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DP/ID/SER.B/101 4 March 1977 English

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### INDUSTRIAL DEVELOPMENT AND CONSULTING BUREAU

DP/KUW/71/507

KUWAIT,

TERMINAL REPORT,

Prepared for the Government of Kuwait by the United Nations Industrial Development Organization, executing agency for the United Nations Development Programme



United Nations Industrial Development Organization

#### United Nations Development Programme

INDUSTRIAL DEVELOPMENT AND CONSULTING EUREAU

DF /KUW /71 /507

KUWA I 'T

#### Project findings and recommendations

Prepared for the Government of Kuwait by the United Nations Industrial Development Organization, executing agency for the United Nations Development Programme

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Inited Nations Industrial Development Organization Vienna 1977

#### Explanatory notes

References to dollars (\$) are to United States dollars.

The monetary unit in Kuwait is the Kuwaiti dinar (KD) of 1,000 fil. During the period covered by the report, the value of the dinar in relation to the United States dollar was KD 1 = \$US 3.40.

Use of a hyphen between dates (e.g. 1973-1976) indicates the full period involved, including the beginning and end years.

A full stop (.) is used to indicate decimals.

A comma (,) is used to distinguish thousands and millions.

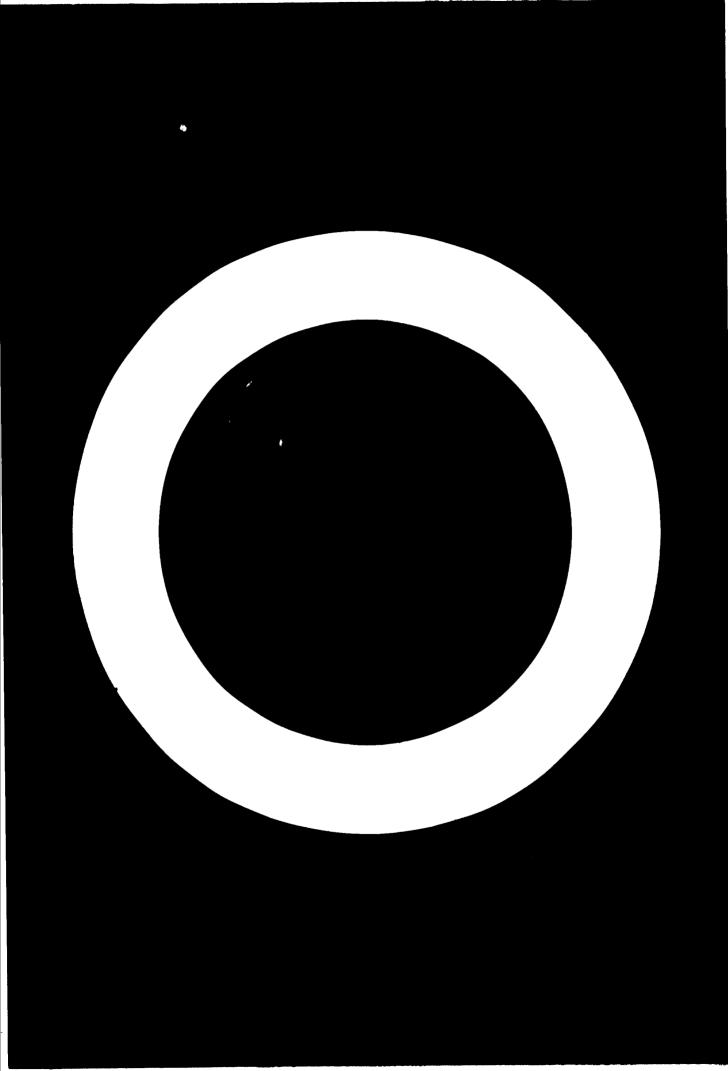
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#### ABSTRACT

The report describes the circumstances that prompted the extablishment of 2m industrial development and consulting bureau in Kuwait and provides an account of the Bureau's activities during the first phase of its existence. The Industrial Development and Consulting Bureau was established and run as United Nations Development Programme (UNDP) project DF/KUW/71/507, for which the United Nations Industrial Development Organization (UNIDO) was appointed executing agency. The project began in August 1973, and its first phase ended in November 1976. UNDP contributed \$US 70,105 to the project; the Government of Kuwait contributed \$602,552. The main purpose of the project was to assist the Covernment in promoting industrialization with a view to diversifying the economy. The report describes and assesses the work done by the Bureau: assistance in industrial planning, identification of investment possibilities, preparation of feasibility studies, evaluation of licence applications, and training. A number of actions are recommended and make the Bureau's work more effective.



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#### INTRODUCTION

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#### Background

The economy of Kuwait depends heavily on oil and natural gas (85% of government revenues in 1972). Because of this, and because oil and natural gas are not renewable resources, the Government of Kuwait has adopted policies to diversify the economy. Industrialization, especially industrialization of the country's natural resources, offered an effective means of diversification. Abundant capital and, particularly since 1973, government encouragement for industry, have created a favourable atmosphere for industrial development. There are, however, a number of obstacles to rapid industrial development, chiefly a shortage technical and skilled of manpower, and a limited local market.

#### Official arrangements

The Government's desire to promote industrial development led to a United Nations Development Programme (UNDP) a project for an industrial development and consulting bureau. The project document was signed on 9 May 1973. The Government of Kuwait was represented by the Ministry of Commerce and Industry as counterpart agency and the United Nations Industrial Development Organisation (UNIDO) was appointed executing agency. Field work began on 11 August 1973; the first phase of the project ended on 10 November 1976. UNDP contributed \$70,105 to the project; the Government of Kuwait contribution \$502,552.

#### Objectives

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"he main purpose of the project was to assist the Government of Kuwait in promoting industrialization with a view to diversifying the national economy; to assist in the identification, evaluation and running of industrial projects; and to build up the Government's capabilities in those fields.

The immediate objectives of the project were:

(a) To assist the authorities in the formulation and realization of an industrial development strategy and industrial plans and programmes;

(b) To identify industrial investment opportunities by pre-feasibility studies prepared by the "entre's experts or short-term consultants or sub-contracted consultants:

(c) To assist in evaluating feasibility studies and licence applications, and so assist businessmen to prepare licence applications;

(d) To assist on request in preparing specifications and tenders, advise the Ministry on the suitability of prospective foreign investors, contractors and suppliers of equipment, and assist the Ministry and private businessmen in their consideration of labour requirements;

(e) To train counterparts to the international experts.

During the first phase of the project, reports on many subjects were submitted to the government counterpart agency.

#### I. CONCLUSIONS AND RECOMMENDATIONS

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#### Industrial Law

The industrial law was promulgated in 1965 when Kuwait's revenue was substantially less than in 1975 and industries other than the oil industry were not sufficiently developed. It is recommended that the law might be reviewed with a view to:

(a) Establishing a clear policy for industrialization, setting priorities for industrial development in all sectors including oil, natural gas and petrochements and specifying clearly the responsibilities of the Ministries and institutions involved;

(b) Having representatives of other institutions concerned with industrialization on the Industrial Development Committee (Ministry of Oil, the Shuaiba authority, the Industrial Bank, and the Municipality);

(c) Pectifying the shortcomings of the law that have been revealed during its application to such matters as incentives and project sites;

(d) Delegating authority.

