The Problem of Surplus and Shortage of Manpower in Developing Countries

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1. Introduction

If you wish to plan for a year sow seeds ...
If you wish to plan for ten years plant trees...
If you wish to plan for a life time develop men ...
(Kuan Chung Tzu)

(1.1) Development as a term is still vague to all those who deal with it. And because of that it does have more than one definition. The improvement in living standards of the people, the increase in G.N.P., the quest for a peaceful, stable life and many others are offered as definitions of development. A unique answer can be found in different places and different times and for different purposes. In general, the term `developing countries', can then be used to describe all countries because each one of them is still developing itself in one way or another.

But as this term has been used by the U.N. agencies to describe those countries of the southern part of the world like those of Asia, Africa, Latin America and some other countries. We will continue describing those countries as `developing countries' and describe the more advanced countries as `developed countries'.

(1.2) By labour force we mean `the number of people capable of work and among those, those willing to work'⁽¹⁾. So those between the age of 16 and 59 years, capable and willing to work, will be under our examination, and those not capable and/or unwilling to work will be excluded.

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⁽¹⁾ **T. Moreton**, *Labour the Key Factor*. (unpublished paper). The University of Leads. 1977. p. 1.

Labour force can be skilled, semi-skilled or non-skilled. The advancement of any nation is dependent on the structure of its labour force skills and their relevancy to the country's needs and objectives. The more the skilled labour in the country, the more advanced that country. The U.S.A., Germany, Japan and the U.K. are some examples of the advanced-developed-countries, while India, Zambia, Iraq and Colombia are some examples of developing countries.

(1.3) Smith has defined planning as "a process for providing a frequently updated framework of information for decision making, with the object of improving the utilization of resources" (2). So manpower planning is the process of collecting data about manpower, analyzing it to help the decision makers to take more rational and applicable decisions. The data or `information' to be collected is usually about the supply sources of manpower as well as the demands or requirements of manpower, which is the most important and lasting element in the production process. And because of the changing nature of this resource, the manpower planner deals with the unseen, uncertain future, so the risk of this future can be decreased or eliminated through susceptibility to unexpected situations. Bartholomew has agree with that in saying that "the organization which has effective planning procedures can adapt more quickly to new circumstances as they arise" (3).

(1.4) The probable future risk of having either surpluses or shortages, or both, in particular kinds of manpower skills, can then be reduced by good planning so the balance between demand and supply can be achieved and then maintained through continuous readjustments and reassessment of both demand and supply sources. Having defined and explained 'briefly' the elements of the question of the essay, I will examine the problem 'in general' depending on some relevant fields which determine the size of the problem, and will bring some examples whenever that is needed. But because of the limits of time and space, some of the less important fields will be excluded, and because each individual developing country has its unique situation and unique answers to such problems, the essay will be general rather than specific.

2. Population Growth

(2.1) The paucity and unreliability of the demographic statistics of developing countries is well known. However, although population data has been insufficiently accurate for planning purposes, the concept and measures of population change used by demographers in the developing countries are logically sound.

Population growth can be a result of either natural increase - that is through birth, or immigration flows from outside or inside the country. In each case a special situation can be created which determines the manpower structure of this country or that. Well organised growth can result in a better situation. Birth control, immigration control, internal movements control and many other similar actions can be of great importance in many cases. But doing such a job needs a lot of other kinds of resources which may not be available to most developing countries.

⁽²⁾ A. R. Smith, "The Philosophy of Manpower Planning" (in: D. J. Bartholomew, (ed.)) `Manpower Planning', Penguin, 1976, p.19.

⁽³⁾ *Ibid*.

(2.2) The relationship between population growth and economic growth is not yet agreed upon. "Hicks, Hirschman, Clark and others appear to see population growth as an incentive, inducement or compulsion to greater effect in the development process" (4).

In contrast, in historical experience population growth and economic progress are sometimes said to be inversely related, that is the higher the rate of population increase, the lower the rate of economic growth. I think neither case is correct in itself. It is the way the country deals with its resources, the Systems governing the economic activities and the degree of balance between the different resources as well as the balance within each individual resource, that is most important.

(2.3) China can be a very good example of an over-populated country which could utilize its resources, especially manpower, and could get the best use of each individual to build a better China in a very short period of time. India and Pakistan are another example of over-populated countries: but they are very bad examples of manpower utilization. These two countries and many others suffer from an unbalanced situation in their resources and they have done very little to overcome this problem.

Again, it is the unique situation of each country and its special circumstances which govern its performance.

