Employment and livelihood

The rural labour process and the formulation of development policy

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Limits to industrialisation in a dual economic structure

It has come to be generally accepted that an economic development
strategy based on the industrialisation experience of the advanced
capitalist countries may not be viable for most developing countries. At least
three major distinctive factors exert a strong influence on contemporary
industrialisation. First, the decline in the death rate and the corresponding
rise in the *net* birth rate in most developing countries have generated strong
pressure to increase wage employment more rapidly through industrialisation
– a problem accentuated by the deteriorating land/man ratio and the severely
limited scope for international migration. Large-scale emigration,
particularly to the United States (and the Americas in general), provided a
significant escape route from population pressure for many European
countries during their industrialisation process, but no escape route of
comparable magnitude exists today for the relatively large developing
countries with high population density.

Secondly, the technological environment for industrialisation has
radically altered. The vast stock of technological knowledge available in the
industrially advanced nations is a double-edged weapon in the context of
developing country industrialisation. It opens up the possibility of rapidly
raising labour productivity; but, because of the greater dependence of
developing countries nowadays on international trade, it also threatens to
impose a heavy economic penalty on those of them that fail to catch up
technologically. Thus developing countries cannot avoid adopting a
conscious technological policy as part of their industrialisation strategy. By
and large, this need was not felt at the time of the Industrial Revolution in
Western capitalism, where technological development proceeded more or
less simultaneously with the process of capitalistic accumulation.

Third, and most important from an economic point of view, it has
become more difficult to finance industrialisation internally, and the
developing countries do not have colonies from which to extract surplus.

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Moreover, domestic wage-price-productivity relations have changed. For instance, the real wage per adult male worker hardly increased in Britain during the first six decades of the nineteenth century, despite a substantial increase in labour productivity in this initial phase of the Industrial Revolution. Similarly in France, *money* wages remained almost constant during the entire period from 1810 to 1850 (Boyer, 1979), while *real* wages fell perceptibly between 1840 and 1856 as the cost of living rose sharply (Lhomme, 1968). In contrast, in the organised industrial sector of today's developing countries, money wages in general tend to respond much more rapidly to rises in prices and the cost-of-living index, and this, added to downward inflexibility of the real wage rate in the organised industries, weakens the classic mechanism of surplus generation in a capitalist economy. Inflationary redistribution from wages to profits often boils down to an even more cruel process of redistribution mostly at the cost of the weaker and more vulnerable workers in unorganised industries, who are unable to protect themselves against the rising cost of living.

The role of real wages in an underdeveloped (or, for that matter, in a developed) capitalist economy should not be misunderstood. It is not principally a means of substituting labour for "capital" by reducing the relative price of labour, as is asserted by orthodox neoclassical economic theory. It is not evident, as Keynes pointed out, that depressing the real wage rate would increase the derived demand for labour. With lower real wages the level of effective demand tends to fall, and the strong negative "acceleration effect" of a lower level of effective demand may well outweigh the higher profitability of investment associated with a lower real wage rate and keep both investment and effective demand in a depressed state. Thus it is by no means certain that lower real wages in a developed or underdeveloped capitalist economy would help to reduce unemployment. Only when investment is centrally planned and a lower real wage can be used to redistribute income from the already employed to the unemployed, will the stimulating effect of lower real wages on the employment level be certain to operate.

Most so-called labour-surplus developing countries are therefore ill placed to deal with growing unemployment. While high net population growth without significant scope for international migration and the need to catch up technologically pull the developing countries towards faster industrialisation, a weaker mechanism for generating and utilising social surplus makes the financing of industrialisation more problematic.

The classical assumption of a *given* real wage rate at which labour supply remains perfectly elastic was used by Lewis (1954) to capture some of the essential features of industrialisation in a dualistic economic structure. With profit maximisation in the modern capitalist sector at that given real wage, it is assumed that in a long-run process of industrialisation all savings (profits) in the capitalist sector are automatically invested to finance further industrialisation. And, as labour productivity in the modern sector rises while

the real wage rate remains constant, both savings out of profit and the share of investment rise and can be used to increase the pace of industrialisation. Another result is the transfer of surplus labour at an increasing rate from traditional peasant agriculture.

In his later assessment (1979, p. 223) Lewis himself candidly admitted: "It [the model] predicts quite well for nineteenth century Europe, on whose experience it was based, but when applied to one hundred LDCs over the past quarter century, its [predictive] performance is spotty."

