
ISRARUL HAQ

1. EMPLOYMENT STRATEGY OF THE NMC

The National Manpower Commission (1987-89) in order to meet the unemployment situation envisages generation of an additional 1.25 Million work opportunities annually. It envisages an employment target within the macro-economic framework of a growth rate in GNP at around 8 percent annually. The NMC recommendations were cast within the following parameters.

General Strategy/Parameters

(a) Labour force is growing at more than 3 percent annually (the NMC puts it at 3.3 percent) alternatively more than one and a quarter million new people would be entering the labour market every year during 1990s.
(b) An annual real G.N.P growth rate of about 8 percent on the present sectoral pattern would be just about sufficient to meet the employment target.
(c) The direct employment creating policies can serve to top up the contribution of overall economic growth and cannot be a substitute for it.
(d) As a medium term objective—an increase in the capital formation in the economy from 18-19 to 23-24 percent would be necessary.
(e) The Commission believes that structural adjustment toward market resource allocation is compatible with high employment policy.
(f) Agriculture should no longer be a passive absorber of the rural labour—major responsibility for labour absorption must shift to sectors other than agriculture.
(g) The small-scale sector must be recognised as the leading sector for employment generation—this recognition must be duly reflected in credit policies and marketing facilities. However, the employment promotion potentials of large industrial enterprises must also be fully realised. Towards this end, it has identified following seven industries:
   (i) Engineering;
   (ii) electronics;
   (iii) textile specially ready made garments;

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(iv) plastics;
(v) related chemicals;
(vi) agricultural processing like fruit canning; and
(vii) printing and publishing.

Employment in Rural Areas

The Commission argues that "it is the country side where battle for employment generation must be fought and won". Towards this end, it has placed reliance on indirect generation of employment opportunities through building of physical and social infrastructure. The Commission envisages the following four conditions for achieving this target:

(a) Developing of rural housing, electrification and provision for clean water;
(b) rural road construction through government stimulated self financing self help programme with private sector participation;
(c) establishment of marketing centres; and
(d) development of focal points in each Union Council with facilities of telephone, electricity, basic health units, and High School.

As to the role of agriculture in the creation of additional employment opportunities, it suggests diversification towards high value but labour intensive crops in order to increase the capacity of agriculture to generate greater employment.

Employment in Urban Areas

The main thrust of urban employment creation has been directed by the Commission towards:

(a) Growth and development of small scale informal manufacturing sectors;
(b) growth of informal trade and services;
(c) housing construction as a leading sector; and
(d) provision of basic services especially in low income Katchi Abadis.

Employment of the Educated

Dealing with the unemployment of the educated the Commission earmarks four areas for increasing employment opportunities for the unemployed with matric and intermediate level, i.e., (i) Science and Mathematics teachers in rural schools; (ii) Health sector—the paramedical; (iii) the private manufacturing and service sectors; and (iv) self employment.
2. GAPS IN THE PROPOSED EMPLOYMENT STRATEGY

The Seventh Five Year Plan in its chapter on Employment makes the following crucial observation in respect of employment strategy to be followed during the Plan period.

"The employment generation during the Seventh Five Year Plan period will depend on the level and the sectoral composition of economic growth. The employment elasticity is a useful tool for determining the likely impact of economic growth on employment. It further needs to be supplemented by a more detailed estimates based on sectoral programme and projects in the public and private sectors and the policy mix in each sector. The Planning Commission would undertake such a detailed exercise at a subsequent stage with the help of the National Manpower Commission".

It is interesting to note that even in the 1960s with the level of investment going up to 30 percent of the G.N.P. the economy could not register more than slightly over 6 percent growth rate in the real GDP and could generate less than 1 million additional employment, with the output employment elasticity being much higher during the 1960s. The target of 1.25 Million additional employment per annum set up by the NMC therefore, seems to be highly unrealistic.

The National Manpower Commission on the one hand points to the over encouragement to mechanisation both of agriculture and industry in the past due to faulty input pricing (including exchange rate) and credit policies, and shows on the other hand its anxiety not to compromise labour productivity in order to create more jobs. It seeks even to further encourage the mechanisation of the large scale units in order to make them internationally competitive.

