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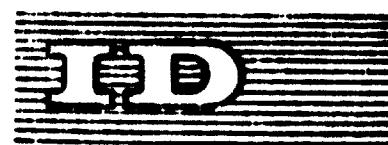
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AGRO-INDUSTRY AND ITS FINANCING BY THE
WORLD BANK GROUP ^{1/}

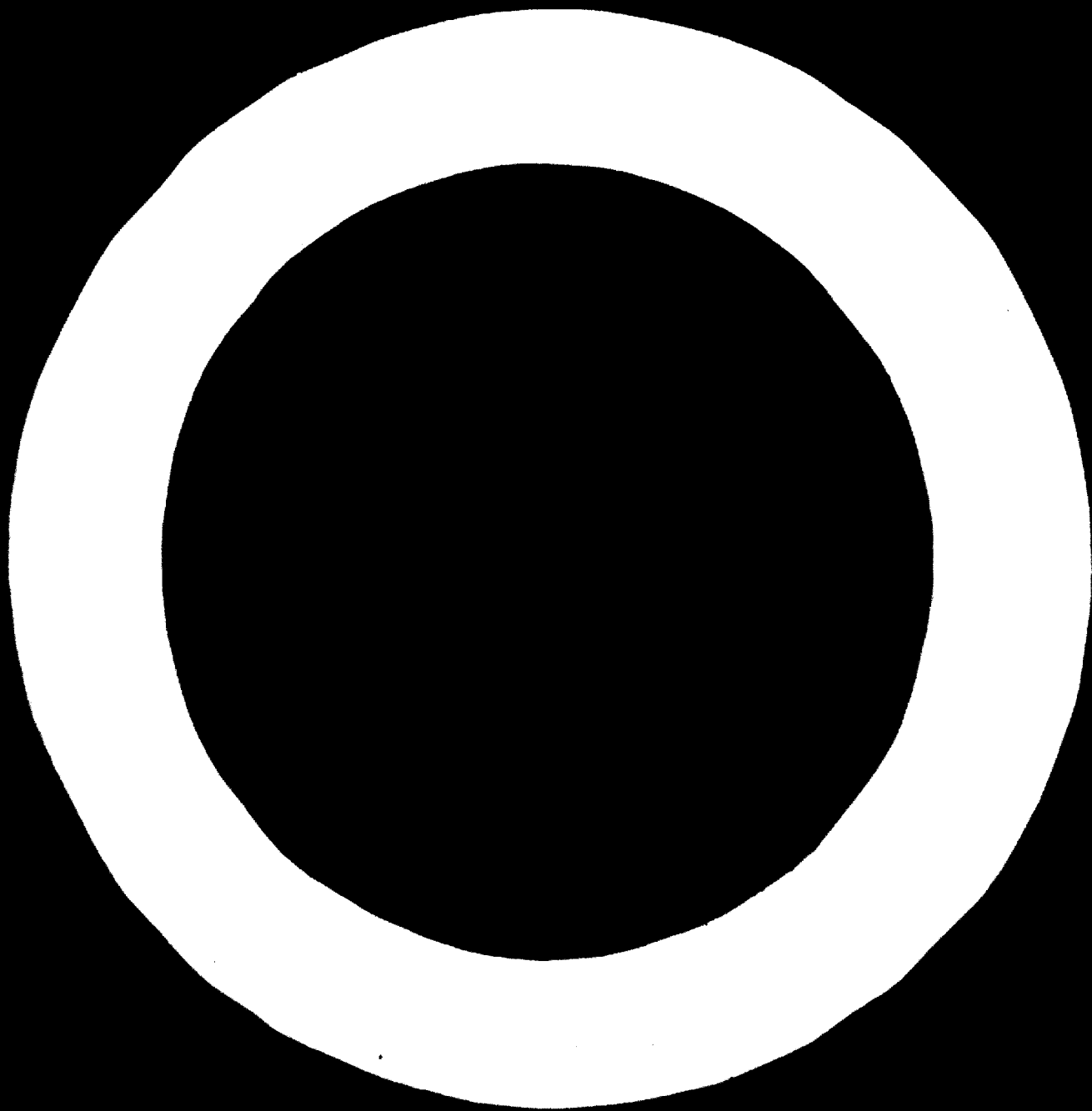
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We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.



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ABBREVIATIONS

- IBRD - International Bank for Reconstruction and Development
- IDA - International Development Association
- IPC - International Finance Corporation

- FY - Fiscal Year (Bank Group: 1 July - 30 June)
- FE - Foreign Exchange
- T.A. - Technical Assistance
- 1 billion - 1,000 million

A. INTRODUCTION

The Co-operation between UNIDO and IBRD

In order to link operations of UNIDO closer to the more investment-oriented activities of the World Bank Group, a co-operation agreement was reached between the two organizations last year. A special unit has been functioning within UNIDO - as a part of the Executive Director's Office - since the middle of last year. It carries out industrial studies, helps formulate industrial policies and plans, assists feasibility studies, of projects, preparing and reappraising investment projects for Bank Group financing. In carrying out its task, our Unit collaborates closely with the other UNIDO Divisions, Industrial Field Advisors, and outside consultants.

Until now, we have been engaged in industrial sector studies in Ghana, Ivory Coast, and Senegal, and helped appraise a development finance company in Colombia. Members of our staff are now in Egypt participating in an Economic Mission, and an Industrial Import Credit Project appraisal, as well as in an appraisal mission for a project for small-scale industry development in Nigeria.

I am glad to be able to report that with UNIDO's assistance in the appraisal, a loan amounting to \$18.5 million was approved in February to the IMT Tractor Factory in Yugoslavia, to cover the foreign exchange requirement for a substantial expansion scheme costing a total of about \$88 million. This loan is guaranteed by the Yugoslav Government and is repayable over 14 years at an annual interest rate of $7\frac{1}{2}$ per cent, the grace period being three years.

The first IDA credit of \$2.3 million to the Government of the Yemen Arab Republic to finance part of an industrial estate was approved by the Board of IDA's Directors in February, again with UNIDO's participation in the project preparation. Unlike World Bank loans, the so-called "credits" from IDA carry no interest, but only a $\frac{3}{4}$ of 1 per cent p.a. service charge, and the credit is repayable over 50 years including a ten year grace period.

