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U N C L A S S I F I E D

AGENCY FOR INTERNATIONAL DEVELOPMENT

Washington, D.C. 20523

PROJECT PAPER

INDONESIA

DATED: September 25, 1991

Agribusiness Development
497-0368

U N C L A S S I F I E D

Agribusiness Development Project
Project Paper

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GLOSSARY AND ABBREVIATIONS

ADB	Asian Development Bank
ADP	Agribusiness Development Project
A.I.D.	Agency for International Development (Washington, D.C.)
APO	Agribusiness Promotion Office (a creation of this Project)
ARD	USAID/Jakarta Office of Agriculture & Rural Development
ARSSP	USAID/Jakarta Agriculture and Rural Sector Support Program
Bapak Angkat	Indonesia Foster "Parent" Small Business Assistance Program
BAPPENAS	Badan Perencanaan Pembangunan Nasional - National Development Planning Agency
BAPPEDA	Badan Perencanaan Pembangunan Daerah - Regional Development Planning Agency
BOP	Bureau of Planning
BULOG	Badan Urusan Logistik - National Logistics Agency
CDSS	Country Development Strategy Statement
DFISA	The Dairy and Food Industries Supply Association
DGs	Directorate Generals
DIP/DUP	Daftar Isian Proyek/Daftar Usulan Proyek - Indonesian National Budget
DSP	Development Studies Project
EEC	European Economic Commission
EKUIN	Coordinating Ministry for Economics, Finance, Industry and Development
FAO	U.N. Food and Agriculture Organization
FPM&SA	The Food Processing Machinery & Supplies Association
FMO	Netherlands International Development Agency
GAPPINDO	Gabungan Pengusaha Perikanan Indonesia - Indonesian Federation of Fisheries Associations
GOI	The Government of the Republic of Indonesia
GTZ	German International Development Agency
IBRD	International Bank for Reconstruction and Development (The World Bank)
IESC	International Executive Service Corps
IQC	Indefinite Quantity Contract (an A.I.D./W contracting mechanism)
JICA	Japanese International Cooperation Agency
KADIN	Kamar Dagang & Industri - Indonesian Chamber of Commerce and Industry
MOA	Ministry of Agriculture
MOA/BOP	Ministry of Agriculture/Bureau of Planning

MOI	Ministry of Industry
MOT	Ministry of Trade
MTAP	The Market and Technology Access Program
NAFED	National Agency for Export Development
NFPA	The National Food Processors Association
NGO	Non-Government Organization
PAIWC	The Permanent Agricultural-Industrial Working Commission
Palawija	Non-rice grain crops
PID	Project Identification Document
Pimpro	Pimpinan Proyek - Indonesian Project Leader
PIU	Project Implementation Unit
PP	Project Paper
PROAG	Project Agreement (bilateral project agreement between AID and host country government, based on approved PP)
PSC	Project Steering Committee
REPELITA	Rencana Pembangunan Lima Tahun - Five Year Development Plan of the GOI
RFP	Request for Proposal (A.I.D.'s name for it solicitation documents)
S&T	Science and Technology Bureau (AID/Washington D.C.)
TA	Technical Assistance (e.g. experts and advisors)
UNDP	United Nations Development Program
USAID	Agency for International Development Mission in Jakarta, Indonesia (or USAID/Indonesia)

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete) — Amendment Number: ____ — DOCUMENT CODE: 3

2. COUNTRY/ENTITY: Indonesia

3. PROJECT NUMBER: 497-0368

4. BUREAU/OFFICE: ASIA — 04

5. PROJECT TITLE (maximum 40 characters): Agribusiness Development Project

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 09 DD 30 YY 97

7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4)
A. Initial FY 91 — B. Quarter 4 — C. Final FY 96

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY ____ B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total	2,526	780	3,306	16,380	3,620	20,000
(Grant)	(2,526)	(780)	(3,306)	(16,380)	(3,620)	(20,000)
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1.						
Other U.S. 2.						
Host Country	0	719	719	0	7,642	7,642
Other Donor(s)						
TOTALS	2,526	1,499	4,025	16,380	11,262	27,642

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1) FN				0		20,000		20,000	
(2)									
(3)									
(4)									
TOTALS						20,000		20,000	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)
A. Code
B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To enhance public sector support to agribusiness and to strengthen private sector agribusiness organizations.