The model seems to have lost its contemporary relevance in at least three crucial respects. First, the assumption that all savings (profits) of the modern sector are *automatically* invested back into the economy fails to capture investment behaviour in a predominantly capitalist, underdeveloped economy. In a centrally planned economy it may be a reasonable approximation to assume that savings are invested back, but the essential feature of any capitalist economy, developed or underdeveloped, is the relative autonomy of private investment guided by prospects of profits, to which savings tend to adjust. The model has nothing to say on how the size of the domestic or home market affects the pace of investment and therefore of industrialisation.

Secondly, the process of surplus expropriation is inadequately specified in the model. Apart from identifying the profits of the modern sector as the investable surplus of the economy, the model does not explicitly deal with the issue of how adequate agricultural surplus is generated to support the expansion of the modern industrial sector by matching demand for and supply of food. Instead, the traditional peasant agricultural sector is largely treated as a passive variable, with both the level of agricultural surplus and the labour supply adjusting to the requirements of industrialisation.

Finally, not only does the model gloss over the problem of surplus extraction, it also fails to link variation in the level of agricultural surplus with the pace of migration to modern industry over time. The conclusion is that Lewis-type dualistic models grossly underestimate the social phenomenon of migration to urban areas and the associated enormous cost of urbanisation, which threatens the very process of industrialisation. Inasmuch as higher extraction of agricultural surplus to finance industrialisation may constitute a strong "push" factor propelling migration to urban industries, in addition to the standard "pull" factor of higher urban wages, the pressure for industrial employment creation can reach a level that is simply unmanageable.

Two simple sets of calculations illustrate the nature of the problem. On the *requirement of agricultural surplus*, consider the broad magnitudes in the Latin American context. In the early 1950s about 30 per cent of the Latin American population was urban and 70 per cent rural. By 1985 the situation was almost reversed with nearly 70 per cent of the total population living in urban areas. Assuming that all profits and no wages were saved and that there was no net import of food grains, this would have meant that the rural

labour force L_r was able to support the food consumption of the urban labour force L_u in the 1950s provided that agricultural productivity x_a was about 1.43 times higher than the average real wage w in the economy in terms of food, according to the simple formula:

$$w\,L_u = (x_a - w)\,L_r \tag{1}$$

or $\dfrac{L_u}{L_r} = \dfrac{.3}{.7} = \dfrac{x_a}{w} - 1$

or $\left\{\dfrac{x_a}{w}\right\}_{1950s} = 1.43$

However, in 1985 the same formula would have required a ratio of agricultural productivity to the average real wage of $x_a/w_{1985} = 3.33$. In other words, the drastic change in the urban-rural population balance over three-and-a-half decades would require something of the order of a 133 per cent increase in agricultural labour productivity to generate a sufficient agricultural surplus to meet the new needs, on the assumption of a constant and uniform real wage rate. Even this would be an underestimate if either the urban-rural wage differential were to widen or the real wage were to rise over time in favour of the urban sector.

The other dimension is the *requirement of job creation in industry*. Even a modest target of 3 per cent growth in total employment, if it had to be achieved by the industrial sector alone, would require wholly unrealistic industrial growth rates. Consider, by way of example, some typical values: the industrial sector engages 20 per cent of the total active labour force and the output elasticity of employment n is around 0.3. Using the traditional three-sector classification into agriculture, industry and services, represented by subscripts a, i and s respectively, we can define the growth in total employment L as a weighted average, i.e.

$$\frac{\dot{L}}{L} = \frac{\dot{L_a}}{L_a}\,\frac{L_a}{L} + \frac{\dot{L_i}}{L_i}\,\frac{L_i}{L} + \frac{\dot{L_s}}{L_s}\,\frac{L_s}{L}$$

where $\dfrac{L_a}{L} + \dfrac{L_i}{L} + \dfrac{L_s}{L} = 1$ by definition.

Since, by assumption,

$$\frac{\dot{L}}{L} = \left\{\frac{\dot{L_i}}{L}\right\}\left\{\frac{\dot{X_i}}{X_i}\right\} n \tag{2}$$

where the output elasticity of employment in the industrial sector is definitionally given as

$$n = \frac{\dot{L_i}/L_i}{\dot{X_i}/X_i} = 0.3 \text{ (assumed constant value)},$$

it follows from (2), that for $L_i/L = 0.2$ and a *total* employment target of 3 per cent per annum, i.e. $\dot{L}/L = 0.03$, the required growth rate of industrial output $\dot{X}_i/X_i$ has to be 50 per cent a year.

