THE NEED FOR CO-OPERATION AMONG THE NON-ALIGNED NATIONS IN INDUSTRIAL DEVELOPMENT

M. Anwarul Azim

1 Introduction

The very expression "Non-aligned" has a political bearing. Though the author is aware of the fact that the economic and the industrial development of a country depends also on the policy which the political system of the country advocates, yet the whole discussion in this paper will be based on economic, industrial and humanitarian aspects.

The dimensions of the problems of industrial development of a country and for that matter its economic growth depends on a number of factors such as the niveau of industrialization, labour, and man-power resource (including technical and managerial know-how), socio-cultural conditions, rate of growth of population, degree of urbanisation, raw material resources etc.

The Non-aligned countries are distributed all over this globe, have also different socio-cultural structures and differ in many other aspects. Thus it is quite difficult, perhaps impossible, to discuss about the industrial development of Non-aligned countries from one common base. Thus to avoid this multi-dimensionality and to keep the scope of this paper within a reasonable boundary, we shall try to define a more or less common base, on the basis of which we shall discuss the scope of co-operation in industrial development.

The majority of these countries have relatively low per capita income (Table 1), high unemployment, high rate of population growth, at least 70-80% of the working population of these countries are engaged in the primary sector of production. Most of them have shortage in technical and managerial know-how. These countries have immense raw material resources. Our discussions and arguments will necessarily be based on this.

2 Importance of co-operation

At this stage, the question, "Is this co-operation necessary and useful?" may be raised. The reply is affirmative. Till today Non-aligned countries have nursed co-operation, bilaterally or groupwise, with the developed countries of both the tents. But the people having similar problems, similar constraints, can understand one another's problems more easily. Thus the co-operation between these countries should be much more effective and useful. We can put forward a number of reasons to substantiate such a statement:

2.1 In most of the cases the so-called experts from developed countries cannot visualize the dimension of our problems. It is perhaps not possible as well. In the last few decades the developed countries have undergone an astonishingly rapid technological development. Though the experts have perhaps solved much more sophisticated problems in their own country, but they have never faced our less-sophisticated problems. Thus they may not always be termed real experts for our problems.

TABLE 1

Average Per Capita Income of Different Countries in 1949, 1961 and 1974*

	1949	1961	1974
United States	1,453	2,308	6,155
Switzerland	849	1,463	6,346
Canada	870	1,459	5,372
Sweden	780	1,445	6,155
United Kingdom ...	773	1,149	3,120
West Germany	320	1,072	5,618
Norway	587	1,036	4,735
France	482	1,034	4,851
Soviet Union	308	800	...
Japan	100	402	3,812
Malta	...	391	1,096
Argentina	346	378	1 246
Chile	188	377	777
Jamaica	...	37	868
Cyprus	...	359	1,459
Costa Rica	125	291	775
Yugoslavia	146	223	...
Syria	100	218	345
Algeria	...	217	504
Malaysia	...	215	554
Peru	100	145	617
Tunisia	...	141	459
Jordan	...	139	286
Sri Lanka	67	122	198
Morocco	...	120	286
Sudan	...	91	135
Kenya	...	72	172
India	57	69	117
Nigeria	...	66	250
Uganda	...	57	161
Burma	36	50	82
Indonesia	25	49	115
Bangladesh	...	...	100
Tanzania	...	...	127
Zaire	...	...	147
Nepal	...	...	90
Chad	...	...	88
Mali	...	...	73
Ethiopia	...	...	83

*In US dollars of current purchasing power.
(For 1949: National and Per Capita Income in Seventy Countries; United Nations, N.Y. 1944. For 1961: Monthly Bulletin of Statistics, United Nations, N.Y. 1963; For 1974: The World Almanac & Book of Facts 1976, Newspaper Enterprise Association Inc., N.Y.).

So far as we are concerned there is another negative aspect of this rapid technological development. An expert in those countries are really experts in a very

Dr.-Ing. M. Anwarul Azim, B.Sc. (Eng), Dipl.-Ing, Dr.-Ing, MIE (Bangladesh) DGOR, is Professor of Bangladesh University of Engineering and Technology. He graduated from the University of Dacca in 1961. In 1965 he proceeded to West Germany for his post-graduate studies and obtained his Dipl.-Ing. in Production Engineering from Technische Hochschule, Aachen, and he was conferred the degree of Dr.-Ing. from Technische Universitaet, Barunschweig in 1975. He has been Lecturer in Bangladesh University (1962-66), appointed Assistant Professor in 1966, Associate Professor in 1971 and Professor in 1976.

limited field (specialization). But the experts, who should help us in solving our problems, must have wide range of knowledge. Thus an expert coming to a mechanical engineering manufacturing company, will be expected to advice on metallurgy, electrical machines and appliances. Perhaps he will have to be a good craftsman, good psychologist etc. etc.

