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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Seminar on the Organization and Administration of Industrial Services in Africa

Jointly organised by the United Nations Industrial Development Organization (UNIDO) and the African Training and Research Centre in Administration for Development (CAFRAD), Tangier, Morocco, 14 - 30 August 1967.

DRAFT REPORT OF THE SEMINAR

The Seminar was opened at the Palais du Marshan, Tangier, on 14 August 1947 at 10.30 a.m. with a Message of Welcome by His Excellency the Governor of Tangier, Moulay Taher El Alacui. The text of the Governor's message appears as Appendix I to this Report. This was followed by an address by Dr. Abdelasis Filali, President of the Governing Board of CAFRAD. The text of Dr. Filali's address is shown as Appendix II. Mr. Mchammed Laghsaoui, President of the Afro-Asian Organisation for Econemic Cooperation, delivered a speach, the text of which is shown as Appendix III. A message from Dr. I.H. Abdel Rahman, Executive Director of UNIDO, was read by Dr. A. A. Afifi. The text of Dr. Rahman's address appears as Appendix IV. The Director of CAFRAD, Mr. Abdel Rahman Abdalla, delivered an address, the text of which appears as Appendix V.

The following officers of the Seminar were elected:

Presidents

M. Abdelkrim Belkora, Charge d'Etudes, Cabinet du Ministre, Ministere de l'Industrie, des Mines, du Commerce et de l'Artisanat, Rabat, Morocco.

Viet-Presidents:

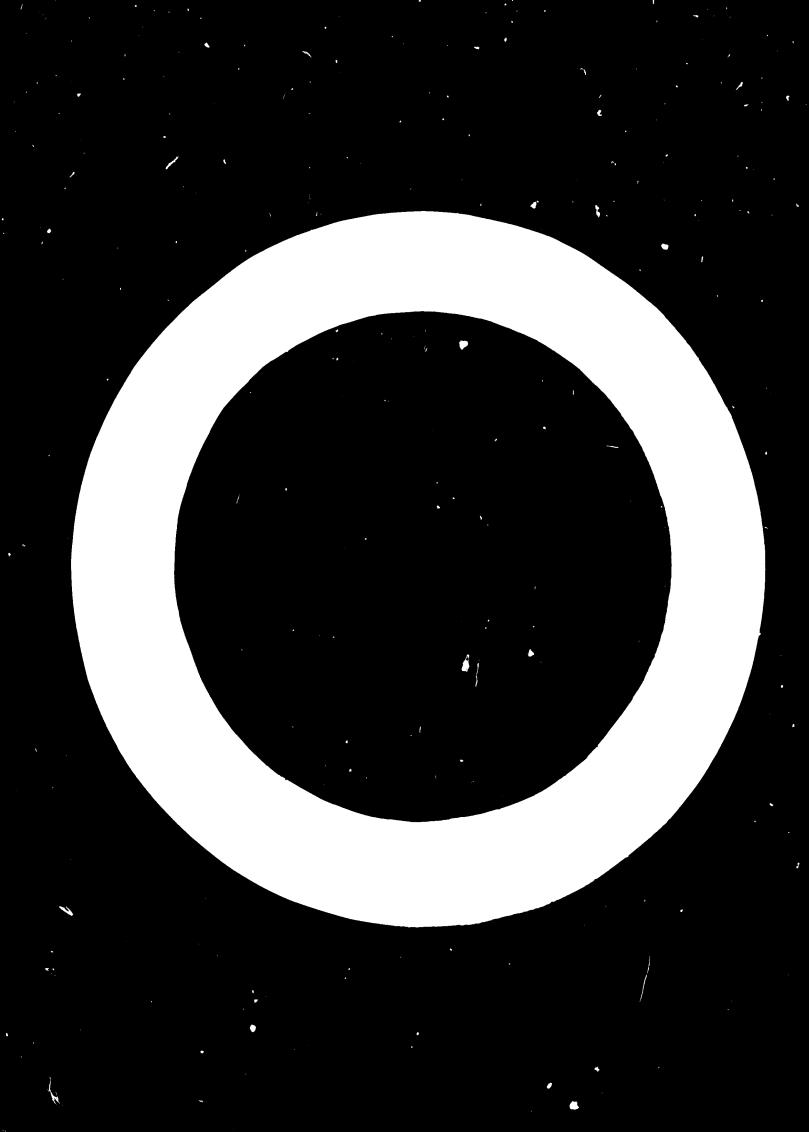
Mr. Kwabena K. Anti, Chief Industrial Promotion Officer, Ministry of Industries, Acora, Chana.

M. Louis Alexandrenne, Directeur des Mines et de l'Industrie, Dakar, Sénegal

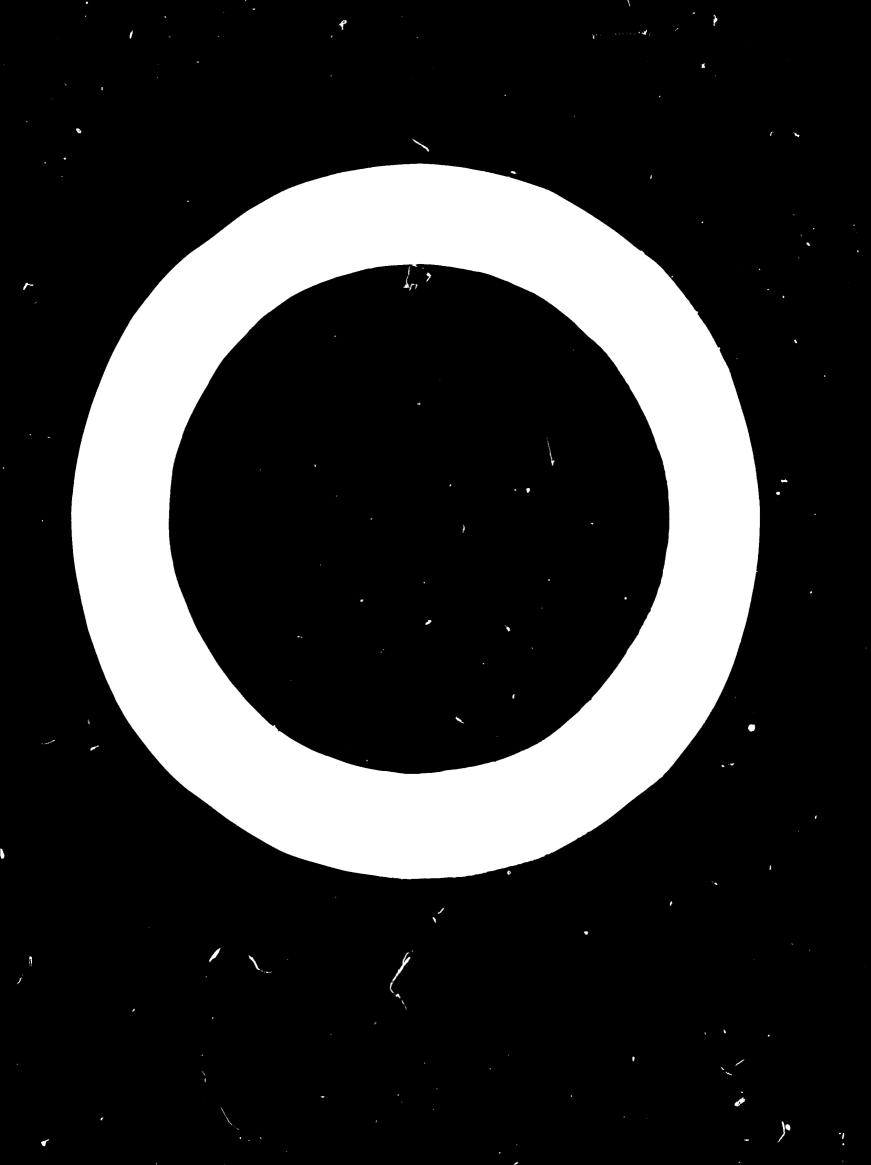
Reprosteurs:

Mr. Abdelhamid Chaghal, Responsable, Service de Développement, Societe Tunisienne de Banque, Tunis, Tunisia.

M. Dosseh Claude Mathey, Chef de la Division de la Proprieté Industrielle, Lomé, Togo.



We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.



Rapportours (oontid.)

Mr. Prince N.A. Browne. Director of Industrial Development, Department of Commerce and Industry, Monrovia, Liberia.

Mr. Boma G.E. Charles, Principal Assistant Secretary, Ministry of Industries, Lagos, Nigeria.

Following the adoption of the agenda and the programme of work of the Seminar, Dr. Lawrence W. Bass, Consultant, delivered the Seminar's keynote address, a résumé of which appears as Appendix VI to this Report.

Rusearch, including feasibility studies, laboratory testing, standardisation

Industrial research is an integral part of the industrialization process. Its contributions to this process-are manifold. They include such activities as investigations aimed at discovering local as well as foreign sources of raw materials, discovering possible uses for demestic natural and agricultural, products, developing production processes for the transformation of raw materials into intermediate or final goods, finding solutions to ad boo technical and other problems encountered in industry, cost-reduction, product and process improvement and dissemination of industrial information.

Laboratory testing of raw materials, production processes and intermediate or final goods is another activity of institutes of industrial research. In many developing countries these institutes are the only agencies possessing the specialized equipment and technical competence requisite for this type of activity.

Two types of industrial research institutes commonly in use are the "specialised institute" and the "general-purpose" institute. Many of the problems commonly encountered in industry and which may be brought for solution to an industrial research institute tend to out across two or more scientific disciplines. For this reason, it is usual to staff such institutes, in particular the general-purpose institutes, with personnel representing various scientific fields. This pool of diversified scientific and technical competence offers an excellent opportunity for the solution of these problems. In developing countries, where resources to be devoted to industrial research are generally inadequate, it is important to bear in mind the comparatively greater efficiency of the general-purpose institute.

Specialised industrial research institutes, on the other hand, customarily deal with the problems connected with one particular product or group of related products or with those of one industry or group of related industries. Their importance is, however, not to be minimised since many of them in developing countries, especially those connected with a country's major cash earner, have proven themselves to be extremely useful. One of the major problems faced by industrial research institutes in Africa is that of shortage of qualified research personnel. This problem is not, however, confined to Africa, since similar institutes elsewhere face this problem. Experience has shown that even where people with the necessary qualifications and experience can be found, they are often attracted away from industrial research institutes into other vocations in government or in private industry either because of higher calary inducements or because they consider those other positions more prestigious. There is also the tendency, especially among young university science graduates, to favour work in pure research instead of applied research. This tendency can be remedied through proper orientation to the work of an industrial research institute as well as through visits by the young recruits to research institutions in the industrially advanced countries.

Financing of industrial research institutes is another area in which problems are frequently encountered. Most industrial research institutes in Africa are, of necessity, government-financed.

Newly established industrial research institutes should be able to count on full financial support from their governments for a minimum of five years, and on at least partial support for a number of years afterwards. It would be of considerable help to African governments contemplating the establishment of industrial research institutes to examine and study carefully the expenditure figures, including initial outlays, of institutes already in existence elsewhere. In this commection, the United Nations Industrial Development Organization could serve as a clearing-house for the dissemination of information on costs and other relevant statistics of setting up and operating industrial research institutes. Governments possessing such information would render invaluable service by communicating it to the UNIDO.

There are, in addition to the purely technical problems, social and economic problems of industrialisation. While, occasionally, industrial research institutes might find it necessary to conduct investigations of an economic or a social nature, it should be emphasized that the primary concern of industrial research institutes is that of technical and techno-economic industrial research. There are a number of international organizations which are devoting considerable attention to the social and economic aspects of industrialisation and care should be taken to avoid unnecessary duplication of their efforts.

The growing need for pre-investment feasibility studies of industrial projects in Africa raises the question as to which institution should be charged with this vital responsibility. While a number of institutes exist whose primary purpose is that of conducting feasibility studies, it whose emphasised that such studies constitute a legitimate and extremely important part of the work of an industrial research institute.

The question of research policy and research orientiation is best answered by each individual country, based on its factor endowment. Thus in an agricultural country, it would be logical for the industrial research institute to concern itself with problems of agro-industries. Similarly, in a mineral-producing country, one would expect to find that the work of the research institute is geared to the mineral products produced there.

It is an observed fact that in some countries industrial research is, unfortunately, not regarded as a necessity but as a luxury, especially by those who look upon it merely as a form of academic exercise with no practical industrial consequences. Experience in the industrially advanced countries, however, has clearly demonstrated the important link between industrial research and industrial development. The need for pre-investment feasibility studies as well as for technical "trouble-shooting" during the course of industrial production clearly emphasise this link.