14. SCHEDULED EVALUATIONS
Interim MM 08 YY 94 — MM YY — Final MM 12 YY 96

15. SOURCE/ORIGIN OF GOODS AND SERVICES
[X] 000 [ ] 941 [X] Local [ ] Other (Specify) ____

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ____ page PP Amendment.)

17. APPROVED BY
Signature: L.P. Reade
Title: Director USAID/Indonesia
Date Signed: MM 09 DD 27 YY 91

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
MM DD YY

AID 1330-4 (8-79)

PROJECT AUTHORIZATION

Name of Country: Indonesia
Project Name: Agribusiness Development Project
Project Number: 497-0368

1. Pursuant to the Foreign Assistance Act of 1961, as amended, and in accordance with the authority delegated to me in Delegation of Authority 652, I hereby authorize the Agribusiness Development Project (the "Project") for Indonesia, involving planned obligations of not to exceed $20,000,000 in grant funds over a five year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allowance process, to help in financing foreign exchange costs and, as specifically authorized below, local currency costs of the Project. The planned life of project is six years from the date of initial obligation.

2. The Project will help generate sustainable increases in employment and incomes in Indonesia by increasing the competitiveness, efficiency and growth of the Indonesian agribusiness sub-sector. The purpose of the Project is to enhance public sector support to agribusiness and to strengthen private sector agribusiness organizations.

3. The Project Agreement, which may be negotiated and executed by the officer(s) to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority, shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

(a) Source and Origin of Commodities: Nationality of Services

Except as otherwise agreed by A.I.D. in writing, all commodities financed by A.I.D. shall have their source and origin in the United States. All suppliers of commodities or services shall have the United States as their place of nationality, except as A.I.D. may otherwise agree in writing. Local source financing is authorized for the following procurements or types of procurement as described in the PP: Locally required Technical Assistance; Local costs of in-country Training/Seminars/Workshops; Local costs of Policy Studies; Local Administrative and Logistical Support Services; and other local procurements authorized in Chapter 18, AID Handbook 1, Supplement B.

(b) Conditions Precedent to Disbursement

(1) For Project Activities other than Technical Assistance. Prior to disbursement under the Grant for any purpose other than technical assistance, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made with respect thereto, the Cooperating Country will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., written evidence of the establishment of the Project Steering Committee and the Project

Implementation Unit. This documentation will include a description of the structure, staffing and responsibilities of each of these two units.

(2) For Activities Implemented by the Ministry of Agriculture and the Ministry of Industry in Project Years Beginning April 1, 1992. Prior to the disbursement of funds under the Grant for activities to be implemented by the Ministry of Agriculture and the Ministry of Industry in each year of the Project starting on April 1, 1992, and thereafter, or to the issuance of documentation pursuant to which disbursement will be made with respect thereto, the Cooperating Country will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., an annual work plan and budget covering both Cooperating Country and A.I.D. contributions to the activities for that year.

(3) For Assistance to Not-for-Profit Agribusiness Associations. Prior to disbursement of funds under the Grant for assistance to not-for-profit agribusiness associations, or to the issuance of documentation pursuant to which disbursement will be made with respect thereto, the Cooperating Country will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., a description of the specific implementation arrangements for such assistance.

(c) Special Covenants

(1) Equipment Maintenance. The Cooperating Country will agree to provide sufficient funds in its annual development (DIP) or routine recurrent budgets to adequately and properly maintain all equipment financed under the Grant.

(2) Staffing. The Cooperating Country will covenant to provide all GOI personnel required to implement the Project in an effective and timely manner. Unless otherwise agreed by A.I.D., (a) all Project Steering Committee members will be appointed by the Cooperating Country not later than 180 days from the date of the signing of the Project Grant Agreement; and (b) the staff of the Project Implementation Unit will be appointed not later than June 30, 1992.