#### Industrial Development Committee

The Industrial Development Committee could play a greater role in industrial development policy and organizational activities. Until now it has concentrated on project licensing, exemptions and project sites. It is recommended that the Committee's functions should be enlarged. Some of its authority should be formally delegated to the Minister of Commerce and Industry - a step that has already been taken in practice for licencing projects in the building materials sector and certain exemptions. The committee should have a technical secretariat.

#### Industrial Affairs Department

With its present structure, the Industrial Affairs Department cannot do the work it is supposed to do, because of the serious shortage of suitable staff. Furthermore, all authority is exercised by the Undersecretary and Assistant Undersecretary for Industrial Affairs.

A new organizational chart, with the job specifications, authority and responsibilities of the staff members concerned, is being completed by specialists from the University. It should be applied as soon as possible. Office space and all the staff required should be provided.

#### Industrial Development and Consulting Bureau

The project received less office space, counterparts and supporting staff during its first phase than was originally planned.

It is recommended that five more rooms should be provided, preferably on the same floor of the building and that the missing counterpart staff (industrial economist and civil engineer) and supporting staff (administration officer, secretaries, documentation officer, and draftsman) should be recruited. Should it prove difficult to locate suitable staff using the Ministry's recruitment procedures, it is recommended that the staff should be obtained by advertising or even international recruitment. All the posts are important to the proper performance of the project.

Since the work of the Bureau is carried out in Arabic, translators should be provided.

It is strongly recommended that the Ministry should take certain measures to encourage counterparts to stay in the Industrial Affairs Department, and the Bureau. Because of the increasing demand for engineers and university graduates, only one of the four counterparts originally appointed has remained, and one of the newly appointed counterparts has resigned. All those who left were recruited by private enterprises or other institutions that offered more remunerative conditions.

Kuwait is now finding it more difficult to attract sophisticated and expert talent in the face of competition from Saudi Arabia, the Emirates, and Iraq. Some countries with abundant labour are no longer lending such personnel so readily and it is therefore time to have the whole labour issue analysed. (The Planning Board has already made detailed studies on labour in Kuwait.)

#### Status of the Bureau

The Industrial Affairs Department does not wish the Bureau to be semi-autonomous at present. "he project team recommends that the issue should be reviewed, however, because it feels that it is more appropriate for an advisory unit for industrial development that initiates studies and evaluates projects to be autonomous and to be guided by a Board. In the second phase of the project, the Government might wish to set up a small committee of representatives of the Ministries of Industry, Planning and Oil to strengthen the autonomy of the project. The Project Manager would participate continously in the discussions of the committee, and the Resident Representative and Senior Industrial Development Field Advisors could be invited to contribute. The committe would act as a steering committee rather than a board or governing body.

Development of the Bureau by the appointment of further national staff should be envisaged, once space is available, so as to support the various other work the Bureau has been doing and is likely to continue to do.

#### Library and documentation unit

As a more adequate library and documentation unit is of importance to the Bureau, it is recommended that the counterpart agency should provide the necessary facilities. UNIDO should supply the library directly with all its non-restricted publications.

#### Planning and policy

Although the previous five-year plan for economic and social development (1967-1972) was not adopted by the authorities concerned, it is hoped that the plan for 1976-1980 will be adopted and carried through after the necessary

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amendments and alterations have been made. This is important at a time when Kuwait is entering an era of overall planning.

The programme for the Ministry of Commerce and Industry (including industrial affairs) should also be implemented. The programme included 20 new investment opportunities in industry, for which 20 feasibility studies were recommended.

The plan for the development of petrochemical industries is of a particular interest. It will be implemented by the public sector for oil and basic petrochemicals; secondary and tertiary petrochemical industries (downstream operations) may be the responsibility of the joint and private sectors. The plan should be dynamic and must allow for other projects initiated during the plan period. (A number of applications for projects not included in the plan are already under consideration.)

The petrochemical sector requires advanced operation, management and marketing, know-how and technology, which should be obtained through international specialized firms, if necessary by partnership.

The building materials industry has also become very important because of the severe housing shortage facing the country. It should continue to receive increasing attention from the authorities concerned, so that more suitable building materials, such as cellular concrete and light weight bricks, can be produced.

Because of the limited area of Kuwait, and because the raw materials for the cement industry are found over a large area near the coast, it was recommended that the cement factory should be built about 100 km away, near the border with Saudi Arabia, as a joint venture with a bigger capacity to serve both countries.

Although first priority should be given to industries for which the raw materials are available locally (petrochemical and building materials, for example), importsubstitution food industries should also be encouraged. Projects would cover poultry, eggs, animal feed, dairy products, beverages and the like.

Engineering and chemical import-substitution industries have also been of importance to the Bureau; much of its work is likely to be in these fields.

#### Co-operation with Arab and developing countries

Part of Kuwait's basic strategy is to be part of the Arab world; the final aim is to have a common market. It is recommended that there should be closer co-operation with the other Gulf countries, with a view to co-ordinating industrial policies and plans.

Co-ordination is especially important in large export-oriented projects in such fields as petrochemicals, steel, aluminium, and large-scale engineering.

Co-operation with Arab countries with abundant raw materials and human resources is recommended. The aim should be to secure for Kuwait and other Arab countries adequate supplies of agricultural and animal products (wheat, rice, meat, fish) and the development of industries based on them. Co-operation is also a possible way to overcome the scarcity of labour in Kuwait and to support demand and a consumer market. The Bureau has suggested a number of projects for collaboration.

It is also recommended that there should be co-operation with the developing countries on industrial projects. The Bureau has studied a project for a wood processing complex, with an assessment of the raw materials required, that is recommended as a joint venture with Malaysia.

#### Industrial areas and factory sites

A number of industrial projects have been delayed during the last three years because industrial sites were not available at the proper time. A number of the sites were not used for the purpose for which they were allocated.

It is recommended that infrastructure for the new industrial area near should be completed as soon as possible. A new industrial area for small industries should also be planned as early as possible. The Bureau has been deeply involved in matters relating to a suitable site. There should be proper legislation to prevent the unauthorized use of sites allocated for other purposes.

In view of the new trend of centralizing the distribution of land for industrial sites with the Ministry of Commerce and Industry, the necessary organizational staff should be provided.

#### Implementation of industrial projects

It was recommended in the first (projected) five-year plan that, if industrial projects were to be carried through effectively, an industrialization institution should be created. The recommendation was repeated in the five-year plan for 1976-1980 drawn up by the Bureau, and in the Ministry's programme. The institution, with the appropriate organizational and financial resources, would be entrusted with certain industrial projects initiated by the Ministry, and should help to accelerate industrialization.

#### Assistance to existing industries

It is recommended (as was suggested in the programme for the Ministry) that the Ministry should provide assistance to the existing industriss in matters relating to production, costing and finance, and trouble-shooting in general.

#### Training

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It was found that counterparts do not wish to be nominated for fellowships financed from the project budget because of the small daily subsistance they receive during the fellowships; they prefer to be nominated under the government budget that covers certain training courses arranged by government bodies.

It is recommended that this issue should be settled finally with the authorities concerned.

