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**Poverty – Dynamic and Sustainability
Perspectives: Implications for Welfare and
Policy with Reference to India**

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Poverty — Dynamic and Sustainability Perspectives: Implications for Welfare and Policy with Reference to India

ABSTRACT

After outlining some comparative features of poverty in India, this article reviews critically recent literature on the dynamics of poverty. On economic efficiency grounds, it rejects the view that the chronically poor are more deserving than the non-chronic poor of poverty assistance. Mechanisms of households and communities for coping with poverty are discussed. The possibility is raised that where poverty has been persistent that rational methods for coping with it are likely to be well established, and less suffering may occur than for households and communities thrown temporarily into poverty. However, situations can also be envisaged where such rational behaviours deepen the poverty trap and create unfavourable externalities for poverty alleviation. Conflict can arise between programmes to alleviate poverty in poor communities and the sustainability of these communities and their local cultures. Problems posed by this are discussed. Furthermore, the impact of market extension on poor landholders is considered. In contrast to the prevailing view that increased market extension and liberalisation is favourable to poor farmers, it is argued that inescapable market transaction cost makes it difficult for the poor to survive as landholders in a fluid and changing market system. The likelihood of poor landholders joining the landless poor rises, and if they migrate from the countryside to the city they face further adjustment hurdles. Consequently, poor landholders may be poorer after the extension of the market system and only their offspring may reap benefits from market reforms.

Keywords: India, markets and poverty, poverty alleviation policy, markets and poverty, poverty dynamics, sustainable communities.

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1. Introduction

Many studies of poverty concentrate on measuring its aggregate incidence. Essentially they provide a static snapshot of poverty incidence or a series of such snapshots. They fail to tell us whether those in poverty tend to remain in poverty or the extent to which there is transition into and out of the state of poverty. While, the importance of poverty dynamics is being increasingly recognised, the dynamics of transition into and out of poverty appears to have been little researched. According to Mehta and Shah (2003), this research lag is quite evident in India. However, poverty dynamics does have important implications for welfare and policy. For instance, Barrett (2003, p.3) claims that measuring poverty for example, by an appropriate poverty line, is important but not as important as consideration of poverty dynamics. He states that this is “because poverty dynamics is the more fundamental policy concern. The reason for poverty dynamics primary is that some not all of the poor need help through policy”

Whether that ought to be the main reason for studying poverty dynamics is, of course, debatable. The objective of this interest might be to improve the basis for economising assistance to the poor or for trying to make sure that the assistance provided for the poor is better targeted. But as argued later, considerable caution is needed in drawing policy conclusions from some of the recent theory of poverty dynamics about who amongst the poor is deserving of government help or aid.

In considering the dynamics of poverty in this paper, the main (but not exclusive) emphasis will be on rural poverty. The paper is developed first by outlining some comparative information on poverty in India, and then critically reviewing selected recent literature on the dynamics of poverty, particularly the distinction made between transitional and chronic poverty and policy prescription based on this. Then in turn follows a discussion of the importance of studying how individuals and families cope with poverty; how these coping mechanisms affect welfare and the persistence of poverty; conflicts between the sustainability of local communities (including of tribal societies) and poverty reduction and implications of markets (especially market transaction costs) for the dynamics of rural poverty.

2. Some Comparative Aspects of Poverty in India

There has been considerable research into poverty in India. Nevertheless, according to Mehta and Shah (2003, p.492), “there has been little systematic work exploring poverty dynamics. When disaggregating the poor, the literature commonly focuses on those who are severely poor, in terms of how far below a poverty line their income or consumption lies, within the implicit assumption that those who are extremely poor are also those who are poor for long periods of time.” Certainly this research situation needs remedying; not that this can be achieved here.

In the absence of such research and by way of background, it is worthwhile providing a brief overview of official data on the incidence of poverty in India. Consider data for the whole of India and then disaggregated data by regions, mostly comprised of India’s states.

From Table 1, it can be seen that the aggregate incidence of poverty in India has shown a substantial decline since 1973-74 and the Planning Commission predicts a further significant decline to occur. While there is little doubt that India has experienced a large reduction in its incidence of poverty in recent decades, it is possible that rates of decline are overstated for the last half of the 1990s. In this connection, Mehta and Shah (2003, p.491) point out that “there is considerable scepticism about the accuracy of the poverty estimates because of changes in methodology for data collection,” a problem highlighted by Palmer-Jones and Sen (2001). Despite the likelihood that declines in the occurrence of poverty in India have been overstated after allowing for this possibility, Datt and Ravallion (forthcoming) conclude that India probably maintained a similar rate of reduction in its incidence of poverty in the 1990s as in the 1980s.

Table 1

**Number and Percentage of India's Population Below the Official Poverty Line
(Number in Millions and Poverty Ratio in Percentage)**

Year	All India		Rural		Urban	
	Number	Poverty Ratio	Number	Poverty Ratio	Number	Poverty Ratio
1973-1974	321.3	54.9	261.3	56.4	60.0	49.0
1977-1978	328.9	51.3	264.3	53.1	64.6	45.2
1983	322.9	44.5	252.0	45.7	70.9	40.8
1987-1988	307.1	38.9	231.9	39.1	75.2	38.2
1993-1994	320.3	36.0	244.0	37.3	76.3	32.4
1999-2000	260.3	26.1	193.2	27.1	67.1	23.6
2007*	220.1	19.3	170.5	21.1	49.6	15.1

*Poverty projection for 2007

Source: *Economic Survey 2000-2001*. Ministry of Finance, India, Table 10.4, based on data of the Planning Commission. Website: www.indiabudget.nic.in

It is clear from Table 1, it can be seen that India's incidence of poverty throughout the last three decades of the twentieth century remained higher in rural than urban areas but not by a large amount. On the other hand, due to the rural urban distribution of India's population, the absolute number in poverty in rural areas exceeded that in urban areas several fold. However, compared to the early 1990s, the ratio of the absolute numbers in poverty in rural

