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Comments on

Labor-Intensive Development-- Theory and Implications

Refugio I. Rochin

My friend, Jerry Eckert, has done a good job with the topic given to him. As with any topic about which there is considerable literature, a speaker is forced to choose one or more of several alternatives, neither of which will be completely satisfactory. One alternative is to concentrate on a synthesis of outstanding articles treating the subject and then to criticize the existing state of the knowledge. Another alternative is to reject or ignore what has been said and to hypothesize a new set of material.

Dr. Eckert has done some of both. I would not criticize him for it. I believe he has made the best choice. It is evident that a historical evolution of literature abounds on the related subjects of surplus labor, labor force absorption, rates of unemployment and population growth, migration, capital-labor substitution, intermediate technology to name just a few. There is certainly more than enough material for criticism and analysis. On the other hand, Dr. Eckert has eight years of practical experience in Pakistan on the problems of the "green revolution," rural-urban labor flows, and policies affecting agricultural employment. It would have been a loss if he had deprived us of this valuable experience.

There is one problem, however, with intimating from what one has lived through, especially for one who has worked intensively at the farm level. That is the failure to view the general situation of the political economy.

In a topic like this, involving the planning of national resources, an analysis of the macrosystem, including the dependency relations with other nations, intersectoral networks and the historical evolution of the society, is imperative. A good example of this point is de Janvry's theory of unequal exchange between the center and periphery

in which he hypothesizes an insightful interpretation of rural underdevelopment in Latin America. Dr. Eckert, along with many others, does not have a general framework of analysis of "labor-intensive development." Nor has he spent much time to define the concept. This is to be expected, because the subject has numerous interrelated and complex facets and is not perceived by scholars in the same way. At the end of this paper, I address some of Eckert's omissions. What I propose to show in concluding is that there exists a great need for research on many of the questions raised by Eckert.

With regard to the contents of his paper, there are several arguments worthy of repeating. He has an opinion that a new development approach is needed which provides a positive alternative to the capital-intensive, import-displacing, low-employment growth pattern followed by many low-income countries. His approach emphasizes an investment in "labor-intensive" industries, a consumer-goods orientation and policies to promote and expand the "green revolution." His approach also gives top priority to redistributing national income to the point where there is an adequate level of income for all, and a disruption of purchases like imports of luxury goods which end up in the hands of a few elites in the developing societies. He would even go so far as to recommend an elimination of the overt goal of raising growth rates or per capita GNP to pursue the objective of income redistribution. The essence of this point is the view that it is more important for everybody to produce something than for a few to produce a great deal.

To some extent, I concur with these suggestions. However, while these points are clear, Dr. Eckert has not developed completely the rationale behind these objectives. To my knowledge, there are at least three convincing reasons for pursuing new directions in many of today's LDC's:

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First, despite over two decades of accelerated industrialization, often promoted through the policy of import substitution, the rapidly increasing labor force of cities is not being absorbed into full, productive employment. In addition, low productivity employment in non-agricultural occupations (and I might add illegal activities), has been steadily rising on top of an open layer of unemployment that has been estimated as high as 20 percent of the urban labor force (Turnham). The main reason for this situation is the fact that percentage gains in industrial employment are much less than the corresponding rates of growth in the urban work force; a growth that is significantly added to by an outmigration from agriculture. Most disconcerting of all, attempts to increase urban employment only bring more migrants to the cities (Todaro).

Second, despite the employment problem, it is apparent that employment has been a secondary, not a primary, objective of planning. It has usually been added as an afterthought to the growth target in GNP, and even then, employment measures are poorly integrated into the framework of development strategies. It has been assumed far too readily that high growth rates will ensure full employment. This hot pursuit of GNP growth has not necessarily been wrong. But the focus on GNP has certainly blurred the visions of many of its inhuman "side effects." For example, the attention given to growth has led economists and national planners to believe that development goals can be reached by investing in the most modern capital equipment. The history of agricultural development in the advanced countries seemed to confirm this approach. But the employment results of this strategy of capital investment in agriculture are far from encouraging. Indeed, the capitalization has significantly reduced the proportion of population engaged in agricultural production. Though growth in the nonagricultural sectors has been expected to absorb this displaced farm labor, it is all too evident that industrialization in the LDC's has failed to satisfy this expectation.

The point is, this crises course of capitalization and unemployment has not been abetted. LDC's continue to support subsidized tractor mechanization, importation of modern capital equipment via tied aid and a wide spectrum of concessions and fiscal policies, e.g., investment credits, depreciation allowances, tariff rebates, corporate tax laws, etc.

Third, perhaps the most compelling argument for a new development focus is the staggering growth of population, especially among the poor. The World Bank estimates conservatively that the LDC's are now faced with at least 750 million rural people living at levels lower than absolute poverty. And this population is growing at alarming rates of over two percent per annum; enough to double their number every 35 years. This means that food supplies, employment opportunities and many basic necessities must be expanded likewise in the same time period. What makes Eckert's position more noteworthy is the fact that many of the LDC's with widespread poverty have evidenced concomitantly significant increases in real GNP. In ten years, for example, Brazil's GNP per capita grew at 2.5 percent per annum. Yet the share of the national income received by the poorest 40 percent of the population declined from 10 percent in 1960 to 8 percent in 1970, whereas the share of the richest 5 percent grew from 29 percent to 38 percent during the same period (McNamara).