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#### II. PROJECT FINDINGS

#### A. Summary of project operations

In pursuance of its objectives of assisting the authorities in formulating industrial strategies, plans and programmes, the Bureau produced reports relating to industrial policies, strategies of industrial development, and government encouragements to industrialization. (The latter include: exemption from customs duties on imported machinery and spare parts, and on raw materials for new projects and extensions of existing ones; factory sites provided nominal rents and supplied with cheap power, water and fuel; and exemption from taxes on earnings and profits.) Suggestions for providing sites for industrial projects were also submitted.

A five-year plan for industrialization was drafted and submitted to the authorities for incorporation into the country's five-year plan for economic and social development. A concise programme for the activities of the Industrial Affairs Department was drawn up and submitted to the Ministry. The programme was incorporated into the Ministry's overall plan. These documents contained the Bureau's views on industrial strategies, and the means for accomplishing the plans.

Identifying investment opportunities in industry was one of the Bureau's major activities. Twenty prefeasibility studies were made, most of them by the Bureau's international experts. Eight more are scheduled (four from UNIDO) and are likely to be completed by the end of the first phase of the project. A feasibility study on synthetic rubber was subcontracted to the Japan Gasoline Company through UNIDO.

The Bureau carried out three industrial surveys, one of which on building materials industries, was subcontracted to the Industrial Develogment Centre for Arab States (IDCAS). It was also involved in suggesting joint-venture industrial projects to be run with the Gulf and other Arab countries. It assisted with the agreements and preliminary discussions on the projects.

The staff of the Bureau spent most of their time in evaluating the licence applications and prefeasibility studies submitted by the joint sector and the entrepreneurs of the private sector, and in assisting entrepreneurs to prepare applications.

They evaluated new industrial projects and projects for the extension of existing plants. At the request of entrepreneurs, the Bureau provided assistance in preparing studies and with negotiations on contracts for industrial projects.

Training proceeded very satisfactorily. Fellowships for counterparts, on both the project and ministry budgets, were an important activity. A change of counterparts, however, reduced the effectiveness of training somewhat. The Bureau had a considerable amount of work referred to it in addition to its planned activities. This helped the Industrial Affairs Department to make up for its severe shortage of staff, and the Bureau's experts and counterparts became better aquainted with the Ministry's industrial activities. The situation was not, however, an entirely satisfactory one.

#### Overall results

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Prefeasibility studies and evaluation reports by the Bureau were submitted regularly to the Assistant Under-Secretary of the Ministry for Industrial Affairs and were presented to the Minister or the Industrial Development Committee for action. All the work of the Bureau has been positively received; most of its suggestions have been adopted.

It is therefore felt that the Bureau has achieved its objectives during the first phase of its work and has rendered the required assistance to the Ministry as an advisory organ for promoting industrialization

#### B. Assessment

#### Analysis and evaluation of inputs

Certain of the facilities required for the project were inadequate or lacking. Although the facilities concerned may have appeared to the counterpart agency to be of little importance, they are considered by the experts to be vital to the smooth running of the Bureau. The provision of secretarial, administrative and documentation staff and the appointment of a civil engineer and a draftsman would have enabled the experts and their counterparts to devote more time to their original tasks. Adequate office spa  $\pm$  and proper maintenance create a better atmosphere for effective work.

Implementation formalities and arrangements were very time consuming; shorter and simpler procedures should therefore be devised, and the authority of all parties concerned must be better defined.

One of the main problems that arose during the first phase of the project was UNDP's request early in 1976 to reduce expenditure to zero, because of UNDP's liquidity problem. Fortunately the Government stepped in with an additional contribution of \$82,000, and this eased the situation considerably.

#### Analysis and evaluation of activities

#### Policies and strategies of industrial development

In view of the objectives of the project, it was only natural that one of the main tasks of the Bureau was to assist the Ministry of Commerce and Industry in the formulation and execution of an industrial development policy, and industrial development plans and programmes. Most of the Bureau's output is submitted through the Industrial Affairs Department of the Ministry to the Industrial Development Committee, which is one of the main organs responsible for industrialization. The experts felt that the practical role of the Industrial Development Committee could be greater, especially where industrial policies and plans are concerned: the Committee could, for example, have approved the draft five-year plan for industry for 1976-1980. Institutions affecting the acceleration of industrialization should also be represented on the Industrial Development Committee so as to improve co-ordination between them and the Ministry. The institutions concerned are the Ministry of Oil, the Shuaiba authority, the Municipality, and the Industrial Bank.

The organ of the Ministry responsible for industry is the Industrial Affairs Department. According to the project document, the Department was to be reorganized, mainly because it was very short staffed. A ministerial decree was issed on 25 September 1973 reorganizing the Department but it was not put into effect. The Department continued to be very short staffed and was thus unable to work as effectively as it should have done.

The reorganization of the whole Ministry of Commerce and Industry is under consideration. New departments suggested include industrial planning and development, productivity, follow up and control, and standardization.

The Bureau drafted a five-year industrialization plan (1976-1980) in collaboration with the institutions, especially the Planning Board, and companies concerned. The total investment forecast is KD 1,294 million, KD 1,133 million for the public and joint sector and about KD 161 million for the private sector.

The plan involves 74 industrial projects for which the estimated total labour requirements are 11,009 (20<sup>d</sup> are managerial and administrative, 50% production and  $30^d$  services).

The Ministry of Electricity and Water has planned to provide the necessary power and water. Annual power requirements for utilities have been estimated at 1,950 million kilowatt hours, or almost as much as present industrial sector consumption. Annual drinking water requirements have been estimated at 10 million cubic meters and annual requirements of sea water for cooling at about 2,120 million cubic meters.

The Plan includes suggestions for providing further industrial sites, organizational structures, and training.

Although there is no established government policy for industrialization, it is generally accepted that first priority will be given to making the best and most economic use of the country's natural bil and gas resources and other, limited, resources such as building materials. The Plan envisages local investment on themical and petrochemical industries amounting to KD 1,143 million (building materials, KD 50 million; engineering and metallurgical industries, KD 77 million including a suggested aluminium smelter costing KD 45 million supported by cheap power). Because of the scarcity of labour and the abundance of capital, capital intensive projects with minimum labour requirements must take priority in planning for industrial development.

Because of the country's limited market, import-substitution industries do not absorb any appreciable amount of the investment available; so export-oriented industries using basic petrochemicals are the main target for diversifying the ountry's economy through industrialization. Despite this, quite a number of medium-sized and small industries in various sectors are attracting increasing interest.

Kuwait's limited area also makes it necessary to establish more mechanized and sophisticated industries and take special precautions to prevent pollution.

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The Bureau drafted the objectives and programme of the Ministry of Industry and Commerce for the industrial sector; the programme included prefeasibility studies for 20 new industrial projects. The establishment of an authority for implementation and follow up was suggested. Country papers submitted to industrial development conferences illustrating strategies and policies of Kuwait's industrial development were also prepared by the Bureau.