Table 2
Official Poverty Rates for India by Regions
Ranked According to their Poverty Incidence

Year	1973-1974		1993-1994		1999-2000	
All India Average Poverty Ratio →	54.88%		35.97%		26.10%	
Region ↓	Poverty Ratio	Rank	Poverty Ratio	Poverty Ratio	Poverty Ratio	Rank
Orissa	66.18	1	48.56	3	47.15	1
Bihar	61.91	3	54.96	1	42.60	2
Madhya Pradesh	61.78	4	42.52	4	37.43	3
Sikkim	50.86	16	41.43	5	36.55	4
Assam	51.21	14	40.86	6	36.09	5
Tripura	51.00	15	39.01	9	34.44	6
Meghalaya	50.20	19	37.92	10	33.87	7
Arunachal Pradesh	51.93	13	39.35	8	33.47	8
Nagaland	50.81	17	37.92	11	32.67	9
Uttar Pradesh	57.07	7	40.85	7	31.15	10
Manipur	49.96	20	33.78	17	28.54	11
West Bengal	63.43	2	35.66	14	27.02	12
Maharashtra	53.24	12	36.86	13	25.02	13
Pondicherry	53.82	11	37.40	12	21.67	14
Tamil Nadu	54.94	9	35.03	15	21.12	15
A & N Island	55.56	8	34.47	16	20.99	16
Karnataka	54.47	10	33.16	18	20.04	17
Mizoram	50.32	18	25.66	21	19.47	18
Dadra & Nagar Hav.	46.55	24	50.84	2	17.14	19
Andra Pradesh	48.86	22	22.19	27	15.77	20
Lakshadweep	59.68	6	25.05	24	15.60	21
Rajasthan	46.14	25	27.41	20	15.28	22
Gujarat	48.15	23	24.21	26	14.07	23
Kerala	59.79	5	25.43	22	12.72	24
Haryana	35.36	28	25.05	25	8.74	25
Delhi	49.61	21	14.69	30	8.23	26
Himachal Pradesh	26.39	31	28.44	19	7.63	27
Punjab	28.15	29	11.77	31	6.16	28
Chandigarh	27.96	30	11.35	32	5.75	29
Daman & Diu	NA	32	15.80	28	4.44	30
Goa	44.26	26	14.92	29	4.40	31
Jammu & Kashmir	40.83	27	25.17	23	3.48	32

Source: Based on *Economic Survey 2000-2001* Ministry of Finance, India, Table 10.5 compiled from data of the Planning Commission.

Website: www.indiabudget.nic.in

areas compared to those in urban areas declined from more than 4:1 to somewhat less than 3:1 by the end of the 1990s. By the end of the 1990s, the official poverty incidence was 27

per cent in rural areas and 23.6 per cent in urban areas. Despite the claimed sudden fall in the rural poverty incidence in India in the last half of the 1990s, this incidence remained *at least* twice as high as this incidence in China, on the basis of data available in Fan (2002).¹ While international comparisons of poverty incidence are fraught with difficulties, the sheer magnitude of the estimated discrepancies in rural poverty between India and China, two indicate that rural poverty is much more prevalent in India than China.

Table 2 ranks the states and main administrative regions of India by their officially estimated poverty incidence (ratio) in 1999-2000, and provides comparisons for 1973-74 and 1993-94. From it, it can be seen that the highest incidence of poverty occurs in the northeastern segment of India.

The twelve states of India with the highest poverty incidence consist of Uttar Pradesh, Madhya Pradesh and all states to the east of these, excluding Mizoram, states and other administrative regions to the west of this segment and to the south experience a lower incidence of poverty than this impoverished segment of India (see Figure 1). However, it is possible that these figures do not reflect the pattern of the incidence of chronic severe poverty. Mehta and Shah (2003, p.495-496), for example, contend that “if we map the regions on the basis of severe poverty, the heartland of chronic poverty, in the severity sense, seems to be constituted by the central Indian (and virtually contiguous) regions of South Western Madhya Pradesh, spreading in the southern direction into all of Inland Maharashtra except the western segment and in the northern direction into Central and Southern Madhya Pradesh, Southern, Central and Eastern Uttar, Pradesh, Bihar and Orissa. Urban poverty is also severe in Inland Northern Karnataka and Southern Tamil Nadu.