(3) Ineligible Activities. The Cooperating Country will covenant and agree that none of the funds provided under the Grant may be used for certain types of assistance related to the production of agricultural commodities for export from Indonesia if such exports would cause substantial injury to U.S. exports or compete with U.S. products in U.S. or third country markets.

4. Grants to Non Governmental Organizations. All grants to NGOs shall be made in accordance with the source, origin, nationality and other policies set

forth in A.I.D. Handbook 1, Supplement B, Chapter 16, and A.I.D. Handbook 13. Unless otherwise agreed by A.I.D., each grantee will be required to finance not less than 25 percent of the total costs of the Project or activity supported by the grant from non-A.I.D. resources.

By: _____
L.P. Reade
Mission Director
USAID/Indonesia

Date: 9/27/91

spp:a\authoriz
9/25/91

THE AGRIBUSINESS DEVELOPMENT PROJECT

EXECUTIVE SUMMARY

PROJECT RATIONALE

Opportunities Agribusiness[1] is a unique and critical sub-sector of agriculture in Indonesia. It links Indonesia's natural resource-based economy to greater employment and higher earnings through value-added processing of raw material inputs. Indonesia's vast agricultural sector employs over half the nation's work force and accounts for nearly 25 percent of the its Gross Domestic Product. The agribusiness sub-sector provides the domestic market with basic consumer goods and contributes to national productivity in value-added manufacturing. These value-added agricultural products are a promising source of non-oil foreign exchange earnings. Labor force projections indicate that agribusiness can provide employment and income opportunities for Indonesia's rapidly growing labor force, particularly for small-scale farmers and small-and-medium-sized, off-farm rural enterprises.

Indonesia's current economic setting provides favorable conditions for further development of the agribusiness sub-sector. Trends in exports of agribusiness products, domestic consumption patterns and agricultural production are all promising. With a population of approximately 180 million, consumer spending on value-added food products is increasing at a rate of approximately 6 percent per year. At the same time that Indonesia is experiencing an increase in domestic consumer demand for food products, there is a trend toward higher output per employee and higher value of production per hectare. The export market also continues to offer excellent opportunities to generate foreign exchange. Growth of demand for food products domestically and abroad, improving production techniques and transportation facilities, and deregulation in banking, investment and trade, set the stage for growth in the agribusiness sub-sector. The timing is right for an acceleration of agribusiness development if key constraints can be overcome and key opportunities seized.

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1 Three key definitions are set forth:

The agricultural sector consists of a primary (producing) sub-sector and an agribusiness sub-sector.

Agribusiness incorporates enterprises which provide inputs to the agricultural sector and enterprises which process, elaborate, store or market the products produced by the agricultural sector.

Agroprocessing (or agroindustry) includes the segment of the agribusiness sub-sector which processes and transforms raw agricultural food and fiber products into intermediate and finished consumer goods.

Constraints In order to seize the aforementioned opportunities and attain efficient and rapid growth in the agribusiness sub-sector, certain constraints must be lessened or removed entirely. For example, the Indonesian agriculture sector is constrained by private monopolies on key inputs such as sugar, cooking oil, and soybeans, while certain ministries and private parties exert pervasive control over the production of a number of important estate crops and rice. In an economy that has recently deregulated other key sectors, the agricultural sector remains highly regulated. If these constraints were lessened, the benefits would be significant, but only in proportion to the readiness of the sub-sector itself to take advantage of such changes.

The Government support structure for agribusiness is still evolving. Current market forces and information flows in Indonesia make it difficult for most new and existing small- and medium-scale firms to access needed technologies and market information. The perishable nature of most agribusiness raw material inputs places constraints on the agribusiness sub-sector in terms of timely procurement, transportation, storage, processing, and marketing. Indonesia faces keen competition in export markets. Although Indonesia's low labor costs assure a comparative advantage in some product areas, lack of information on markets, limited technology, managerial skills and trained work force shortages, create a short-to-medium term disadvantage with respect to competitors. Most private agribusiness organizations in Indonesia, such as trade associations, which in other countries respond to the needs of the private sector for vital services to respond to these problems, are not yet capable of offering such services.