Industrial research institutes in Africa, as elsewhere, exist at various levels - the factory level, the industry level, the national level, and the sub-regional or regional level. Thus, there is some scope for choice as to which level to adopt depending on the circumstances of the individual country. For example, where the resources of a country are such that the establishment of a national research institute would be uneconomic, it would be advantageous for such a country to pool its resources with neighbouring countries in the formation of a sub-regional or regional research institute of the type existing in Central America, the

tcalti). The practical difficulties of setting up a sub-regional or regional industrial research institute should nevertheless not be lost sight of. For example, each government involved must decide the extent of its own sovereignty that it is prepared to forego in the interest os the sub-regional or regional organisation. And member countries, other than the country in which the institute is located, will be faced with the problem of great distances between their industries and the leaboratories of the institute, which distances can produce distorted results of laboratory experients and tests. These difficulties aside, and with sufficient goodwill on all sides, successful regional cooperation in this field could go a long way towards lessening the financial burden of developing countries in organising and maintaining industrial research institutes.

As the institute develops its competence and gains the confidence of the industrial community, it will be able to, and should, undertake sponsored research whereby it levies charges for the work it undertakes for clients. This will have the effect, among others, of reducing the expense of the institute's financial dependence upon the government, thereby en anoing its operational autonomy.

While recognizing in principle the desirability of sufficient autonomy for the institute to enable it to function effectively, it should be emphasized that institutes must operate within the framework of gov ernmental policy and national economic objectives. The primary purpose of such autonomy is to

relieve institutes of pressures from external sources in order that they might concentrate on their work, guided primarily or even solely by considerations of efficiency. Such autonomy, however, must not impair the principle of accountability. For this purpose some institutes in some countries are attached to universities; others to national bodies such as Academies of Sciences, and still others to governmental ministries such as the Ministry of Industry. It is up to the individual country to decide the agency with which its industrial research institute should be linked.

So far as research programming is concerned, the management of each industrial research institute should be in a position to strike a balance between, or the one hand, its long range and short range programmes, and, on the other, its "in-house" and sponsored projects. Contingency funds may be set aside to meet expenditures for unforeseen research projects.

Industrial Extension Services

The concept and methodology of extension services, first used to a considerable degree in agriculture, are now being used extensively in industry. Industrial extension services comprise essentially those services "extended" directly to the individual enterprise, with a strong emphasis on enabling small and medium-scale enterprises to acquire staff services beyond their own internal resources. This involves, in most instances, carrying the services to the enterprise - rather than waiting for the enterprise to call in the service.

The usefulness of industrial extension services is recognised in providing assistance to the entrepreneur in such areas as management and organisation, technical and technological support, financial aid, information and documentation. Since few small-scale interprises in Africa possess the requisite experience in the field of modern management, and are often faced with other problems both technical and financial, the need for the development and more extensive use of industrial extension services is an urgent one.

The manager of an enterprise that is experiencing production, management, marketing or other difficulties, may not always know exactly what the cause of his troubles is. Thus, one of the first tasks of the industrial extension officer is to carry out a careful diagnosis of the operations of the enterprise in order to locate the areas in which improvements are called for.

In order to determine their impact and usefulness, industrial extension services should be evaluated periodically by those providing them. Research should also be carried out in various branches of industry in order to discover and remedy any bottlenecks that may have developed.

Proper training of extension workers is essential if industry is to have maximum benefit from their services. This can be achieved by attracting young graduates in engineering and business economics and developing them into staff members of the extension service through additional theoretical as well as practical, in-service training.

In setting up industrial extension services in developing countries, the fullest possible use should be made of available aid from bilateral and international sources.

The importance of providing a measure of training for managers of small enterprises as part of the industrial extension programme is affirmed, in order that any operational improvement suggested by the programme may be firmly established within the enterprise. Such training should take the form of discussion workshops and short seminars at which participants should be encouraged to discuss their specific problems and to relate the subject matter to the situations in their respective enterprises.

Cooperation among enterprises augurs well for the general good and should be systematically encouraged through extension work. This could lead to improved business relations and more efficient use of resources through greater specialization and the use of the sub-contracting technique.

Industrial extension services should be a two-way process: there should be a flow of information from the extension services to the enterprises and a communication of the problems of the enterprises to the suppliers of the extension services.

An inquiry service should constitute an adjunct of the extension services in order that entrepreneurs may be able, on their own initiative, to seek needed information on and assistance in dealing with their operating problems.

The location within the governmental structure of the organ responsible for industrial extension services is a matter involving a policy decision and is best decided by the appropriate authorities in each country based on its peculiar needs and circumstances. Regardless of its location, this organ should have the freedom and flexibility necessary for its efficient operation. Its affairs may be governed, where so desired, by a board representing the various interests affected by or connected with its work, such as labour organisations and enterprise groups. This will help to remove suspicions sometimes entertained by entrepreneurs towards governmental bodies as having connections with tax-collecting agencies. For the same reason, service agencies should be separated, as far as possible within reason, from policing agencies.

Industrial extension services may be fully financed by the government and provided free of charge to industry or they may be organized on a joint basis between the government and the private industrial sector, in which case the beneficiaries participate in the financing of the services they receive. Experience indicates that a service is more appreciated when it is paid for than when it is freely received.

Large industries, which are often in a stronger financial position than the smaller ones, should be persuaded or forced to share in the financial responsibility for providing industrial extension services.

The industrial extension corps in a country should embrace a proper combination of specialists and generalists in order that the problems of industry may be examined and dealt with within their proper perspective. Each extension worker, however, whether specialist or generalist, must be fully extension should be able to command the confidence and respect of the entrepreneur.

Consulting Engineering

Increasing use is being made in African countries of the services of industrial consultants for solving industrial problems. In general, such consultants are specialized individuals who have had considerable experience from previous exposure to situations similar to those for which their expertise is being sought. The services required may be of a highly specialized nature concerned with related technical, economic and managerial problems, or they may involve diversified skills needed for a particular assignment.

Consulting services most frequently sought in the developing countries of africa fall into three broad categories, those mainly related to improvements or modifications of existing operations or procedures; those required for installation of new establishments, operations, markets, systems or for installation of new establishments, operations, markets, systems or organizations, and those relating to the specialized problems associated with organizations, and those relating to the specialized problems associated with organizations, and medium-scale enterprises. Services within the first category fresmall and medium-scale enterprises. Services within the first category frequently include information dissemination, "trouble-shooting", productivity quently include information dissemination, skill improvement and development, process and equipment appraisal, plant layout, product and process ment, process and equipment appraisal, plant layout, product and process improvement and development, by-product and waste utilization, financial control procedures, marketing improvements, labour relations and managerial procedures.

Services relating to the installation of new operations, marketing areas, systems or organizations may lead to establishment of new industrial enterprises. Other services within this category include raw materials surveys, area development surveys, organizational studies, long-range planning, marketing activities and personnel development.

Considerable attention has been paid and is being paid to the problem of special assistance to small and medium-sized enterprises. Owing to their relatively limited resources, small and medium-sized enterprises, one would expect, would be the first to avail themselves of every opportunity of technical or managerial assistance. Experience proves, however, that this is nical or managerial assistance. Experience proves, however, that this is generally not the case, and that the benefits which each olient derives from generally not the case, and that the benefits which each olient he himself puts the use of a consultant are in proportion to the effort which he himself puts into the project.

Successful implementation of the consultant's recommendations depends to a large extent on the personal competence of the client's organisation, the extent and quality of his manufacturing facilities, his marketing skills, and, generally, his method of managing the enterprise. On the other hand, the consultant's recommendations must be of a practical and realistic nature, consultant's recommendations must be of a practical and realistic nature, taking into account the capability of the client to implement them. Some

industrial enterprises in Africa, otherwise desirous of making use of consultants, are unable to do so due to a lack of knowledge of the sources of consultative help. The truth of the matter is that there are more sources of such help than is generally realized. Among these are private or autonomous sources, which include industrial research institutes, independent consultants and consulting organizations, faculty members at universities; foreign consultants, technical personnel in large enterprises, financial institutions, technical societies, libraries, and suppliers and vendors of industrial machinery and equipment. There are also governmental sources such as development agencies, government departments, government laboratories and institutes, and management training centres. In addition to these, there are international organizations such as the United Nations and several others, as well as foreign governments and agencies interested in assisting developing countries to secure the services of industrial consultants.

Individuals and organizations interested in the subject of industrial consultancy will find useful information in a forthcoming publication of the United Nations Industrial Development Organization entitled "The Use of Consultants in Developing Countries."

While recognizing the valuable contribution made by foreign consultants to the industrial development of developing countries, it is essential that local consultants be developed and encouraged. Considering the high cost of consultancy service, the use of local consultants should result in substantial savings to the entrepreneur, since it would in many instances not involve travel expenditure covering long distances and would at the same time often eliminate the language barrier which generally exists between the foreign consultant and the local client. There are, of course, no schools or institutions of learning for turning out consultants although higher education is an asset in the vocation. The principal stock-in-trade of the industrial consultant is the practical experience acquired through long exposure to the particular type of activity. The consultant is to industry what the medical practitioner or medical specialist is to the human body.

In the client-consultant relationship a certain degree of sophistication on either side is essential. Not only should the consultant be competent to deal with the problem at hand, but he should also possess high enough ethical standards not to accept any undertaking for which he knows he lacks the requisite experience. The client, on the other hand, should be relatively well informed on the proper procedure for selecting and hiring a consultant. He should also be "in the know" regarding the proper points to be covered in a contractual agreement, not the least of which is the financial question. This has to do with when and how payment is to be made, whether it is to be in the form of a lump sum remuneration on the completion of the assignment or whether it should be paid on a daily basis. In the event of difficulties arising between consultant and client, procedures should be agreed upon, for instance in the form of arbitration, for resolving such difficulties. The agreement should also set forth in clear and unequivocal terms the responsibilities, obligations and rights of the consultant as well as of the client.

In encouraging the establishment of consulting offices, developing countries will have to decide whether such offices should become branches of consulting firms, whether they should be independent or whether they should form a liaison with similar organizations. Special consideration should also be given to the types of incentives, if any, that the government could offer in order to encourage and facilitate the establishment of consulting offices. Alternatively, governments may provide consultant services, especially to small businesses, at/nominal fee or, where circumstances so justify, free of charge. One useful approach towards the development of local consulting expertise is the use of counterpart personnel to work closely with foreign consultants. With such practical on-the-job training, and given sufficient experience, the local staff will eventually be capable of meeting the technical requirements in their lines of duty.

In view of the high cost of consultant services in relation to the individual enterprise, the provision of such services under some form of government subsidy either through the retention of individual consultants or a firm of consultants, or through the development of the necessary skills within an institute of industrial research, would seem to recommend itself.

While consultants may be hired to advise on managerial and other matters, it is not always advisable to relinquish the role of management to the consultants. Better results would be achieved and practical experience gained by employing a local manager who is sufficiently familiar with the nature of the particular enterprise.

With regard to the choice of a new product to be produced by the enterprise, it is important to bear in mind that the consultant's opinion should not be the final word. The ultimate consumer is sovereign in this respect and the decision of the enterprise should be based only on the tested reactions of the market.

Finally the costs of hiring consulting services, which admittedly may be high in relation to the financial capabilities of a particular enterprise, should not be exaggerated. It is a matter of experience that seldom are these costs greater than they would be if the enterprise itself undertook to perform the assignment, and frequently they are much less.

Industrial Property

Industrial property, in its generally accepted meaning, consists of patents, certificates of authorship, trade marks, designs, and know-how. It thus denotes ownership of intellectual property not only in the industrial field but in other fields as well, such as that of publishing.

Patent systems and their proper administration are important in the industrial field in promoting inventive activity by providing a reward to the inventor. The system also helps to encourage disclosure of inventions which would otherwise remain within the secret domain of the inventor. It also offers protection to the inventor from competition during the operative years of his patent and thereby encourages investment in industrial activity.

Trade marks are no less important in the industrial field; they help to indicate the origin of industrial products and to identify them in the consumer's mind with their manufacturer. This vital function is recognized as playing an important role by protecting owners of trade marks from unfair competition, and the consuming public from deception and confusion.

Patents and trade marks are important not only in private-enterprise economies but also in socialist as well as mixed economies.

Industrial designs, though quantitatively less significant than patents and trade marks, are nevertheless important in the commercialization of industrial products, particularly with regard to those products whose appearance and attractive styling are important marketing factors.

The area of industrial know-how is much more volatile than the others, being less amenable to legislation and hence more difficult to regulate and control. The term may be said to include everything else that contributes to the successful commercialization of industrial goods and services that is not covered under patents, trade marks, designs, etc.