Thus a necessary condition for a sustainable process of industrialisation must be to moderate its requirements for extraction of agricultural surplus and creation of industrial employment. Such conditions can be satisfied only when rural livelihood is reasonably stabilised to slow massive out-migration to urban areas. In other words, the earlier dual-economy models may be fundamentally misleading precisely because they concentrate on the dynamic growth of the "modern" industrial sector as the prime mover of the system. Instead, in some contexts, the traditional sector may play the crucial role, not merely by generating the required agricultural surplus or even providing the domestic market for industrial goods but, more importantly, by reducing the almost intolerable pressure for industrial job creation and accompanying urbanisation.

Expropriation of agricultural surplus and the survival strategy in traditional agriculture

The dual-economy model implies that the dominant social form of labour utilisation is different in the "traditional" and in the "modern" sector, modern organised industry being based on wage labour, while traditional agriculture depends heavily on the use of family labour.

The industry-agriculture division does not, however, sufficiently capture the distinction in the social form of labour utilisation for one central reason: the nature and extent of inequality in private property ownership exert a decisive influence. Thus, while large landowners may often organise production on the basis of wage labour in agriculture, small enterprises may rely heavily on family labour in unorganised industry and the service sector. In general, both in agriculture and in industry, self-employment through reliance on family labour increases in importance as one moves down the scale of private ownership of property. The very existence of a large traditional agricultural sector presupposes that a large number of direct producers are not separated from the ownership of the means of production, that is, they own their small plots of land, and/or have access to the use-right of land through an active land-lease market.

The coexistence of wage-labour-based production on large farms and self-employment-based family-operated farms reflects the underlying inequality in the land ownership pattern in traditional agriculture. This inequality in land and other resource ownership forces the vast majority of agricultural households to devise survival strategies – in which context it is necessary to focus on the concept of *livelihood* as distinct from wage employment.

Survival strategies involve two interrelated aspects: (i) the use pattern of household labour (and other household-owned resources); and (ii) the

relationship of households with "the market" both as buyers and as sellers. Although the two aspects are not usually distinguishable in practice, it is analytically useful to make this separation. Households, operating small plots either as owner-cultivators or as tenants, tend to use their family labour most intensively in order to obtain maximum yield per acre of land. This is a reflection of their limited access to land in relation to available household labour; it is also a reflection of their need to survive by trying to get the maximum out of that land, almost irrespective of the additional income/output obtainable from extra effort on the part of the family.

The resulting higher yield from land does not show itself so much in terms of a given single crop, but arises from choosing, say, a more labour-intensive crop composition which maximises monetary yield per acre (or allows small producers to be more favourably placed in relation to the market, as discussed later). Thus the much debated inverse relation between land size and land productivity seems to have a firmer empirical basis when yield per acre, taking into account all crops, is considered (Bharadwaj, 1974).

However, choice regarding crop composition and cropping intensity is constrained by land quality, ecology, control over water, credit availability, and so on. In this context, longer-term investment may become another choice variable, mostly concerning the use of family labour in land improvement, such as better drainage and irrigation facilities to improve future production potential. But longer-term land improvement can be a valid option only for family-owned farms, or for tenant-operated farms enjoying long-term security of tenure. In this way, property relations in the form of *continuity* of land-use rights may also exert a strong influence on the extent of choice in the more intensive use of family labour.

Some empirical evidence from India suggests that "smaller farms generally have a higher percentage of their area irrigated" (Bharadwaj, 1974, p. 41). This may result from two different motives for family labour utilisation. First, it may reflect the tendency to use family labour more intensively in improving land quality, as mentioned above. But secondly, it may reflect the threat to survival imposed on small-sized tenant-operated farms by an indirect control of the labour process by the landowner. This indirect control may be exercised by leasing out more fertile or irrigated land in smaller parcels than less fertile land under, say, share-cropping arrangements. A tenant family is forced to cultivate the more fertile irrigated land more intensively because the size of operational holding parcelled out by the landowner is reduced in proportion to its fertility. Some further evidence has been recently accumulated in India to suggest that the higher productivity of small farms in traditional agriculture may well be partly explicable by a more intensive pattern of land improvement and capital expenditure (see table 1). However, even if this evidence holds as a more general pattern, higher capital investment in smaller holdings may be the complex resultant of at least three interacting economic forces: *(a)*