In my view, such comparisons cannot be so accurate as to give a clear-cut opinion or to build up a theory. And to prove that, the following table gives us a good idea of how each case is the result of the individual country's policy, where more dense countries produce more than less dense ones, because of the better utilization of resources, especially manpower.

Classification of 26 countries with respect to the relationships between the intensiveness of cultivation and agricultural output per person engaged in cultivation.

Value of agricultural production per	Number of persons engaged in agriculture per sq. km. of cultivable land.					
person engaged- rupees per year	0-5	5-10	10-15	15-20	20-25	25-30
Below 1,000		Philippines				India
1,000-1,500			Turkey U.S.S.R. Yugoslavia			
1,500-2,000			Poland	Rumania		Italy
2,000-2,500	Brazil	Greece	Cyprus Bulgaria	Portugal		
2,500-3,000		France Austria	Spain		Hungary	
3,000-3,500	Sweden	Ireland	Syria			
3,500-4,000			Germany Czecho- Slovakia	Belgium		
4,000-4,500						
4,500-5,000	•	U.K.		Netherlands		
Over 5,000	•		Denmark			

Source: Clark, C., "Population Growth and Living Standards", (in: S.P. Singh, (ed.,) The Economics of Underdevelopment, Oxford 1975, p. 37).

⁽⁴⁾ For more details about this argument, read W. Elkan, An Introduction to Development Economics, Penguin. 1976. Ch. 8.

We can notice from this table that the developed countries like U.K., Denmark, Netherlands, Germany and Belgium, as well as the developing countries like the Philippines, Turkey, Greeze and Brazil, have got varying amounts of production as advanced and less advanced countries and as individual countries within each group. There are, of course, many factors which determine that utilization of labour and other resources is one of the major factors.

(2.4) "Urbanization crisis" is the result of rural-urban immigration and natural population increase. The annual population growth rates in some cities, exceed 8% in many cases. This high rate of increase creates the urban crisis in that the economic growth rate in these areas has been much less than the population growth rates, and as a consequence of that number of problems and difficulties have been created. Unemployment is one of these problems, where thousands of those job seekers who come from rural areas cannot find jobs in the formal sector, as a result of that they have no way but to engage in a job within the informal sector or to be troublemakers. A lot of time and energy have to be spent to tackle these problems. Solutions offered by economists vary. Balanced investment plans, emphasizing distressed areas, "walking on two legs" policy, industrialization and many other suggestions are said to be the solution.

Shumacher, for example, has emphasized on the distribution of new economic activities spatially, as well as on using simple production methods requiring small capital inputs per employee to be operated in large numbers of units. The I.L.O. mission to Kenya⁽⁵⁾ has prescribed greater use of resources in the promotion of rural employment opportunities, and made suggestions for raising employment levels in the urban areas.

(2.5) So the special case of each individual country determines the types of actions needed to re-balance its resources through planned flows of skills to be absorbed into the different economic activities, not only in quantities and qualities, but also at the right time and place. The better and faster these actions for utilizing manpower, the better the condition of the people and the more advanced the country will become.

Germany and Japan are some of many other countries which could build very strong economies through setting up institutions, legislation, rational and effective plans, which all lead to better utilization of manpower and other resources.

Iraq, is another good example of those developing countries which could, through its planning and development process, absorb thousands of the unemployed/underemployed as well as exploiting the many non-utilized resources such as minerals, water for power, land and many others. Free education, land reform, labour law and political support are other kinds of action which could raise the standards of living of the poor and contribute effectively in providing a stable and secure life for thousands of families and individuals.

⁽⁵⁾ **I.L.O.,** Employment, Incomes and Equality, a Strategy for Increasing Productive Employment in Kenya, Ch. 13.

3. Manpower Structure

(3.1) The population of any country is different in terms of its structure. The more the productive working force - between 16-59 years - and the less the dependency ratio population working force, the more advanced the country can be. But having an X million work force it itself may not mean anything, because the structure of the skills available within this work force is, in most cases, more important. So it is not the quantity of labour force only, but it is the quality of the skills which have to fulfill the manpower requirements in the place and the time they are needed.

The situations in Japan and the Philippines can be a good example which shows the importance of manpower structure in the development process.

"In 1963 only 27% of the population of Japan were under 15 years of age 36% of females were in the labour force In the Philippines 47% of the population were children 16% of females were in the labour force As a result there were two dependants for every worker in the Philippines and there was one dependant for each worker in Japan. The Philippines case is the typical situation in developing countries" (6).

(3.2) But having X million of productive labour force and Y per cent of skilled workers may not mean a lot in certain cases. The important thing to have is the availability of jobs - suitable jobs - for those who possess or acquire skills to be able to use them. The U.K., for example, has got thousands of highly qualified teachers, so does India with its engineers, but neither of these two countries can offer suitable jobs for them.