Industrial property legislation in Africa is still rather in its infancy. Many countries that gained their independence only in recent years are still operating under the industrial property legislation introduced during the colonial era. In some countries, new legislation is being introduced to replace the old one. Sound industrial legislation in this field is considered a vital element in the transfer of industrial technology from the developed countries to the developing ones and efforts by governments in this field will be a step in the right direction. The existence of the African and Malagasy Patent Office (OAMPI) is noted with satisfaction as a regional undertaking worthy of emulation elsewhere in Africa.

The work of the International Union for the Protection of Industrial Property (BIRPI), an international organization which has several African countries on its membership, is noted as contributing to the establishment and administration of industrial property organizations in various countries.

International licensing is recognized as a useful method for the international transfer of technological know-how. The experience of the developing countries vis-a-vis the developed ones in the field of international licensing of patents and other forms of industrial property leaves much to be desired. One of the reasons for this is the lack of an industrial base in the less developed countries which renders these countries less attractive to potential licensors from the developed countries. Another reason is that licensors sometimes feel that their industrial property rights will not be given full protection in the less developed countries or that the returns from their licences will not be high enough to justify the effort.

In the developing countries themselves, institutions such as industrial research institutes are useful in helping to develop and negotiate patents for new inventions. In this connection, a patent lisison man within the institution

can help the inventor in assembling information for his patent application. Though he may not be a patent lawyer, this liaison man should be sufficiently conversant with this field to render useful service to the inventor.

With regard to licensing, it is important that the contractual arrangement involved should be equitable to both the licensor and the licensee. A patent is merely a licence to practice a product. As such, nobody has complete control over it until it is adjudicated in a court of law. While there is a general tendency on the part of licensors to hesitate to underwrite protection of the licensee from infringement on the patent there are numerous instances in which such protection has been negotiated as part of the contract.

With regard to the observed hesitation on the part of developed countries to license their patents for use in developing countries, it is realized that most industrial activity in developed countries is in the hands of private entrepreneurs who also own the industrial patents. The government cannot give entrepreneurs who also own the industrial patents. The government cannot give away those patent rights or force their owners to give them to anyone requesting them. Some private concerns do have free information to offer to developing countries; others have information for sale on a business basis while governments use their good offices to assist in negotiations between private companies in the developed countries and those in the developing countries. The United Nations should also compile data on available information from various sources on the subject and place it at the disposal of interested parties. It is realized that patents are not the only form of transfer of technology and that a lot of information is easily available for the asking. However, if one withes to purchase a particular patent then one must pay for it as for everything else that is of value.

Industrial Cooperatives

Industrial cooperatives, which term includes all industrial enterprises, great or small, which are legally registered as cooperatives, or which are wholly controlled by an organisation registered as cooperative, have been in existence in industrially advanced countries for a considerable length of time. Their introduction to Africa is of recent origin and even as of today few, if their introduction to Africa is of recent origin and even as of today few, if their introduction has, however, demonstrated its usefulness as an important prise organisation has, however, demonstrated its usefulness as an important prise organisation has, however, demonstrated its usefulness as an important prise organisation has, however, demonstrated its usefulness as an important prise organisation has, however, demonstrated its usefulness as an important factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—factor for economic development and is, therefore, deserving of every encourage—

In Africa, where economic planning is extensively used as a means of allocating development expenditure and setting targets and priorities, industrial cooperatives can play a useful part in participating in the economic planning process. They can also provide valuable assistance to their members in such matters as productivity improvement and development, and standardization and quality control of industrial products.

Industrial cooperatives should be distinguished from consumers' cooperatives and should be recognized for what they are, namely, industrial and commercial institutions or cooperative factories.

Sound business practice demands that before setting up an industrial cooperative a careful study should be conducted of its technical feasibility and economic soundness, a step recognized as necessary in almost every kind of industrial undertaking.

Experience indicates that one of the primary problems facing many industrial cooperatives is the lack of professional management. Since the cooperative is an association of producers and workers, it frequently does not have a specialised administrative machinery and must depend on the services of the workers themselves. This explains in part why industrial cooperatives tend to be established mainly in the primary, traditional or less complex branches of industry, such as woodworking, leather working, glass, pottery or painting. Another reason is that industrial cooperatives lack the organizational and technological flexibility to operate successfully in the more complicated and competitive branches of industry where production methods must be continually up—dated.

In Africa cooperative associations will find it advantageous to operate in the less highly modernized branches of industry. The trail already blazed by some of the successful cooperatives in agriculture will, no doubt, provide useful lessons for similar cooperatives in industry. Success in this field, however, will depend at least in part on continual improvement in management techniques and know-how. To that end, special training programmes for the organisers and managers of industrial cooperatives should be arranged by interested parties both in the countries themselves as well as by international organisations. These parties should also provide such other assistance as may prove necessary.

(A statement read by Dr. Mohammed Ali Rifaat, Secretary-Ceneral of the Afro-Asian Organisation for Economic Cooperation, appears as Appendix VII to this Report.)

Industrial Financing

The shortage of investment capital in Africa is recognized as one of the major contributing factors to the slow rate of industrial development in the continent. The majority of industrial enterprises in Africa lack adequate internal resources for self-financing. This condition, coupled with the absence or inadequacy of capital markets in most, if not all, African countries, emphasizes the need for more intensive effort in this field.

It is noted with some satisfaction that efforts are being made at the domestic, regional and international levels to improve capital availability in Africa.

On the domestic scene; many African countries have one or more Industrial Development Banks or Industrial Finance Corporations active in the field of industrial financing by way of medium and long-term loans and/or equity investments. These financial institutions are, in general, public or semi-public organizations established for the primary purpose of providing financial assistance to private (and in some cases public and semi-public) enterprises.

Since lack of industrial finance is not the only major obstacle to satisfactory economic or industrial development, financial institutions have often found it necessary to assume ancillary responsibilities, such as industrial promotion, management of enterprises in which they have invested funds, conducting feasibility studies on projects which they are contemplating financing, etc. It is recognized that in most cases, these additional responsibilities are assumed by the institutions as a matter of absolute necessity in order to assist deserving but needy enterprises. The net result in some cases is that the enterprises concerned have been put back on their feet and on the road to viable, productive life. In the interest, however, of the financial institutions own sound financial practice, care should be taken not to over-extend the scope of these ancillary functions. While feasibility studies by financial institutions are perhaps unavoidable as a means of determining the "bankability" of proposed industrial projects, other functions of a less crucial nature, or those which could be sub-contracted or delegated to other agencies, should not be assumed by the financial institutions themselves to the point where sound financing operations are compromised. At the same time, it is recognized that byintegrating these diversified functions within the same organization, economics of scale may be realised which may offset part or all of any possible didadvantages.

One of these "possible disadvantages" is that by taking over the management of poorly-run enterprises, financial institutions, unless they exercise great caution, may find themselves burdened with a number of unprofitable enterprises in which scarce capital is tied up that might otherwise be put to better use elsewhere.

At the regional and sub-regional levels, the recent creation of the African Development Bank and the East African Development Bank is noted at a good augury for the future of development financing generally in Africa. It is expected that these and similar institutions in Africa will provide further assistance in such other aspects of industrial development as feasilility

studies, industrial promotion and attracting foreign capital and technical and technological know-how. Recent experience indicates, unfortunately, that the African Development Bank, like the national development banks, often encounters serious difficulties in raising the capital necessary for its operations. It would be of assistance if external loans contracted by African Banks could be repaid in the national currencies of the borrowing countries.

The efforts being made by the United Nations Economic Commission for Africa to establish sub-regional and regional industrial promotion agencies are noted with satisfaction. These agencies, in concert with existing national, sub-regional and regional bodies, should intensify their effort to attract more foreign capital into Africa.

Some of the sources of industrial investment capital in the past have included the European Development Fund, the European Investment Bank, the European Economic Community, the International Bank for Reconstruction and Development (IBRD), the International Monetary Fund and the United Nations and its Specialized Agencies and subsidiary bodies, such as the UNDP and UNIDO. The assistance so far rendered by these bodies is greatly appreciated but there is a great deal more to be done.

High interest rates on international loans as well as the reluctance on the part of international lending institutions to grant loans on a sufficiently long term basis are factors inhibiting greater utilization of international lending capacity.

Much as foreign capital is needed in African countries, care should be taken to ensure that such capital serves the best interests of the countries concerned. A careful determination of the true financial and economic needs of a country is, therefore, a pre-requisite to the optimal utilization of the resources acquired.

Industrial Estates

The term "industrial estate" is applied to industrial housing projects, with essential services such as power, water, feeder roads, etc., provided to industries on a rental basis.

It is noted that only a few African countries have industrial estates, as opposed to industrial sites which are merely areas set aside for the location of industries.

The objectives for which industrial estates are created include:

- (a) assis tance to small entrepreneurs in the establishment and operation of small and medium-sized enterprises.
- (b) the development of economically depressed areas.

- (c) provision of essential services (workshops, water, electricity, effluent disposal facilities, etc.) to tenant enterprises at moderate prices.
- (d) better marketing organization.
- (e) better provision of social services.

The setting up of an industrial estate should, like the launohing of any other industrial venture, be preceded by a careful feasibility study which should take into account the views of the potential users.

Industrial estates when established should be reserved primarily for small and medium-sized enterprises. Provision should, however, be made for later expansion. In this connection, it is considered that the initial building of any one factory should normally not cover more than one-third of the acreage allocated to that factory. Enterprises which expand beyond what is generally regarded as small or medium size should be obliged to move out of the industrial estate.

In view of varying costs of land, labour and materials, no estimates can be given, which will be valid for all countries, of the costs of establishing industrial estates.

The funds for financing industrial estates may be derived from public or private sources or from both. In the case of private financing, profitability of the venture will be a key factor.

Industrial legislation for the promotion and protection of local industry.

The protection of a country's industry calls for selectivity and flexibility in order to ensure that the most competitive branches of industry are covered. This can be achieved through tariffs and quota restrictions. Protection of domestic industry should not be carried out in such a way as to create monopolies which would hinder development.

So far as industrial legislation is concerned, its scope and general direction are influenced by the political and administrative system within the country. Industrial standardisation, for instance, may be compulsory or optional, depending on whether the politice-economic system is centralised or decentralised.

The question as to which Ministry - that of Justice or of Industry or both - should handle industrial legislation is best decided by each country in the light of its internal needs.

It is important that industrialists be kept well-informed of legislation concerning industry. Such information may be distributed in the form of bullatins, news-sheets and digests.

Training

The shortage of trained industrial manpower in African countries is generally recognized. Various programmes have been launched by the respective governments to improve the situation. These include expanded facilities at technical training institutes for the training of technicians and other categories of middle-level manpower. At the top level, various governments are making available each year a greater number of scholarships and fellowships for the training, both at home and abroad, of engineers, chemists, economists, accountants and managers.

It is essential that the training of technicians should proceed side by side with that of managerial and administrative personnel. The need for this balance is underlined by the lack of managerial expertise evident in many African enterprises and which very frequently is the most serious stumbling-block to African entrepreneurship.

The work of the International Labour Organization (ILO) in the field of training as outlined by its observer at this Seminar, is noted with great appreciation.

Most African countries do have some domestic facilities, albeit not entirely adequate, for training in industrial skills. To supplement domestic training, many countries each year send their young men and women to foreign universities, training centres and industrial enterprises for further training. In view of the high cost of training and the number of years required to train, say, an engineer, and considering that training should be geared to a country's manpower needs for development purposes, each country should examine and evaluate periodically the two alternatives of training at home and training abroad. It is to be noted that the educational curricula in the highly advanced countries are geared to the needs of those countries and are thus often lacking in crientation to the fundamental requirements of developing societies.

In the developing countries of Africa the educational curricula have not yet severed their umbilioal cords with the colonial educational system with its preponderant emphasis on the arts and classics. Such a system is out of step with the needs of the emerging production-oriented economies of Africa.

Formal training, however thorough, is no substitute for experience. Proper job orientation and in-service training should therefore form part of any industrial training programme.

The efforts of private enterprises to provide training programmes of various types for their employees are noted as a welcome contribution to national human development efforts and should be encouraged. Where necessary, government assistance should be provided to make such training schemes more effective.

With regard to Government-sponsored training programmes, there should be a clear understanding of the precise jurisdiction of each of the various ministries involved in this activity, e.g. the Ministries of Education, Labour, Economic Development, and of Industry, so as to avoid confusion and possible rivalry.

The problem of migration from public industrial institutions to private enterprises of personnel trained at public expense is recognized as a serious one affecting the effectiveness of the institutions concerned. Expanded training programmes and improvements in service conditions at public institutions are likely to help in alleviating it.

