

# eSays

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## DEBATING POVERTY



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# Agriculture: Is it a Destination for the Poor?

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*The rural poverty ratio has always been higher than the urban ratio and contributes a larger number of the poor. This is not only due to the larger populations in the countryside or the lack of employment. There are cultural peculiarities of the sector that forces those in agriculture to stay poor. There is evidence of a nexus between poverty and agriculture.*

Eminent economist V. M. Dandekar once remarked that the agriculture sector had become the mainstay of the poor. It is now a known fact that the agricultural sector has a very high density of poor. This is a historical truth but rarely has any attempt been made to look into its genesis and emergence. When Theodore Schultz analysed the transformation of traditional agriculture, he argued that the low level equilibrium (Guatemala and Senapur) and the necessity of augmenting the human capital improvement. Schultz highlighted the 'near zero' marginal productivity in agriculture. Over the years, the situation in agricultural sector has not changed substantially. One can now also affirm that the seed of poverty in agricultural can be located within capital starvation and the near stagnated marginal value productivity. The rural poverty ratio has always stayed higher than urban poverty ratio and constitutes a larger number of the total poor. This result is not due to the distribution of population or lack of employment opportunities only. There are some inbuilt cultural peculiarities of the agricultural sector that forces the inhabitants of the sector to stay poor. We argue here that the culture of agriculture itself has developed in a way that it inhibits the populace from crossing the poverty barrier very easily. Further, I deal with the evidence a nexus between agriculture and poverty. We do not have reliable data on agricultural incomes and hence the estimation of poverty for agriculturists is a difficult task. But poverty estimates for rural areas could be the best and nearest proxy. The genre of the technology has also contributed significantly towards this situation. We do not contest the fact that poverty has declined in rural areas, but would rather search for the residual persistence of poverty.

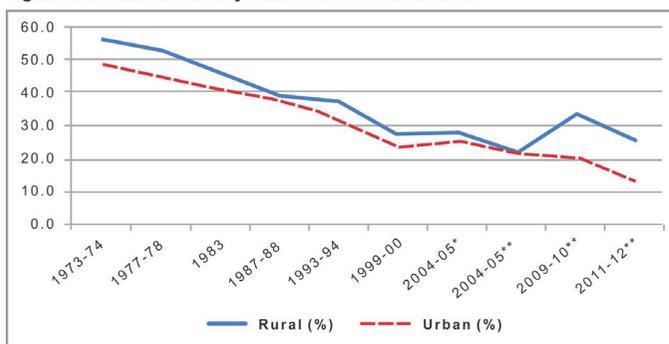
## **Agriculture and Culture**

Agriculture emerged within civilizations as the only livelihood or vocation besides hunting. Therefore the emergence of the term agriculture deals with 'culture'. Its basic

function in the early years was that of the only livelihood support system and thus, self-sufficiency. Markets did not emerge very strongly till about a hundred years before. During initial development experience, livelihood concerns were the first criteria in the farmers' decision calculus. Dandekar's remark came from his logical view of the nature of the work and production organization associated with agriculture as a typical livelihood system.

The argument begins with the seasonal production cycle in crop husbandry. The farmer begins the initial operation on a clean slate, as the summer months would have produced no direct earnings, and the marriage the festive seasons of the summer would have brought the household economy to a critical threshold with cash crunch. Cultivation begins with the obtaining of 'Taccavi Loans (Crop Loans)' and the farmer continues the farm operations in the company of the usual risk factors including monsoon. Cultivation operations continue, supported either through the savings of the last year, or from fresh borrowings. After harvesting, the meek market participation of the agriculturists' decides the income flow. Over the generations, for Indian agriculturists, farming has become a way of life. Initially, the farmer borrows to meet a shortage of funds for the crop cultivation and takes the obvious risk of crop failure, associated with a probable risk of more than 20 per cent anywhere in the country. A farmer has no alternative but to confront the factor and the product markets with little information, and in both arenas, the farmer is the price taker and not a price leader. That makes a critical difference. Market risks compound the other risks associated with cultivation. It is really a wonder that despite the fact that about 40 per cent of the farmers said they would prefer to quit farming, they continued in the profession till a break point. Finally, it is poverty and an association of land-based hope that keeps them company in the profession. This has been accepted as a cultural reality by the farmers by now. The logical arguments indicate a significant stress on the farmers' income flows, and hence poverty is an unavoidable outcome. So the question is: how then is rural poverty said to be declining?