These two recent, practical instances involving the co-operation between UNIDO and IBRD, already provide an answer to basic questions about World Bank activity in the field of industry.

There is a booklet available which gives more thorough answers to 136 questions related to IBRD and IDA. In addition, IFC has informative booklets of its policies and achievements.

B. THE WORLD BANK GROUP

1. General information on IBRD, IDA, and IFC

The World Bank Group comprises the IBRD and its two affiliates, the IDA and the IFC. All three institutions are devoted to the provision of financial and other assistance for the economic development of member countries.

The World Bank was founded about thirty years ago, began operations in 1946 and has now 123 member countries. It is a Specialized Agency of the United Nations, as are its two affiliates. At present, the Bank is the largest multilateral source of development financing in the world. By the end of June 1973, the Bank Group had committed about \$26 billion in over one hundred countries. IBRD terms, at present, are now generally at $7\frac{1}{4}$ per cent p.a. interest, and repayable over 10 - 20 years. All Bank loans must be guaranteed by the recipient country's Government.

The IDA was established almost 14 years ago, it has the same objectives and the same staff, but its credits are on very concessional terms and can only be made to the poorest member countries.

The Bank itself receives its resources from the capital markets in the Western World, in Japan, and more recently, in the Middle East - on conditions in line with the world capital markets. IDA, however, needs contributions from the "rich" member countries which in turn enable IDA to give credits with a high "grant element".

The grant element is the face value of loan commitments less the discounted present value of the future flow of repayments of principal and interest, using the customary rate of 10 per cent and expressed as a percentage of face value.

Average terms of loan commitments and grant element in the period 1965 - 1971 are as follows:

Maturity (years)	17.0 - 20.8
Grace (years)	4.0 - 5.0
Interest (% p.a.)	4.0 - 5.2
Grant Element (%)	32 - 41

Recently, the problems of IDA have been discussed in the public when in January the US House of Representatives declined the approval of the so-called "fourth IDA-Replenishment". At the end of April, the US Government however, with its \$5.8 billion Foreign Aid bill, included about \$2 billion for IDA replenishment plus ADF* contribution, but this still needs Congressional approval.

The third member of the Group, the IFC, was established in 1956, to finance commercial enterprises through investments in equity and loans (on commercial terms) without Governmental guaranty. IFC's objective is to stimulate private enterprise, the capital markets in developing countries, and the international flow of private capital.

2. The role of the World Bank Group in financing development projects.

In 1972, the total capital flow (excluding Eurodollar credits) to all developing countries exceeded \$19 billion, a 7 per cent increase compared to 1971. Of this amount, about \$8.3 billion, came from private sources including \$3.8 billion direct private investment in developing countries including investment in the oil sector, but excluding suppliers' credits. Direct private investment in the oil sector has been estimated at \$1.4 billion. Developing countries in addition are said to have received from Eurodollar markets at least \$5 billion, but possible up to \$8 billion. Terms (1970-73) were between 5 per cent and 11 per cent interest p.a.; 5-8 years repayment.

*) Asian Development Bank

How does the World Bank Group fit into this overall picture?

The Bank's and IDA's main function is lending for productive projects which will lead to economic growth in the developing countries. The Bank has lent over the past 27 years up to 1973, about \$23 billion in foreign exchange. Major sectors were as follows (in \$ million): - related to agro-industry -

Sectors	through 1963	5 years 64-68	5 years 69-73	Cumulative through 1973
Agriculture	456	621	2,589	3,666
Industry	550	118	598	1,266
DFC	206	483	1,224	1,913

The total lending was as follows: 5,321 (through 1963); 5,030 (64-68); 12,849 (69-73) and about 23,000 (accumulative through 1973)

During the Fiscal Year 1973, (1 July 1972 through 30 June, 1973), IBRD and IDA approved 148 operations, and the amount of loans and credits approved totalled \$3.4 billion, which is an "average" of \$23 million per project.

In 1972/73, IFC committed equity and loans amounting to \$147 million representing a total project value of about \$481 million, more than three times the IFC share in total financing. In all the projects in which IFC participated in 1972/73, and of the total funds, 31 per cent came from IFC, 43 per cent from developing countries, and the balance (26 per cent) from industrialized countries.

Besides this "bankers activity", the Bank is involved in many international groups and agencies, such as consultative groups on various countries, international research activities, economic development groups, and has sponsored the International Center for Settling of Investment Disputes, and the Center for International Agricultural Research.

3. What is a World Bank project?

a) Basic requirements

IDA and IBRD loans must be for a specific project in a member country, except for programme loans when these enhance the development of a member country (providing foreign exchange to enable equipment to be imported to support existing production facilities); technical assistance can also be financed.

A project must be technically, financially and economically sound and of relatively high priority to the country. Management for implementation and operation must be adequate. There must be assurance that the loan will be repaid, and that the loan does not unduly burden the borrower country's economy.

The Bank lends to governments, or private or public organizations, if the respective governments guarantee the loan. Loans cover the foreign exchange cost of the projects, sometimes also some local currency costs. The borrower must agree to certain procurement procedures (international competitive bidding, among others).

These "official" definitions, need some personal explanations. A good support is the "5 M-Rule" covering the essential items which make up the appraisal criteria:

- Management
- Money
- Market
- Marketing (sales)
- Maintenance.

If these aspects have been covered, in a sound feasibility study, this is usually sufficient to judge whether or not we have "a project".

Most important is the management part - during the initiation stage often represented by a person, or a department in a ministry, who is really pushing a project as if their own well-being would depend on its success - the only approach to industry which almost guarantees success.

b) How are Bank projects identified?