#### Identification of investment opportunities

The Bureau, using its own experts or short-term consultants, made 20 prefeasibility studies involving total investment of approximately KD 46,322,000 and a labour force of 3,257. Fourteen prefeasibility studies were made by the Bureau's experts in building materials industries (cement, sanitary equipment and wall ceramic tiles, glass containers, sheet glass, light-weight bricks and sand/cement facing bricks), chemical and petrochemical industries (tannery, calcium carbide. carbon black, and paper from paper waste), agro industries (wood processing complex), and engineering industries (liquid gas cylinders).

UNIDD short-term consultants made two feasibility studies for spare parts (pressure valve flanges, and muts and bolts, for the oil and petrochemical industries) and a feasibility study for the assessment of raw materials for an integrated woodprocessing complex.

Four prefeasibility studies were made by short-term consultants recruited by the Industrial Development Centre for Arab States (IDCAS). The studies were for new projects for the production of woollen blankets; tanning leather and tanning shoes; starch, and glucose; and tabs, water mixers, locks, padlocks and similar products.

Four more prefeasibility studies by short-term consultants were requested from UNIDO and are likely to be completed by the end of the first phase of the project. The studies relate to new industrial projects for the production of petroprotein, synthetic adhesives, glass fibre and ordinary and toilet soap. The preparation of these four studies was delayed owing to the financial situation of the project.

Four prefsasibility studies by short-term consultants from IDCAS have been commissioned for completion in the financial year 1976/77. They cover the use of slaughterhouse animal waste (raw wool, bones, blood, and intestines); the production of printing inks, carbon paper, stencil paper, pad inks and typing ribbons; the production of insecticides and pesticides (DDT); and fire extinguishers.

A feasibility study for synthetic rubber was subcontracted to the Japan Gasoline Company during the first phase of the project. It cost \$53,000. Because of the financial situation of the Bureau, it was not possible to use all the funds for subcontracting (\$108,000) on other feasibility studies. A feasibility study for a project for the production of chemicals from sea water could not be made.

The procedures for creating industrial projects based on the studies initiated by the Industrial Development and Consulting Bureau were not very clear during the

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first two years of the existence of the Bureau. Private or joint-sector companies submitted licence applications for such projects, but the applications were not exactly based on the studies made. It was only during 1976 that the Ministry of Commerce and Industry started to set up companies to act on the studies made by the Bureau. The Ministry also formed an investment company that would carry out projects for which studies are initiated by the Bureau or the Industrial Bank. Most of the investment opportunities in industry identified by the Bureau were taken up, however, and the rest are under consideration.

One way in which the Bureau identified investment opportunities in industry was by using the services of UNIDO Senior Interregional Advisers. Requests for studies relating to the prospects for petrochemical development in Kuwait and the feasibility of a project for the production of lubricating oils from used oils were made by the Ministry. The study on the prospects for petrochemical development was completed by the UNIDO Senior Interregional Adviser for fertilisers and petrochemicals; the other study is expected to be completed before the end of the first phase of the project. The Bureau has also made studies on these subjects using its own experts.

A plan for the development of the petrochemical industries in Kuwait covering the period up to 1990 was suggested and discussed with the authorities concerned in the presence of the UNIDO Interregional Adviser. This plan covered the production of basic petrochemical products and also secondary and tertiary products. It included an analysis of the world market situation and the feasibility of the products suggested. It also suggested means of realizing the projects, including technology and marketing.

The Bureau has also assisted the Ministry of Commerce and Industry, when requested in co-operation activities with the Gulf and Arab states and other developing countries. Kuwait's co-operation activities are becoming an important factor in the co-ordination of industrial development, particularly in the Gulf area, and are also a means of rendering assistance to other developing countries. Kuwait's development fund (capital \$3,400 millions), investment companies, and local enterprises are very actively engaged in co-operation work. During 1974, Kuwait spent over 7% of its GNP on rendering assistance to the developing countries. Kuwait is also a leading country in all the funds and joint venture projects created by the Unity Economic Council of the Arab States.

The Bureau has assisted by suggesting joint venture industrial projects, participating in certain discussions and negotiations, and helping to draft certain co-operation agreements with other countries. Industrial co-operation with the Arab world is vital if Kuwait is to secure its supply of materials. It also creates support for the establishment of industrial projects that need substantial markets.

A delegation constant ting of staff of the Bureau and Ministry visited the United Arab Emirates and Bahrain for fifteen days to investigate co-operation in Joint venture industrial projects in the building materials industries, with

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particular emphasis on the marble and glass industries. They met the rulers and authorities in the Emirates and the authorities in Bahrain. The delegation found that there was a strong desire for co-operation and for the establishment of joint ventures in industry, and also for the co-operation and co-ordination between the Gulf countries in other fields.

Thirty samples of limestone, marble, ornamental stones, sands, quartzite, asbestos and other minerals were collected and analysed, and their suitability was investigated. Excellent marbles and ornamental stones are found in abundance in certain other Emirates, but suitable sand for the glass industry was not found. Good raw materials for the cement and silicate-brick industries are also abundant.

It was concluded that joint ventures in the marble, cement and silicate brick industries could be established, and the glass industry could be set up in collaboration with Saudi Arabia.

#### Industrial Surveys

Staff of the Bureau made two industrial surveys at the request of the counterpart agency. One was for the printing industry and the other for the brick industry. A survey for the building materials industry was made under a subcontract from the Ministry's budget with IDCAS. It involved an expenditure of \$35,000. A team of five experts r(9 m/m) carried out the survey, which was required mainly for the future planning of the sector.

The Bureau has supervised all subcontracted activities and the work of all short-term consultants. The Bureau's experts and counterparts participated in all studies carried out and rendered all possible assistance to the consultants. The Bureau has also inspected existing industrial projects, part:cipated in arbitration of the selling prices of certain products, and assisted the Ministry in fixing the selling prices for certain products.

#### Evaluation of licence applications

The evaluation of licence applications was the major task of the experts and counterparts and was a principal function of the Industrial Development Committee. According to industrial legislation, projects submitted to the Ministry must be evaluated within sixty days from receipt of the complete licence applications.

The Bureau has issued a simplified guide in Arabic for local entrepreneurs and has reviewed and reprinted all forms used in connection with licence applications. The Bureau has also been helping entrepreneurs in submitting and preparing applications.

Feasibility of industrial projects is judged after market analyses and technical, administrative, economic and financial studies have been made. The Bureau has evaluated 122 projects for new industrial products. Of these, 101 were approved and licensed. They involved an investment of about KD 117 million and a labour requirement of 7,500 personnel. They do not include the iron and steel project

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rejected by the Council of Ministers (investment KD 35.8 million). Eight projects are still under consideration. (investment about KD 98 million, and labour requirements 1,600), and 13 were found to be not feasible. Evaluation also involved numerous extensions of existing industries.

The Bureau has also evaluated a few non-industrial projects - one for agriculture and three for truck transport and hire.

The Ministry of Finance and Oil (subsequently the Ministry of Oil) always had the final say on decisions concerning oil and petrochemical industries. All projects evaluated by the Bureau concerning this industry had to be referred to those authorities. Such projects included asphalt, lubricating oil, carbon black, normal paraffins, and synthetic rubber. It was also agreed between the Ministry of Commerce and Industry and the Ministry of Oil that all feasibility studies initiated by the Pureau should be submitted to the Ministry of Oil for consideration.