**Figure 1: Decline in Poverty Ratios: 1973-74 to 2011-12**



Source: Planning Commission

## **Poverty: Rural and Urban**

The quality of absolute poverty in India is not homogenous across sectors or regions. The regional differences are evident in terms of urban and rural poverty, both in calorie terms or income accrued. Rural India has always stayed at higher a level of poverty head count than urban India, not so much due to the degree of availability of food, but largely due to the extent of access to food. Almost the entire food production of India comes from rural areas, but when it comes to the consumption, it is the urban area that dominates.

The trends in poverty now indicate that poverty ratios are declining both in rural and urban areas. Figure 1 is based on official data of Planning Commission shows the declining trend in rural as also in the urban areas. But some subtle differences are interesting.

- First, the rural poverty ratio stays above that of the urban areas ratio for all the years, even though the growth of urban areas through rural-urban migration is significant.
- Second, the trend in poverty ratio is declining more smoothly in urban areas as against the fluctuations in the rural areas. This gives us a hint that the dependence on monsoon (year to year fluctuations in income flows) plays a critical role in rural poverty decline. The decline of poverty staggers even with a little shock to the agricultural sector, but urban areas probably have a cushion effect against this. That is not a big deal of an observation, but during the same stress period urban poverty still shows a declining trend, indicating the continuing availability of the same amount of food in urban India when rural India (producer of total food) confronts food stress.

The official poverty line of Rs.26 for rural and Rs.32 for urban areas (at 2010-11 prices) has been debated and commented on by many. The comments came not only from political circles but have equally attracted the attention of academics too. As a field worker and one who travels through rural areas often, I can vouch for the fact that ‘bare’ medical survival is possible with this amount in both rural and urban areas; but that cannot be called living by any stretch of the term. Even the destitute need slightly higher amounts to survive, and given the poor safety nets in rural areas, it is quite insufficient even to survive.

Let me not get into that debate now but I need to focus on the issue of the quality of rural poverty. In rural India where agriculture is the major occupation, the cultivators and agricultural labourers are the two groups that are predominant among the poor. Over the decades, as per Census of India definition the share of ‘cultivators’ among the workers is declining and the share of ‘agricultural labourer’ is increasing. This process indicates the economic marginalization of workers in rural areas and their degeneration in the status from cultivators to agricultural labourers. The decline of the poverty ratio

therefore should be credited to the availability of that proverbial Rs.26 to remain afloat, but probably just above the line, so that one sinks down with the slightest shock.

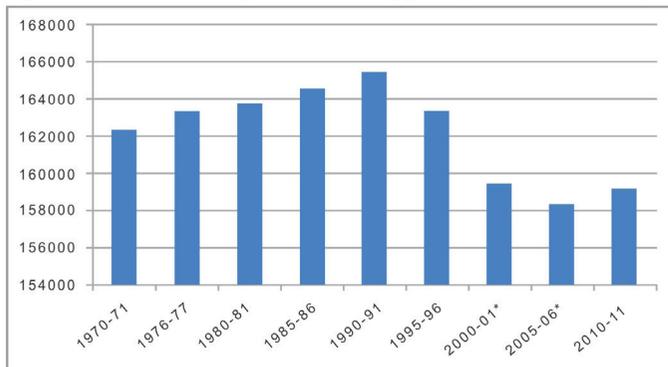
**Table1 : Changes in Workforce: 1991-2011** (Numbers in Lakhs)

	1991	2011	Change
Tot Workers	3141.3	4817.4	1676.1
Cultivators	1246.8	1186.9	-59.9
Agri Workers	859.9	1443.3	583.4

Source: Census of India 1991 and 2001

The disappearing cultivator is a matter of concern. Table 1 shows that as per 1991 census, India had 1246.8 lakh workers recorded as cultivators and this number came down by 59.9 lakhs by 2011. This change in two decades means that almost 3 lakh cultivators have disappeared from the fold every year. They may get into the fold of ‘Other workers’ or become ‘Agricultural labourer’. The increase in the number of agricultural workers is also substantial, and there are enough reasons to believe that the cultivators would have changed to agricultural labourers.