- Governments of member countries may propose a project to the Bank;
- Bank economic or sector missions may propose projects sometimes as a follow-up of earlier projects;
- Special Project identification missions are sent out by the Bank;
- Bank Resident Representatives or Resident Missions may propose projects;
- The Co-operative Programmes of the Bank with UNIDO or FAO (and other organizations) may identify and prepare projects for proposing them to the Bank;
- Pre-investment surveys financed by UNDP may be sources for bankable projects.
- Indirectly, projects may be proposed by local development banks, if such projects exceed the financial capability of local financial institutions.
- Finally, the Bank may be asked by other multinational or bilateral agencies, to participate in project financing.

IFC projects, in addition, may be proposed by private sponsors in the borrowing country, or from an industrialized country. IFC also fields specific project promotion missions.

c) Mobilizing Bank Group financing

Bank Group financing can be channelled in several ways:

- Smaller projects - up to about \$1 million investment value - through intermediate industrial financing institutions in the borrower's country. In some countries, development banks are designed specifically for such purposes.
- Small and medium sized projects - up to a few million dollars investment value - may be financed by IBRD/IDA, with industrial loans and credit.

- Integrated agro-industrial projects:

The investment integrates farm production, sorting, packing, transportation (refrigerated trucks, ships) and storage. These projects may in the future become more important for the Bank's activity, and receive direct financing, as a mixture of agricultural and industry-type lending.

C. WORLD BANK OPERATIONS IN THE AGRO-INDUSTRY SECTOR

1. The agricultural scene to-day; the commodity problem and related issues

In recent years, many developing countries have become disillusioned with the outcome of industrial growth, since industrialization hitherto has failed to slow down unemployment and reduce mass poverty.

Although investment in agriculture may not be as glamorous as large steel and fertilizer plants, it is most important for the economic development of the less developed countries, and it offers good investment opportunities, last but not least, through processing of primary agricultural commodities in agro-industrial outfits.

Even oil-rich countries such as Algeria or Iran are paying increasing attention to agricultural development. Agricultural primary products, however, are very sensitive as export goods although their prices - especially for non-food products - are increasing with the international inflation.

The Bank/IDA lending for agriculture in fiscal year 1973 was about \$958 million, and in the five year period from 1969 through 1973, about \$2.6 billion. Most of these funds were used for irrigation, drainage and flood control, livestock, and agricultural credits.

The Bank, in its 1973 Annual Report, states that "trends in the promotion and marketing of primary commodities such as agricultural products, have a major influence on the prospects of most of the Bank's developing member countries."

The heavy dependence on exports of primary agricultural projects with poor market prospects is difficult for smaller and poorer countries which have limited domestic markets.

The Bank is therefore in consultative status with intergovernmental commodity organizations (representing both primary producers and consumers). The Bank can and must review the probable effect of Bank Group projects on world supplies and commodity prices. Examples of such consultative arrangements encompass: citrus fruits, cocoa, coffee, fats and oils, fish, grains, hard fibers, meat, sugar, and wheat. Price forecast for a number of primary agricultural products such as coffee, sugar, cotton, rubber, fats and oils and others - are a basis for evaluating agro-industrial projects. Any increase of production will re-adjust international trade and prices, (e.g. palm oil production in South East Asia - formerly an African domaine). The Bank must consider such interchange between production and prices - because almost half of the developing countries depend on a single commodity for more than 50 per cent of their total export earnings.

Weather and other natural "inputs" complicate any forecast. The energy situation in addition, is changing the world picture for supply and demand for natural products which previously had to stand up against synthetic products, to name a few - cotton against synthetic fibers, rubber against SBR and polybutadiene, wood against PVC and other plastic materials. Long range price forecasts, under those uncertainties, are almost impossible to accomplish, the more since the interlinkage between increased input prices (fertilizers) and agricultural product prices, have not yet been clearly established.

The Bank has to an increasing degree worked on analyzing future Bank lending policy for commodities, for example - during the fiscal year 1973 - market prospects for sugar were evaluated. The result was that sugar production in developing countries should be expanded, if the country enjoyed a comparative advantage. Supply and demand for sugar are difficult to forecast in the medium and long-term; history shows sharp sugar price fluctuations.

Another example is the industrial use of hardwood resources. The Bank, in 1973, concluded that tropical hardwoods - in Indonesia, Malaysia, and the Philippines - could be exploited, offering labor intensive wood processing opportunities even in remote areas. A good example of agro-industry: furniture manufacture could be re-located, for instance, from Denmark to West-Africa (Ghana, Gabon). In Latin America and the Caribbean, large forestry resources are awaiting agro-industrial exploitation. New wood based products may offer additional export opportunities.

I like to draw your attention also to some lesser known products based on agricultural inputs - which may well become interesting - following the scarcity in, and price increases for, hydrocarbon raw material. I am referring to wood chemicals such as lignin as a basis for plastics (replacing oil or coal based phenol-resins). IFC has assisted, as another example, in the financing of a furniture plant based on bagasse.

Technological research on industrial uses - especially in the light of recent market developments for other feedstocks - of agricultural renewable resources may become a major objective of the Bank as well as of UNIDO. It would supplement the international efforts in agricultural research which otherwise are directed primarily towards solving the food problem.

During 1972/73, a paper on "Development Policy for Countries Highly Dependent on Exports of Primary Products" was discussed in the Bank's Board of Directors. It concluded that one of the fundamental needs was the access to major markets for agricultural products, processed primary products and manufactures exported from developing countries.

Processing of primary goods may be a means of improving the comparative advantage of a country. Diversification into other primary goods is another alternative.

Hence, the Bank's policy may be outlined as follows:

- The financing of the new production of primary (agricultural) products - as such products face inelastic demands - should be limited, to avoid price reductions for the same product exported from other developing countries;
- Least Developed Countries should receive accelerated assistance, and realize their comparative advantage by implementing agro-industrial projects;
- Research in agricultural marketing and end-uses should be expanded.
- Trade and economic cooperation among developing countries deserve more support;
- Export policies and potential, are accorded particular attention in the Bank's economic and project analysis.

The objectives and policies of the World Bank, therefore, are also in line with UNIDO's efforts to assist in expanding agro-industry.