Policies on oil and its industrialization are the concern of the High Council for Petroleum Affairs, under the chairmanship of the Prime Minister. This council is composed of six ministers, including the Minister for Commerce and Industry. The totally government-owned oil sector is responsible for everything concerned with oil and all major industries based on oil or gas. The Industrial Development and Consulting Bureau is not likely to participate in projects run by the public sector. However, small and medium-sized projects based on gas or oil that private firms want to build will be handled in the same way as other industrial projects by licensing through the Industrial Development Committee, but only after consultations with the Ministry of Oil.

A project for the production of iron and steel by direct reduction (investment KD 35.8 million) was extensively discussed by the Planning Board and the Ministry of Finance and finally rejected by the Council of Ministers. A project for the production of aluminium (investment KD 44.5 million) was referred to the Planning Board, where divergent views were expressed, and is still under consideration by the Industrial Development Committee.

The Industrial Bank, which was formed during 1975 with a capital of KD 10 million and secured a government loan of KD 100 million at 3% interest, is playing an increasingly important role in financing industrial projects evaluated by the Bureau and licensed by the Industrial Development Committee. It offers loans at about 5% interest; during its first year of operation, 17 projects, costing KD 30 million, were partly financed by leans from the Bank totalling KD 15 million. During 1976, projects costing altogether between KD 120 and KD 150 million will be financed by the Bank with loans totalling about KD 60 million. The Bank has initiated four investment studies for the production of hydrazine, desalination equipment, glass fibre and paper. The studies are being evaluated by the Bureau.

#### Factory sites

According to industrial legislation, the owner of any industrial firm complying with the law may apply for the allocation of a plot of land; applications are submitted to the authorities responsible for the allocation of land after the agreement of the Minister of Commerce and Industry has been obtained.

Evaluation reports of industrial projects include land requirements for the project, including possible extension. Recommendations for licensing feasible industrial projects also include the allocation of the required site areas, which should be handed over only after the letter of credit for the machinery has been opened and on condition that the land is used for the project.

As land is offered at a nominal rent of 50 fils/ $m^2$  at the Shuaiba Industrial Area and 3 fils in other industrial areas, applicants usually exaggerate their land requirements. Many plots of land are not used for the purpose for which they were allocated, and owners can in practice dispose of such land irregularly.

"he Bureau's experts and counterparts often have to evaluate unjustified land applications, and this consumes a lot of their time - a situation that has to be remedied.

Many licensed industrial projects were delayed because the required plots of lands were not available at the proper time.

#### Execution of projects

The Industrial Affairs Department is the part of the Ministry concerned with the follow-up of the execution of industrial projects. The Bureau assists with both execution and follow-up.

When a licence is issued for projects, it is usually on condition that letters of credit for the machinery and equipment are opened within six months from the issue of the licence, and the owner is supposed to keep the Ministry informed of the progress of the project. The conditions are not always adhered to, however. The Industrial Affairs Department was short staffed, there were no proper procedures for licensing, and the entrepreneurs were not always prompt.

There were many factors preventing the speedy completion of industrial projects; industrial sites were not available at the proper time, there was no specialized organization responsible for the adoption and execution of projects, experienced labour was not available, and some of the entrepreneurs were not serious once they had obtained the required licenses. As a result, the rate at which projects were completed fell short of what the ambition of promoting development required - a situation that should naturally be remedied. The Bureau submitted useful recommendations on the various issues involved.

The Bureau has assisted entrepreneurs, on request, in discussions with consulting engineering firms, in the evaluation of bids, and in negotiations with

machinery suppliers to draw up agreements. The staff of the Bureau have reported on all industrial projects completed after inspection and before the final licences are issued; in certain cases they made useful suggestione.

#### Training

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One important objective of the project was to train counterparts to carry out the Bureau's work in the future. Training in the work done by the project manager and the international experts proceeded satisfactorily.

Training abroad was also properly organized and carried out but the original plan could not be fulfilled, because counterparts were changed during the project. and some counterparts were not appointed. Only one of the originally appointed counterparts (the mechanical engineer) has remained with the project. Two others left the Bureau after almost two years, and one after only seven months. Consequently, the three present counterparts are comparatively new to the project. Arrangements have been made for some training abroad in 1976 on the Ministry's budget.

Training abroad consisted of in-plant group training, training in the evaluation of industrial projects and training in carrying out feasibility studies.

Measures must be taken to encourage counterparts to stay. The problem of qualified Kuwaiti personnel leaving government work to enter private enterprise or take up more remunerative jobs must be solved.

#### Other project activities

Other activities of the Industrial Development and Consulting Bureau included representation of the Ministry in meetings and committees with other government institutions (Planning Board, Ministry of Labour, Municipality, Ministry of Public Works, and other government and private institutions). The national counterpart personnel are usually delegated to attend meeting, but the international experts were also delegated as advicers in certain instances.

The Bureau represents the Ministry at conferences and seminars on industrial development and labour. The national director of the Bureau represents the Government of Kuwait in international conferences (UNCTAD, UNIDO and European-Arab dialogue). He also attends UNIDO and IDCAS board meetings and working groups.

The Bureau co-operates with related institutions such as the Planning Board, Industrial Bank, investment companies, the Arab Institute for Social and Economic Development, and the Engineering Society.

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#### Annex I

#### FELLOWSHIPS AWARDED UNDER PROJECT BUDGET

Recipient:	Saad Akasha, chemical engineer	
Subject:	(a) Petrochemical industries	(b) Petrochemicals project analysis
Place:	Bucharest, Romania	United States
Duration:	From 10 September 1973 to	From 1 April 1975 to 30 June 1975
	16 November 1973	
Recipient:	Najeeb Al Foraih, industrial en	ngineer
Subject:	(a) Planning and evaluation of industrial projects	(b) Industrialization (preparation and evaluation of projects)
Place:	Sofia, Bulgaria	The Hague, Netherlands
Duration:	From 23 June 1975 to	From 14 July 1975 to 23 August 1975
	11 July 1975	
Recipient:	Ghanima Yaakoob, documentation	officer
Subject:	Library work	
Place:	IDCAS, Egypt	
Duret on:	From 1 February 1975 to 1 May	1975

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#### Annex II

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#### FELLOWSHIPS AWARDED UNDER COVERNMENT BUDGET

Recipient:	Iss Al Mazidi, national director of Bureau
Subject:	Assessment of raw materials for wood processing complex
Place:	Fast, South-Fast and West African countries
Duration:	From 22 June 1975 to 24 July 1975
Recipient:	Najeeb Al Foraih, industrial engineer
Subject:	(a) Evaluation of industrial projects (b) Assessment of raw materials for wood processing complex
Place:	Berlin, West Germany Foundation for Fast and South-Fast Asian Countries
	International Development, Berlin,
	Federal Republic of Germany
Duration:	From 12 July 1976 to 30 July 1976 From 15 April 1975 to 14 May 1975
Recipient:	Jassem Mohamed Abdel Malek, industrial engineer
Subject:	Preparation and evaluation of industrial projects
Place:	The Hague, Netherlands
Duration:	From 12 July 1976 to 21 August 1976

Annex III

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FEASIBILITY STUDIES INITIATED BY THE BUREAU (1272-1975)