Table 1. Capital expenditure/investment in agriculture by operational size groups: India, 1951-52 and 1971-72

Size [1]	Average expenditure [2] per acre (rupees)	
	1951-52	1971-72
Small cultivators [3]	19.3-22.1 [4]	34.1-43.2 [4]
Medium cultivators	16.4	30.4
Large cultivators	15.9	39.1

[1] The 1951-52 and 1971-72 data are not strictly comparable in terms of size group classification, as the former uses a "relative frequency" approach, while the latter uses the land ownership per household as the criterion. [2] Excludes expenditure on purchase of land or land title, but includes expenditure on land improvement (also imputed values). [3] The 1951-52 classification defines small cultivators as the bottom 30 per cent of land-owning households; in the 1971-72 classification they comprise "marginal" (up to 0.8 acre) and very small (up to 2 acres) farmers, accounting for a larger percentage (about 47 per cent). [4] Tentative estimate of range, based on varying imputed value to family labour.

Source: Recomputed from Banerji, 1984, on the basis of All India Rural Credit Survey (1951-52), All India Debt and Investment Survey (1971-72) and National Sample Survey, 8th round.

complementary investment to higher labour use per acre of land in *current* production; *(b)* higher family labour use to expand *future* production potential, as a part of the survival strategy; and *(c)* smaller operational holdings of better endowed and more fertile land enforced by some landowners.

Yet another important complexity in family labour use patterns arises out of the survival strategy. Given acute land scarcity in relation to available family labour at the lower end of the land ownership spectrum, there is naturally a strong tendency to lease in land on the part of the landless and near-landless or marginal cultivators. However, with the fragmentation of land ownership as a result of population pressure and inheritance laws and rights, leasing in frequently leads to extremely unconsolidated landholding patterns, where even a smallholding may be divided into several pieces. Such fragmented holdings reduce the effective use of family labour and increase the "setting-up" costs of cultivating each fragmented piece. Thus, paradoxically, the pressure for survival that leads to leasing in several unconsolidated plots of land with a view to better use of family labour may ultimately result either in subletting or in greater reliance on outside, hired labour even by very small and marginal landholders.

The dependence of small-to-landless peasants on the land-lease market is in turn only one component of overall survival strategy which revolves round their complex relation with the market in general both as buyers and as sellers.

It has been customary in traditional theory to oversimplify and view *all* market exchange as based on the motive of "gains from trade". This view rests on the assumption that trade or exchange in the marketplace is strictly

voluntary while specialisation in production, according to comparative advantage, operates as the general rule. In the case of poor peasants serious doubt may be cast on the validity of both these assumptions. Small and marginal peasants are often involved in the market for agricultural produce in a series of *involuntary* exchanges, simply dictated by their need for survival. Thus there is the widespread phenomenon of cycles of post-harvest distress selling and pre-harvest distress buying in which many small peasants are caught up. The fact that they regularly sell at a low post-harvest price and buy at a high pre-harvest price would seem to suggest that "voluntary" trade is not a particularly meaningful term to apply in the present context. Indeed, evidence also suggests that smaller farms quite often have a high degree of market involvement, in terms either of the proportion of output sold or of the proportion of land devoted to cash crops or both (Narain, 1961; Bharadwaj, 1974; and a theoretical explanation and additional data in Bhaduri, 1983, Ch. 1). Because smaller farms typically have less "surplus" to sell in the market, such market involvement cannot be easily explained in terms of voluntary sales. To highlight this *involuntary* nature of the market involvement of small peasants, we employ the term "forced commerce". It emphasises that, more often than not, small peasants are forcibly caught up in a commercial network through indebtedness largely incurred by taking out regular consumption loans in order to survive from harvest to harvest (Bhaduri, 1983, Ch. 1 for empirical details relating to India).

Such forced commerce has a dual role in traditionally backward agriculture through its impact on the livelihood of the small peasantry. On the one hand, it might superficially appear that many small peasants would not have a viable livelihood were it not for regular recourse to consumption loans and the associated network of forced commerce it involves. On the other hand, such forced commerce is also an important device to extract a surplus from even the smallest producers in agriculture by obliging them to participate in the market under duress, and thus represents an increased threat to their survival.

