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P.P. KUCZYNSKI

COMMODITIES
September 1971 - February 1972
(2)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM Re Consultants

TO: Mr. O. T. W. Price DATE: February 25, 1972

FROM: Andrew C. Huang

SUBJECT: Back-to-office report on trip to New York City and Cambridge, Massachusetts, February 13-16, 1972

1. I visited New York City and Cambridge, Massachusetts, between February 13 and 16, 1972, in search of suitable alternative aluminum consultants to undertake an ad hoc report on the outlook of the world bauxite/aluminum industry. I contacted the following three consulting firms with special knowledge of aluminum:

In New York City:

Stewart R. Spector, Senior Analyst, Oppenheimer and Co.

In Cambridge, Massachusetts:

James C. Burrows, Senior Consultant; Thomas A. Domencich, Vice President; and Gerald Kraft, President, Charles River Associates, Inc.; and

Auguste E. Rimpel, Jr., Senior Consultant, Economic Development Section, International Operating Group, Arthur D. Little, Inc.

2. During the discussions, I mentioned that the Bank is exploring the possibility of engaging a suitable consulting firm to do a study on the world bauxite/aluminum industry. One of the leading objectives of the report is an assessment of the competitive strength of the three traditional bauxite producers in the Caribbean, i. e., Guyana, Jamaica and Surinam vis-a-vis such new producers as Australia and Guinea. I further indicated that since timing is of the greatest importance, the proposed study perhaps could be undertaken in two different ways, implying a choice between (a) a comprehensive, in-depth study on the world bauxite/aluminum industry with special emphasis on the three Caribbean producers mentioned above based on the outline shown in Appendix A (attached) or as an alternative, (b) a pilot study centered on the three countries in question based on the terms of reference shown in Appendices B and B-1 (attached).

3. In response to my proposal, all three firms mentioned that they are fully qualified, in terms of expertise, to undertake the study we need and would be interested in such an assignment. Meanwhile, in support of their respective professional competence and experience in carrying out assignments of this nature, copies of the following publications were made available to me:

(a) "Aluminum Industry, 1970-71, Survey of Free World Primary Aluminum Capacity, 1970-75", by S. R. Spector;

(b) "An Economic Analysis of the Aluminum Industry", prepared in 1971 for the U.S. Government, by Charles River Associates, Inc.; and

(c) Table of Contents of "Aluminum Industry Outlook to 1980", a report prepared by A. D. Little, Inc.

4. At the end of the discussion I left with each firm a copy of the outline of the proposed study, namely, Appendices A, B and B-1, for their information and comments, and requested that they furnish us with separate detailed descriptions of the two proposed studies (comprehensive and pilot) as soon as possible; the replies should indicate:

(a) A suggested outline of contents;

(b) The starting and completion dates;

(c) The costs involved; and

(d) The name or names of specialists primarily responsible for the assignment, together with some relevant information on their academic and professional backgrounds.

5. In the cases of Mr. Spector (Oppenheimer and Co.) and Charles River Associates, a reply may be forthcoming before the end of February 1972, and in the case of A. D. Little, Inc., a reply is promised by mid-March 1972.

Attachments

cc: Messrs. Stevenson, Berrie, Chardon, Kuczynski and Richter
Miss Noel

A Study on the World Bauxite Industry with Special Reference to Jamaica/Guyana/Surinam

1. It is envisaged that the contemplated study will concentrate on surveying the competitive advantages offered by each of the major countries to the concessionary companies by reason of the quality of their resources, conditions of production and the present terms of the government-company agreements. The study will then consider where pressures for adjustments in such agreements may arise and the probable implications. The comparisons will cover such factors as ore qualities in relation to world demand, current and prospective costs of production of bauxite/alumina, the structure of royalties, taxation, transportation costs, etc.

2. The study should examine in detail the competitive position of leading exporting countries, including Jamaica, Guyana, Surinam, Australia, Guinea, Ghana, Yugoslavia and Greece, vis-a-vis the concessionaire producers and each other in their drive to broaden their respective shares of the world export market and/or to increase their revenues.

3. One possible approach for the evaluation of the competitive position may be made in terms of:

(a) The average alumina and silica contents of the bauxite ore;

(b) The production costs of bauxite/alumina;

(c) The f.o.b. price structure of bauxite in 1960-70 (dollars per long ton);

(d) The c.i.f. bauxite price structure of leading producing countries with respect to the United States East Coast, Northwest Europe and Japan in 1960-70 with breakdown of f.o.b. and freight costs; and

(e) The pattern of royalty rates and taxation governing bauxite/alumina in leading producing countries with special emphasis on the Caribbean area, Guinea and Australia.

4. The study should include, if feasible, an assessment of the economics or viability of aluminum production in bauxite producing countries.

Appendix B

General Remarks on the Proposed Bauxite Study

Company - Host Country Problems and Prospects in Bauxite

1. The study is intended as an initial step in meeting the request of the Central America and Caribbean Department. Its purposes include providing a basis for evaluating the probable course of future relations between government and concessionary companies in the major producing countries and helping to project trends in future investment and in bauxite/alumina revenues in Jamaica, Guyana and other countries. IFC is also interested in the study in connection with its consideration of a bauxite-alumina project in Ghana.

2. It is envisaged that the present study will concentrate on surveying the competitive advantages offered by each of the major countries to the concessionary companies by reason of the quality of their resources, conditions of production and the present terms of the government-company agreements. The study will then consider where pressures for adjustments in such agreements may arise and the probable implications. The comparisons will cover such factors as ore qualities in relation to world demand, current and prospective costs of production of bauxite/alumina, the structure of royalties, transportation costs, etc.

Terms of Reference - Study on the Bauxite Industries of Jamaica, Guyana and Surinam

1. As we have pointed out during various discussions between our Department and yours, we attach great importance to a study that will assess to which extent the Governments of Jamaica, Guyana and Surinam are able to increase their share in the benefits generated in the bauxite-based sector.

2. The study should provide the following assessments:

(a) Position and prospects of the bauxite-alumina producers in Jamaica, Guyana and Surinam in comparison to that of major competing countries;

(b) Relationships between the Governments of the three countries and the aluminum companies in comparison to arrangements in major competing countries; means and scope left to increase, within the present institutional framework, the contribution of bauxite-based operations to the countries' foreign exchange earnings and fiscal revenues, to the development of linkages and to employment generation; and economic feasibility of joint ventures and nationalization as alternatives to the present arrangements; and

(c) In particular, the state-run industry in Guyana should be assessed regarding its financial viability, particularly against the problem of selling its products in oligopolistic markets.

3. To achieve the objectives of the study, the following information base and analysis would be necessary:

(a) Supply and investment. Bauxite deposits and mining capacities; likely competition through bauxite substitutes; existing and planned alumina capacities; existing and planned aluminum capacities (Surinam) and the feasibility of aluminum production in Jamaica and Guyana.

(b) Costs. Unit costs of operations and average total unit costs in comparison to operations in major competing countries, in particular costs of production, of basic inputs, and transport costs.

(c) Returns on total investment; and

(d) Analysis of companies' and governments' policies:

Companies: criteria applied in negotiations with governments; decisions taken on investment, production, financing and profit retention; degree of autonomy of local subsidiaries;

Government: criteria applied regarding concessions, royalties, taxation, volume of production and product mix; and

User Countries: trade policy on bauxite, alumina aluminum and aluminum products.

4. The assessment of future relationships between companies and governments, to be carried out against the background of the long-term development of the aluminum world market, would include:

(a) Expansion plans of companies in the three countries in the context of their global expansions plans; and

(b) Alternatives for government action:

- increase in taxation, combined with partial reinvestment of profits in sectors of the national economies other than mining.

- joint ventures with or without ulterior full nationalization.

- nationalization with or without service contracts; joint sales organization and eventually, joint production ventures among the three countries.

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

Re Commodities

TO: Mr. Robert S. McNamara **DATE:** February 11, 1972

FROM: Hollis B. Chenery

SUBJECT: Prospects for OPEC-type Actions

1. In response to your request of December 13, 1971, I submit the attached paper entitled What are the Opportunities for Raising LDC's Earnings from Exports of Non-Fuel Minerals through OPEC-type Cooperation? by Mr. Varon of the Economics Department. It is in the nature of a policy-oriented brief rather than a full exploration of the subject; a more detailed treatment of the subject is available in the Economics Department's Trade Policies and Export Projections Division.

2. In summary, it seems unlikely that a success of OPEC's proportions can be achieved through similar means by producers of minerals other than oil. Not only is the economic rent much larger in the case of petroleum, but the bargaining power of petroleum exporting countries is also greater for a variety of reasons. No other mineral combines the relevant attributes of petroleum: (1) its indispensability to importing countries, (2) its relative immunity to the threat of substitutes, and (3) the heavy concentration of the known world reserves in a small number of developing countries in one region. Moreover, the current market situation for the majority of non-fuel minerals is unfavorable, and consequently the bargaining position of their producers is particularly weak at present. There may be some scope for raising revenues by concerted action in one or two minerals, especially bauxite, when the economic situation becomes more favorable.

3. Bauxite is the commodity which, prima facie, most resembles the petroleum case. While its global reserves are not as limited as silver and not as heavily concentrated in the LDC's, as tin, four developing countries (Jamaica, Guyana, Surinam, and Guinea) possess over 50% of the world total. In addition, while not so immune to substitution as petroleum, bauxite enjoys perhaps the most favorable long-term demand prospects in industrialized countries, and this gives some bargaining power to the exporting countries.

4. The bauxite/aluminum industry is one of the most vertically integrated, foreign-company dominated and complex of metallurgical industries, and the developing countries are concerned as to whether they are getting a fair deal. There is little solid information available on the size of the economic rent in bauxite, its determinants, or the revenue potential attainable through concerted unilateral action by producers and/or more effective negotiations with the foreign companies. The Economics Department and the Area Departments concerned are currently negotiating with a consultant to undertake a study on these topics. The findings of

the study should enable the Bank to give clearer guidance on fiscal and economic policies to the bauxite-producing member countries.

5. No other study or action is recommended at this time.

Attachment:

Paper entitled "What are the Opportunities for Raising LDC's Earnings from Exports of Non-Fuel Minerals through OPEC-type Cooperation? -- A Brief Answer"

cc: President's Council
Economic Committee

WHAT ARE THE OPPORTUNITIES FOR RAISING LDC'S EARNINGS FROM EXPORTS OF NON-FUEL MINERALS THROUGH OPEC-TYPE COOPERATION? -- A BRIEF ANSWER

Introduction

1. The remarkable success scored by the Organization of the Petroleum Exporting Countries (OPEC) in negotiating with the major oil companies contract terms which raised their members' oil revenue expectations dramatically in 1971 has jolted the developing countries and has given rise to speculation about the bargaining power of the LDC's vis-a-vis the developed world. It has raised the question "Can developing countries dominating the supply of other minerals achieve a result similar to that of the OPEC countries?" Where the question has been asked in international organizations such as the Bank, it is linked up with ongoing efforts to formulate appropriate resource development policies for LDC's and with an intensified interest in trade, in this case mineral exports, as an augmentable source of capital for developing countries.

2. It is quite evident that a success of OPEC's proportions cannot be achieved through similar means by producers of other minerals. Not only is the economic rent much larger in the case of petroleum than in other minerals, but the bargaining power of petroleum exporting countries is in principle greater in this case too, for a variety of reasons, and was enhanced further by a set of special circumstances in 1971, when the latest series of precedent-shattering agreements were reached. Conversely, the current market environment for the majority of non-fuel minerals is quite unfavorable, as indicated by the reversal of the long-term upward trend in prices in recent months (Chart I). The bargaining position of producers of such minerals is particularly weak at present and may remain so for some time. Nevertheless, this note will show that there may be some prospects in the long-run to raise revenues by concerted action for one or two minerals and especially bauxite.

Prerequisites for Successful Action

3. The main prerequisites for the establishment of a producers' cartel which are surveyed below are: (a) that a few countries (the fewer the better) control a large portion (the larger the better) of the supply not only of the metal or ore but also of the scrap, and (b) that demand be price inelastic (the more inelastic the better), i.e., that the commodity be an "essential good" and have no available or suitable substitute at competitive prices.

4. With regard to (a), a priori, scarcity of reserve is not essential; what is required is control over present and potential supply. The scarcity factor is nevertheless quite important in a broader sense: (i) in strengthening the hand of producing countries in negotiations with importing countries; and (ii) in shaping the ultimate course of supplies, or costs. For it is crucial for the successful operation of a cartel that supply outside the members of the cartel be inelastic, i.e., that other suppliers be higher-cost producers with small reserves.

5. These criteria should be amended ideally to include another set of considerations, some of them normative in nature. They would refer to whether or not consumers are organized in a group, the level of development of producing countries, and their dependence on exports of the product.

Overall Mineral Reserve Situation

6. The conceptual difficulties encountered in assessing the adequacy of mineral resources are great and the data available are grossly inadequate. All estimates of mineral reserves are, broadly speaking, conservative, since they are more likely to be adjusted upward rather than downward by technological progress and improved mapping.

7. The world mineral reserve situation is summarized in Tables 1-3 in the Annex. Table 1 shows that of the 19 minerals surveyed here, world reserves are ample for six, being more than sufficient to satisfy cumulative requirements for the next 50 years. These are (in order of their abundance): potassium, phosphorus, magnesium, chromium, vanadium and iron. Most of these are minerals known to form a significant part of the earth's crust; one, magnesium, can be obtained economically in vast quantities from the sea, as in the U.S. Available estimates for iron ore are probably too conservative; besides, an increase in price of 35-40 percent would more than double the reserves (Table 2).

8. Reserves for a further seven minerals pose no serious problem since they are large enough to sustain growing demand for 40-50 years. These are: sulphur, bauxite, cobalt, nickel, manganese, molybdenum, and titanium. Sulphur and bauxite are borderline cases. While reserves of standard sources of sulphur are not large, huge quantities of the product can be recovered from gypsum. Moreover, further moves toward reduction of air pollution can yield large quantities of marketable sulphur (from smokestacks and elsewhere) which can flood the market. With regard to bauxite, estimates of world reserves vary, and the quantities that can be added to reserves by higher prices are not as great, in relative terms, as in the case of iron ore. However, it is claimed that there are very large undiscovered resources. Finally, there seems to be a vast potential for increasing the recycling of aluminum, at least in the United States (see Table 3), and thus saving up to 20 percent of the world's bauxite reserves as now estimated.

9. In the case of the remaining six major minerals the reserve situation is less comfortable or can be considered tight or even critical, reserves only being adequate to meet cumulative demand for 30 years or less, with present technology and at recent prices. These are (in decreasing order of scarcity): silver, tin, zinc, lead, tungsten and copper, the last being a borderline case. While its reserves are not large, copper is cited as an example of a mineral which is now mined at much lower ore content and at costs not materially different from the past, as a result of technological progress and research and development rather than through higher prices. If necessary, the size of minable resources could be expanded through price incentives. There is also considerable potential for conserving the metal through accelerated recycling.

10. The potentially scarce product of most interest to LDC's is tin. Recent extensive explorations have failed to uncover significant new resources. It would take a price increase of the order of 80 percent to double the size of economically minable reserves. But even if doubled, reserves would be barely sufficient to meet requirements for the next 30 years, at conservatively estimated demand growth.

Distribution of Reserves

11. What emerges most strikingly from Table 1 is the heavy concentration of reserves in developed and centrally planned areas rather than in developing countries. The developed and centrally planned countries appear to have over 90 percent of world reserves in the case of three minerals and over 75 percent in the case of eight. Among the major minerals, only in the case of tin do developing countries dominate the reserve situation. While the often repeated observation that developing countries produce less than half of the world mineral output but have more than half of the world reserves may be true in aggregate terms, this is not the case for the vast majority of the minerals reviewed here.

12. World reserves of the four major non-fuel minerals of primary interest to LDC's are distributed as follows:

	Tin	Bauxite	Copper	Iron
Developing countries	79.2	56.6	47.2	29.1
Developed countries	3.7	38.1	37.3	35.6
Centrally planned countries	17.1	5.3	15.5	35.3
Total	100.0	100.0	100.0	100.0

13. The distribution does not change significantly in favor of LDC's under higher price assumptions (Table 2). In fact, in the case of tin, developing countries' share of world reserves declines from 79 percent to 68 percent when prices are assumed to rise by about 50 percent.1/

14. The possible effects of future non-price factors on the distribution of reserves is uncertain. Since large areas in developing countries are still unmapped, it is quite likely that future explorations will uncover greater reserves in these countries than in the developed world. But on the whole, developed countries will continue to have greater advantages in new exploitations since, in addition to commanding the technology, many of them already have the costly (in capital and time) infrastructure.

1/ The major beneficiary of this would be Mainland China, whose reserves would quadruple while those of developing countries as a group would only double.

Poor Candidates for Action

15. There are serious obstacles to raising prices through joint action by LDC's in the case of tin, copper, and iron ore as explained below.

16. Taking one commodity at a time, a priori, the best candidate for the type of action in question ought to be tin, since its reserves are scarcest and four developing countries alone (Malaysia, Thailand, Indonesia, and Bolivia) control the bulk of the world exportable output and approximately 70 percent of the reserves. On the negative side, however, are the dual threats posed by substitutes (aluminum and stainless steel), to which tin is quite vulnerable, and by the huge U.S. stockpile and surplus stocks.

17. In the case of copper, a paper on this very question prepared recently in the Bank concluded that on the basis of the available evidence the present members of CIPEC (Chile, Zaire, Peru, and Zambia) "cannot necessarily improve their export earnings on a long-term basis unless the agreement includes most copper producers and the long-run elasticity of demand happens to be well below (minus) unity ... The CIPEC countries must lose in the long-run if they attempt to jack up the price of copper by cutting back their supply on a long-term basis."[1/]

18. Developing countries control no more than 30 percent of known world reserves of iron ore. Thus, while there is certainly a need to explore the possibilities of improving the terms that they obtain under long-term contracts (which have become the rule) from importing countries and companies, their power to raise their export earnings through unilateral action (which leaves out the U.S., Canada, and Australia) is limited. There is, moreover, greater rivalry and a weaker sense of a community of interest among iron ore producing LDC's (India, Brazil, Venezuela, Liberia).

The Case for Bauxite

19. The case for bauxite rests on the proposition that not only are the obstacles to successful concerted action by LDC's fewer than in tin, copper and iron ore, but that the need to scrutinize how equitably the economic rent is shared is highest. Bauxite is the commodity, which, prima facie, most resembles the petroleum case. LDC's export earnings from bauxite, including aluminum concentrates, however, at about $300 million in 1969 (though probably greater now) are only a fraction of their earnings from petroleum (approximately $13 billion in 1969).

20. The pros and cons regarding this mineral are as follows: On the positive side, demand for aluminum has been growing rapidly and is expected to expand faster than the demand for other metals (at a rate of 6-7 percent per annum up to the year 2000 - see Chart II). Four developing countries, Jamaica, Guyana, Surinam, and Guinea, have over 50 percent of the world reserves, and the supply from developed areas which has to be reckoned

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1/ Kenji Takeuchi, An Analysis of the Effects of Possible CIPEC Actions on the Copper Export Earnings of Member Countries, Economics Department Working Paper No. 109, July 1, 1971.

with is that of one country only, Australia. These five countries account for about 90 percent of world bauxite reserves or resources. There are reasons to believe that Australia could be pulled into a bauxite cartel-type arrangement more easily than other developed countries in other commodities. Not only could her continuing "general mineral explorations boom" make Australia more amenable to cooperation in bauxite, but this country has a history of siding more frequently than other developed countries with the LDC's on some development issues. Another positive factor is that aluminum so far has experienced less competition from substitutes though, one should hasten to add, not for want of physical substitutes (steel and plastics constitute threats) but because its traditionally stable prices have attracted users.

21. On the negative side, it must be recognized that bauxite reserves are by no means limited in relation to anticipated requirements and that aluminum can be produced from alternate raw materials, as in the U.S.S.R. Furthermore the capital cost of refining is higher - and the technology more complex - in this case than in the case of petroleum, which makes it more difficult for the LDC's to undertake this activity on their own. Consequently their bargaining power in relation to the developed countries is weaker than in the case of petroleum.

22. What may tilt the scale in favor of bauxite, however, are the following two considerations. One, a successful attempt to raise the prices of bauxite and aluminum through concerted action could also improve over the long-run the prices of copper and tin. That is, it could make it easier and less risky for producers of these two metals to do the same. Or, as one observer put it, if the price of aluminum were raised significantly, copper producing countries could become more adventurous in attempting to raise their prices. Second, the bauxite/aluminum industry is one of the most vertically-integrated foreign-company dominated, and complex industries among mining and metallurgical industries, and the developing countries are concerned as to whether they are getting a fair deal.

Action

23. The Economics Department with the Area Departments concerned is currently negotiating with a consultant the outline and terms of a bauxite study focusing on these very questions, the first stage of which would be in the nature of case studies of "host country-foreign company" relations and their economics for Jamaica, Surinam, and Guyana. The findings of the study, particularly those on relative costs, should facilitate the formulation of more informed views on the feasibility and desirability of joint action by producing countries to raise revenues. No other study is recommended at this time.

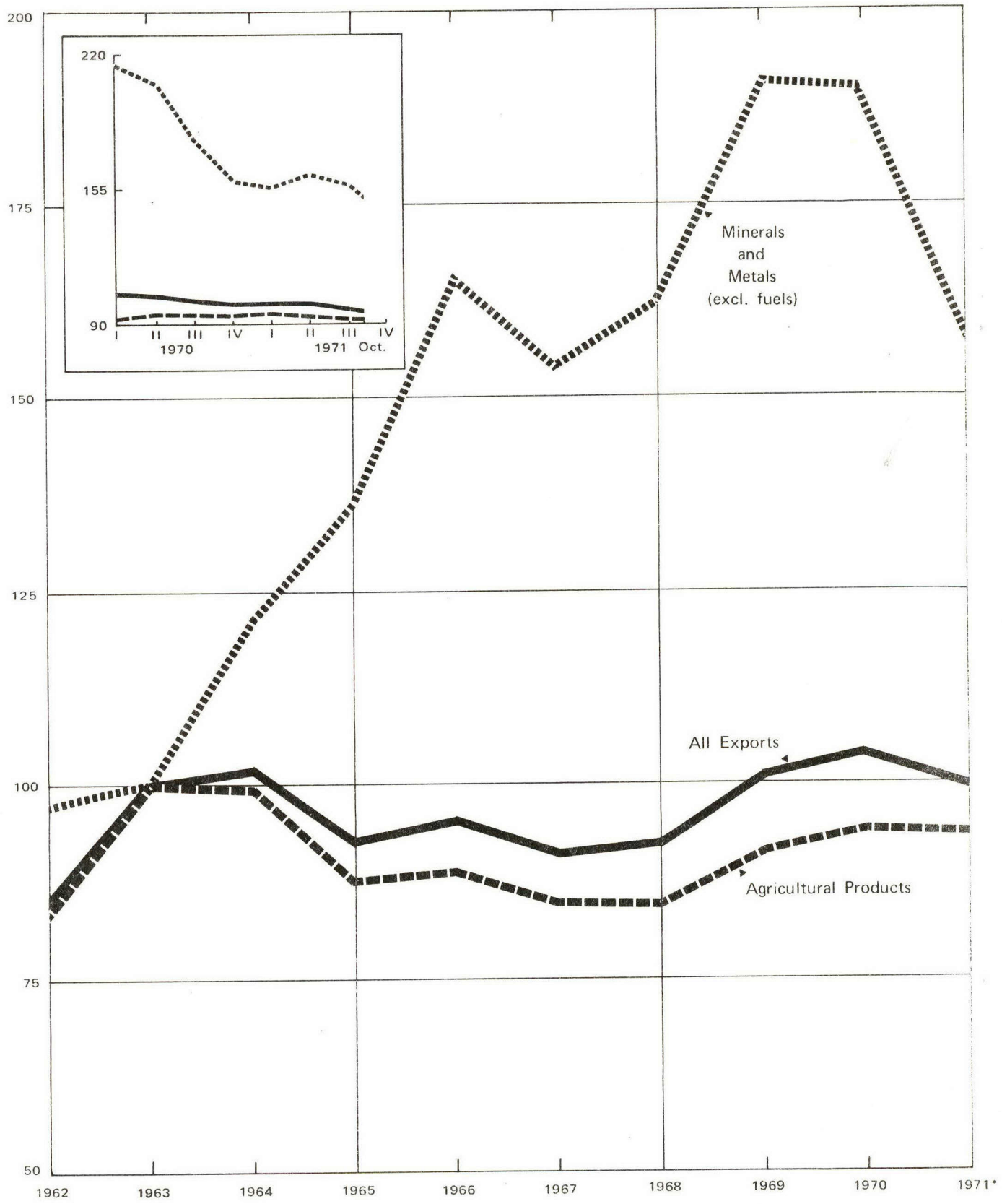
24. The subject of this inquiry raises the issue of the relative merits of competition versus market interference in achieving national or international objectives. It is a fact, however, that the power of

buyers in many minerals is great and increasing (through growing vertical and horizontal integration, regional arrangements, etc.) rather than decreasing. While bilateral monopolies, cartels facing cartels in this case, do not lead automatically to optimal solutions (since the solution is based not only upon demand and cost conditions but also upon the bargaining power and skills of the two parties), one thing is certain: a market situation where competing and unorganized sellers confront a strong buyer favors sellers least among all possible forms of market configuration. Therefore, cooperation among mineral exporting countries should be encouraged, though without minimizing the risks of pushing producer agreements too widely and without expecting too much too soon.

Trade Policies and Export Projections Division
Economics Department
February 11, 1972

CHART I

INDICES OF EXPORT PRICES OF PRIMARY PRODUCERS (1963 = 100)



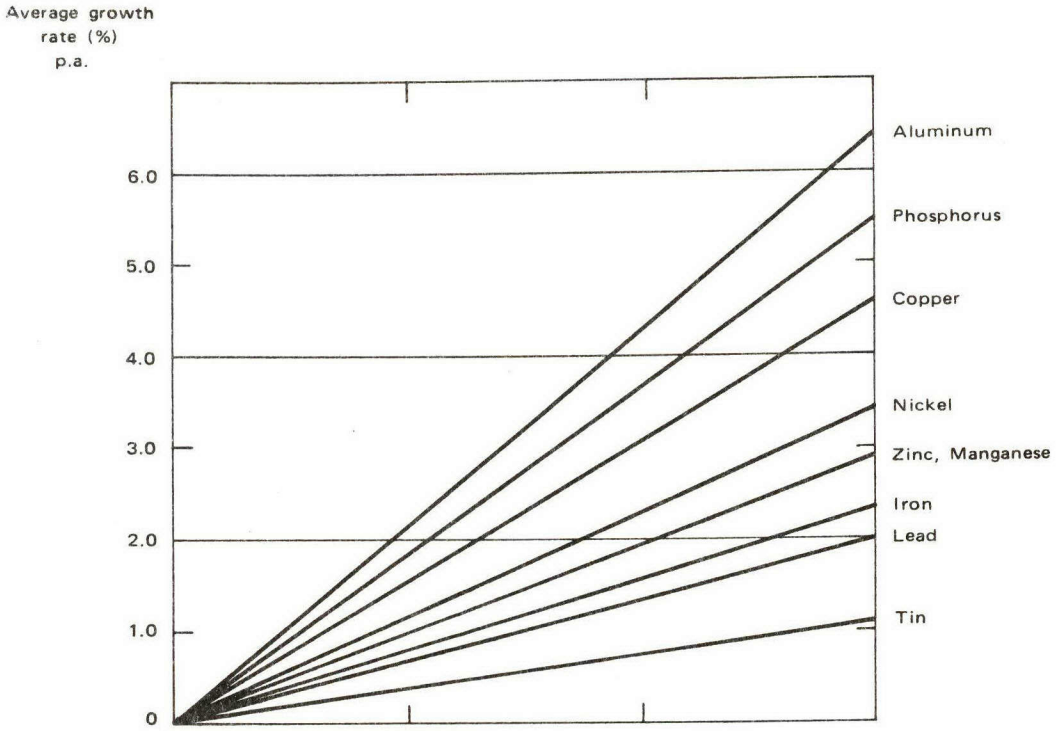
*Average of three quarters only.

SOURCE: National Institute Economic Review (London), No. 58, November 1971.

