

UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL



5816
Distr.
RESTRICTED

E/CN.14/INR/INF/1
15 June 1970

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA
Meeting of the Permanent Consultative
Committee of the Maghreb
Tangiers 24-26 June 1970

INDUSTRIAL DEVELOPMENT HARMONIZATION IN NORTH AFRICA MAGHREB (Preliminary Report)

M71-377

TABLE OF CONTENTS

| | Paragraphs |
|----------------------------------------------------------|------------|
| 1. Introduction | 1 - 7 |
| 2. Industrial Development Harmonization Study | 7 - 12 |
| 3. Some suggested features of the envisaged co-operation | 13 - 21 |
| 4. Harmonization of industrial development | 21 - 40 |
| 4.1 Generalities | 21 - 24 |
| 4.2 Iron and steel industry | 25 - 26 |
| 4.3 Non-ferrous metals industry | 26 - 28 |
| 4.4 Chemical and petro-chemical industries | 28 - 30 |
| 4.5 Engineering industries | 31 - 32 |
| 4.6 Textile and clothing industries | 33 - 34 |
| 4.7 Food processing industries | 34 - 35 |
| 4.8 Other industries | 35 - 36 |
| 4.9 Specialization and related problems | 36 - 37 |
| 4.10 Redistribution of benefits | 38 - 40 |
| 4.11 Multinational financement of industrial projects | 40 |
| 5. Summary remarks | 40 - 41 |
| Annex 1: North Africa: List of Sectoral Studies | |

1. Introduction

Rapid industrial development has become an all pervasive feature of Africa's economic and social development strategy. Agricultural development ceased to be an engine of growth, which it was in the fifties when it contributed 63 per cent (directly and indirectly) to the gross domestic product increment. This contribution has declined to 18 per cent in the past decade (figure derived for 1960-67), and although this figure may be considered as unduly low^{1/} it shows clearly that Africa's economic structure has been fundamentally altered.

2. It becomes clear that the international demand for Africa's agricultural products has become inelastic and the growth of domestic demand will not be able to compensate for slackening export demand being itself conditioned by domestic development, which in view of relatively slow agricultural development will depend on secondary sector development, the bulk of which is represented by extractive and manufacturing activities. The tertiary's sector's contribution to demand growth can develop only proportionately to the development of the 'productive sectors' (i.e. primary and secondary) activities. Moreover, this sector's demand elasticity should be expected to be low if structural distortions of the past are to be corrected. In most African countries the tertiary sector has by far outgrown the productive sectors in relative terms frequently reflecting the degree of the rapacious exploitation of their economies and population by the foreign enclaves.

3. On the other hand the importance of agricultural activities in Africa should not be understated. Agriculture should develop although this will be a difficult and painful process because of the need for radical restructuring of the kind of output, to meet the changing structure of demand which is related to the unavoidable urbanization, or more generally, modernization process which transforms the traditional African society, highly dependent on subsistence output, into a modern cash earning and spending population. If the

^{1/} I.e. the output in many respects has been below the actual demand level.

domestic demand for food and industrial inputs of agricultural origin are not to be met by domestic (or African) production, the whole development process may grind to a halt because of the unbearably growing burden of food and other imports of agricultural origin on the balances-of-payments, curtailing the capacity for imports of unsubstitutable capital goods, raw materials and intermediaries for growing industries. Nevertheless it is necessary to develop awareness that the process of restructuring the agricultural output, simultaneously maintaining the growing output level of export-crops will be not an easy task and no spectacular improvement in growth rates should be expected for some time to come. It is more important to increase substantially the industrial growth rates which should make up for agricultural deficiencies.

4. All of this appears today to be obvious, but ten years ago this truth was neither generally understood nor accepted. There was a strong, mainly exogenous, opposition which stubbornly denied Africa's right and need to industrialize, especially in respect of basic key industries. Still today it is very difficult to convince most of the donors to contribute to such projects particularly when they are to be created within the public sector of the economy.

5. Giving to industry a development priority at least equal to agriculture, there are still enormous difficulties which African countries are facing when trying to implement this development strategy.

6. Africa suffers a shortage of all skills, particularly entrepreneurial and managerial, shortage of retained^{1/} domestic savings, and it may be that first of all its industrial development is hampered by the smallness of national markets.

7. These general features are salient for all developing African countries, and although in many respects the Northern African countries should in general be considered economically more advanced than African countries south of the

^{1/} I.e. domestic savings available for (net) fixed investment.

Sahara, these features are also peculiar in this area and the difficulties are not less but appear with the same intensity as in other parts of the region.

8. The size of a national market may be in a way approximately measured by the size of domestic consumption (private and public). The smallness of national North African markets is strikingly emphasized when compared with the smallest markets of European developed countries. This can be seen from the following table:

Size of national markets expressed in terms of private and public consumption (selected countries, 1966)

| European countries | | | North African countries | | |
|-----------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|
| Country | Population in thousands | Consumption in US\$ mln. | Country | Population in thousands | Consumption in US\$ mln. |
| Ireland ^{a/} | 2884 | 2460 | Libya | 1090 | 560 ^{b/} |
| Norway | 3753 | 5470 | Tunisia | 4460 | 818 |
| Ireland | 4639 | 6398 | Algeria | 12150 | 2992 |
| Switzerland | 5999 | 10345 | Morocco | 13725 | 2114 |
| Austria | 7290 | 7459 | Sudan | 13940 | 1500 |
| Greece ^{a/} | 8614 | 5447 | UAR | 30147 | 4893 |

Source: UN Statistical Yearbook, 1967

a/ Countries usually not considered as developed.

b/ Crude estimate.

Remark: Smaller countries like Lichtenstein, Luxemburg, Albania have been excluded.

9. Only Ireland represents a smaller market than Algeria and UAR. All the others are larger, in spite of much smaller populations. Norway, which is next to Ireland in respect of market size, has only 12 per cent of the population of UAR but a market 12 per cent larger. It should be pointed out that the above recorded figures overestimate the actual size of North African markets because they include a relatively large volume of the non-marketed subsistence

consumption. The combined markets of the four Maghreb countries can in respect of size be compared with Finland's market (which has seven times less population). Considering the non-marketed part of the consumption of the combined market of all six North African countries is of a size similar to the size of Switzerland's market and, of course, Switzerland represents a case of a highly developed country, which, nevertheless, is also a known case and a classic example of a country which has developed because of the long period of continuous access to large European and overseas markets for its highly specialized products of exceptionally good quality. It has never developed nor does it intend to develop several lines of industrial activities in which it does not have reasonable comparative advantages and chances to compete on domestic or export markets.

10. This enormous handicap has been duly and early recognized by Maghreb countries^{1/} and first steps toward co-operation among this group of countries were undertaken already in 1964.^{2/} Although still a small combined market (about US\$6500 million in terms of consumption) this group represents large development potential in terms of population (roughly 31.5 millions by 1966) and diversified natural resources, including petroleum.

11. Of course, a larger, all North African grouping of six countries could certainly represent much more important development potentialities, especially from the point of view of the economies of scale and diversification. Nevertheless, smaller units should be regarded as more easily manageable, especially in the early stages of co-operation.

12. Nevertheless, considering the relative and absolute smallness of the group's markets it becomes obvious that some sort of loose co-operation among them should exist from the very beginning. This may, at early stages, take the form of periodical bilateral (among both groups) consultation mainly in respect of planned major industrial development projects especially those.

^{1/} The emerging co-operation among UAR, Sudan and Libya is a very recent development.

^{2/} Protocole of October 1st, 1964 signed in Tunis and subsequent agreements.

vulnerable to economies of scale, to avoid duplication of efforts and to provide specialization, or in broader terms, to aim toward rational application of division of labour within the African region. By and large both groupings are today more competitive than complementary, but there are several emerging complementarities related to existing comparative advantages, and their development should be supported at least by avoiding competition with them. Not only both groupings but also the whole region may benefit.

13. Any one field of economic (and other) activities offers a large scope of opportunities for co-operation but certainly the most important is the field of industrial development. There are, two reasons for this: one is that the industry because of its peculiarities offers the most opportunities for co-operation, and the second is that industrial development is decisive for the whole of economic and social development.

14. At this instant it should be pointed out that the fact that industrial development is at the core of the concept of economic co-operation in Africa as in any other developing region of the world, makes it sharply different from the concept of so-called economic integration. This is not a purely semantic quibble. Of course, the term "integration" has been vulgarised and become ill defined, because its validity is now restricted to identify a very specific kind of economic co-operation applicable only to developed, mature economies. The aim of such "economic integration" is to prevent stagnation and secure further growth of developed economies by releasing the market forces and allowing them to work within the importantly expanded integrated market. The existence of strong market forces should be regarded as the most important precondition for the success of "economic integration" so conceived.

