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Sharecropping and Economic Efficiency in Bangladesh—Comment

by

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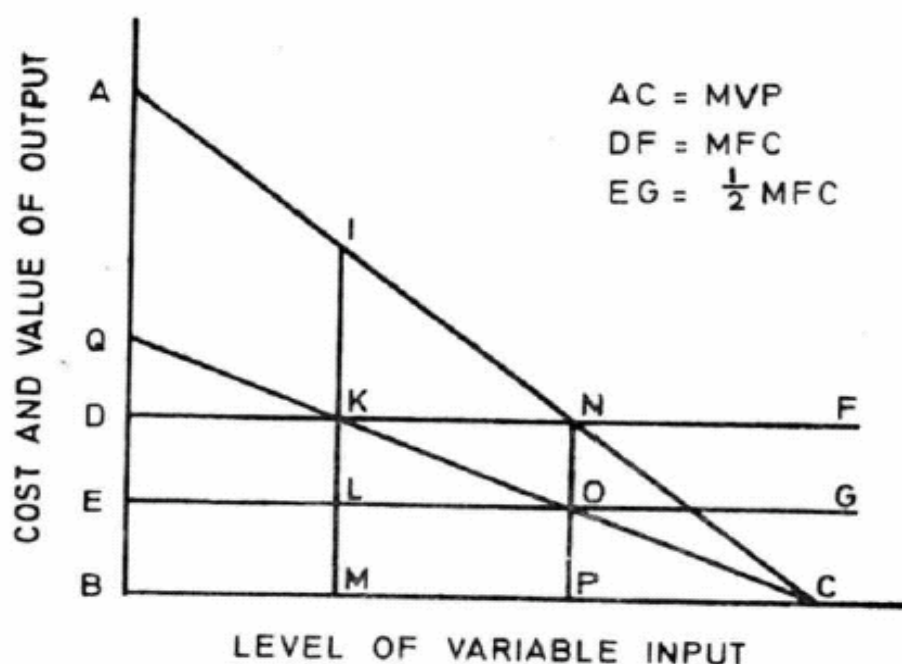
Sharecropping and its counterpart absentee ownership have generally been considered inefficient in theoretical and empirical economic literature. Zaman [9] took exception to this general contention with reference to Bangladesh agriculture. He tried to argue with empirical support that within the given context of Bangladesh the traditional marginality principles of western market economy to measure efficiency were not applicable and that sharecropping as an institution was not only efficient but socially desirable for the 'achievement of maximum aggregate economic gains'.

The purpose of this note is to point out some of the shortcomings of Zaman's data and argument.

Zaman suggested that the optimality conditions explained by Figure 1 were valid for such input as labour in a full employment situation and under conditions of perfect competition which was not the case in Bangladesh. He argued that labour was the main variable input of agricultural production in Bangladesh with almost zero marginal variable cost because of lack of employment opportunities (this he considered equally true for owner operators and sharecroppers). Therefore, farmers employ labour upto the limit imposed by the production possibility curve (PPC) and production under sharecropping will not necessarily be less than production under owner cultivation. He further argued that if the landowner were to cultivate the land himself, he has to hire labour and he will hire labour at the market wage rate upto BP. If the land is given on sharecropping basis, the tenant will use his labour upto BP because his opportunity cost is zero. Total output will be greater in case of the latter and the society as a whole will be gainer.

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FIGURE 1



He suggested that his empirical data from two different areas of Bangladesh did not provide any conclusive proof of significant yield differences in the owner operated and sharecropped land. His results also suggested that sharecropping arrangement as such did not prevent the acceptance of modern inputs and that landowners and sharecroppers often shared the costs of such modern inputs in the same production as output was shared between them. So, sharecropping could be considered efficient on the basis of both static and dynamic efficiency criteria.

The shortcomings of his data and argument are as follows :

(1) The assumption of (family) labour as a variable input is untenable in the short-run analysis which he used. In the short-run the supply of labour is fixed in the same sense as land or capital is although the amount of labour time actually used (or can be actually used) may be variable.