World Bank--6475

U.S. BUREAU OF MINES PROJECTIONS FOR SELECTED MINERALS FOR THE YEAR 2000

I. Probable Growth Rates in World Requirements, 1968–2000



II. Indices of Probable Price Levels in the Year 2000 (1970 = 100), in Constant 1970 dollars

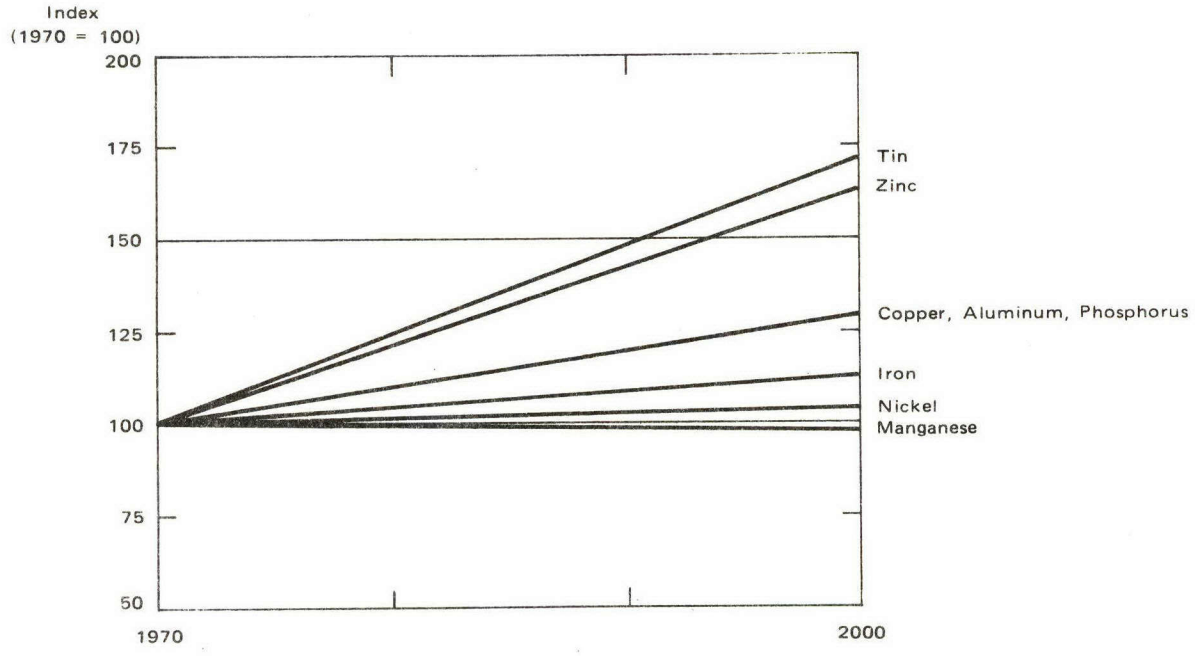


Table 1: ADEQUACY OF WORLD RESERVES OF SELECTED MINERALS AND RELATED DATA

Minerals	Reserve Life[1]	Value of World Output, 1968[2]	Probable Demand Growth, 1968-2020[3]	Location of Reserves[4]		
				Developed Countries	Developing Countries	Centrally-planned Countries
	(No. of years)	(million $)	(percent per annum)	(.....percent of world total .....)		
Group I - Reserves ample (X denotes cumulative requirements for 50 years)						
Potassium	35x	370	4.8	51	3	46
Phosphorus	7x	835	5.5	34	50	16
Magnesium	5x	115	2.0	8	2	90
Chromium	3x	190	2.7	73	25	2
Vanadium	3x	60	4.6	38	3	59
Iron	2x	6,910	2.3	36	29	35
Group II - Reserves pose no serious problem						
Sulphur	5/	710	4.4	21	63	16
Bauxite	5/	340	6.4	38	57	5
Cobalt	50-60	110	1.9	27	48	25
Nickel	50-60	1,100	3.2	40	22	38
Manganese	40-50	475	2.9	47	23	30
Molybdenum	40-50	n.a.	4.7	63	19	18
Titanium	30-40	60	4.2	63	19	18
Group III - Reserves tight or critical						
Copper	5/	7,740	4.6	37	47	16
Tungsten	under 30	105	3.5	13	12	75
Lead	about 20	775	2.3	66	21	13
Zinc	about 20	1,450	3.0	65	23	12
Tin	under 20	750	1.2	4	79	17
Silver	under 20	595	2.7	40	24	36

1/ Based on estimates of reserves (commercially recoverable resources at recent prices) by the U.S. Bureau of Mines and the probable exponential growth in future requirements shown in column (3).

2/ Rounded figures.

3/ Mid-point of projected range.

4/ The three groups may not be uniformly constituted in each case due to insufficient detail in the original source. The resulting possible error in classification is probably no greater than 3 percent in any individual mineral shown.

5/ Intermediate cases; see paragraphs 8 and 9 in the text.

Source: Based on data in: Leonard L. Fischman and Hans H. Landsberg, "Adequacy of Minerals (other than Fuels) and Forest Resources," in Ronald Ridker, Ed., Resources and Environmental Consequences of Population Growth in the United States, Resources for the Future, Inc., Washington, D.C. (not yet published); and U.S. Bureau of Mines, Minerals Yearbook 1969, Vols. I-II; U.S. Bureau of Mines, Commodity Data Summaries, January 1971; and Metal Statistics 1971.

Table 2: COMMERCIALLY RECOVERABLE RESOURCES OF IRON ORE, BAUXITE, TIN, AND COPPER UNDER SELECTED PRICE ASSUMPTIONS *

	Reserves Under Selected Price Assumptions			
	(1)	(2)	(3)	(4)
Iron Ore				
Price	15.65	18.65	21.65	n.a.
(Index)	(100)	(119)	(138)	n.a.
World reserves	97	129	206	n.a.
(Index)	(100)	(133)	(212)	n.a.
Share of (%)				
Developed countries	35.6	34.8	40.1	n.a.
Less developed countries	29.1	32.2	28.7	n.a.
Centrally planned countries	35.3	33.0	31.2	n.a.
Bauxite				
Price	0.27	0.31	0.34	0.37
(Index)	(100)	(115)	(126)	(137)
World reserves	3,280	3,420	3,705	4,695
(Index)	(100)	(104)	(113)	(143)
Share of (%)				
Developed countries	38.1	37.8	37.5	35.9
Less developed countries	56.6	56.2	55.0	52.7
Centrally planned countries	5.3	6.2	7.5	11.4
Tin				
Price	1.64	2.00	2.50	3.00
(Index)	(100)	(122)	(152)	(183)
World reserves	4,180	5,492	7,465	9,133
(Index)	(100)	(131)	(179)	(218)
Share of (%)				
Developed countries	3.7	4.7	6.1	6.5
Less developed countries	79.2	72.3	68.3	66.5
Centrally planned countries	17.1	23.0	25.6	27.0
Copper				
Price	0.50	0.60	0.80	1.00
(Index)	(100)	(120)	(150)	(200)
World reserves	296	332	402	516
(Index)	(100)	(112)	(135)	(174)
Share of (%)				
Developed countries	37.3	38.5	36.8	38.8
Less developed countries	47.2	47.3	50.1	49.6
Centrally planned countries	15.5	14.2	13.1	11.6

* Prices in U.S. $ per pound (constant 1969 dollars); volume (metal content) in million short tons, except for tin (in thousand long tons); index numbers, in parenthesis, column (1) = 100.

Source: U.S. Bureau of Mines.

Table 3: IMPACT OF AN ACTIVE RECYCLING POLICY ON U.S. REQUIREMENTS FOR FIVE MAJOR METALS *

	Cumulative Requirements 1968-2020		Metal Conserved 1968-2020		Proportion of Requirements met from Secondary Sources	
	Without Active Recycling	With Active Recycling	Volume	Proportion	Current	Under Active Recycling
	(..... million short tons .....)				(..... percent .....)	
Iron	11,293	10,931	362	3.2	47.3	48.9
Aluminum	853	576	277	32.5	17.3	42.6
Copper	206	166	40	19.4	44.0	54.4
Lead	117	111	6	5	43.9	47.2
Zinc	220	171	49	22.3	16.5	34.6

* Based on the assumption that the potential for return flow of new scrap is already sufficiently exploited and would therefore remain the same, and on a metal-by-metal analysis of the potential contribution that might be made by increased old scrap "recycling," be it currently recycled or mined from waste dumps.

Source: Compiled from Leonard L. Fishman and Hans H. Landsberg, "Adequacy of Minerals (other than fuel) and Forest Products" (mimeographed) in Ronald Ridker, ed., Resource and Environmental Consequences of Population Growth in the United States, Resources for the Future, Inc., Washington, D.C., 1971 (not yet published).

Record Removal Notice

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File Title	Barcode No.
Pedro Pablo Kuczynski Subject Files - Commodities - Correspondence - Volume 2 - September 1971 - February 1972	1849472

Document Date	Document Type	
2/8/1972	Memorandum	

Correspondents / Participants
To: Pedro-Pable Kuczynski
From: George Beier

Subject / Title
Meeting with Messrs. Price, Varon, and Huang, of the Commodities Division, Concerning Bauxite Consultants

Exception(s)
Personal Information

Additional Comments

The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group.

Withdrawn by	Date
Meredith Gramann	3/2/2012

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Pedro Pablo Kuczynski Subject Files - Commodities - Correspondence - Volume 2 - September 1971 - February 1972	1849472

Document Date	Document Type	
2/1/1972	Letter	

Correspondents / Participants

To: George Beier

From:. Andrew C. Huang

Subject / Title

Concerning a meeting called to discuss the bauxite study

Attachment: Letter from Samuel Moment to O.T.W. Price, re: Bauxite study

Exception(s)

Personal Information

Additional Comments

The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group.

Withdrawn by	Date
Meredith Gramann	3/2/2012

Mr. Kuczynski
A 1139

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

File Commodities

TO: Mr. O.T.W. Price

DATE: January 25, 1972

FROM: Kenji Takeuchi KT

SUBJECT: Back-to-Office Report - Consultations on the Market Prospects for Copper, Lead, Zinc and Forest Products in Europe, December 11-22, 1971.

1. In accordance with the terms of reference dated December 7, 1971, I conducted a series of consultations with representatives of industry, trade and international organizations 1/ in London, Paris, Frankfurt, and Rome over the period December 12-21, 1971 relating to world market prospects for commodities assigned to me - copper, lead, zinc and forest products. The following are the highlights of the findings.

Copper Price Forecasts

2. There seemed to be a variety of views among those I interviewed as to the probable future price level of copper. But, as a whole, I found no views potent enough to change our current forecasts of the world copper price for the short or long-term future.

3. The following are some examples of the views expressed during the consultations. Mr. Schiff stated that the LME wirebar price would average 550 £/MT in current terms in 1980 (65 U.S. ¢/lb. at the new official exchange rate). Mr. Loffler was assuming that the LME price (monthly average) in constant value of money as of early 1971 (i.e., excluding the effects of inflation) would fluctuate between 340 £/MT and 630 £/MT in the period between June 1971 and December 1980 with the average at around 460 £/MT. In his estimation, the price (constant-term) would tend to average 420 £/MT in 1972 and 1973, and then would tend to rise to 540 £/MT in 1980. Mr. Bauer was of the opinion that the LME price in current terms would be around 70-75 U.S. cents per pound (590-635 £/MT at the new official exchange rate) in 1980. Mr. Siegel said that they would consider copper's prospects to be "fairly good" in the long-term although in the short-run the price could fall to 350 £/MT level in current terms.

Demand Prospects for Copper

4. All those interviewed were almost unanimous in assuming that the world copper consumption would grow at an average rate of 4-5 percent

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1/ See Annex I for the list of persons I visited during the trip.

per annum during the 1970 decade. This is also in general agreement with our assumptions.

Net Trade in Copper with the Centrally Planned Economies

5. In analyzing world copper market, we would normally confine ourselves to the analysis of consumption, production, trade, etc. of the world excluding the centrally planned economies (CPE's). We would then estimate the net trade between the CPE's and the rest of the world. This is due to the fact that data regarding the CPE's are considered to be of unknown reliability. During the course of this trip, I made a special effort to find out as much as possible about the trade in copper between the CPE's and the world (excluding CPE's). 1/

6. The Metal Statistics, a statistical yearbook published annually by Metallgesellschaft AG, has been carrying estimates of production and consumption in the "Soviet sphere" countries for a number of years. Mr. Bauer of Metallgesellschaft asserted that the publication was the best available source of data in this respect. Their estimates are based on market intelligence collected through private sources connected with the company as well as on official sources.

7. Mr. Evans, Statistician for the World Bureau of Metal Statistics based in Birmingham, U.K., is responsible for the data published in the World Metal Statistics. 2/ The monthly publication began to carry a table on "East-West Trade in Refined Copper" in 1971. Mr. Evans is of the opinion that very little of the trade in copper between "East" and "West" takes place in the form of unrefined copper. He said that there had been about 20-30 thousand metric tons of unrecorded exports to the CPE's from the "West" in 1970. Mr. Evans felt that net exports from the world (excluding CPE's) to the CPE's during 1971 would be "less than those in 1970".

8. As for the likely levels of net exports to the CPE's in the future, Mr. Evans was projecting net exports of about 100,000 tons for 1972. Messrs. Schiff and Saurel said they would project no expansion in net exports to the CPE's in the long-run on the ground that the CPE's as a whole always would try to be essentially self-sufficient in most basic raw materials and that reportedly some of them had vast reserves of copper orebodies. On the other hand, it was pointed out that in the medium-term the changing international political environment surrounding Mainland China might result in an increase of net exports of copper to the CPE's from the "West". In short, the findings of this trip would not critically invalidate the assumption, which I made in a recent projection exercise, that the net exports to the CPE's would increase

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1/ See also my Back-to-Office Report on New York trips, dated December 9, 1971.

2/ They also publish an annual supplement which summarizes the latest year's copper trade matrix. Such a table for the calendar year 1970 is attached (Annex II).

gradually (by 5,000 tons annually) from the projected level of 110,000 metric tons in 1972.

Mine Production Capacity

9. Among those interviewed, Sir Ronald Prain was the only one who had a carefully prepared set of estimates for the world mine capacity for the period up to 1976. His estimates were given in his latest speech. 1/ The International Wrought Copper Council projected a capacity of 7.8 to 9.2 million metric tons for 1978. Hence, the following set of figures:

Mine Capacity

1971	5.7	million tons
1972	6.4	" "
1973	6.9	" "
1974	7.2	" "
1975	7.3	" "
1976	7.3	" "
1977	n.a.	
1978	7.8-9.2	" "

According to Sir Ronald, the world's average rate of mine capacity utilization was within the range of 91.7 - 94.0 percent in the 1952-66 period, with the average at 92.8 percent. Mainly because of the 9-month labor strike in the U.S., the world average was below 90 percent in 1967-68, while it was very high (96%) in 1969.

10. If the projected mine capacity were to be utilized at 93 percent rate in the future, then Sir Ronald would conclude that there would be a potential surplus in the immediate few years. Sir Ronald suggested, on the other hand, that if every producer would aim to produce only 95 percent of his capacity, then on the average actual production would amount to only about 86 percent of the world capacity (0.95 x 0.93 = 0.86), and there would be no surplus. He was in favor of such a change in the industry's policy because it would enable the industry to meet possible sudden upsurges in demand. In his opinion, a cutback in production of less than 15 percent of capacity would not have the effect of raising the per-unit cost materially.

Cost of Production in Copper Industry

11. Sir Ronald has been conducting studies of the cost of production in world copper industry for a number of years on a consistent basis although he has not made available to the trade all of the results of his studies. Normally, data regarding costs are confidential. For this

1/ "The International Outlook for Copper", American Metal Market Forum, London, November 1971.

reason, he cannot make available bulk of the cost data he has assembled since 1952, i.e., on an annual basis, mine-by-mine, country-by-country as well. In the course of the interview, he made available to me some average figures regarding major copper-producing countries in two recent years - 1969 and 1970 - which are presented in the attached table (Annex III).

12. We could make several interesting observations on the Prain cost figures:

(a) that the world average cost increased more than 12 percent from 1969 to 1970;

(b) that Chile was apparently a major contributor to this abnormally sharp increase in the world average cost;

(c) that Canada is the highest cost producer if co-product copper is excluded but her cost would be below the world average if co-product copper is included;

(d) that, contrary to the general impression, Zambia is not particularly a high-cost producer while Zaire is;

(e) that Peru, the Philippines and South Africa are among the low-cost producers;

(f) that Chile could no longer be called a low-cost producer, but

(g) that, if Chilean copper mining industry should return to its normal efficiency, it would offset largely any increases in cost in other producing areas and the world average cost might not go up very much, if at all.

Japan Metal Center (London)

13. Until recently, I had been under the impression that the Japanese copper industry in general favored low copper prices. Domestic mine production accounted for only 15 percent of refined copper consumption in Japan in 1970 while Japan has become the world's largest copper importer. Since all of the major non-ferrous metal - mining and metallurgical - companies had their own associated fabricating companies, they liked lower copper prices.

14. As a result of the discussions I had with representatives of the Japan Metal Center this time, however, it now appears that the Japanese industry is beginning to shift its position in favor of reasonably high copper prices. The reasons appear to be twofold. First, some companies operate domestic mines whose average costs have been rising and

are roughly in the range of 45 - 50 US ¢/lb. Second, more or less all the major companies are now engaged in overseas mining ventures with equity participation - e.g., in Zaire and Malaysia. Both the Japanese industry and government are apparently intending to emphasize equity participation as one of the principal means of financing overseas mining ventures for the purpose of securing raw materials.

Intergovernmental Council of Copper Exporting Countries (CIPEC)

15. It was known that CIPEC had been studying what it could do to prevent the copper export earnings of its member countries from falling further. As at the time of my visit, apparently it had not reached any conclusion or decision on a comprehensive scheme. It had previously commissioned the Battelle Institute (Geneva) to undertake studies of the world copper market which, I was told, were nearing completion. The CIPEC staff were also studying in detail the operations of the International Tin Agreements and the Tin Buffer Stock.

Lead and Zinc

16. I discussed the prospects for lead and zinc with Mr. R.L. Stubbs, Secretary-General of the Lead and Zinc Development Associations in London. Mr. Stubbs is also the Chairman of the Statistical Committee of the International Lead and Zinc Study Group.

17. In Mr. Stubbs' opinion, the most important basic facts we must bear in mind in considering the market prospects for lead and zinc are as follows:

(a) Neither lead nor zinc is subject to any serious threats of substitution by other materials;

(b) Zinc consumption is quite sensitive to changes in the general level of industrial production in consuming areas while lead consumption is not;

(c) Lead recovered from scrap accounts for a very large portion of consumption while scrap is relatively unimportant in the case of zinc.

18. Regarding the first point, despite Mr. Stubbs' contention, it must be recognized that in some end-uses, lead and zinc are subject to threats of substitution. For example, zinc die casting faces a serious competition from aluminum die casting and plastic molding. Also, lead in gasoline is threatened to be phased out and replaced by other additives.

19. Zinc consumption is quite sensitive to changes in industrial production. A regression exercise based on 1956-1969 data yielded a coefficient of determination of 0.978 and an elasticity of zinc consumption with respect to industrial production in the developed countries of 0.85. 1/ A similar exercise regressing lead consumption on industrial production, based on 1956-1968 data, yielded a coefficient of determination of 0.947 and an elasticity value of 0.47 for the developed countries as a whole. 2/ The levels of consumption of both lead and zinc are closely related to automobiles. But lead is used in gasoline and more importantly, in lead-acid batteries while zinc is used in various forms - galvanized steel, zinc die casts, paint pigment, etc. - in the production of automobiles. Thus, consumption of zinc is affected sensitively by the number of cars produced while consumption of lead is affected by the number of cars in use. This difference in consumption pattern is reflected in the difference in the sensitivities of these two metals to the business cycle.

20. Mr. Stubbs' third point: About 35 percent of the annual lead supplies come from scrap, while only about 20 percent of the zinc supplies come from scrap. This difference in the importance of scrap in total annual supplies of these two metals has had an important implication for the pricing policies of the industry. To put it simply, it has been possible to establish a producer price for zinc outside North America and maintain an artificially high level by cutting back the supplies. On the other hand, it has been impossible to support an artificially high price level for lead outside North America because of the inability of the industry to control the supply of lead scrap.

21. The following are the price forecasts by Mr. Stubbs:

The LME Prices in Current Terms

	Lead	Zinc
1972	115 £/MT	150 £/MT
1975	140 £/MT	180 £/MT
1980	180 £/MT	250 £/MT

Forest Products

22. I visited United Africa (Timber) Ltd. in London and the FAO Forestry Department, mainly to discuss the long-term prospects for tropical

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1/ Draft report I prepared on "Zinc: Review and Outlook", dated August 13, 1970.

2/ Draft report on "World Lead Industry: Review and Outlook", dated September 30, 1970.

hardwood exports from Africa. The results of the talks were taken into account in my recent memorandum to Mr. Jaycox on "Gabon Railway Project - Outlook for Tropical Hardwood Trade", dated January 18, 1972. The results will also be taken into account in revising the draft report, "The Market Potential for Tropical Hardwood with Emphasis on the Asia-Pacific Region," dated September 27, 1971.

Copies to: Messrs. Henderson
Stevenson
Haq
Chief Economists
Kalmanoff
Maane
Van Nimmen
Devaux
Thiebach
King (Robert)
Varon

KTakeuchi:mcd

ANNEX I: LIST OF PERSONS VISITED

London, December 12 - 16, 1971

(1) Japan Metal Center:

Mr. K. Kano, General Manager;
Mr. E. Ishida, Deputy General Manager;
Mr. M. Sakashita;
Mr. K. Yoshii; and
Mr. U. Okayama

(2) British Kynoch Metals Ltd.:

Mr. P.F.A. Loffler, Managing Director

(3) The Anglo Chemical & Ore Co.:

Mr. L. A. Schiff, Director

(4) Mr. D. B. Evans, Statistician,
World Bureau of Metal Statistics
(Interviewed in IBRD London Office)

(5) RST International Metals Ltd.:

Sir Ronald L. Prain, Board Chairman; and
Mr. A. J. Wilson, Assistant to the Chairman

(6) Mr. R. L. Stubbs,
Director-General,
Zinc Development Association and
Lead " "

(7) United Africa (Timber) Ltd.:

Mr. W. R. Evans, Forestry Adviser; and
Mr. G. J. Pleydell, Director of Public Information

Paris, December 17, 1971

(8) Intergovernmental Council of Copper Exporting Countries (CIPEC):

Mr. S. Gueronik, Executive Director, and his associates

(9) France Metaux:

Mr. G. Saurel, Manager

Frankfurt am main, December 20, 1971

(10) Metallgesellschaft AG

Dr.Willy Bauer, Deputy Chief of Research Department

(11) Kreditanstalt fur Wiederaufbau

Dr. Wolfgang Siegel, Abteilungs-director; and
Mr. Eberhard Spriegel, Prokurist

Rome, December 21, 1971

(12) Food and Agriculture Organization
Forestry Department;

Messrs. S. L. Pringle and T. Erfurth

ANNEX II:

WORLD BUREAU OF METAL STATISTICS

WORLD TRADE IN UNWROUGHT COPPER — 1970

Th: Metric Tons

	AFRICA				AMERICA							ASIA					AUSTRAL-ASIA	EUROPE																				
	Congo Republic	S. & S.W. Africa	Uganda	Zambia	Argentina	Brazil	Canada	Chile	Mexico	Peru	U.S.A.	Cyprus	India	Japan	Philip-pines	Turkey	Australia	Belgium	France	Germany F.R.	Italy	Nether-lands	Total E.E.C.	Austria	Denmark	Finland	Great Britain	Norway	Portugal	Spain	Sweden	Switzer-land	Yugo-slavia	Other Countries	Free World Total	Communist Countries	World Total	
MINE PRODUCTION	386·0	167·0	17·6	684·1	—	3·4	613·3	685·6	61·0	212·1	1 547·5	19·5	9·7	119·4	160·3	31·1	145·6	—	0·3	1·3	2·3	—	3·9	2·1	—	30·9	—	19·9	3·7	19·9	23·1	—	98·0	76·6	5 141·3	1 187·0	6 328·3	MINE PRODUCTION
Exported to:—																																						Exported to:—
Belgium	—	—	—	—	—	—	0·1	1·4	—	0·8	0·3	0·1	—	—	—	—	—	—	0·3	0·1	—	—	0·4	—	—	—	—	—	—	—	—	—	—	0·6	3·7	—	3·7	Belgium
France	—	—	—	—	—	—	—	—	—	—	—	0·5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·3	0·8	—	0·8	France
Germany F.R.	—	—	—	—	—	—	3·0	15·4	—	0·3	6·4	13·4	—	—	—	—	—	—	—	—	—	—	—	0·5	—	—	—	7·1	—	—	—	—	22·0	0·9	69·0	—	69·0	Germany F.R.
Great Britain	—	—	—	—	—	—	1·2	—	—	0·1	—	0·3	—	—	—	—	1·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2·6	—	2·6	Great Britain
Italy	—	—	—	—	—	—	—	—	—	—	—	0·9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·9	—	0·9	Italy
Netherlands	—	—	—	—	—	—	—	—	—	0·1	—	0·6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·7	—	0·7	Netherlands
Norway	—	—	—	—	—	—	29·2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29·2	—	29·2	Norway
Spain	—	—	—	—	—	—	3·9	4·9	—	3·3	2·0	2·8	—	—	—	—	—	—	—	—	2·1	—	2·1	—	—	—	—	—	—	—	—	—	—	—	19·0	—	19·0	Spain
Sweden	—	—	—	—	—	—	1·8	1·2	—	1·0	1·8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1·3	—	—	—	—	—	0·2	7·3	—	7·3	Sweden
East Germany	—	—	—	—	—	—	—	0·4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1·6	—	—	—	2·0	—	2·0	East Germany
Roumania	—	—	—	—	—	—	—	0·9	—	0·8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1·7	—	1·7	Roumania
Canada	—	—	—	—	—	—	—	—	—	0·4	1·7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·2	2·3	—	2·3	Canada
U.S.A.	—	—	—	—	—	—	7·1	—	1·4	8·7	—	—	—	—	17·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34·2	—	34·2	U.S.A.
Mexico	—	—	—	—	—	—	—	—	—	—	2·4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2·4	—	2·4	Mexico
Japan	—	—	—	7·2	—	—	115·4	14·5	—	25·6	41·2	—	—	—	143·3	—	25·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10·4	382·6	—	382·6	Japan
Markets unknown	—	—	—	—	—	—	0·8	—	—	—	—	—	—	—	—	12·4	1·1	—	—	—	0·2	—	0·2	—	—	—	—	—	—	—	—	—	—	32·1	46·6	—	46·6	Markets unknown
TOTAL EXPORTS	—	—	—	7·2	—	—	162·5	38·7	1·4	41·1	55·8	18·6	—	—	160·3	12·4	27·1	—	0·3	0·1	2·3	—	2·7	0·5	—	—	—	8·4	—	—	1·6	—	22·0	44·7	605·0	—	605·0	TOTAL EXPORTS
TOTAL IMPORTS	—	3·5	—	—	—	—	—	—	—	—	29·7	—	—	391·0	—	—	—	5·0	—	83·2	—	—	88·2	—	—	—	—	20·6	0·3	19·9	11·1	—	—	—	564·3	3·7	568·0	TOTAL IMPORTS
Stock Change Concentrates ±	+0·5	—1·5	+0·6	—5·9	—	—	—	—0·3	—	—5·4	+32·5	+0·9	+0·5	+6·5	—	—	+2·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	+30·4	—	+30·4	Stock Change Concentrates ±
Secondary blister	—	—	—	—	—	—	14·3	—	—	—	71·6	—	—	102·2	—	—	3·9	49·0	9·1	133·2	7·5	—	198·8	9·4	—	3·8	—	—	—	—	18·6	—	—	—	422·6	—	422·6	Secondary blister
SMELTER PRODUCTION	385·5	172·0	17·0	682·8	—	3·4	465·1	647·2	59·6	176·4	1 560·5	—	9·2	606·1	—	18·7	120·4	54·0	9·1	217·6	7·5	—	288·2	11·0	—	34·7	—	32·1	4·9	39·8	51·2	—	76·0	31·9	5 492·8	1 190·7	6 683·5	SMELTER PRODUCTION
Exported to:—																																						Exported to:—
Austria	—	2·7	—	3·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5·7	—	5·7	Austria
Belgium	184·9	8·1	—	—	—	—	—	7·5	—	16·9	5·4	—	—	—	—	—	—	—	8·1	0·4	—	—	8·5	—	—	—	—	—	—	—	—	—	—	—	231·3	—	231·3	Belgium
France	4·8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4·8	—	4·8	France
Germany F.R.	—	42·8	—	20·5	—	—	—	28·4	—	15·9	1·7	—	—	—	—	—	—	3·1	0·4	—	4·6	—	8·1	—	—	—	—	6·4	—	0·2	—	—	—	—	124·0	—	124·0	Germany F.R.
Great Britain	—	—	1·0	13·4	—	—	—	28·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42·7	—	42·7	Great Britain
Greece	—	—	5·1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5·1	—	5·1	Greece
Italy	—	—	—	0·2	—	—	—	1·9	—	—	—	—	—	—	—	—	—	0·1	—	—	—	—	0·1	—	—	—	—	—	—	—	—	—	—	—	2·2	—	2·2	Italy
Portugal	—	—	—	2·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2·0	—	2·0	Portugal
Spain	—	2·5	—	1·8	—	—	—	2·6	—	—	—	—	—	—	—	—	—	—	0·1	0·5	—	—	0·6	—	—	—	—	—	—	—	—	—	—	—	7·5	—	7·5	Spain
Sweden	—	—	—	—	—	—	—	3·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3·3	—	3·3	Sweden
Yugoslavia	—	1·5	0·2	6·2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7·9	—	7·9	Yugoslavia
U.S.A.	—	25·2	—	—	—	—	—	87·2	2·2	93·1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	207·7	—	207·7	U.S.A.
China	—	—	—	2·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2·0	—	2·0	China
Japan	—	19·2	9·6	54·6	—	—	—	30·9	2·8	9·4	—	—	—	—	—	—	7·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	133·5	—	133·5	Japan
Markets unknown	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4·6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4·6	—	4·6	Markets unknown
TOTAL EXPORTS	189·7	102·0	15·9	103·7	—	—	—	190·1	5·0	135·3	7·1	—	—	—	—	4·6	7·0	3·2	8·6	0·9	4·6	—	17·3	—	—	—	—	6·4	—	0·2	—	—	—	—	784·3	—	784·3	TOTAL EXPORTS
TOTAL IMPORTS	—	—	—	—	—	—	—	—	—	—	203·5	—	—	136·6	—	—	—	250·4	16·4	133·3	3·1	—	403·2	5·5	—	—	49·4	—	1·9	15·0	4·1	—	10·8	1·2	831·2	2·0	833·2	TOTAL IMPORTS
Stock Change Blister ±	+6·2	+1·4	+1·1	—1·6	—	—	—27·6	—4·2	+0·9	+5·2	+84·0	—	—0·1	+37·4	—	—	+1·5	—6·4	—	+9·2	—	—	+2·8	—	—	+0·7	—	—0·1	+1·9	—	—	—	—	+109·5	—	+109·5	Stock Change Blister ±
Refined from scrap	—	—	—	—	—	—	—	—	—	—	359·6	—	—	—	—	—	31·4	30·0	19·6	65·0	13·7	—	128·3	5·5	—	—	156·8	—	—	28·2	—	—	2·5	—	712·3	203·8	916·1	Refined from scrap
Direct use of blister	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3·0	—	6·0	—	9·0	—	—	—	—	—	—	—	4·1	—	—	—	13·1	—	13·1	Direct use of blister
REFINED PRODUCTION	189·6	68·6	—	580·7	—	3·4	492·7	461·3	53·7	35·9	2 032·5	—	9·3	705·3	—	14·1	143·3	337·6	33·5	405·8	13·7	—	790·6	22·0	—	34·0	206·2	25·8	4·0	82·8	51·2	—	89·3	33·1	6 129·4	1 396·5	7 525·9	REFINED PRODUCTION
Exported to:—																																						Exported to:—
Austria	—	—	—	3·7	—	—	—	1·1	—	—	0·2	—	—	0·1	—	—	—	1·2	—	16·0	—	—	17·2	—	—	—	0·3	—	—	—	—	—	—	—	22·6	0·2	22·8	Austria
Belgium	75·0	0·4	—	0·4	—	—	6·2	14·7	—	—	3·9	—	—	—	—	—	—	—	0·5	8·4	0·3	0·4	9·6	—	—	—	1·7	—	—	—	0·2	0·4	—	—	112·5	1·4	113·9	Belgium
Denmark	—	—	—	4·7	—	—	0·5	1·9	—	—	1·1	—	—	—	—	—	0·3	3·8	—	0·5	—	—	4·3	—	—	—	—	—	—	—	—	—	—	—	12·8	—	12·8	Denmark
Finland	—	—	—	3·4	—	—	—	2·1	—	—	—	—	—	—	—	—	—	—	—	0·7	—	—	0·7	—	—	—	0·5	—	—	—	1·3	—	—	—	8·0	—	8·0	Finland
France	26·3	0·5	—	58·2	—	—	14·8	49·9	—	—	20·0	—	—	—	—	—	7·2	112·9	—	6·7	0·3	0·1	120·0	—	—	0·9	1·2	3·4	—	—	3·2	—	9·2	—	314·8	0·2	315·0	France
Germany F.R.	—	2·5	—	64·6	—	—	35·5	125·3	—	3·8	23·8	—	—	0·5	—	—	6·8	66·7	0·5	—	0·3	0·5	70·0	4·5	—	1·8	4·3	13·6	—	0·9	5·5	0·1	0·2	—	363·7	16·0	379·7	Germany F.R.
Great Britain	3·9	21·6	—	144·3	—	—	102·2	70·3	0·2	1·0	22·8	—	—	—	—	—	9·4	1·0	—	11·5	—	0·3	12·8	—	—	0·2	—	3·7	—	0·5	12·0	—	17·5	—	427·3	0·2	427·5	Great Britain
Greece	2·3	—	—	4·1	—	—	—	0·5	—	—	—	—	—	—	—	—	—	2·4	—	0·6	—	—	3·0	—	—	—	—	—	—	—	—	—	—	—	9·9	—	9·9	Greece
Irish Republic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	—	—	—	—	—	—	0·1	—	0·1	Irish Republic
Italy	48·6	2·7	—	74·1	—	—	3·9	64·8	—	2·2	35·6	—	—	—	—	—	1·6	25·2	0·4	2·7	—	—	28·3	0·3	—	0·3	0·9	1·6	—	—	0·4	—	0·2	0·3	265·8	0·9	266·7	Italy
Netherlands	—	0·1	—	5·6	—	—	0·2	5·8	—	8·1	1·6	—	—	0·1	—	—	—	13·1	—	1·4	—	—	14·5	—	—	—	3·2	—	—	0·2	0·3	—	—	—	39·7	0·1	39·8	Netherlands
Norway	—	—	—	—	—	—	—	2·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·4	—	—	—	0·4	—	—	—	3·1	—	3·1	Norway
Portugal	0·6	—	—	—	—	—	2·6	—	—	—	—	—	—	—	—	—	—	2·1	—	—	—	—	2·1	—	—	—	—	—	0·3	—	—	—	—	—	5·6	—	5·6	Portugal
Spain	—	—	—	9·7	—	—	1·9	6·8	—	1·2	2·5	—	—	0·8	—	—	—	8·6	0·1	0·9	—	—	9·6	—	—	—	6·5	—	—	—	—	—	—	—	39·0	—	39·0	Spain
Sweden	—	—	—	16·0	—	—	1·8	23·8	—	—	4·0	—	—	—	—	—	—	11·4	—	0·8	—	—	12·2	—	—	0·1	—	1·8	—	—	—	—	—	—	59·7	—	59·7	Sweden
Switzerland	—	0·1	—	8·9	—	—	2·1	3·1	—	0·4	3·1	—	—	—	—	—	—	14·5	0·9	10·6	—	—	26·0	1·0	—	0·2	—	1·5	—	—	—	—	—	—	46·4	0·7	47·1	Switzerland
Yugoslavia	—	—	—	4·8	—	—	1·6	—	—	—	13·7	—	—	—	—	—	—	—	—	0·4	—	—	0·4	—	—	—	0·3	—	—	0·6	—	—	—	—	21·4	1·6	23·0	Yugoslavia
Bulgaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	—	—	—	0·1	—	0·1	Bulgaria
Czechoslovakia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1·8	—	1·8	—	—	3·6	—	—	—	0·1	—	—	0·2	—	—	—	—	3·9	—	3·9	Czechoslovakia
Germany D.R.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	—	—	—	—	—	—	0·1	—	0·1	Germany D.R.
Hungary	—	—	2·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	—	0·2	—	—	—	—	2·6	—	2·6	Hungary
Poland	—	—	2·4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1·3	—	—	0·1	—	—	—	—	3·8	—	3·8	Poland
Roumania	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3·1	—	—	3·1	—	—	—	—	—	—	0·5	—	—	—	—	3·6	—	3·6	Roumania
Argentina	—	—	—	0·1	—	—	0·1	24·3	—	1·7	0·6	—	—	—	—	—	—	—	—	1·2	—	—	1·2	—	—	—	1·3	—	—	—	—	—	—	—	29·3	—	29·3	Argentina
Brazil	1·8	—	—	6·2	—	—	3·4	11·0	0·2	0·9	22·4	—	—	—	—	—	—	2·5	—	1·5	—	—	4·0	—	—	—	0·4	—	—	—	—	—	—	—	50·3	—	50·3	Brazil
Canada	—	—	—	—	—	—	—	—	—	—	11·8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	0·2	—	—	—	—	—	—	12·1	—	12·1	Canada
Colombia	—	—	—	—	—	—	—	0·4	—	0·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·7	—	0·7	Colombia
U.S.A.	—	—	—	1·7	—	—	83·6	14·1	0·2	4·9	—	—	—	—	11·9	—	1·5	—	—	0·7	—	—	0·7	—	—	—	—	0·1	—	—	—	—	0·5	—	119·2	—	119·2	U.S.A.
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	—	—	—	0·1	—	—	—	—	—	—	—	—	—	—	—	0·1	—	0·1	Venezuela
Burma	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	—	—	—	—	—	—	0·1	—	0·1	Burma
China	—	—	—	26·4	—	—	—	—	—	—	—	—	—	13·7	—	—	—	—	—	9·3	—	0·1	9·4	—	—	—	19·5	—	—	—	—	—	—	—	69·0	—	69·0	China
Formosa	—	—	—	—	—	—	—	—	—	—	1·0	—	—	4·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5·3	—	5·3	Formosa
India	7·7	—	—	25·4	—	—	3·8	—	—	—	13·3	—	—	2·5	—	—	—	0·5	—	0·1	—	—	0·6	—	—	—	0·9	—	—	—	—	—	—	—	54·2	—	54·2	India
Japan	13·8	—	—	107·6	—	—	0·8	17·8	—	—	8·4	—	—	—	—	—	3·0	—	—	—	—	—	—	—	—	—	—	0·2	—	—	—	—	3·8	155·4	—	155·4	Japan
Korea	—	—	—	—	—	—	—	—	—	—	4·1	—	—	0·6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4·7	—	4·7	Korea
Pakistan	—	—	—	—	—	—	0·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·3	—	0·3	Pakistan
Philippines	—	—	—	—	—	—	—	—	—	—	1·6	—	—	2·7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4·3	—	4·3	Philippines
S. Vietnam	—	—	—	—	—	—	—	—	—	—	0·1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	0·1	S. Vietnam
Algeria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	0·3	—	—	0·4	—	—	—	—	—	—	—	—	—	—	—	0·4	—	0·4	Algeria
Egypt	—	—	1·5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·8	—	0·7	—	—	1·5	—	—	—	2·0	—	—	0·6	—	—	—	—	5·6	—	5·6	Egypt
Morocco	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·7	—	—	—	—	0·7	—	0·7	Morocco
South Africa	—	—	2·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2·3	—	2·3	South Africa
Spanish North Africa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·5	—	—	—	—	0·5	—	—	—	—	—	—	—	—	—	—	—	0·5	—	0·5	Spanish North Africa
New Zealand	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1	—	—	—	—	—	—	—	—	—	0·2	—	—	—	—	—	—	—	0·3	—	0·3	New Zealand
Markets unknown	—	—	—	—	—	—	—	—	—	8·1	5·8	—	—	5·0	—	5·7	1·5	24·0	0·6	—	—	—	24·6	—	—	—	—	—	—	9·9	3·9	—	—	10·4	74·9	—	74·9	Markets unknown
TOTAL EXPORTS	180·0	27·9	—	578·4	—	—	265·3	440·0	0·6	32·6	201·4	—	—	47·1	—	5·7	31·4	295·2	3·0	79·9	0·9	1·4	380·4	5·8	—	3·5	45·5	26·1	0·3	14·5	27·2	0·5	27·6	14·5	2 356·3	21·3	2 377·6	TOTAL EXPORTS
TOTAL IMPORTS	—	2·3	—	—	29·0	52·9	13·2	—	—	—	119·8	—	41·0	165·4	4·3	—	—	131·1	315·4	384·4	270·0	39·7	1 140·6	26·4	4·5	14·2	401·3	0·6	5·8	30·2	61·7	48·6	29·0	18·8	2 209·6	104·8	2 314·4	TOTAL IMPORTS
Stock change refined ±	+9·6	+8·0	—	+2·0	—	—	+11·6	+0·7	—	—0·7	+98·4	—	+1·3	+8·6	—	—	+1·0	+33·5	+15·2	+12·8	+14·8	—0·8	+75·5	—	—0·7	+7·2	+15·5	—12·7	—2·5	—9·7	+3·2	—	+12·5	—	+228·8	—	+228·8	Stock change refined ±
REFINED CONSUMPTION	—	35·0	—	0·3	29·0	56·3	229·0	20·6	53·1	4·0	1 852·5	—	49·0	815·0	4·3	8·4	110·9	140·0	330·7	697·5	268·0	39·1	1 475·3	42·6	5·2	37·5	546·5	13·0	12·0	106·2	82·5	48·1	78·2	37·4	5 753·9	1 480·0	7 233·9	REFINED CONSUMPTION
Direct use of scrap incl. ingotted scrap	—	13·0	—	—	11·0	20·7	44·0	7·4	19·9	—	802·8	—	18·0	342·5	0·7	3·1	41·1	33·0	123·7	158·1	175·0	18·5	508·3	4·8	*	*	116·6	*	0·6	23·8	*	19·1	31·8	6·0	2 081·3			Direct use of scrap incl. ingotted scrap
TOTAL COPPER CONSUMPTION IN ALL FORMS	—	48·0	—	0·3	40·0	77·0	273·0	28·0	73·0	4·0	2 655·3	—	67·0	1 157·5	5·0	11·5	152·0	173·0	454·4	855·6	443·0	57·6	1 983·6	47·4	*	*	663·1	*	12·6	132·0	*	67·2	110·0	43·4	7 836·2			TOTAL COPPER CONSUMPTION IN ALL FORMS

Figures for countries marked * have been calculated and included in Free World Total.

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ANNEX III: AVERAGE COST OF COMPETITIVE COPPER [1]

(U.S. cents per pound)

	1969	1970	
CIPEC			
Zambia	29.0	29.8	
Chile	24.3	33.6	
Zaire	32.5	33.7	
Peru	22.4	21.3	
Total CIPEC		31.3	
Other Countries			
United States		32.5 -	
Canada		37.4	(29.2) [2]
Philippines		18.5 -	
South Africa		26.3	
Australia		31.9	
Elsewhere		43.6	(37.3) [2]
Total non-CIPEC		32.1	(31.0) [2]
Grand Total	28.5	31.7	(31.1) [2]

1/ The average cost of producing primary copper including costs of smelting, refining and delivery to buyers. The cost includes depreciation and interests on the capital used. By-product credit is deducted. By competitive copper is meant mine production outside the centrally planned economies from which is excluded by-product and co-product copper, "mercantilist copper" where decisions on mining depend mainly on criteria other than cost, and mines - mainly small - with cost unknown. Competitive copper accounts for about 80% of total world (ex. CPE's) mine production.

2/ The figures in brackets include also co-product copper.

Source: Sir Ronald L. Prain

FORM No. 75
(2-60)

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

INTERNATIONAL DEVELOPMENT
ASSOCIATION

ROUTING SLIP	Date Feb. 3, 1972

NAME	ROOM NO.
Mr. Luczynski	A1139

	To Handle		Note and File
	Appropriate Disposition		Note and Return
	Approval		Prepare Reply
	Comment		Per Our Conversation
	Full Report		Recommendation
	Information		Signature
	Initial		Send On

REMARKS

From A. C. Kwang – D409

File Commodities

18th January, 1972.

The growing influence of OPEC as exemplified by developments since late 1970

In order to assess the current status of OPEC and its potential, one has to go back briefly to the origins of this organisation and its performance so far. OPEC owes its formation to an initiative of Venezuela which found a favourable response in Saudi Arabia. The result was the Perez Alfonso/Sheik Tariki Plan of early 1960.

Venezuela, with its high-cost oil and comparatively slender reserves, had been alarmed by the competitive pressures emanating from the Middle East with its low-cost oil and high reserves. Perez Alfonso felt that his country's interests would be best served through the Venezuelan handicap being reduced by way of scaling-up, or at least preserving, the government take in the Middle East thus putting a floor under the price level of Middle East oil.

Simultaneously Venezuela, anxious to maintain its take per barrel, was to be content with leaving by far the greatest part of the rise in output to the Middle East. Although the Middle East - especially Saudi Arabia - might have fared better by eliminating less favourably-placed competitors and increasing more rapidly its output, Sheik Tariki did fall in with Perez Alfonso's concept. Yet nothing much might actually have happened had the oil companies not reduced the posted prices later in 1960.

The companies' action was in line with the original concept of posted prices being related to the general market situation, and it took some practical experience for the companies to realise that the producing countries, in whose budget oil revenues played such a preponderant role, could not be expected to accept easily substantial reductions in their expected revenues. This traumatic experience of the producer countries was the catalyst which resulted with great rapidity in the underpinning of the original Plan.

During the first years of its activities OPEC remained essentially a defensive weapon, i.e. it was successful in making further downward adjustments of posted prices virtually impossible, and it provided (Resolution I.1) a means of avoiding a repetition of what had happened at the time of the nationalisation of Anglo-Iranian in Iran: the OPEC countries were to stand together should one or the other of them be in conflict with oil companies, and in such circumstances would make it impossible for the companies to play one producer country against another.

During that period, whenever and wherever undertaken, endeavours for the positive restructuring of the relationship of the producer countries to each other and of all of them to the oil companies, failed eventually. This applied particularly to the endeavours to establish a system of production programming which was tantamount to a quota system, possibly a kind of international proration. Each country wanted such production quotas to be established on the strength of criteria which happened to favour its own particular situation: proved reserves, historical position, population, etc.

In 1965 a tentative programme was introduced but for various reasons it proved to be entirely ineffective and was abandoned. This item has not been removed from the agenda, but in spite of Venezuelan pressures it has never got any nearer to being realised. It was last mentioned in Resolution XXlll. 133 and described as a potential defensive weapon should the price situation deteriorate.

Whereas the ambitions to establish a quota system failed to materialise, simply because the discussions showed up the true fact that OPEC members were competitors of each other, OPEC did progress in the direction of exacting higher revenues per barrel from the oil companies, because on this point their interests were altogether identical.

After protracted negotiations during 1964 the increase in unit revenues was achieved without any adjustment in posted prices by using a number of technical devices. The basic mechanism adopted was to follow the long-standing Venezuelan example of treating royalties as a deductible cost for tax purposes instead of as part of the 50% government take which was the way in which the 50/50 principle had by mutual consent been applied in the Middle East since the early 1950s. The agreements reached between the OPEC member states and the oil industry in 1965 have thus come to be known as the "OPEC expensing of royalty settlement".

The other important feature of this settlement, which in the first instance was applied for the period 1964-1966 and later extended to 1975, was the recognition that the posted price levels of Middle East and African crude oils existing at the time should not necessarily

constitute the basis on which tax was assessed by producer countries. Since OPEC could not accept an official reduction in posted prices, the settlement introduced the concept of a tax reference price lower than the posted price.

To establish the tax reference price two different sets of adjustments to the posted price were allowed. The first was a flat percentage reduction which was originally set at 8½% in 1964 declining to 6½% in 1966 and eventually further declining to 2% in 1971 before being entirely eliminated in 1972. The second was a gravity adjustment which was applicable through a complex formula the net effect of which, however, was to reduce the relative effect of the flat percentage reduction on light and heavier crude oils. Heavier crude oils were less affected by this gravity adjustment than lighter crude oils, thereby in principle adjusting the historical posted price relationship of light and heavy crude oils as they existed at the time. As part of all these adjustments a change was also made in the marketing allowance which had previously been applicable but which was of small consequence.

The result of all this complex mathematics was to increase the unit revenues of M.East producer countries by an average 4¢ per barrel in 1964 and thereafter by around 1¢ per barrel per annum to 1975. The "expensing of royalty settlement" was superseded by the Agreements of 1971 for Persian Gulf, Mediterranean and African crude oils, but the principle that royalties are treated as a cost has been maintained.

At this stage we must look again at the different status of the various OPEC members. We have already referred to the respective positions of Venezuela and of the main Middle East producer countries, but now we must deal with the situation of newcomers to OPEC such as: Qatar, Indonesia, Libya, Abu Dhabi, Algeria and Nigeria.

Indonesia, although joining in 1962 has been operationally a sleeping partner, a role it has shared with Venezuela notwithstanding the latter's strong influence. Both countries did benefit from the successes of the Middle East protagonists but their problems were so special that operationally the OPEC Resolutions being mainly focused on the Middle East, and to a secondary extent Africa, did not affect them directly.

The position of the African countries was different, and in the case of Libya (under the previous Regime) the delay in joining OPEC until it had established a strong quantitative position was entirely logical. Once it had achieved a certain plateau in this respect it was in its interest to join and the same applied to Nigeria. Algeria was a case per se because of its "special relationship" to Metropolitan France, based on the Evian Agreements of 1962. Only when this relationship had worn thin did it join OPEC.

The particular situation of 1970 revitalised the OPEC position which had suffered from the trauma of the 1967 Middle East War. At that moment the Arab countries (not, of course, Iran) endeavoured to use their oil supply position to further political aims, whereas OPEC is designed to use the politico-administrative strength of the producer countries to further their oil economic interests. Only

when there was an opportunity to revert effectively to the latter concept did OPEC regain its strength.

There is no need at this point to retell the story of the Libyan coup, followed by tax increases and price adjustments at the Persian Gulf in November 1970, again followed by the Teheran and Tripoli Agreements, and the Eastern Mediterranean and West African settlements. For OPEC, however, it is significant that :-

(a) the initiative came from one member country in a specific situation (Libya), and
(b) that all along the real negotiations took place on a regional rather than on an overall OPEC level.

In spite of the spectacular success of the OPEC countries, the situation as of mid-1971 was that, whereas previously OPEC provided a common front which dealt to a great extent with each of the oil concessionaries separately, the oil companies- with the reluctant blessing of the U.S. Department of Justice - had by then established effective coordination (London Policy Group), whilst the rifts amongst the oil-producing countries had grown and had become altogether visible.

It is, therefore, perhaps not right to talk of "a growing influence of OPEC", although there is no doubt that the bargaining position of the producer countries is now greater than it can have been at any previous time.

The reason for this stronger bargaining position is two-fold:-

(a) current energy demand estimates to 1980 and beyond show figures considerably higher than those on which respective calculations were based hitherto.* Since the Middle East is the backbone of the world oil supply system, the increased demand assumptions cannot fail to cast their shadow upon the near-and medium-term supply/demand picture. The concept that the Middle East could be considered as being a bottomless pit no longer appears to be altogether valid.

(b) the OPEC member governments have become more sophisticated and the events of the last eighteen months have shown that it is none too difficult to create by administrative action and/or by the threat thereof a position of scarcity in the course of which the price levels can be pushed upwards. This, of course, is mainly due to the by now generally known fact that alternative sources of energy carry higher costs than those of Middle East crude even with the substantial tax burden put upon it.

The growing strength of the producer side depends obviously on the elimination or attenuation of competition between oil-producing countries and for that matter oil companies. In view of the very high benefit derived by the countries from the export of a barrel of oil, it would not seem unreasonable if, at least, some of the countries would have incentives to optimise by exporting more barrels rather than trying to take as much money as they can per barrel.

Finally, the balance of power will to a certain extent depend on whether and in which form the main oil-importing countries are going to organise their oil procurement system.

* The development of assumptions regarding U.S.A. oil demand is a case in point. The dramatic change in the U.S. approach is mainly determined by the progressive scaling-up of oil demand figures in the U.S.A. The OECD energy policy paper of 1966 worked on the assumption of a 1980 oil demand of 15 million b/d; the Presidential Task Force Report of February, 1970 mentioned 18.6 million b/d, whereas the National Petroleum Council Report issued in July 1971 works on 22.7 million b/d.

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DATE: November 15, 1971

Table 1

Worldwide oil consumption in the 70's

(as estimated by OGJ)

	1,000 b/d			1,000,000 t/y		
	1970	1975	1980	1970	1975	1980
North America	15,870	20,800	25,200	769	1,008	1,222
U.S.A.	14,370	19,000	23,000	697	922	1,116
Canada	1,500	1,800	2,200	72	86	106
Latin America*	2,760	3,710	5,020	136	184	250
Argentina	420	580	800	21	29	40
Brazil	510	670	880	25	33	44
Mexico	490	640	890	24	32	44
Other	1,340	1,820	2,450	66	90	122
Western Europe	12,710	16,100	19,930	631	795	984
Belgium-Luxembourg	550	670	880	27	33	43
France	1,940	2,430	3,080	95	119	151
West Germany	2,700	3,450	3,900	131	167	189
Italy	1,720	2,300	2,800	87	116	142
Netherlands	730	850	1,000	37	43	51
Scandinavia	1,130	1,550	2,170	60	78	109
Spain	480	870	1,550	23	42	74
United Kingdom	2,080	2,400	2,850	103	119	141
Others	1,380	1,580	1,700	68	78	84
Middle East	990	1,300	1,900	51	67	98
Africa	870	1,200	1,910	43	59	94
Asia Pacific	6,380	11,520	17,250	317	572	861
Australia	530	700	950	26	34	46
India	350	570	850	17	28	47
Japan	4,030	8,000	12,000	200	397	595
Others	1,470	2,250	3,450	74	113	173
World O.C.A.†	39,580	54,630	71,210	1,947	2,685	3,509
Communist Countries‡	6,980	10,550	14,500	346	494	719
U.S.S.R.	5,450	7,800	11,300	270	387	560
Others	1,530	2,750	3,200	76	107	159
Total World	46,560	65,180	85,710	2,293	3,179	4,228

*Mexico, Bermuda and Bahamas included in Latin America.
†World Outside Communist Areas. (Based on "BP Statistical Review of the World Oil Industry 1970").
‡Includes Mainland China, North Korea, North Viet Nam; excludes Yugoslavia (Western Europe), Cuba and Chile (Latin America).

OPEC

BOOKS AND MAGAZINES FOR A PETROLEUM LIBRARY

— Two lists of titles —

July 1967

The present lists, prepared by the Information Officer, Mrs. Floria Abolfazli, do not pretend to be a comprehensive bibliography on the subject of petroleum. They were prepared with the main object of informing staff members of the OPEC Secretariat, researchers in Member Countries and all others connected with the industry, what books or magazines might be of particular interest.

BOOKS FOR A PETROLEUM LIBRARY

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Barrows, Gordon H. *The International Petroleum Industry*, International Petroleum Institute: New York, 1965

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(Various) American Association of Petroleum Geologists, *Habitat of Oil*, American Association of Petroleum Geologists, (ed. L.G. Weeks): Tulsa, 1958

(Various) Princeton University Conference, *The Role of National Governments in Exploration for Mineral Resources*, Littoral Press: Ocean City, N.J., 1964

Zimmermann, Erich W. *Conservation in the Production of Petroleum*, Yale University Press: New Haven, Conn., 1957

MAGAZINES FOR A PETROLEUM LIBRARY

A LIST OF 50 TITLES

American Gas Association Monthly, American Gas Association: 420 Lexington Ave., New York 17, N.Y. (Monthly)

Boletin de la Asociación Mexicana de Geólogos Petroleros, Asociación Mexicana de Geólogos Petroleros. Apartado Postal 1884, Mexico 1, D.F. (Bi-Monthly)

Bulletin de l'industrie petrolière, S.O.C.I.D.O.C. - Bureau d'informations professionnelles: 156 rue Montmartre, Paris 2e, France (Daily)

Bulletin of the American Association of Petroleum Geologists, The American Association of Petroleum Geologists: Box 979, Tulsa 1, Okla. (Monthly)

Bulletin of the Geological Society of America, The Geological Society of America: 419 West 117th St., New York, N.Y. (Monthly)

Bulletin on the Trinidad and Tobago Petroleum Industry, Ministry of Petroleum and Mines: Port of Spain, Trinidad & Tobago (Monthly)

Canadian Oil & Gas Industries, National Business Publication, Ltd.: Gardenvale, Quebec, Canada (Monthly)

Europe & Oil, Europe & Oil Verlag: Sonnenstrasse 19, Munich, Germany (Monthly)

Fuel Oil News, Oildom Publishing Co.: 1217 Hudson Blvd., Bayonne, N.J. (Monthly)

German Oil Information Service, Erdöl Informationsdienst: Alsterterrasse 11, Hamburg 36, Germany (Bi-Monthly)

The Independent Monthly, Independent Petroleum Association of America: Box 1019, Tulsa 1, Okla. (Monthly)

Industrial Gas, Moore Publishing Co., Inc.: 48 West 38th St., New York 18, N.Y. (Monthly)

The Institute of Petroleum Review, The Institute of Petroleum Review: 61 New Cavendish St., London W.1. England (Monthly)

International Oilman, Oil Forum, Inc.: 258 Majestic Bldg., Ft. Worth, Texas (Monthly)

Journal of Canadian Petroleum Technology, The Journal of Canadian Petroleum Technology, The Canadian Institute of Mining and Metallurgy: 1117 St. Catherine Street West, Montreal 2, Quebec, Canada (Quarterly)

The Journal of Geology, The University of Chicago Press: 5750 Ellis Ave., Chicago 37, Ill. (Bi-Monthly)

Journal of the Institute of Petroleum, The Institute of Petroleum: 61 Cavendish St., London W.1., England (Monthly)

Journal of Petroleum Technology, Society of Petroleum Engineers: AIME, 6300 No. Central Expressway, Dallas 6, Texas (Monthly)

Offshore, Industrial Trade Publications: P.O. Box 977, Conroe, Texas (Monthly)

Oil in Canada, Stovel-Advocate Publishing Co.: 365 Bannatyne Ave., Winnipeg 2, Manitoba, Canada (Weekly)

The Oil and Gas Journal, The Petroleum Publishing Co.: 211 St. Cheyenne Ave., Tulsa, Okla. (Weekly)

Oilweek, MacLean-Hunter Publishing Co., Ltd.: 481 University Ave., Toronto 2, Ontario, Canada (Weekly)

Petro/Chem Engineer, The Petroleum Engineer Publishing Co.: Box 1589, Dallas, Texas 75221 (Monthly)

Petróleo Interamericano, Petroleum Publishing Co.: 211 S. Cheyenne Ave., Tulsa, Okla. (Monthly)

Petroleum, Leonard Hill Technical Group, Leonard Hill House: 9 Eden St., London N.W.1., England (Monthly)

Petroleum and Chemical Transporter, Petroleum Transportation Publishing Co., Inc.: 7815 Old Georgetown Road, Washington 5, D.C. (Monthly)

The Petroleum Engineer, Drilling and Producing, The Petroleum Engineer Publishing Co.: 800 Davis Building, Dallas 2, Texas (Monthly)

Petroleum Gazette, Petroleum Information Bureau: 174 Swanston Street, Melbourne C.1., Victoria, Australia (Quarterly)

Petroleum Intelligence Weekly, Petroleum Intelligence Weekly: 48 West 48th Street, New York 36, N.Y. (Weekly)

Petroleum Legislation Report, Petroleum Legislation Co.: P.O.Box 1591, New York, N.Y. (Monthly & Revision Service)

Petroleum Management Report, The Petroleum Engineer Publishing Co.: Box 1589, Dallas, Texas 75221 (Monthly)

Petroleum Press Service, 24 Ludgate Hill, London E.C.4., England (Monthly)

Petroleum Refiner, Gulf Publishing Co.: Box 2608, Houston 1, Texas (Monthly)

Petroleum Taxation Report, Petroleum Legislation Co.: P.O. Box 1591, New York, N.Y. (Monthly)

Petroleum Times, Petroleum Times, Ltd.: 33/39, Bowling Green Lane, London E.C.1., England (Bi-Monthly)

The Pipeline Engineer, The Petroleum Engineer Publishing Co.: 800 Davis Building, Dallas 2, Texas (Monthly)

Pipe Line Industry, Gulf Publishing Co.: Box 2608, Houston 1, Texas (Monthly)

Pipe Line News, Oildom Publishing Co.: P.O. Box 6347, Houston 6, Texas (Monthly)

Platt's Oilgram, Platt's Oilgram Services: 330 West 42nd St., New York, N.Y. (Daily)

Quarterly Journal of the Geological Society of London, Geological Society of London: (order from: H.K. Lewis & Co., Ltd.: 136 Gower St., London W.C.1., England) (Quarterly)

Revue de l'Institut Français du Pétrole, Societé des Editions Tecnip: 2, rue de Lubeck, Paris XVI, France (10 times yearly)

La Revue Petrolière, La Revue Petroliere: 40, rue du Colisee, Paris VIII, France (Monthly)

Russian Oil and Gas Bulletin, Associated Technical Services: Drawer 271, East Orange, New Jersey (Quarterly)

Statistical Bulletin API, American Petroleum Institute: 1271 Avenue of Americas, New York 20, New York (Monthly)

Tanker Times, Terminus Publication, Ltd.: Tanker House, 416 King's Road, London S.W.10., England (Monthly)

Western Oil and Refining, (formerly Petroleum World & Oil) Palmer Publications: 412 W. 6th St., Los Angeles 14, California (Monthly)

World Oil, Gulf Publishing Co.: Box 2608, Houston 1, Texas (Monthly)

World Petroleum, Mona Palmer: 604 Fifth Ave., New York 20, N.Y. (Monthly)

World Petroleum, Mona Palmer: 25 West 45th Street, New York, N.Y. 10036 (Monthly)

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For more copies, please write to :

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M. Kaczynski.