2.2 Because of this rapid technological development, new processes are always being invented, which are more economic than the latest ones. Thus we see that the price of NC-machine tools has been reduced drastically over a span of 7-10 years. Hence there is a trend in those countries to design a product for a shorter span of life (in general, 5-10 years). The case was just opposite before a quarter of a century. In our countries, where we have acute shortage of capital and technical know-how, we are compelled to invest in machines which are robust and have longer life. Such examples are not rare, where machineries cannot be run because of a simple part, which the producer company is no more manufacturing.

Problems such as under-voltage, over voltage, power failure are practically unknown in developed countries. Thus we see that sophisticated electrical appliances are often out of commission in our countries.

2.3 Because most of these countries have an agro-based economy and that they cannot process them in many cases and that the home consumption is low, they are compelled to export these raw materials. In many cases they are to compete amongst themselves and are left to the mercy of the buyer.

2.4 Technically developed countries have shortage of population, for which reason, they are mostly opting for capital-intensive machineries (automation). But the Non-aligned countries are mostly over-populated and on the other hand, have an acute shortage of capital. Hence our objective will be to utilize, wherever possible, this immense human resource. Here the example of China's building cupola furnaces in villages may be cited. Presently, the government of the People's Republic of Bangladesh is utilizing the human resources to solve a very important national problem. The silted riverbeds of this biggest deltaic region are being re-excavated under 'Food for Work' programme.

2.5 If any of these countries have solved a problem, the other countries having similar problems, can utilize this solution and save time and costly experimentation.

This paper does not of course, claim that co-operation with developed countries is not necessary. We shall have to judge the merit of each individual case.

3 Certain aspects of industrial development

Industrial development is one of the instruments of economic development. The goal is that the real purchasing capacity of an average citizen must increase. Though there are different indices to measure economic development one point that has already been established, is that as a result of industrial development (for that matter economic development) there is a diffusion of population from primary (production) sector to secondary and further to tertiary production sectors. In a developed country the distribution of population in primary, secondary and tertiary sectors are 15 - 20%, ca. 40% and ca. 40% respectively. Because we have 70-80%, even 90% of our population engaged in primary sector, and because we have high rate of population growth, industrialization could not create jobs even for its share of population growth. Thus percentage of people employed in industrial sector is sliding down the scale. Amongst the causes are shortage of capital, low productivity of the industries, backwash, poor spread effects etc. One of the causes of low productivity is poor technological know-how. We have seen sophisticated machines lying around in ports and/or in the factory area without being properly taken care of. Many costly machine hours are lost because no body has experience on such machines. In many cases these more economic machines drive workers in traditional industries out of job (backwash). Because of many reasons such modern industries did not have the necessary spread effects, which the planners of the (national) planned economy proposed.

On the other hand, there are countries, which could drive their economy to a respectable position without any sort of imported industries. Through innovation, creativity (I do not know, if there is any imitation) of their people such industrial and economic development could be made possible.

Consequently, we are becoming sceptical about the success of "Technology Transfer". Our aim rather should be "Appropriate Technology". In those fields, where most advanced technology is a requirement, we should go for it. As for example, nuclear power plants for power generation. Power tilling is perhaps very good. But its backwash effect is very dangerous for our countries. We can increase the productivity in the agricultural sector through improved plough design, improved harness design etc.

Further, the products of industries may be capital, intermediate and consumer goods, which are manufactured for the internal market or external market. When it is meant for foreign market, we speak of export-oriented industry, about which we propose to talk a little later. The products for internal market, either generate their own demand or there is demand for it. In poor countries supply cannot create its market to a significant level. The existing demand is usually met by traditional manufacturing and through import. Because of capital and other constraints, and of backwash, it is necessary to develop industries for import-substitution. Different corporations of Bangladesh, for example, had to import TK.345.3 million worth of spare parts for jute, textile and sugar industries. (The estimate is for 1974).

Export-oriented industries, which should be more welcome, have at the start a lot of difficulties, specially because of highly competitive international market. Export markets can be divided into two groups: (1) Export between the developing countries, which I propose to discuss under co-operation for regional development, (2) Export to developed countries. This may be discussed at first.

Due to various reasons the developed countries have shortage in labour force. As a result different countries in Europe are allowing foreign workers into their countries. Furthermore, the wage rate in these countries have gone up very rapidly. Even after intensive rationalization, high labour productivity and automation, direct labour cost swallows 20 - 40% of the production cost and even more. They are trying to solve this problem by two means: (1) transferring the industry to less costly locality. For example, New Factory of Leitz Ltd. Co. in Singapore, Volkswagon Factory in Brazil, (2) They are going for more and more automation. Industrial robots are supposed to take the place of their labour force. Intensive research is being carried out in this field.

Consequently those products, which have reached more or less the technological perfection and relatively more labour-intensive can no longer be manufactured in developed countries more economically than in the developing countries. Thus they have to leave this market to less developed countries. In the recent years West European countries are having collaboration with East European countries, which supply different parts for machineries. Even West European market is flooded by consumer goods from East Europe. India could also be mentioned as a good example. Indian machine tools are now being exported to European markets.