The threat to survival posed by forced commerce and the associated method of extraction of agricultural surplus generally operates in two distinct ways. So long as an indebted small peasantry is able to service its debt from consumption loans, the interest payments on the loans in various explicit or implicit forms (e.g. undervaluing the standing crop as collateral) constitute the main mechanism of surplus extraction. When the peasants are unable to service their debt, the method of surplus extraction takes other forms. A major consequence of default is the transfer of "assets" from the peasants, including land and future labour services as undervalued collaterals (Bhaduri, 1983, Ch. 5). The steady erosion of such assets through loan defaults poses an obvious threat to their traditional livelihood. In turn, this creates a strong "push" factor in traditional agriculture as many small peasants ruined by unpayable debt burdens are compelled to look for alternative livelihoods.

In most traditional agriculture with its acute inequality in land distribution, the small peasantry account for a relatively small proportion of total agricultural output or surplus, and since the method of forced commerce based on a threat to survival basically operates on them, it may not be quantitatively the most important means of extracting agricultural surplus. And yet it could threaten the traditional livelihood of a very substantial proportion of all agricultural households. The consequence is extremely unfavourable for sustained industrialisation: not only is the agricultural surplus that is expropriated through forced commerce to finance industrialisation relatively unimportant, but the pressure it creates for alternative job creation by destroying traditional livelihood in agriculture is disproportionately large.

Alternative methods of surplus extraction, such as a higher indirect tax on essentials or a higher land revenue demand by the State, which may be passed on to the smaller direct cultivators, can likewise bring the smaller peasantry into the grip of forced commerce by depressing their consumption level. In that case alternative modes of surplus extraction, including the claims made by the State, would interact in a complex way. If the final outcome strengthens the grip of forced commerce and threatens the livelihood of the smaller peasantry in traditional agriculture, this would jeopardise the very process of sustained industrialisation for which agricultural surplus is extracted by the State in the first place. Nor can this difficulty be easily circumvented by manipulating the terms of trade between agriculture and industry. Most agricultural labour households and marginal-to-small peasants are not genuine surplus producers voluntarily participating in the market for "gains from trade". They may either be *net* buyers of food grains (e.g. agricultural labourers) or be involuntarily involved in the market as net sellers under a contrived system of forced commerce. In either case, they cannot be expected to benefit from a movement in the terms of trade in favour of agriculture. At the same time, the logic of forced commerce would allow the moneylenders and merchants to expropriate the benefit of higher agricultural prices along with large, genuine surplus producers. Manipulation of the terms of trade may thus be ineffective. So long as this system of forced commerce maintains its grip on the small peasantry, it will, in the process of extracting agricultural surplus, continue to ruin traditional livelihoods. In this way the *method* of extraction of agricultural surplus exerts a crucial influence on the longer-term viability of the development strategy in a predominantly agrarian economy. It follows that both the *method* and the *pace* of extraction of agricultural surplus must not be allowed to result in the uncontrolled destruction of traditional livelihood in agriculture.

The contradictory dynamics of rural livelihood

The destruction of livelihood in traditional agriculture under the surplus-extracting role of forced commerce is by no means a unilinear

process, basically because of the essential flexibility of rural livelihood in contrast to wage-labour employment. Within a broad margin such flexibility permits both the sources and the pattern of livelihood to adapt to changing economic circumstances, and, in turn, this generates a complex dynamic of simultaneous creation and destruction of rural livelihood.

The flexible nature of livelihood in traditional agriculture arises from its three distinguishing characteristics.

1. Since the whole family rather than the individual is the relevant labour unit, economic activities can be more easily diversified over space and time.

2. The survival strategy of a poor family with limited land and other resources usually requires dependence on several sources of earning and other family-supporting activities.

3. The labour use pattern of the family, that is, the labour process associated with rural livelihood, is governed by its survival strategy but usually is not directly controlled by others. This lack of direct control allows family labour to change and adapt its use pattern in accordance with its preferred survival strategy over time.