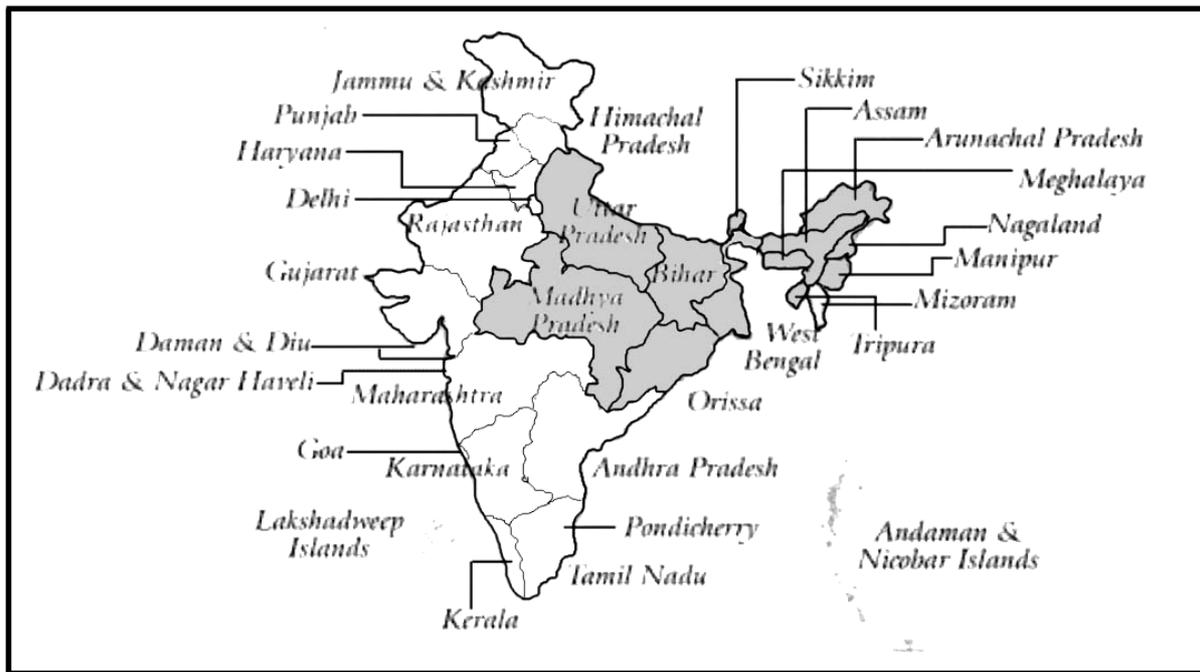


Figure 1: Map showing the states of India shaded that had an incidence of poverty higher than the Indian average in 1999-2000.

For the years shown in Table 2, it can be seen that all regions of India reduced their incidence of poverty throughout the last three decades of the twentieth century but that considerable disparity occurred in the rates of reduction in their incidence of poverty. Of the nine regions with above average rates of poverty in 1973-74, only five were above average in 1999-2000. Of these five, West Bengal showed tremendous improvement. Ranked second in terms of the incidence of poverty in 1973-74, West Bengal was ranked twelfth in 1999-2000 having more than halved its incidence of poverty. In 1973-74, Kerala had one of the highest incidences of poverty in India but by 1999-2000, it had one of the lowest incidences of poverty. Its incidence of poverty was reduced from 59.79 per cent to 12.72 per cent. It is interesting to observe that both states had socialist governments. At least in the case of West Bengal, it is suggested that this contributed to its falling incidence of poverty (Mehta, and Shah, 2003, p.505). This result does not fit well, however, with the neoliberal view that marked capitalism constitutes the best hope for poverty reduction. Note that most states in the northeast of India became more highly ranked in the terms of their incidence of poverty in the 1990s compared to the 1970s. This may *partly* reflect the significant numbers of tribals in these states.

On the basis of social groupings, Mehta and Shah (2003) identify the following or being highly likely to be in poverty in India: (a) scheduled castes and scheduled tribes; (b) females;

(c) older persons; and (d) the disabled. Furthermore, they deplore the lack of consideration in India for the destitute – they are provided little official assistance and are not included in the statistics on poverty.

One can, therefore, see that poverty in India still remains a serious problem, and that it is probably more serious than recent statistics reveal. There is also a paucity of information about the dynamics of poverty in India at the household level. Much of India's poverty may be chronic rather than transitory, but this is not known for sure. It is also possible that the fear of falling into poverty has become more widespread following India's economic reforms. Furthermore, India faces mounting difficulty in generating enough employment to ensure sufficient employment of its growing labour force (Bhalla and Hazell, 2003). In a de-personalised market system in which the majority only have their labour to sell, this looks likely to develop into a serious social problem, and possibly a factor that could reverse poverty reduction in India.

3. A Critical Review of Selected Recent Literature on the Dynamics of Poverty

According to Barrett (2003) several studies indicate that much poverty is transitory in nature. In that respect, he mentions work by Grootaert and Kanbur (1995) and by Baulch and Hoddinott (2000) but also suggests that for statistical reasons, the number of persons in transitory poverty could be overstated. He states: "The descriptive task of distinguishing the chronically poor from the transitorily poor is a significant challenge. One can establish ex post whether people recovered after falling below a poverty line provided one has sufficient time series data on the same individuals or households. But at the time when policymakers need to decide on prospective interventions, it is difficult to tell from the data who will recover and who will not. Hence, the attention paid over the past decade to identifying the correlators of "chronic" or "persistent poverty" (Barrett, 2003, p.7). Baulch and Hoddinott (2000), World Bank (2000), Carter and May (2001) and Hulme and Shepherd (2003a) have adopted this approach.

Barrett (2003) argues that the transitory or temporary poor do not need assistance from governments or NGOs because they will transit from poverty of their own accord. However, this seems simplistic. First, they may need aid to escape considerable suffering while they are in poverty, especially if they are likely to be in this state for a considerable period before escaping. The magnitude and the period of their deprivation have to be considered. Aid that

reduces the period of their state of poverty may be justified on economic grounds. Secondly, if one judges the effectiveness of aid for the poor by its ability to reduce the incidence of poverty, targeting the temporarily poor may reduce this rate more quickly than targeting those in chronic poverty. The cost involved and time required to typically alter the situation of a “temporarily” poor person to one of not being poor may be much less than for a chronically poor person or household. Thirdly, targeting the temporarily poor may have greater income multiplier effects in a poor community. Thus, it is by no means clear even on fairly mechanical economic grounds, that targeting the chronic poor rather than the transitory poor is efficient policy in reducing the incidence of poverty (see Appendix).

In addition, the chronically poor may in many circumstances be able to cope better with their situation than those thrown unexpectedly and recently into poverty. Having been in poverty for a long time (in many cases for several generations), the chronic poor may have learnt behaviours that enable them to cope much better with poverty than families recently cast into poverty. For the same apparent level of income or assets, the learnt behaviours of the long-term poor may enable them to have a higher level of economic welfare than the transitory poor who may bring inappropriate behaviour to their new situation because of behavioural persistence. For example, ratchet-like effects of the type once described by Duesenberry (1952) can be present.

Thus, the view that the chronic poor constitute the deserving poor and the “transitory” poor do not appear to be flawed. It seems that many contemporary economists, such as Barrett (2003) are involved in a modern form of the search for the deserving and undeserving poor which in earlier times had a strong moralistic basis.