The role of the manpower planner then is not to plan for having adequately trained labour only, but to create suitable opportunities for them to use their skills. He can also plan for narrowing the gap within the manpower structure, that is between different categories, by training and retraining schemes. These programs can be for all ranges of skills or for some of them. It can be for unskilled workers or for managing directors or those in between them. Switching certain numbers from one category to another, or from sector to another is another important job the manpower planner can do to fulfill the needs.

(3.3) Maintaining the balance within the manpower structure does mean keeping the training and retraining facilities going on, not only to train the new recruits but also to improve the existing working force. The case of industrialization in Iraq needs such kinds of activities not only for those newcomers who engage in industry but for those who are already engaged in it. Such activities are also needed for those who are left behind in the agricultural sector to substitute the emigrant farmers, and this can be done by training the farmers to use new methods, new equipment and new seeds. These training and re-training schemes can benefit the whole economy through rebalancing both industrial agricultural sectors. And as the industrialization process - and here we are still talking about Iraq continues, "the relatively less efficient people will be

⁽⁶⁾ A. Maddison, Economic Progress and Policy in Developing Countries, Unwin, 1970, p. 259.

absorbed into the labour force" and as a consequence of that "the average of efficiency will tend to fall" so the need for manpower activities becomes more essential and more urgent.

The role of the Japanese manpower planners between the years 1946-60 -- the recovery period - could contribute effectively in building up one of the strongest economies of this time. Many institutions were established, and many actions were taken to maintain the balance between the demands for and supply of manpower, which helped to keep productivity going up very quickly and very sharply.⁽⁸⁾

The "ongoing manpower planning" as it is in Japan and most of the advanced countries "is the proper function of specialized units" on all levels.

4. Surplus and Shortage of Manpower

(4.1) It may be mistakenly thought that the over-populated countries must have an abundance of labour. The fact - as I see it - is not that, because having an abundance of non-skilled workers may also mean having a shortage in semi-skilled or skilled workers, or in both. Surplus in some skills and shortage in others may be found also.

India and Ceylon do have surpluses among educated labour simply because the manpower planners did not do their job properly - they only did part of it which is in this case `education'. But the job of the manpower planner is not only educating or training people, but finding suitable employment for them, otherwise they may go to work in jobs which are irrelevant to their skills and this, of course, does mean losses and wastage.

(4.2) So mobilization and utilization of the labour force through reorganizing and re-constructing the supply sources to match the demand is an important step towards manpower planning.

Denmark, for example, has achieved its highly advanced economy through better utilization of its resources. Training and re-training schemes were a part of a continuous development process of the Danish manpower planning machine. One of the many objectives set for the manpower development process was "to ensure that labour is not hampered from moving from sectors of surplus to sectors where the demand for it is expanding, because of insufficient opportunities to train for the new jobs or move home to new areas" (10). They did not set this and other similar objectives only, but also set some "measures to ensure that labour is not hampered from moving to the areas where the demand for it is greatest such as improved training systems, mobility incentives and improvements to the employment services information-dispensing activities" (11).

⁽⁷⁾ T. Moreton, op. cit.

⁽⁸⁾ For more details, read: O.E.C.D. "Manpower Policy in Japan", Paris, 1973.

⁽⁹⁾ A. R. Smith, "What Is Manpower Planning," in: D. J. Bartholomew, ed.) Manpower Planning, Pengum, 1974, p. 44.

⁽¹⁰⁾ O.E.C.D., "Manpower Policy in Denmark,", Paris, 1974, p.13.

⁽¹¹⁾ lbid., p. 14.

(4.3) But to do such highly organized job in developing countries may be of great difficulty. Lack of data, absence of co-ordination and shortage of manpower planners all have a negative effect on performing such a complex task.

In my opinion such a job can be done on a small scale and gradually starting from the fundamental point which is the individual organization, to build up on that and do it on a sectoral level rather than on the national level. This can be very useful as a learning process also.