**Figure 2: Total Number of Operational holding (in '000): 1970-71 to 2010-11**



Source: Agriculture Census

This fact can also be corroborated with the agricultural census data. Figure 2 shows the changes in the number of operational holdings as given in the agricultural census over the years. There was some increase in the number of operational holdings until the 1990-91 Agricultural Census, but a sharp decline after that till the recent Agricultural Census. Across the agricultural censuses, the area operated has also changed substantially. According to 1970-71 Agricultural Census the number of Marginal and Small Holdings were 49.6 million; this has increased to 117.1 million. The area operated by the Marginal and Small holdings increased by 36.7 million hectares; and the area under the Medium and Large holdings has reduced by 39.6 million hectares. As a result, 29.97 lakh hectares

seem to have gone out of agriculture. This fact needs to be read with the decline in the number of cultivators in the population census and the decline in the poverty ratio as seen from the Planning Commission data. There are only three possibilities.

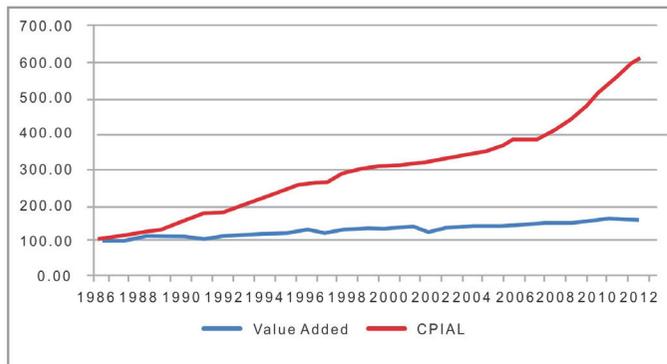
- First, the agricultural income per hectare has increased. As a result, a large number of farmers, despite marginalization of the size of holding, have crossed the poverty barrier. That means farming has become remunerative!
- Second, if farming is not remunerative, as in fact indicated by the NSSO 59th round and other sources of data (Deshpande and Prabhu, 2005), then only the increase in agricultural wages or the availability of other employment opportunities could have helped the farmers/agricultural workers stay above poverty line. Real wages need to increase for that purpose.
- Third, there is a possibility of the rural poor crossing the official poverty line, but staying in the close neighbourhood of that income threshold with the help of many ongoing schemes. This is the most probable reason, explaining the clustering of persons just ‘Above Poverty Line’ but just near the poverty threshold. The result is, therefore, deceptive and the dependence culture in the farm sector continues to haunt the sector.

### Poverty and Agro-Climatic Regions

The hypothesis that poverty declines with agricultural growth was attempted by Montek Singh Ahluwalia, 1978, 1985). Ahluwalia concludes that

The second issue (considered in this chapter) is the relationship between rural poverty and agricultural income levels per head. Three conclusions have emerged: (1) There is fairly strong evidence of an inverse relationship between agricultural income per head and the incidence of rural poverty, especially if account is taken of lagged effects.

**Figure 3: Agricultural Value Added per Worker and CPIAL: 1986-2012**



Source: World Bank

Ahluwalia also cautions that reliance on growth alone may not reduce poverty. A simple piece of evidence is, however, interesting here. We took the data on value added to agriculture per agricultural worker at constant prices compiled by The World Bank and the index numbers of this data along with the index of CPIAL for the period 1986-

2012 and plotted them together (See Figure 3). It is quite revealing that the CPIAL is growing at quite a fast rate as compared to the value added. That possibly explains that agriculture alone cannot help in alleviating poverty and whatever reduction of poverty ratio is visible in rural areas it is from sources other than agriculture.

Across the states in India, poverty has been varying. Keeping in view the hypotheses tested by Dharm Narain, and later by Ahluwalia in the *Essays in Honour of Prof Dharm Narain*, we worked out simple correlations of important variables with the percent of rural poverty across states in India. The density of cultivators does not show a high correlation, but that of agricultural workers and labourers indicate that poverty goes closely with the density of these groups. Income generated from agriculture has not recorded the relationship but the growth rates during a short period 2007-12, clearly shows the correlation. The lower magnitude and negative sign of the correlation with per capita income in a strict statistical sense means little. However, the data indicates that it could be the major deciding factor in aiding the cross-over above the poverty threshold. The experience needs to be carefully documented and analysed with larger data set and more rigorously.