15. Of course, this is not the case of developing countries where the market forces are extremely weak, if existing in true sense, and the market is characterized by several features of imperfections and rigidities, and of course is not ubiquitous. Therefore, although economic integration in its true sense may be the far-sighted goal of co-operation - and certainly is - the immediate purpose in development (as distinguished from growth), it should be

rather called "co-operation for development" to distinguish it sharply from the concept at the other extreme, "integration to prevent stagnation."

Consistently when referring to co-ordinated industrial development it may be meant co-operation for industrial development which represents the most important element of co-operation for development.

16. Recognizing that at the present stage of African development industry has become its prime mover, all co-operation arrangements should be centered around industrial development. From this point of view e.g. trade and payment arrangements^{1/} become a tool but not a goal per se.

17.. This explained indirectly why the Latin American and other efforts which have blindly copied the EEC model approach have failed to stimulate development. They have concentrated on trade, but the rest of the job has not been done because the weak market forces have proven to be unable to cope with^{2/} these other sectors. It should be well understood that neither "free trade area" nor "common market" nor any other arrangement which emphasizes trade^{3/} are goals per se - they are only tools which should be used to an extent and at the right time when they could contribute to the development process. Applied mechanically, in an automatic way - and this is the case of the concept of linear trade barriers abolition^{4/} - they may cause a disaster. They belong automatically to later stages of co-operation and development when the market forces have grown strong enough to play the desired role within a planned economy. And, of course, co-operation for development implies planned economy, which in itself is not a goal but a tool.

-
- ^{1/} This is just the reverse of the concept of so-called "integration" which is implemented centering all attention on trade and payments problems and leaving the market forces to do the remaining part of the job.
- ^{2/} Of course, the "integration" concept creates a paradise for the penetration of rapacious foreign capital which takes the major part of forthcoming benefits and is usually opposed to true industrial development.
- ^{3/} Some "liberal" economists believe that trade can be regarded as "engine of growth" in developing countries.
- ^{4/} Which actually is nothing but a hideous nick-name for the free trade area and all sorts of other "laissez-faire" concepts incompatible with the concept of planned economy at early stages of development.

18. Considering that the Maghreb countries, like all other Northern African countries, should be regarded as planned economies, with accumulated experience on their own, the dangers of "laissez-faire" related to over-reliance on trade and implicitly on market forces may be less important in magnitude.

2. Industrial Development Harmonization Study

19. It was already said that co-ordinated industrial development is in the core of co-operation for development. This was already recognized by African countries long ago and formally confirmed by the resolution 153(VIII) adopted by the Economic Commission for Africa at its 139th plenary meeting on 24 February 1967^{1/}. Already other earlier resolutions, although they did not emphasize the importance of the problem as clearly and strongly as the above mentioned resolution, requested the ECA secretariat to study the problem of co-ordinated industrial development in Africa.^{2/} The work was started in 1964 and continued, and will be continued as long as the co-operating African groupings will not take it over to continue it by themselves.

20. For obvious reasons it was impossible to cover at once the whole region. The sub-regional approach was adopted, in the sequence (1) East Africa, (2) West Africa, (3) Central Africa, and (4) North Africa. From the very beginning & the ECA secretariat faced major difficulties caused mainly by the endemic lack of resources and the necessity of multiplying its own resources by wide use of bilateral aid, which was generously granted by different countries which either put at the disposal of the ECA secretariat experts or contracted services of scientific institutes^{3/} and specialized enterprises to carry out different parts of the studies including the final harmonization studies which require

1/ ECA, Eighth session, Lagos, 13 - 25 February, 1967.

2/ Project No. 14: Harmonization of industrial development programmes.

3/ Final harmonization studies for East and West African sub-regions have been prepared by ECA secretariat with the help of bilateral experts. Central and North African harmonization studies are being prepared by Institut des Recherches Economique et Sociale (Prof. Lacroix) in Kinshasa and the Netherlands Economic Institute (Prof. H.C. Bos) in Rotterdam, respectively.

both numerous specialized staff and adequate facilities.^{1/} But this need for extensive ECA secretariat co-operation with a large number of independent individuals and organizations, besides all difficulties connected with securing their co-operation^{2/}, was conducive to serious technical difficulties in respect of co-ordination of industrial studies, their quality levels as well as observance of imposed terms of reference, frequently neglected by independent experts. Of course, other circumstances, including unexpected political developments, have an important negative impact, and resulted in important delays in time schedule.

21. Such was also the fate of the North African industrial development harmonization study which today is in an advanced stage and should be finalized in October, 1970.

22. This paper is considered as a preliminary report. Its purpose is to clarify the scope of the final study, give some brief information on methods used, expose preliminarily some results readily available at the present stage as well as to make some suggestions for immediate action which will not be altered by the final study.

23. The goal of the study is to provide the interested states with a consistent multinational industrial development programme for 10 - 15 years to come, considering existing industrial capacity and its utilization, and, of course, searching for optimal solution, which at the end will be reflected by proposed allocation and development time schedule of industries.

24. There are three distinct stages of such an analytic and programming exercise. The first is the establishment of an overall macro-economic framework development programme for the period of time under consideration.^{3/} It goes without saying

1/ E.g. Computers, not available at ECA secretariat.

2/ Several cases of donors' refusals and protracted negotiations, usually related to budget periodicity implications caused delays running in some cases up to two years of time, destroying all time schedules and plans.

3/ Careful analysis of national development plans is one of the important sources of information at this (first) and the second stage of the exercise.

that this part of the exercise must be rigorously checked from the point of view of its feasibility. The second stage is the sectoral analysis, which, of course, concentrates on industrial and related activities (mining, power, construction), but should also analyse and ascertain in main outlines the development of other sectors, i.e. of primary sector (agriculture, etc) and tertiary sector (trade, transport and other services). This way the sectoral studies, called also "pre-feasibility studies" should cover all economic activities throughout the period of time^{1/} under consideration. These sectoral studies for the sake of consistency should be rigorously related to the above mentioned macro-economic framework. Although all the studies consider all North African countries, the Maghreb countries are always considered as a separate entity. The third and final stage is the so-called harmonization study which is mainly concerned with consistency checks, which are followed by a sequence of reallocations of proposed industrial capacities (those which are "shiftable" from one to another location, i.e. foot-loose industries) with the aim of giving optimum advantage to the programme to be finally proposed.

25. The development programme which will be presented will certainly not be the only one feasible, and may not be the best one, in specific detail. But this development programme will provide a balanced growth for the Maghreb group of states as well as for the whole North African sub-region and a considerable improvement in the standard of living for all the people. Balanced growth is particularly important in developing countries because investment funds are never sufficient and thus an unwise investment (out of balance with demand or input availabilities) means a real slowdown in progress toward economic betterment because the misused resources could have been more productively employed.^{2/}

1/ Of course, appraisal of past performance is one of the elements of the analysis although the so-called "past trends" are generally recognized as irrelevant for the future because development is inherently associated with a structural transformation process.

2/ A.O. Hirschman's concept of "disbalanced development" being inherent to "laissez-faire" non-planned economies and intended to substitute for lacking "natural" market forces is rejected here as irrelevant and wasteful since the economies concerned are planned and have experience in plan implementation.

26. At present the final stage, i.e. the harmonization study, is being carried out by Prof. H.C. Bos and the Netherlands Economic Institute in Rotterdam and it is expected to be completed in October 1970. Both precedent stages have been completed. The full set of sectoral studies have been made available to the governments of interested states. The list of sectoral studies is annexed to the present report (Annex 1).

27. Due to delays the studies are to some extent in disaccord with the development time schedules to be proposed. It should be appreciated that the bulk of sectoral studies were prepared in 1967 and 1968 i.e. at the time when not much was known about the performance of the economies under consideration between the basic year of the study (1963 or 1963/64, or 1964 whichever data have been available at the time the macro-economic framework was prepared - early 1967) and the time when the sectoral study was prepared. The actual performance of individual countries involved is at present known from officially published data up to 1968 inclusive and some preliminary approximate information is available for 1969. Assuming that these trends will continue through 1970, there will be deviation from the macro-economic framework projection which can be expressed in estimated delays in achievement of performance expected for 1970. They are not important but require correction of time schedules proposed in individual sectoral studies. These deviations are not very important and will certainly have no influence on the validity and actuality of the final harmonization study. Two countries: namely Algeria and Tunisia are "on the schedule" i.e. are expected to fulfil the framework's expectation for 1970. Morocco has some delay which may be estimated as of the order of magnitude of 2 - 3 years (i.e. Morocco will achieve the expectation of the framework in 1972 or 1973 instead of in 1970). Libya is "ahead of schedule" because of better than expected performance of the petroleum mining industry which also pulled along other sectors (except agriculture). By and large, with Libya compensating for Morocco's retard, the whole group of four Maghreb countries has fulfilled the expected aggregate economic performance for 1970.

28. Of course, this is an aggregate picture. In details - some projects expected to come up after 1970 already have been implemented others have not materialised. But this does not influence the consistency of the overall picture as it appears in fact from the one depicted in the study.