Obviously, the long-term solution to the twin problems of poverty and lack of productive employment is a reduction in birth rates. Unfortunately, the millions of new entrants into the labor force for the rest of this century have already been born. Just in the next decade alone, the labor force will expand by twenty to thirty percent, with a large percentage adding to the armies of unemployed (Lele and Mellor). This situation, then, constitutes the main reasoning for Eckert's proposal. As I understand him, Eckert is saying that to meet the immediate problem of massive poverty and the problem of a rapidly growing labor force, imposed on existing high levels of unemployment, new approaches are required for economic development and, I will add, that new approaches are also required in foreign aid and international trade.

For starters, he suggests that we focus on the development and production of labor-intensive commodities. To do so, he provides a formula for calculating labor's share within various types of industries. I do not question the formula, *per se*. However, any calculations therefrom do not really make contact with the essence of the problems. For one, devoting some time to these numbers may in the long run give rise to more shortcomings. For example, planners may be

induced to adhere to *given* industries that are estimated to be very labor-intensive. By doing so they may close the door to even more labor-using alternatives. We might add that not all labor-intensive industries are attractive, nor humane. Take stoop labor in agriculture, for instance, or consider accidents or health hazards inherent within many labor-intensive endeavors. In other words, we need to look beyond mere numbers to determine the best types of work opportunities for improving the standards of living. For another, if it is argued that LDC's should give preference to "labor-intensive" rather than "capital-intensive" industries, it may preclude the most intelligent choice of industry, omitting other powerful criteria as well, such as the raw material base, markets, entrepreneurial interests, etc. Furthermore, the choice of industry is one thing; but the choice of technology to be employed *after* the choice of industry has been made, is quite another. We still have a long way to go for determining the best labor using technology. All things considered, it might be better to speak directly of technology, and not cloud the discussion by choosing terms like "labor-intensity" or "capital-intensity" as one's point of departure. An example of this approach is found in Schumacher's book treating "intermediate technology."

Earlier I said there were some important omissions in Jerry Eckert's proposals. It would be presumptuous of me to suggest that I can fill all the gaps. So in concluding, I would like to illustrate some of the remaining researchable issues with a series of questions:

1. How can developing countries prevent "needless" capitalization that eliminates jobs for large numbers of people? What are the best ways, out of many schemes (e.g., rural public works, collectives, profit sharing, etc.), for putting money in the hands of the poor?
2. How can the abundant labor resources be put to the best productive use and concomitantly add growth to the nation's product? Does Eckert's data really suggest we should avoid investments in the development of energy resources, basic metal industries, and certain types of machinery, because their capital-labor ratios are relatively high?
3. How can the LDC's take advantage of the "green revolution" to stimulate growth and to generate employment throughout the rural areas and the rest of the nation? Is agricultural research oriented toward the development of divisible

technology—technology that can be used efficiently by small-scale units so as to compliment rather than displace labor?

4. How can effective employment be generated without exacerbating the equally explosive problem of inflation? I might add that this dilemma of employment versus inflation gives special relevance to the potentials of the "green revolution." New seed, fertilizer and technologies can provide food needed to complement increased employment (d'A. Shaw). And goals of increasing food production might be met best by millions of small farmers (see pages 181-186).

In sum, Eckert has presented only a few elements in the new perspective that is needed today on development. They are neither complete nor perhaps very conclusive. But the paper is a good discussion piece. It opens up ideas which, intelligently pursued, could lead to positive efforts. He is commended for presenting a provocative paper.

References

- d'A. Shaw, Robert. *Jobs and Agricultural Development*, Monograph No. 3 (Overseas Development Council, 1970).
- de Janvry, Alain. "The Political Economy of Rural Development in Latin America: An Interpretation" *American Journal of Agricultural Economics*, 57 (1975):490-499.
- Lele, Uma J., and J. W. Mellor. "Jobs, Poverty and the Green Revolution" *International Affairs* (January 1972):20-32.
- McNamara, R. S. *One Hundred Countries, Two Billion People* (Praeger Publishers, 1973).
- Turnham, David. *The Employment Problem in Less Developed Countries* (OECD, June 1970).
- Schumacher, E. F. *Small is Beautiful: Economics as if People Mattered* (N.Y. Harper & Row, Publishers, 1973).
- Todaro, Michael P. "An Analysis of Industrialization, Employment, and Unemployment in Less Developed Countries" *Yale Economic Essays*, VIII, 2 (1968).
- World Bank. *The Assault on World Poverty: Problems of Rural Development, Education, and Health* (Baltimore, The Johns Hopkins University Press, 1975).