4 Regional co-operation

Apart from regional trade co-operation, such as Latin American Free Trade Association (LAFTA), regional co-operation for industrial development can be advocated. The scope of this field is very wide, specially because the Non-aligned countries control substantial amount of industrial raw materials. A petro-chemical complex is very costly and the internal demand usually does not justify its purchase. But, if a group of countries combinedly goes for such an investment, it will certainly have its impact on economic development. These types of co-operation have of course a lot of initial hurdles to cross.

5 Three important fields of co-operation

(*a*) *Central Information Service*

It has been realised throughout the world that the industrial output can be substantially raised through a better information system. Here we can cite an example in Bangladesh. A number of factories required jobs, which are manufactured by the process of powder metallurgy. But they did not know that a certain factory had such a machine, which was being under-utilized. Only through personal contact this was known. Recently different sector corporations are developing Management Information Systems (MIS) to improve productivity. A central information bureau among the Non-aligned nations is a must. Its purpose would be to make available information on, for example different industries and projects, technical know-how, raw materials, industrial research etc. in different member countries. The national information centres could act as agents of the central information bureau.

(*b*) *Co-operation in the Field of Technological and Managerial Know-how.*

It has already been shown that the experts from developed countries under certain circumstances may not be experts in the context of the problems in our countries. On the other hand, certain Non-aligned countries have better technical know-how. These technical hands can be easily borrowed. This has two advantages: (1) They are cheaper; (2) they have the experience of solving almost similar problems. Low productivity of many developing countries is partially due to poor management. We can also advocate exchange of managerial know-how. India and Bangladesh, for example, are "exporting" technical hands to different developing countries.

(*c*) *Co-operation in Industrial Research*

We should jointly find new fields of application for our raw materials. The motto should be: raw materials are cheap but finished products bring in more money. We may not be able to go for it in a large scale; but a modest start could prove its utility.

6 Conclusion

It is high time that Non-aligned nations co-operate amongst themselves to improve their industrial sector. The developed countries are moving at a faster rate and the gap between the poor and the rich countries is growing wider and wider. Only through co-operation can we exist. There is no short cut way. Through hard labour and mutual help we shall have to move forward.

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නොබැඳි රටවල් බෙහෙවින් ම දුප්පත්ය. කාලය ඉක්මයාමක් සමඟම ධන වත් හා දුප්පත් රටවල් අතර පවත්නා පරතරය පුළුල් වෙයි. නොබැඳි රටවල් විසින් ඔවුන්ගේ ආර්ථිකයන් දියුණු කර ගැනීම ඉතිහාස මහන්සි වී වැඩ කළ යුතුව ඇත්තේ එබැවිනි. මේ සඳහා අවශ්‍ය වන ප්‍රධානතම සාධකවලින් එකකි, කාර්මික සංවර්ධනය. විවිධාකාර අවශ්‍යතාවන් හේතු කොට ගෙන ස්වකීය කර්මාන්තයන් දියුණු කිරීම ඉතිහාස තම තමන් අතර සහයෝගයෙන් ක්‍රියා කිරීමට සංවර්ධනය වන රටවල් පෙළඹී සිටෙයි. පිටරටින් ගෙන්වන දේ මෙහි ම නිපදවා ගැනීම, පිටරට යැවීම සඳහා භාණ්ඩ නිෂ්පාදනය කිරීම තාක්ෂණික හා ක්‍රමනාකරණ දැනුම් මිනුම් යනාදිය ලබා ගැනීම යනාදී ක්ෂේත්‍රයන්හී මෙය සිදුවිය හැකිය.

கைத்தொழில் அபிவிருத்தியில் கூட்டுச்சேரா நாடுகளுக்கிடையே ஒத்துழைப்புக்கள் தேவை

எம். அன்வாருள் அசீம்

பொழிப்பு

கூட்டுச் சேரா நாடுகள் பெரும்பாலும் வறியனவே, காலத்தின் முன்னேற்றத்துடன், வறிய நாடுகளுக்கும் செல்வந்த நாடுகளுக்கு மிடையிலான இடைவெளி மேலும் அகலமாகின்றது. எனவே கூட்டுச் சேரா நாடுகள் தமது பொருளாதாரத்தை விருத்தியுறச் செய்ய தாங்களாகவே முயற்சிக்க வேண்டியுள்ளன. இதற்கான பிரதான காரணிகளில் ஒன்று கைத்தொழில் அபிவிருத்தியாகும். வேறுபட்ட கட்டுப்பாடுகள் காரணமாக அபிவிருத்தியுறும் நாடுகள் தங்களது கைத்தொழிலை அபிவிருத்தி செய்ய தங்களுக்குள்ளேயே ஒத்துழைக்க நிர்ப்பந்திக்கப்பட்டுள்ளன. இது, இறக்குமதி மாற்றீடு, ஏற்றுமதி சார்ந்த கைத்தொழில்கள், தொழில்நுட்ப, முகாமைத்துவ அறிவு ஆகிய பல்வேறு துறைகளில் நிகழ முடியும்.