It should be observed also that in the contemporary theory of poverty dynamics scope exists for more sophisticated dynamics. Whether or not a family moves from a state of poverty or to a state of no poverty is to some extent a random process. Up to a point, it may even be uncertain. But if this movement is modelled as stochastic process, then the process might be modelled as a Markov chain. In that respect, it should be noted that sometimes individuals move out of poverty only to return to it again. The dynamics can be quite complicated, especially if the transitional probabilities change with time.

Figure 2 illustrates this for a single period transition case. For simplicity two states for a family or individual are identified. Initially the family or individual is either in poverty (P) or

not in poverty (NP). Then we need to consider the factors that influence the probability of transition to either of these states in the next period, and so on. In the simple case shown in Figure 2, these are the probabilities of following each of the paths indicated by the arrows. Determining such probabilities, especially for a long period of time, is very complex.

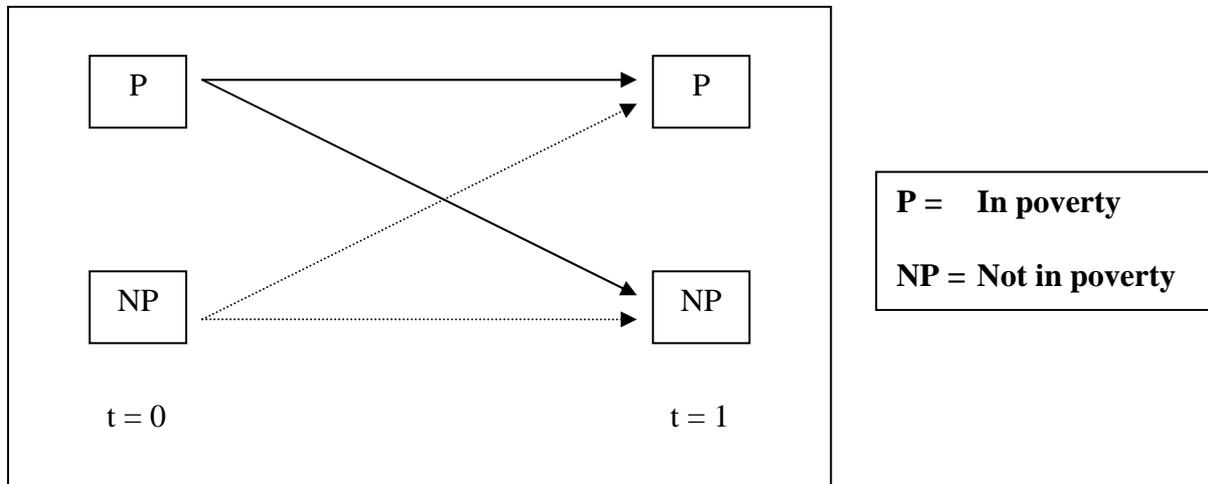


Figure 2: The start of a simple Markov chain for considering probable transitions between the states of poverty and its absence.

Observe that those who fall into ‘temporary’ poverty may find it quite difficult to leave this state due to constraints on the availability of finance to them. As a rule, they will lack collateral for loans and lending to them remains risky. Consequently, their ‘temporary’ poverty may become relatively long-term. Observe also that the transitional probabilities in the Markov process illustrated in Figure 2 may alter with ‘exogenous’ events such as the occurrence of a series of favourable or unfavourable seasons in agriculture, if the focus is on farmers. This would further complicate the analysis.

The possible dynamic patterns of the occurrence of poverty and income variation are in practice quite varied and even more complex as can be seen from the set of representative stationary patterns illustrated by Hulme and Shepherd (2003b, p.406). Even these ‘representative’ patterns, adapted from Jalan and Ravallion (2000), do not capture all relevant possibilities, each of which could be considered a possible state of poverty, or a possible state in which it is absent. While advances in theory are dependent on such classification or categorising of possibilities, it should also be recognised that coarse categorisation poses a danger for policy prescription. It may result in unlike poverty situations being grouped together in the interest of simplification with unfortunate results from policy based on such

simplification. One should not rush from the development of theoretical models to policy prescriptions, for example, conclude that those classified as the transient poor are less worthy of economic support than the chronic poor.

4. Welfare and Household and Community Mechanisms for Coping with Poverty

Although economists have shown increasing interest in poverty dynamics, little study appears to have been undertaken of how patterns of behaviour of individuals and families are shaped by the occurrence of poverty. To what extent are the behaviours of the poor rational given their situation? How well do they and their communities cope with poverty given the external conditions experienced by them? Is there any way, the poor could cope better with poverty given their available resources? Do the poor really have any scope to escape from poverty by their own efforts or self help?

It is possible that those who have been in poverty for a long time (for example, members of families in poverty for several generations) may in some circumstances cope relatively well with their situation. They may be in a stable and sustainable survival situation. In addition, the poor, may cope much better than those recently thrown into poverty, even though both have the same nominal income and resources. The behavioural rules of those recently cast into poverty may be poorly adjusted to their new situation, for example, Duesenberry ratchet-like effects may be present for the 'new' poor (Duesenberry, 1952). Thus the welfare of individuals or families recently thrown into poverty is likely to be lower than that of those in long-term poverty, given that they have the same resource endowments.

While Hulme and Shepherd (2003b), drawing on the observations of Narayan et al. (1999), touch on this matter, they do not draw out its possible implications for policy. They state:

“According to Narayan et al. although they continue to battle against poverty, the long-term poor in developing countries tend to be relatively accepting of their poverty compared to the new poor in the transitional countries. The competition generates important questions surrounding the comparative psychological effects of chronic transient and new poverty in different contexts and on different generations, and the manner in which they relate to poor people’s sens of vulnerability and their coping strategies” (Hulme and Shepherd, 2003b, p.408). It might also be observed that those recently thrown into poverty, often lose social

status and their relative standing in society, and that this will undoubtedly add greatly to the psychological stress of some of the new poor.