PROJECT DESCRIPTION

Goal and Purpose The Agribusiness Development Project (ADP) is a six-year effort with life-of-project funding of $27.6 million (USAID = $20.0 million in grant funds and Indonesia = $7.6 million). The goal of ADP is to generate sustainable increases in employment and incomes by increasing the competitiveness, efficiency and growth of the agribusiness sub-sector. The purpose of the Project is to enhance public sector support to agribusiness and to strengthen the private agribusiness sector especially agribusiness organizations.

Components ADP will incorporate two complementary components:

1. Public Sector Component Institutional reform and regulatory change are needed to improve the environment for agribusiness development. Three basic elements address this requirement:

(a) Regulatory Reform Project resources will help senior level Ministry of Agriculture (MOA) and Ministry of Industry (MOI) representatives address macro-

level policy issues. The myriad of micro-level (sub-sectoral) regulations that affect the production, harvest, transportation, processing, packaging and marketing of particular products will also receive attention. These regulations have important day-to-day impact on business operations. For this element, an initial policy agenda and policy selection matrix have been developed. The MOA and MOI staff, with the assistance of BAPPENAS and project-funded personnel, will periodically update the agenda through the life of the Project.

(b) Institutional Reform To support agribusiness growth, the GOI is seeking to become a facilitator and service provider in a free, open market environment. Project resources will help this process. A general framework for institutional change within the Ministry of Agriculture has already been defined. This will be further refined through the Project.

(c) Private Sector Linkages Better communication and cooperation between the public and private sector is another pre-requisite for accelerated agribusiness growth. Through the Project, the private sector will have an increased opportunity to recommend policy changes to the GOI, as well as to comment on changes proposed by the Government. Public-private cooperation in agribusiness research and development, market development and promotion, and quality assurance programs will also be encouraged. Finally, Project staff will assist in formulating and implementing programs to utilize profits from selected agricultural parastatals in order to develop small agribusinesses (bapak-angkat).

2. Private Sector Component The improving environment for agribusiness development in Indonesia creates additional marketing opportunities for the private sector. Key constraints which inhibit rapid expansion of agribusiness also need to be removed. As a means to these ends, the ADP will strengthen the capacity of private sector not-for-profit agribusiness trade associations or other organizations to provide services to their members and provide input to the Government in policy and regulatory reform. In the process, these organizations will be linked into the U.S. agribusiness sub-sector, the strongest and most highly organized agribusiness sub-sector in the world.

Initially, just a few organizations will be supported in order to start small and progressively build upon success. Technical assistance, training, and matching funds for activities such as seminars, feasibility studies, attendance at trade shows, and initial visits of potential joint venture partners (both U.S. and Indonesian) will be funded. The intent is to support only activities that may not be undertaken otherwise, and that have potentially strong economic benefits for Indonesia. While assistance is being rendered to two initial organizations, Project staff will identify other organizations that require and can effectively use assistance. To compete successfully for Project support agribusiness

organizations (national, regional or local) must have ties with small farmers and understand the importance of protecting and enhancing small producer interests.

Impact The primary indicators for assessing ADP's impact at the end of the Project include the extent to which there are: (i) more efficient and competitive markets for agribusiness production, processing, marketing, and trade and investment; (ii) GOI and private institutional structures effectively and efficiently supporting agribusiness development; (iii) small- and medium-scale firms in product lines supported by the Project rapidly expanding their production, processing and marketing of agribusiness products; and (iv) higher rates of increase in employment, incomes, exports, and trade and investment in specific agribusiness lines supported by the Project. The social and economic soundness analyses indicate very favorable returns to Project investments. Illustrative benchmarks of Project impact beyond expected levels of increase without the Project include:

* At least 50% of policy agenda items achieved;

* 100 new agroprocessing firms in the market;

* Total agribusiness trade increased by $1 billion and investment by $500 million;

* In assisted product lines, new sales of $500,000,000 and investment of $250,000,000, at least $100,000,000 of which represents sales of U.S. goods and services, and 50% of which is not with large firms; and

* In assisted product lines (fisheries, horticulture, etc.), at least 100,000 new jobs created (60% women), representing $30,000,000 in new income, of which two thirds accrue to low- or medium- income people.