The specific challenge for agro-industry is:-

- to create a higher rate of growth than with primary commodities,
 - to reduce poverty
 - to create employment
 - to create industrial development by introducing new technology.
- } via the agricultural basic production,

2. Direct lending in agriculture - related industries

a. Definition and past activity (through 1971)

The definition of agriculture - related industries is not uniform: besides the processing of primary agricultural goods, even fertiliser and tractor manufacture may be included.

However, in this paper, I am only considering those industries which are based on agricultural inputs.

Bank Group investment in agriculture - related industries - through FY 1971
(based on locally - produced agricultural raw materials.)

	\$ million		
	Bank/IDA	IFC	through local development banks
Food processing and Beverages	34	25	34
Textile Manufacturing	13	19	113
Tobacco Processing	-	-	7
Leather and Leather Goods	-	-	2
Wood-based industries	173	60	32
Rubber Products	-	-	11
Sub-total	220	104	199
<u>Other Agro-related Industries</u>			
Fertilizer	117	53	6
Farm Machinery	2	-	2

b. Recent agro-industry projects financed or under consideration by IBRD/IDA

During the fiscal years 1971/72 and 1972/73, IBRD and IDA have participated in the financial assistance of 24 projects in the agro-industry field, or closely related to agro-industry. During the two fiscal years which of course is an arbitrary time span, the total value was at least \$800 million (including two large projects in Brazil and Mexico with \$135 and \$216 million) and IBRD/IDA has contributed to the financing of the total cost, about \$300 million (or about 38 per cent of total cost).

The total cost for projects which are in the pipeline, as of March 1974, cannot yet be estimated. However, at least \$400 million IBRD/IDA funds will be needed to finance 25 projects for which such estimates are already available, which is an average of \$16 million IBRD/IDA per project. Of course, such "average" figures are not very meaningful: since the spread between the smallest (0.2 for technical assistance) and the largest (216) project cost is exorbitant.

Although the breakdown of all 65 projects carried through or under consideration from 1971/72 through the present date may or may not be characteristic, it is still interesting to group these projects as follows:

(See Annex I)

Group A (13 Projects)

General Assistance to agro-industrial enterprises, commercial farming, integrated rural development, technical assistance, marketing, infrastructure and general credits to development funds which are re-lending primarily to processing industries.

Group B (21 Projects)

Agro-industry related projects based on commercial (cash) crops: 4 tea and cotton projects each, 3 sugar projects, industrial projects for coffee, rubber, palm oil, grain storage and flour milling, fruit and vegetables, cashewnuts, export facilities, etc.

Group C (17 Projects)

Livestock industry related projects: 8 dairy farming and marketing projects, 7 slaughter houses and meat processing projects (beef, poultry, mutton), general projects in the livestock industry, and hide/skin preparation.

Group D (10 Projects)

Wood-based industries - such as 5 pulp and paper projects, general integrated forest industry development, wood processing, saw mills, linerboard and plywood.

Group E - Other Projects

Special sectors of agriculture, which receive increasing attention for industrial purposes, are the livestock, and fisheries industries.

Fishery industries: shore facilities, boats, marketing, factories.

Infrastructure projects primarily designed for agro-industry such as rural roads, used for transporting seed cotton to ginneries, and fibre cotton to export ports.

Between 1964 and 1971 the Bank made loans amounting to only \$24 million to fisheries projects. Examples were tuna fish export operations, and shrimp processing for export. Fresh-water fish farming is also expected to become more important as a Bank lending operation. Projects may be made more comprehensive by including shore facilities; wharves, boat repair - a UNIDO activity in Mauritania for instance - ice-making, and processing facilities, supply of boats and fishing gear, and technical assistance.

The scope of projects supported by the Bank has widened into poultry processing for export, dairy operations, and slaughterhouses and meat processing and packing plants which are increasingly necessary for beef export, required by sanitary regulations in importing countries. A recent example is the difficulty for beef exports to Europe, encountered by livestock industries in traditional Latin American export countries.

A few examples for IBRD/IDA assisted projects are given below:

Example 1:

Turkey Antalya Integrated Forest Industry Project (SEKA)

This Turkish enterprise intends to build an integrated forest products mill to produce annually 182,000 cbm of saw-wood per year plus 155,000 tons of linerboard or 90,000 tons of multiwall sack paper using the KRAFT pulping process.

The complex will include a 30 megawatt power generation and other offsite facilities, and is expected to cost about \$170 million, which places it among the largest industrial projects. Financing is expected from: IBRD - \$40 million, and EIB - \$24 million, to cover the foreign exchange requirements. Turkish Lira will be provided by SEKA, and the State Investment Bank.

Example 2:

Ivory Coast - \$26 million investment in agro-industry

A coffee de-shelling plant (\$6 million) has been constructed, with an annual capacity of 60,000 tons of un-hulled coffee beans as compared to an expected coffee production in 1975, of 260,000 tons. The Government intends to build nine of these plants. Also in the Ivory Coast, the Bank's assistance has been requested for a chocolate factory (about \$4 million), and for edible oil factories for palm oil and cotton seed oil, (about \$6 million each), and a cocoa butter plant (about \$4 million).

Example 3:

India - Apple processing

An IDA credit of \$13 million has been approved (total cost about \$22 million) for 55,000 tons of apple processing and marketing facilities, and related road investment, aerial cableways, technical assistance, training, etc.

c. IFC activity

The IFC, in addition, has invested, from the beginning of its operations in 1960 through FY 1972/73, about \$138 million in at least 38 projects, which are related to agro-industry, about 12 investments have been committed during the last two fiscal years. (See Annex II).

IFC's activity has been mostly in the pulp and paper industry (19 projects), food processing (8 projects), tanneries and shoe manufacture (5). Other industries include sugar factories, oil mill, wood processing, and even chemicals (furfural from bagasse). IFC's commitments through June 1973 in the food and food processing sector, total \$28.5 million, and in the pulp and paper sector, \$117.3 million.

As an example for a financial plan for an agro-industrial project, with IFC involvement, a project may be mentioned in Nigeria for producing 37,500 tons p.a. of cotton-seed oil.