29. Nevertheless, there is another apparent delay which, so far, could not be reflected by statistical records: namely, the delay in co-operation agreements and establishment of co-operation machinery, to a large extent caused by the absence of the harmonized programme of industrial development which should serve, at least, as a preliminary outline of action to be undertaken by interested members of the group. However, a good deal of this delay has been made up by the Comité Permanent Consultatif du Maghreb which has not been waiting for the completion of the harmonization study by the ECA secretariat but has made good use of this waiting time preparing preliminary studies on their own^{1/} which formed an excellent basis for preparation by CPCM of a draft of Maghreb Agreement on Economic Co-operation^{2/}.

30. Of course, it is difficult at this stage to foresee the final results of the study. Even the consistency check and the subsequent process of adjustment by iteration is not completed. Nevertheless, some aggregates will be presented below

31. Even less can be said about the volumes of industrial output allocated to individual countries. Recommendations of individual experts should be as far as possible followed in respects of industries or particular projects the location

1/ Propositions pour la première phase de l'intégration industrielle des quatre pays du Maghreb arabe and other studies e.g. report on monetary and payment problems and implications.

2/ "Projet d'Accord Maghrebien de Coopération Economique" (Decembre 1969) preceded by an exhaustive synthetic study "Rapport de synthèse sur le Projet d'Accord Inter-gouvernemental de Coopération Economique entre les Pays du Maghreb"

of which is predetermined either by developments which are already in progress (e.g. the iron and steel industry) or otherwise restricted by technical and economic factors. They may appear in following sequence: raw material basis, (e.g. mineral deposits), availability of energy (including fuel and water), transport costs (both on input and output side^{1/}), labour supply and other as the case may be.

32. Detailed location within the country to which the allocation of a given project is proposed is not always suggested. That means that the final location is subject to further more detailed studies. Only obviously predetermined detailed locations are suggested in the sectoral studies.

33. Nevertheless, a word of caution should be spelled out at this instant. Development of more remote and apparently forgotten areas of any one country is a recognized goal of any one country and its government. Nevertheless, the establishment of any one development pole is bound to cause heavy visible and invisible costs and it should be recommended that the decision on the establishment of any new development pole should be preceded by a rigorous social cost-benefit analysis. Contrary to the preoccupation of developed countries with decentralization of oversized and over-saturated centres of activities which have been growing uncontrolled through the XIXth and XXth century, developing Africa should take particular care to prevent wastage of resources which could occur by the creation of more development poles than are really necessary and than the economy can afford considering the local costs incurred and expected benefits during, say, 15 years. A 15 years development programme, such as the one in preparation will supply all background data necessary for such exercise, which will consider existing development poles and will yield the programme for creation of new ones if they are necessary.

1/ In case of large projects characterized by a bulky and relatively cheap product (e.g. fertilizers) which are highly vulnerable to the adverse impact of transport costs on the consumers' price the optimal location is usually sought by minimizing (linear models are used for solution) the price to be paid by the consumer loco his premises. The model used involves the economies of scale factor. Experience has shown that sometime a smaller unit, less efficient is reaping the benefits of the economies of scale yield a lower price to the consumer (loco) than larger apparently more economic units which are burdened by heavy transport (and distribution) costs.

3. Some suggested features of the envisaged co-operation

34. Some common features of the economic co-operation for development have been already mentioned in the introductory part of the present preliminary report.

35. Industrialization has been recognized as the main engine of growth. The smallness of individual national markets has been identified as the most important development constraint which is the more effective the more advanced the country, it having exhausted most of the investment opportunities feasible in the context of the national market. Unless the disposable markets are extended through economic co-operation such countries' development may grind to a halt.^{1/}

36. A flood of theoretical and empirical studies on different types of economic co-operation have been produced in the recent past, but few of them have any, and if so a rather remote, significance for economic co-operation for development of developing countries in general, and of African countries in particular. This lack of relevant theoretical knowledge and practical experience should be recognized as a serious handicap to African countries embarking on the path of economic co-operation among themselves. It would be both too ambitious and out of place to try to identify substitutes for these gaps in the present preliminary report. Only certain features considered, at the moment subjectively, to be especially important for the analysed case will be mentioned.

37. Leaving aside the political problems which are frequently considered to be the most important obstacles to co-operation in Africa and which should be eliminated from the scope of economic analysis, it would be enough to say that such analysis should be conducted under assumption of preservation of national

^{1/} This consideration excludes export-oriented activities, which, of course can be developed independently of the size of the domestic market - but there are other well-known difficulties, except, may be, petroleum mining - at least for the time being.

sovereignty of the individual partners to any scheme of economic co-operation.^{1/}

38. A common feature of African economies, particularly when considered within major ecological zones, is the lack of economic complementarity among them. There are striking structural similarities resulting in their competitive character when compared. Deviations from this pattern, if any, are mainly caused by the acts of nature which endowed some countries with valuable mineral resources, thus placing them in a better economic position than the others.

39. This lack of complementarity may result at early stages of co-operation in a disheartening lack of immediately visible effect of the lifting (or reduction) of the "artificial" barriers^{for trade}, especially when reluctantly applied with several exclusions, safeguards, etc. will act with a long delay. Action based on a selective basis, providing immediate complete elimination of tariffs etc. for any emerging complementary item will be certainly more efficient and stimulating. The linear concept should rather be left for all competing items leaving to the partners the time necessary to develop gradually the set of policies which will place all the partners-producers on equal footing enabling honest and healthy competition.

40. The stimulating incentives provided by selective treatment will certainly revive existing industries by using their idle capacities as well as encouraging expansion and new investment in - say - "traditional" activities. Considering the practical difficulties of giving immediate consideration to the probably long list of these "complementary" items which potentially merits selective treatment, it may be suggested to introduce both systems simultaneously. The "linear" agreement will work automatically^{3/} its way and parallelly will be

1/ This does not mean that when co-operation develops this assumption may not be gradually altered. Besides, it should be pointed out that the definition of "sovereignty" as generally accepted at present should be considered rather obsolete and impracticable in the second part of the XXth century if due consideration is given to the existing multi-fold international system of economic inter-dependency.

2/ Which may be actual or potential, depending upon who is exploiting these natural resources - if this exploitation is monopolized by foreign capital, the countries' benefits may be relatively limited.

3/ With corrections which will be introduced from time to time to cope with, mainly unforeseen, distorting and therefore economically either dangerous or unjust situation.

accelerated as fast as possible by measures introduced on a selective basis.

41. The introduction of the possibility of immediate abolition of trade barriers on a selective basis is particularly important in the case of manufacturing industries, and especially for the so-called "agreed" industries whether existing or to be established in the future. The problem may be dealt with within the framework of the procedure of the recognition of the given industry (or product) as an "agreed" one which should simultaneously consider the measures of common protection against foreign competition, if required.

42. But the tariff policies alone (linear and selective) will not be sufficiently effective if not supported by measures conducive to harmonization of national market policies.

43. Experience has shown that the lack of integration of combined domestic markets may greatly impede progress in co-operation. This is particularly important in respect of the agricultural^{1/} production.

44. Viewed from this angle the "competitiveness", or in simple terms the economic similarities visible through the output structure (in kind), gives immediate opportunities for co-ordination of policies in respect of the supply side, domestic market (organization, standardization, and integration), and export. The bargaining position of exporters working within a common policy framework of the group can be immensely strengthened.

45. To deal with these problems a permanent body and gradual action which should start on a selective basis immediately are required. It should be realised that with time the volume of problems to cope with will grow quickly and substantially and they will become more and more complicated requiring more and more refined considerations and decisions and complex actions. Postponement means running into delays and insuperable volumes of work. It should be

^{1/} Understood here as agriculture, animal husbandry, forestry, fishing, etc.

appreciated that here again trade appears not as a goal per se but only as a tool which should be widely used for development purposes.

46. The size of the combined market of the partners, and the aim to reap as far as possible the benefits arising from the attainable economies of scale hide dangers of development of a monopolistic or oligopolistic situation within the Maghreb's market. As long as the favours of the monopolistic situation are with a public or publicly controlled enterprises the arising problems can be easily resolved either by the government concerned or by the respective body of the group. The situation appears to be more complicated when these favours are enjoyed by private enterprises. Preventive methods used by developed countries^{1/} are for the time being not useful in this case because in principle all efforts will be centered on securing the economies of scale i.e. full support should be given the establishment of optimally^{2/} large productive units. Nevertheless during the past 70 years or so economists have learned enough about the adverse features of private monopolies and oligopolies and gathered substantial experience on how to counteract and annihilate their possible impact. It should be pointed out that a monopolistic position might not be necessarily conducive to exaggerated profits through deliberate price increase. Under developing countries conditions, the most important dangers are related to the obsolescence of product, obsolescence of technology, low productivity, or more generally negligent management, and so on - all incompatible with the development effort, and results in gross wastage within a profitable framework for the owner.

47. This should be regarded as the reverse side of the inherent elements of the co-operation, which should be duly recognized and fought from the very beginning to prevent their negative impact on the economy and development process.