The Commission has proposed to generate 1.25 million additional jobs and has set its sight on the small scale units mainly in the informal sector for generating the required additional employment in view of their use of less fixed capital per work place.

Small informal sector so heavily relied upon for employment generation has not been comprehensively defined nor its economic characteristics spelt out by the NMC. While assigning such a decisive role to it, the Commission has failed to take cognisance of the experiences of other countries. For instance, the experience and conclusion of the Indian Third Five Year Plan may be of interest here. The employment target in small scale industrial units could not be achieved due to unsold stocks and marketing problems which led to the conclusion that training in skill, proper technology, cost effectiveness were necessary in order that small-scale units may succeed as the main employment generator. The emphasis once again therefore has to shifts to development of appropriate technology, critical level of output per enterprise for increased output and employment.

The National Manpower Commission has found that the income elasticity of the demand for the goods produced by small scale industries is very low. The ARTEP Project has similarly found that old units are faced with problems of
survival. The ARTEP Evaluation of rural industrial performance of Punjab Small Industrial Corporation (1989) shows that rural manufacturing units are not cost effective, the rate of return on capital is discouragingly low, wages are less than Rs 400, per month as the minimum and less than Rs 1,000 as the maximum; Rs 70,000 on the average was the cost per unit of employment as against 27,000 in the household units. 70 percent of the workers employed are on contract. The Project in course of its survey of the rural industries finds that the second most important bottle-neck is the marketing facilities—They can compete neither with the products of large scale industries—nor with the increasing stream of smuggled goods.

Such being the track record of the small scale units placing the main reliance and a major shift in the transfer of resources towards the small scale units would only restructure an already overburdened market, driving many out of business and thinning out profit margin in the face of extensive competition. Self employment through encouraging small units under these conditions would be another form of disguised unemployment. Even if the definition of informal sector is extended to include the registered firms to being in its ambit most of the construction, transport, communication, trade and services activities as has been stipulated by the ILO (ARTEP) study of 1990, the informal sector would take on new attributes and characteristics losing its most important employment generating characteristics, namely small investment, less costly technology and freedom from state regulations.

The National Manpower Commission in order to generate 1.25 Million additional employment opportunities per annum stipulates an overall growth of 7.5-8.0 percent with an investment outlay of 22–24 percent of the GNP. This target in view of the past performance of the economy appears to be a tall claim. During the last decade the real GNP growth rate averaged at 6 percent. The Economic Survey of Pakistan for 1990-91 projected the rate of investment for the year at 17.8 percent as against 18 percent in the previous year. Therefore the stipulated quantum increase in investment by 5 percent with a stagnant saving rate and declining foreign aid would be quite out of the existing trend. The GNP growth rate during 1990-91 was estimated to be 5.6 percent compared to the achievement of 4.6 percent during the previous year. The NMC has not estimated the overall employment elasticity for the Seventh Plan. It has, however, calculated the overall employment elasticity in 1977-78 to 1986-87 to be 0.36 as against 0.64 for the period of 1971-72 to 1977-78. This clearly demonstrates that the overall production system of Pakistan is moving away to a lower employment elasticity.

More than the size of investment, from the point of view of employment generation, the composition of investment as a whole and its intersectoral distribution is significant. With the passage of time the economic system is not only moving towards capital intensive mode of production but the real wages are also increasing. In addition, a larger proportion of investment is being directed to the rehabilitation, maintenance and replacement of the fast deteriorating fixed capital. All these factors are leading to a constant decline in employment generation per
unit of investment, hence the level of investment no longer serves as a reliable indicator of employment level.

The strategy therefore of creating additional 1.25 Million employment opportunities by concentrating on the small-scale units in the informal sector both in rural and urban areas is clearly misplaced.

Missing of a Vital Link

This misplacement of the focal point in employment generation arises because of the by-passing of agriculture, which is still responsible for 50 percent of employment opportunities, 27 percent of the GNP and 90 percent of the foreign exchange earnings. Both the National Commission on Agriculture and the National Manpower Commission have recommended a rather capital intensive approach which they think necessary for increased productivity of agriculture even though both the Commissions have been sceptical about the employment effects of mechanisation, namely tractorisation and other mechanical implements, like harvesters, threshers, and cotton pickers etc. The NMC in its interim report deferred the consideration of the employment effect of mechanisation to the Agriculture Commission, which in turn even though felt concerned about the adverse employment effects of tractorisation left the question to be finally settled by the NMC.