Future industrial expansion dictates that due emphasis be given to the training of trainers as a supplement to the training of workers.

The practice sometimes observed in many an African country of appointing professional technical personnel to posts other than in their fields of training (for example, an engineer holding an administrative position) is inconsistent with optimum utilization of expert talent and should be discouraged. The same is true of the use of high-level personnel in routine jobs which can be adequately performed by skilled technicians and other middle-level operatives.

Role of public and private sectors and their relationship in the provision of industrial services

The services needed by industry are many and varied even in developing countries. In some developed countries with mature private sectors, most of these services are provided by private institutions and organizations, the government playing a supplementary role or providing those services which owing to their peculiar nature are best provided by the government. In the developing countries, on the contrary, the majority of industrial services must be provided by the government.

This is partly because industrialization in the developing countries is a recent phenomenon, thus private industrial enterprises have not had time to develop their own supporting services. It is also partly due to the fact that the existence of certain of these services is a pre-requisite for the very emergence of the industries themselves.

Among the industrial services commonly provided by the government, therefore, are the following:

- (i) Planning of industrial development;
- (ii) Financial assistance to industry;
- (iii) Provision of economic incentives, e.g. tax and/or duty remissions, hire-purchase schemes covering factory buildings, plant and equipment, provision at little cost of certain assential services such as water, electricity and telecommunications;
 - (iv) Provision of basic infrastructural facilities;
 - (v) Staff training and other forms of assistance in the utilisation of manpower;
 - (vi) Assistance relating to research and development, laboratory testing, standardisation, patent rights, etc.
- (vii) Marketing information and the promotion of domestic as well as foreign trade.

The above and other similar services are normally provided under a variety of institutional units. These may be wholly public or may involve a measure of private participation. Only in a few cases, if any in the developing countries of Africa are they wholly private.

These institutional units, regardless of the nature of their sponsorship, generally face many serious constraints — human, physical, technical and financial. Often there is neither the tradition nor indeed the precedent of efficient operation to serve as a guide. Consequently progress comes only slowly and often by way of trial and error.

The organizational and administrative structure of a public industrial institution is usually quite different from that of a private institution. The former is generally fixed rather rigidly by law. Its financial, budgetary and personnel policies and procedures are usually similarly fixed. Sometimes, this inflexibility tends to vitiate the efficient functioning of the institutions concerned and thus to defeat their original purpose.

In the private sector, experience in industrialized countries shows that internal administrative controls tend to be more flexible and progressive due, no doubt, to the greater necessity to justify expenditure solely or primarily in terms of actual or potential economic returns.

As the private sector in the African countries gets stronger, its role in the provision of industrial services is expected to increase. This development will be enhanced by the emergence of strong inter-industry organizations, such as Chambers of Industry, Manufacturers' Associations and professional Associations. These bodies, it is hoped, will play a vital role in making the views of the private sector better understood by the government and in communicating to their members the significance of government policies and measures affecting industry.

Organizational factors and functions of agencies involved in industrial development

Under this item, the only question considered was that of the relationship between the State and the public industrial sector.

The public industrial sector is defined as the sector directly controlled by the State and consisting of publicly-sponsored or controlled enterprises whose organisation, rules of procedure and functions are customarily stipulated in legal instruments enacted by the State.

The central issue concerns the degree of "autonomy" which State-enterprises should have or, conversely, the degree of "control" which the State should exercise over them. The attitude of the State towards State enterprises varies from country to country, ranging from mere concern for efficiency to complete integration of the public industrial sector within the national production plan.

The rules governing the operation of the enterprises, and the way in which they are applied, are decisive in establishing the relationship between the enterprise and the public authorities. Some of the vital elements of a State enterprise through which public authorities may exert influence and even control include the mode of capitalization of the enterprise, the appointment of its management, auditing and the structure of the decision-making process.

During the initial stages of institution-building, the State should decide the extent to which it is prepared to permit the institutions to develop freely and what support it is prepared to provide. It should also obtain the full information necessary to ensure the systematic development of the enterprises along clearly defined lines. Care should be taken to avoid either of the two extremes to which some State enterprises tend to gravitate, namely, complete evasion of public control and complete and passive reliance on public direction.

As experience grows in the operation of State enterprises more flexible and sophisticated methods of control are evolving that rely less and less on coercion and compulsion and more and more on constructive cooperation.

The purpose of control is two-folds to integrate the public sector into the national economic development programme and to ensure the regular and efficient management of individual State enterprises. The usefulness of the former objective depends on the industrial sector covered; i.e. public enterprises serve as a yardstick for measuring performance in, and for applying pressure on, the private sector.

So far as management is concerned, control systems in various countries tand to be influenced by restrictive attitudes introduced when the systems were originally devised and which are often difficult to alter.

It is often difficult to reconcile administrative standards as they exist in the civil services of most countries with the requirements of industrial operations by a public enterprise. But there is a need for some form of State control in order to safeguard the public interest. The difficulty is knowing the type of controls that will least impede the smooth running of the enterprise. There appears to be strong justification for a distinction to be made between decisions involving the policy of an enterprise, which clearly call for the intervention of governmental authorities, and those affecting routine matters of day-to-day administration which are best left to the discretion of the management of the enterprise.

Control is also a means of ensuring or promoting efficiency. Those entrusted with efficiency-auditing thus serve as a link between the State and the enterprise, clarifying points of mutual interest.

Cooperation between the various governmental units and public industrial enterprises is essential to the success of these enterprises as a vital force in the industrial development of developing countries.

The Seminar noted with appreciation the work of Industrial Development Centres in Nigeria as outlined by Mr. E.G. Rothblum, Observer from the US-AID Mission in Nigeria.

Financial Policies

The policies adopted by governments for financing industrial institutions vary according to the nature and purpose of the particular institution. A broad distinction should be made between institutions providing services mainly to meet social and developmental needs and those that are of an entrepreneurial and profit-seeking nature. Either by accident or design, the predominant practice observed in developing countries is to finance both types of institutions in an identical manner, namely, through annual budgetary subsidies and grants.

Such a system imposes serious limitations on the ability of the institution to plan its programmes for more than one year at a time. The implications of this approach for public industrial enterprises in particular are extremely serious. Such enterprises, taking the case of Ghana as an example, are of three categories, namely, the Departmental Enterprise (organized within a Ministry or Department of Government), the Public Corporation (established under a legal instrument as a semi-autonomous enterprise) and a Mixed Enterprise (involving public-private participation).

Funds for departmental enterprises are normally provided through the annual national budget and must be utilized in accordance with strictly defined procedures which in normal circumstances can neither be changed nor accelerated, no matter how slightly. The amounts involved can only be increased by supplementary allocations veted by the legislature and unspent balances at year's end must be returned to the central coffers of the government.

Rigid rules and procedures are also prescribed for many normal business operations such as indenting for supplies and entering into legal contracts.

With regard to public corporations it is observed that they are normally expected to operate along lines similar to those of private business ventures without being permitted the freedom to adopt financial manasement techniques used in the private sector. Legislative instruments often place undue emphasis on controls, laying down detailed procedures for the handling of such items as depreciation, bad debts, staff welfare, contingencies, etc.. The net effect of such close financial supervision by political power-centres is that public enterprises often find themselves incapable of building up the financial reserves necessary to finance expansion or even maintain the volume of operations at a profitable level.

Mixed enterprises have a generally more favourable record of success than the other two, at least in profit and loss terms. This is partly due to the relatively greater freedom which they normally enjoy to adopt such financial policies and measures as are dictated by changes in the business environment. It is also due in a great measure to the fact that the management of such enterprises is often in private, more experienced hands, consisting most frequently of expatriate personnel.

African governments should recognize that the financial and administrative procedures suitable for the civil service are not necessarily suitable for industrial enterprises and institutions and should evolve systems, suitable to the African environment, that are designed specifically with the objectives of industrialization in mind. The experience of the industrialized countries and of international organizations active in the industrial development field should be studied for possible adaptation to African needs.

Problems of staffing and utilization of manpower

The observer from the ILO gave an account of the work of his organization in the field of personnel and managerial training in developing countries, with particular reference to Africa. He appealed for cooperation between his organization on the one hand and UNIDO and CAFRAD on the other. The desire for cooperation was reciprocated in replies by the representatives of UNIDO and CAFRAD respectively.

In the discussion of the above topic, the following points were made:

Every institution must cope with its problems of internal organization and administration including the recruitment and briefing of personnel. This latter task is by no means an easy one in African countries due not only to the general shortage of qualified persons but also to pressures often exerted by influential politicians aimed at securing the recruitment of favoured but often unqualified friends and relatives.

A system of competitive examination should be used for recruitment purposes. Following proper job-orientation, staff should be assigned to jobs for which, by training, they are best qualified. Re-training should, however, be provided where necessary. Job rotation and transfers from the public to the private sector, and vice versa, will help to broaden the background and experience of the staff concerned.

Salaries and other conditions of service in industrial institutions should not be unfavourable in comparison with those in other branches of government and should bear a reasonable relationship to those in private industry if the industrial institutions are to attract and retain some of the best talent available.

The use of local and/or foreign consultants to supplement internal personnel resources of industrial service institutions should be carefully considered. Every effort should also be made to provide commercial training and practice for local personnel, to motivate them and to interest them in their jobs. This emphasizes the need for job descriptions.

Delegation of authority is important in developing employee self confidence. Team work and the necessary team spirit should be fostered. The precise status of various categories of staff within the organization should be established, with detailed stipulations covering their duties, rights, salaries, promotion conditions, transfers, separations from service and replacements.

Personnel output as well as salary-scales should be reviewed annually and older staff who lose their jobs should be assisted to find new ones. Qualified personnel should not be placed in jobs in which they cannot develop their potentiality. Where circumstances so justify, temporary staff only should be recruited while permanent ones are being trained.

No useful purpose is served in recruiting a foreign expert unless he is better qualified than the available local counterpart. He should be recruited solely for his specialized knowledge in a clearly defined area and should be properly briefed for his work in a developing country.

Modern methods of manpower planning should be studied and employed in African countries including the use of annual lists showing the intellectual resources likely to be available from the training institutions over specified periods.

Training should not be limited to one level of personnel but should be so provided as to cater for all levels — from the unskilled and semi-skilled to that of skilled men, foremen, technicians and engineers.

Problems of coordination

Meaningful industrialization of a country must mobilize all available resources and channel them into productive uses in accordance with a set of predetermined priorities. This task presupposes the existence of at least a reasonable degree of social organization. It is useful to determine at the outset whether one or more agencies should spearhead the industrialization effort and what their organic form should be.

The single-agency approach has been tried in some countries and the multi-agency one in others. Experience indicates, however, that the variety of activities involved in industrial development can hardly be adequately covered by one agency. It is difficult to imagine one agency undertaking adequately the functions of industrial research, industrial planning, financing, promotion, statistical service, personnel training, extension work, industrial management and production, quality control, marketing, etc., without collaboration from other sources.

Granted the need, then, for a division of labour, the problem is how to harmonize the activities of the various agencies in order to avoid wasteful duplication. It is not implied that the mere fact of two or more agencies working in the same field constitutes duplication. Indeed, a measure of competition is conducive to efficiency-consciousness which in turn is consistent with the principle of economic maximization.

The danger consists instead in a failure to coordinate inter-agency relationships in such a way that the efforts of one agency complement those of the other.

In most African countries the planning device is used towards this goal. The Flanning Agency, to properly fulfil this function, must occupy a central position within the total institutional framework. The Office of the nation's Chief Executive is often found to be a suitable location for this agency. In any case the agency should be vested with sufficient authority to command the respect of the other agencies and should be impartial enough not to be regarded as serving partisan interests.

Properly located, and operating within the limits and objectives set for it by the national authorities, the planning agency should then be granted reasonable freedom from interference with the routine aspects of its operations. This rule should, in fact, apply to all industrial development agencies.

In the place of the planning agency, or in addition to it, some countries have National Coordinating Committees responsible for coordination of industrial and general economic development activities.

Many industrial services, such as statistical services, are provided by branches of the civil service. While a complete break between industrial agencies and the civil service is undesirable, it is felt, nevertheless, that the dynamic nature of industrial development should always be borne in mind and institutions created that are uniquely suited to the special requirements of industrial development.

Multi-national development agencies present their own problems of intraagency as well as inter-agency coordination. These stem mainly from such
factors as a lack of mutual confidence among participating governments, mutual
fear of excessive influence from the other side and reluctance on the part of
some international financial agencies to participate in projects in which
governments exercise the controlling power. The removal of these obstacles
Governments exercise the controlling power. The removal of coordination of
should pave the way to greater international cooperation and coordination of
effort in the industrial and other fields.