1/ Anti-trust, anti-merger and other measures e.g. in force in USA.

2/ In this context from group's socio-economical point of view (i.e. considering externalities and social cost-benefit optimisation).

48. Another group of problems to be resolved may be brought under the general heading: monetary and financial problems, which of course are intimately inter-related. They should be brought up here rather pro memoria only because the existence of them is obvious as is the need to resolve them in a constructive way - starting from agreements on principles which should be gradually refined in the time to come.

49. Consistent basic monetary policies should be established and strictly observed. Inconsistent monetary policies may not only impede, but ruin co-operation. Of course, because of the present different position of the partners in respect of their liquidity, foreign exchange reserves, balance of payments position, the common monetary policies should not be too ambitious.

50. The need for a sort of payment union which should evolve from a simple clearinghouse concept at the beginning is an obvious proposition.

51. A common investment bank is another element of the machinery. Its co-operation stimulating impact is generally by far underestimated - of course, if a well managed, efficient organization is considered. It should be pointed out that world-wide experience has shown that both national and multinational investment banks have proven to be extremely valuable institutions, not only in the banker capacity but also as a highly professional brain trust which is capable of contributing efficiently in the process of development planning, economic analysis and appraisal (both on enterprise and overall economic level), stimulating development and investment promotion, thus representing an important element of development and co-operation machinery.

52. Experience in co-operation shows that the creation of a supra-national development planning machinery endowed with some indispensable executive authority encounters serious difficulties. So far, no proper arguments have been produced against such institutional arrangement - which is obviously necessary - but it was extremely difficult to conclude agreements in this respect; if they have been concluded at all. The factor in play is the super-sensitive interpretation associated with the ideal of "sovereignty". A well staffed group's investment bank may by-pass this difficulty assuming the informal role of supra-national planner (which in fact such bank must perform to satisfy its own analytical and policy-backing needs) which by its authority and weight of

competence can have far going influence on a proper multinational co-ordination of individual national development plans, particularly if its authority is strongly enough supported by the top governing body of the group. This is a fairly good solution for the beginning of the co-operation which with time may be sanctioned and given gradually a more formal position.

53. It should, however, be suggested that the functions related to the "payment union" and to "investment bank" should be performed by two different institutions in view of their sharply different functional and operational character.

54. There are no difficulties to start the organization of an investment bank for the Maghreb. The study of the problems of the creation of the "clearinghouse - payment union" institution may start immediately and will be supported in an important way by the harmonization study when it is ready. The harmonization study will supply several data necessary for the estimating of the volume of flows, financial time lags and volumes of credit expected to be involved - vital perspective information necessary to define properly the size of this institution, its structure and modus operandi. If this institution is to operate through commercial banks the need for foreign assistance in financing the initial operational steps may be avoided.

55. The fiscal implications of the envisaged co-operation remain to be studied in light of data which will be made available by the harmonization study, which by the definition of its scope will leave these problems open. These problems should be considered parallely, if not, up to an extent, together, with the problem of redistribution of benefits resulting from co-operation. It will be superfluous to enumerate here the several possible ways of restructuring the fiscal system to have it correspond to the requirements of the co-operation. It is believed that two major criteria ought to be observed when reshaping the existing fiscal systems: (a) the changing structure of revenue sources (declining yield of revenue from indirect taxation, particularly from custom duties and other dues arising when goods cross national borders), and (b) the need for alteration of the present static fiscal system, presently suitable to relatively slowly growing mature economies, into a dynamic, development

stimulating fiscal system, not only consistent but also as far as possible standardized, if not identical in all member States.^{1/} The problem of the redistribution of benefits will be considered later in this preliminary report in the context of the problems of industrial developments.

56. There is one problem more to be mentioned here, which is apparently more technical than economic, but of extreme importance in the context of co-operation, and intimately associated with the concept of the economies of scale - not only in the field of industry but in any case field of economic activity. This is the problem of standardization which should be considered at two levels: namely, (1) standardization - as defined by the International Standards Organization (ISO), i.e. standardization in its narrow formal context which is commonly known, and (2) standardization in its broad context.^{2/}

57. It is fundamentally important to introduce common standards^{3/} in all member countries of the group. Most, if not all, existing internationally adopted standards (ISO) can be immediately adopted and introduced by the group, which happily recognises the metric system. They cover the basic most important areas. Remaining standards can be selected from the large stock on European national standards (which in most cases are co-ordinated) which can be adopted for Maghreb countries practically without alterations. Very few, specific

1/ A considerable amount of creative work was done in this field recently - new concepts, particularly for planned economies have been elaborated, which may be very useful for speeding up the work to be done in this field.

2/ It should be deplored that there is no proper word in the English language for this kind of standardization - in French this kind of standardization is called "typisation", and the same word (in different variations peculiar to different languages) as adopted in several other languages, e.g. Italian, German, Polish, Russian.

3/ Here standards in the "narrow" context are considered. Please refer to "Standardization in North Africa" E/CN.14/NA/ECOP/6 and the documents prepared by Maghreb Centre for Industrial Studies.

standards will have to be worked out for the Maghreb especially - either they will be concerned with specific products or will take into consideration specific local conditions, habits and needs.

58. The second kind of standardization mentioned above (standardization "in broad sense" - "typisation") may be even more important than the first one and incomparably more difficult in implementation, but highly important from the point of view of market integration and successful industrial co-operation. The problem is to limit the number of types and sizes of equipment (including capital equipment), appliances and durable consumer goods to the minimum satisfactory to meet reasonable demand requirements.

59. This request may warrant some more explanation. If, for example, the problem of agricultural tractors is considered. Immediately at the beginning it may be stated that some 2 - 3 per cent of all tractor park will be represented by special purpose equipment which may be excluded from general consideration.^{1/} The remaining tractors in average conditions, which are supposed to prevail also in Maghreb countries, should be considered under two categories: wheel and caterpillar tractors. The true demand for the latter is also rather limited - in the analysed cases they represented between 5 and 15 per cent of all the tractors. The wheel tractors demand can satisfactorily be covered with two sizes (measured e.g. by the engine power), the selection of which depends on specific local conditions: e.g. 40 HP and 65 HP). Now it is desirable that both these sizes (types) be of the same make, because they will then have several identical components, their operation will be similar, and they can be serviced and overhauled by the same workshop etc.

60. The above case description is self-explanatory. On one side the exploitation cost may be substantially reduced by such kind of standardization and on the other it opens the way to domestic (Maghreb) manufacture of e.g. both wheel tractors (already perfectly viable by 12 - 15 thousand tractors of one type-size annually).

^{1/} The figures are approximate and together with the conclusions are based on studies made for individual countries (Turkey, India) as well as the East and West African sub-regions.

61. This kind of standardization applies to many kinds of equipment, first of all: tractors, road building and earth-moving machinery (representing one group to be consistently standardized), motor vehicles (trucks and passenger cars), textile machinery (extremely important and usually neglected group which has a very large current demand for spare parts - routine wear and tear), railway stock, electric motors and appliances, pumps, auxiliary internal combustion engines, valves and other plumbers' appliances and accessories, all durable mechanical household equipment (e.g. refrigerators, air-conditioners, cookers, mixers, ventilators, fans, radio receivers) and of course many others of which a long list may be established.

62. Such standardization action should begin as early as possible in view of creating future opportunities for local manufacture of several products (and may be spare parts at the beginning) and will result in several import tariffs adjustment granting relative preferences to selected (standardized) type-size of items or discriminating against those which are undesirable.^{1/} Selection of desirable "type-sizes" can be profitably combined with negotiations with the potential supplier concerning future (or immediate, as the case may be) local manufacture, as a condition of acceptance of his product.

4. Harmonization of industrial development

4.1 Generalities

63. Although the study is not completed there are some general problems which can be readily discussed as well as certain specific recommendations concerning some industries which have already crystallised enough to be not altered during the last stage of the study. On the other hand there are several industries, particularly those foot-loose, shiftable industries the distribution of which among the Maghreb countries remains unknown and will be determined and proposed only at the later stage of the analysis.

^{1/} In a developed country such arrangement would be unacceptable from the point of view of GATT, but is permissible in a developing country being done in the interest of accelerating development.

64. It should be appreciated that the allocation of industrial activities to each member country is a delicate and at the same time complicated operation. It implies choice of proper valuation premises as well as the set of criteria used which may be of different importance in the case of each country and, therefore, represent a different strength of constraints applied during the process of optimisation of a multinational scheme. Of course, the major constraints should be sought among the following: balance of trade; balance of payment; equitability of: overall development, purchasing power development, consumption levels; utilization of manpower resources or otherwise - the employment criterion; fixed capital formation capacity (absorption capacity, availability of domestic savings, yield of capital inputs^{1/}) and others.

65. On the other hand each partner should participate in carrying the temporary burdens vitally important for Maghreb economy strategic projects (mainly basic industries) which cannot be expected to become immediately commercially profitable.