Furthermore, communities where poverty or near-poverty is the norm and which are on the surface resource-poor, often develop communal mechanisms that enable them to cope well with the occurrence of situations likely to result in extreme poverty or threaten survival of families. They may develop communal security nets involving sharing of resources by families especially in times of hardship. Chambers (1987), for instance, points out how access to forest resources can provide such a safety net.

If the poor or a poor community is in stable and sustainable state, policies to change that state must be scrutinised carefully before implementation. If such policies do not result in a sustainable rise in income, they may do more harm than good. If they temporarily lift a local community out of poverty for it only to return to poverty after some time, it could succeed in destroying behaviours that permit people to cope relatively well with poverty.

Nevertheless, it is also true that behaviours adopted to cope with the presence of poverty can result in the persistence of poverty; they result in a low-level equilibrium trap, using the terminology of Leibenstein (1957). This is so even though such behaviours may be rational from the point of view of the family.

A relevant example from the Indian subcontinent is discrimination (in some communities) against female children in access to education, medical services and other resources. The poorer the family, the more marked tends to be this discrimination. (See, for example, Tisdell and Roy, 2000). It reflects two aspects: (1) a daughter will not remain with her family once she is married but join another family so her parents can gain few benefits from their human capital compared to a boy; and (2) in many cases, employment opportunities for women in rural areas are low so the private return on capital invested in girls is lower than for boys. However, the social benefits of investing in the human capital of females is much higher. For instance, education of females appears to be positively correlated with declining fertility rates, and an educated mother may pass on 'superior' knowledge and attitudes to her children.² This may help the family escape from their poverty trap.

Another example given by Wood (2003) is the cultivation of patron-client relationships by the poor in developing countries. These relationships involve mutual obligations that provide

to some extent a safety net for the poor but often lock them into economic relationships that keep the poor poor.

It may also be that because habitual or customary behaviour has worked in the past to enable a family to cope with poverty that the family will be reluctant to try new behaviours or strategies, even when they involve little or no risk. It is certainly necessary in such cases to demonstrate convincingly to the poor that such new economic strategies work if they are to be adopted by the poor.

5. Sustainability of Communities (Local Cultures) and the Alleviation of Poverty

Alleviating poverty via market-type mechanisms and economic development programs can threaten the sustainability of local communities and minority cultures, such as that of various tribal groups. When this is so, poverty alleviation fostered by economic development involves a trade-off with cultural preservation. There are often close links between production methods and managerial techniques and culture. Economics cannot provide much guidance about the desirability of trading off preservation of culture in return for economic growth.

In considering this matter, we might divide poor local communities (or cultures) into two groups: (1) communities that would remain economically and socially sustainable in the absence of outside intervention; and (2) those communities that would fail to in the absence of outside intervention remain economically viable. The latter communities probably also will not remain socially and culturally sustainable.

Some traditional slash-and-burn communities in India for example, the Mizos in Mizoram, seem to fall into the latter category. Because of growing populations, their slash-and-burn cycles are becoming shorter and the productivity of land under cultivation is falling. This is resulting in increasing economic deprivation. The economic and social-cultural structures based on slash-and-burn agriculture in Mizoram appear to be unsustainable in the long run (Tisdell, 1999a Ch.15; 1999b). The Indian government has, therefore, instituted schemes to encourage settled agriculture, especially horticulture and the marketing of crops, as an alternative to slash-and-burn agriculture. However, social adjustment appears to be slow and farmers who have adopted the growing of commercial crops find it difficult to predict market prices.

In many tribal communities, customary communal property rights are a barrier to social and economic change. In such communities, local leaders often have an interest in maintaining the status quo. For example, in some tribal communities in Africa, chiefs have control over the distribution of land and some control over the use of the commons. Even if the creation of freehold private property title would facilitate economic development and reduce poverty in the local community, local leaders may oppose it because it reduces their power (Lyne and Darroch, 2003).

In cases where a local community/culture can sustain itself in the absence of intervention, but is poor, the case for outside intervention to assist its economic development (especially if intervention is opposed by the local community) is less strong than in the case just discussed. That is not to say that intervention should not occur. It would seem particularly appropriate if it is favoured by the local community.

Several economic methods may be used, alone or in combination, to relieve poverty in poor rural communities,. These include:

- (a) migration;
- (b) assistance with capital investment;
- (c) diffusion of new production techniques or methods, and
- (d) improved property rights regimes.

Migration may be of help, especially if it is combined with remittances for those who remain behind in the rural area. However, it can also increase deprivation among those who remain in poor communities if the more able migrate. If economies of scale exist in the provision of local public services, depopulation will add to the per capita local cost of supplying services. In addition, outside contact fostered by migration are likely to accelerate cultural change in the local community.

Capital investment may take many forms. It may include improved transport and communication systems. In some cases, this may increase the value of local production. At the same time, it is likely to accelerate cultural change and can also result in increased pressure in natural resources³. Investment in education is another form of capital investment.

Often it transmits the dominant culture and erodes minority or social cultures. As for the introduction of new techniques, it is important to make sure that they are suited to the local environment (are sustainable environmentally), and are as well economically sustainable.

In some rural tribal communities, long-term strategy to relieve poverty and promote economic development calls for changed property rights. As mentioned earlier, these are often difficult to bring about because of vested political interests in the existing system of property rights. Furthermore, changes in property rights are often associated with significant social and cultural change.