PROJECT IMPLEMENTATION SUMMARY

The ADP will be managed by the Ministry of Agriculture. The Project will be under the direct guidance of the MOA's Secretary General, and programmatically supported through the Project Steering Committee.

Management and implementation units will include a Steering Committee, a Project Implementation Group or Unit (PIU) and Agribusiness Promotion Offices.

1. Steering Committee (SC)

The Project's Steering Committee will be chaired by the MOA's Secretary General. The Vice Chairman will be the MOI's Secretary General. The Secretary of the Steering Committee will be the Director of Bureau of Planning-MOA. The membership of the Steering Committee will include a representative from each of the following:

- BAPPENAS
- Bureau of Planning-MOI
- D.G. Food Crops
- D.G. Fisheries
- D.G. Livestock
- D.G. Estate Crops
- Bureau of International Cooperation-MOA
- USAID
- D.G. Multifarious Industry
- D.G. Small Scale Industry
- D.G. Domestic Trade, MOT
- NAFED, MOT
- PAIWC Secretariat
- Private sector
- Center for Agro Socio-Economic Research
- TA Team Leader

The SC will be responsible for overseeing project implementation. Other ministries that may be represented later include Ekuin, Cooperatives, and Health. It will review and approve annual work plans and budgets for the project. In addition, the SC will also serve as a policy forum for discussion of agribusiness issues. As such it will coordinate formulation of agribusiness development policies.

2. Implementation Unit (PIU)

A Project Implementation Unit (PIU) will be formed under the direction of the Project Steering Committee. Plans to be implemented by the PIU will be approved by Project Steering Committee. Overall coordination of project management and implementation functions will reside in the PIU. A Project Leader (Pimpro) from MOA will be appointed to head this unit. Other members of the PIU will include representatives from BOP/MOA, BOP/MOI, Directorates of Binus from D.G.s Food Crops, Fisheries, Estate Crops, Livestock, D.G.s Multifarious Industry and Small Scale Industry, USAID, and the TA Team. TA team advisors assigned to this unit will include the Senior Policy Advisor/Chief of Party and the Project Administrator.

The PIU will coordinate overall administrative and financial management functions for the Project. The PIU will develop annual work plans and budgets (covering both USAID and GOI contributions) for consideration and approval by the Steering Committee. On a monthly basis, or more often as required, the PIU will review and approve activities proposed by the Pimpro and the Technical Assistance Contract Chief

of Party. This will include implementation functions associated with the In-country Training, Policy Studies, and Workshops/seminars elements. Official project communications between USAID and the GOI will be through this Unit.

3. Agribusiness Promotion Office (APO)

An Agribusiness Promotion Office (APO), forming an operational link with the private sector, will be established on a test basis. In terms of overall policy and procedures, the APO staff will work under the direction of the PIU and, hence, the Steering Committee. Initially, it will be staffed by three long-term TA team members, along with local staff, including temporary assignments by GOI agribusiness staff who will continue to be solely employed by the GOI.

The APO will not be a new legal entity; rather it will be sponsored by the MOA and supported by USAID via the prime contractor. During Year 2 of the Project, two more small APOs will be established outside of Jakarta, most probably in Surabaya and Ujung Pandang. These offices will report administratively to the Jakarta APO. Other APOs may be established in later years.

4. Contracting

USAID will competitively award the prime contract to a U.S. firm that will field a technical assistance team of five expatriate long-term professionals. Other foreign and local short-term professionals will also be hired. The Senior Agribusiness Policy Advisor/Chief of Party and the Project Administrator will be headquartered along with the PIU, and the other team members will be housed in the Agribusiness Promotion Office.