66. Nevertheless most of the basic industries are characterized by an a priori predetermined location, which is either related to the location of natural resources (raw material, power) or results, beyond doubt, from factors which combine into obviously favourable, from the Maghreb community point of view comparative and absolute advantages of the proposed location.

67. Economic data derived from sectoral studies are subject to consistency check (simultaneous check of supply and demand) which may show over - or underestimation of demand and/or too large or too small capacity expansion proposition. It is one of the tasks of the study to analyse each of such cases and decide upon the kind and magnitude of adjustments considered necessary. Of course, most of such decisions provoke a kind of "chain reaction" of changes of several data and indices (e.g. capital formation, employment, wage and salary bill). Therefore, any preliminary aggregation of main economic data derived

^{1/} Care should be taken not to overburden any one country with projects characterized by high capital output ratio, long gestation period, and long period of waiting for "cash flow break-through point."

directly from sectoral studies before consistency checks and following adjustments^{a/} can yield only very approximate information as to the order of magnitude of proposed developments. Nevertheless, it is considered useful to expose these aggregates which although burdened by definition with a large margin of error, give some idea about the magnitude of proposed developments. The following table present these data for purely informative purposes:

Comparative approximate (orders of magnitude)
information on considered development^{b/} of manu-
facturing industries of Maghreb countries^{c/} 1965-80.

(US^{d/} millions, 1964 factor cost prices)

| | 1965 | 1965-80 | 1980 |
|-------------------------------------------|------|----------------------|---------------------------|
| A. <u>Identified opportunities</u> | | | |
| Gross Business Output | 2054 | | 6860 |
| Value Added | 740 | | 2690 |
| Investment Outlays 1965-80 | | 4530 | |
| B. <u>Demand-supply balance</u> | | | |
| Domestic demand | 3346 | (94.8) ^{e/} | 9555 (90.7) ^{e/} |
| Foreign demand (export) | 184 | (5.2) | 980 (9.3) |
| Total demand | 3530 | (100.0) | 10535 (100.0) |
| Domestic supply | 2054 | (58.2) | 6860 (65.2) |
| Foreign supply (import) | 1476 | (41.8) | 3675 (34.8) |
| Intra-regional trade ^{d/} | 18 | (0.9) ^{f/} | 420 (6.1) ^{f/} |

- ^{a/} The process unavoidably occurs through several iterations because of the existence of inter-sectoral relationships. Change in one sector implies simultaneous changes in several other sectors.
- ^{b/} Algeria, Libya, Morocco, Tunisia.
- ^{c/} As identified by sectoral studies (i.e. before consistency checks).
- ^{d/} Total volume, ex factory.
- ^{e/} As per cent of total demand.
- ^{f/} As per cent of domestic supply.

68. It should be pointed out that the above-mentioned gross business output does not reflect the considered total capacity. In 1965 it was not fully utilised and similarly, although for other reasons (gestation period, labour training period, one- or two-shift instead of two- or three-shift operation, and other obvious technical reasons inherent in fast industrial development), there will be considerable temporarily unutilised capacities by 1980. Of

course, investment outlays reflect the size of capacities expected to exist by 1980.

69. Measured in terms of value added the expected average annual rate of growth will be of the order of 9.0 per cent.

70. This roughly fits the macro-economic framework (8.8 per cent per annum). Nevertheless, it should be pointed out that it would be desirable to arrive at some more identified industrial investment opportunities than in the present case and than necessary to secure the projected growth rate, because this will give the planners, within the so created room for manoeuvre, a choice of projects securing the optimal development path. On the other hand without such reserve any delay in project implementation for which there cannot be another project substituted, will have a direct negative impact on the overall development performance.

71. The importance of co-operation is strikingly witnessed by the volume of intra-Maghrebian exchange which is expected to grow at a rate of the order of 23 per cent annually.

72. Certain industries are expected to grow faster than the others. This does not necessarily reflect the actual growth of the demand but rather the experts' opinion about technical projects feasibility within the period of time considered. Factors which combine in the gestation period, of which the availability of skilled labour should be considered as having a major impact, have been taken into account. Industries characterized by high density of skills, e.g. engineering industries in the field of capital goods manufacture, will develop relatively more slowly than the others. In fact the engineering industries will meet relatively the smallest part of expected demand when compared with other industries which in some cases will not only satisfy the domestic Maghreb demand but also produce for exports.

73. For reasons already explained it is difficult to give more precise information in respect of the particular industries. Nevertheless, some information can be disclosed with belief that the further stages of the forthcoming study will not alter the basic features as known today.

4.2 Iron and steel industry

74. Any future development of iron and steel industry in Maghreb must be based on the fact that this industry is already in existence and is rapidly developing.

75. Dealing first with production expected to come from Algeria there will be a Maghreb market for wide strip products of about 470,000 tons by 1980 (280,000 tons by 1975) excluding strip for petroleum pipe lines. If by agreement with petroleum companies about two-thirds of the demand for these pipes can be met by welded pipe, probably spirally welded, made locally, then the total demand for strip will rise to about 620,000 tons by 1980 (390,000 by 1975). These figures are compatible with the current construction of a wide strip mill of 400,000 tons per annum capacity provided, as is no doubt the case, that plans allow for future extensions, and it is proposed to have at least 600,000 tons capacity mill operational before 1980. It is proposed to de-centralize re-rolling locating tin-plate production in Morocco.

76. There is not enough demand to propose a technically feasible and viable manufacture of plate and heavy sections (including rails).^{1/}

77. Bar and light sections are proposed to be manufactured in Morocco and Tunisia on an integrated basis and in Libya and Algeria on re-rolling plus scrap melting basis. This means new capacities for Morocco (200,000 tons per annum by 1980) and Libya (60,000 tons per annum by 1980) and expansion of

capacity in Tunis (up to 150,000 tons per annum by 1980) and in Algeria (up to 170,000 tons per annum by 1980). Scrap melting units will probably provide all Libya's requirements for billets but for Algeria it will be necessary to rely partly on billets from the integrated strip works or from works based on the Gara Djebilet deposits.

78. The Maghreb requirements for medium sections amounting to 140,000 tons in 1980 should be met by a single integrated works which is proposed for location in Tunis, having in view the poor viability of the existing, and even

^{1/} Such a mill is in existence in the UAR and undergoes expansion based, mainly on the UAR's domestic demand for sections and the very modest demand of the Sudan. Most probably, this mill's surplus will be able to satisfy Maghreb demand in current sizes. The situation is similar in respect of plates for which only the UAR will have a substantial demand - a 200,000 tons per annum mill have been proposed to be erected during the coming decade. (The UAR's demand - 180,000 tons per annum by 1980).

expanded (as proposed in para 77) works, giving them the opportunity to reap a bit of economies of scale.

79. Welded tube plants can be established in all Maghreb countries, with spirally welded tubes in Algeria and Libya. There is not enough demand to propose manufacture of seamless tubes.

80. It should be pointed out that the fragmentation of this industry within the Maghreb does not augur any brilliant commercial viability and will need relatively heavy protection. Nevertheless, it should be recognised that it creates a reasonable development basis which when expanded during 1980-1990 may become both efficient and viable in competitive conditions.

4.3 Non-ferrous metals industry

81. This industry will be oriented both toward domestic and export markets.

82. Domestic demand for rolled and extruded aluminium products is expected to be satisfied to a high degree by one plant which is proposed to be located in Algeria. Capacity: 40,000 tons per annum^{1/} of rolled products, and 20,000 of extruded and drawn products, based on imported aluminium.

83. Demand for copper products (except cables - see engineering industries section 4.5) does not allow the establishment of an economic manufacturing unit in Maghreb countries. In the North African context it is proposed to expand existing UAR's manufacturing facilities to supply the whole of the sub-region.

84. It is proposed to establish one plant in Morocco for the manufacture of extruded lead products of 20,000 tons per annum capacity. This plant is expected to supply the whole North African sub-region (demand by 1980 about 18,000 tons). More than half of the demand is concentrated in UAR - it would be difficult to propose this plant if based only on combined Maghreb market.

^{1/} All figures in this section (4.3) refer to 1980.