As forced commerce becomes the centrepiece in the mechanism for eroding traditional livelihood by transferring land and other means of production from poor peasants to the moneylenders and merchants, the flexible response of the livelihood pattern may become visible. The overall or *macro-economic* impact of the transfer of land and other assets from defaulting peasants depends to a large extent on its repercussions on the organisation of production in traditional agriculture. In so far as it means a mere transfer of property rights without any fundamental change in the organisation of production (e.g. reducing the defaulting peasant from owner-cultivator to tenant), its impact on livelihood is relatively limited. It has the effect of depressing the consumption level of the direct cultivator without a consequent change in the organisation of production. However, in other instances the transfer of property rights may entail basic changes in the organisation of production (e.g. a changeover to capitalistic from peasant farming). Even assuming that the transfer of property rights in land leads not only to concentration of land ownership rights, but also to simultaneous consolidation and cultivation of land in larger operating units along capitalistic lines, its overall effect on rural livelihood would be the resultant of two opposing tendencies. On the one hand, traditional family-based cultivation of smallholdings decreases, while on the other hand wage-employment opportunities on larger operating units are created. When irrigation and other forms of capital investment raise the cropping intensity of the larger units, the potential for wage employment tends to increase further. Thus the net effect in terms of labour absorption in agriculture depends on a complex interaction between the destruction of relatively independent family-based cultivation and the creation of fresh wage

employment in larger and perhaps more productive (thanks to capital investment) modern capitalist holdings. However, the overall net impact on labour absorption in agriculture is likely to be adverse so long as labour use per unit of land is higher on smaller than on larger farms.

Nevertheless, a lower average labour absorption per unit of land in agriculture must not be confused either with a necessarily lower employment potential or with lower average earnings for agricultural households. The wage income opportunities generated in the larger farms created by land transfer may outweigh the disadvantage of land alienation by giving higher earnings to *some* of the small peasant families. Thus a part of family labour may still be used in the cultivation of the small family plot, while the remaining family labour (usually that of the adult male member of the family) finds wage employment on the larger farm. Under these circumstances, total earnings from all sources may actually increase for some families. Such enhanced earnings should weaken involuntary market involvement, and consequently weaken the grip of forced commerce by slowing the process of land transfer through debt default. The result would be a marked tendency for a number of small farms to persist over time, despite an overall trend towards concentration in the landholding pattern – in other words, for traditional agriculture to be polarised.

If smaller landowning groups are able to supplement their income with opportunities for additional earnings *outside* agriculture, for example through animal husbandry, artisan work, or employment in local industry, a more autonomous dynamic of employment opportunities would be superimposed on the internal dynamics of land alienation and simultaneous creation of wage income opportunities *inside* agriculture.

Under these circumstances it is possible to visualise complex interactions of "push" and "pull" factors determining the overall rate of out-migration from agriculture. If the pull factor creates additional income by attracting some members of the family to work in the city or industry and remittances are sent back to stabilise the small, family agricultural holdings, such migration to cities, often in the form of temporary "relay migration", may paradoxically contribute to the stabilisation of livelihood in traditional agriculture. Indeed, there is evidence that migration to plantations and to urban areas has allowed small peasant proprietorship to stabilise in some instances, as the figures in table 2 based on an intensive survey of four villages in the Noakhali district of Bangladesh suggest.

The final column of table 2 shows a definite tendency towards polarisation in land ownership through net transfer of land from the two smallest size classes (owning up to 0.6 acre) to the larger ones. Nevertheless, this polarisation is relatively slow, as nearly half the households in the two smallest size classes retained at least some of their inherited land (see column 3 of the table) and persisted as very small farms. However, further investigation revealed that their persistence was made possible mostly by additional income opportunities in the form of leasing in land and wage-

Table 2. Persistence of small-owner farms despite land transfer: Four villages in Noakhali District, Bangladesh

Size of current landholding (acres)	No. of households	% of "stable" households [1]	Net transfer of land ownership as % of currently owned land [2]
(1)	(2)	(3)	(4)
Up to 0.2	350	50.9	−21
0.2-0.6	200	46.0	−13
0.6-1.6	222	41.4	+13
1.6-4.0	118	39.0	+20
Over 4	46	52.2	+11

[1] Calculated by the ratio of currently owned to inherited land; "stable" households are those in which this ratio remains close to unity (between 0.9 and 1.1). [2] The bases on which the percentages are calculated are different for different ownership size groups. The bigger landholdings gained more land than the smaller ones lost in absolute amount. This discrepancy can be explained by out-migration from agriculture and by new areas brought under cultivation.
Source: Consolidated from tables 1 and 2 of Bhaduri et al., 1986.

labour employment and, to a lesser extent, artisan and similar non-agricultural activities. Interestingly enough, this activation of the rural wage-labour and land-lease market was in part a consequence of the process of land transfer from the small landowning group as a whole. Thus additional agricultural income opportunities for some of these households also meant dispossession of land for others within the same size class. In this way, polarisation and persistence figure as opposite sides of the same process.