6. Market Extension and the Rural Poor

The view that persistent poverty is essentially due to artificial social restrictions on the operation of the capitalist market system has been well canvassed by some members of the World Bank and the IMF, for example by Dollar and Kraay, (2000). The way forward, according to this neo-liberal theory, is to concentrate policy-wise on the extension of markets for rural products. Such an approach, however, fails to come to grips with many of the fundamental features of the market system as a means of social organisation, for example, significant aspects of transaction costs, and the varied circumstances that result in poverty. The theory on which the neo-liberal policy prescription is based is too simplistic and artificial, and fails to give appropriate weight to the dynamics of poverty. Furthermore, for various other reasons outlined by Hulme and Shepherd (2003b, p.404), the neo-liberal vision ‘leads to a focus excessively on the role that market forces can play in poverty reduction’ ignoring conditions in which markets are incapable of liberating some of the poor from poverty. There are many issues involved, but I want to concentrate here on market transaction costs as a barrier to lifting many of the poor out of poverty via neo-liberal policies. While some market transaction costs may be able to be reduced or eliminated, others are inherent in the market system and cannot be eliminated.

In line with the neo-liberal view, market extensions is often extolled as a way to assist poor rural landholders. But very often it fails to do that, especially if landholders have had little experience with the market system. The main difficulty for poor landholders arises from the transaction costs involved in market adjustment (Coase, 1937; Williamson, 1975).

Most markets for agricultural produce are not stable in the sense that the relative prices and profitability of different agricultural crops varies with the passage of time, often considerably. This requires market-dependent farmers to alter their production of agricultural commodities as time elapses.

However, switching agricultural crops or other commodities produced can be very costly to a landholder and requires a significant amount of investment. It often requires new capital equipment, investment in different types of land husbandry and in a period of learning-by-doing by the landholder in order for the landholder to become competent in the new production field. During the early learning-by-doing phase, the farmer may make considerable losses or have much reduced income, and capital is usually required to tide him over for this period of income reduction.

In this adjustment process, the poor farmer (who often have a small landholding) seems disadvantaged relative to wealthier farmers. A poorer farmer may not have sufficient resources to 'self-finance' the transition of his farm to new land-uses, and the relative risks of change for him are high. Furthermore, he may be unable to obtain outside finance because of his low amount of collateral, a perception by lenders that poor farmers are comparatively high risk proposition, and the high transaction costs that lenders experience in servicing relatively small loans.

A further difficulty faced by poor market-dependent landholders is in predicting accurately future prices of commodities of relevance to them. Because of lower levels of education or for other reasons, poor farmers may not have as much ability to predict economic variables as accurately as richer farmers. More importantly, they have less ability to finance the costs of their errors than richer farmers and to cope with market-related variations in the level of their income. Market-related uncertainty and instability seem to be especially disadvantageous to the poor.

In these circumstances, one might envisage a tendency for poor landowners to sell their properties to larger landholders and for the poorest landholders to join the landless rural poor. This may indeed compound their poverty. In this regard, the extension of the market system seems to alienate a growing number of poor rural landholders from their land and make them dependent solely on wage income. As highlighted by Mehta and Shah (2003, p.401), over 79

per cent of those in chronic poverty in rural areas in India depend on wages for their livelihood. While it may be that that workers will in the very long-term gain from extensions of the market systems, adjustment to market-making can create considerable hardship initially.

In China, for example, farmers producing soya beans and maize have suffered considerable hardship following China's entry to the WTO (Xue et al. 2004). This is because supplies of soybeans and maize from the USA have started to flood the market. This has pushed many Chinese growers of these crops into poverty. In order to survive, they need to alter the type of crops they grow on their land. But many will not be able to do this because of the investment and funding required. They may be forced to migrate to the cities in search of work. However, in Chinese cities very high levels of unemployment exist; levels as high as 35 percent of the labour force have been reported. In the long run, market extension may all work out for the best, but in the beginning, and probably for some time, there could be an increase in the incidence of poverty in China, to a large extent market-induced.

In that respect, it is interesting to observe that it is unlikely that the rural poor in the Western regions of China (mostly in mountain and desert areas and belonging to ethnic minorities) will be affected by China's increased linkage to world markets via its entry to the WTO. This is mainly because they have few linkages with the market system. This, to a large extent, insulates them from the vagaries of the market system. It might also be observed that the poverty experienced by these ethnic minority groups has been persistent.

A further aspect of labour mobility is that the poor are often at a disadvantage in migrating. This is because migration involves considerable costs. The costs of migrating can be regarded as labour market transaction costs. The costs include the actual cost of travel, the cost of finding accommodation at the destination, the cost of job search at the destination, and the cost of support while seeking a job. In such circumstances, the migrant usually has little bargaining power, runs the risk of being exploited and may fail to escape from poverty. More than one generation may be needed for a migrating family to escape from poverty.

As pointed out by Mehta and Shah (2003, p.502) "The existing literature on internal migration in India does not throw much light on the long-term impact on migrants' (or immigrants') livelihood base and quality of life among the poor migrating households,

especially at the place of destination”. They go on to say that this needs rectifying urgently. While agreeing with this suggestion, I would also suggest that not only the long-term impacts be considered but that the dynamics of the migration adjustment process be given particular consideration. A long-term result may not be justified when the path to its attainment creates undue hardship on the way.

7. Concluding Comments

Clearly processes of poverty alleviation take time but there has been less attention to the dynamic processes involved in these than seems warranted, especially at the disaggregated level. When greater attention is paid to this matter, it is found that the contemporary aim of distinguishing the temporary poor from the chronic poor is fraught with difficulties, especially the view that the temporary poor are less worthy of assistance than those in chronic or long-term poverty.

For one thing, it is difficult to tell in advance which of the recent poor are likely to remain only temporarily in poverty. Secondly, the aim itself can be questioned, since the ultimate objective is unclear. An ultimate objective could be, for example, to minimise the numbers in poverty at the end of a period for a given expenditure on poverty alleviation or a variant of this, or to do this given a set of policy choices. Using such an approach, the temporarily poor may be very worthy of assistance, and the cost of assisting each family in this situation may be much less costly than enabling families in chronic poverty to escape from such poverty.⁴ Thus the policy approach, for example, of Barrett (2003), of favouring the chronic poor for poverty reduction seems debatable even when poverty dynamics is taken into account. The problem is highlighted in the Appendix.