Project	Main products	Total investment (KD)	Paid-up capital (KD)	Annual production	Labour require- ments	Annual net profit (KD)	Jross added value (KD)
Cement from local raw materials,	Portland cement	11 300 000	4 000 000	KD 700 000	220	888 <b>200</b>	5 421 000
Sheet glass manufacture	Sheet glass	5 200 000	3 000 000	35 000 tons	319	646 - 6 <b>0</b> 0	1 740 000
Glass containers and glassware	Glass containers and glassware	2 550 000	1 000 000	12 000 tons	134	213 000	578 000
Crystal and semi-crystal glass	Semi-crystal and crystal glass vases and articles	379 000	200 000	300 tons	83	85 <b>000</b>	271 000
Ceramic wall tiles and sanitary equipment	Wall tiles and sanitary equipment	2 500 000	1 500 000	<pre>2 000 tons sanitary and 8 000 tons wall tiles</pre>	264	179 000	775 000
Tanned leather	Tanned leather	2003 SOO	298 200	550 000 sheep and goat skins and 20 000 hides			
Carbon black Butane gas cylinders Wood-processing complex	Furnace carbon black Gas cylinders (26.21) Sawn wood veneers, pl wood and chipboard	k     1     96.000       1)     486     000       ply-     500     000	1 300 000 496 000 2 000 000	14 000 tons KD 100 000 70 000 m <sup>3</sup> sawn wood and 40 000 m <sup>3</sup> plywood 2 1 000 000 m <sup>3</sup>	67 73	273 <b>800</b> 51 000	555 5 <b>00</b> 165 400
Cellular concrete	Light-weight cellular blocks	1 336 000	500 000	C E 000 Sr	83	174 000	310 000
Cellular concrete	Light-weight cellular blocks	1 106 000	200 000	60 000 π <sup>3</sup>	53	<b>000</b> 66	223 500

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Project	Main products	Total investment (KD)	Paid-up capital (KD)	Annual production	Labour require- ments	Annual net profit (KD)	Gross added value (KD)
<b>Calcium carbide</b>	Calcium carbide	1 20 000	120 000	1 200 tons	14	10 000	39 400
Paper from paper waste	Craft and card- board paper	1 050 000	600 000	10 000 tons	121	223 000	527 000
Leather tanning and tanned leather manufacture	Tanned leather and shoes	845 000	845 000	100 000 sheep skins, 25 000 hides,375 000 pairs of shoes	210	274 900	
Woollen blankets	Woollen blankets for limited income families and first- grade blankets	3 062 100	I	376 000 for li- mited income families and 125 000 first- grade	432	264 887	ı
Locks, hangers, tabs etc.	Locks and tabs, water mixers etc.	1 276 200	I	1 800 000 locks, 72 000 dozen (250 tons) tabs etc.	, 425	221 000	666 <b>000</b>
Starch and glucose	Starch and glucose	4 000 000	5 000	<pre>2 100 tons starch, 2 400 tons dextrime, 7 200 tons glu- cose, 1 170 tons embryo, 900 tons concentrate, 2 700 tons ani- mal feed, 990 tons gillotine</pre>	136 136	612 833	1 349 000
Sand cement facing bricks	Facing bricks	1 250 000	650 000	50 million stan- dard bricks	- 26	120 650	428 750
Spare parts for oil and petrochemical industries	<b>Valves, flang</b> es, nuts and bolts etc.		feasible an	Partly feasible and still under consideration.	nsiderati	·uo	
Assessment of raw materials for an integrated wood-processing plant	Sawn wood, veneer and plywood		Project found feasible under consideration.	<b>N</b>	venture w	a joint venture with Malaysia and	a and

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Annex IV

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LIST OF EVALUATED PROJECTS FOR NEW INDUSTRIAL PRODUCTS APPROVED BY THE INDUSTRIAL DEVELOPMENT COMMITTEE (1973-1976)

Type of project	Major products	Total investment (KD)	Arnual production	Total labour rejuire-	Arnu <b>a</b> l profits (KD)	Jross value added (KD)
Kuwait Cement Co.,Cement from its raw materials in existing company	Portland cement	16 537 000	700 000 tons	<b>30</b> 6	2 237 000	5 314 000
Wood processing complex	Various kinds of sawn wooû, veneer, plywood and chipboard	4 500 000	70 000 m <sup>3</sup> sawn wood, 1 mil- lion m <sup>2</sup> of veneer, 40 000 m <sup>3</sup> of plywood and chipboard	- 500	717 000	1 800 000
Sugar refinery	Refined sugar	2 000 000	30 000 tons su <b>gar</b> , 2 000 tons syrup	122	144 500	396 <b>000</b>
Artificial gravel from lime- stone and sand	Artificial gravel	1 155 000	300 000 <sup>m 3</sup>	<u>8</u>	80 000	279 <b>000</b>
Metal office furniture	Office desks, files, cabinets, shelves etc	500 000	25 000 tons	85	204 000	504 000
Prefabricated housing units	Cast one-piece units (rooms, garages etc.)	625 000	1 500 units	86	82 <b>000</b>	204 900
Carbon dioxide and dry-ice	Liquified CO,	57 000	250 tons	9	2 150	12 350
Prestressed hollow-core slabs (Prefabricated Housing Co.)	Slabs 100-120 cm wide in various lengths	123 000	130 000 m <sup>2</sup>	27	68 <b>000</b>	
PVC pipes and fittings	PVC pipes up to 50 mm diameter	164 000	500 tons	25	19 000	58 3 <b>00</b>
Gulf dairy and soft drinks	Dairy products	66 <b>100</b>	20 000 kg ice cream,2 000 kg cheese, 300 000 cases yoghurt	17	14 400	30 800
Electric lamp assembly plant	Lighting lamps	75 000	2.4 million units	67	000 L	6 400
Car assembly plant	28-32 ton trucks, 1600 cc saloon cars	4 250 000	800 trucks, 1 500 saloon cars	208	265 000	7.88 8 <b>00</b>

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Type of project	Mæjor products	Total investment (KD)	Annual production	Total labour require- ments	Annuæl profits (KD)	Gross v ilue added (KD)
Formica	Standard sheets	395 000	250 000 sheets, 418 feet long, thickness 0.75-1.5 mm	51	005 61	188 300
Tent manufacture	<b>Tents of different</b> sizes	100 000	6 000 tents	86	41 000	89 67 <b>0</b>
Manilla and ordinary envelopes	Envelopes	128 000	40 million envelopes	26	27 000	62 620
Cheese production	Cheese	20 000	75 tons	7	14 000	
Wasseet Commercial Co.,Soft drinks	Traubi soft drinks	248 000	950 000 cases	46	175 000	241 700
Melamine Manufacturing Co.	<b>Melamine</b>	7 198 000	15 000 tons	73	293 400	1 258 000
Iron and steel <sup>a</sup> /	Steel blocks and construction steel	35 800 000	300 000 tons	854	2 844 000	7 916 000
Corrugated cardboard boxes	Cardboard boxes	308 600	3 000 tons	23	83 8 <b>00</b>	137 800
Lubricating oils	Lubricating oil	879 100	5 000 tons	24	29 600	164 300
Cake production	Swiss rolls etc.	286 3 <b>00</b>	600 000 cart ons	25	190 966	191 760
Steel barrels	200 l steel barrels for asphalt	643 000	300 000 barrels	54	287 100	407 790
Mechanical seals	Mechanical seals and packing couplings	1 53 500	37 000 units	<b>3 2</b>	17 000	41 500
Air conditioning and cooling	Central and window units	2 500 000	30 000 window units, 5 000 tons central units, 7 000 water coolers and heaters	412	193 <b>800</b>	798 000
Continuous paper iorms for computers	Continuous forms aud envelopes	141 000	55 million pieces	37	25 000	83 400
Leather goods and leather shoes	Shoes and cases	68 8 <b>00</b>	16 400 pairs of shoes, 2 200 brief cases	õ	12 400	4 800
Manufacture of plastic straws	Plastic straws	20 000	300 000 boxes	9	3 200	

a/ Rejected by Council of Ministers.