File Comments

Mr. O.T.W. Price

January 12, 1972

Andrew C. Huang

Back-to-Office Report - Consultations on Petroleum and Primary Aluminum

1. I had a series of meetings with several institutions in Europe between November 29 and December 14, 1971 for the purpose of obtaining up-to-date information and exchanging views relevant to the petroleum report "Demand-Supply Outlook for World Petroleum Through 1980" (hereafter referred to as our draft report) which I am updating and revising.

2. These consultations were fruitful in terms of both exchanging views and securing additional data. (See Appendix I for a list of available reports.) These were some of the main findings of my consultations.

a) Growth rate projections of total world (including the centrally planned economies) energy demand for 1970-80 are generally higher than those made prior to 1971. (See Table IV, p. 24A of our draft report.) In most cases, the growth rates of potential total world energy demand have been revised upward to between 5 percent and 7 percent per annum for 1970-80. Earlier projections ranged between about 4 percent to 5 percent per annum for the same period.

b) The consensus of the petroleum specialists I met with is that, petroleum is likely to contribute a rising share of the market economies' total energy supply from around 50 percent in 1970 to around 55 percent in 1980.

c) According to informed sources, the possible crude oil supply pattern by areas in 1970, 1975 and 1980 is given below:

APPROXIMATE ESTIMATE OF FREE WORLD PETROLEUM PRODUCTION
(percent)

	1970[1/]	1975	1980
North America	30.0	26.0	22.3
Central and South America	15.1	12.9	11.0
Western Europe	0.8	1.0	1.2
North Africa	9.4	8.5	7.6
Other Africa	4.2	5.3	6.5
Middle East	35.8	41.4	46.4
Asia/Oceania	4.7	4.9	5.0
Total	100.0	100.0	100.0

1/ The above estimate was prepared in the Spring of 1971. Its 1970 marketshare patterns (especially in the case of North America - U.S./Canada) differ appreciably from those which became available later in the year such as the BP oil review.

d) As a result of faster growth rate of petroleum demand than that of indigious production for the centrally planned countries, oil imports from the Middle East under barter-agreements have been rising. However, for political as well as strategic reasons, Russia may not like this situation to develop too rapidly. In order to maintain its dominance in Eastern Europe, Russia has several alternatives. These include: (1) reducing oil exports to the Free World; (2) increasing its oil imports from the Middle East; (3) raising its own oil production targets; and (4) controlling oil demand. Most specialists think that Russia will maintain its oil exports to the West more or less at its recent level. Towards the late 1970's Russian exports of natural gas, mainly to Western Europe, may become a new source of foreign exchange.

e) Most petroleum economists are of the opinion that oil prices will tend to rise during the present decade in contrast to the preceding decade when a buyers' market prevailed. On the other hand, no one would venture a quantitative assessment of the extent of the likely price increase mainly due to the rising influence of OPEC on oil pricing and the uncertainty of future OPEC strategy with respect to producing companies. For instance, the Teheran Agreement of February 1971 is assumed to remain in effect without additional demand for revenue increase from the host governments for the period January 1971-75. However, two new issues have already arisen which are likely to result in even higher tax costs and oil prices than those provided under the Teheran Agreement. The issues in question are compensation for de facto U.S. dollar devaluation and government participation. Other contributing factors to rising oil prices include slower rate of increase in productivity, worldwide inflation, a faster growth rate of demand for oil than anticipated, (including U.S. import demand which may rise from about 25 percent at present to about 50 percent of total domestic demand in 1980) and shortage of alternative sources of fuels.

3. In addition to the objectives specified in the terms of reference, I also had useful meetings with two of the leading aluminum producers in Europe, i.e., The British Aluminium Company in London and Pechiney Aluminium Company in Paris concerning (a) the current problems of the world aluminum industry (overcapacity and price weakness), and (b) the supply/demand prospects of primary aluminum in 1971-75. (See my note on "A Summary Review of World Aluminum Price Prospects," dated November 4, 1971.)

4. I also took advantage of my visit to OECD to see Mr. Hill, Chief, Special Study Section, in order to verify the fact as reported by the Mining Journal,[1/] that the OECD is planning to prepare a study on the world

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1/ See my memorandum of November 11, 1971, regarding Study on World Aluminum Industry by the OECD.

aluminum industry at the request of the Federal German Government. He confirmed this fact and told me that a Preparatory Meeting of the Study Group is scheduled for early 1972. I then told Mr. Hill that the Bank is also deeply interested in and has followed closely, the aluminum market. During the discussion, I also informally raised the question of a closer cooperation in research projects in the future and the possibility of the Bank being invited to send an observer to meetings of the aluminum study group. Mr. Hill replied that he would give my request careful consideration.

5. Pertinent particulars on the institutions and the petroleum and aluminum specialists visited in these consultations are given in Appendix 2.

Attachments:

ACHuang:ms

APPENDIX I

LIST OF AVAILABLE REPORTS

1. "Small and Medium Power Reactors: Technical and Economic Status, Potential Demand and Financing Requirements" by

   Munir A. Khan and J. Tom Roberts
   Division of Nuclear Power and Reactors
   International Atomic Energy Agency

2. "Potential Demand for Nuclear Power in Developing Countries and the Associated Capital and Foreign Exchange Requirements" by

   International Atomic Energy Agency
   Division of Nuclear Power and Reactors
   Economic Studies Section, May 1971

3. "Comparative Evaluation of Crude Oils" by
   Paul H. Frankel and Walter L. Newton
   The Institute of Petroleum
   November 1969

4. Previsions et Orientations a Moyen Terme Pour Le Secteur Petrolier by

   Commission des Communautes Euopeenenes
   Bruxelles
   29 November 1971

APPENDIX 2

PERTINENT DETAILS ON CONSULTATIONS

On Energy and Petroleum

(a) British Petroleum Co. (London)
Messrs. E. Jamieson - Senior Planner ,
A. H. Dutton and N. Power

(b) Shell Centre (London)
Messrs. M. D. J. Gellard, G. Glass and A. F. Peters

(c) Compagnie Francaise des Petroles (Paris)
Mr. R. Constans, Asst. Economic Director

(d) Organization of the Petroleum Exporting Countries (Vienna)
Mr. M. Almahdi - Chief, Economics Section

(e) OECD (Paris)
Mr. B. D. Reinfrank - Chief, Oil Section

(f) Petroleum Economics Ltd. (London)
Messrs. P. H. Frankel, W. L. Newton and T. White

(For details of information which the Petroleum Economics Ltd. agreed to supply in conjunction with the revision of our draft report in the near future, see Appendix 3.)

(g) EEC (Brussels)
Mr. G. Brondel, Director of Energy Commission

(h) ECE (Geneva) - K. J. Brendow - Chief, Energy Division

Incidentally, Mr. Brendow told me his group has under preparation a study on the prospects for energy demand and resources for Europe on the occasion of the 25th anniversary of ECE with completion date scheduled for mid-1972. He was very complimentary about our draft report and told me that he has quoted certain parts of our draft report, specfically paragraphs 26 and 33 in their report mentioned above.

(i) International Atomic Energy Agency (Vienna)
Messrs. R. Krymm - Chief, Economic Section
J. T. Roberts, Division of Nuclear Power

APPENDIX 2 (Cont'd)

On Aluminum

(a) British Aluminium Co. (London)
Mr. J. Wall - Chief Economist

(b) Pechiney Aluminium Co. (Paris)
Messrs. G. Baudart - Chief, Service de l'information Commerciale and Jean-Pierre Ergas, Director of Marketing

(c) OECD (Paris)
Mr. D. H. Hill - Chief, Special Study Unit

(d) UNCTAD (Geneva)
Messrs. C. Dawson - Chief, Minerals and Metals Section, and D. L. Pike

TELEPHONE: 01-734.0761

APPENDIX 3

TELEGRAMS: PETEC, LONDON, W.1

PETROLEUM ECONOMICS LIMITED

1, ARGYLL STREET, LONDON, W1V 2DS

Directors: PAUL H. FRANKEL WALTER L. NEWTON TED WHITE CLIVE DALTON

WLN/DW

3rd December, 1971

Mr. Andrew C. Huang,
International Bank for Reconstruction and Development,
1818 H Street, N.W.,
Washington, D.C.20433

Dear Mr. Huang,

It was a great pleasure to see you here earlier this week and to have an opportunity to discuss with you your plans for revising and updating your Petroleum Report of March 1971.

I should now like to confirm what we have agreed to do for you:

We will provide you with background information mainly in the form of statistical tables where applicable as follows:

	Subject:	To be provided by
(a)	The growing influence of OPEC as exemplified by developments since late 1970	end 1971
(b)	More recent forecasts on world energy demand	end 1971
(c)	Potential supply pattern by areas	end 1971
(d)	The implication of recent OPEC agreements on oil revenues of producing governments	end January 1972
(e)	The net oil trade position of the Centrally Planned Countries (This will be largely derived from data sent under (b) and (c))	end 1971
(f)	Price outlook for crude oil and products in the 1970s	end January 1972

The above items relate to updating of your previous Report. As for the additional items, we have agreed to provide you as follows:

(a)	Trends and prospects of crude oil production costs of major producing areas	some data end 1971 supplementary data end January 1972

Mr. Andrew C. Huang 3rd December, 1971

(b) The structure of freight rates and their significance to oil prices — end January 1972

(d) The flow pattern of oil trade — end January 1972

It was agreed that items (c) and (e) relating to crude oil and petroleum products prices were too ambitious a programme to incorporate in a Report to be completed in March 1972. It would also involve us in substantial research. We agreed that we would review the matter when I come to Washington in February next year and that it could perhaps be the subject of a special study at a later date.

With best regards.

Yours sincerely,

W.L.Newton

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

Copy to Hoffmann
File Commodities

TO: Mr. O. T. W. Price

DATE: January 3, 1972

FROM: Enzo Grilli

SUBJECT: Back-to-office report on the 10th Session of the FAO Consultative Subcommittee on Hard Fibers and Meeting on Coir, Rome, December 6-11, 1971, and on Consultations with Olefins and Cordage Manufacturers and Traders, London, December 13-14, 1971

1. I attended the 10th Session of the Consultative Subcommittee on Hard Fibers held in Rome from December 6 to 11, 1971. The Consultative Subcommittee, set up in September 1967, works under the umbrella of the FAO Study Group on Hard Fibers and has the task of carrying through the operation of the "Informal Agreement", essentially an "export quota" arrangement among the major hard fibers producing countries. 1/ The Subcommittee also acts as the "Standing Committee" of the Study Group and is concerned with a broad range of issues, varying from review of the current situation to long-term prospects and action, including research on new end uses and competition from synthetic substitutes. A meeting on coir, on December 6, preceded the formal assembly of the Consultative Subcommittee on Hard Fibers. All major producing and consuming countries were present at the meetings. Several intergovernmental and international organizations (such as the EEC, UNDP, UNCTAD, Commonwealth Secretariat), as well as non-governmental organizations, including the Federation of Twine, Cordage and Rope Manufacturers of Western Europe (FIDUROP) were also represented.

2. In view of the fact that the Informal Agreement, reactivated in May 1971, still is much in question, there may be merit in reporting on the present meeting in some detail.

Review of the current situation in sisal and henequen

3. Output of sisal and henequen in 1971 is estimated at about 770,000 metric tons, or 2 percent below that of 1970. Adverse weather conditions affected African sisal production, particularly in Tanzania and Madagascar. While other African producers did not suffer from droughts and bad weather and were able to maintain production at 1970 levels, the overall sisal output of Africa probably declined by some 10-13 thousand metric tons. Production was about the same as in 1970 in Brazil and only marginally lower in Mexico, because of unfavorable weather conditions.

1/ For information on the origin, basic features and changes of the "Informal Agreement" which also include all the major hard fibers consuming countries, see Mr. Varon's memorandum on "Recent International Discussions on Hard Fibers", dated May 22, 1969, and my back-to-office report on the 9th Session of the FAO Consultative Subcommittee on Hard Fibers, dated May 19, 1971.

4. Exports of fiber in 1971 were estimated to be considerably lower than in 1970, although exports of cordage from producing countries increased further. The overall export situation, however, is not clear yet, since few exporting countries were able or willing to provide estimates for the whole year to the subcommittee and information on the first half of 1971 was also fragmentary. World imports of sisal and henequen in 1971, however, were put at about 508,000 metric tons, 6 percent below the level of 1970. The decline in fiber imports was particularly strong in Western Europe where total imports in 1971 were estimated to be 25,000 metric tons less than in 1970. Imports of fiber also declined in Japan, Australia and Canada, while in the United States they remained substantially unchanged from a year ago. On the whole, developed countries' imports of sisal and henequen probably declined by about 10 percent in 1971. Centrally planned countries showed only a marginal increase in their imports above 1970, while developing countries' imports of sisal and henequen remained substantially unchanged. Imports of manufactured products, thought to be at higher levels than in 1970, did probably offset part of the decline in fiber imports showed by Western European countries. Total world import demand for sisal and henequen (fiber and manufactured products), however, further declined in 1971, probably by as much as 4 percent with respect to 1970. Although the accumulation of fiber and finished products which took place in the second half of 1970 (when importing countries took advantage of the very favorable prices which prevailed in the market) explains at least in part the decline in total import demand registered in 1971, the trend in world sisal-henequen fiber and goods absorption is clearly a declining one. Since the mid-sixties total world import demand has declined much faster than world supply and the necessary output adjustments have not yet materialized. In a basic situation of oversupply the price behavior of sisal and henequen during the past 4-5 years is scarcely a surprise. In spite of the various stabilization attempts made through the "Informal Agreement", prices have trended downwards and 1971 prices were no exception.

5. Following the reactivation of the "Informal Agreement" in May 1971, prices of African sisal showed some improvement up to the end of July. East African Rejects (otherwise known as Under Grade or UG) - a representative grade of African sisal - sold at £73.6 per metric ton c.i.f. Europe. This represented an increase in price of £1.6 per metric ton with respect to May. The further rise of £3 per ton registered in August was largely due to increases in freight rates. At the same time, however, prices of Brazilian No. 3 sisal - a grade comparable to EAR - declined from £66.5 per ton c.i.f. Europe in May to £62.7 per ton in August, thereby bringing the price differential between the two grades from £5.5 to £13.3 per ton. In a major bid to recapture their place in world markets, sisal producers in East Africa cut their EAR prices by £4 per ton in September and by another £9 per ton in October. Although prices of Brazilian No. 3 sisal further declined to £59 per ton in October-November, a more normal price differential between the two comparable grades was reestablished by the end of November. Current prices, however, appear to be very unattractive to most producing countries since they barely cover direct costs of production of the most efficient

producers in Africa and leave many others - especially in East Africa - below the break-even point.

Review of the "Informal Agreement" on sisal and henequen

6. A definite assessment of the working of the "Informal Agreement" in 1971 is not possible since member countries were generally unable (or unwilling) to indicate with sufficient precision the magnitude of their exports (especially cordage exports). Some official and unofficial complaints of overfulfillments of national export quotas were heard during the meetings, but given the scarcity of information on exports in 1971, the foundation of such complaints could hardly be ascertained with any sufficient precision. The FAO Secretariat, however, held the view that the agreement was by and large respected in 1971.

7. The Subcommittee decided to maintain for calendar year 1972 the same export quotas as in 1971, subject to reexamination at the next session. Export quotas for fiber and cordage in 1972 were thus agreed as follows (in thousand metric tons): Tanzania 185, Brazil 155, Mexico 86, Portugal 81, Kenya 50, Franc Zone 25, Haiti 19, Indonesia 1, other countries 3, for a total of 605 metric tons. The Subcommittee also decided to "reconfirm" the indicative target prices of £84.5 ± £5 per metric ton c.i.f. Europe for EAR, while consuming countries reiterated their views that a more realistic target price for EAR c.i.f. Europe should be £78 ± £5 per metric ton. 1/

8. The inability of the Subcommittee to revise the global export quotas for 1972, in spite of strong urgings from the Kenyan delegation which, supported by most of the main fiber importing countries, called for a cut of about 5 percent in the global export quota and for corresponding pro rata cuts in the national quotas as a way to adjust supply to the shrinking demand and to raise market prices to more remunerative levels, indicates the extent to which conflicting interests among producing countries have become crystallized. In this context serious doubts were cast not only on the effectiveness of the "Informal Agreement" but also on the principle of cooperation between producing countries on which the arrangement is based.

9. Although the demand-supply prospects for 1972 are not fully clear, given the scarcity of statistical information offered by most producing countries, import demand for fiber is expected to decline by roughly 3 percent with respect to 1971 and in such a situation fiber prices are likely to remain weak throughout 1972.

1/ Minimum selling prices for various grades of sisal and price differentials between grades which operated in 1969 under the Informal Agreement were abolished in May 1971 and were not reestablished.

10. Given the very low prices which prevailed in 1971, sisal and henequen were said to have remained fully competitive with polypropylene in the harvest twine market, while synthetic fibers continued to cut into traditional sisal-henequen markets for ropes and packaging twine. 1/

Research on new end uses for hard fibers

11. Research on new end uses for sisal and henequen was discussed at some length and it was decided that the next session of the Subcommittee, which will be held in Rome on June 7-9, 1972, would be preceded by a session of the Advisory Working Party on Research (AWP). The question of possible IBRD participation in financing research of new end uses for hard fibers, raised in general terms during the meeting, will be taken up again and in more specific terms during the Meeting of the Advisory Working Party in June 1972, since an organic plan for research is likely to be presented by the AWP to the 11th Session of the Subcommittee.

Review of the abaca situation

12. Production of abaca in the Philippines during the first ten months of 1971 amounted to 45.6 thousand metric tons, a decline of about 19 percent with respect to the same period of the previous year. Total production in 1971 is expected to be around 54.0 thousand metric tons (as compared to 77.6 thousand tons in 1970). A further decline in production, again due to adverse weather conditions is expected in 1972. 2/ Exports from the Philippines during the first ten months of 1971 totaled to 42.2 thousand metric tons, a decline of about 12 percent compared to the same period in 1970. Demand for abaca appears to be firm in the United Kingdom and the United States, where increased consumption by paper mills seems to be sufficient to compensate for losses in the traditional rope uses. Abaca consumption in Japan appears to be weak and expected imports in 1971 are 3,000 metric tons below the 1970 level. A further decline of import demand of about 1,000 metric tons is expected in 1972. On balance, however, uncertainty is more on the supply than on the demand side and shortages of certain grades may occur in 1972. Freight rates on abaca are expected to increase in February 1972 by some 15 percent and by another 2.5 percent in August. For some low-price grades of abaca freight rates will then account for about 40 percent of the c.i.f. value of the fiber. Improvement in baling techniques in the Philippines was recommended as a possible way to counter freight rate increases.

1/ The relationship between sisal-henequen prices and olefin prices (especially polypropylene) and the effects of competition from synthetics in the various sisal-henequen end-uses will be examined in detail in my paper on the "Hard Fibers Situation and Projects" scheduled to appear in draft form in the next 2-3 months.

2/ A series of eight typhoons in August-September 1971 hit abaca producing areas.

Review of the coir situation

13. The "ad hoc meeting" on coir reviewed the situation of coir fiber and yarn in some detail. World imports of coir fiber in 1971 were estimated at some 10 percent above 1970 levels but roughly in line with the 1967-69 average. Import demand seems to be stagnating. FAO Secretariat studies on the coir situation in the United Kingdom, Italy and the Federal Republic of Germany indicate that mattress fiber was suffering from strong competition from synthetic materials in its major end use as an insulator in inner-spring mattresses. As a way to stimulate coir fiber consumption, the meeting recommended that Ceylon, the main producing country, make a strong effort to improve quality and to insure regular supplies.

14. Imports of coir yarn into the major consuming countries - with the exception of Belgium and France - showed a further decline in the first part of 1971. The import demand prospects for coir yarn were considered rather poor since its use in mattings for floor coverings tended to be limited mainly to runners and to coverings of large areas, while in domestic uses felt floor covering and tufted carpets were replacing coir yarn mattings. Demand for coir mats, on the contrary, is still good and exports of coir mats (particularly door mats from India) are still expanding. The importance of quality control on the yarn exported from India was repeatedly stressed by many of the importers and the necessity of standardization of sizes of door mats was reiterated by European manufacturers who invited India to comply with the recent agreement reached by the major European manufacturers not to produce doormats of sizes less than 0.24 square meters. This agreement is expected to increase consumption of coir yarn for mats by some 15-20 percent.

Consultation with polypropylene and cordage manufacturers and sisal traders in London

15. On December 13 and 14 I consulted in London with polypropylene manufacturers, cordage manufacturers and sisal traders. From my conversations with officials of the polypropylene marketing department of the Imperial Chemical Industries (ICI) I was able to confirm my views on the situation of excess capacity which characterizes the polypropylene market in Europe and is largely responsible for the recent declines in the market price of various grades of polypropylene. This situation, however, is expected to last possibly until 1973 whereupon prices of polypropylene - at least in the United Kingdom - are forecast to rise in line with the 3-5 percent expected annual rate of inflation.

16. British Ropes 1/ officials expressed the view that polypropylene harvest twine is still not fully competitive with sisal-henequen twine in

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1/ British Ropes Limited manufactures most of the hard fiber cordage consumed in the United Kingdom and also produces polypropylene harvest twine.

the United Kingdom particularly because of the very low market prices of sisal and the strong competition coming from cheap imported sisal and henequen twine. They indicated, however, that as much as 15-20 percent of the harvest twine consumed in the United Kingdom is made out of polypropylene and that consumption of polypropylene baler and binder twine is likely to increase in the future.

17. I also visited the Tropical Products Institute in London and reviewed with Mr. C. Jarman (who is also the Secretary of the FAO Advisory Working Party on Hard Fibers Research) the results and prospects of research on new end uses for hard fibers. The Tropical Institute, a part of the Ministry of Overseas Development, is presently engaged in assisting the handicraft sector of various hard-fibers producing countries in matters such as design, dyeing techniques and quality standards; the results of the research and assistance of the Institute seem to be quite promising.

cc: Messrs. Demuth, Henderson, Stevenson, Singh and Varon
Messrs. Avramovic, Collier, de Vries, Gilmartin, Kuczynski and Takahashi

EGrilli:hbb

M. Kuczynski

January, 1972

RLe Commodities

The Flow Pattern of Oil Trade

Tables 1(a) - (h) show the estimated main oil movements for the years 1970 and 1971 and forecasts for the years 1973 - 1977 and 1980. The figures are given in million tons (1 million tons per annum = 20,000 barrels daily).

These tables are based on:

a) The tables relating to world energy and world demand and supply pattern by areas already sent to the International Bank for Reconstruction and Development under cover of our letter of 4th January, 1972.

b) The following general assumptions:

(i) The Suez Canal remains closed.

(ii) The Trans Arabian Pipeline (Tapline) is open throughout.

(iii) The existing pipelines from North Iraq to the Eastern Mediterranean will be open throughout at a capacity of 54 million tons per annum in 1970 and 1971 and 59 million tons per annum from 1972 onwards.

(iv) There will be a pipeline on the Egyptian side of the Suez Canal from Suez to Alexandria with a capacity of 80 million tons per annum as from 1975. Throughput has been assumed at 60 million tons in 1975 and 80 million tons in subsequent years.

(v) The capacity of the Israeli pipeline is raised to 22 million tons per annum in 1971,45 million tons per annum in 1973 and 60 million tons per annum in 1976 and subsequent years. Throughput has been assumed at:

cont.....

40 million tons in 1973
45 million tons in 1974 and 1975
50 million tons in 1976
55 million tons in 1977
60 million tons in 1978 and 1980.

(vi) The Iran/Turkey pipeline will now not be built so as to be in operation by 1980.

(vii) There will be an additional Iraq/Eastern Mediterranean pipeline with a capacity of 30 million tons per annum from 1977 onwards.

(viii) There will be a pipeline from Iraq/Iran into the U.S.S.R. with a capacity of 30 million tons per annum in 1980.

(ix) Shipments from the North Slope of Alaska will now begin only in 1976, at 45 million tons per annum, rising to 60 million tons in 1977, 75 million tons in 1978 and 100 million tons in 1980.