More consideration should also be given to how families in poverty cope with it. What mechanisms do they adopt? Are these mechanisms rational from their viewpoint? They may often be rational given the situation of a poor family. However, they may become habitual and suboptimal in a changing world. In this case, policy could be directed to making such families aware of better coping strategies. It has also been observed that intra-household strategies for coping with poverty while rational for a family may be suboptimal for a social viewpoint. Such strategies often occur due to social or cultural embedding and result in a difference between the private benefits and social benefits for strategies used to cope with poverty. For instance, access of females to human capital may be less than socially desirable

(relative to males) in poor families, as in India. To some extent this matter can be addressed by government support for universal education.

A very difficult issue is how best when promoting economic development and reducing poverty in tribal areas (and those areas dominated by ethnic minorities) to take into account the impacts of these policies on the cultures involved. Economic policies are rarely neutral in their cultural impacts. In alleviating local or regional poverty, it is necessary to pay attention to the sustainability of local communities and cultures.

In the previous section, this article considered the prevailing view that market extension and facilitation is a positive force in relieving rural poverty. While this may be so in the long run, during the adjustment phase (which could be very long) it does not seem to be so. It seems likely that due to market-related adjustment costs, poor landholders face difficulties in adjusting to market variations. This may deepen their poverty and result in the sale of their land. Consequently, they may join the rural labour force which, at least initially also remains poor. Furthermore, if they migrate to the city in search of employment, they may also face difficult times. The family may remain in poverty for some considerable time. Hence, the adjustment costs imposed by the market system can be quite high for the poor. A political choice is involved in deciding whether the perceived long-term benefits from market extension will outweigh adjustment costs and initial impacts on inequality. Certainly one must face up to these difficulties and not assume them away, as is often done using idealised static models of how market economies work.

Notes:

¹ Note that Fan's data on India is not up-to-date, so it gives a worse impression of the incidence of poverty in India than its currently estimated official incidence. However, even after updating for India, the discrepancy in the Chinese and Indian rural poverty incidence is large. For more discussion of rural poverty in China with reference to China's entry to the WTO see Tisdell (2002).

² Discrimination against females that contributes to their impoverishment can result in lack of sustainability of economic development for reasons outlined in Tisdell (2001, 2000).

However, the poverty of a family does not always result in discrimination against females. Culture seems to be a major influence on whether such discrimination occurs. Furthermore, despite the findings of the Brundtland Report (World Commission on Environment and Development, 1987) poverty might not be a prime reason for lack of economic sustainability, or a major contributor to lack of sustainability of development. It has been claimed that weak conditions for development result in its lack of sustainability but strong conditions do not (Tisdell, 1999c). Poverty seems often be associated with the fulfilment of strong conditions, that is preservation of considerable stocks of natural capital. Conversion of natural resources into man-made capital or other economic products (to satisfy weak economic growth conditions) requires considerable capital or wealth and can usually only be achieved by the better-off members of society or wealthier societies. Hence, wealth rather than poverty appears to be the main threat to lack of long-term economic sustainability, that is to lack of sustainability of the type that can arise if there is excessive conversion of natural resources to man-made capital and to other man-made products.

³ An interesting case study of such changes can be found in Coggins (2003).

⁴ Note that it is not being argued that the chronic poor are not worthy of assistance. The main problem is that neither Barrett (2003) nor Hulme and Shepherd (2003b) specify the objective function that is to be the purpose of poverty reduction. Depending on how this function is specified, variation in types of desirable targeting of different poor groups emerges.

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APPENDIX

THEORY OF EFFICIENT ALLOCATION OF FUNDS BETWEEN THOSE IN CHRONIC AND NON-CHRONIC POVERTY

The simple objective that I shall consider for illustrative purposes concerning this efficiency argument can be presented in two different ways: (1) minimise the total cost of getting a targeted number of individuals out of poverty in a specified period of time or (2) maximise the number lifted out of poverty in a specified period of time. These are reverse ways of considering the same problem. If the group of those in poverty is divided into two subgroups, those in chronic poverty and those in ‘temporary’ or non-chronic poverty, funds for poverty alleviation should be allocated so as to equate the marginal cost of lifting the last individual out of poverty in each category, given the above objective.

Let x_1 represent the number of persons or households lifted out of non-chronic poverty and x_2 represents the number lifted out of chronic poverty in the specified period. If $C_1(x_1)$ and $C_2(x_2)$ represent the total costs respectively of lifting individuals or families out of poverty in each of these categories, then for the first efficiency condition to be satisfied it is necessary for

$$C'_1(x_1) = C'_2(x_2) \tag{A.1}$$

The marginal cost of lifting individuals out of poverty in each category should be made equal.

If both of these marginal cost curves are rising and if $C'_1(x_1)$ is less than $C'_2(x_2)$ for the same value of x_1 , this will require persons in non-chronic poverty to be assisted more so than those in chronic poverty.

This is illustrated in Figure A.1. There, the marginal cost curve of lifting persons in non-chronic poverty out of poverty is shown by line AB and those in chronic poverty by EF. If an aggregate of $x = \bar{x}_1 + \bar{x}_2$ individuals are to be lifted out of poverty, the cost of doing this will be minimised by mostly lifting persons in non-chronic poverty out of poverty. As can be seen, HJ should be lifted out of non-chronic poverty and only GH out of chronic poverty.