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Type of Froject	Major products	Total investment (KD)	Annual production	Total labour require- ments	Annual profits (KD)	Jross value added (KD)
Fabricated steel buildings	Constructional steel 3 elements for buildings	3 665 <b>000</b> 85	SUS 9 million	106	455 <b>000</b>	1 040 000
Cold stores and ice boxes	Ice blocks <b>an</b> d cooling stores	100 000	10 000 ice blocks, $600 \text{ m}^3$ cooling stores	8	10 000	42 600
Vinyl floor tiles	Plastic tiles	144 000	300 000 m <sup>2</sup>	•	56 000	96 225
Acbestos vinyl tiles	Plastic tiles	177 500	200 000 m <sup>2</sup>	29	27 000	92 135
Woollen <b>blankets</b>	Pure wool and mixed blankets	1 000 000	400 000 blankets	69	97 500	
Welding electrodes	Carbon steel, mild steel, stainless, and cast iron electrodes	243 000 d	1 000 tons	37	34 200	95 300
Flexible air ducts	Aluminium flexible tubes for air conditioning	112 000	150 000 m	13	16 400	45 000
Fruit puice concentrate	Bottled concentrated juice, 25 oz	120 000	100 000 cases, 12 bottles each	71	16 500	38 <b>50C</b>
Mineral oxides for paints	Paint oxides	60 000	600 tons	18	38 000	<b>0</b> 56 02
Ty re s	Tyres for auco- mobiles	9 469 000	13 000 tons	533	1 306 000	3 140 600
Steel rolling mill	Reinforcement steel b <b>ar</b> s	2 610 000	30 000 tons per shift	54	579 000	943 <b>000</b>
Gement blocks	Blocks of various sizes	350 000	7 million blocks	27	<u>5</u> 0 000	201 530
Poultry and chicken feed	Eggs and chicken feed	6 000 000	85 million eggs, 50 000 tons chicken feed			
White cheese	Cheese	18 600	72 tons	2	1 800	
Hot asphalt	Asphalt mixed with gravel	256 000	150 000 m <sup>3</sup>	8	56 000	165 000

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Type of project	Major products	Total investment (KD)	Annual production r	Total labour require- ments	Amu <b>a</b> l profits (KD)	Jre- value added (KT)
Toilet paper	Toilet paper	87 100 200 000	4 million rolls 20 000 magazines weeklv	18 5 5	41 100	100 700
Printing press	Newspaper, magazines and pamphlets					
Boats and mobile houses	Reinforced plastic boats	108 <b>000</b>	200 units	21	55 <b>300</b>	002
Recording tape assembly	Recording cassets	78 000	6 million pieces	÷.	15 000	30 000
<b>E</b> lectrical components	Electrical components	200 000	KD 534 000	73	33 890	
Notebooks	Accounting books	65 000	200 tons	15	6 400	
Aluminium false ceilings	False ceilings	72 700	40 000 m <sup>3</sup>	18	12 000	
Egg plates	Egg plates	175 000	4 million pieces	38	26 <b>300</b>	
Travelling suitcases	Suitcases	303 000	166 000 units	61	65 600	46 200
Notebooks	School and busi- ness notebooks	66 000	300 tons	15	21 600	49 <b>00</b> 0
Ready-made clothes	Finished clothes	58 700	30 000 pieces	35	15 290	43 440
Suitcases	Suitcases	38 000	50 000	17	4 900	
Artificial marble	Marble	729 000	250 000 m <sup>2</sup>	26	135 500	249 000
Cement blocks and tiles	Blocks and tiles	438 000	3.2 million cement blocks, 7.6 million cement tiles	5	145 400	182 86 <b>0</b>
Cement blocks	Cement blocks	133 500	<pre>4.5 million cement blocks, 7.6 million cement tiles</pre>	16	79 200	100 500
Ceramic wall tiles	Wall tiles	1 128 000	360 000 a <sup>-2</sup>	8	140 000	376 850
Ceramic sanitary equipment	Sanitary equipment	1 345 000	2 000 tons	118	112 000	357 000
Real Estate and Industries Co., steel mats	Reinforcing steel m <b>a</b> ts	1 400 000	12 000 tons	4	281 000	4 <i>9</i> 4 000
Preparation of reinforcing	Reinforcing steel	386 000	10 000 tons	33	32 000	108 700
steel bars Prefabricated houses	bars Prefabricated <b>units</b>	3 500 000	30 000 m <sup>3</sup>	100	590 000	1 290 000

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Type of project	Major products	Total investment (KD)	Anrual Freduction	Total labour require- ments	Ann <b>ua</b> l Frofit <i>z</i> (KD)	Jross valse add 1 (KD)
Hydroponic vegetable growing	Vegetables	156 500	230 tons tonatoes, 350 tons cucumbers	÷	_1_200	66 000
Comment blocks	Cement blocks	96 000	5.4 million fieces	۲ ۲	00;	10 <sup>5</sup> 100
Airmail and manilla envelopes	Envelopes and files	103 <b>500</b>	13.4 million airmail enve- lopes, 7.6 million enve- lopes, 1.0 million ordi- nary files	0	E C C C C C C C C C C C C C C C C C C C	
Liguie-cas cylinders	Butane gas cylinders	486 <b>000</b>	100 000 piezes	<u>~</u>	51 <b>0</b> 00	165 100
Steel wire	Steel wire, 0.88 mm and 2.4 mm	000 00	960 tons 0.88 mm nca- galvanized and 968 tons 2.4 mm galvanized	21	25 800	123 850
Cer it blocks	Cement blocks of different sizes	:53 000	10 million pieces	8	53 260	118 300
Snack production	Potato snacks	35 <b>500</b>	50 tons	œ	31 271	59 <b>800</b>
Mosaic tiles	Tiles of different sizes	34 + <b>300</b>	5.4 million tiles	17	130 000	218 850
Sanitary equipment of fibre slass	Baths, basins etc.	547 000	12 000 units (basin and washing units)	44	34 800	208 000
Prefabricated buildings	Concrete prefabri- cated elements	2 175 500	90 000 m <sup>3</sup>	100	775 645	1 319 820
iight-weight sand-lime blocks	Cellular light- weight blocks	2 465 v00	145 000 pieces	120	375 000	798 000
Mosaic tiles	Tiles	1 040 000	16 million tiles of variqus sizes	39	357 000	596 715
Children's tovs	Plastic toys	206 500	660 000 rieces	37	66 7 <b>0</b> 0	·63 200
Prefabricated slabs	Prestressed columns and slabs	2 570 000	100 000 - 3	107	256 <b>000</b>	
Cement blocks	Cement blocks	105 000	2.7 million blocks	<del>ر</del> . ۱	000	120 120
Plastic articles	Ropes, profiled hose	361 000	2 000 tons	28	1 41 000	1970 OOO
Production of clips, needle pins etc.	Clips, needle pins etc.	5 000	14 tons	m	500	