Table 1(a)

MAIN OIL MOVEMENTS 1970

Million Tons

From: / To:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S.Bloc Baltic	S.Bloc Black Sea	Caribbean	S. America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	22	-	3	6	-	x	3	15	1	6	-	(f)	-	-	56
Northwest Europe (b)	162	20	85	29	-	x	10	2	8	18	-	2	-	-	336
Southwest Europe (c)	61	31	90	5	-	1	x	-	8	5	-	1	-	-	202
Southeast Europe (d)	17	20	20	-	-	-	x	-	9	1	-	-	-	-	67
North Africa	-	-	x	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	4	1	(f)	x	-	-	-	-	1	1	-	-	-	-	7
South and East Africa	21	-	-	-	-	-	-	-	-	-	-	-	-	-	21
Middle East (e)	10	-	-	-	-	-	-	-	-	-	-	-	-	-	10
India, Pakistan, Ceylon	22	-	-	-	-	-	-	-	(f)	-	-	-	-	-	22
Southeast Asia	38	-	-	-	x	-	-	-	3	1	-	-	2	-	44
Japan	165	-	(f)	1	31	(f)	-	-	2	2	-	-	4	-	205
Australasia	21	-	-	-	5	-	-	-	-	-	-	-	-	-	26
Canada (East Coast)	10	-	-	3	-	-	(f)	-	-	28	-	-	-	-	41
U.S. East Coast	6	-	3	3	-	3	5	-	1	106	-	91	-	-	218
U.S. West Coast	3	-	-	-	3	-	1	-	-	6	(f)	(f)	x	9	22
Caribbean	7	-	4	9	1	-	-	-	6	x	-	-	-	-	27
S. America (East Coast)	13	-	2	2	-	-	-	-	-	5	-	-	-	-	22
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	584	72	207	58	40	4	19	17	41	186	-	94	6	9	1,337

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli pipeline
(f) less than 500,000 tons

Table 1(b)

MAIN OIL MOVEMENTS 1971

Million Tons

From: / To:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S.Bloc Baltic	S.Bloc Black Sea	Caribbean	S. America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	24	-	2	7	-	x	3	15	1	4	-	(f)	-	-	56
Northwest Europe (b)	191	25	56	38	-	x	9	2	8	14	-	2	-	-	345
Southwest Europe (c)	81	35	73	10	-	1	x	-	7	3	-	1	-	-	211
Southeast Europe (d)	33	18	19	-	-	-	x	-	8	1	-	-	-	-	79
North Africa	-	-	x	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	5	-	(f)	x	-	-	-	-	1	1	-	-	-	-	7
South and East Africa	22	-	-	-	-	-	-	-	-	-	-	-	-	-	22
Middle East (e)	15	-	-	-	-	-	-	-	-	-	-	-	-	-	15
India, Pakistan, Ceylon	23	-	-	-	-	-	-	-	(f)	-	-	-	-	-	23
Southeast Asia	43	-	-	-	x	-	-	-	2	(f)	-	-	2	-	47
Japan	179	-	(f)	2	34	(f)	-	-	1	1	-	-	4	-	221
Australasia	16	-	-	-	3	-	-	-	-	-	-	-	-	-	19
Canada (East Coast)	12	-	-	3	-	-	(f)	-	-	27	-	-	-	-	42
U.S. East Coast	12	-	2	3	-	3	5	-	1	115	-	99	-	-	240
U.S. West Coast	5	-	-	-	4	-	1	-	-	9	(f)	1	x	9	29
Caribbean	9	-	8	14	1	-	-	-	6	x	-	-	-	-	38
S. America (East Coast)	11	-	3	3	-	-	-	-	-	4	-	-	-	-	21
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	683	78	163	80	42	4	18	17	37	186	-	103	6	9	1,426

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli pipeline
(f) less than 500,000 tons

Table 1(c)

MAIN OIL MOVEMENTS 1973

Million Tons

To: / From:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S.Bloc Baltic	S.Bloc Black Sea	Caribbean	S. America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	32	-	-	9	-	x	4	15	1	5	-	-	-	-	66
Northwest Europe (b)	198	25	59	70	-	x	14	2	8	16	-	2	-	-	394
Southwest Europe (c)	103	56	77	13	-	1	x	-	7	4	-	1	-	-	262
Southeast Europe (d)	40	33	24	-	-	-	x	-	8	1	-	-	-	-	106
North Africa	-	-	x	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	6	-	-	x	-	-	-	-	1	1	-	-	-	-	8
South and East Africa	25	-	-	-	-	-	-	-	-	-	-	-	-	-	25
Middle East (e)	34	-	-	-	-	-	-	-	-	-	-	-	-	-	34
India, Pakistan, Ceylon	29	-	-	-	-	-	-	-	-	-	-	-	-	-	29
Southeast Asia	46	-	-	-	x	-	-	-	2	1	-	-	2	-	51
Japan	203	-	-	5	55	-	-	-	1	2	-	-	4	-	270
Australasia	18	-	-	-	2	-	-	-	-	-	-	-	-	-	20
Canada (East Coast)	13	-	-	3	-	-	-	-	-	29	-	-	-	-	45
U.S. East Coast	24	1	9	10	-	4	6	-	1	127	-	100	-	-	282
U.S. West Coast	11	-	-	-	8	-	1	-	-	10	2	1	x	9	42
Caribbean	12	-	15	15	1	-	-	-	6	x	-	-	-	-	49
S. America (East Coast)	12	-	3	3	-	-	-	-	-	4	-	-	-	-	22
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	808	115	187	128	66	5	25	17	37	207	2	104	6	9	1,716

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli pipeline

Table 1(d)

MAIN OIL MOVEMENTS 1974

Million Tons

From: / To:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S.Bloc Baltic	S.Bloc Black Sea	Caribbean	S.America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	38	-	-	10	-	x	5	15	1	5	-	-	-	-	74
Northwest Europe (b)	203	25	56	83	-	x	14	2	8	16	-	2	-	-	409
Southwest Europe (c)	123	57	75	14	-	1	x	-	7	4	-	1	-	-	282
Southeast Europe (d)	45	38	25	-	-	-	x	-	8	1	-	-	-	-	117
North Africa	-	-	x	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	6	-	-	x	-	-	-	-	1	1	-	-	-	-	8
South and East Africa	27	-	-	-	-	-	-	-	-	-	-	-	-	-	27
Middle East (e)	38	-	-	-	-	-	-	-	-	-	-	-	-	-	38
India, Pakistan, Ceylon	33	-	-	-	-	-	-	-	-	-	-	-	-	-	33
Southeast Asia	48	-	-	-	x	-	-	-	2	1	-	-	2	-	53
Japan	220	-	-	7	66	-	-	-	1	2	-	-	4	-	300
Australasia	19	-	-	-	3	-	-	-	-	-	-	-	-	-	22
Canada (East Coast)	15	-	-	3	-	-	-	-	-	31	-	-	-	-	49
U.S. East Coast	29	2	13	14	-	4	7	-	1	134	-	100	-	-	304
U.S. West Coast	17	-	-	-	9	-	1	-	-	11	3	1	x	9	51
Caribbean	13	-	21	15	1	-	-	-	6	x	-	-	-	-	56
S. America (East Coast)	15	-	3	3	-	-	-	-	-	4	-	-	-	-	25
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	891	122	193	149	79	5	27	17	37	217	3	104	6	9	1,859

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli pipeline

Table 1(e)

MAIN OIL MOVEMENTS 1975

Million Tons

From: / To:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S. Bloc Baltic	S.Bloc Black Sea	Caribbean	S. America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	36	-	-	9	-	x	6	15	1	5	-	-	-	-	72
Northwest Europe (b)	213	28	50	84	-	x	14	2	7	16	-	2	-	-	416
Southwest Europe (c)	121	79	75	15	-	1	x	-	7	4	-	1	-	-	303
Southeast Europe (d)	29	65	25	-	-	-	x	-	8	1	-	-	-	-	128
North Africa	-	-	x	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	6	-	-	x	-	-	-	-	1	1	-	-	-	-	8
South and East Africa	29	-	-	-	-	-	-	-	-	-	-	-	-	-	29
Middle East (e)	81	-	-	-	-	-	-	-	-	-	-	-	-	-	81
India, Pakistan, Ceylon	37	-	-	-	-	-	-	-	-	-	-	-	-	-	37
Southeast Asia	52	-	-	-	x	-	-	-	2	1	-	-	2	-	57
Japan	233	-	-	9	77	-	-	-	1	2	-	-	4	-	326
Australasia	21	-	-	-	3	-	-	-	-	-	-	-	-	-	24
Canada (East Coast)	15	-	-	3	-	-	-	-	-	31	-	-	-	-	49
U.S. East Coast	36	4	18	22	-	4	7	-	1	145	-	100	-	-	337
U.S. West Coast	20	-	-	-	11	-	1	-	-	12	4	1	x	9	58
Caribbean	13	-	28	15	2	-	-	-	7	x	-	-	-	-	65
S. America (East Coast)	16	1	3	3	-	-	-	-	-	5	-	-	-	-	28
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	960	177	199	160	93	5	28	17	37	230	4	104	6	9	2,029

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli and Egyptian pipelines.

Table 1(f)

MAIN OIL MOVEMENTS 1976

Million Tons

From: / To:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S.Bloc Baltic	S.Bloc Black Sea	Caribbean	S.America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	41	-	-	9	-	x	7	15	1	5	-	-	-	-	78
Northwest Europe (b)	223	29	46	86	-	x	14	2	7	16	-	2	-	-	425
Southwest Europe (c)	130	90	75	15	-	1	x	-	7	4	-	1	-	-	323
Southeast Europe (d)	27	76	28	-	-	-	x	-	8	1	-	-	-	-	140
North Africa	-	-	-	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	6	-	-	-	-	-	-	-	1	1	-	-	-	-	8
South and East Africa	31	-	-	-	-	-	-	-	-	-	-	-	-	-	31
Middle East (e)	105	-	-	-	-	-	-	-	-	-	-	-	-	-	105
India, Pakistan, Ceylon	43	-	-	-	-	-	-	-	-	-	-	-	-	-	43
Southeast Asia	54	-	-	-	-	-	-	-	2	1	-	-	2	-	59
Japan	245	-	-	12	88	-	-	-	1	3	-	-	4	-	353
Australasia	22	-	-	-	4	-	-	-	-	-	-	-	-	-	26
Canada (East Coast)	17	-	-	3	-	-	-	-	-	32	-	-	-	-	52
U.S. East Coast	47	5	26	26	-	4	8	-	1	156	1	100	-	-	374
U.S. West Coast	11	-	-	-	6	-	-	-	-	2	1	-	x	54	74
Caribbean	13	-	28	15	3	-	-	-	7	x	3	-	-	-	69
S. America (East Coast)	16	2	3	3	-	-	-	-	-	5	-	-	-	-	29
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	1,033	202	206	169	101	5	29	17	37	233	5	103	6	54	2,200

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli and Egyptian pipelines.

Table 1(g)

MAIN OIL MOVEMENTS 1977

Million Tons

From: / To:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S.Bloc Baltic	S.Bloc Black Sea	Caribbean	S. America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	46	-	-	9	-	x	8	15	1	5	-	-	-	-	84
Northwest Europe (b)	235	34	42	84	-	x	14	2	7	16	-	2	-	-	436
Southwest Europe (c)	145	100	71	15	-	1	x	-	7	4	-	1	-	-	344
Southeast Europe (d)	21	94	28	-	-	-	x	-	8	1	-	-	-	-	152
North Africa	-	-	x	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	6	-	-	x	-	-	-	-	1	1	-	-	-	-	8
South and East Africa	33	-	-	-	-	-	-	-	-	-	-	-	-	-	33
Middle East (e)	109	-	-	-	-	-	-	-	-	-	-	-	-	-	109
India, Pakistan, Ceylon	47	-	-	-	-	-	-	-	-	-	-	-	-	-	47
Southeast Asia	59	-	-	-	x	-	-	-	2	1	-	-	2	-	64
Japan	260	-	-	15	95	-	-	-	1	3	-	-	4	-	378
Australasia	24	-	-	-	5	-	-	-	-	-	-	-	-	-	29
Canada (East Coast)	18	-	-	4	-	-	-	-	-	33	-	-	-	-	55
U.S. East Coast	59	6	35	35	-	4	8	-	1	157	2	100	-	5	412
U.S. West Coast	15	-	-	-	5	-	-	-	-	3	-	-	x	64	87
Caribbean	13	-	30	15	4	-	-	-	7	x	4	-	-	-	73
S. America (East Coast)	15	3	4	4	-	-	-	-	-	6	-	-	-	-	32
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	1,107	237	210	181	109	5	30	17	37	237	6	103	6	69	2,354

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli and Egyptian pipelines.

Table 1(h)

MAIN OIL MOVEMENTS 1978

Million Tons

From: / To:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S.Bloc Baltic	S.Bloc Black Sea	Caribbean	S. America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	52	-	-	9	-	x	9	14	1	5	-	-	-	-	90
Northwest Europe (b)	252	34	38	81	-	x	14	2	7	16	-	2	-	-	446
Southwest Europe (c)	175	95	69	15	-	1	x	-	7	4	-	1	-	-	367
Southeast Europe (d)	21	100	30	-	-	-	x	-	8	1	-	-	-	-	160
North Africa	-	-	x	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	6	-	-	x	-	-	-	-	1	1	-	-	-	-	8
South and East Africa	35	-	-	-	-	-	-	-	-	-	-	-	-	-	35
Middle East (e)	113	-	-	-	-	-	-	-	-	-	-	-	-	-	113
India, Pakistan, Ceylon	51	-	-	-	-	-	-	-	-	-	-	-	-	-	51
Southeast Asia	65	-	-	-	x	-	-	-	2	1	-	-	2	-	70
Japan	274	-	-	18	101	-	-	-	1	3	-	-	4	-	401
Australasia	26	-	-	-	6	-	-	-	-	-	-	-	-	-	32
Canada (East Coast)	20	-	-	4	-	-	-	-	-	34	-	-	-	-	58
U.S. East Coast	69	7	43	44	-	4	8	-	1	160	2	100	-	10	448
U.S. West Coast	20	-	-	-	5	-	-	-	-	3	-	-	x	74	102
Caribbean	14	-	31	15	5	-	-	-	7	x	5	-	-	-	77
S. America (East Coast)	16	4	4	4	-	-	-	-	-	6	-	-	-	-	34
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	1,211	240	215	190	117	5	31	16	37	241	7	103	6	84	2,503

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli and Egyptian pipelines.

Table 1(i)

MAIN OIL MOVEMENTS 1980

Million Tons

From: / To:	Persian Gulf	Eastern Mediterranean	North Africa	West Africa	Southeast Asia	Northwest Europe	South Europe	S.Bloc Baltic	S.Bloc Black Sea	Caribbean	S. America West Coast	U.S. Gulf	U.S. West Coast	Alaska	Total
Scandinavia (a)	67	-	-	9	-	x	11	11	1	5	-	-	-	-	104
Northwest Europe (b)	284	33	32	79	-	x	14	2	6	16	-	2	-	-	468
Southwest Europe (c)	222	93	65	15	-	1	x	-	7	4	-	1	-	-	408
Southeast Europe (d)	25	97	32	-	-	-	x	-	8	1	-	-	-	-	163
North Africa	-	-	x	-	-	-	-	-	2	-	-	-	-	-	2
West Africa	6	-	-	x	-	-	-	-	1	1	-	-	-	-	8
South and East Africa	41	-	-	-	-	-	-	-	-	-	-	-	-	-	41
Middle East (e)	110	-	-	-	-	-	-	-	-	-	-	-	-	-	110
India, Pakistan, Ceylon	61	-	-	-	-	-	-	-	-	-	-	-	-	-	61
Southeast Asia	70	-	-	-	x	-	-	-	2	1	-	-	2	-	75
Japan	307	-	-	25	110	-	-	-	1	4	-	-	4	-	451
Australasia	32	-	-	-	7	-	-	-	-	-	-	-	-	-	39
Canada (East Coast)	26	-	-	5	-	-	-	-	-	36	-	-	-	-	67
U.S. East Coast	81	9	57	58	-	4	8	-	1	161	3	100	-	25	507
U.S. West Coast	29	-	-	-	2	-	-	-	-	3	-	-	x	84	118
Caribbean	17	-	33	15	6	-	-	-	8	x	6	-	-	-	85
S. America (East Coast)	19	5	5	5	-	-	-	-	-	7	-	-	-	-	41
S. America (West Coast)	2	-	-	-	-	-	-	-	-	7	x	-	-	-	9
Total	1,399	237	224	211	125	5	33	13	37	246	9	103	6	109	2,757

(a) Denmark, Finland, Norway, Sweden and Soviet Bloc Baltic ports
(b) Belgium, France (Atlantic Coast), Germany (excluding imports via SEPL, CEL and TAL pipelines), Iceland, Ireland, Luxembourg, Netherlands, U.K.
(c) France (Mediterranean Coast), Germany (via SEPL and CEL pipelines), Italy (Mediterranean Coast and Islands), Portugal, Spain, Switzerland
(d) Austria, Germany (via TAL), Greece, Italy (Adriatic Coast), Turkey, Yugoslavia and Soviet Bloc Black Sea ports
(e) Estimated shipment via Israeli and Egyptian pipelines.

1) Circulate to economists

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

2) I copy my commodity file. Mr. Kaczynski

OFFICE MEMORANDUM

TO: Mr. Alexander Stevenson

DATE: December 29, 1971

FROM: O. T. W. Price

SUBJECT: Back-to-office report on visit to the International Sugar Organization: world sugar prospects

1. The Bank has had a cautious policy towards investing in sugar projects following the sugar surpluses and depressed free market conditions of the late 1960's. The free market situation for sugar has changed in recent years, however, and it may be advisable for the Bank to reconsider its lending policy towards sugar.

2. As some difference of opinion about the future market in sugar appears to have arisen between Dr. Viton (FAO) and some members of the International Sugar Organization, I visited Mr. Ernest Jones-Parry, Executive Director of the International Sugar Organization (ISO), on December 15, 1971, in order to ascertain the current views of the ISO and where they differ (if at all) from FAO.

3. A symposium on the prospects for sugar was sponsored by various EEC sugar trade associations in Brussels in November 1971. A paper delivered by Dr. Viton, Commodities and Trade Division, FAO, received wide press coverage and particularly his "strong suspicion" that unlike the 1960's production would fail to meet demand for a much longer period in the 1970's and, furthermore, that the adverse effect of the shortage and high prices would be most seriously felt in some of the LDC's. The ISO agrees that there will be a tight market situation in 1972 and 1973 but does not agree that a disequilibrium situation will persist through much of the 1970's since production will expand in response to higher prices, higher prices will also tend to reduce the pace of expansion in consumption and the ISO feels that Dr. Viton has not given sufficient allowance to the stated production plans of some of its members (including Cuba). Stated tersely, it is argued that there are interactions between demand, supply and prices and that the FAO projection methods fail to take these adequately into account.

4. I would like to pass on to the areas of agreement between the ISO and FAO which appear far more relevant to the Bank in its commodity lending policy considerations.1/ There is a consensus that:

(a) Centrifugal sugar consumption could rise from 71.8 million tons in 1970 to 92.8-94.4 million tons in 1980 - a growth of about 30 percent.

1/ Neither seem very explicit about the price assumptions underlying the consumption forecasts but it appears that the ISO is assuming a higher free market price.

(b) At least half the expansion in consumption is likely to occur in the Lesser Developed Countries, as illustrated by the following forecasts:

Countries	1970	1980	Difference
	(Million tons of centrifugal raw sugar)		
Western developed	29.7	35.7	+ 6.0
LDC's	23.4	33.8-35.4	+ 10.4-12.0
Centrally planned (including Mainland China)	18.7	23.3	+ 4.6

(c) To meet the increase in consumption substantial investments will be needed in production and refining facilities.

5. Some of the most expensive sugar is derived from sugar beet in developed countries while some of the cheapest is derived from cane, again in developed countries, namely, Australia and South Africa. Costs of sugar production from cane in the LDC's occupies a wide middle band. There is no question but that several LDC countries are capable of producing relatively low cost sugar based on cane provided adequate capital, technical and managerial investments are made to facilitate such a development.

6. The Bank Group has a formal consultation arrangement with the International Sugar Organization relating to any new projects for sugar production. The Executive Director of the ISO indicated that he thought the Bank Group would have a more active role to play in financing sugar projects than in recent years but he still favored considering each project in turn rather than making a blanket recommendation for expansion. The ISO is likely to respond favorably to new sugar projects in the LDC's at present.

7. Any attempt to forecast developments in the sugar market over the next 3-4 years will prove extremely hazardous since (a) the International Sugar Agreement runs out at the end of 1973; (b) the EEC has not yet decided how to handle 1.4 mil. tons of Commonwealth sugar associated with British entry to the EEC and this issues does not need to be resolved until late in 1974 (there can be little doubt that Australia will need to find alternative markets); (c) the EEC does not need to review its internal sugar quotas between member countries until mid-1975; (d) the U.S. Sugar Act expires at the end of 1974 and is likely to undergo thorough examination before being replaced by some alternative legislation.

8. A considerable amount of the world sugar is traded at present under preferential market terms and is protected from free market forces. As most of these arrangements, which are subject to political considerations, will come under review over the next 3-4 years, it makes it extremely difficult to predict their outcome on the free market situation. A desire to move away

from such a distorted market situation and rising costs in some producing countries suggest that the level of sugar prices will tend to be higher in the 1970's than in the 1960's.

9. I would conclude from this brief review that the time is opportune for the Bank to reconsider its present lending policy towards sugar.

10. As a postscript I should add that prices in the free market for raw sugar have increased in the last month to their highest level in seven years following rumors of shortages in the USSR and Eastern Europe and in anticipation of a poor crop in Cuba, coupled with speculation on the outcome of the international monetary settlement. As a result of the rise of the "world price" (free market) the Executive Committee of the ISO decided on December 21, 1971 to suspend all sugar export quotas to the free market effective January 1, 1972, in an effort to curb further advancement of the price level. The Committee stated that in its opinion sufficient supplies were available to meet import requirements in 1972 and that the price increases were of a "speculative and transient character". The action of the ISO should contribute to the easing of the situation because it allows countries with large stocks of sugar to sell above their basic export quota. Should the world price be at or below 5.25 cents per pound for five days in a period of 17 consecutive market days, the quotas will be re-established and the Executive Committee will meet to decide the level at which they should be re-set. It is too early to assess the effect on the market of the ISO action which came just before the holiday period but there are signs (see prices on the New York futures market of December 27, 1971) that the situation is cooling off.

cc: Messrs. Chenery, Evans, Fuchs, Henderson, Haq
Mr. von Hoffmann (IFC)
Chief Economists

OTWPrice/hl

PPK

Re Commodities

Mr. A. Stevenson

December 22, 1971

E. Peter Wright

Terms-of-Reference - Study on the Bauxite Industries of Jamaica, Guyana and Surinam

1. As we have pointed out during various discussions between our Department and yours, we attach great importance to a study that will assess to which extent the Governments of Jamaica, Guyana and Surinam are able to increase their share in the benefits generated in the bauxite-based sector.

2. The study should provide the following assessments:

(a) Position and prospects of the bauxite-alumina producers in Jamaica, Guyana and Surinam in comparison to that of major competing countries;

(b) Relationships between the Governments of the three countries and the aluminum companies in comparison to arrangements in major competing countries; means and scope left to increase, within the present institutional framework, the contribution of bauxite-based operations to the countries' foreign exchange earnings and fiscal revenues, to the development of linkages and to employment generation; and economic feasibility of joint ventures and nationalization as alternatives to the present arrangements;

(c) In particular, the state-run industry in Guyana should be assessed regarding its financial viability, particularly against the problem of selling its products in oligopolistic markets.

3. To achieve the objectives of the study, the following information base and analysis would be necessary:

(a) Supply and investment. Bauxite deposits and mining capacities; likely competition through bauxite substitutes; existing and planned alumina capacities; existing and planned aluminum capacities (Surinam) and the feasibility of aluminum production in Jamaica and Guyana.

(b) Costs. Unit costs of operations and average total unit costs in comparison to operations in major competing countries, in particular costs of production, of basic inputs, and transport costs.

(c) Returns on total investment.

(d) Analysis of companies and governments' policies:

Companies: criteria applied in negotiations with governments; decisions taken on investment, production, financing and profit retention; degree of autonomy of local subsidiaries.

Government: criteria applied regarding concessions, royalties, taxation, volume of production and product mix.

User Countries: trade policy on bauxite, alumina, aluminum and aluminum products.

4. The assessment of future relationships between companies and governments, to be carried out against the background of the long-term development of the aluminum world market, would include:

(a) Expansion plans of companies in the three countries in the context of their global expansion plans.

(b) Alternatives for government action:

- increase in taxation, combined with partial reinvestment of profits in sectors of the national economies other than mining.

- joint ventures with or without ulterior full nationalization.

- nationalization with or without service contracts; joint sales organization and eventually, joint production ventures among the three countries.

Cleared with and cc.: Messrs. Pedro-Pablo Kuczynski ✓
Hans Wyss

cc.: Messrs. Price
Chernick
Beier
Neo

JURichter/mcm JR

Dr. Kruzynski

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Country Economists*
THROUGH: Chief Economists
FROM: Shamsher Singh

DATE: December 9, 1971

SUBJECT: Coffee- Production Projections

1. In December 1970, we asked for the views of the Area Economists on coffee supply prospects for their respective countries. The exercise was connected with a review of the supply-demand position and price projections. To assist the area economists a table on coffee production projections using country reports and, in most cases, hypothetical growth rates to signify possible trend value of production was circulated.

2. The revisions supplied were incorporated in the enclosed table as indicated by an asterisk. Where no asterisk is shown means that the area economist did not offer any views.

3. We shall be grateful if you reexamine the revised table, make the necessary changes and return it to me by December 15, 1971. A review of price forecasts is now under preparation and we like it to reflect your views on supply prospects.

1) File Commodities

2) Call Mr. Saiga's office & say projections OK.

Enclosure

cc: Messrs. Henderson, Stevenson, Price
Miss Dow

* List of Countries for each Department-
Eastern Africa Department: Ethiopia, Kenya, Tanzania, Uganda, Burundi, Congo (K), Malagasy Republic, Rwanda
Western Africa Department: Ivory Coast, Togo, Sierra Leone, Cameroon, Central African Republic, Guinea
East Asia and Pacific Department: Philippines, Indonesia
South Asia Department: India
Europe, Middle East and North Africa Department: Portugal and Dependencies
Central America and Caribbean Department: Dominican Republic, Haiti, Mexico, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Venezuela
South America Department: Colombia, Peru, Ecuador, Brazil

SSingh:lcj

WORLD HARVESTED PRODUCTION OF COFFEE

(thousand 60 kilogram bags)

Continent and Country	Actual					Projected				Rates of Growth 1967/68-1969/70 Average to 1975/76
	Average 1967/68-1969/70	1967/68	1969/70	1970/71	1971/72 1/	1972/73	1973/74	1974/75	1975/76	
North America										
Costa Rica	1,337	1,350	1,400	1,250	1,330	1,550	1,600	1,700	1,770	4.1
Cuba	483	450	500	550	550	470	470	470	470	-0.4
Dominican Republic	605	635	640	675	625	580*	595*	600*	600	-0.1
El Salvador	2,267	2,400	2,500	2,000	2,350	2,550	2,650	2,750	2,860	3.4
Guatemala	1,780	1,850	1,750	1,840	2,000	2,150	2,200	2,300	2,400	4.3
Haiti	482	500	465	480	450	410	400	390	380	-3.4
Honduras	493	480	550	570	600	450	460	470	480	-0.4
Mexico	2,942	2,900	3,075	3,000	3,300	3,150	3,200	3,300	3,400	2.1
Nicaragua	552	550	565	580	580	600	615	630	645	2.2
Others	502	552	476	497	519	450	450	450	450	-1.6
Total North America	11,443	11,667	11,921	11,442	12,304	12,360	12,640	13,060	13,455	2.3
South America										
Brazil	19,500	23,000	19,000	9,750	23,600	25,300*	26,500*	29,500*	31,500*	7.1
Colombia	8,117	8,000	8,450	7,500	7,800	8,600*	8,800*	9,000*	9,200	1.8
Ecuador	945	1,175	660	1,200	1,200	1,200	1,250	1,300	1,340	5.1
Peru	893	880	940	990	1,030	1,090*	1,090*	1,090*	1,090	2.9
Venezuela	837	750	900	900	920	750	750	750	750	-1.6
Others	235	216	239	161	179	160	170	170	175	-4.1
Total South America	30,527	34,021	30,189	20,501	34,729	37,100	38,560	41,810	44,055	5.4
Africa										
Angola	3,267	3,400	3,300	3,300	3,400	4,000	4,150	4,300	4,470	4.6
Burundi	277	315	240	350	325	360*	370*	380*	390	5.0
Cameroon	1,133	1,100	1,200	1,150	1,250	1,250*	1,300*	1,300*	1,350	2.6
Central African Republic	178	175	200	150	160	210*	230*	250*	270	6.1
Congo (K)	1,033	1,000	1,100	1,200	1,250	1,100	1,150	1,200	1,250	2.7
Ethiopia	1,932	1,750	2,000	2,100	2,150	2,780*	2,860*	2,950	3,050	6.7
Guinea	183	170	200	200	200	150	150	150	150	-2.8
Ivory Coast	4,167	4,500	4,600	4,000	4,000	3,690*	3,760*	3,830*	3,900	-1.0
Kenya	817	650	1,000	985	1,000	1,000*	1,060*	1,100*	1,150	5.0
Malagasy Republic	943	1,100	830	950	850	1,050*	1,100*	1,200*	1,250	4.1
Rwanda	178	190	145	235	200	240*	250*	260*	270	6.1
Sierra Leone	88	80	90	125	100	80	80	80	80	-1.4
Tanzania	822	740	775	900	900	1,050	1,100	1,150	1,200	5.6
Togo	228	175	230	225	225	260	280	300	320	5.0
Uganda	3,128	2,700	3,350	3,000	3,050	3,300	3,400	3,500	3,600	2.0
Others	399	399	399	409	399	440	450	460	470	2.4
Total Africa	18,773	18,444	19,659	19,279	19,459	20,960	21,690	22,410	23,170	3.1
Asia and Oceania										
India	1,167	1,050	1,150	1,800	1,325	1,300	1,300	1,400*	1,400*	2.6
Indonesia	2,117	2,150	2,200	2,350	2,250	2,300	2,400	2,450	2,520	2.5
Philippines	750	700	815	840	840	660	640	620	600	-3.1
Others	661	580	701	768	778	1,050	1,050	1,250	1,380	11.1
Total Asia and Oceania	4,695	4,480	4,866	5,758	5,193	5,310	5,390	5,720	5,900	3.3
World	65,438	68,612	66,635	56,980	71,685	75,730	78,550	83,000	86,580	4.1

1/ Second estimate USDA.

Projections: based on hypothetical growth rates from the base period 1967/68-1969/70. These growth rates are subject to revision by Area Departments. An asterisk denotes projections as revised by Area Departments in December 1970.

Source: 1967/68 to 1971/72 - U.S. Department of Agriculture.

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. O. T. W. Price

DATE: December 8, 1971

FROM: Raffaello Marsili

SUBJECT: Back-to-office report on Seventh Session of the International Sugar Council, London, November 17-19, 1971

1. The Seventh Session of the International Sugar Council was held in London, November 17-19, under the chairmanship of Mr. A. G. Sauzier (Mauritius). The main items in the agenda included: review of the market situation in 1971; first estimate of the supply/demand position for 1972 and determination of initial export quotas for 1972; review of the operation of the Agreement and consideration of appropriate action; request by the Dominican Republic for an increase of quota entitlements for 1971; withdrawal by Thailand from the Agreement; progress report by the Consumption Committee; election of Chairman and Vice-Chairman of the Council and the members of the Executive Committee; and setting the date for the next Council session.

Review of the market situation in 1971

2. The review presented by the Chairman of the Executive Committee indicated that the considerable strengthening of the market which started in late 1970 continued in 1971 and for the first time since the Agreement came into force (January 1, 1969) quotas were raised to more than 95 percent of Basic Export Tonnages 1/ (BET). The sequence of the Executive Committee action on the BET's during the year was as follows:

Date	Quotas as % of BET's	Sugar Price (US ¢/lb.)
November 18, 1970	95	3.98
December 30, 1970	100	4.23
February 4, 1971	110	4.87
May 19, 1971	105	4.36
October 1, 1971	100	3.97

3. As a result of shortfalls which were not fully redistributed and allocations from the "Hardship Fund", the quotas deviated from these shown in the above table; thus the quotas in effect on October 17, 1971, the last date of action which affected quota levels, amounted to 94.5 percent of BET's (6,806,000 tons) as compared to 85 percent of BET's a year earlier. Allocations from the Hardship Fund totalling 92,000 metric tons were made to the Dominican Republic, Fiji and British Honduras.

1/ The term "Basic Export Tonnages" refers to shares in the free market, expressed in metric tons.