It is important to note that the ability of small farms to persist over time under a system of forced commerce does not depend critically on efficiency considerations. Once it is recognised that many smallholdings provide a livelihood for peasant families without alternative means of subsistence in traditional agriculture, it is easy to see how they may persist with subsidiary income opportunities that are barely viable. Indeed, an essential aspect of the survival strategy is the family's ability to eke out a livelihood irrespective of efficiency considerations.

Reversing the Schumpeterian imagery of "creative destruction" caused by technological progress under industrial capitalism, we may identify polarisation as the destructive force operating on rural livelihood which typically prevails over the conserving force represented by the persistence of small family farms, made viable by supplementary income opportunities. However, it is essential to distinguish between situations in which such additional income opportunities are created for certain small peasant households at the cost of others, and those where the additional income opportunities arise either through additional asset or resource creation or at the cost of the more privileged higher-income groups. Thus, when some

peasant families find wage employment on newly created large farms through a general process of land alienation, the situation can be aptly described as a "zero- or constant-sum game": the subset of more fortunate families are able to stabilise their livelihood only at the cost of other households in the same category who have lost their land and livelihood. On the whole, this would typically be a *poverty-augmenting* way of creating supplementary income, as the losers outnumber the gainers in the process (the Bangladesh study points to this situation).

By contrast, supplementary income opportunities arising from, say, better animal husbandry, better marketing, or consisting in non-farm artisan work or off-season guaranteed employment on public works schemes, can be created either by redistribution from more privileged higher-income groups or by introducing new types of resource formation in traditional agriculture. In essence, this is the *poverty-reducing* way to stabilise rural livelihood.

Systematic empirical research on the changing pattern of alternative sources of income opportunities at different levels of family income in rural areas is not available. It would be a highly desirable, indeed a necessary, line of research to give operational content to this distinction between poverty-augmenting and poverty-reducing ways of stabilising livelihood in traditional agriculture. The major policy implications of the preceding analysis hinge on such a distinction. In the course of our discussion of rural development policy in the next section, we shall try to identify on an *a priori* basis a few important poverty-reducing ways of stabilising rural livelihood with brief comments on their political feasibility in different contexts.

Some implications for rural development policy

The critical role of agricultural surplus in financing industrialisation has been widely recognised, especially in the context of dual economies. However, it has been far less common to recognise that the *methods* of expropriation of agricultural surplus can exert a virtually decisive influence on the sustainability of the industrialisation process. If the method of expropriation of agricultural surplus leads to uncontrolled destruction of livelihood in traditional agriculture, then the pressure for creating alternative employment opportunities in industry and services, and the associated urbanisation cost, may mount at a disastrous rate, as has been the recent experience of many developing countries. Yet the ability of organised industry and of services to create employment is severely limited.

It is not possible to generalise meaningfully about the repercussions of alternative methods of agricultural surplus extraction on rural livelihood without reference to context. For instance, a traditional tax-like land-revenue demand by the State can have disastrous consequences for rural livelihood *if* the heavy revenue demand burden is primarily passed on to the small direct cultivators, resulting in rack-renting. This indeed was an important lesson from colonial experience in many parts of South Asia.

Unless the method of surplus extraction can be restricted to the better-off agrarian sections, its effects on rural livelihood and consequent out-migration from agriculture may assume disastrous proportions.

The argument of this paper has concentrated on the role of *forced commerce* in extracting agricultural surplus, not because it is quantitatively important in terms of surplus generated – it usually is not – but because of its wide-ranging negative repercussions on rural livelihood. It may not be important in many developing countries and perhaps its direct relevance is mostly limited to the contemporary South Asian context, but because it simultaneously destroys rural livelihood, it has a wider analytical relevance : it clearly and specifically demonstrates how a *method* of surplus extraction can, quantitatively speaking, be relatively unimportant (as it relies on extracting surplus from the poorest stratum of the peasantry) and yet can seriously threaten the survival of the smaller peasants.