(2) His argument and interpretation would be applicable for a pure tenant who has no land but own other resources and a landowner who has only land but not other resources. In this case, if either is to maximize his own returns with resources fixed in quantity, he must seek out resources of the other until the marginal value productivity of the latter resources become zero [4]. In reality, such an equality is unlikely to be achieved and the relative earnings of the owner and the tenant will depend on their strength in the market which is imperfect.

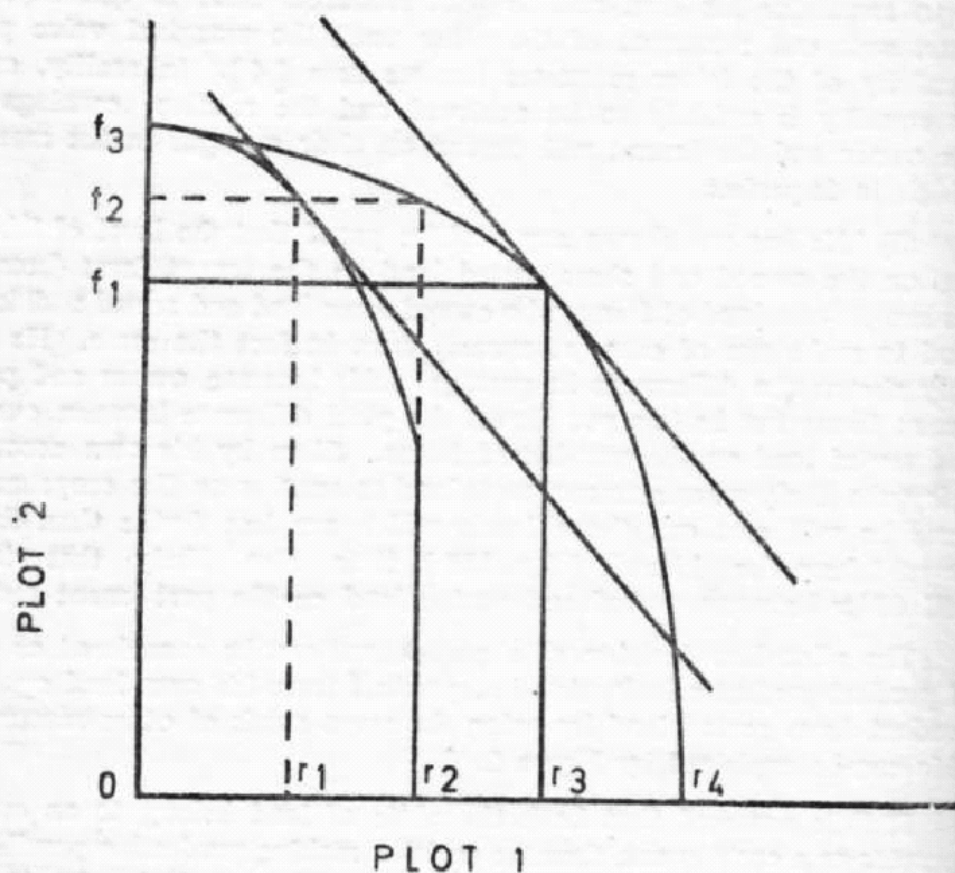
(3) He has not shown any positive proof that the level of labour use on the owned and share rented land on the tenant farm (because his sample consisted of farms who owned some land and rented additional land to make use of other resources) were in fact the same. He has only shown the differences in average yields between owner and part-tenant farms but he has not shown the yield difference between owned and rented land on the part-tenant farms. Since by his own account, it is quite likely when a farmer rents land to another on the cropsharing basis he will rent out those lands which are less fertile than those he will keep for himself [9, p. 155], it is also likely that yields will differ between owned and rented land on the part-tenant farm.

The allocative decision of a part-tenant can be considered as one of product-product relationship i.e., product from his own land against product from rented land by using the same stock of other resources. This can be explained by Figure 2.

If it is assumed that both the plots of land belong to an owner operator or a cash tenant, then the decision making production possibility curve will be $f_1 r_1$. Under perfect competition product price is the same for owned and rented land, so ER represents the isorevenue curve. The profit, maximizing output combination for the owner or the cash tenant will be of_1 from plot 1 and or_1 from plot 2.