85. Domestic demand for zinc and brass amounts to 18,000 tons per annum of rolled and 14,000 tons per annum of extruded products. It is proposed to establish one plant with 20,000 tons per annum capacity in Algeria.
86. Other domestic demand for non-ferrous metals, except for the bulk of castings, will have to be met by the way of imports.
87. Possibilities for exporting metals instead of ores exist in respect of manganese and zinc-cum-lead.
88. In view of expected decline of manganese ore output in Morocco (from 350 to 250 thousand tons) it is a little difficult to make larger farsighted proposition. Certainly one plant (optimal unit of 50,000 tons per annum output, using 100,000 tons of ore) is safely feasible. Another similar unit might be proposed but final decision in this respect should depend on more precise evaluation of the reserves of the ore.
89. The position in regard to lead and zinc is more complicated since Morocco, Algeria and Tunisia all have deposits. In the Oujda area of Morocco output of lead concentrate will be fairly constant at about 35,000 tons per annum which is sufficient for the existing smelter at Oued el Heimer. The remaining output is in the Moloujou-Mibladen area at about 40,000 tons rising to 60,000 tons in 1980 and capable therefore of sustaining another smelter in that area.
90. Output of lead in Tunisia will probably not exceed 30,000 tons per annum which is barely sufficient for the existing foundry at Mégrine, but it is proposed to arrange for additional supplies from numerous small deposits in Algeria and Morocco.
91. Zinc deposits are found in the Oujda areas of Morocco where output is expected to rise from about 40,000 tons of concentrate at present to about 70,000 tons in 1980 and in the adjacent area of Algeria where output is expected to rise slightly from present level of 50,000 to about 60,000 tons per annum. The other area is in Eastern Algeria (Kherret Youssef) where output is expected to rise sharply to 60,000 tons per annum in 1980 and in adjacent Tunisia area to 40,000 tons per annum.

92. Although both these areas are divided by national boundaries only one plant for each should be proposed to make them economical and competitive. The exact locations obviously depends on many detailed rather technical considerations and obviously on negotiations between the countries concerned. At first instance it is proposed to have one zinc foundry in Morocco (for Oujda area) and the second one, in East Algeria. Both of 100,000 tons per annum capacity. This remains to be confirmed at later stages of the study and still will be subject to further technical investigation.^{1/}

4.4 Chemical and petro-chemical industries

93. These industries will certainly be the fastest growing of the group. A sixfold^{2/} expansion of the output is proposed.

94. At the same time almost eight times^{2/} more of those industries' products are expected to be exported by the Maghreb countries outside Africa (almost 25 per cent of production intended for export outside Africa). At the same time the import of chemical products by the Maghreb group from outside will grow only by 40 per cent.

95. Some 50,000 new jobs will be created at a cost of some US\$800 millions.

96. Fertilizers, plant protection agents, plastic materials and fibres, and pharmaceuticals will occupy the most important place in the proposed development programme.

^{1/} It is not possible without further investigation to decide between the electrolytic process and the Imperial Smelting Process which is more suitable for mixed lead and zinc ores. Two plants are proposed, having in mind the ISP process which require large units to be economical. The electrolytic process for producing zinc, has the advantage of giving zinc directly of the highest purity and on a fairly small-scale. If the electrolytic process will be found more favourable then the number of proposed units becomes irrelevant.

^{2/} Comparison refers to years 1965 and 1980.

97. The Maghreb's production of fertilizers is expected to grow from about 200 thousand tons in 1965 to some 1650 thousand tons by 1980 (expressed in pure nutrient weight). The value of fertilizer exports will grow from US\$19 million (in 1965) to about US\$150 million (in 1980). At the same time the import of fertilizers (almost exclusively potassium salts) will grow from US\$12 million (in 1965) to US\$20 million (in 1980).

98. Large ammonia units working for export have been located in Algeria and Libya in relation to the abundant supply of earth gas and oil, but the remaining new capacities have been located taking into consideration both raw material supply and the location of the demand. It is proposed that urea and ammonium nitrate concentrate be manufactured in Algeria and Libya. In Tunisia production of urea and ammonium nitrate calcinate is foreseen. Triple superphosphate and di-ammonium phosphate is proposed for production in three countries: namely, Morocco, Algeria, and Tunisia.

99. Production of pharmaceuticals will multiply rapidly. At present (1965) only few pharmaceuticals valued at US\$6 million are produced in Maghreb. It is **proposed** to increase this production up to some US\$120 million by 1980. Nevertheless, the import of pharmaceuticals will still represent one of the most important items among chemical products to be imported from outside. Pharmaceutical production is one of the most complicated and difficult of industrial activities; it requires highly qualified and specialized manpower, strongly developed research and scientific services, and, in view of the smallness of national markets, a highly advanced stage of co-operation creating a solid base for specialization and division of labour. Progress achieved during the coming decade will be decisive for the future development of this highly profitable industry which after 1980 will make use of its own much better developed intermediaries supply basis, expected to be able to meet the high quality standards required for pharmaceuticals.

100. The manufacture of plastic materials and synthetic fibres will develop even faster than manufacture of pharmaceuticals (from US\$11 millions in 1965 to almost US\$150^{1/} million value of output in 1980). It is proposed that

^{1/} Fibres US\$80 million and plastic materials US\$70 million.

nylon and polyester fibres be manufactured in Morocco and Algeria.^{1/} PVC and polyethylene are proposed for manufacture by the same countries. The necessary intermediaries will also be produced domestically in sufficient quantities.

101. It is proposed that a soda industry be developed in Morocco and Algeria. Plant protection agents factories are located in relation to the soda industry (like PVC).

102. Although one large dyestuffs factory exists in UAR^{2/} which will dispose of surpluses in several kinds of products it will not be in the position to satisfy either UAR's domestic demand for certain types of products or the Maghreb demand for most of these products. Therefore, it is proposed to establish another relatively large dyestuffs factory (on a slightly different manufacturing programme than the UAR's factory) in Morocco, which together with the UAR's factory will be able to satisfy all the demand of the North African sub-region.

103. Paint, varnishes, soap, detergents, toilet preparations, etc. manufacture is proposed to be distributed based on the size and density of domestic demand.

104. There is evidence that the Maghreb's impressive chemical industries development can result in development of a highly modern and perfectly competitive, both in respect of price and quality, sector of the economy. Nevertheless, the proposals are ambitious and their implementation will not be an easy task.

^{1/} Acryl fibres manufacture is expected to develop in UAR.

^{2/} In Ismailia. It was operational in May 1967, but because of its location it is not operating at present.

4.5 Engineering industries

105. The demand for products of this industry is rapidly growing which reflects both the growing demand of the population as well as the impressive development programme, which implies heavy investment and implicitly a large demand for capital goods.

106. The projection of demand still awaits the consistency check which will be performed within the framework of the forthcoming study under consideration in this preliminary report. But it is characteristic for the engineering industry that, except for a few lines of production (of which typical example is the automotive industry), in most cases a reasonable economic optimisation of the scale of production is achieved fairly early. Therefore, the combined Maghreb market in spite of its relative smallness offers opportunities for a fairly large spectrum of different lines of production. Of course, a market of any single Maghreb country will offer incomparably fewer opportunities, in fact very few, most of which already have been utilised. But once a market of reasonable size is going to be created - Maghreb market - the problem reverses, and become more technical than economic (of course, it should not be forgotten that the overcoming of technical problems is always bound to generate costs, sometimes relatively important).

107. In 1964 the Maghreb countries produced about 164 thousand tons of engineering products which met about 40 per cent of the demand (the value of this output amounted to some US\$196 million thus representing - ad valorem - less than 35 per cent of the demand). In 1980 a certainly conservative estimation expects the demand to increase to more than 1600 thousand tons (value some US\$2500 million) out of which only some 830 thousand tons (value more than US\$900 million) can at this time be manufactured domestically.

Therefore, the relative dependence on imported engineering products will not improve during the period under consideration. It should be pointed out that in the past the engineering industries did not develop first of all because of inadequacy of market sizes; in the future, not the market but technical difficulties will prevent faster development.

108. Of course, this should be regarded as a serious general development constraint which can be overcome only through heavy foreign exchange expenditure on capital equipment with all its implications on the balance-of-payments situation.

109. In this context it is almost irrelevant whether the projected demand is correct or underestimated - in both cases it cannot be met by domestic supply.

110. Of course, the situation is different for each group of products. In the field of metal products, more than 90 per cent (but only 60 per cent ad valorem) is expected to be met by domestic production. Worse is the situation in machinery - about 33 per cent (30 per cent ad valorem), and in transport equipment - about 30 per cent (35 per cent ad valorem).

111. As it is to be seen the bulk of metal products will be domestically available. But the missing 10 per cent (in weight) represents a valuable part of these products (6 times more valuable per unit of weight than those locally manufactured). Nevertheless, it would be very difficult to reduce this import because of their extreme diversification and high quality standards.

112. In respect of machinery, both non-electric and electric, the effort in absolute figures appears to be modest. Only some 30 per cent of the demand will be met by domestic production. Of course, in relative terms the development is tremendous - the production will increase almost nine times (ten times in value added terms). At the same time the capacity will grow much more significantly but will remain largely unutilised. Few, if any, of the newly established factories will work on two shifts by 1980. But the additional factors of lack of skills and experience (these factories will be, on an average, no more than 2 - 3 years in operation) should be introduced - assuming optimistically the level of 0.7. This results in less than 50 per cent capacity utilisation and should be regarded as a good achievement considering existing conditions. Such economic indices are, of course, not attractive economically. Therefore, it is proposed not to insist on this industry development and consider this which has been proposed as a large training venture and nursery for creation of a skilled army of workers to prepare a basis for priority treatment of this industry in the next decade. To propose

larger expansion will mean misallocation of resources urgently needed on other more immediately profitable fronts.^{1/}

113. The apparently poor performance of the transport equipment manufacturing, industry results only and exclusively from the smallness of the market which will not grow sufficiently within the period of time under consideration, to allow really true and viable development of the already established nucleus of this industry. Of course, it would be unrealistic to propose to convert this industry at this stage from a domestically oriented one into an export oriented one. Too many indispensable precondition requirements are missing or will be in short supply during the decade to come.