First estimate of demand/supply in 1972; determination of export quotas and entitlements

4. The report prepared by the Statistics Committee estimated the free market import requirements for 1972 at 9,313,000 tons 1/. The corresponding supply estimate, covering anticipated free market exports by non-members (2,150,000 tons), entitlements other than quota of members (1,485,000 tons) 2/ and export quotas at 105 percent of Basic Export Tonnages (7,714,000 tons) as recommended by the Executive Committee, amounted to 11,349,000 tons leaving an apparent surplus of 2,036,000 tons. The Committee recognized that there will be shortfalls in 1972 which would reduce the apparent surplus but could not at this time provide reliable estimate of their magnitude. The Council adopted the recommendation to set initial quotas for 1972 at 105 percent of BET's. The limitation of free market exports by the USSR to an annual maximum between 1,100,000 and 1,250,000 tons, agreed for the years 1969-1971 (Article 39) was maintained for the remaining years. The maximum level for 1972 was set at 1,175,000 tons.

Review of the operations of the Agreement

5. Article 70(2) provides for such a review before the end of the third year (1971). Discussions were based on a report prepared by a working group appointed by the Council. There was general consensus on the side of both exporting and importing members that the Agreement had worked satisfactorily. Concerning revision of basic export tonnages, several exporting countries expressed the opinion that some of the basic quotas were now out of line with current conditions and should be modified. Others, though concurring with what had been said, made the point that re-negotiation of quotas at this stage might jeopardize the Agreement and suggested postponement to the time at which the Agreement as a whole would have to be re-negotiated, i.e., during the year 1973. This point of view prevailed and the suggestion to postpone any revisions was adopted.

Request by the Dominican Republic for an increase of quota entitlement for 1971

6. The delegate for the Dominican Republic stated that sugar production in his country had reached approximately one million tons in 1971. The basic export quota established at the negotiating conference in 1968 was based on production in the mid-sixties when unstable

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1/ This compares with the initial estimate for 1971 of 8,864,000 tons and for 1970 of 8,600,000 tons.

2/ Export entitlement of USSR under Article 39(2) of 1,175,000 tons, re-exports of Cuban sugar by East European countries of 250,000 tons under Article 36(3), and Philippines entitlement of 60,000 tons when export quotas are above 100 percent of BET's.

political conditions and unfavorable weather had reduced output to an abnormally low level. In the last two years production recovered the level of the early 1960's and increasing stocks had put an intolerable burden on the country's sugar industry. Since it had been decided to leave basic export tonnages for the next two years of the Agreement unchanged, the Dominican Republic asked for permission to exceed its quota in effect for 1971 by some 95,000 tons in order to reduce domestic stock to the level at the end of 1970. The Council recognized the seriousness of the situation but, in view of general market conditions felt unable to agree to an increase beyond 60,000 tons.

Withdrawal by Thailand from the Agreement

7. Thailand had repeatedly made the point that its quota (36,000 tons), established on the basis of exports in earlier years, was far below current and expected future exportable supplies. The temporary relief granted in March 1971 of 35,000 tons and 10,000 tons from the Hardship Fund could not solve the problem. Hence, effective October 28, 1971 Thailand has withdrawn from the Agreement.

Report by the Consumption Committee

8. The Committee presented to the Council a proposal on a special pilot study to be undertaken by the Sugar Organization in cooperation with FAO and the Economic Commission for Africa (ECA) on factors affecting the level of sugar consumption in four developing countries of Africa and the Middle East. During the discussion, the observer for the OCAM 1/ reported that at its October meeting OCAM had decided on a similar study and expressed the wish to collaborate with the joint ISO-FAO-ECA study. The Council decided to pass the study proposal to its Executive Committee for consideration and for later action by the Council but in the meantime preparatory work could start on the collection of information.

Election of Chairman and Vice-Chairman for 1972

9. The Agreement provides that the chairmanship of the Council should rotate between importing and exporting countries. The present Chairman, Mr. A. G. Sauzier, represents an exporting country (Mauritius); the Council elected Mr. S. Larson of Sweden as Chairman for 1972. Mr. R. Leon Torras of Cuba will serve as Vice-Chairman.

1/ Common Organization of (French) African and Malagasy States.

Provisional date of next meeting of the Council

10. The next session of the Council was provisionally scheduled for May 24 to 26, 1972. The Statistics and Executive Committees will meet in the preceding week.

RMarsili:mb

cc: Mr. Demuth
Messrs. Henderson, Stevenson
Messrs. Avramovic, Blobel, Collier, de Vries, Gilmartin, Kuczynski and Thompson
Mr. Rowe

File Commodities

DRAFT
JURichter/mcm
November 24, 1971

OFFICE MEMORANDUM

To: Mr. Henderson

From: ~~J.U. Richter~~ M.M.

Subject: World Review of Bauxite-Alumina-Aluminium Markets, To Be Carried Out By Mr. S. Moment (Consultant)

1. I refer to Mr. A. Huang's memo of October 13, 1971 regarding the proposed outline of the above-mentioned study. This department feels that Mr. Moment should address himself primarily to the worldwide aspects of the markets, rather than the particular position of the bauxite-alumina industries in Jamaica, Surinam and Guyana. We are reasonably well informed about the peculiarities of the bauxite-alumina industries in the countries of our area. Of particular value to us -- and, we are satisfied, to other area departments as well that include bauxite-alumina producing countries -- is a background study which enables us to assess the bauxite-alumina prospects of our countries in the worldwide context. Studies on the major producing countries could be carried out by the staff in economics and area departments, reinforced, if need be and the possibility exists, by Mr. Moment.

2. The proposed study should update and deepen the Bank study "Past and Prospective Trends in the World Aluminum Industry" of May 1968. It should include the following topics, mentioned already by Mr. Moment in his letter to Mr. Macone of September 6, 1971 under para. 3(b) and which, according to his estimate, would require about 31 days:

(a) World demand and outlook for bauxite and alumina, 1970-1985;

(b) Distribution of known bauxite reserves, effects of recent discoveries, and possibilities for additional discoveries in certain countries;

(c) Trends in useable grades of bauxite;

(d) To be deleted: (Competitive outlook for bauxite substitute: clay, nephelite, etc.)

(e) Distribution of alumina capacity between bauxite producing countries and alumina consuming countries;

(f) Distribution of bauxite reserves and alumina capacity between enterprises;

(g) Marketing practices (types of contracts, tolling and barter practices) and trade relationships in bauxite and alumina between enterprises including relationships between western enterprises and East European countries, and possible relationships with Mainland China;

(h) Price structure and freight costs of bauxite, 1965-1971 and pending changes with reference to arms length transactions and other transactions, f.o.b. and c.i.f.;

(i) Price structure and freight costs of alumina, 1965-1971 and pending changes with reference to arms length transactions and other transactions, f.o.b. and c.i.f.;

(j) Changes in ocean transport costs of bauxite and alumina, ship and port capacities, and outlook for further changes, 1970-1980 ;

(k) Illustrations of cost trends of producing bauxite, 1965-1970-1980

(i) local costs including taxes and royalties;

(ii) costs of distribution and other costs accruing abroad;

(1) Illustrations of cost trends of producing alumina, 1950-1965, 1970-1980.

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Form No. 58 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Henderson

DATE: November 23, 1971

FROM: Pedro-Pablo Kuczynski PPK

SUBJECT: Mr. Price's proposal for a study of "Bank Policy for Commodity Lending"

I was interested in the paper which Mr. Price recently circulated, but I am not entirely sure of its purpose or of what "commodity lending and nutrition" means. I think that it would be useful, in case you propose to undertake such a study, to have a meeting of the Economic Committee to find out what could be expected from the proposed study.

cc: Area Chief Economists

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

Ms. Kuczynski

TO: Mr. P. D. Henderson

DATE: November 19, 1971

FROM: O. T. W. Price OTP

file Commodities.

SUBJECT: "Bank Policy for Commodity Lending": a proposed study

I consider that with some application and analysis a considerable amount of information which already exists in the Commodities Division could be put to more effective use in helping management to formulate decisions on commodity lending. The attached memo indicates the sort of study I have in mind. I would welcome your views on this proposal. I am circulating the memo to the Area and Projects Departments also, as I would find their views and support most helpful. I regard this study as leading to an internal Bank paper for management and not a Board paper at this juncture.

cc: Mr. Stevenson, Mr. Lerdau
Mr. Haq
Chief Economists/Economic Advisers, Area and Projects Departments

Bank Policy for Commodity Lending: a proposed study

Many factors need to be considered in determining the Bank's lending program. Not least of these in importance is the Bank's position on commodities. The flow of funds from external sources to the developing countries is still small compared with the LDC's export earnings. Export earnings from primary products still provide the main engine for growth and development in most of the LDC's.

The Bank does undertake some work on commodities which has a bearing on its investment policy. This includes its forecasts of supply, demand and prices for about forty primary commodities. It has also undertaken other ad hoc studies, including studies in depth of some key commodities. The development of trading blocs, the mounting danger of trade discrimination, declining commodity prices, and even the possibility of taking a more positive approach in fostering new trading patterns between the LDC's all indicate that the Bank should expand its study of trade in primary commodities. This should enable the Bank to derive a more positive investment strategy towards commodities. The study should contribute to the number and type of criteria which management could use in determining its lending strategy towards individual and groups of developing countries.

It would be premature at this stage to indicate the type of criteria this study might highlight. It would, however, need to consider the following:

(a) prospective rates of growth for various primary commodities;

(b) price elasticities of demand for individual commodities and the consequent effect of temporary oversupply on world prices;

(c) comparative advantages and disadvantages of some major producing countries in their key exports: (Such an exercise is fraught with difficulties. It could only be accomplished for a few commodities and would be a guestimate. Nevertheless, an attempt to rank countries on the basis of their costs or simply to classify them into "high cost" and "low cost" would be helpful for decision making.);

(d) the vulnerability of the balance of payments of selected countries which are particularly dependent on a few commodities: this would help to indicate which countries are most in need of adjusting the composition of their exports (or to diversify);

(e) effects of change in composition of exports on employment;

(f) effects of changes in income distribution on national commodity markets;

(g) the feasibility of fostering international trade between the LDC's and the effect of such action on their rate of economic development;

(h) commodity loans and nutrition.

It is considered that such a study could add another dimension to the consideration of the Bank's lending policies and if it were undertaken at present, it could anticipate some of the problems which lie ahead.

Such a study should take about 1½-2 years, depending on the effort devoted to it. I envisage part of the work being undertaken by consultants in cooperation with Division staff. I am assuming that we would liaison and receive help from Projects and Area Departments in the preparation of this paper, e.g., Agriculture Projects could give considerable assistance in ranking countries cost-wise.

Commodities and Trade Division
Economics Department
November 19, 1971

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Files

DATE: November 3, 1971

FROM: R. Marsili

SUBJECT: U.S. Sugar Act of 1948 - Amendments of 1971

1. The U.S. Congress has recently approved, and the President has signed into law on October 14, 1971 new Amendments to the U.S. Sugar Act of 1948, extending its validity for 3 years beginning 1972. These amendments have not changed the philosophy of the sugar program initiated in 1934. Some modifications, however, are extremely important to foreign countries supplying the U.S. market. These relate to: a) allocation of basic quotas, b) the clauses governing the distribution of deficits and c) measures which will be taken against foreign sugar suppliers who expropriate U.S. property abroad. These modifications are described more fully below.

Main features of the U.S. Sugar Act of 1948

2. Sugar imports into the United States as well as domestic (mainland and offshore) supplies are regulated by the U.S. Sugar Act. Initially adopted in 1934, the Act was renewed in 1948 and has since been repeatedly amended and revised 1/. Towards the end of each year the U.S. Secretary of Agriculture estimates the prospective U.S. requirements for the following calendar year to serve as a basis for allocation of domestic and foreign quotas. Specific quotas are assigned to U.S. mainland and offshore producers (Hawaii, Virgin Islands and Puerto Rico), the Philippines, Bahamas and Ireland; the remaining balance of requirements is allocated to other foreign suppliers. Up to 1960 over 95 percent of this balance was supplied by Cuba but following suspension of imports from that source, import quotas were reallocated as a temporary measure to other foreign suppliers.

Principal Amendments introduced in 1971

a. Basic Quotas (Sec. 202)

i. Domestic basic quotas

3. The most significant change achieved by the 1971 Amendments has been to raise the quotas assigned to the U.S. mainland cane producers by 300,000 short tons 2/, whilst the Puerto Rican quota has been reduced by 285,000 short tons and that of the Virgin Islands of 15,000 short tons has been abolished. These changes have not altered the total amount of

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1/ Since 1948 the Sugar Act has been amended in 1951, 1956, 1960, 1961, 1962 (twice), 1965 and 1971, the amendment being analysed in this memorandum.

2/ Any tonnage figure appearing in this memorandum refers to an hypothetical U.S. total yearly raw sugar requirements of 11,200,000 short tons.

the basic domestic quotas of 6,910,000 short tons, the increase in the mainland cane producers' quota being offset by the decline in the Puerto Rican quota and the abolition of the quota for the Virgin Islands. In recent years both Puerto Rico and the Virgin Islands have been unable to fill their quotas and their deficits - which have been increasing and reached 975,000 short tons in 1971 1/- have been distributed between the Philippines and other foreign suppliers in the Western Hemisphere. The shift of the 300,000 short tons from Puerto Rico and the Virgin Islands to the mainland cane producers has therefore the effect of reducing the final quota entitlement of the Philippines and the Western Hemisphere suppliers by a similar amount of 300,000 short tons. In addition to this, beginning 1973 the mainland beet area will be allocated an extra quota of 100,000 short tons with the discretionary authority given to the Secretary of Agriculture to increase it to 125,000 short tons. This will further reduce the total amount of the foreign quotas by 100-125,000 short tons from 1973 onwards.

ii. Foreign basic quotas

4. No change occurred in the specific basic quota allocations of the Philippines and Ireland. The Bahamas Islands, who also had a specific basic quota in the 1965 Amendments, has now been given a quota on a percentage basis.

5. The total amount of basic quotas for other foreign countries is calculated by subtracting from the total U.S. consumption requirements the domestic basic quotas and the specific quotas (Philippines and Ireland). The remainder is prorated among foreign countries in accordance with the percentages established in the Act. In the 1965 Amendments to the Act, 50 percent of the foreign basic quota was allocated to Cuba and the other 50 percent was allocated to other foreign suppliers. In the 1971 Amendments the Cuban allocation has been reduced to 23.74 percent, and the foreign suppliers total basic allocation has been increased to 76.26 percent of the total foreign basic quota. This is, however, only an accounting change since the Cuban quota (as well as the Southern Rhodesian quota) is still suspended and it is prorated as a temporary quota between the same foreign suppliers. Only in the event of the resumption of diplomatic relations with Cuba in the next three years will the reduction of the Cuban reserve have practical significance.

6. More relevant to the size of the total quota entitlements are the changes which have been made in the individual foreign countries percentage share of the foreign basic quotas. These changes become evident only after the various components, the share of basic quota, and the shares of the Cuban and Southern Rhodesian reserves are added

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1/ Puerto Rican and Virgin Islands combined deficit in thousand short tons: 438 (1966), 430 (1967), 640 (1968), 784 (1969), 795 (1970) and 975 (1971).

together. Table 1 adds these components and gives a comparison of the foreign suppliers' percentage shares of the total foreign basic quotas (columns 4 and 9) in the old (1965 Amendments) and new (1971 Amendments) Sugar Act. Between the large suppliers Brazil, Mexico and especially Peru had their share reduced and the Dominican Republic had its share increased substantially. British Honduras, Mauritius, Panama, Swaziland and Venezuela had also large increases relative to their former shares. Paraguay, Uganda and, from 1973, Malawi were granted a share for the first time. The quota previously granted to the French West Indies has been eliminated on the ground that those islands are, as a French overseas department, an integral part of the European Economic Community.

b. Distribution of Deficits (Sec. 204)

7. Under the provisions in the 1965 Amendment to the Act any deficit in quotas, whether in domestic or foreign areas, were reallocated entirely to foreign sources of supply. Deficits in domestic areas and in the Western Hemisphere were assigned to the Philippines (47.22 percent) and Western Hemisphere countries (52.78 percent); the latter would also supply any shortfall occurring in the Philippines. The President could, however, override these rules, and if in the national interest, allocate any deficit or part of it to countries holding quotas, as he found appropriate.

8. Under the 1971 Amendment to the Act the procedure of allocating the deficits was maintained intact, but the percentage share of the Philippines was reduced to 30.08 percent and that of other foreign suppliers increased accordingly to 69.92 percent. This action was taken considering the fact that in recent years the Philippines were unable to supply their entire share of the deficit allocation 1/ and their entitlement was redistributed between other foreign countries in the Western Hemisphere. A country-by-country comparison of the percentage shares of the deficits in the two Amendments is shown in Table 1, columns 5 and 10. The percentages indicated in this table (columns 9 and 10) will also enable the reader to derive, if so desired, individual country quotas for 1973 and 1974, after some assumptions are made for the level of total requirements and size of deficits.

c. Expropriation (Sec. 408)

9. Under the 1965 Amendments the President had the mandatory power of suspending the quota, or part of it, of any country supplying raw sugar to the United States that had expropriated or nationalized the property or business enterprise owned by U.S. citizens abroad without payment of an adequate compensation.

1/ Out of a deficits share of 47.22 percent the Philippines supplied 17.44 percent in 1966, nothing in 1967, 1968 and 1969, and 22.0 percent in 1970.

10. The 1971 Amendments to the Act made this action discretionary with the President and gave authority to him either in addition or as an alternative to cutting the quota, to levy a special tax of up to $20 per short ton on all or portion of the sugar quota of the offending country, the proceeds of which would be used to reimburse persons whose property was expropriated without adequate compensation. This action can be applied by the President to expropriations which occurred since January 1961.

Example of Practical Effect of the Changes in the Sugar Act - Sugar Requirements for 1972

11. The U.S. Department of Agriculture announced on October 19, 1971 its proposal for the 1972 quotas estimating that the raw sugar requirements of the United States for next year will amount to 11.2 million short tons and that Puerto Rico will be able to supply only 305,000 short tons from a quota under the 1971 Amendments to the Act of 855,000 short tons.

12. Table 2 illustrates the practical effect which the change in the sugar legislation had on the individual domestic areas and foreign countries quotas. In addition to the individual country differences shown in the table and described earlier, it is worth noting that the percentage of total U.S. requirements supplied by the domestic area has risen from 54.55 percent to 57.23 percent as a result of the shift of 300,000 short tons from Puerto Rico and the Virgin Islands to the domestic cane producers. This percentage might increase to 58.34 percent beginning 1973 when additional quota could be allocated to the U.S. domestic beet producers.

13. Table 3 shows what the actual sugar imports were from 1966 to 1970 and the quota entitlements of each domestic areas and foreign country in the U.S. market for 1970-72. This illustrates that the Philippines faces the prospects for the first time of having to reduce their exports to the United States.

Attachments (3)

RMarsili:mb

cc: Messrs. P. D. Henderson, A. Stevenson, O. T. W. Price
J. H. Collier, B. A. de Vries, W. M. Gilmartin, M. G. Blobel,
C. H. Thompson, P. P. Kuczynski, D. Avramovic, S. Takahashi

Table 1: U.S. SUGAR ACT OF 1948 - COMPARISON OF PERCENTAGE SHARES OF THE TOTAL FOREIGN QUOTA (SEC. 202) AND OF PERCENTAGE SHARES OF DEFICITS/1 REALLOCATIONS (SEC. 204) ASSIGNED TO FOREIGN COUNTRIES UNDER THE 1965 AND 1971 AMENDMENTS TO THE ACT

(Percentages)

Countries	1965 AMENDMENTS (OLD)					1971 AMENDMENTS/2 (NEW)				
	Sec. 202 Quotas					Sec. 202 Quotas				
	Share of Basic Quota (1)	Share of Cuban reserve (2)	Share of Rhodesian reserve (3)	(4) Total (1+2+3)	Share of Deficits/1 (Sec. 204) (5)	Share of Basic Quota (6)	Share of Cuban reserve (7)	Share of Rhodesian reserve (8)	(9) Total (6+7+8)	Share of Deficits/1 (Sec. 204) (10)
Philippines	-	-	-	- /3	47.22	-	-	-	- /3	30.08
Argentina	.93	1.00	.01	1.94	1.21	1.53	.48	.01	2.02	1.75
Australia	3.60	2.87	-	6.47	-	5.02	1.56	-	6.58	-
Bahamas	-	-	-	- /3	-	.54	.17	..	.71	.62
Bolivia	.09	.10	..	.19	.12	.13	.04	..	.17	.15
Brazil	7.56	8.13	.04	15.73	9.85	11.04	3.44	.09	14.57	12.60
Br. Honduras	.22	.18	..	.40	.29	.68	.21	.01	.90	.78
Br. West Indies	3.02	2.41	.02	5.45	3.93	4.12	1.28	.03	5.43	4.70
China, Republic	1.50	1.20	-	2.70	-	2.09	.65	-	2.74	-
Colombia	.80	.86	.01	1.67	1.04	1.36	.42	.01	1.79	1.55
Costa Rica	.89	.96	.01	1.86	1.16	1.38	.43	.01	1.82	1.57
Dominican Republic	7.56	8.13	.04	15.73	9.85	12.80	3.99	.10	16.89	14.61
Ecuador	1.10	1.18	.01	2.29	1.43	1.63	.51	.01	2.15	1.86
El Salvador	.55	.59	-	1.14	.71	.86	.27	.01	1.14	.98
Fiji Islands	.79	.63	-	1.42	-	1.10	.34	-	1.44	-
French W. Indies	.95	.76	.01	1.72	1.24	-	-	-	-	-
Guatemala	.75	.81	..	1.56	.98	1.18	.37	.01	1.56	1.35
Haiti	.42	.45	..	.87	.55	.62	.19	.01	.82	.71
Honduras	.09	.10	..	.19	.12	.24	.08	..	.32	.27
India	1.44	1.15	-	2.59	-	2.01	.63	-	2.64	-
Ireland	-	-	-	- /3	-	-	-	-	- /3	-
Malagasy Republic	.17	.14	-	.31	-	.30	.09	-	.39	-
Malawi	-	-	-	-	-	.37 /4	.12	-	.49	-
Mauritius	.33	.26	-	.59	-	.74	.23	-	.97	-
Mexico	7.73	8.32	.04	16.09	10.07	11.32	3.52	.09	14.93	12.92
Nicaragua	.89	.96	.01	1.86	1.16	1.29	.40	.01	1.70	1.47
Panama	.56	.60	..	1.16	.73	1.29 /5	.40	.01	1.70	1.47
Paraguay	-	-	-	-	-	.13	.04	..	.17	.15
Peru	6.03	6.49	.03	12.55	7.85	7.90	2.46	.06	10.42	9.01
South Africa	1.06	.85	-	1.91	-	1.42	.44	-	1.86	-
Swaziland	.13	.10	-	.23	-	.74	.23	-	.97	-
Thailand	.33	.26	-	.59	-	.46	.14	-	.60	-
Uganda	-	-	-	-	-	.37	.12	-	.49	-
Venezuela	.38	.41	..	.79	.49	1.23	.38	.01	1.62	1.40
Total	49.87	49.90	.23	100.00	100.00	75.89	23.63	.48	100.00	100.00

.. Less than .005.

/1 Deficits in U.S. domestic areas and in Western Hemisphere countries.

/2 Shares as shown in the source effective for 1973 and 1974.

/3 Specific quota allocated (see text).

/4 Share effective in 1973; no quota was allocated for 1972.

/5 Share effective in 1973; for 1972 Panama's share will be .85 percent.

Source: 1965 Amendments - U.S. Senate, Committee on Finance, Sugar Act Amendments of 1971, Statistical Information, June 23, 1971.
1971 Amendments - U.S. Senate, Committee on Finance, Sugar Act Amendments of 1971, Conference Report No. 92-381, September 28, 1971.
IBRD Economics Department.

Table 2: U.S. SUGAR REQUIREMENTS FOR 1972 (PROPOSED) - COMPARISON OF INDIVIDUAL DOMESTIC AREAS AND FOREIGN COUNTRIES QUOTA ENTITLEMENTS UNDER THE 1965 AMENDMENTS (OLD) AND 1971 AMENDMENTS (NEW) AND DIFFERENCE IN FINAL QUOTA ENTITLEMENTS RESULTING FROM THE INTRODUCTION OF THE 1971 AMENDMENTS TO THE ACT

(Thousand short tons, raw value)

	Quota Entitlements for Calendar Year 1972								Difference in final quota entitlements	
	1965 AMENDMENTS (OLD)				1971 AMENDMENTS (NEW)					
	(1) Basic	(2) Section 202(d) proration /1	(3) Deficits & deficits proration /2	(4) Final (1+2+3)	(5) Basic	(6) Section 202(d) proration /1	(7) Deficits & deficits proration /2	(8) Final (5+6+7)	(9) Tonnage (8-4)	(10) Percentage (8/4)
I. Domestic										
Mainland beet	3,406.3	-	-	3,406.3	3,406.0	-	-	3,406.0	-0.3	
Mainland cane	1,238.7	-	-	1,238.7	1,539.0	-	-	1,539.0	+300.3	+24.2
Hawaii	1,160.0	-	-	1,160.0	1,160.0	-	-	1,160.0	-	-
Puerto Rico	1,140.0	-	-835.0	305.0	855.0	-	-550.0/2	305.0	-	-
Virgin Islands	15.0	-	-15.0	-	-	-	-	-	-	-
Total domestic	6,960.0	-	-850.0	6,110.0	6,960.0	-	-550.0	6,410.0	+300.0	+4.9
II. Foreign										
Philippines	1,126.0	-	401.4	1,527.4	1,126.0	-	165.5	1,291.5	-235.9	-15.5
Argentina	28.8	31.3	10.3	70.4	48.0	15.9	9.7	73.6	+3.2	+4.5
Australia	111.6	88.9	-	200.5	157.3	42.8	-	200.1	-0.4	-0.2
Bahamas	10.0	-	-	10.0	16.9	5.6	3.4	25.9	+15.9	+159.0
Bolivia	2.8	3.1	1.0	6.9	4.1	1.4	0.8	6.3	-0.6	-8.7
Brazil	234.3	253.1	83.7	571.1	346.0	115.1	69.8	530.9	-40.2	-6.3
British Honduras	6.8	5.6	2.5	14.9	21.3	7.1	4.3	32.7	+17.8	+119.5
British W. Indies	93.6	75.3	33.4	202.3	129.1	42.9	26.1	198.1	-4.2	-2.1
China, Republic	46.5	37.2	-	83.7	65.5	17.8	-	83.3	-0.4	-0.5
Colombia	24.8	26.9	8.8	60.5	42.6	14.2	8.6	65.4	+4.9	+8.1
Costa Rica	27.6	30.1	9.9	67.6	43.3	14.4	8.7	66.4	-1.2	-1.8
Dominican Republic	234.3	253.2	83.7	571.2	401.2	133.4	80.9	615.5	+44.3	+7.8
Ecuador	34.1	36.9	12.2	83.2	51.1	17.0	10.3	78.4	-4.8	-5.8
El Salvador	17.0	18.3	6.0	41.3	27.0	8.9	5.4	41.3	-	-
Fiji Islands	24.5	19.5	-	44.0	34.5	9.4	-	43.9	-0.1	-0.2
French W. Indies	29.4	23.9	10.5	63.8	-	-	-	-	-63.8	-100.0
Guatemala	23.2	25.1	8.3	56.6	36.9	12.3	7.5	56.7	+0.1	+0.2
Haiti	13.0	13.9	4.7	31.6	19.4	6.5	3.9	29.8	-1.8	-5.7
Honduras	2.8	3.1	1.0	6.9	7.5	2.5	1.5	11.5	+4.6	+66.7
India	44.6	35.6	-	80.2	63.0	17.1	-	80.1	-0.1	-0.1
Ireland	5.4	-	-	5.4	5.4	-	-	5.4	-	-
Malagasy Republic	5.3	4.3	-	9.6	9.4	2.6	-	12.0	+2.4	+25.0
Malawi	-	-	-	-	-	-	-	- /3	- /3	- /3
Mauritius	10.2	8.1	-	18.3	23.2	6.3	-	29.5	+11.2	+61.2
Mexico	239.5	259.0	85.6	584.1	354.8	118.0	71.5	544.3	-39.8	-6.8
Nicaragua	27.6	30.1	9.9	67.6	40.4	13.4	8.2	62.0	-5.6	-8.3
Panama	17.4	18.6	6.2	42.2	26.6	8.9	5.4	40.9/4	-1.3/4	-3.1/4
Paraguay	-	-	-	-	4.1	1.4	0.8	6.3	+6.3	
Peru	186.8	202.0	66.7	455.5	247.6	82.4	49.9	379.9	-75.6	-16.6
South Africa	32.8	26.3	-	59.1	44.5	12.1	-	56.6	-2.5	-4.2
Swaziland	4.0	3.1	-	7.1	23.2	6.3	-	29.5	+22.4	+315.5
Thailand	10.2	8.1	-	18.3	14.4	3.9	-	18.3	-	-
Uganda	-	-	-	-	11.6	3.2	-	14.8	+14.8	
Venezuela	11.8	12.7	4.2	28.7	38.5	12.8	7.8	59.1	+30.4	+105.9
Total Foreign	2,686.7	1,553.3	850.0	5,090.0	3,484.4	755.6	550.0	4,790.0	-300.0	-5.9
III. Total Requirements	9,646.7	1,553.3	-	11,200.0	10,444.4	755.6	-	11,200.0	-	-

/1 Prorations of the quotas temporary withheld from Cuba and Southern Rhodesia.

/2 Deficit in the Puerto Rican quota forecasted for 1972 by the U.S. Secretary of Agriculture.

/3 No quota allocated for 1972; beginning 1973 Malawi will be allocated a quota of 15,000 short tons, on the basis of 1972 total U.S. requirements.

/4 Beginning 1973 Panama's quota will be increased to 62,947 short tons on the basis of 1972 total U.S. requirements.