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Type of project	Major products	Total investment (KD)	Annual production	Total labour require- ments	Annual profits (KD)	ross value added (KD)
stone doors	Doors and profiles	470 000	40 000 doors	35	26 0 <b>0</b> 0	161 000
	ဖမ္မ	5 000 000	1	300	I	I
	Ship repair	<b>000 000</b> 6	-	082	I	I
Atesity and Atesity	Fences	78 000	300 000 m <sup>2</sup>	£	19 700	42 300
	Goods transport	3 125 000	137 200 tons	283	367 000	I
Truck transport	Goods tr <b>a</b> nsport	2 300 000	112 000 tons	280	334 000	I
las cookers	Cookers with elec- tric stoves	1 383 000	25 000 units	148	415 750	
Adhesives	Adhesives	181 500	1 000 tons	ଟ୍ଷ	82 200	138 000
Readv-made clothes	Clothes	246 0 <b>0</b> 0	180 000 pieces	49	136 000	218 530
	Mosaic tiles	125 000	2.3 million tiles	19	64 000	119 400
Assembly of suitch boards	Switch boards	123 000	KD 146 000	24	13 000	59 425
Alteriate of creation control Alteriations	Windows and doors	87 000	7 500 pieces	16	17 600	58 600
Nursing bottles	Nursing bottles	48 000	1 million bottles	10	36 000	71 000
rement blocks	Cement blocks	312 000	5.5 million blocks	17	58 000	146 300
Alimin mirinimus	Aluminium windows	75 000	9 000 pieces	12	32 000	62 510
Daner tissile	Paper tissue	484 100	720 tons	29	161 700	
Plastic articles	Spacers, flooring mats and house ware	192 000	1 750 000 spacers, 180 000 mats, 300 000 pieces house	56	42 000	156 000
Automotive <b>bodies</b>	Automotive chassis	1 400 000	150 tipper, 125 v <b>an</b> , 450 cargo, 100 trailer, 175 semi-trailer	122	195 000	588 000
Automotive <b>bodies</b>	Automotive bodies	1 215 000	<pre>1 000 tipper, 300 water tanker, 80 trailer</pre>	241	212 000	838 000
Automotive bodies	Automotive bodies	1 198 000	1 275 tipper, 75 water tanker, 155 trailer, 50 bus	114	825 000	1 107 000
Assembly of switch boards	Switch boards	210 000	2 000 boards	49	64 700	148 000
Spark plues	Spark plugs	312 500	2 400 000 pieces	30	95 000	

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# EVALUATED PROJECTS STILL UNDER CONSIDERATION

Type of project	Major products	Total investment (KD)	Annual production	Total labour require- ments	Annual profits (KD)	Gross value added (KD)
Aluminium smelter	Aluminium blocks and billets	44 500 000	120 000 tons	955	1 004 000 11 140 000	1 140 000
Pharmaceuticals and cosmetics	Tablets, capsules, drops, mirtures and ointments	1 340 000	50 million tablets, 15 mil- 89 lion capsules, 3 million drops and mixtures, 1.8 mil- lion ointments, 145 000 powders	- 89 1- wders	191 400	454 875
Polys <b>an</b> d pipes	Pipes of various diameters	1 95- 110	100 km	37	165 537	679 745
Paraffin oil	Paraffin oil	40 400 CD0	500 000	172	5 500 000	9 256 000
Paper from paper waste	Craft paper and cardboard	1 050 000	10 000 tons	121	223 000	527 000
Synthetic rubber Aluminium extruder	Synthetic rubber Aluminium profiles	3 306 500 1 828 000	42 000 tons 2 000 tons	96	791 000	1 303 120
Prefabricated houses	<b>Prefa</b> bricated elements	3 816 000	2 600 prestressed slabs, walls, stair cases	192		

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#### Annex VI PROJECTS BEING EVALUATED

production of chemicals for water and oil treatment Production of batteries Production of carbon black Production of hydrazine Production of fibre glass Production of chemicals Production of synthetic glues Production of pure hydrogen Production of suitcases Production of leather products Production of brushes and brooms Fight projects for the production of cement blocks Production of carpets Production of files Production of aluminium doors and windows Production of prefabricated houses Production of cement tiles Production of sea water desalination equipment Production of mobile diesel engines (chassis and framework) Production of electronic chips and assembly of electronic calculating machines Production of paper from paper waste and pulp Production of fibre-glass plastic pipes Production of taps, water mixers and similar articles Production of lighting lamps of various kinds

#### Annex VII

#### IMPORTANT TAPERS AND REPORTS PRODUCED DURING THE PROJECT

A paper (in Arabic) on the strategy and objectives of industry in Kuwait, presented to the "hird Industrial Development Conference held in Tripoli, April 1974.

Draft five-year plan for industry (in Arabic) for 1976-1980 in Kuwait, which was incorporated into the draft five-year plan for social and economic development in Kuwait.

A paper (in Arabic) on industrial development in Kuwait, presented in June 1976 to a seminar held in Alexandria on industrial co-ordination between Arab countries, organized by the Foonomic Unity Council of the Arab League.

A study (in Arabic) prepared as part of the background paper made by the Ministry of Social Affairs and Labour, submitted to the Second Conference on the development of labour in industry, held in Baghdad, December 1976.

A paper (in Arabic) on industry in Kuwait, presented to the Conference for co-operation in industry between the Gulf countries, held in Riyad, Saudi Arabia, March 1976.

Peport (in Arabic) on the exemption of machinery spare parts and raw materials from customs duty for industrial firms.

Report (in Arabic) on the implementation of industrial projects.

Report (in Arabic) on the sand-lime brick industry.

Report (in Arabic) on building materials in industry.

Report (in Arabic) on a joint venture in the cement industry in the United States.

Report (in Arabic) on the advantages of establishing a direct reduction steel plant.

Report (in Arabic) on an offer made by a French firm for feasibility studies concerning joint ventures between Kuwait, Somalia, Sudan and Mauritania for agriculture development, wheat, rice, meat and agro-industries.

Report (in Arabic) on the utilization of natural gas.

Report (in Arabic) for collaboration with the United Arab Emirates and Bahrain in certain joint-venture industries.

About 150 evaluation reports (in Arabic) for industrial projects, extensions and factory sites.

Report (in English) on a petrochemical complex in Kuwait.

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"wo reports (in Fnglish) on the prospects for petrochemical development in Kuwait.

A report (in English) on the production of lubricants from used lubricating oils.

Report (in Figlish) on the assessment of raw materials for an integrated woodprocessing complex.

Heport (in English) on the production of certain spare parts for 10 oil and petroleum industries.



## 79.01.16