114. More attention has been given to engineering industries because it may be accepted that their development may be considered as an index of a country's industrialization. The present appraisal might not be considered very optimistic; nevertheless, for a professional it looks very encouraging.

4.6. Textile and clothing industries

115. A considerable scope for additional growth of these industries is indicated by the large volume of current imports and a rather conservative assessment of likely demand in 1980, as well as possibilities for some expansion in the export trade.

116. The internal market is expected to grow threefold, and a considerable shift is expected in its composition in favour of man-made fibres. There will be also a considerable shift in favour of the clothing industries on the part of the consumer.

^{1/} Which have to "make money" needed for the expensive long gestation period of such industries like the one under consideration - which, of course, should be regarded as the "fine fleur" on top of all industries.

117. The scale of feasible expansion of domestic output - taking into account all kinds of textiles and clothing in the Maghreb context - is impressive. More than 42,000 new jobs (mainly for non-skilled labourers, with enormous possibilities for employment of women) are proposed to be created at a cost of some US\$530 million.

4.7 Food processing industries

118. The food processing industry is and will remain one of the major industries of the Maghreb countries. The demand for processed food is expected to double within the period of time under consideration (1964-1980). Correspondingly, it is proposed to double also the production of processed food.^{1/}

119. The intra-Maghrebian trade in processed food is and will remain negligible. Only Libya shows a demand which can be satisfied by the other partners.

120. In 1964 or thereabout some 10 per cent of the output of this industry was exported. It is hoped that this figure can be increased to almost 13 per cent by 1980 (i.e. two-and-a-half times more export than in 1964). But the unavoidable need for imports (in spite of substitution effort made) will remain, even slightly increasing during the period from some 22 per cent (1964) to 24 per cent (1980) of domestic demand, thus the relative deficit of processed food will remain on the level of 13 per cent of demand throughout the period under consideration (i.e. increasing from US\$110 million to US\$270 million). All mentioned figures have been expressed ad valorem in 1964 prices.

^{1/} It should be appreciated that at present relatively large quantities of food items classified under the heading "processed food" (meat, milk and dairy products, products of milling) are supplied by the traditional sector, thus escaping statistical records.

121. The important increase in demand for processed food is not as much related to the increase of per capita income as to the changing consumption habits and patterns related to the development and modernization of the economy. And manifested not only in accelerated urbanization but also in changing patterns and standards of living in less remote rural areas.

122. The apparent inability of this industry to improve the supply-demand balance of processed food is not caused by the industry itself but by the inadequacy in supply of inputs by the primary sector. In fact the presented picture conceals the real situation because it does not emphasize the fact that the volume of inputs imported by this industry will grow substantially although the analysis was based on extremely optimistic FAO estimations of supply. Major supply shortages are expected in cattle and milk (including eggs). Shortages in the domestic supply of fresh vegetables may also cause increase in processed food imports - canned and otherwise preserved vegetables.

4.8 Other industries

123. Forest based industries development is hampered by the modesty of domestically available basic raw materials. It is proposed to double the domestic sawn wood production, to quadruple the wood based panels output but still this will satisfy only 10 per cent and 50 per cent respectively, of the expected demand.

124. Pulp and paper industry suffer similar development constraints although not to the same extent (in addition to wood there is bagasse, esparto and straw which can be used), and it is hoped to increase Maghreb self-sufficiency from present 60 to 70 per cent by 1980.

125. Non-metallic mineral products industries (mainly building materials) have been proposed following the principle that every country should be self-sufficient in respect of main building materials, i.e. cement, cement-based products and bricks. In respect of ceramics, glass (sheet and packing glass), and refractories, specialization is regarded necessary if Maghreb countries are to achieve self-sufficiency and the enterprises become viable. Also special products such as white cement, high-strength cement, ceramics for the chemical

industry, specialty glass, refractories should be produced only in selected factories, and thus be subject to co-operation. Roughly the output of this industry during the period under consideration should triple (the output of the construction industry is expected to quadruple).

126. Industries other than those mentioned above, although some of them will be relatively important, have a prevailingly national character^{1/} (with the exception perhaps of the rubber manufacturing industry in which co-operation in manufacture of tyres and tubes, and some other specialized products is highly important) and will not be described here.^{2/}

4.9 Specialization and related problems

127. It will be difficult, given the existing conditions, to rely on authoritative methods to assume proper division of labour, specialization, and co-operation among individual industrial enterprises (operating and going to operate in Maghreb countries. Even in socialist centrally planned economies, where almost all industry belongs to the public sector these problems are very difficult to resolve efficiently in an authoritative way and there has recently been a tendency to entrust several decisions to the management enterprises and to let market forces have more influence on such decisions. Therefore, in view of the mixed structure of the ownership of industrial enterprises in Maghreb countries (with prevailingly private and frequently foreign ownership of industrial enterprises) other, more "voluntary" methods should be adopted. Of course, this does not mean that "laissez-faire" can be tolerated. Severe discipline should be opposed for the sake of achievement of planned development, of both economic and social goals.

-
- 1/ It should be mentioned that the absolute size of the industrial enterprise is irrelevant, some so called small-scale industries being highly specialised need large markets to materialise.
- 2/ Sectoral studies on these, as well as, all above mentioned industries are available, see annex 1 to this report.

128. Efficient use should be made of an industrial licensing system which should be unified in all countries. The old-fashioned method of granting licences with a very liberally described scope of activities encompassed by the license and therefore permitted should be promptly discontinued. This implies severe review of all licences granted in the past in terms of the new legislation introduced - as it was said, common for all countries. This legislation should include provisions regarding "Maghreb agreed industries" which have a special status. Further on this legislation should include regulations imposing on the obligations of enterprises in respect of the time schedule of commencement of production, achievement of agreed upon levels of output in respect of all items or those considered especially important for the economy, for which a manufacture licence was granted. In case of production starting with large degrees of imported inputs, the schedule should provide for substitution of domestic input (if available or expected to be). Consideration should be given to the problem of whether industrial enterprises should be permitted to deal with foreign trade and particularly import transactions in view of the widely introduced practices of over- and under-invoicing, which results in illicit transfers abroad.

129. Semi-compulsory or compulsory industrialists associations which should be statutorily obliged to take care of members' specializations are very helpful in promoting specialization and avoiding duplication resulting in unnecessary competition.

130. Relationship among individual enterprises through multilateral mutual equity shareholding, particularly when the public sector of the host country is involved (not necessarily with a controlling shareholding), has proven to be a very efficient and smoothly working system promoting specialization and co-operation. This system has also been adopted in Africa (textile industries in Cameroon, Central African Republic, and Chad) where it works very satisfactorily both in respect of existing as well as newly planned factories.

131. It is, of course, impossible to exhaust this subject in this report. The few observations made above should be considered rather as suggesting the importance of the problem which certainly merits attention and requires detailed study, which will consider specific conditions prevailing in Maghreb countries.

4.10 Redistribution of benefits

132. The problem of equitability should be regarded as perhaps the most crucial of all problems relevant to economic co-operation. And it should be admitted that so far it remains unresolved. All that has been tried or is currently practised is certainly unsatisfactory, and must be regarded as accepted for temporary use awaiting a better system to be conceived and made workable.

133. Already the notion "equitability" is very vague, and, so far as is known, not defined in economic terms, and there is no yardstick to measure it.

134. So far as it is known neither theoretic nor empiric complex inquiry into the problem has been undertaken. Some fragmentary studies usually considered only one sector of the economies in insulation from others. However, any economic activity induces not only direct but also indirect benefits, which sometime may be for many reasons more important than the direct benefits for the economy and society as a whole.

135. Of course, the subject seen from a scientific point of view is certainly highly complicated and its analysis very difficult. This is perhaps the main reason that little analysis of this problem has been made. But there is also another reason. Developed mature economies are virtually not interested in the solution of this problem for practical purposes - they may be interested in it, if at all, only from a purely scientific point of view. This is so because in developed economies the large volume which they represent and the strong automatically working corrective forces of the market makes the analysis of this problem irrelevant. The spread effect is high and acts very quickly. For example the EEC is concerned with creation of equitable conditions and opportunities; the benefits when they arise anywhere within this area spread quickly through its ubiquitous market generating other benefits elsewhere almost simultaneously. In other words - the multiplier works.

136. This is not the case in developing economies. First of all on the average they grow relatively much faster than the developed countries. Secondly - when analysed more closely - they grow in leaps and bounds. Because any one new, activity added (e.g. new industrial project brought into operation) represents a relatively large volume when compared with the existing volume of activities.