Mechanisation, particularly tractorisation has been the subject matter of many studies with conflicting findings. There are studies which find it positively labour displacing at least at the rate of 6 persons per tractor. The latest study in the series, however, carried out by the PERI has come out with the finding that the tractorisation has led to greater labour use per farm than before and that it has only served to meet the eventualities arising out of labour shortage during the peak season and that there has been no labour displacement, or any increase in the incidence of rural unemployment as a result of tractorisation.

The NMC as well as the commission on Agriculture has strongly recommended to bring about a shift from employment oriented to production oriented agriculture. The NMC has equally strongly discarded the idea of making agriculture the absorber of the surplus rural labour. Both these Commissions have formulated a strategy for a high value crop agriculture by greater investment in vegetables, fruits as well as in livestock sectors of agriculture.

Both the commissions have subscribed to the greater productivity-output theory of mechanisation and have advocated that if necessary employment can be sacrificed for greater output and productivity. Let us examine this greater productivity and output argument for agriculture through mechanisation particularly tractorisation.

Chemonics International consultancy, Washington D.C., published in January 1985, attributed the productivity output potentials of the different factors as follows.
Wheat production could increase from 2184 Kg per hectare to 8,000 Kg per hectare if various constraints in respect of seed, weed, plantation disease could be removed; 25 percent by better and timely application of water, 17.5 percent by weed elimination, 10 percent by better seed bed preparation, 10 percent by improved fertilizer application. In this order of productivity augmenting potentials of tractorisation is relevant as far as better seed bed preparation is concerned to which only 10 percent point has been allotted by the consultancy.

The Master Planning Division of WAPDA has further worked out the respective contributions of various factors to the percentage increase in the productivity of the different crops as follows:

<table>
<thead>
<tr>
<th>Factors</th>
<th>Wheat</th>
<th>Rice</th>
<th>Cotton</th>
<th>Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved water management</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Drainage</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Certified seeds (improved varieties)</td>
<td>15</td>
<td>25</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>45</td>
<td>40</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Plant protection</td>
<td>15</td>
<td>15</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Other central practices</td>
<td>30</td>
<td>40</td>
<td>80</td>
<td>15</td>
</tr>
<tr>
<td>Current national average</td>
<td>15.6</td>
<td>16.7</td>
<td>2.8</td>
<td>405</td>
</tr>
<tr>
<td>Potential</td>
<td>37</td>
<td>40</td>
<td>7.5</td>
<td>750</td>
</tr>
</tbody>
</table>

The Asian Productivity Organization, Tokyo reported in 1983 that in Korea it was the labour shortage that prompted the Republic to bring in mechanisation. Introduction of High Yielding Varieties of crops, chemical fertilizer proved most decisive in the development of agriculture in Korea, Thailand, Sri Lanka, India, Pakistan, Indonesia and Nepal. It considers irrigation and drainage system as prerequisite for cropping intensity and greater use of farm mechanisation.

Regional Seminar at Investigation Research and Training Inst. Colombo, held in October, 1992 concluded that in the absence of alternative employment opportunities mechanisation can lead to lower level of income.

One needs to have full information about the changes that have taken place in the quantity and the relative proportions of the different inputs and outputs in all the activities associated with agriculture in each region.

The question would still remain whether the recorded increase in output could not have been attained at less cost in other ways. Scientific and technological advances offer a wide variety of crop rotation and combination and for each crop several alternative techniques of production are available involving different kinds of inputs depending on the climate, soil and hydrological characteristics. Tractors could be land saving by tilling more deeply by greater speed of operations. A survey of 260 farms in the Indian Punjab with different characteristics like:

(a) Farms having neither pumps nor tube-wells nor tractors;
(b) having only pumps and tube-wells;
(c) having only tractors; and
(d) having pumps + tube-wells and tractors.