<u>Credits</u>	<u>\$ million</u>	
IFC	1.6	
Nigerian Industrial Development Bank	0.8	
Local banks	0.2	
Total Credit	<hr/>	<u>2.6</u> (52%)
<u>Equity</u>		
Nigerian Investors	1.9	
Foreign Investors	0.5	
	<hr/>	<u>2.4</u> (48%)
Total Financing:		<u>5.0</u>

This project is predominantly privately financed, with international financial, managerial and technical assistance for operations and for marketing of the products.

The feedstock for this first oilseed mill in Nigeria is a byproduct from cotton production.

In Venezuela, IFC participated with \$3 million in the financing of a factory for production of animal feed from grain, supplying about half of the domestic demand in Venezuela. New chicken farms can be implemented based on this project's feed production.

In Zambia, IFC contributed a \$1.2 million loan to finance a \$2.5 million tannery. The capacity will be 300 skins per day to produce leather which will secure the supply to an integrated shoe factory, which had been financed also with IFC help. Zambia is producing annually 72,000 raw skins, 70 per cent of which are being exported, and the balance virtually unused; on the other side, Zambia imported its total demand for leather. This backward-integration from shoes to tannery forms an illustrative example for integrated agro-industries.

IFC's assistance to DFC's which in turn may invest in agro-industry, and in the textile industries, are other important fields of IFC activity related to agro-industry.

3. Indirect Lending in Sectors related to Agro-industry

a) Transportation

One of the largest traditional areas of Bank lending is transportation. This in turn has an important impact on agro-industry - for shipping agricultural products to the factories (for instance, cane to sugar factories), and the processed goods to consumers, or to ports for export purposes. The assistance in acquiring special transport equipment - refrigerated trucks or rail wagons, refrigerated ships - may be of special relevance to the agro-industry sector. In the five-year period 1967-71, the Bank has invested an average of about \$270 million p.a. for financing of construction and improvement of about 6,000 km of roads annually. Over two thirds (length and cost) of these roads, will directly benefit the agricultural sector.

In 1972/73, the Bank and IDA have approved 36 transportation projects with a lending volume of US \$692 million. Many more projects are in the pipeline.

For illustration purposes, major projects in 1973 may be mentioned:

Project	Total cost (\$ million)	Country
Rolling stock	12	Bolivia
Railway rehabilitation (bulk traffic from agriculture and industry)	223	Turkey
Railroad equipment	44	Burma
Inland Waterways	24	Burma
Feeder roads for opening up access to agricultural areas	26	Honduras
Highway to open up agricultural lands	19	Indonesia
Roads to assist agricultural development - Engineering costs -	0.7	Yemen (People's Rep)

b) Non-project lending

The Bank also provided member countries with foreign exchange for non-project purposes. In the fiscal year 1973, for example, \$195 million IDA credits were approved for Bangladesh, India and Pakistan, and a US \$30 million IBRD loan to Zambia, mostly for financing imports of equipment and materials for agriculture and manufacturing among other purposes, to increase utilization of existing industrial capacity. Our IBRD/UNIDO Co-operative Programme is involved in an Industrial Import Credit appraisal in Egypt which is now underway.

c) Technical Assistance

Technical assistance involves:

- | | | |
|-----------------------------|---|--|
| | (| - sector studies |
| | { | - selection of priority projects within a sector |
| <u>Pre-investment stage</u> | (| - identifying projects |
| | { | - preparing projects |
| | { | - feasibility study for projects |
| <u>Investment Stage</u> | (| - financing of consultant services |
| | { | - training of local personnel |
| | { | - improvement of project design |
| <u>General</u> | | - Advice on economic programming and planning |

Although lending for technical assistance projects is usually provided from UNDP resources, the Bank does assist in this field, not necessarily in conjunction with investment loans. Last year, a US \$4 million IDA credit was given to the Government of Bangladesh for pre-investment planning, feasibility and engineering studies primarily in the agricultural sector. These funds can also be used to train staff from Government agencies.

In the fiscal year 1973, a total of US \$37.3 million were provided for technical assistance (feasibility studies, experts, and training). This is equivalent to about 4 per cent of the loans and credit amounts during the same period. It is - for comparison - about four times the annual technical assistance deliveries of UNIDO.

d) Agricultural research and agro-industry

In 1971, the Bank, FAO, and the UNDP, established a Consultative Group on International Agricultural Research (CGIAR) which now comprises 29 member countries, including the Commission of the European Communities.

With a total of about US \$24 million, including IDA grants, the Group financially supported in 1973, among others, Institutes dealing with agricultural research in tropical agriculture, maize and wheat improvement potatoes, rice, and cattle production in tropical Africa.

It is not clear whether, and to what extent, such agricultural research could include problems of agro-industry: for example, in case of cassava (tapioca), the development of varieties yielding more starch and/or carbohydrates than conventional varieties. UNIDO could play a major role in forwarding such requests directing research towards the needs arising from agro-industry, and modifying characteristics for agricultural products used for technical purposes.

Pulp and paper manufacture from bagasse, is another field of such research.

e) Education

Last but not least, many educational facilities financed by Bank/IDA are in rural areas and therefore have at least an indirect impact on the training of personnel for agro-industrial enterprises. Agricultural Projects Courses are co-sponsored by the Bank's Economic Development Institute.

f) Credit

Agricultural credit is another example of the diversified Bank activity in the agricultural sector. The Bank funds are channeled through intermediary institutions in the developing country, for instance, agricultural development banks and commercial banks. During the period 1969-1971, about \$253 million per annum have been lent in support of agricultural credit, which in turn has been used for all types of investment including agro-industry and even working capital. "Credit" forms a part of virtually all loans for rural development projects.