Follow-up and Evaluation

The need for improved efficienty in the operation of industrial development agencies is recognized not only for the justification of expenditure but also for realizing better returns on investments. Towards this end, the setting up of evaluation standards and procedures is a necessary first step. The standards may be based on the past performance of either the agency concerned or some other agency of a similar nature.

In private industry the yardstick generally used is profitability. It is realized, however, that in the public sector objectives other than profitability often assume overriding importance in which case other yardsticks have to be desired. Taking the industrial research institute as an example, such yardsticks will include the cost per qualified research worker, the number of supporting workers per research worker (support ratio), the balance between personnel and other operating costs, the distribution of staff costs among various categories of work, and other quantitative and qualitative measurements.

It is appreciated that many difficulties inhere in the evaluation of institutional performance especially in developing countries. Among these are the difficulty and unreality of treating the contribution of an institution in isolation from its environment, the fact that, due to a general lack of supporting staff, scientific personnel often devote a disproportionate amount of their time to routine functions and the relative lack of freedom of the institutions from restrictive political country.

Evaluation standards and techniques should be tailored to the type of institution to be evaluated. The standards required for evaluating an industrial development corporation, for instance, would be unsuitable for evaluating an industrial research institute. For example, the cost per unit of production, output per man-hour, ratio of turn-over to inventories, etc., are measurements that can be used in the case of a product-oriented institution as opposed to a service-oriented one.

The next logical step after evaluation is the follow-up, a step designed to ensure that any recommended changes and improvements have in fact been instituted. One of the devices for bringing this about is the efficiency audit. This can be carried out by a special evaluation and follow-up unit within the institution's internal structure. Alternatively, an occasional external efficiency check will provide the institution with the benefit of a detached viewpoint on its performance. Both approaches have their drawbacks. Personnel resources within the individual organization may be lacking. And periodic scrutiny by external efficiency auditors might tend to make the management overly fearful of having their mistakes listed against them and initiative imagination and experimentation.

Bilateral Aid and United Nations Technical Assistance

Information on the bilateral economic aid programmes in Africa of the Governments of the Netherlands, France and the United States was supplied by Messrs. Philippus B. van Harreveld, Roland Julienne and Egon G. Rothblum respectively.

The industrial services of the United Nations Economic Commission for Africa (ECA) were outlined by Mr. J.E. Gholl, ECA observer.

In his presentation, Mr. van Harreveld pointed out that Holland is itself a small country with limited resources and that its aid programme was of a modest scope, dealing mainly with training.

Mr. Julienne mentioned a number of French Agencies involved in technical assistance in Africa, including the Ministry of Overseas Departments and Territories, the Ministry of Foreign Affairs and the "Caisse Centrale de Coopération économique." The different types of assistance consisted of technical assistance, grants, "soft" loans, training, research, and assistance in planning and statistics.

Mr. Rothblum indicated in his presentation that US-AID projects were of two categories grants and ("soft") loans and covered three broad areas: human resources development, equipment and construction. Other forms of assistance included the sending to developing countries of American technical assistance personnel who might be career staff, contract personnel (or organizations) or persons hired by AID but paid by the recipient country. Investment guarantees from the U.S. Government for private American investors as well/direct assistance in the form of short-term (about 4 months) experts from the International Executive Service Corps (a private organization) could also be arranged.

In the discussion that ensued the points were made that developing countries should not limit their quest for economic assistance to the major metropolitan, former colonial powers but should approach other nations as well, that foreign experts are often unduly influenced by the political and economic ideologies of their own countries and also usually demand excessive privileges, such as high salaries, duty remissions, and other immunities to the extent of almost assailing the national sovereignty of the host countries, that grants and so-called "soft" loans are often too complicated and often have too many strings attached. It was noted, however, that for foreign experts to be willing to leave their jobs in their home countries and go to developing countries they had to be offered adequate inducements.

Dr. A.A. Afifi gave details of the technical assistance programmes of UNIDO and the United Nations Development Programme (UNDP). He gave a history of the formation of the UNIDO and its predecessor organization the United Nations Centre for Industrial Development (CID).

The types of assistance available to developing countries and the steps necessary for securing assistance were outlined. (See Seminar document ID/WG.1/DP.5). He pointed out that assistance was available to both the public and private sectors but that private sector assistance must be channeled through the Government.

He outlined the concept of UNIDO National Committees to coordinate UNIDO activities in each country in cooperation with the local Resident Representative of UNDP. The role of UNIDO as an Executing Agency for UNDP-sponsored projects in the industrial field was explained. It was unpresented that the first step in the process for securing UNIDO or UNDP technical assistance was the submission of a formal request by the Government concerned and that the local Resident Representative of the UNDP was always available to offer advice on the matter.

The question of UNIDO National Committees was taken under consideration by most participants, with a few expressing reservations whether such Committees would not duplicate the work of existing agencies.

Some participants offered to furnish UNIDO with industrial statistics pertaining to their respective countries.

Organizational and Administrative Aspects of Industrial Services

It is the severeign right of every developing country to decide whether and to what extent it is prepared to welcome foreign capital in its industrialization effort. If the decision is made to accept foreign capital it becomes important to determine what should be done to attract it. Many factors obviously play a part here; but the security and profitability of investment is obviously a primary consideration. Here again each state must decide how much of each it can offer. The political aspect of this question is well known. What are often insufficiently emphasized are the juridical and administrative aspects.

Naturally before the foreign financier or industrialist commits his money whether in a developing country or a developed one he will be interested in knowing the legal conditions under which he is allowed to operate. For this reason it is important that governments wishing to attract foreign capital should make clear their policies concerning issues such as the conditions under which they will welcome joint ventures between themselves, or their nationals, and foreign industrialists and what incentives, if any, they are willing to grant firms cooperating with local capital.

It is also useful to determine what rights and obligations attract to foreign industrialists with regard to their choice of personnel, location of industries, conditions of employment, particularly of locally recruited labour, and any other necessary legal requirements and concessions. Above all, the laws promulgated in these connections and the administrative machinery for implementing them must be given adequate publicity for the benefit of both domestic and foreign investors.

UNIDO is prepared to assist in this field by helping with the preparation of brochures in investment possibilities in those countries requesting such help. It is also prepared to provide advice, on request, to countries on the administrative machinery for handling matters pertaining to foreign investments.

Lord Layton, a Director of the British Steel Corporation responsible for commercial and marketing affairs, addressed the Seminar on "the management of the developing steel industry and its implications for developing countries in Africa."

Appendix I

MESSAGE OF WELCOME BY HIS EXCELLENCY THE COVERNOR OF THE PROVINCE OF TANGIER, MOULAY TAHER EL ALAOUI.

Gentlemen.

Having recently been entrusted with the responsibility of administering the province of Tangier, I am pleased to take part in this opening session which is a two-fold privilege for me, since it enables me to establish my first contact with the African Training and Research Centre in Administration for Development, and to welcome you to Morocco in the name of His Majesty and of the authorities and people of this town, whose guests you will be for a few days.

Although I have referred to this as my first contact with the organisation responsible for today's meeting, this does not mean that I know nothing about it.

I know that it is usually referred to by the initials "CAFRAD" and, although this elliptical style is no doubt a matter of fushion, I regard it as a sign of fame.

I am also aware that His Majesty King Hassan II is responsible for taking the initiative in setting up this institution. He considered that newly independent African countries should not necessarily copy what was being done elsewhere, but should endeavour to find the administrative structures best adapted to each country's particular characteristics. It was in order to make such research possible that he put forward the idea — which has now materialised — of this Centre, where those concerned should be able to exchange ideas about established doctrines and the means of satisfying their particular requirements.

Several meetings have already been held in this context. At the beginning of the year there was a seminar on the inspection and control of government services, which is a problem of obvious interest to newly independent countries, where many of the officials themselves are also very young.

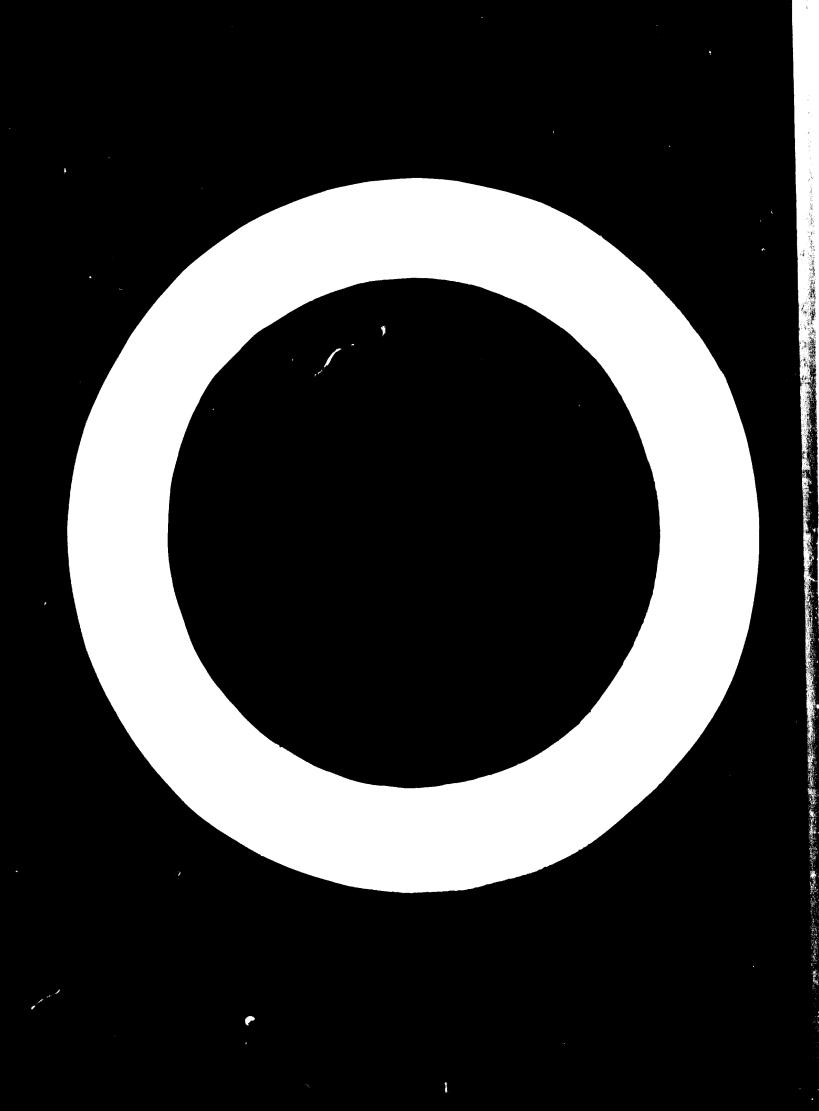
Today, the theme to be studied in cooperation with the United Nations Industrial Development Organisation will be less closely connected with public law since I believe that the services you are going to deal with are principally those concerned with the development of industry. However, amongst the questions of organisation involved, you will have occasion to refer to some

of the industrial activities which are funiamental to the life of a country and which give rise to perpetual discussions as to whether they should be entrusted to the private sector or to the public authorities. I should like to point out that, by a strange coincidence, at the very moment when you are about to deal with this subject, it is my duty as an administrative officer to transform a public service hitherto run by a private firm into a chartered government agency.

I regard this as a sign, amongst others, of the topical interest of your studies for African countries. Although the development of industrial activities is necessary for Africa, if it is to provide a solution for underemployment - which is increasing with the growth of population - it must be organized in such a way as to meet the requirements of African countries and their peoples.

Gertlemen, I hope that your work will prove fruitful and that you will find Tangier an appropriate setting. I should like to welcome you to our town, in the hope that all of you will have pleasant memories of your stay here.

I declare the Seminar on the Organisation and Administration of Industrial Services in Africa open.



Appendix II

ADDRESS BY DR. ABDELAZIZ FILALI. PRESIDENT OF THE COVERNING BOARD OF CAFRAD.

In the name of the African Centre in Tangier, I have pleasure in welcoming you and in wishing you a pleasant stay in Tangier, which is part of our great country, emergent Africa.

Thank you for accepting our invitation to take part in this Seminar.

Your numbers - there are representatives of 25 (sic) African States here - and your quality give reliable proof of the interest and affection with which you regard the Centre. The fact that the United Nations Industrial Department Organization should have chosen to organize this Seminar in conjunction with the Centre shows that it has confidence in the role and the future of CAFRAD.

This meeting is of great importance and significance; it enables us to enrich our experiences, to extend our knowledge in our particular fields and to strengthen the links between all African countries. The Centre will provide the Seminar with everything it requires to ensure complete success and we would like to offer our sincerest thanks to Dr. Ibrahim Hilmi Abdelrahman, the Director of UNIDO and to his Deputy, Dr. Azmi Afifi, who are responsible for planning and organizing this Seminar, and to all those who have helped to prepare it.