Because certain methods of extracting agricultural surplus like forced commerce may ultimately be counterproductive for economic development, it is useful to consider an alternative attack on the problem. If the real wage in terms of agricultural produce can be reduced, then the same level of investment can be financed with a lower level of surplus. This can create a larger volume of employment with the same real wage bill without extracting higher levels of agricultural surplus. However, this option is generally not open to an underdeveloped capitalist economy since a lower real wage also reduces effective demand in the domestic market and may therefore depress the level of private investment. Only in a centrally planned economy can an effective assault be made on the employment problem by redistributing income from the already employed to the unemployed through a reduction in real wages, maintained by a central rationing system. This indeed has been the experience of several centrally planned economies in their early phase of industrialisation.

While flexibility of the real wage rate affects mostly the demand for agricultural surplus in the course of industrialisation, on the supply side the central policy issue must be to identify *methods* of obtaining agricultural surplus that do not seriously endanger livelihood in traditional agriculture.

It is essential to strengthen the survival strategies of the small and marginal peasantry as an integral part of a sustainable development process. This requires identifying a whole range of what we have termed "poverty-reducing" supplementary income generation measures.

Redistribution of land, as well as of other productive assets (e.g. milch animals), and higher productivity on smaller landholdings would increase income and strengthen the survival strategies of the poorer peasantry. However, the political barriers to such redistribution can be formidable. Even longer-term land improvement through better irrigation and drainage facilities on smallholdings requires security of land-use rights as well as land consolidation so that the tenant has adequate incentive to utilise family labour in land-improving investment. The poor implementation of tenancy

laws in many developing countries makes it doubtful that these minimum conditions for improving the productivity of smallholdings would actually obtain.

An alternative thrust of policy could prove more feasible in some existing political regimes. Whenever forced commerce exists on a significant scale, rural credit and marketing reform could be an essential first step for strengthening the survival strategies of the poorer agricultural households.

For the reform of rural credit, it would be necessary to provide institutional loans to small borrowers on a continuing basis, especially by accepting such collateral securities as these underprivileged borrowers can offer (e.g. the future crop and labour services mentioned earlier; for details see Bhaduri, 1977). Since the recurring dependence of these borrowers on consumption loans is a reflection of the constant threat to their survival under a system of forced commerce, its grip can be weakened only if institutional loans can be assured for the same purpose on a *continuing* basis. The success of such a credit reform depends crucially on being able gradually to convince poor borrowers that they will have access to institutional credit in times of distress. Without generating this confidence, mere occasional availability of institutional credit cannot become an integral part of their survival strategy. Precisely for this reason the process is bound to be a long and gradual one. Enactment of superficial laws, such as imposing a legal ceiling on private interest rates or banning certain kinds of loan arrangements, is likely to be ineffective in strengthening the survival strategy until alternative institutional sources of borrowing can be confidently relied upon by the small and poor peasants.

In this context, it is also understandable why large public works programmes intended to guarantee wage employment during agricultural slack seasons so often fail to make a sufficient dent in the system of forced commerce. For such supplementary income opportunities to become an integral part of the survival strategy, they too must be available on a *continuing* basis over the years. However, by their very nature (e.g. a major road-building, irrigation or drainage project) they are not recurrent schemes in the context of the village economy.

Some of the problems associated with strengthening the survival strategy seem more tractable if collective rather than individual survival strategies are focused on. Thus it may be extremely difficult to make adequate marketing reforms for each individual producer at the village level. Instead, the villagers' collective survival strategy could be strengthened if direct exchange among them could be organised through mutual marketing co-operatives. Because this would not necessarily require recourse to generalised monetary exchange, it would not expose them to exploitation by contrived market relations under the system of forced commerce. Decentralised local exchange, largely based on local skill and production patterns among the poorer section of the rural population and supplemented by credit reform, could play a significant role in expanding the scope of rural

livelihood whenever commercial exploitation is a dominant method of surplus extraction from the poor peasants.

At the political level, policies favouring commercial reform may in some circumstances turn out to be more feasible than the conventional radical policy of redistributing land and other productive assets. In situations where the rural commercial class is fused with the landed élite, the political power of both groups will become intertwined in such a way as to create an insurmountable barrier to any reform, moderate or otherwise. But where the rural commercial class is in opposition to, and is outgunned by, the political power of the landed élite, commercial reform may be possible (whereas land reform will certainly not be). The task of honest economic policy formulation is not to avoid these uncomfortable political realities but to understand why scope for moderate reforms does or does not exist in different historical circumstances.

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