Source: 1965 Amendments quotas - Calculated in the IBRD Economics Department.
1971 Amendments quotas - U.S. Department of Agriculture, News, Sugar Requirements for 1972 Proposed, October 19, 1971 (USDA 3455-71).

Table 3: U.S. SUGAR ACT - FINAL ADJUSTED QUOTAS /1 (ACTUAL DELIVERIES) 1966 TO 1970 AND QUOTA ENTITLEMENTS /2 1970 TO 1972 (PROPOSED) BY SUPPLYING DOMESTIC AREAS AND FOREIGN COUNTRIES

(Thousand short tons, raw value)

	Final Adjusted Quotas /1					Quota Entitlements /2		
	1966	1967	1968	1969	1970	1970 /3	1971 /4	1972 (Proposed)
I. Domestic								
Mainland, beet	3,025	3,216	3,115	3,216	3,597	3,597	3,406	3,406
Mainland, cane	1,100	1,169	1,204	1,169	1,308	1,308	1,239	1,539
Hawaii	1,200	1,253	1,192	1,191	1,145	1,145	1,110	1,160
Puerto Rico	711	725	515	371	360	360	180	305
Virgin Islands	6	-	-	-	-	-	-	-
Total domestic	6,042	6,363	6,026	5,947	6,410	6,410	5,935	6,410
II. Foreign								
Philippines	1,203	1,126	1,126	1,126	1,301	1,501	1,589	1,292
Argentina	59	63	76	79	79	73	72	74
Australia	188	191	203	193	206	206	204	200
Bahamas	-	-	-	10	10	10	10	26
Bolivia	5	6	7	8	8	7	7	6
Brazil	478	513	620	640	638	594	584	531
British Honduras	13	13	16	17	16	15	15	33
British West Indies	177	184	218	227	217	205	202	198
China, Republic	78	79	85	80	86	86	85	83
Colombia	51	54	66	68	68	63	62	65
Costa Rica	72	60	73	75	75	70	69	66
Dominican Republic	603	618	707	693	678	594	634	615
Ecuador	69	75	90	93	93	87	85	78
El Salvador	44	37	45	47	46	43	42	41
Fiji Islands	41	42	45	42	45	45	45	44
French West Indies	56	58	66	72	68	64	64	-
Guatemala	60	51	62	64	63	59	58	57
Haiti	27	28	28	17	26	33	27	30
Honduras	-	6	7	8	8	7	7	12
India	73	76	81	77	83	83	81	80
Ireland	5	5	5	5	5	5	5	5
Malagasy Republic	9	9	10	9	10	10	10	12
Malawi	-	-	-	-	-	-	-	-
Mauritius	17	17	19	18	19	19	19	30
Mexico	489	524	634	655	653	607	597	544
Nicaragua	19	53	55	72	75	70	69	62
Panama	13	33	37	44	39	44	43	41
Paraguay	-	-	-	-	-	-	-	6
Peru	361	409	495	300	456	473	465	380
South Africa	55	56	60	57	61	61	60	57
Swaziland	7	7	7	7	7	7	7	30
Thailand	17	18	-	18	19	19	19	18
Uganda	-	-	-	-	-	-	-	15
Venezuela	24	26	31	32	32	30	29	59
Total foreign	4,333	4,437	4,974	4,853	5,190	5,190	5,265	4,790
III. Total Requirements	10,375	10,800	11,000	10,800	11,600	11,600	11,200	11,200

/1 Actual quantities of raw sugar supplied to the U.S. market by individual domestic areas and foreign countries under the provisions of the Sugar Act.

/2 After the proration of the Puerto Rican and Virgin Islands deficits, but before the proration of foreign countries' deficits, if any.

/3 This column differs from the one for 1970 under Final Adjusted Quotas because it excludes the proration between foreign countries in the Western Hemisphere of the deficit of the Philippines, Haiti and Panama who were unable to supply their entire quota entitlement.

/4 Status of quotas as of August 31, 1971.

Source: U.S. Department of Agriculture, Sugar Reports (various issues).
Table 2.

FORM No. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. A. J. Macone

DATE: September 14, 1971

FROM: Shamsher Singh

SUBJECT: Back-to-Office Report - Nineteenth Session of the International Coffee Council, London, August 16 to 30, 1971

1. The following are the main issues and decisions that emerged from the deliberations of the 19th Session of the International Coffee Council, London, August 16 to 30, 1971.

Quotas and Prices

2. Discussions on the determination of world market requirements for coffee in 1971/72 were initiated against the background of a staff paper which had estimated world net import demand at 50.9 to 52.5 million bags. Allowing for imports by non-quota countries and the small quantity of shipments by non-member countries to quota markets meant a global quota requirement of 46.8 to 48.0 million bags. The Brazilians were in favor of establishing an initial export quota of 46 million bags with adjustment provisions if the composite price moved outside the agreed range. Thus they wanted a low quota and the abandoning of adjustments based on selectivity, that is, selective adjustment of quotas (as opposed to pro rata) based on the movement of the prices of a particular type of coffee. The Central Americans favored an export quota of 44 million bags, a special allotment of 2 million bags to be given to certain countries facing oversupply of coffee (chiefly Centrals and Robustas) and a reserve of 5 million bags to be released under the price adjustment mechanism. The importing countries as well as Robusta producers favored a larger quota and an adjustment mechanism based on selectivity.

3. After a series of bargaining sessions, the initial quota for coffee year 1971/72 was set at 47 million bags, just a million bags above the original Brazilian proposal. Country allocations are shown in Tables 1 and 2. In addition, a reserve of 3 million bags was established to be released successively in three traunches of a million bags each if the composite price moved above US¢45.00, 46.25 and 47.50, respectively. These trigger prices compare with a composite price which has been fluctuating between US¢43.00 and 44.00 in recent months. Usual provisions governing selective adjustment of quotas if the price for a particular group of coffee rose above or fell below the established range were also adopted.

4. The establishment of price ranges for the four groups of coffee proved to be a difficult matter to resolve among the Brazilians on one hand and the Robusta exporters on the other. The Brazilians, of course, favored abandoning of the selective system, a position supported by other exporters of Arabicas but strongly opposed by Robustas. As a partial concession, the Brazilians were agreeable to maintaining the selective system provided the

price ranges for both types of coffees overlapped, meaning that the floor of Unwashed Arabicas would be lower than the ceiling of Robustas. In the past there had always been a differential (0.75 to 3 cents) between the ceiling of Robustas and the floor of Unwashed. The Robusta exporting countries bitterly opposed the Brazilian proposal because it would have greatly reduced their chances of selective upward adjustments in their quotas. Usually Robusta prices have tended to move above the ceiling entitling them to selective quota increases, while Arabicas have tended to fall below the floor precipitating quota cuts. The Brazilians refused to give in on the issue and finally the following overlapping price ranges for the four types of coffee were adopted:

	U.S. cents per lb.	
	Floor prices	Ceiling prices
Colombian Milds	46.00	50.00
Other Milds	44.00	48.00
Unwashed Arabicas	42.00	46.00
Robustas	38.50	42.50

5. The quota/price decisions seem to have three implications for our work:

(i) At 47 million bags - this is one of the lowest initial global quotas fixed in recent years. Therefore, chances are that prices will not fall below their existing level and may even strengthen a little for the Arabica types.

(ii) Quota markets will be shared on a pro rata basis to a greater degree than in recent years.

(iii) Our existing price forecasts for Arabicas do not need to be changed; in fact they fall in the middle of the ranges fixed for October 1971/September 1972. However, the price forecast for Robustas may need to be revised upward by 2 cents to appropriately reflect the narrowing of the differential between Robustas and Arabicas.

6. It is interesting to note that last year the consumers, led by the United States, were insistent on establishing a very large initial quota of 52 million bags which caused a sharp fall in prices. However, this year the consuming countries were rather conciliatory[1/] whereas the divergence among the blocs of producing countries increased. The Brazilians took the

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1/ Coffee prices are rather low and importing countries feel that ample supplies of coffee are available.

attitude of "take it or leave it" with regards to their position, just as the United States did last year. The cleavage among the producing countries became more evident when the elections to the Council and the Assembly of the Diversification Fund were held. It was the turn of the Mild Arabicas group to put forward a nomination for the Council chairmanship. Next year's chairmanship is important because the renegotiation of the Coffee Agreement due to expire in 1973 begins in spring 1972. The nomination of Ambassador Manuel Escalante of Costa Rica was advanced by the Central Americans (except Honduras and Guatemala) and supported by Mexico, most South Americans and Africans (except Portugal[1/]), whereas the candidature of Mr. Rene Montes of Guatemala was advanced by Honduras and strongly supported by Brazil and Colombia. It was interesting to see that more countries were in favor of Escalante but there were more votes[2/] for Mr. Montes. Since a compromise could not be reached, Mr. Montes of Guatemala was elected Chairman. Following this, the Chairmanship of the Diversification Fund Assembly was offered to Mr. Escalante but he declined it. I am giving these political details because they signify the lines of split among the producers with regards to issues concerning the renewal of the Coffee Agreement. The Central Americans and Africans would like a revision of the basic quotas which would entitle them to a larger share of the market, whereas the Brazilians and Colombians would wish to perpetuate as much as possible the sharing of the market on the basis of the existing basic quotas.

Distribution of Shortfalls

7. Jamaica, Paraguay, and Trinidad and Tobago had declared that they did not have sufficient coffee available to fully utilize their quotas for 1970/71. The shortfalls, amounting to 76,039 bags, were redistributed among the member countries as shown in Table 3.

Waivers

8. Several countries including El Salvador, Peru, Tanzania, India, and Indonesia had asked for waivers which were denied or deferred for the time being. However, Rwanda was allowed to ship the shortfall from 1970/71 in 1971/72. Nigeria, where civil disturbances had impeded the movement of coffee in 1969/70 was granted a waiver of 10,400 bags, 5,200 bags to be shipped in 1970/71 and another 5,200 bags in 1971/72 in addition to the normal quota for these years.

Basic Quotas

8. Guinea - The basic quota for Guinea was originally set at 180,000 bags. Following a report prepared by the executive board, the Council decided

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1/ Representing Angola, a major Robusta producer.
2/ Brazil and Colombia alone hold nearly one-half of producer votes.

to reduce Guinea's basic quota by 53,000 bags to 127,000 bags. The decision was taken in spite of Nigeria's plea that such stern action be deferred because Guinea was unable to attend the Council's session and defend its position against the accusations with regard to adequate supply of coffee.

9. Sierra Leone - The Agreement requires that when the annual export quota of an exporting member reaches 100,000 bags, the Council shall establish a basic quota for the member concerned. Sierra Leone's annual quota for 1970/71 amounted to 98,400 bags and would have exceeded the limit in 1971/72. Sierra Leone had accordingly requested that it be allocated a basic quota of 127,000 bags. The Council approved the request. On this basis, Sierra Leone's effective initial quota for 1971/72 amounts to 105,384 bags.

Renegotiation of the Agreement

10. The first meeting of the Council dealing with the renegotiation of the Agreement has been scheduled for spring 1972. In this connection, Ethiopia formally proposed that the International Coffee Organization should invite the views of UNCTAD on the Agreement and the policies that it should follow. The proposal was termed as "very interesting" by several delegates from the exporting countries and it was decided that it should be taken up by the executive board when it meets to consider matters concerning the renegotiation of the Agreement. I do not know the motives behind the proposal but it may have been advanced because several countries feel that the Agreement is not working as an instrument of "aid through trade" which they consider to be a desirable objective.

Consultations on Jute

11. I held meetings with the Overseas Development Administration (ODA) of the United Kingdom, the Jute Association, London, the Jute Manufacturers' Association, Dundee, and the leader of the UNDP Jute Fact Finding Mission with regard to the current situation and market prospects for jute and allied fibers and jute goods. Mr. Hayes had written to ODA who were very helpful in arranging these consultations and I found the British jute trade and industry to be highly cooperative. I will prepare a separate note on the subject.

Attachments

cc: Messrs. Henderson, Stevenson, Haq
Messrs. Hayes, Lerdau, King
Chief Economists

SSingh:lcj

Table 1

COFFEE YEAR 1971/72

ANNUAL EXPORT QUOTAS

(60-kilo bags)

Exporting Member	Basic Annual Export Quota
TOTAL	47,000,000
Colombian Milds	7,103,038
Colombia	5,808,559
Kenya	713,623
Tanzania	580,856
Other Milds	9,597,577
Burundi	290,428
Costa Rica	912,773
Dominican Republic	431,493
Ecuador	622,346
El Salvador	1,576,609
Guatemala	1,493,629
Haiti	406,599
Honduras	352,662
India	351,003
Jamaica	5,000
Mexico	1,460,438
Nicaragua	456,387
Panama	32,500
Peru	614,048
Rwanda* 1/	215,662
Venezuela *	376,000
Unwashed Arabicas	18,738,984
Bolivia	65,000
Brazil	17,364,272
Ethiopia	1,239,712
Paraguay	70,000
Robustas	11,560,401
Congo (D.R.)	1,078,732
Ghana	66,300
Guinea	105,384
Indonesia	1,126,031
Liberia	78,000
Nigeria 2/	67,600
OAMCAF	4,565,682
Portugal	2,303,508
Sierra Leone	105,384
Trinidad & Tobago	89,700
Uganda	1,974,080

* Provisional

1/ Subject to the provisions of Resolution number 243

2/ Subject to the provisions of Resolution number 244

Table 2

COFFEE YEAR 1971/72

QUARTERLY DISTRIBUTION OF THE ANNUAL EXPORT QUOTAS

(60-kilo bags)

Exporting Country	October-December	January-March	April-June	July-September
TOTAL	10,380,485	11,775,304	12,422,103	12,422,108
Colombian Milds	1,562,668	1,775,760	1,882,305	1,882,305
Colombia	1,277,883	1,452,140	1,539,268	1,539,268
Kenya	156,997	178,406	189,110	189,110
Tanzania	127,788	145,214	153,927	153,927
Other Milds	2,151,953	2,424,698	2,510,462	2,510,464
Burundi	87,128	87,128	58,086	58,086
Costa Rica	200,810	228,193	241,885	241,885
Dominican Republic	94,928	107,873	114,346	114,346
Ecuador	136.916	155,586	164,922	164,922
El Salvador	346,854	394,153	417,801	417,801
Guatemala	328,598	373,407	395,812	395,812
Haiti	89,452	101,649	107,749	107,749
Honduras	77,586	88.166	93,455	93,455
India	77,220	87,751	93,016	93,016
Jamaica	1,100	1,250	1,325	1,325
Mexico	321,296	365,110	387,016	387,016
Nicaragua	100,405	114,096	120,943	120,943
Panama	7,150	8,125	8,612	8,613
Peru	135,091	153,512	162,722	162,723
Rwanda 1/	64,699	64,699	43,132	43,132
Venezuela	82,720	94,000	99,640	99,640
Unwashed Arabicas	4,122,597	4,684,746	4,965,830	4,965,831
Bolivia	14,300	16,250	17,225	17,225
Brazil	3,820,140	4,341,068	4,601,532	4,601,532
Ethiopia	272,737	309,928	328,523	328,524
Paraguay	15,400	17,500	18,550	18,550
Robustas	2,543,287	2,890,100	3,063,506	3,063,508
Congo (D.R.)	237,321	269,683	285,864	285,864
Ghana	14,586	16,575	17,569	17,570
Guinea	23,184	26,346	27,927	27,927
Indonesia	247,727	281,508	298,398	298,398
Liberia	17,160	19,500	20,670	20,670
Nigeria 1/	14,872	16,960	17,914	17,914
OAMCAF	1,004,450	1,141,420	1,209,906	1,209,906
Portugal	506,771	575,877	610,430	610,430
Sierra Leone	23,184	26,346	27,927	27,927
Trinidad & Tobago	19,734	22,425	23,770	23,771
Uganda	434,298	493,520	523,131	523,131

1/ See footnotes to Table 1.

Table 3

DISTRIBUTION OF SHORTFALLS IN COFFEE YEAR 1970/71

(60-kilo bags)

Exporting Members	Bags
TOTAL	76,039
Colombian Milds	11,308
Colombia	9,247
Kenya	1,136
Tanzania	925
Other Milds	15,213
Burundi	490
Costa Rica	1,453
Dominican Republic	687
Ecuador	991
El Salvador	2,469
Guatemala	2,378
Haiti	647
Honduras	561
India	559
Jamaica	0 1/
Mexico	2,325
Nicaragua	727
Panama	41
Peru	978
Rwanda	357
Venezuela	550
Unwashed Arabicas	29,697
Bolivia	82
Brazil	27,642
Ethiopia	1,973
Paraguay	0 1/
Robustas	19,821
Congo (D.R.)	1,972
Ghana	79
Guinea	258
Indonesia	1,943
Liberia	107
Nigeria	85
OAMCAF	7,848
Portugal	3,975
Sierra Leone	147
Trinidad & Tobago	0 1/
Uganda	3,407

1/ Declared a shortfall

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REMARKS

From M.P. Benjenk

September 1, 1971

MIDDLE EAST AND NORTH AFRICAN PETROLEUM DEVELOPMENTS AND OUTLOOK

This paper was prepared by Mr. M. H. Payson and is based on a memorandum by Mr. C. H. Thompson (dated March 15), a memorandum of Mr. Andrew C. Huang (dated May 20, 1971), and on the Draft Economic Report on Algeria (EMA-39).

TABLE OF CONTENTS

Introduction

1. As late as spring of last year there was a general consensus among petroleum specialists that downward pressure on petroleum export prices would continue owing, on the supply side, to the increasing availability of sources of crude oil at low production costs, combined with growing competition among some producers (influenced by the growing share of "independent" producers); and, on the demand side, to policies to restrict dependence on foreign supplies by expanding domestic production, encouraging the development of alternative sources of energy and raising indirect taxes. In fact, from the late 1950's to the summer of 1970, average realized f.o.b. crude oil prices in the Persian Gulf followed a generally declining trend, while the structure of posted prices remained practically unchanged. Starting in September 1970, however, there have been a series of jumps in posted prices, owing to the conclusion of a number of new agreements, with concurrent increases in realized oil prices. These agreements reflect a fundamental change in the situation on the world petroleum markets and in the bargaining position of the producer countries vis-a-vis concessionary companies. They significantly affect foreign exchange earnings and government revenues in the oil producing countries of the Middle East and North Africa.

Recent Trends in Demand and Supply

2. In 1970, total world crude oil consumption rose 8.5 percent from a rate of 42.9 million b/d to 46.6 million b/d (about 2,145 million tons in 1969 to 2,328 million tons in 1970). Western Hemisphere consumption increased by only 5 percent, owing mainly to less rapid expansion in the already high level of U.S. consumption, while consumption in the oil importing regions of Europe and Japan grew 11 percent and 17.7 percent. (See Table 3.) Imports into these areas increased somewhat more rapidly, i.e. by 13.4 percent and 18.4 percent last year, as limited domestic production declined in Western Europe; the development of alternative sources of energy lagged; demand for some refined products, particularly fuel oil, expanded; and efforts to increase petroleum stocks were intensified. Anti-pollution laws also encouraged consumers to shift from coal to low sulphur fuel oils. Import demand in the U.S. grew by almost 8 percent, i.e. considerably more rapidly than domestic consumption, owing in large part to high demand for fuel oil for heating resulting from a shortage of domestic natural gas.

3. While the rapid growth in demand was essentially a continuation of long-term trends (since 1960 world consumption has risen at 8 percent a year, and imports into Western Europe and Japan have grown by 12 percent and 20 percent per year respectively), during the past three years there has been a shortage of world transport capacity, as the Suez Canal was closed; pipelines were fully utilized; and there was limited potential for increasing world tanker capacity in the short run.

4. In May 1970, the Tapline in Syria was closed; it carried about 500,000 b/d (25 million tons/year) from Saudi Arabia to Sidon on the Eastern Mediterranean, or about 4 percent of average European daily imports. In June Libya ordered cutbacks on production of some independent oil companies as a means of pressing them to accept raising posted prices; production actually fell by about 440,000 b/d (22 million tons/year) for the rest of the year, or the equivalent of 3.5 percent of average European daily imports. Since tankers take nearly four times as much time to carry oil from the Persian Gulf to North-Western Europe via the Cape as compared to carrying oil from the Mediterranean ports, the closure of Tapline, and the cutback in Libyan production increased the pressure on available tanker capacity and considerably raised the freight rates on uncommitted charter tankers (which account for about one-third of total capacity). Thus, shipping costs from the Gulf to Rotterdam rose from $1.1 per barrel in May 1970 to about $3.3 per barrel in September 1970.

5. The growing price advantage of Mediterranean oil, and the seasonal growth of demand in winter in Europe won for Libya a substantial rise in the posted price of crude in September/October 1970. This precipitated in 1971 a series of agreements with Gulf and Mediterranean producers, which brought further rises in posted prices. Eastern Mediterranean countries, through which oil pipelines transit, also benefited from the new situation.

6. These events reflect a significant change in the market behavior of major producers. For the first time, an important producer (Libya) was willing to cut back production thus creating an artificial shortage of supply. Even more important, however, is the fact that in Teheran and Tripoli the producing countries joined forces and negotiated as a group with the oil companies; previously, while aligning their approaches in OPEC (Organization of Petroleum Exporting Countries) each country had negotiated its contracts individually. These behavioral changes substantially strengthened the bargaining position of the oil countries and forced the oil companies to grant larger price concessions than they were initially prepared to give.

Revenue Sharing Agreements

7. Prior to September 1970 the 'typical' agreement, though subject to important variations reflecting historical, political or geographical conditions especially in Algeria, provided a 12½ percent royalty on exports valued at an artificial or posted price and a 50 percent income tax also calculated as the difference between cost and output valued at posted prices. Various small premia reflecting quality and transport advantage were also applied. The only important modification was the 'expensing' of royalties (which since the mid-1960's ceased to be part of the tax payment becoming instead a cost element), resulting in Government-company profit sharing of roughly 56 and 44 percent respectively (compared with 50 and 50 percent previously). To the extent that realized prices were lower than posted prices, which has generally been the case since 1960, the Government's share of producing companies' gross profits had of course been higher.

8. Details on the recent revenue sharing agreements are given in Annex I in chronological order. The approximate effects of the new agreements as of June 1, 1971 were to increase posted prices in the case of the Gulf States from about $1.80 to about $2.30 per barrel (28%) and in Libya from about $2.20 to $3.45 (57%) per barrel. Government revenues to the Gulf States will have increased from 87 cents to over $1.30 per barrel (50%) while Libyan oil revenues will almost double from about $1.10 to $2.00 per barrel (80%). Detailed information for Iraq has not yet been published and the Algerian situation is complicated by Government ownership in oil production facilities, which tends to make Government revenues more dependent on realized prices and production costs than on posted prices. However, the following table sketches the approximate effects as of 1969, June 1971 and 1975.

TABLE A

Approximate Effect of Profit Sharing Agreements

	Gulf States	Mediterranean Terminals, Iraq Saudi Arabia	Libya	Algeria
Posted Prices per barrel				
1969	1.80	2.10	2.20	2.08
1971, June	2.30	3.21	3.45 /b	3.60 /a,b
1975	2.60	3.54	3.68	3.84
Revenues per barrel				
1969	0.87	0.95	1.10	0.96
1971, June	1.32	1.95	2.00	2.03
1975	1.52	2.05	2.16	2.22

/a Reference prices relevant only for calculating the government take from minority shareholders in oil companies. Government majority share depends on difference between realized prices and costs, i.e. actual gross profits.

/b Includes 25 cents per barrel in temporary Suez Canal and freight premia.

9. The foregoing agreements will raise total government oil revenues in the area, including Iran, from around $6 billion in 1970 to at least $11½ billion in 1972. The growth of revenues for any one country will depend on a complex of factors affecting the volume of exports and its share in importing countries' markets, but an illustrative projection, based mainly on past trends, would produce the pattern shown in Table B.

TABLE B

Illustrative Projection of

Government Petroleum Revenues /a

(in millions of U.S. Dollars)

	Assumed Export Growth Rate	1970	1972	1975
Iran	12	1175	2182	3538
Saudi Arabia	10	1082	2139	3202
Kuwait	6	840	1449	2001
Iraq	5	485	1003	1217
Qatar	6	119	210	321
Abu Dhabi	10	224	403	619
Other Middle East	10	128	252	387
Subtotal	9.7	4053	7638	11285
Libya	8	1361	2838	3803
UAR	16	113	253	452
Algeria	10	345	808	1023
Subtotal	12.0	1821	3899	5278
Total	10.3	5874	11537	16563

/a See Annex, Tables 5 and 6.

10. The overall rate of growth of production is projected at 10 percent per year. The assumed export growth for Iraq of 5 percent could well be exceeded by the end of the period if agreements to expand production are reached with the major oil companies. The 8 percent export growth assumed for Libya would bring production in 1975 to 4.8 million barrels per day (240 million tons/year), i.e. only 20 percent above the peak rate of production already achieved. On that assumption and even excluding Suez Canal and freight premia, oil revenues to Libya alone would be almost $4 billion in 1975 while export growth rates of 10 percent and 6 percent would yield $5 billion in revenues to Saudi Arabia and Kuwait combined.

11. In the first quarter of this year Iran's production increased 13½ percent to 4.4 million barrels per day; Saudi Arabia had 4.2 barrels per day for a 22 percent gain; Kuwait rose 12.6 percent to 2.9 million barrels per day; and Iraq and Abu Dhabi increased 11.6 percent and 40.3 percent achieving 1.7 million b/d and 0.87 million b/d respectively. This rapid expansion may have been influenced by the restriction of Libyan and Algerian supplies as well as the build up of stocks to cushion political changes.

Pipeline Receipts in Transit Countries

12. On January 28 the Syrian Government reached a new agreement with Tapline, which originates in Saudi Arabia and transits Jordan, Syria and Lebanon, and on July 6 announced a new agreement with Iraq Petroleum Company, whose pipeline transits Syria and Lebanon. The former agreement provided for a lump sum payment of $9 million as well as increases in transit and terminal fees of 3 cents a barrel to a total of about 6 cents a barrel. Annual revenues are estimated to rise from $4.5 million to $8.5 million. Details on the IPC agreement have not yet been published, but a press release announced that royalties paid to Syria would rise from $54 million per year to $83 million per year. In addition to the annual increase of $29 million, Syria will receive a lump sum of $34 million.1/ Smaller increases can be expected in revenues due to Jordan from the Tapline and to Lebanon from the IPC and the Tapline.

1/ New York Times, July 7, 1971.

Realized Prices and Short-Run Price Outlook

13. Under the pattern which had prevailed during the past decade competitive and other supply factors had resulted in declining realized prices, and if these trends had continued, might eventually have caused posted prices also to decline. However, the situation described in the foregoing pages has been the reverse, i.e. conditions during 1970 initially put rising pressures on realized prices, followed by the negotiated increases in posted prices and tax paid costs which have in turn resulted in pressure for even higher realized prices.

14. The position of the oil companies, predictably, is that they can not absorb increases in costs of the magnitude agreed in the Middle East and these must therefore be passed on to the consumer countries. The companies argue further that whether the cost increases will be passed on to individual consumers within these countries depends on governmental tax measures in the importing countries.

15. On the first point, although information is sketchy, realized prices to Western Europe for Iranian and Kuwait crudes during the first quarter of 1971 rose by 40 - 45 cents per barrel over the mid-November level and by 30 - 35 cents per barrel over the mid-February level, e.g. almost exactly in line with the estimated rise in government take during this period. Price rises were apparently comparable for crudes sold to Japan and India.

16. On the second point there is little evidence that the importing countries have or will lower taxes on petroleum and products. On the contrary, France recently raised them and Germany will probably be doing the same. The higher prices could, however, encourage the importing countries to turn to alternative sources of energy, including speedier development of new petroleum sources.

17. Concerning the short-run outlook, there is agreement among some oil experts that the buyer's market of the last decade has come to an end and that realized f.o.b. crude oil prices will follow a rising trend similar to that of posted prices in the next few years, due to the higher taxes on crude oil and to higher freight rates.

Factors Affecting Longer Term Outlook

18. Because the price increases have been so recent and earlier energy studies assumed stable or marginally increasing prices, there is now a need for a re-evaluation of energy supply, demand and government policies in the consuming countries, particularly Western Europe. Some of the major factors which can be expected to affect such a re-evaluation are summarized below.

19. The Middle East is fundamentally in a strong position, with over half the world's proved reserves (Table 1) and low production costs. North African producers at present have about 10 percent of world reserves, high quality crude, and the advantage of being on the Mediterranean side of the Suez Canal. Significant factors would include political developments in the area, the extent to which members of the OPEC maintain their cohesion, the growth of national companies and independents in relation to the "majors" as participation increases and concessions expire or are altered.

20. Known new producing areas in the North Sea, Alaska and Indonesia could add 5 million b/d to world production by the mid-1970's, but rather than contribute to an oil glut, it now appears that these supplies may only help meet the increment in world demand. The recent price increases will certainly tend to encourage further exploration, but there is a substantial lag between exploration and production.

21. A recent study in the U.S. illustrates the strength of the competitive position of Eastern Hemisphere crudes. It estimates that to limit imports from that region to 10 percent of U.S. consumption would require a U.S. price level of $3.83 per barrel. At $3.10 per barrel, the U.S. would import from the East 3.1, 5.2 and 8.2 million b/d in 1975, 1980 and 1985. As far as Western Europe is concerned, which imported 13 million b/d in 1970, there is little evidence to suggest a slacking of demand. On the contrary, efforts to increase stocks from about 65 to 120 days reserve could push demand even higher in the medium term. Alternative sources of energy must, however, be watched closely.