5. Project Operations

(a) Focus The Project will initially focus on development of horticulture and non-marine fish products, which offer the opportunity for substantial impact on employment, incomes and market development and which have been determined as not falling within the restrictions of the Bumpers and Lautenberg Amendments or other U.S. legislation. The Project will also start with assistance to just few agribusiness organizations. It is envisaged that after working for a year or two with a few promising trade and producer organizations on development of specific products, that the Project will identify new areas of opportunity and need. Emphasis throughout the Project will be on seeking out organizations with action-oriented programs to increase employment and income of smallholders.

(b) Catalyst The ADP will serve as a catalyst encouraging line offices in the MOA and MOI to act. For example, the PIU will orchestrate studies, organize meetings, arrange for training and workshops, and support initiatives which encourage movement away from reliance on state-owned enterprises and toward facilitating private sector initiatives. The PIU will promote modern management concepts in both the public and private sectors, and adapt these management concepts to the Indonesian context.

(c) Sustainability By the end of the Project, key line offices of the MOA and MOI will have been restructured, and there will be many strong agribusiness organizations at national, regional and local levels responding to the needs of their members. Essentially the ADP will strengthen existing institutions and train their personnel. So the question of sustainability of Project activities really does not pertain.

The Project will, however, establish the Agribusiness Promotion Office as a non-permanent means to an end. That end is increased agribusiness activities on a sustainable basis. A benefit outside the current design of this Project might be that the APO evolves into a financially self-sustaining foundation that promotes agribusiness development.

PROJECT FEASIBILITY SUMMARY

1. Institutional Analysis The Project focuses on expanding the value-added of agricultural products through processing and marketing. Among GOI Ministries, the Ministries of Agriculture and Industry are the most concerned and directly involved with the production and processing of agricultural commodities. These two Ministries are the ones targeted for Project support, and have expressed firm commitments to the objectives of the Project.

2. Administrative Analysis The proposed structure of a steering committee, a project implementation unit or group and Agribusiness Promotion Offices provides a workable and adequate system of project administration. With the addition of technical assistance, the structure is judged satisfactory to achieve Project objectives.

3. Economic Analysis The Project promises a high rate of economic return. If Project benefits are measured only in terms of export growth for the initially-targeted areas of horticulture and non-marine fisheries products, the "with/without" Project analysis shows that the value of exports will increase $525 million for this $27 million project spanning six years. This is based on a total additional value of production of $1.7 billion and $300 million in new investment resulting from project activities.

4. Social Analysis The Project has a high degree of social soundness according to the six dimensions of social soundness outlined in A.I.D. Handbook 3. Conservative estimates are that 100,000 jobs will be created in the horticulture and fisheries sectors by the Project with 60 percent of these jobs going to low or medium income families.

5. Technical Analysis Using various criteria, it was concluded that Project impact input would be maximized by focusing initially on no more than two organizations in two agribusiness segments. The fisheries and horticulture segments were selected for initial emphasis with two organizations also identified as targets for support.

6. Financial Analysis The Project is financially viable from the perspective of demands on GOI funding, private sector contributions and post-project sustainability. The strengthening rather than creation of new GOI institutions and major emphasis or private sector activities are major factors in this conclusion.

7. Environmental Analysis A categorical exclusion was approved. However, technical assistance and training will be provided to ensure compliance with A.I.D. regulations.

1. PROJECT RATIONALE

1.1 The Economic Setting

1.1.1 The Development Context

As Indonesia enters a new decade and looks forward to a new century, economic policy is dominated by three central challenges: the need to replace the petroleum sector as the primary source of foreign exchange and government tax revenues; the need to cope with the problems of underemployment and unemployment; and the need to mobilize private sector investment. How the GOI approaches these challenges will be influenced to a large extent by the central themes of Indonesia's Fifth Five-Year Plan (Repelita-V, 1989-93): growth, equity and stability. This will be particularly true with regard to the agricultural sector and its emerging agribusiness sub-sector. Growth will be measured not only by the quantity of output of various commodities and the magnitude of private sector investments in agribusiness, but also by increases in employment, rising real wages, and better living conditions for the millions of rural and urban dwellers directly or indirectly dependent on agriculture.