If it is now assumed that plot 1 is owned by the farmer himself and plot 2 is rented on half-cropsharing arrangement with no sharing of variable input, then the relevant production opportunity curve for the part-tenant will be $f_1 r_2$ because he realises full product from his own land but only half of the product from the rented land. Given the same isorevenue curve as before, the profit maximizing output combination for the part-tenant will be of_1 from his own land and or_2 from rented land of which or_2 will be his share. It, therefore, appears that a part-tenant will produce a relatively greater output from his own land ($of_2 < of_1$)

FIGURE 2



and a smaller output from the rented land ($or_2 < or_3$). (the is so under the assumption of no differences in fertility between the two plots.) As long as $(of_1 + or_3) = (of_2 + or_2)$, resource allocation may not be inefficient from the point of view of the society. But this is possible only under the condition of perfect competition. Under the prevailing imperfect conditions in Bangladesh, as suggested by Zaman, it is more likely that the tenant will try to produce even higher output than the optimum from his own land but less so from the rented land. In terms of Figure 1, he will use BP or more amount of labour on his own land but BM or slightly greater than BM but less than BP amount of labour on the rented land.

(4) The assumption of zero or near zero opportunity cost of labour is also untenable (in an optimistic sense) because, by his own account the workers could easily sell BP amount of labour and other resources

at the market rate if the landowner would decide to cultivate himself. The argument that part-owners do not go on looking for jobs or work on somebody else's land because of rare opportunities for such work would also be untenable if the landowner would decide to cultivate himself. Such argument also seems to be superfluous when one considers the larger number of landless workers and near landless tenants for whom work means survival. The landowner's decision to rent out land rather than cultivate himself should be explained not by this apparent unavailability of labour but by the economic advantage of such operation which is working in his favour. As one author put it, the normal tendency in overpopulated countries is for the great landowners to let their lands to the peasants for rent, rather than to hire agricultural labourers. They get more this way, since the wage they would have to pay to labourers is more than is left to the peasants when rents have been extracted from them [8,p.326]. In the same way, he does not normally intend to come to an ideal leasing arrangement because the possible advantage of an ideal lease to the tenant may be higher than it is for the owner.

(5) There is evidence to suggest that cost sharing and adoption of improved technology is not as common as Zaman has suggested [6].

(6) Even if sharecropping is efficient by the above measures, it does not follow that it should be specially desirable. All traditional leasing arrangements are exploitative in nature. Several specific elements of tenant exploitation are mentioned in economic literature which may be observed in Bangladesh as elsewhere :

- (a) If share tenants have free access to land they will rent additional land until its marginal value product is zero. Land owners do not allow tenants to take such advantage by restricting the amount of land leased to individual tenant and by changing the tenants very often.
- (b) Under certain circumstances the landowner may be able to force the tenant to employ more than BM amount of labour on the rented land (Figure 1) under different contractual arrangements, for example, supply of labour at fixed wage when actual wage is higher, unpaid help in somekind of household work etc.
- (c) If the tenant families are producing a less than minimum subsistence level of output, then the landowner may force the tenant to use his labour beyond BM level to earn at least the subsistence minimum. The same can happen if the rental share goes up against the tenant.

- (d) Under dynamic technological conditions wages may increase due to increased demand for labour, as Zaman has suggested, but the amount of exploitation will also increase, even when cost is shared, because the increased output is a result not only of fertilizer and seeds whose costs may be shared but also of other resources including labour owned by the tenant.
- (e) Zaman himself has mentioned the special credit problems faced by the tenants because of their inadequate abilities to provide securities required for institutional credit. Consequently they dependent on their landowners for borrowing at very high rates of interest.

As a result of all these, landowners earn more than their specific contribution to output while actual producers receive much less. To argue that the marginality conditions of western market economy are not applicable in the prevailing situation of Bangladesh is one thing but to regard the prevailing system as efficient and socially desirable is another. It amounts to saying that "an overpopulated economy does not operate efficiently unless some labourers earn more than their own contribution to output" [3,p.31]. It appears as though the rules which would govern the efficiency and social desirability of a system should be biased towards a small number of landowners against mass of tenants and agricultural workers. A remarkable commendation for social justice indeed.

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