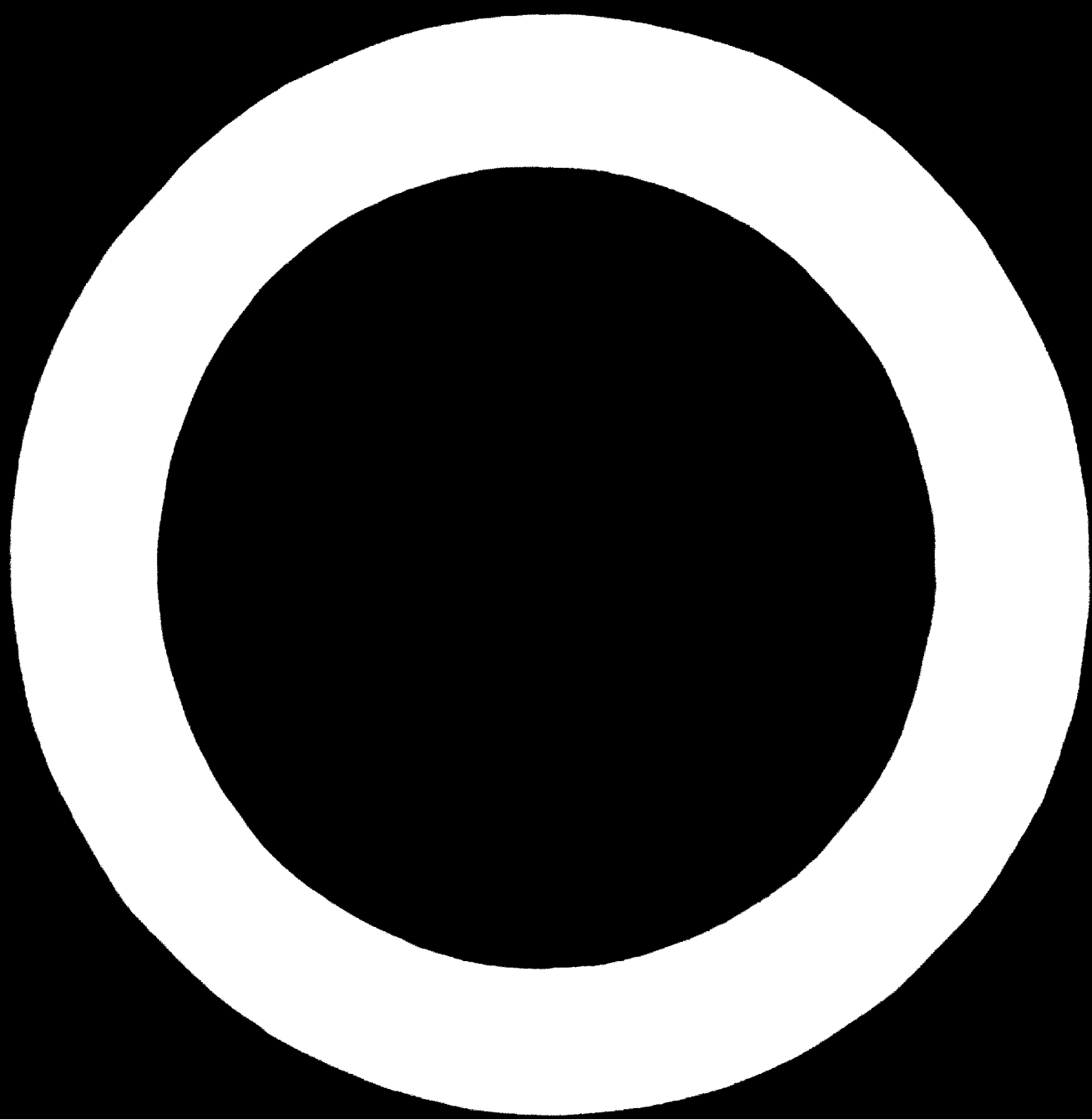
D. CONCLUSIONS ON THE IMPACT ON AGRO-INDUSTRY OF BANK ACTIVITIES

Although the Bank lending still represents only one to two per cent of total domestic and foreign investment in agriculture in developing countries, the impact is much greater than this figure would imply; for the following reasons:

- foreign exchange is provided on relatively favourable terms;
- the Bank carefully considers the development value of its projects;
- the Bank assists in introducing better technologies;
- assistance to institutions is often provided;
- improvements in credit policies are a possible side-effect;
- the Bank's emphasis on project preparation (for instance, on marketing, and product quality control) are often essential to a project's success;
- changes in fiscal matters (export bonus, foreign exchange allocations, tariff structure on utilities etc.) are often evaluated in Bank sector missions and help to better prospects of agro-industry;
- introducing by the Bank of a system of project supervision benefits the enterprise, and the Government.

The total capital flow in 1972, to developing countries, is estimated at about \$24-27 billion (including Eurodollar loans, but less suppliers credits). The World Bank Group's share is considerable in this foreign exchange financing of about \$3.4 billion.

It is possible to increase the Bank's involvement in agro-industry, which was less than \$0.2 billion annually. UNIDO, by helping to identify suitable projects, and prepare feasibility studies, could foster such increased financial assistance by the World Bank Group.



ANNEX I

IBRD AND IDA PARTICIPATION IN AGRO-INDUSTRY PROJECTS *)
in 1972 and 1973
and up to March 1974 **)

- Group A: General Agro-industrial Enterprises**
- Group B: Agro-industry Projects based on
Commercial Crops**
- Group C: Livestock Based Industries**
- Group D: Wood Based Industries**
- Group E: Other Projects**

*) **Excluding Seeds Industry, Grain Storage.**
Fiscal year 1972: 1 July 1971 - 30 June 1972

***) **but not complete**

ANNEX I
Group A

General Agro-industrial Enterprises

Project	Country	Total cost	IDA/IBRD
Credits to agro-industry: processing beef, oilseed, milk, other food and feed products - to increase domestic supply and exports.	Brazil	135	-/54
Agricultural Credit III - for livestock, dairying, agro-industries, crops, forestry etc.	Costa Rica		-/up to 15.0
Commercial farms and agro-industrial enterprises for beef, dairy products, crops.	Costa Rica	16.5	-/9
Marketing agricultural products (training, fair trading, efficient handling).	India	12	8/-
Agricultural Development Fund of Iran - lending to processing industries and commercial agriculture.	Iran	35.1	-/14.0
Agroicultural Credit II for agro-industries, livestock, T.A., etc.	Jamaica	11	-/5.5
10,000 subloans for expansion of livestock and crop production and of agro-industries; studies and training.	Mexico	216	-/85
Caisse Nationale de Credit Agricole: 8,000 loans to farmers and packing facilities operators.	Morocco	69	10/24
Rural Credit - farm mechanization equipment, fishing boats, agro-industry equipment etc.	Philippines	44	-/22.0
Integrated rural and livestock development	Rwanda		
Agro-industry - medium and long term credit.	Turkey		