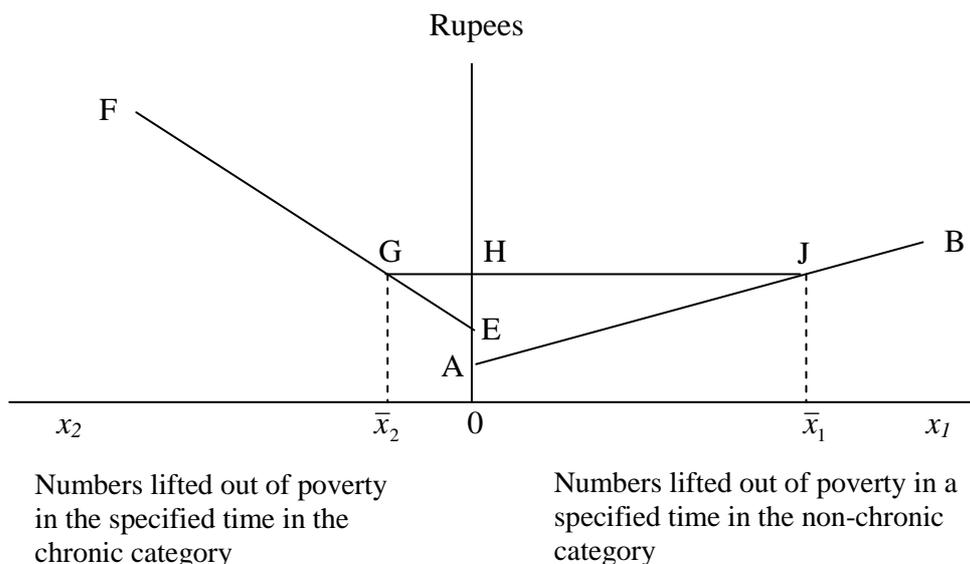


Figure A.1 With a shortage of funds for poverty reduction, it may be more efficient to concentrate on those who are not chronically poor

Note that if EF is high enough compared to AB , a corner-point solution could occur. This would result in none of the limited available funds being allocated to the chronically poor.

Observe that within the poverty categories there will be differences in the economic costs of lifting different families or individuals out of poverty. These differences would need to be identified empirically. Observe also that even if, up to a point, some individuals in the non-chronic poverty category are given aid yet would have exited poverty without it in the specified time, that concentration on the non-chronically poor could still be efficient. Such slippage has the effect of moving line AB upwards. If it does not move this line up excessively, concentration on the non-chronic poor still remains efficient.

Consider this matter also from the point of view of the second formulation of the problem. Let z_1 represent the amount of expenditure for poverty reduction allocated to the non-chronically poor and let z_2 represent that allocated to the chronically poor. Let $R_1(z_1)$ represent the reduction in the number of the non-chronically poor in a specified period of time and $R_2(z_2)$ represent that for the chronically poor. These are in effect the production functions for reducing poverty. Then if the numbers in poverty are to be reduced to a maximum extent by expenditure on poverty reduction it is necessary for the marginal productivity of expenditure in reducing poverty amongst the non-chronically poor to be equal

to that for reducing poverty amongst the chronically poor. In other words it is necessary for the allocation of expenditure to be such that

$$R'_1(z_1) = R'_2(z_2) \tag{A.2}$$

If the marginal productivity of expenditure in reducing numbers in poverty for the non-chronically poor is higher than for the chronically poor for the same level of expenditure, efficient use of funds to relieve poverty requires the major allocation of funds to go to the non-chronically poor. This is illustrated in Figure A.2. There, line AB represents the marginal productivity in terms of numbers lifted out of poverty of expenditure on the non-chronically poor and DF represents that for the chronically poor. If a total of $\bar{z}_1 + \bar{z}_2$ of funds are available for distribution, the efficient allocation is one allocating HJ of available funds to the non-chronically poor and GH of funds to the chronically poor. The major portion of the funds would, therefore, be allocated to the non-chronically poor.

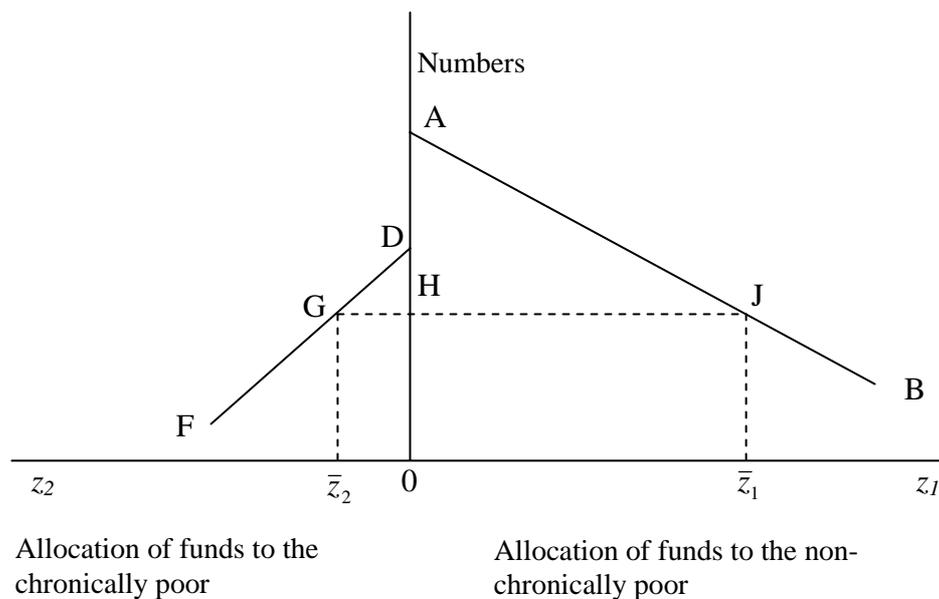


Figure A.2. A case in which allocating most of the funds available for poverty reduction to those not in chronic poverty brings about the maximum reduction of numbers in poverty in a specified period.

This is, of course, a highly simplified theoretical presentation of the issue. For example, it is based on a poverty threshold and takes no account of the extent of deprivation of those in poverty. Nevertheless, it does illustrate the shortcomings of supposing that those in chronic poverty are more worthy of poverty assistance than those not in chronic poverty (as is now commonly done in the economic literature).

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