Has found that optimum degree of mechanisation has occurred in having pumps and tube-wells—but not tractor. Addition of tube well and pumps resulted in increasing the per acre value of output as well as per acre profit realised in cash. Much of the food consumed by the draught animals comes from wheat straw, rice straw and forage which has insignificant opportunity cost. Additional land available will be that which can be irrigated by water, and formerly used for growing fodder when irrigation makes it possible to divert more lands to valuable crops.

The labour displacing effect of tractorisation in Pakistan is confirmed by an ILO study according to which the number of landless labour shot up from 609,000 to 2.95 million from 1960 to 1972. As to the secondary employment effect of mechanisation a study carried out in 1984 by the PIDE on the tractor assembly manufacturing agri machinery plants in Pakistan yielded very poor evidence regarding the secondary employment effects. Out of 514 firms manufacturing agriculture machinery in Pak, 120 firms were surveyed and disclosed that out of a total 1360 workers in these firms only of eight categories consisted of skilled workers and their wages ranged from Rs 170 to 807.

3. ALTERNATIVE STRATEGY

The above analysis of agricultural productivity and output opens up a new perspective on the allocation of resources:

(a) There is a vast gap between the potential and actual productivity and output in agriculture;
(b) this gap can be filled by a number of alternative ways which permits of different combinations;
(c) the appropriate technology for agricultural development must respond to our resource endowment of scarce capital and abundant labour; and
(d) it is possible to maximise both output and employment by choosing:

   (i) An appropriate agriculture technology;
   (ii) a critical scale of output and the size of the unit of production;
   (iii) an appropriate product mix;
   (iv) elimination of conspicuous consumption;
   (v) a proper price and income policy; and
   (vi) greater allocation of resources to water management, drainage, irrigation and seed development, if necessary by transforming resources from mechanisation.
Out of 30 million hectares of cultivated land in Pakistan only 20 million is actually under cultivation. The remaining 10 million hectare of cultivated land could be brought under cultivation; the additional irrigation infrastructure can be created by:

(a) Restoring the optimum efficiency of the conveyance of the irrigation water, which is at present operating, according Agri Commission only at 40 p.c. of the efficiency;
(b) by better water management on the farm;
(c) by levelling the farm land;
(d) by rain harvesting and building up small dams in rain fed areas;
(e) by tapping cloud bursts and rain water run offs between the foot of the hills and the embankments in Sindh;
(f) by tapping and developing streams in Balochistan;
(g) by developing draught and flood resistant seeds and crops;
(h) by developing seeds which can flourish in saline water; and
(i) by mounting research and development efforts for developing appropriate technologies.

The farmers particularly the small tenant farmers should be trained through demonstration farms in water management, seed preservation and other cultural practices.

The live stock sub-sector of agriculture must move into prominence—Live stock farms should be developed in the barani areas, in the range land. The number of animals should be rapidly increased in the barani areas—the quality of animals by better feeding and crossing should be achieved in the irrigated areas—The animal feed should be produced in small scale rural industries. Similarly the dairy produce should be processed in the rural industries. All these activities will be both output and employment optimising with the development and employment of appropriate technology.

Research and Development efforts, should be mounted to develop appropriate technology which is resource endowment responsive and location specific; new and high yielding varieties of seeds should be constantly developed; draught and flood resistant seeds should also be continuously developed. A fractional technology in the form of small tractors and improved version of conventional agricultural implements and tools should be developed.

The educated unemployed can be productively absorbed in the process of survey and management of additional land levelling of ground, accounting and supervision necessitated by extension of agriculture, over the additional 10 million hectares of land, creation of additional irrigation infrastructures establishment of small scale industries producing improved agricultural tools implements (2) producing animal feed (3) processing live stock produce (4) running live stock farms etc. These small scale industries will have large and wide forward backward
and sideways linkages optimising both output and employment with a much lower level of investment.