The theme which the United Nations Industrial Development Organization has asked you to examine is one of great importance for African States. Without wishing to underrate the role and importance of agricultural development in most African countries, it should be remembered and emphasized that the question of agricultural development should not be allowed to obscure the particular importance of industrialization. The latter, together with the modernization of agriculture, maintains the economic balance of the nation by creating as active a home market as possible. And is not development of the home market regarded as the criterion of a country's development? Obviously care must be taken not to use economic independence and the development of the home market as an excuse for resorting to autarky, which leads to regression in an increasingly inter-dependent world and deprives any country which adopts such a system of the enormous cultural and material advantages to be derived from international trade. Industrialization, in order to be profitable and useful,

^{*} See List of Participants

must above all further the development of the home market and at the same time help to increase the flow of information and the supply of technical, scientific and cultural data, not only on an African but on an international level.

Industrialization is also vitally important for the advancement of man. The increase in population as well as human progress make it essential to create new employment and this is one of the main functions of industrialization.

Unfortunately industrialization is no easy task. The facts must be faced fairly and squarely. First of all Africa is a very late arrival on a crowded market where there is fierce competition carried on with up-to-date techniques. Finally, it must be admitted that, in spite of its natural wealth, Africa lacks financial resources, personnel and entrepreneurs, by which are meant men who, unlike tradesmen and middlemen, do not simply see things on a short-term basis but often conceive of production which may not be profitable for a long time.

How can all these shortcomings be overcome and how can African countries which are chiefly rural - be industrialized?

Some prefer to rely purely and simply on the principles of liberalism, whilst others prefer those of socialism. The Centre does not intend to show a preference for either of these systems but to examine the results achieved or reasonably to be expected.

Our research and conclusions, in order to be fruitful, must be based on concrete facts and must represent the realities of life. Study of this theme presupposes a thorough, positive examination of the actual situation in African countries particularly as regards problems, resources, prospects and present and future preoccupations. It is in the light of these factors that suitable systems will be found. Only by freely comparing and discussing all ideas and experiences can speedy, positive results be achieved.

I sincerely hope that, as a result of our work, we shall have a clearer idea, in the fields of administration, finance and training, as to the most efficient systems, that is to say, those most likely to enable African States to organize and plan their resources and efforts in order to create and develop a genuinely African industry.

At a time when CAFRAD is expanding and its Statutes and working conditions are approaching the final stage it is my duty to give you a brief account of its history and operation.

On 25 May 1962, His Majesty Hassan II told the U.N. Committee of 17 at Tangier that:

The major problem of under-developed countries is lack of personnel. This is a problem whose importance we have not overlooked and we should like to submit to you a suggestion made to UNESCO by our Government".

His Majesty was referring to his project for setting up an institute at Tangier, in which Law, Administrative Sciences and Economics would be taught, and the "commandos" of the teaching and administrative professions would be trained.

The Director General of UNESCO welcomed this royal initiative. As a result, during the 12th Session of the UNESCO General Conference the draft resolution of the Moroccan Government was adopted, supported by 9 African States: Algeria, Cameroun, Gabon, Guinea, Mali, Morocco, Sudan, Tunisia and the U.A.R., authorising UNESCO to assist in establishing an African Training and Research Centre in Administration for Development at Tangier.

On 13th May 1965, an agreement was concluded between the Moroccan Government and UNESCO to create the Centre at Tangier and make provisional arrangements for its organization and operation.

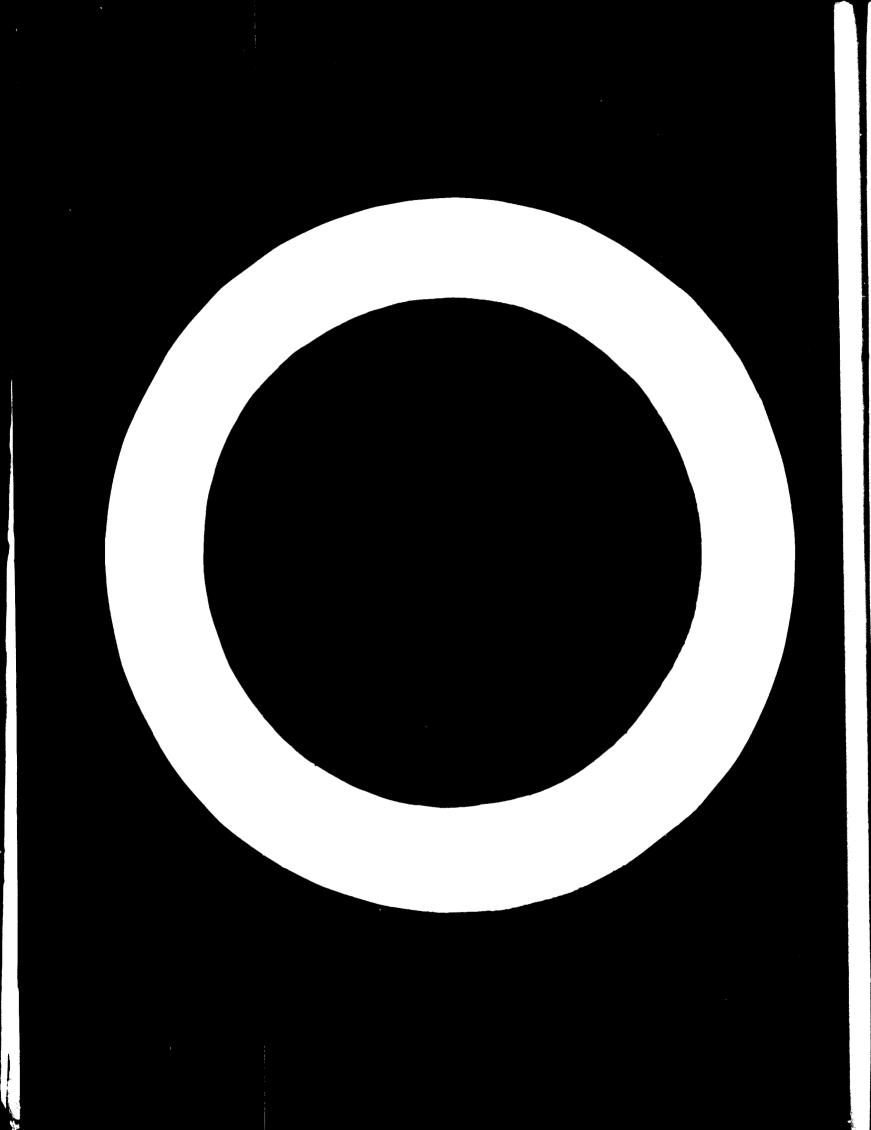
According to this agreement, on the one hand UNESCO undertakes to provide the Centre with experts and to contribute to its specialized equipment; on the other hand, the Moroccan Government undertakes to do what is necessary to ensure its establishment and operation until the Centre receives its final constitution.

His Majesty Hassan II is responsible for taking the initistive in establishing CAFRAD.

At the present time the Centre has:

- (a) A Governing Board, with representatives from the following States: Cameroun, Ivory Coast, Libya, Mauritania, Morocco, Senegal, Sudan, Tunisia, United Arab Republic and Zambia, and from two international organisations, UNESCO and UNITED MATIONS.
- (b) a budget
- (c) a statute
- (d) an administrative and scientific personnel
- (e) a programme

I should like to thank you for coming, Gentlemen, and to assure you that you will receive every assistance and a friendly reception from the personnel of the Centre and from the Government of His Majesty Hassan II.



Appendix III

PRESIDENT OF THE AFRO-ASIAN ORGANIZATION FOR ECONOMIC COOPERATION, RABAT

Gentlemen,

First of all, on behalf of my colleagues in the Afro-Asian Organization for Economic Cooperation (AFRASEC), I should like to thank those responsible for CAFRAD and for UNIDO for taking the initiative of organizing this Seminar on industry and the problems it involves in African countries.

The number of delegates, observers and technicians attending the Seminar shows the very great interest taken not only by African countries but by the United Nations.

It should be pointed out that this Seminar is a triple homage to King Hassan II:

- to his industrial policy and his enlightened directives;
- to his African policy, his attachment and realism as regards
 African development and to his constant contributions to
 African unity;
- to his policy of peaceful international cooperation and his attachment to the principles of the United Nations.

I can also say, as President of AFRASEC, that Asian countries are also watching Tangier and hope to learn from this fruitful confrontation.

Our organization includes some fifty member countries which are represented by their Chamber of Commerce Federations, that is to say by representatives of commercial and industrial enterprises eager to learn from experience.

Anything that can be said about industry greatly interests member countries and our organization. We belong to countries generously called developing countries, whose economics are characterized by the predominance of the primary sector, a shortage of personnel and by a rapidly increasing population. Industry there is a recent phenomenon and in any case a complementary economic and social factor which is indispensible for the harmonious development of our present-day economics.

I do not intend to deal here and now with the very subjects to be studied but will do so either directly or indirectly as we come to each of them. But I should like to draw your attention to a certain number of points which we have had occasion to refer to in AFRASEC and which we consider to be of vital importance.

Appendix III (cont'd.)

- (1) First of all, industry-requires a minimum of planning. By planning we mean a long-term economic policy by which regular standards are applied to certain basic factors such as wages and prices, taxation, tariffs, and trade regulations.
- Secondly, industry needs adecuate economic outlets since an industrial enterprise depends directly on its markets. This principle leads to two conclusions: certain enterprises can only be established on a multi-national basis. International financial agencies should play a leading role in this matter. Moreover small and medium-sized firms, which are so flourishing and enterprising in developed countries, should also be encouraged in African countries. For this purpose, they should endeavour to cooperate and in the second place there should be a certain degree of decentralization for their benefit.
- (3) Need for an official industrialisation drive. This could take the form of coordinated government services responsible for providing financial assistance, technical advice and training for personnel.
- (4) Fourthly, industry in developing countries requires international understanding. Certain manufactured goods should be given import preference in developed countries. Furthermore, industries which use a large quantity of raw materials from developing countries should be given preferential treatment when settling in such countries whenever raw materials form the bulk of the value of the goods produced.

These are the g eneral remarks I felt it necessary to make at this stage in the proceedings. They seem to constitute the psycho-economic framework for all the problems, concerning the conception, organization and operation of government services, which we are about to study.

To conclude, Gentlemen, I should like to point out that the 5th AFRASEC Conference, which took place in Casablanca last Spring under the honorary chairmanship and distinguished patronage of His Majesty King Hassan II, led to the setting up of an Industrial Committee.

This Committee will soon submit a report. I am sure that the information it will derive from your Seminar will enable it to perfect its own work. As far as I am concerned, I undertake to keep CAFRAD and UNIDO informed about industrial research undertaken by AFRASEC.

Gentlemen, I will conclude by wishing you every success in your work and at the same time a pleasant stay in Tangier, which is noted for its native charm and for the kindness of its inhabitants and which has always been of great interest to His Majesty the King; the recent appointment of Moulay Taher Alaoui, an enterprising and competent Governor, has given direct proof of this.

Thank you for your attention; I hope that African countries will prosper and that CAFRAD and UNIDO will enjoy a long and brilliant career.

Appendix IV

MESSAGE FROM THE EXECUTIVE DIRECTOR OF UNIDO,

DR. I.H. ABDEL RAHMAN

Read by Dr. A.A. Afifi

In co-sponsoring this Seminar on the Organization and Administration of Industrial Services in Africa, UNIDO wishes, among other things, to underline the importance it attaches to the idea of the existence of sound industrial services in developing countries as a prerequisite for the rapid industrialization of those countries. An industrial society is, of necessity, an organized society, and an effective organization presupposes an effective administration.

It is clear, therefore, that the questions and problems which you will be dealing with here are fundamental to the success of industrialization as such, whether the country concerned is developed or developing. In dealing with them you will not only have to contend with observed facts but also to make value judgements. For example, your agenda covers a broad spectrum of industrial services, such as research, feasibility studies, laboratory testing, standardization, extension services, training, industrial financing, consulting engineering, and many others. The decision as to which of these services should receive priority in a given country is a value judgement which must, of course, give due consideration to certain objective phenomena, such as the stage of industrial development already attained, availability of financial and human resources and prevailing social and economic conditions.

Industrial services are provided under a variety of arrangements. Some enterprises have internal arrangements for technological research, staff training, pilot operations, and the like. The majority of industries, however, must rely on external sources for such services. In Africa, as in developing countries elsewhere, the private industrial sector has, by and large, not yet reached a level of self-sufficiency to enable it to play the predominant role in providing these services. But some progress in that direction is being made. In practice, then, the government, either acting alone or in partnership with private industry, has been responsible for setting up most of the institutions that provide these services. A typical example of such an institution is the Industrial Development Corporation which, in many an African country, is the spearhead for industrial promotion.