**Table 2 : Rural Poverty Correlates**

Variables	Corr Coeff.
Cultivators Percent to total Workforce	0.03
Agri Labours Percent to total Workforce	0.67
Agri Workers Percent to total Workforce	0.67
Growth Rate in Per Capita Income – 2007-12	-0.17
Growth Rate of Agriculture 2005-13	0.68
Percent Share of Agriculture GSDP	0.23

**Note:** Date from Various Economic Surveys for Various Years, and Census of India. Only correlations above 0.6 are statistically significant at 5% level.

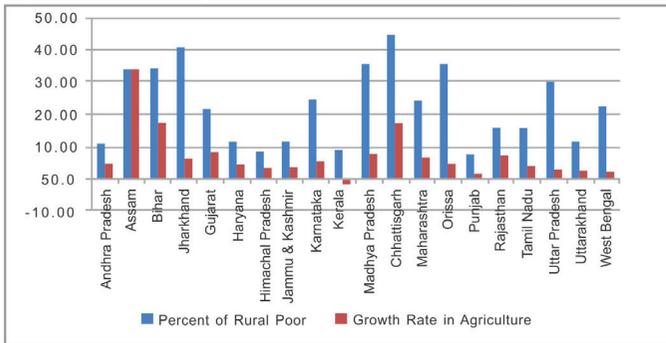
The distress of agriculturists due to the intense poverty inflicted by the unfriendly markets on one side and the dominant culture of agriculture on the other pushes vulnerable farmers out of the profession. What remains in the rural areas is a cluster of non-poor precariously placed just above the poverty line.

The ratio of poverty and the growth rates in agriculture across states do not depict any clear picture of the relationship.

It is visible that there are states with high growth and high poverty as well as states depicting high growth with lower poverty ratio. Chattisgarh, Jharkhand, Bihar, Madhya Pradesh, West Bengal and Maharashtra show a pattern of coexistence of high poverty coexisting with high growth rates in agriculture. Most of the states in this group depict poverty as an institutional existence and these regions will take sufficient time to lower the poverty ratio. Besides, the agro-climatic conditions also stand as an explanation to these coexistences.

There is another interesting group of states that depicts low levels of poverty ratio and lower rates of growth. This group includes Tamil Nadu, Haryana, Uttarakhand, Jammu and Kashmir, Andhra Pradesh and Kerala. There is a significant presence of non-agricultural and allied agricultural sectors in these states. Does that mean growth in agriculture does not matter? Not at all and one cannot reach such a hasty inference basically due to the nature of income flows and processes in agriculture. Even today, with the proliferation of market forces, agriculture continues to be an activity plagued with a shortage of cash resources and thereby the dependence on other activities. Poverty or near poverty is therefore an obvious outcome.

**Figure 4: Rural Poverty Ratio 2011 and Growth Rates in Agriculture: 2005-13**



### Dumping Ground or Residual Collection Bin?

The agricultural sector still continues to be the critical determinant of the performance of the Indian economy. The contribution of the sector to the GDP has slid down from 45 per cent in 1971 through 35 per cent in 2000 and finally to reach 17 per cent in 2012. But that does not, by any means, reduce the sensitivity of the GDP growth to the performance of the sector. Even with less than 20 per cent contribution to the GDP the failure of monsoon and presence of drought in some parts of the country pulls down the growth rate of GDP. VKRV Rao in his second book on national income warned about the trends in the rates decline in the contribution of agriculture to GDP being at a steeper rate than the workforce dependent on agriculture. He cautioned about the density of the

poor in the sector. This certainly means that the carrying capacity of the sector has been a critical issue coupled with the near stagnation in value added. Further, agricultural activities are culturally bounded to the typical organization of the sector that requires a continuous cash flow as demanded by various activities. As a result, farmers are forced to depend on the supply of cash and as a result become indebted. Evidence shows that rural poverty is declining and it has two specificities.

- First, the decline is not as smooth as that of poverty in urban areas. That gets explained through the typical nature of agriculture.
- Second, all the other pieces of evidence point out that the process of marginalization of size of holding coupled with the difference in the trends in agricultural value addition clearly point to the deteriorating economic situation of the farmers.

However, the implementation of various schemes and the flow of other labour intensive works have succeeded in keeping a large share of poor from rural areas afloat. But the distress of agriculturists due to the intense poverty inflicted by the unfriendly markets on one side and the dominant culture of agriculture on the other pushes vulnerable farmers out of the profession. What remains in the rural areas is a cluster of non-poor precariously placed just above the poverty line.

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