ANNEX I
Group A

Project	Country	Total cost	IDA/IBRD
Agricultural credit to Vojvodjanska Banka to assist expansion and improvement of production, processing and marketing of agricultural combinats, etc.	Yugoslavia		
Modernization, expansion of production and processing facilities of agro-industrial "combinates" in Macedonia; increase production of processed meat, milk, wine, fish, tobacco.	Yugoslavia	62	-/31

ANNEX I
Group B

Agro-industry Projects Based on Commercial Crops

Project	Country	Total cost	IDA/IBRD
Agro-industries I: expansion and modernization of Algeria's flour milling industry	Algeria		
Commercial development of palm oil for domestic demand (jointly with FAC and CCCE)	Cameroon		-/1.7
Engineering for rehabilitation of cotton ginning industry	Egypt	0.23	0.18/-
Fruit and vegetable production, processing, marketing, credit facilities etc.	Egypt		
Cotton ginneries, rice mills, T.A., feeder roads, land development	Dahomey	12.7	6.1/-
Tea rehabilitation, replanting, and factories, including training and extension services, marketing	Indonesia	15.4	7.8/-
Grain storage, cleaning, drying, weighing, T.A.	Ethiopia		
Coffee processing (II)	Ethiopia		
Rubber estate and rubber production (with EIB and COCE)	Ivory Coast	33.4	-/8.4
Rehabilitation of sugar industry; modernization and expansion of factories, transport, extension service, credit to cane-growers, T.A. (not yet effective)	Indonesia	81	50/-
Cotton ginning, development, extension, feeder roads, etc.	Ivory Coast		-/14.0
Cotton and seeds development - ginnery rehabilitation - oil crushing mills etc.	India		55.-
Sugar factory rehabilitation	Jamaica		

ANNEX I
Group B

Project	Country	Total cost	IDA/IBRD
Integrated agricultural projects for growing commercial crops for export, and modern facilities for processing and packaging	Korea		-/14.1
Tea processing factories and training	Kenya	21	-/10.4
Rural development and pilot rubber project, surveying rubber industry	Liberia		1.2/-
Tea processing factories, foodcrop production, coffee improvement and others	Rwanda		
Cashew nut processing (40,000 t) feeder roads improvement, cashew nut research, etc.	Tanzania		-/17
Cotton textile industry expansion	Tanzania		-/15
Diversification of agricultural output: tea planting, leaf processing factories, T.A., road construction	Tanzania	16.5 (with Norway and I.C.O.)	10.8/-
Re-equipping <u>sugar</u> factories, acquire harvesting equipment, improve management and operations	Trinidad and Tobago	21.9	-/12

ANNEX I
Group C

Livestock Based Industries

Project	Country	Total cost	IDA/IBRD
Livestock including slaughterhouse, refrigerated trucks, T.A.	Afghanistan	11	9/-
Livestock development: feed-lots, slaughtering, marketing, transportation	Upper-Volta		
Dairy processing, marketing etc.	India	56	28.2/-
Dairy II (via Agricultural Refinance Corp.)	India		50/-
Livestock development: slaughter plants, etc.	Cameroon	14.6	-/11.6
Dairy development of about 2,400 dairy units, pasture establishment, storage facilities	Sri Lanka	12	7.5/-
Livestock - dairy development including (possibly) beef development	Korea		
Livestock - mutton processing and on-farm items	Iran		
Dairy production and processing for domestic consumption	Tanzania		10/-
Hide and skin preparation (as part of a livestock project). Integrated market and stock-route systems, slaughter facilities, T.A., staff training, project preparation	Ethiopia	7	5/-
Livestock: meat processing, agricultural marketing etc., processing industries	Argentina	(in abeyance)	up to -/60
Agriculture, dairy and poultry production, beef cattle and sheep raising	Bolivia		10/-
Dairy farming, improvement of milk collecting, processing, marketing	Ethiopia	6.5	4.4/-
Livestock development: new small dairy farm techniques, large-scale beef production (570 enterprises!)	Panama	13.5	-/4.7

ANNEX I
Group C

Project	Country	Total cost	IDA/IBRD
Improve beef production, marketing and processing	Tanzania	24.7	18.5/-
Dairy development ("livestock IV")	Ethiopia		
Livestock - processing plant, marketing, surveys and T.A.	Kenya		21.5/-
Livestock industry development - introduce livestock and mixed farming techniques (research and technology oriented)	Indonesia	7.2	3.6/-

Wood Based Industries

Project	Country	Total Cost	IDA/IBRD
Forestry Industries (PROFORMEX) - sawmills, plywood factories, liner board plant, infrastructure, forestry roads	Mexico		-/15.0
Forest Industries - sawmills, plywood, newsprint plant, infrastructure and forestry conservation	Mexico		
Pulp and paper	Peru		
Forestry based industries - incl. reforestation, training etc. for integrated projects	Liberia		
Pulp mill and pine plantation - forest industry development	Malagasy Rep.	16	10/-
Pulp production based on Vipya forest reserves - T.A. only	Malawi		21/-
Forest planting and wood processing	Zambia		-/10
Forest industry: sawmilling, corrugating medium and linerboard, etc.	Ecuador		-/5.0
Newsprint mill and sawmill, industrial plantations	Thailand		109
Antalya Forest utilization - pulp and paper	Turkey		-/0.36 (T.A.)