Creating an industrial institution is not, and should not be, an end in itself. An institution that fails to provide the service for which it was created, or that provides it unsatisfactorily, defeats the purpose of its own existence and ultimately defeats the national purpose. The very fact that this Seminar is taking place here today is recognition by all concerned of the fact that while much has already been done by way of providing institutional industrial services, much more remains to be done. As you are no doubt aware from your own experience with industrial development, the problems in this field do not lend themselves to easy solutions by neat mathematical formulas. Their very complexity renders an occasional get-together such as

this the more welcome as providing an opportunity for comparing notes and for a concerted search for the most practical approaches to common problems.

Some participants here present have come from those branches of government primarily concerned with the establishment of industrial policies and guidelines, others from those concerned with the formulation of industrial plans and programmes based on those guidelines, and still others from those concerned with the execution of the plans and programmes so formulated. There are also participants from the organized private sector. Needless to say, a logical complementarity exists between the work of these various units which, fully preserved, facilitates the achievement of the common objective. Yet it frequently happens that somewhere effective coordination has broken down or that an administrative bottleneck has developed with adverse consequences.

Concerned with this and similar problems, UNIDO has conducted a survey of several african countries to gather information on organizational patterns and administrative regulations and practices of public and semi-public industrial agencies. The results of the surveys, in the form of descriptive country reports, are before the Seminar. Hopefully, the information contained in those reports will be helpful to you in analyzing and carrying out a critical evaluation of the patterns and practices concerned and in formulating recommendations for further action by governments, private organizations, UNIDO and other interested bodies.

UNIDO will, of course, continue to give utmost attention to assisting governments, upon request, in the strengthening of existing industrial support institutions and the creation of new ones. Such assistance may take one or a combination of the following forms:

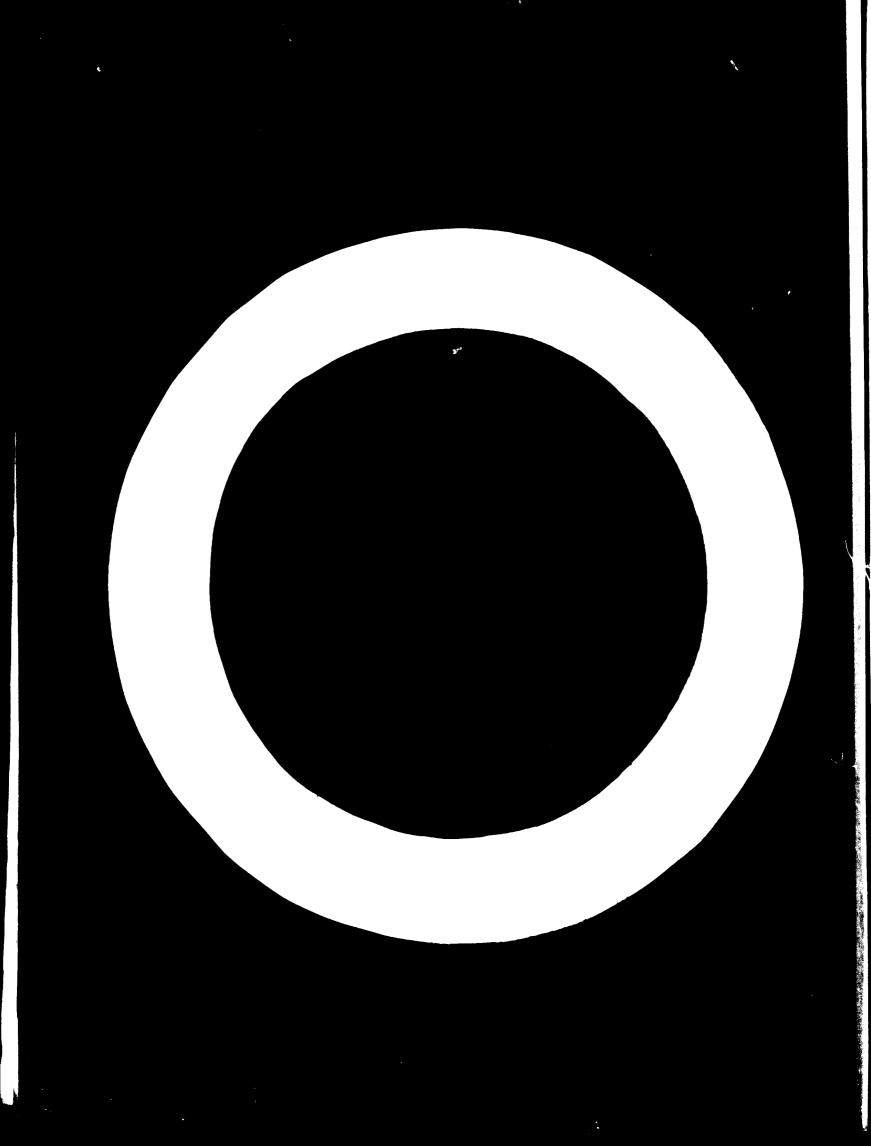
- (i) Recruitment and assignment to institutions of short-term experts to tackle specific problems;
- (ii) Recruitment and assignment to institutions of directors and other management personnel under the OPEX and/or SIS programmes;
- (iii) Assistance in determining, at the planning stage, the technical feasibility and economic soundness of proposed institutions;
 - (iv) Assignment to institutions of UNIDO professional staff members and/or outside consultants, for short periods, to evaluate internal organizational structures and administrative procedures of institutions and the relationships between the institutions and external bodies and make recommendations for improvements;
 - (v) Fellowships to local institutional management personnel for further studies abroad for periods of up to one year;
 - (vi) Other appropriate forms of assistance, depending on need and availability of resources.

The first step in each case must, of course, be taken by the government, namely, the submission of a request.

It is indeed a pleasure to have the opportunity of holding this Seminar in Tangier and I wish to seize this opportunity to express my gratitude and thanks to the Government of Morocco for their kind cooperation.

Finally, I must pay deserved tribute to CAFRAD for the important role it has played in co-sponsoring this Seminar and in providing the necessary facilities.

On behalf of UNIDO I extend to all of you my best wishes for success in your deliberations.



Appendix V

DIRECTOR OF THE AFRICAN TRAINING AND RESEARCH CENTRE IN ADMINISTRATION FOR DEVELOPMENT

Your Excellency,
Ladies and Gentlemen,

We meet today to launch a joint UNIDO/CAFRAD Seminar on the subject of Administration and Organization of Industrial Services in Africa.

Nothing pleases us more than to have with us an outstanding group of participants to discuss a subject of utmost importance. It is no longer questionable that the primary obstacles to development are political and administrative, not economic nor even deficiencies in natural resources. Experience has shown, particularly in the developing world, that "failure in achieving national goals are often due more to lack of effective administration and that if attention was given to the problems of Administration, the situations which call for radical means and extreme political measures might not have arisen."

However, taking our present theme into consideration, knowledgeable observers believe that industrial services may fail for many reasons, but the most common reason is failure of management. Every project will ultimately succeed or fail on the strength of its organization and administration.

It is therefore appropriate for UNIDO and CAFRAD to blend their common interest in a theme which ranks high in priority and importance.

It is our belief that this Seminar, with such an outstanding participation, will arrive at many useful conclusions and guidelines which, I am sure, shall benefit us all as well as those who, for all practical reasons, cannot join our deliberations.

Dear Participants, may I express on behalf of CAFRAD's staff how much delighted we are to have you with us in this hospitable country. But before the closure of this opening session, I would like to say some few words about CAFRAD.

You will be receiving this afternoon some literature about the Centre. However, it would be sufficient to state here that the African Training and Research Centre in Administration for Develop ant is an expanding concern. One important characteristic it has is that it is basically an African initiative. And indeed it is always a happy duty to express the greatest appreciation for the initiating role the Government of His Majesty the King

Appendix V (cont'd)

of Morocco and UNESCO are playing in building up this Institution, with the support of quite a number of contributing African States. Such encouragement we deeply value, since it constitutes the driving spirit to do more and with the best will in the world. Let us look forward to the day when all African States come to our support and guidance; by then, the greatest of our objectives will have been achieved.

Ladies and Gentlemen, judging by the wonderful spirit of cooperation between UNIDO and CAFRAD the success of this Seminar is an easily predictable one. In appreciating the great role of UNIDO, not CAFRAD's praise only is enough, but also that of all others who, directly or indirectly, shall benefit from their invaluable contribution to the joint venture.

In conclusion, I would like to express our deepest appreciation for the assistance and encouragement we continuously receive from the Moroccan Authorities, African Agencies, Diplomatic Missions as well as from the many inlividuals who follow our development with sustained interest and optimism.

Best wishes and thanks to you all.

Appendix VI

TECHNICAL SERVICES AS STIMULANTS TO SOCIO-ECONOMIC DEVELOPMENT

Summary of Keynote Address by Dr. Lawrence W. Bass, Consultant, Arthur D. Little Inc., New York, N.Y., U.S.A.

In most developing countries the striking examples of progress toward industrial development are found in large, very modern plants using imported technology. These factories are designed, installed, and put into operation under the supervision of foreign experts. The usual procedure is for these experts to train local engineers and technologists to take over the responsibility as soon as they are running smoothly. For optimum performance it is advisable that the staffs should include development engineers to ensure continuing improvement in process and product.

If technological advances are to be encouraged on a broad front, however, as they should be for the welfare of the country, these large new plants should not be isolated islands of improvement. Instead, the local enterprises should be stimulated to modernize their facilities, operations and techniques of management. Only in this way will the economy move forward to better utilization of raw materials and manpower, improved products for the satisfaction of consumers, and a higher standard of living.

Local Technical Skills Must be Provided

To ensure a broad base of technological progress, it is necessary that each country encourage the development of its own skilled technologists and engineers. While foreign experts can be used, especially to impart their skills, it is not possible to rely on them for the major efforts in this direction.

The local technical personnel must be able to supply specialized expertise and a practical approach to the operating problems of industry. Sound technical training, either at home or abroad, is an essential basis for these services, but this background must be reinforced by field experience. While formal courses and studies of the literature may be helpful, there is no substitute for actual participation in the diagnosis and solution of operating problems.

The technical assistance programs sponsored by UNIDO are a very practical measure for the development of these local skills. Foreign experts, in selected fields judged to be most important in a given country, work in closest ecoperation with counterpart staff. Together they carry out surveys of various industries to determine the most needed forms of services. Together they work out the best methods for disseminating procedures for improving operations. These training programs are often supplemented by grants for travel to more industrialised countries so that the recipients can have the advantage of direct contact with up-to-date technology, which when they return they can adapt to local needs and conditions.

Appendix VI (cont'1)

Those who offer technical service must be wholly honest and objective regarding their ability to solve a problem. Nothing will have as unfortunate consequences as undertaking an assignment for which the necessary skills and expertise are lacking.

Criteria of feasibility

There are five types of judgement to be made regarding the suitability of new or improved technology, namely, technical, engineering, marketing, economic, and entrepreneurial feasibility.

Technologists are inclined to judge feasibility on the basis of whether or not the operation can be conducted successfully on a small scale, and they pay less attention to engineering, marketing and economic factors. Before the process is transferred to larger scale, a pilot plant for example, critical evaluation should be made of these other questions. Is it possible to project from the information a full-scale commercial plant? Will the product find a market of sufficient size to justify manufacture? Will the cost of production plus marketing expense leave a margin large enough to warrant the investment? Finally, even though the answers to all these questions are favorable, is there an industrialist or government agency which is willing to establish the project commercially when all the necessary data have been obtained?

Types of Technical Services Likely to be Requested

Experience in many countries indicates that the internal demand for specialized services tends to follow a common pattern. First, there is need for some means of communicating to industry practical information on technology in a form which they can apply to their problems. Often a developing country will establish an industrial research institute, and an important asset of such an organization is a good working library, together with a staff competent to digest the available information and to transmit it in a form suitable for use. About the same time there is likely to develop a series of requests for mor specific help on individual problems. This sort of activity is often called "trouble-shooting" or "technical service" in the more limited sense of the term. This assistance is best centralised in a small staff of "industrial liaison officers" who are experienced technologists with practical backgrounds; if they cannot supply the information from their own knowledge, they know other sources to which they can turn.

Information services and trouble-shooting soon lead to requests for short-range product and process improvement. The next stage is development of new products and processes; very often there is known technology in the literature which can be adapted, without going through the longer and more expensive path of "research".