And, of course, the market is rigid, not ubiquitous, highly imperfect and not capable of spreading the benefits quickly. The multiplier does not work, or if it works (and in fact it works) then it works very slowly and with long delay.

137. This is why in Africa, as in any other developing region, the deficiencies of the "natural" economic forces should be strengthened by artificially created auxiliary mechanisms. The more the African countries develop the less they will need such auxiliaries - in general their lifetimes will be relatively short. Nevertheless they are needed, especially at the beginning of the co-operation.

138. Several measures may improve equitable distribution of benefits among co-operating countries. A proper plan for harmonization of industrial development, especially when developed with due consideration of other than industrial activities and their development, should of itself be regarded as a powerful mean securing proper distribution of most of the accruing benefits and assuring gradual elimination of inequities (if any) existing usually among countries entering into co-operation for development. Of course, such plan must not only be well conceived but also very well implemented (strict observance of planned time schedule is also of great importance).

139. Nevertheless, it is felt that because of several secondary factors, and particularly because of the unavoidable irregularities in the group's development plan implementation, auxiliary arrangements for redistribution of the relative temporary excesses of benefits accruing through co-operation will be necessary for some time to come, say for the coming decade.

140. Neither the system of "transfer tax" in use in the East African Common Market nor the concept of "tax unique" in use among U.D.E.A.C. countries can be recommended for the Maghreb group. Both are based on concepts which are incompatible with the development of economic complementarity. Both have no proper scientific foundation or explanation. Both are results of bargain and compromise. Neither of them has features stimulating co-operation and development, on the contrary they have defensive features, defending one partner against incursion of the other partner's goods into the former partner's market.

141. A new system, compatible with the aims and goals of co-operation for development in the conditions and environment of Maghreb countries should be worked out. Obviously this system should emerge from the concept of social cost-benefit analysis.

142. This problem will not be considered by the forthcoming industrial development harmonization study and should be tackled separately. The positive solution of this problem should be considered rather urgent.

4.11 Multinational financing of industrial projects

143. Although this concept should be regarded as an obvious consequence of accepted ideology of co-operation for development, nevertheless its practical implementation poses several problems. Some preliminary work on this subject was done by ECA but more extensive study still remains to be carried on by specialists.

5. Summary remarks

144. The degree of authority or power given to the central organization and all related specialized bodies of Maghreb group is a matter of political decision, but the real effectiveness of these institutions ultimately depends on willing co-operation by each of the countries and not on the legal technicalities.

145. It is the nature of a development programme that it be considered a living document - subject to change and growth. The forthcoming harmonized industrial development programme will be presented with the knowledge that it was outdated as soon as it was printed and that the countries concerned will have many ways of improving it. A permanent institutionalized machinery is necessary to resolve problems currently and to forge ahead with a continuously improving quality of plans for actions necessary to implement economic development.

146. Nevertheless too frequent and drastic changes either prove poor quality of the master plan or lack of self-imposed discipline among the partners, resulting in poor co-operation. This is especially important in respect of strategically important key projects which are subject to mutual agreement (so called "agreed" projects). Most of them are "multinational" in scope i.e. based on the combined market of the group, but some may be of prevaillingly national character but may be in need of co-ordination with similar projects in other partners' countries. More important export-oriented projects should also be considered as belonging to this group, at least for reasons of common export policy of the group. It is certainly extremely important that a list of such projects, say those expected to come up within the next five years, be agreed upon as soon as possible.

147. The need for several auxiliary studies of problems which will not be resolved by the forthcoming industrial harmonization study has been emphasized in this preliminary report. No claim is advanced in respect of the completeness of their list - there are certainly more problems and some of them may be equally important. And, even minor problems when not timely resolved may generate major troubles. Finally, the more the co-operation develops the more problems will emerge. Of course, studying and resolving problems on paper will not yield effective progress. The importance of the problems may in this context be measured by the urgency for action.

148. Economic co-operation becomes every day more obviously the most important pre-condition for Africa's economic and social development. Without co-operation African development may grind to a halt. But a word of caution, although obvious, will not be superfluous. Exogenous forces which still exploit Africa's economic potential are anxious to preserve their vested interests intact. Although not everywhere, they have been, so far capable of doing so and even of expanding their business and influence in post-independence period. Misconceived economic co-operation may consolidate these forces, expand opportunities for them and increase the degree of control which they de facto execute. The question: "Development - for whom?" is not an academic quibble in Africa. A similar question may refer to co-operation.

ANNEX 1

North Africa: List of Sectoral studies

- A. Studies prepared by ECA Secretariat Industry Division ^{1/}
1. Phosphate Mining in the North African Sub-Region E/CN.14/INR/155
 2. Non-ferrous Metal Ores Mining in North African Sub-region E/CN.14/INR/161
 3. The Food Processing Industries of North Africa (Part I) ^{2/} E/CN.14/INR/145
 4. Tobacco Manufacture in the North African Sub-region (Statistical Analysis) E/CN.14/INR/164
 5. A Study of the Textile Situation in the North African Sub-region E/CN.14/INR/157
 6. Forest Industries Development in North Africa E/CN.14/INR/160
 7. Survey of the Development of Chemical Fertilizers in North Africa E/CN.14/INR/159
 8. Evolution des Industries Pétrolière et Chimique dans la sous-region Afrique du nord E/CN.14/INR/156
 9. Dyeing, Tanning and Colouring Materials and their future prospects in the North African Sub-region E/CN.14/INR/158
 10. Development of the Brick Industry in North Africa E/CN.14/INR/WP/5
 11. Development of the Refractory Products Industry in North Africa E/CN.14/INR/WP/1
 12. Development of the Ceramics Industry in North Africa E/CN.14/INR/WP/3
 13. Development of the Glass Industry in North Africa E/CN.14/INR/WP/6
 14. Development of the Cement Industry in North Africa E/CN.14/INR/WP/4
 15. Production of Cement-based Building Materials in the North African Sub-region E/CN.14/INR/WP/2

^{1/} ECA Secretariat staff and bilateral experts

^{2/} Part two has never been prepared; development analysis remain in form of working sheets and notes

ANNEX 1 (2)

- | | | |
|-----|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 16. | Asbestos Cement Products Industries in North Africa | E/CN.14/INR/154 |
| 17. | ECA Study on Industrialization and Economic Co-operation for the North African Sub-region (Basic Metals) | E/CN.14/INR/153 |
| 18. | The Development of the Engineering Industries in North Africa | E/CN.14/INR/152 & E/CN.14/INR/152/ Corr.1 |
| 19. | Prospects for the Establishment of an Integrated Electronics Industry in North African Sub-region | E/CN.14/INR/149 |
| 20. | The Construction Industry in the North Africa Sub-region | E/CN.14/INR/163 E/CN.14/INR/163 & Corr.1, Add. 1 |
| 21. | Standardization in North Africa | E/CN.14/NA/ECOF/C |

ANNEX I (3)

B. Other Divisions and sub-regional (Tanger's) office of ECA

22. Industrialization and Economic Co-operation
for the North African Sub-region, The
Agricultural Sector (1963-1980) E/CN.14/INR/162
23. L'organisation de l'agriculture et la coopération
au Maghreb sent directly by ECA/FAO Agric. Division M69-1133
24. Tourism in North African countries E/CN.14/TRANS/32
25. Evaluation of Capital Formation up to 1980
and its Breakdown between the Major Economic
Sectors E/CN.14/INR/150
26. Evaluation of Requirements in, and Training
Possibilities for, Qualified Staff up to 1980 E/CN.14/INR/151
27. Energy ^{1/}

C. North Africa-Bilateral Aid Studies - and others
Institut Français du Pétrole

28. Etude Economique des Possibilités Pétrolières
de l'Afrique du nord - Exploration et production 30.015

UNOTAD

29. Perspective d'Accroissement des Exportations d'
articles manufactures et semi-finis des pays en
voie de developpement TD/B/C.2/60

WIP - Wirtschaft und Infrastruktur GMBH & Co. Planungs - KG

30. Rapport d'Etudes sur L'Evolution de L'Industries Chimique
pour des Groupes Selectionnees de Produits en Afrique du
Nord (3 Partie) (2 Vols)

D. Dutch Economic Institute (Prof. H.C. Bos)

31. Industrial levelopment Harmonzation in North Africa ^{2/}

^{1/} This study can be finalized only simultaneously with the final
harmonization study

^{2/} Under preparation

Remark: Following industries: Namely, Beverages (ISIC 21), Footwear
(ISIC 241/2) Leather (ISIC 29), Rubber manufacture - only tyres and
tubes for motor vehicles (ISIC 30), have been studied by ECA
secretariat Industry Division experts at working stage to secure
indispensable basic data necessary for completion of the final
harmonization study. Printing and Publishing Industry (ISIC 28)
and miscellaneous Industries (ISIC 28) and miscellaneous industries
(ISIC 39) have not been studied because of non-availability of
experts.