ANNEX I
Group E

Other Projects

Project	Country	Total Cost	IDA/IBRD
Fish processing - factories and improved marketing	Burundi		
Modernisation of fishing industry: construction of shore facilities, ships, international marketing	Yemen (People's Democratic Republic)	4.2	3.5/-
Highways, seasonal roads used for transporting seed cotton to ginneries fiber cotton export roads, staff training; ferry-boats	Chad		3.0/-
Highways (secondary roads) to assist agricultural development	Swasiland		2.0/-

ANNEX II

AGRO-INDUSTRIAL PROJECTS WITH IFC INVOLVEMENT *)

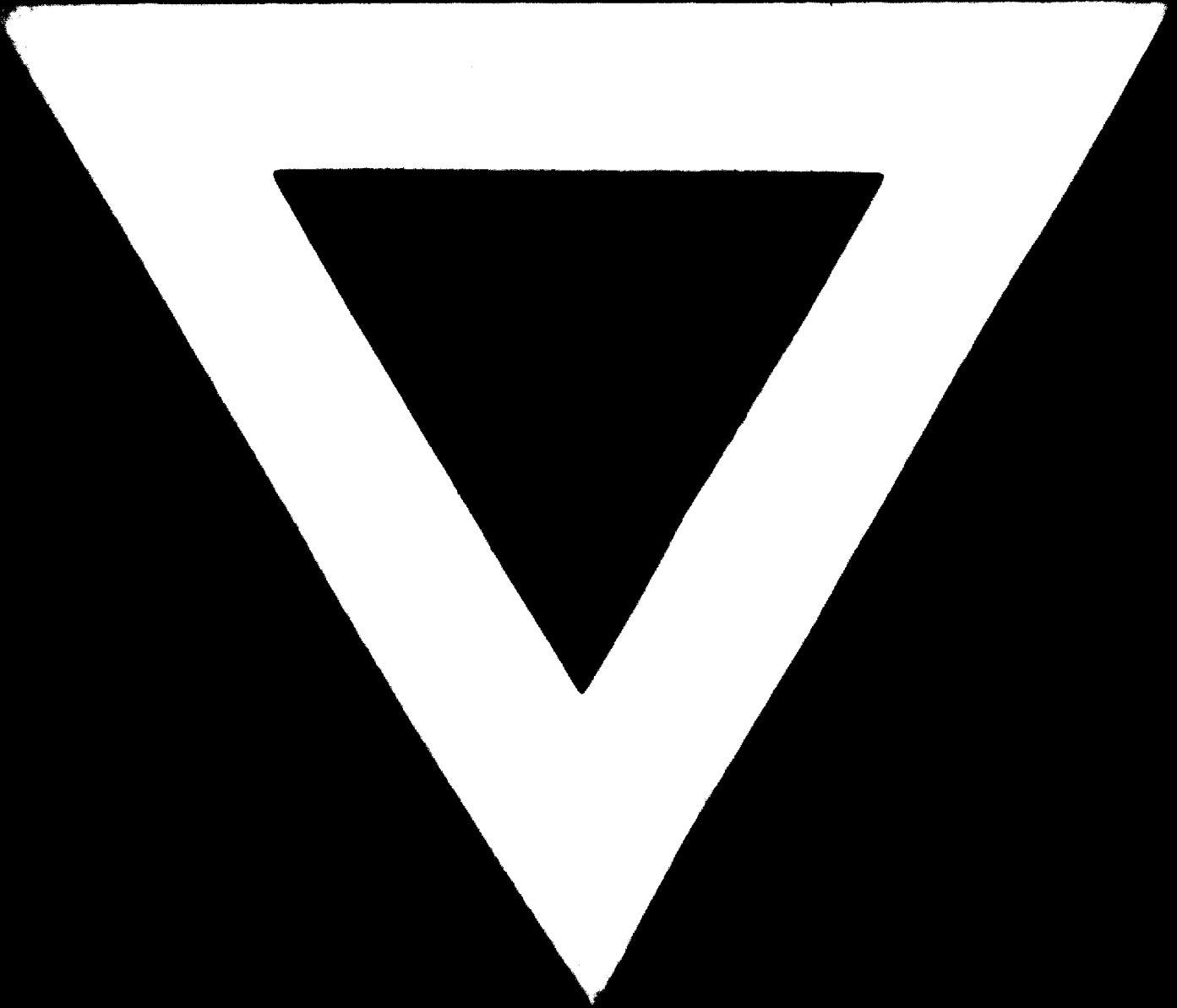
Country	Project	Year	IFC Investment \$ million
<u>Group A - General Projects</u>			
Colombia	Food Products	1960,65	2.1
Chile	Food Processing	1959,65	1.6
Colombia	Storage Equipment	-	1.0
Senegal	Vegetable Export	1972	0.05 T.A.
Venezuela	Food Products	1961	0.5
Philippines	Furfurol from Bagasse	1973	2.2
<u>Group B - Agro-industry based on Crops</u>			
Ethiopia	Sugar Industry	1968	9.0
Guatemala	Flour mill	1959	0.2
Iran	Food Processing	1973	1.3
Morocco	Tomatoe Processing	1966	1.4
Nigeria	Cottonseed oil and byproducts	1973	1.6
Tanzania	Sugar industry	1960, 1974	4.7
Venezuela	Animal Feed from grain	1969, 1973	5.1
<u>Group C - Livestock based Industries</u>			
Honduras	Leather Tannery	1964, 1966	0.38
Colombia	Animal Processing	1966	1.6
Zambia	Shoe Manufacture and Tannery	1972, 1973	2.3

*) Excluding IFC investments in Development Finance Companies and in the textile sector

T.A. - Technical Assistance

ANNEX II

Country	Project	Year	IFC Investment \$ million
<u>Group D - Wood-based Industries</u>			
<u>Pulp and Paper</u>			
Argentina		1960	3.0
Ethiopia		1966	1.9
Brazil (5 projects)		1958, 1959, 66, 69, 71	17.2
Chile		1963	3.0
Honduras		1969, 1970	0.08 T.A.
Iran		1972	14.1
Yugoslavia		1973	13.6
Kenya		1970	14.8
Colombia		1959	0.5
Korea		1970	5.0
Mexico		1972	0.03 T.A.
Pakistan (3 projects)		1965, 67, 69	14.5
Philippines		1970	5.2
Spain		1972	9.6
Turkey		1970/71	3.2
<u>Other:</u>			
Finland	Wood Industry	1961	1.9
Colombia	Furniture	1961, 68	0.2



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