5. Training and Education

- (5.1) There is no doubt that any improvement in the quality of people as productive agents has to be one of the main objectives of any development plans. And "since one of the functions of the educational system in a society is to provide its work force with the abilities required for productivity, it follows that system must be reasonably well regarded to the production requirements of the economy⁽¹²⁾." So it is not only teaching or training people to a job any job but to provide them with the knowledge needed for production requirements, and this means that training and education activities have to have a purpose which is in our case providing useful knowledge to generate and strengthen the economy.
- (5.2) But to be able to design suitable training and educational systems which need a long time to get their output and to assess and evaluate the usefulness and suitability of these outputs, these systems have to be based on anticipated future manpower requirements, which can not be obtained without having known the future objectives and the future requirements. So forecasting to determine these needs in quantity and quality will be used to build and design the training and education systems and programs according to these needs. Manpower planners in different sectors and on different levels can do this complicated job through co-ordination and co-operation.
- (5.3) Knowing the manpower requirements and the future needs, the manpower planner has to look at the priorities and the resources available to decide the actions needed. These actions will be dependent upon identifying:
- "(a) The principal critical shortages of skilled manpower in each major sector of the economy, and an analysis of the reasons for such shortage;
- (b) The surpluses, both of trained manpower as well as unskilled labour, and the reasons for such surplus;
- (c) The setting of forward targets for human resources development based upon reasonable expectations of growth" (13).

But the problems of collecting data and reliability of this data, and the weaknesses in government machine institutions, make the job of manpower planning in the developing countries rather difficult. And because of that and many other similar reasons, the numbers of the unemployed educated in India for the year 1975-76 "was estimated to be equal to the total stock of educated persons in 1960-61" (14).

⁽¹²⁾ **H.S. Parnes**, "Manpower Analysis in Educational Planning," [in: **H.S. Parnes** (ed.) `*Planning Education for Economic and Social Development'*, Paris: O.E.C.D., 1964, pp. 73-80].

⁽¹³⁾ G.M. Meier, "Leading issues in Economic Development", 3rd ed., Oxford, 1976, pp. 532-3.

⁽¹⁴⁾ **G.M. Meier**, op. cit., p. 535.

(5.4) And as the development process continues and technology changes very rapidly, the adjustment actions have to continue to keep the balance between manpower requirements and the supply flows. Leaving things to happen as they are may mean considerable losses and wastages and delays to development plans.

New and more suitable incentives and wages policy can play a big role in supporting such actions, and this can be achieved through issuing new legislation, establishing new institutions or setting up new education and training programs. These and all other similar actions have to match the current changes in organizational structure, people's attitudes, society traditions and values and all other environmental factors

It may also be important to have some kind of coordination and integration between all facilities which are relevant to manpower planning.

6. Conclusions

Planning for human resources, as we have seen, is not an easy job because it is concerned with human behavior which is uncontrollable.

Lack of data, the bad functioning of institutions, shortages in manpower planners and many other important skills, and the unbalanced manpower structure, are some of the developing countries' characteristics.

Some of these countries are over-populated but others are not. Most of them suffer from an abundant labour force as well as shortages in some skills. This fact can be explained in terms of having shortages in some skilled labour and at the same time surpluses in other kinds of labour force especially unskilled workers.

The numbers of workers in these categories vary from country to country, so the responsibility of the manpower planner varies accordingly. But matching the man power requirements with the supply flows of manpower in terms of quantity and quality is the keystone of the manpower planning process. And because of the rapid changes taking place in developing countries in terms of attitudes, goals, socio economic, technological and organizational changes, the job of bringing supply to meet the demand and then maintaining this balance in circumstances like those of developing countries, makes the job of the manpower planner a difficult and complicated one. These facts, I believe, demand immediate action to meet manpower planning process needs on all levels in all sectors. The size and kind of these preparations depend on each individual situation, and many supportive actions are needed in all cases.

Legislation, institutions, wages policy, salary structuring and other supportive actions can create a suitable environment for the manpower planning process. All these and other similar actions have to take into consideration what is in the minds of people as society and as individuals such as values, tradition, attitudes, political systems, as well as technology, availability of resources, development goals and other influential factors to bring about a sound and acceptable manpower plan.

Population growth which leads to an urbanization crisis can be overcome by negative as well as positive actions. Birth control, immigration and `brain-drain' control, internal movements controls can all be described as negative actions. Positive actions can be setting up institutions, training and re-training schemes, legislation and many other actions. Utilization of resources and in particular manpower resources of great importance. China can be a good example of doing that, while India and Ceylon are said to be examples of bad resources utilization, especially in the case of unemployed educated manpower. But this cannot be taken into consideration without looking at the case of each individual country and examining its circumstances, which are unique and special to it.

The dilemma of the abundant labour force in developing countries is nothing more or less than an unbalanced manpower structure. To bring it into balance is a somewhat complicated task. In theory it is the training and re-training, educational system and programs, legislation and free movement from over-skilled sectors to under skilled ones with the establishment of all supportive elements. These actions have to be maintained through readjustments and modifications of plans and objectives to make it more suitable to meet the changing needs and requirements of manpower.

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