Appendix VI (con'd)

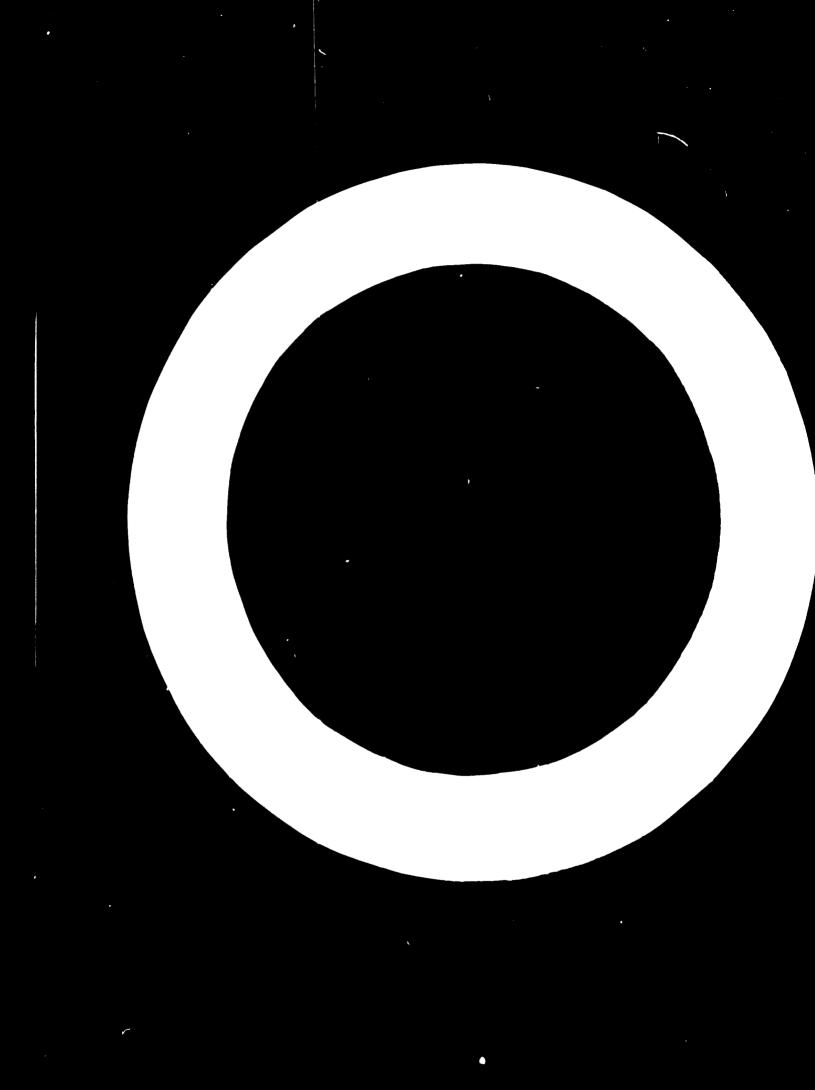
Industrial research institutes often acquire staff at a fairly early stage for conducting specialized feasibility studies. The personnel may consist of process engineers, market researchers and economic analysts. Such experts are a valuable asset not only for client projects, but also for the evaluation of projects supported by internal funds of the institute itself. Finally, this group of experts can undertake broader studies, for the Government for example, such as raw material investigations and regional or national surveys of opportunities for socio-economic development.

Other Aspects of Technical Services

In many countries there will be found, in addition to a programme for technical services, a separate and parallel activity in management development. It is unfortunate that the two are so widely separated, because improved technology will not be used with optimum results unless there are adequate managerial skills to take advantage of it. Conversely, managerial competence does not obtain its full benefits unless there are new or improved products or processes for it to use. Better coordination between these two types of programs is urgently needed, even in highly developed countries.

Standardisation is an activity which can be stimulated by a technical sorvice organisation. The impetus for beginning such a program very often comes from an industry association, whose members decide that it is to their advantage and in the national interest to take steps to improve the quality of their products. They proceed to formulate suitable specifications, and some laboratory organisation is then called on to conduct the necessary tests and analyses. Standardisation is particularly important for products going into export markets.

As a final topic, the optimum utilisation of renewable resources, that is, farm and forest products, is vitally important to nearly all developing countries. The bases of their oconomics are largely agricultural. One of the major problems is the reduction in wastage through spoilage, mechanical losses, and damage by pests. Industrial research institutes can perform a major service to their nations in studying the pattern of losses and in seeking means to conserve their resources. By increasing the net return to agricultural populations through reduction of wastes and through up-grading the utilisation of farm products, an important contribution can be made to national well-boing.



Appendix VII

STATEMENT READ BY DR. MOHAMED ALI RIFAAT,

SECRETARY-GENERAL OF THE AFRO-ASIAN ORGANIZATION FOR

ECONOMIC COOPERATION (AFRASEC), CAIRO, ON THE ROLE OF

AFRASEC IN THE PROVISION OF SPECIAL INDUSTRIAL SERVICES

TO ITS MEMBERS

Mr. Chairman,

I am grateful to you for giving me this apportunity to convey to you, and through you, to all the participants in this Seminar, the greetings of the President and all members of the Afro-Asian Organization for Economic Cooperation - AFRASEC - and to say how happy we are for the privilege of being present at your deliberations. I know many of the participants have travelled long distances to share the honour and to contribute to the efforts of serving Africa.

May I also seize the same opportunity to express warm appreciation of the initiative of the two sponsoring organizations - the UN Industrial Development Organization and the African Training and Research Centre. This initiative is at once indicative of a clear vision and a realistic approach. Its practical connotation makes it particularly appealing to members of my Organization and their sense of realism.

I should also like to join in the expression of a deep sense of gratitude for the warm welcome and hospitality which the host country has extended to participants in the Seminar. I have a special reason for doing so. I shall always cherish the most pleasant memories of our meeting in May 1966 in this wenderful country - the Kingdom of Morocco. For it was then that the Vth AFRASEC Conference was held under the patronage of His Majesty King Hassan II who graciously inaugurated it in person and whose wise counsel has given us so much strength for our undeavours. Again, since the last Conference, an eminent citisen of Morocco, and our President, H.E. Mohemed Laghsacui, has, with characteristic devotion and untiring determination, charted our course, during a period of most rapid expansion in our activities.

But that is not all. It was the same Conference that adopted two very important resolutions, bearing closely upon your present task. In particular, the Conference decided to appoint an Ad Hoc Commission on Industrialisation to study and report on "such problems as: (a) productivity, (b) research and development; (c) manpower development and. (d) patent protection, proprietory rights, etc., with a view to enlarging the field and scope of these activities through mutual cooperation and collaboration and suggesting areas of development in these fields and other specific fields of industrialisation". Furthermore, the Conference "urged the Secretary-General to offer any such assistance to national chambers of commerce and industry and similar institutions in african and asian countries as will enable them to enlarge and intensify their role in economic development especially in the fields of promoting facilities for training, exchange of information, organising exhibitions, export promotion, participation in international fairs, market research, undertaking

Appendix VII (Cont'd.)

feasibility studies, trade missions and so on".

The discussion which led to the adoption of these resolutions clearly reflected the unanimous views and convictions of all AFRASEC members that the major preoccupation which countries share, now and for many years to come, with other developing countries is how to remove the many obstacles to economic development and more specifically how to design and carry out measures calculated to achieve rapid industrialization. For in this AFRASEC and all its members are deeply involved and heavily committed.

No wonder we have watched with growing interest and enthusiasm the emergence of UNIDO and have witnessed with satisfaction its early performance and look forward with cherished hopes to its achievements. The present Seminar is an imaginative initiative not so much because it is designed to realise concrete results immediately, as because it is really a serious attempt to promote realistic and integrated approach to the provision of a much-needed service for the satisfactory evolution of the industrial process.

A cursory glance at the items of the agenda of the Seminar cannot fail to leave a very deep impression of the practical significance of your exercise. Each item, or for that matter each sub-item, involves matters of the highest importance in the daily life and pre-occupations of the practical industrialist. To help him deal with them, to offer him material assistance and guidance, even to show him how to diagnose weaknesses and identify problems - will be a boon and a rewarding contribution.

AFRASEC is very happy to be associated with your endeavours and pledges its full support and cooperation in the cause of Africa. Indeed, it has a specific and rather unique role to play. You know that AFRASEC members are federations of chambers of commerce, industry and agriculture. Their constituents are national institutions and associations which incorporate firms and individual traders and industrialists, be they operating in the public or the private sectors. They enjoy official recognition and command the respect and confidence of the public. They are democratically controlled and suffer no extraneous influences.

The implication of the last attribute is of the greatest importance in present circumstances. It has become increasingly evid ent that success in the great endeavour towards accelerated industrialisation is closely related to the movements for economic independence or greater national control in African and Asian countries. National associations of traders and industrialists can play a very healthy role by providing protective isstitutional framework for national industrial development, especially in the context of international technical cooperation.

The present instance is a case in point. AFRASEC recognises that UNIDO has become a depository of the hopes and aspirations of developing countries who had been longing to see their interest protected and advanced. No doubt its efforts will be greatly facilitated if they are supported by appropriate

institutional arrangements in individual countries with facilities for cooperation at sub-regional and regional levels. Alas, such arrangements are very scarce. Enquiries recently undertaken by AFRASEC have revealed deplorable weaknesses particularly in African countries which have but recently attained political independence.

Historically, it is true that in most of the former dependencies, the colonial power did not encourage the rise and growth of independent national institutions of the occupational pattern. What they tolerated, and perhaps stimulated, were such institutions as could serve the interests of the metropolitan country. After independence, attempts were made to set up national institutions, but were mostly narrow-based and uncoordinated.

In the light of these considerations, AFRASEC has, as already indicated, initiated measures calculated to mobilize national forces and develop the national chambers of commerce and industry in order to co-ordinate and reinforce the activities of professional and occupational groups and stimulate their efforts towards rapid industrialization in collaboration with interested international organizations. An elaborate but integrated programme is already under way for the development of these chambers, so as to enable them to undertake, in addition to their traditional functions, the following activities:-

A. - At the national level

- (i) mobilising national talents and skills, and the training of businessmen and industrialists, to enable them to discharge their responsibilities and fulfil their obligations;
- (ii) making chambers of commerce and industry focal points to coordinate the efforts of businessmen and industrialists;
- (iii) promoting cooperation between management and labour with a view to improving industrial relations and reinforcing the independent status of their respective organisations;
 - (iv) assisting national governments in designing and executing programmes of technical assistance mainly through:
 - (a) furnishing business information, data and advice;
 - (b) making better and more widely known to the business community, and other interested sections of the population the sime and resultant benefits of such programmes;
 - (c) encouraging wider and better use of available technical assistance;
 - (d)helping the technicians and experts engaged in technical assistance projects to arrive at better and more realistic solutions of environmental problems; and

(e) encouraging the spread of sound knowledge and proper understanding of the industrialization process among indigenous business communities.

B. - At the regional level

It is confidently expected that these chanbers will actively participate in the programme of sectoral collaboration which AFRASEC has designed and which, in practice, has proved a most effective instrument of regional as well as international cooperation. This programme was first launched in 1964 with the creation of the Federation of Afro-Asian Insurers and Reinsurers (F.A.I.R.), which was followed by similar achievement in Management Development and productivity and in Shipping. It envisages similar actions in other sectors, especially in banking, tourism, small industries. Surely, the more developed the chambers of commerce and industry, the readier and the better equipped are they to promote trade and industrial co-operation at regional and sub-regional levels. AFRASEC attaches the greatest importance to the use of the regional approach - a cardinal principle of its philosophy.

C.- At the international level

The development of chambers of commerce and industry is an important supporting factor for fostering and ensuring continual cooperation within the 77-Nation Group. This is an aspiration whose realization may well have farreaching practical repercussions upon the industrial progress of developing countries. It is perfectly evident that the growing gap between developed and developing countries in economic growth will not facilitate their purposeful cooperation. Nor will the existing disparity between developed and developing countries in respect of institutional arrangements further such cooperation. Thus, the proper development of chambers of commerce and industry is a necessary condition of encouraging useful dialogues between professional groups in developed and developing countries in such a manner as to facilitate formal negotiations at official meetings.

Now, in order to achieve these objectives, the AFRASEC action programme provides such practical measures as will engender self-help, foster Afro-Asian mutual aid and stimulate better use of available external assistance. The relevant provisions may be summarised as follows:-

- (1) exchange of managorial skills between national chambers of commerce and industry;
- (2) training the personnel of these chambers either in their own or in a neighbouring country;

(3) lending advisers and training specialists by one national chamber to another;

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