22. Finally, the expansion of long-term transport capacity could have significant effects on individual countries' petroleum revenues and landed costs and prices in the importing countries. On the first point the immediate effect of opening the Suez Canal would be the loss of the "Suez Premium" included in posted prices, resulting in an aggregate loss to Libya, Algeria, Iraq and Saudi Arabia of some $180 million in revenues. On the second point, present and planned expansion of Middle East pipelines combined with reopening the Suez Canal at its prewar throughput could provide adequate supply at relatively low transport cost for most or all of Europe's demand for Middle East crude by 1975.

ANNEX I

REVENUE SHARING AGREEMENTS

September/October 1970 Libya

1. In the late spring of 1970 Libyan production, which had hit a peak of from 3.8 to 4.0 million barrels per day, was reduced to 3.1 million barrels per day. In September and October 1970, the Libyan Government negotiated a new series of agreements with the producing companies. The principal terms of the settlement included (a) an immediate increase of about 30 cents per barrel in posted price, i.e. from about $2.23 to about $2.55; (b) an increase in the income tax rate from 50 percent to levels ranging from 54 percent for the Oasis group to 55 percent for the majors and 58 percent for Occidental. This agreement led to an increase in average oil revenues from about $1.10 to about $1.40 per barrel.

November 14, 1970, Iran

2. The Iranian Government concluded an agreement effective November 14, 1970 providing for an increase in the posted price of heavy crude oil of 9 cents per barrel, i.e. from $1.63 to $1.72 per barrel, and an increase in income tax from 50 to 55 percent. Average Government revenues on Iranian light crude oil, for which the posted price was apparently not raised, increased from about 91 to 98 cents per barrel.

February 14, 1971, Teheran

3. The gains made in the Teheran settlement were in large part due to the unprecedented unity shown by the OPEC member countries. The agreement covered six Gulf producers - Abu Dhabi, Iran, Iraq, Kuwait, Qatar and Saudi Arabia - and 22 oil companies. The agreement is complex and is intended to provide a stable basis for relations between oil companies and host governments in the Persian Gulf for 5 years, January 1971 through 1975. The Mediterranean terminals for Iraq and Saudi Arabian crude are not covered by the agreement.

4. The agreement included (a) an immediate increase of 35 cents per barrel in the posted price of Gulf crudes, i.e. from about $1.80 to about $2.15. Owing to quality differences, increases in postings in fact ranged from 35 cents for 40 degrees gravity to 40 cents for 31 degrees gravity crude oil; (b) an increase of the tax rate from 50 to 55 percent; (c) elimination of all the remaining OPEC allowances which would otherwise have continued until 1975; (d) an annual increase of 5 cents per barrel in postings and an annual increase of 2.5 percent in postings to compensate for world wide price inflation and the fall in the purchasing power of the dollar.

5. In return for the large financial benefits to the Persian Gulf producing countries, the oil companies gained the advantage of stability, in particular:

(a) agreement that the Gulf producing countries would not impose any export embargo nor take any action to support any OPEC member which may demand either an increase in Government take or any other matter above the terms agreed on in the Gulf,

(b) guarantees against leap-frogging of claims during the next five years.

6. Although Iran is not included in EMENA Department, the other five countries are, and the following table is roughly illustrative of the terms applicable to each of them. More significantly, the Teheran agreement may be considered to provide a pattern for international profit sharing outside the area, with modifications to account for quality, accessibility, reserves, etc. (Table C).

February 24, Algeria

7. On February 24, the Algerian Government nationalized part of the capital assets and rights of nine French oil producing companies, so as to bring SONATRACH's share in these companies to 51 percent. It nationalized at the same time all non-Algerian natural gas concessions, gas production installations, associated gas and gas transport companies or pipelines. This and subsequent nationalization measures give Algeria complete control of the oil and gas sector and leave a minority share (estimated at 44 percent of production in 1969) in the hands of a group of French companies and two small American companies, as well as minority shares in oil refining and oil service companies.

April 2, Libya (retroactive to March 20)

8. While the Teheran agreement provided for an increase in the "base" posting of 35 cents per barrel, the base posting in Libya was advanced by 52 cents of which 10 cents is specifically described as a low sulfur premium. The Libyan agreement also provided, as did Teheran, for an annual increase in postings of 5 cents per barrel plus an additional 2.5 percent of the previous posting to compensate for inflation. Hence the posted price as of March 20 was $3.197. In addition there are two temporary premia reflecting Libya's location on the Mediterranean side of the closed Suez Canal (12 cents per barrel) and the temporary advantage of Libya's short haul crude resulting from present high freight rates. This latter premium of 13 cents per barrel corresponds to an AFRA (tanker rate) index of W94.4, declines in proportion to the index, and would disappear in any quarter in which the average freight rate assessment fell to W72.

TABLE C

ESTIMATED

IRANIAN GOVERNMENT TAKE

($ per barrel Iranian light) /1

(34° gravity)	1969	Nov.14 1970	Feb.15 1971	June 1 1971	Jan. 1 1975
Posted price	1.790	1.790	2.170	2.274	2.603
OPEC allowance	0.076	0.076	-	-	-
Reference price	1.714	1.714	2.170	2.274	2.603
Estimated costs	0.110	0.110	0.110	0.110	0.110
Royalty	0.224	0.224	0.271	0.284	0.325
Taxable base	1.380	1.380	1.789	1.880	2.168
Tax	0.690	0.759	0.984	1.034	1.192
Government take	0.914	0.983	1.255	1.318	1.577

/1 Export mix approximately 60 percent of light and 40 percent heavy. Posted prices on heavy for June 1971 and 1975 are $2.228 and $2.553, respectively.

Source: M.E.E.S., April 19, 1971

9. In round figures based on the data in Table D, Libya's per barrel oil revenue will rise by about 45 percent or from about $1.40 per barrel as of November 1970 to $2.00 per barrel in March of this year, rising thereafter to at least $2.15 per barrel or more, depending on the application of the Suez and freight premia. For this year it implies a total increase of about 90 cents per barrel or about 80 percent above the Government's take of about $1.10 per barrel prior to November 1970. Assuming an average production cost of 30 cents per barrel in Libya, the new oil pact immediately raises its oil producers' average tax paid cost to $2.30 per barrel. This would compare with $1.40 prior to the first round of oil agreements in September 1970.

TABLE D

ESTIMATED

LIBYAN GOVERNMENT TAKE

($ per barrel)

	1969	Nov. 1970	Mar.20 1971	Jan. 1 1975
Posted price (40° gravity)	2.23	2.55	3.197	3.682
Suez Premium	-	-	0.120	?
Freight premium	-	-	0.130	?
Total posted price	2.23	2.55	3.447	3.682
Royalty 12½%	0.28	0.138	0.431	0.460
Average production cost	0.30	0.30	0.30	0.30
Taxable base	1.65	1.927	2.716	2.922
Tax	0.83	1.060	1.494	1.607
Retroactive tax buy-out	-	-	0.090	0.090
Royalty	0.28	0.318	0.431	0.460
Government take	1.11	1.378	2.015	2.157

Source: Petroleum Intelligence Weekly, April 5, 1971.

April 12, Algeria (retroactive to March 20)

10. The Algerian decision provides that the new posted price for 40 degree crude is $3.60 per barrel f.o.b. Bougie comprising a base price of $3.35 plus a freight premium of 25 cents fixed at this level as in the Libyan agreement until June 30. The base price will rise in succeeding years to $3.37, $3.524, $3.682 and $3.844 in 1975. This is about 15 to 20 cents per barrel higher than the base posted price fixed by Libya but is justified by the Algerians on the grounds that it does not include the 9 cent retroactive tax buy-out gained by Libya but does reflect a shorter haul advantage. In Algeria's circumstances the posted price is applicable only for purposes of estimating taxes due by minority foreign shareholders, which are assumed also to be based on a 55-45 split of the difference between production costs and exports valued at posted prices.

11. In addition, a new oil code replaces the existing concession agreements and establishes SONATRACH as the amjority partner with all foreign companies. French companies must retain in Algeria 100 percent of their realizations on crude sales - with the balance up to 24.5 percent after payment of production costs, taxes, etc. repaid to them from a convertible dinar account after three months provided the crude has been sold above a minimum price fixed by Algeria and that the company's accounts with the Government treasury are "in order". All disputes are to be arbitrated only by Algeria's Supreme Court.

12. In the matter of compensation for the nationalized interests, Algeria had offered the French a total of D500 million (about $100 million) to be paid in oil. On June 30 agreement was reached between SONATRACH and CFP, one of the two companies concerned, under which CFP accepted $61 million and the Algerians agreed to reduce from 12 to 7 years the period over which compensation will be paid. CFP agreed to settle back taxes estimated at some $27 million over the next few months. The Accord established an association for 10 years but the financial and economic clauses are subject to revision after 5 years. Negotiations with the other company involved, the Elf-Erap Group wholly owned by the French Government, are scheduled to begin July 19.

13. The French stopped buying Saharan crude at the end of April on grounds that Algeria's minimum sale price of $2.95 per barrel was 10 percent above the price of other competitive crude available to them. Algeria has since indicated that it would be willing to reduce the disputed $2.95 minimum price if the French would first agree on terms for settling tax arrears and investment programs. It is now expected that the French will lift their embargo and halt their efforts to prevent other countries from buying Algerian crude./1

/1 The agreement with CFP sets the new posted price for tax (55%) purposes at $3.65/bbl. while the "repatriation" price will be $2.75/bbl. (Oil and Gas Journal, June 28, 1971).

June 7, Iraq (retroactive to March 20)

14. Of about 1.6 million barrels per day produced in 1970 by Iraq, approximately 1 million barrels per day is shipped by pipeline to the Mediterranean terminals at Tripoli/Banias. In a separate agreement Iraq negotiated an increase in the posted price by about 80 cents to $3.21 per barrel (of 36° crude). As in the other agreements this one raised taxes on foreign companies from 50 to 55 percent and also provided for annual increases in the posted price of 5 cents and 2.5 percent. The agreement is essentially similar to the Libyan agreement except that the Iraq posted price does not include the 10 cents low sulfur premium won by Libya. The result will be to increase average revenues per barrel to about $1.95, i.e. about 5 cents less per barrel than that earned by Libya.

23 June, Saudi Arabia

15. Of about 3.5 million barrels per day produced by Saudi Arabia in 1970, 0.5 million barrels per day is shipped through the pipeline terminating in Sidon. Agreement was reached between Saudi Arabia and Tapline. Posted prices for 34° crude at Sidon was raised by 81.1 cents to $3.18 per barrel. Apart from the 1 cent difference in the rise in posted prices, the terms are the same as in the June 7 Agreement between Iraq and IPC.

TABLE 1

WORLD "PUBLISHED PROVED" OIL RESERVES AT END 1970

COUNTRY/AREA	Thousand Million Tons	Share of Total	Thousand Million Barrels	Share of Total
U.S.A.	6·1	7·2%	46·7	7·5%
Canada	1·3	1·6%	10·4	1·7%
Caribbean	2·3	2·8%	16·3	2·6%
Other Western Hemisphere	1·4	1·6%	9·9	1·6%
TOTAL WESTERN HEMISPHERE	11·1	13·2%	83·3	13·4%
Western Europe	0·6	0·7%	4·4	0·7%
Africa	9·8	11·7%	74·7	12·1%
Middle East	47·0	55·9%	343·9	55·4%
U.S.S.R., E. Europe & China	13·7	16·2%	100·0	16·1%
Other Eastern Hemisphere	1·9	2·3%	14·4	2·3%
TOTAL EASTERN HEMISPHERE	73·0	86·8%	537·4	86·6%
WORLD (excl. U.S.S.R., E. Europe & China)	70·4	83·8%	520·7	83·9%
WORLD	84·1	100·0%	620·7	100·0%

SOURCE OF DATA

U.S.A. American Petroleum Institute.

Canada Canadian Petroleum Association.

All other areas Estimates published by the "Oil & Gas Journal" (Worldwide Oil issue 28th December 1970)

NOTES

1. Proved reserves are generally taken to be the volume of oil remaining in the ground which geological and engineering information indicate with reasonable certainty to be recoverable in the future from known reservoirs under existing economic and operating conditions.

2. The recovery factor, i.e. the relationship between proved reserves and total oil in place, varies according to local conditions and can vary in time with economic and technological changes.

3. For the U.S.A. and Canada the data include oil which it is estimated can be recovered from proved natural gas reserves.

4. The data exclude the oil content of shales and tar sands.

TABLE 2

WORLD OIL PRODUCTION

THOUSAND BARRELS DAILY

COUNTRY/AREA	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	Yearly Change 1970 over 1960	Yearly Change 1970 over 1965
NORTH AMERICA													
U.S.A.													
Crude Oil	7,035	7,185	7,330	7,540	7,615	7,805	8,295	8,810	9,095	9,240	9,630	+ 3·3%	+ 4·3%
Natural Gas Liquids	930	990	1,020	1,100	1,155	1,210	1,285	1,410	1,505	1,590	1,680	+ 6·0%	+ 6·8%
	7,965	8,175	8,350	8,640	8,770	9,015	9,580	10,220	10,600	10,830	11,310	+ 3·5%	+ 4·6%
Canada	540	645	735	790	850	935	1,015	1,110	1,195	1,310	1,425	+10·3%	+ 8·8%
Mexico	300	320	335	345	355	360	370	410	435	460	475	+ 4·8%	+ 5·8%
TOTAL NORTH AMERICA	8,805	9,140	9,420	9,775	9,975	10,310	10,965	11,740	12,230	12,600	13,210	+ 4·3%	+ 5·0%
CARIBBEAN													
Venezuela	2,845	2,920	3,225	3,270	3,395	3,505	3,400	3,575	3,640	3,630	3,740	+ 2·8%	+ 1·3%
Colombia	150	145	140	165	170	200	195	190	175	210	210	+ 3·3%	+ 1·0%
Trinidad	115	125	135	135	135	135	150	180	185	160	140	+ 2·0%	+ 1·0%
TOTAL CARIBBEAN	3,110	3,190	3,500	3,570	3,700	3,840	3,745	3,945	4,000	4,000	4,090	+ 2·8%	+ 1·3%
SOUTH AMERICA													
Argentina	175	230	270	270	275	270	285	315	345	355	385	+ 8·3%	+ 7·5%
Brazil	80	95	95	105	90	95	115	145	165	175	260	+12·3%	+22·5%
Other South America	90	95	105	110	115	115	120	140	160	150	170	+ 6·5%	+ 8·3%
TOTAL SOUTH AMERICA	345	420	470	485	480	480	520	600	670	680	815	+ 9·0%	+11·3%
TOTAL WESTERN HEMISPHERE	12,260	12,750	13,390	13,830	14,155	14,630	15,230	16,285	16,900	17,280	18,115	+ 4·0%	+ 4·5%
WESTERN EUROPE													
France	40	45	50	50	55	60	60	55	55	50	45	+ 1·5%	– 5·0%
W. Germany	110	125	135	150	150	155	155	155	160	155	150	+ 3·3%	– 1·0%
Austria	45	45	45	50	50	55	55	55	55	55	55	+ 1·3%	– 0·5%
Turkey	5	10	10	15	20	30	40	50	60	70	70	+25·5%	+18·3%
Other Western Europe	100	105	110	110	140	135	125	130	125	130	130	+ 3·0%	– 0·5%
TOTAL WESTERN EUROPE	300	330	350	375	415	435	435	445	455	460	450	+ 4·0%	+ 0·8%
MIDDLE EAST													
Iran	1,060	1,195	1,330	1,475	1,710	1,910	2,110	2,595	2,850	3,375	3,830	+13·8%	+15·0%
Iraq	955	990	995	1,160	1,255	1,315	1,390	1,225	1,510	1,525	1,565	+ 5·0%	+ 3·5%
Kuwait	1,620	1,845	1,930	1,930	2,115	2,170	2,275	2,290	2,420	2,575	2,735	+ 5·5%	+ 4·8%
Neutral Zone	135	175	245	315	300	370	420	420	425	450	505	+14·3%	+ 6·3%
Qatar	175	175	190	195	215	235	290	320	340	355	370	+ 7·8%	+ 9·8%
Saudi Arabia	1,245	1,390	1,525	1,630	1,730	2,025	2,385	2,600	2,830	2,995	3,550	+11·0%	+12·0%
Abu Dhabi	—	—	15	55	185	280	360	380	500	600	695	*	+13·8%
Oman	—	—	—	—	—	—	—	55	235	330	330	*	*
Other Middle East	45	45	45	45	50	60	65	75	105	185	275	+20·0%	+35·8%
TOTAL MIDDLE EAST	5,235	5,815	6,175	6,805	7,620	8,365	9,305	9,980	11,215	12,390	13,855	+10·3%	+10·8%
AFRICA													
Algeria	180	330	435	510	565	575	715	840	915	955	1,025	+18·8%	+12·3%
Libya	—	20	185	465	860	1,225	1,505	1,745	2,600	3,110	3,320	*	+22·0%
Other North Africa	65	75	90	110	130	130	130	170	290	420	570	+23·8%	+34·0%
Nigeria	20	55	70	75	120	275	420	320	140	540	1,085	+50·8%	+31·3%
Other West Africa	20	20	30	35	50	40	45	85	125	155	220	+28·3%	+40·8%
TOTAL AFRICA	285	500	810	1,195	1,725	2,245	2,815	3,160	4,070	5,180	6,220	+36·0%	+22·5%
SOUTH EAST ASIA													
Indonesia	415	430	480	455	470	485	475	515	600	750	850	+ 7·5%	+11·8%
Other South East Asia	95	80	80	80	75	80	95	115	125	140	165	+ 6·0%	+15·3%
TOTAL SOUTH EAST ASIA	510	510	540	535	545	565	570	630	725	890	1,015	+ 7·0%	+12·3%
U.S.S.R.	2,970	3,340	3,740	4,145	4,485	4,890	5,335	5,735	6,190	6,585	7,130	+ 9·3%	+ 8·0%
EASTERN EUROPE & CHINA	385	400	440	450	485	505	535	545	595	695	765	+ 6·3%	+ 5·8%
OTHER EASTERN HEMISPHERE	35	40	65	70	85	105	140	170	195	210	335	+26·0%	+29·8%
TOTAL EASTERN HEMISPHERE	9,720	10,735	12,120	13,575	15,360	17,110	19,135	20,705	23,415	26,400	29,760	+11·8%	+11·8%
WORLD (excl. U.S.S.R., E.Europe & China)	18,025	19,745	21,330	22,810	24,535	26,345	28,465	30,850	33,560	36,410	40,040	+ 7·8%	+ 8·5%
WORLD	21,980	23,485	25,510	27,405	29,515	31,740	34,365	36,980	40,345	43,680	47,875	+ 8·0%	+ 8·5%

*Greater than 300%

TABLE 3

WORLD OIL CONSUMPTION AND TRADE

COUNTRY/AREA	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	Yearly Change 1970 over 1960	Yearly Change 1970 over 1965
						THOUSAND BARRELS DAILY							
CONSUMPTION													
U.S.A.*	9,660	9,810	10,230	10,550	10,820	11,300	11,850	12,280	13,080	13,810	14,370	+ 4·0%	+ 5·0%
Canada	860	880	920	1,000	1,070	1,150	1,220	1,290	1,380	1,440	1,500	+ 5·8%	+ 5·5%
Other Western Hemisphere	1,550	1,650	1,710	1,820	1,900	2,010	2,150	2,250	2,450	2,610	2,760	+ 6·0%	+ 6·5%
TOTAL WESTERN HEMISPHERE	12,070	12,340	12,870	13,370	13,790	14,460	15,220	15,820	16,910	17,860	18,630	+ 4·5%	+ 5·3%
Benelux	420	480	560	640	740	840	870	900	1,040	1,150	1,280	+11·8%	+ 8·8%
France	570	630	730	870	970	1,100	1,190	1,360	1,470	1,700	1,940	+13·0%	+12·0%
W. Germany	680	830	1,010	1,210	1,400	1,520	1,820	1,940	2,140	2,420	2,700	+14·5%	+10·5%
Italy	470	570	700	800	930	1,030	1,170	1,260	1,380	1,530	1,720	+13·5%	+10·8%
U.K.	990	1,060	1,130	1,240	1,360	1,490	1,590	1,680	1,820	1,950	2,080	+ 7·5%	+ 6·8%
Scandinavia	440	450	500	570	620	690	780	790	880	1,010	1,130	+10·3%	+10·8%
Spain	110	120	130	160	200	230	260	320	380	420	480	+16·3%	+15·5%
Other Western Europe	410	440	530	620	710	820	890	990	1,100	1,230	1,380	+12·8%	+10·8%
TOTAL WESTERN EUROPE	4,090	4,580	5,290	6,110	6,930	7,820	8,570	9,240	10,210	11,410	12,710	+11·8%	+10·0%
Japan	590	810	950	1,250	1,490	1,700	1,990	2,480	2,920	3,420	4,030	+21·3%	+18·5%
Australasia	270	290	300	330	380	430	450	490	530	560	600	+ 8·5%	+ 7·3%
U.S.S.R., E. Europe & China	2,920	3,150	3,520	3,880	4,170	4,460	4,840	5,240	5,690	6,340	6,980	+ 9·0%	+ 9·5%
Other Eastern Hemisphere	1,540	1,710	1,790	1,910	2,040	2,120	2,370	2,730	2,990	3,320	3,610	+ 9·0%	+11·0%
TOTAL EASTERN HEMISPHERE	9,410	10,540	11,850	13,480	15,010	16,530	18,220	20,180	22,340	25,050	27,930	+11·5%	+11·0%
WORLD	21,480	22,880	24,720	26,850	28,800	30,990	33,440	36,000	39,250	42,910	46,560	+ 8·0%	+ 8·5%
MAIN PRODUCT DEMAND (Including Bunkers)													
U.S.A.													
Gasolines	4,340	4,410	4,570	4,830	4,910	5,110	5,370	5,560	5,920	6,120	6,340	+ 3·8%	+ 4·5%
Middle Distillates	2,300	2,370	2,540	2,690	2,620	2,720	2,850	3,030	3,280	3,430	3,520	+ 4·3%	+ 5·3%
Fuel Oil	1,430	1,400	1,380	1,360	1,410	1,510	1,610	1,680	1,710	1,860	2,070	+ 3·8%	+ 6·5%
TOTAL	8,070	8,180	8,490	8,790	8,940	9,340	9,830	10,270	10,910	11,410	11,930	+ 4·0%	+ 5·0%
WESTERN EUROPE													
Gasolines	810	940	1,030	1,150	1,320	1,500	1,740	1,870	2,080	2,260	2,490	+11·8%	+10·5%
Middle Distillates	1,130	1,280	1,540	1,840	2,040	2,330	2,580	2,800	3,190	3,650	4,200	+14·0%	+12·5%
Fuel Oil	1,520	1,700	1,970	2,220	2,550	2,890	3,090	3,230	3,500	3,890	4,300	+10·8%	+ 8·3%
TOTAL	3,460	3,920	4,540	5,210	5,910	6,720	7,410	7,900	8,770	9,800	10,990	+12·0%	+10·3%
EXPORTS													
U.S.A.	200	170	170	210	200	190	200	310	200	230	260	+ 2·8%	+ 6·5%
Caribbean	2,560	2,640	2,970	3,080	3,160	3,212	3,100	3,200	3,250	3,440	3,470	+ 3·0%	+ 1·5%
Other America	160	200	330	350	380	330	350	610	620	660	750	+16·8%	+17·8%
Middle East	4,710	5,090	5,570	6,150	6,930	7,690	8,570	9,140	10,440	11,520	12,710	+10·5%	+10·5%
North Africa	190	360	670	1,050	1,440	1,720	2,240	2,480	3,620	4,230	4,670	+37·8%	+22·0%
South East Asia	290	330	310	340	370	340	350	410	440	830	800	+10·8%	+16·8%
U.S.S.R., E. Europe	460	620	690	740	880	900	1,030	1,090	1,100	1,020	950	+ 7·5%	+ 1·0%
Rest of World	240	310	290	300	360	608	670	690	730	1,130	1,810	+22·5%	+24·3%
WORLD	8,810	9,780	11,000	12,200	13,820	14,990	16,550	17,910	20,400	23,060	25,420	+11·3%	+11·3%
IMPORTS													
U.S.A.	1,820	1,920	2,030	2,120	2,250	2,470	2,570	2,540	2,810	3,170	3,420	+ 6·5%	+ 6·8%
Western Europe	4,160	4,520	5,290	6,070	6,900	7,690	8,560	9,250	10,480	11,430	12,980	+12·0%	+11·3%
Japan	680	870	930	1,220	1,470	1,720	2,000	2,400	3,060	3,590	4,250	+20·0%	+19·8%
Rest of World	2,150	2,470	2,700	2,790	2,990	3,200	3,400	3,720	4,050	4,870	4,790	+ 8·3%	+ 8·5%
WORLD	8,810	9,780	11,000	12,200	13,820	14,990	16,550	17,910	20,400	23,060	25,420	+11·3%	+11·3%

*U.S. processing gain has been deducted from total domestic product demand.

TABLE 4

Estimated Average Government

Take per Barrel Exported

($ per barrel)

	1970	1971	1972	1973	1974	1975
Iran /a	.875	1.236	1.296	1.361	1.425	1.495
Saudi Arabia						
Gulf /b	.824	1.229	1.293	1.360	1.425	1.493
Med. /c	.930	1.700	1.950	1.90	1.97	2.04
Kuwait /b	.842	1.233	1.293	1.357	1.421	1.498
Iraq						
Gulf /b	.867	1.239	1.303	1.368	1.434	1.502
Med. /c	.930	1.700	1.950	1.90	1.97	2.04
Quatar	.909	1.259	1.321	1.387	1.454	1.523
Abu Dhabi /b	.890	1.258	1.320	1.386	1.453	1.522
Other Mid-East /b	.890	1.258	1.320	1.386	1.453	1.522
Libya /d	1.134	1.890	2.027	1.967	2.061	2.157
UAR /e	.90	1.26	1.32	1.39	1.45	1.52
Algeria /f	.96	1.49	2.03	2.11	2.17	2.22

/a Table 8, Draft Economic Report, Petroleum Sector, Iran, April 26, 1971

/b MEES, February 19, 1971

/c Estimate based on June 7 Iraq press report.

/d Petroleum Intelligence Weekly, April 5, 1971

/e Same as "other Mid-East"

/f Based on draft Economic Report, excluding tax arrears and revenues from gas and products.

TABLE 5

Crude Oil Export Projection

(millions barrels per year)

	Growth H	Growth L	Prov. 1970	1971 H	1971 L	1972 H	1972 L	1973 H	1973 L	1974 H	1974 L	1975 H	1975 L
Iran	12	10	1343	1504	1477	1684	1615	1887	1788	2113	1966	2367	2163
Saudi Arabia	10	8	1290	1419	1393	1561	1505	1717	1625	1889	1755	2078	1895
Gulf			1107	1236	1210	1378	1322	1534	1442	1706	1572	1895	1712
Med			183	183	183	183	183	183	183	183	183	183	183
Kuwait	8	6	998	1077	1058	1164	1121	1257	1189	1358	1260	1466	1336
Iraq	5	3	533	560	549	588	565	617	582	648	600	680	618
Gulf			168	195	184	223	200	252	217	283	295	315	253
Med			365	365	365	365	365	365	365	365	365	365	365
Qatar	10	6	131	194	139	159	147	174	156	192	165	211	175
Abu Dhabi	14	10	252	287	277	327	305	373	336	425	370	485	407
Other Mid-East	15	10	144	191	174	220	191	253	210	291	231	335	254
Libya	12	8	1200	1344	1296	1505	1400	1686	1512	1888	1633	2115	1763
Algeria/a	10	5	359	382	240/c	420	398	474	418	521	439	573	461
UAR /b	16	11	138	160	153	186	170	216	189	251	209	293	234

/a Draft economic report for 1970-73. Growth of 10 percent and 5 percent assumed thereafter.

/b Memo of March 23, 1971

/c Assumes five months production at 1/3 1970 rate.

Other projections based essentially on past trends.

TABLE 6

Illustrative Projection of

Government Petroleum Revenues

(in millions of U.S. Dollars)

	1970	1971		1972		1973		1974		1975	
	Prov.	H	L	H	L	H	L	H	L	H	L
Iran	1175	1859	1626	2182	2106	2568	2433	3011	2801	3538	3234
Saudi Arabia	1082	1830	1798	2139	2066	2434	2309	2792	2601	3202	2929
(Gulf)	(912)	(1519)	(1487)	(1782)	(1709)	(2086)	(1961)	(2431)	(2240)	(2829)	(2556)
(Med.)	(170)	(311)	(311)	(357)	(357)	(348)	(348)	(361)	(361)	(373)	(373)
Kuwait	840	1327	1300	1505	1449	1706	1613	1930	1790	2196	2001
Iraq	485	842	848	1003	973	1039	991	1125	1056	1217	1124
(Gulf)	(146)	(242)	(228)	(291)	(261)	(345)	(297)	(406)	(337)	(473)	(380)
(Med.)	(339)	(620)	(620)	(712)	(712)	(694)	(694)	(719)	(719)	(744)	(744)
Quatar	119	181	175	210	194	241	216	279	240	321	267
Abu Dhabi	224	361	348	432	403	517	466	618	538	738	619
ber Mid East	128	240	229	290	252	351	391	423	336	510	387
Sub-total	4053	6640	6514	7761	7443	8856	8098	10178	9362	11722	10941
Libya	1361	1540	2449	3051	2838	3316	2974	3891	3366	4562	3803
UAR	113	208	199	253	231	307	269	372	310	452	361
Algeria /a	345	550	346	853	808	1000	882	1130	952	1272	1023
Sub-total	1838	3416	3122	4114	3879	4635	4255	4263	3676	5014	4164
Total	5891	11056	9636	11875	11322	13491	12353	14441	13038	16736	15105

/a Total Government revenues from crude oil exports only, excluding tax arrears.

/b Assumes 5 months production at 1/3 1970 rate.