4. CONCLUDING REMARKS

The macro-economic dimensions and relationship within which the NMC goals have been laid down and analysis have been directed are unrealistic. The small-scale production units particularly in the informal sector are capable of generating neither the required overall economic growth rate of 8 percent nor the targeted additional employment of 1.25 Million per annum. The hitherto untapped productive potentials in the agricultural sector in respect of overall economic growth and the generation of additional employment opportunities has been by-passed in the formulation of the employment strategy by the NMC. It is only by fully tapping the potential growth and employment potentials in the agricultural sector that the required breakthrough can be achieved and productive employment opportunities can be optimised.
Growing unemployment is emerging as a serious worldwide phenomenon, although the problem differs in terms of its nature, extent and implications across regions and countries. The situation, in particular, is more serious in a large number of developing countries. Increasing imbalances are occurring in labour demand and supply flows. In the case of Pakistan for instance, annual entrants into the labour market, which number a million and quarter, are confronted with the situation of: (i) a back-log of unemployed, 1.6 Million and underemployed, a-quarter million, (ii) saturation in public sector employment, (iii) declining employment in the medium-and large-scale manufacturing sector, (iv) worsening land-man ratio in the agricultural sector, etc. Even the process of international migration, which earlier provided a temporary but significant employment outlet, has been reversed or at best become neutral. This situation is aggravated further in view of the low skills, literacy and education levels of the labour force and additions to it. Considerations on employment promotion, thus, should have an adequate focus on all such issues and constraints. Otherwise attempts made would be sub-optimal.

Having said this let me now turn to the paper under discussion. Being interested in employment and manpower development issues and also associated with the work of the National Manpower Commission (NMC), I was, obviously, interested to look for such work. I congratulate the author for attempting to go through the report, identify gaps and suggest alternatives. After going through the paper, however, I find little to agree and a lot to disagree. The apprehensions of the paper concerning NMC targets viz a viz GNP and Investment are well taken. But beyond that, I find that the author has somewhat missed the very essence of the Report. In fact, discarding the employment strategy without discussing the other essential elements of the NMC report, namely macro-economic management, manpower development and institutional machinery occurred to me as an injustice to a well-researched policy document. No wonder, most of the critique offered and the subsequent alternatives proposed owe their existence to this omission. In addition, the set of recommendations made in this paper are backed up neither by the supporting data/proper referencing nor the existing socio-economic conditions.

Some of the essential elements of the NMC report for effecting employment promotion and neglected in this paper are as follows: (i) establishment of a comprehensive four-tier system of labour market information, employment counselling and vocational guidance, (ii) policy planning boards for vocational and technical education, (iii) increasing involvement of the employers in the skills development programmes and subsequent autonomy to the training institutions, (iv)
preparation of detailed project profiles for each District by the local bodies, (v) establishment of multi-purpose Industrial and Business Support Centres in large towns, (vi) creation of focal points and small marketing centres in villages—at the level of union councils, (vii) initiation of mobile training for the informal sector participants, (viii) elimination of structural imbalances and factor price distortions, (ix) establishment of small business chambers, (x) small industrial estates, (xi) development of high-level scientific and technical manpower, (xii) increasing education and training for women, (xiii) development of low-income areas in urban areas through the provision of physical infrastructure, (xiv) developing residential and commercial centres in urban areas, (xv) promotion of key industries, etc. In fact I had expected the response of the author on these policy instruments. Nevertheless, I would suggest the author to have an adequate consideration on them while offering future comments on the NMC Report.

Besides the inadequate treatment given to the NMC report, the author also seems to have been quoting either incomplete/inadequate or relatively old references in his arguments for the productivity and employment potential of the agricultural sector, as well as against the informal or small-scale sector. Moreover, the studies quoted in the paper themselves need to be evaluated in terms of their methodologies, coverage and limitations. In case of alternatives, I find most of them, though sounding very good, lack practicability and relevance to the prevailing socio-economic conditions. Cases in point are: (i) elimination of conspicuous consumption, (ii) training of small tenant farmers in water management, seed preservation and other cultural practices, (iii) use of small tractors, (iv) employment/use of educated in the process of land survey and management, land levelling and creation of additional irrigation infrastructure for 10 Million hectares of land, etc.

Before concluding, I would also like to point out the fact that the NMC has never set the employment target at 1.25 Million, so heavily criticised in the paper. It only indicated the need for making efforts leading to employment generation to such a level, and that is all.

Let me end with acknowledging the fact that my interest in the field of employment and manpower, to a certain extent, has been aroused by the author during the days when we both were in the Pakistan Manpower Institute.

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