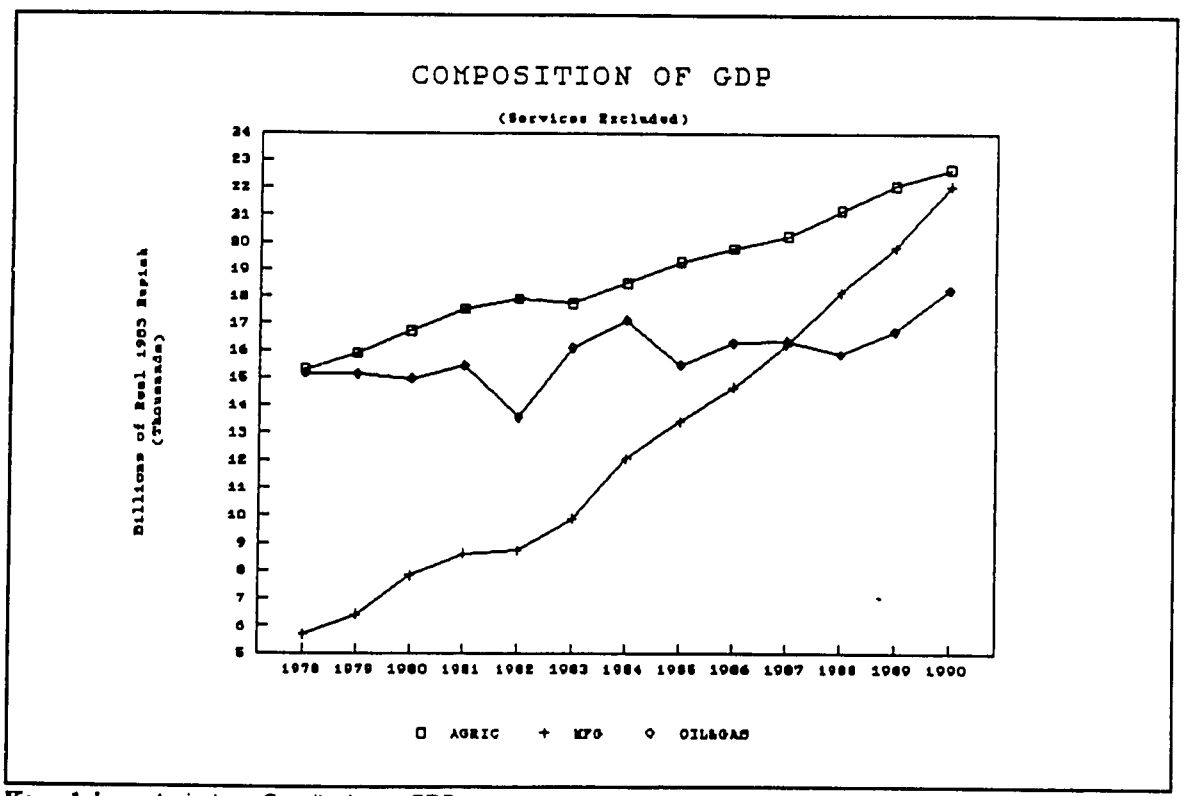

Figure 1: Large Agriculture Contribution to GDP

The agricultural sector remains the predominant part of the Indonesian economy, employing approximately 55 percent of Indonesia's 72 million strong workforce and contributing one quarter of the nation's Gross Domestic Product (GDP). This makes it the single largest contributor to GDP. Figure 1 displays GDP share by sector over the last ten years. As shown in Figure 2, agriculture is also the major component in non-oil exports, contributing nearly 70 percent of total non-oil exports in 1988 (most recent available data). As a result of the structural transformation which is ongoing in the Indonesian economy, primary (production) agriculture cannot be expected to continue to generate major increases in employment, rural income and domestic product growth.

1.1.2 Deregulation of the Economy

When petroleum revenues fell in 1986, new sources of foreign exchange were needed. To stimulate the development of the country's export oriented non-oil sectors, the GOI began policy reforms in 1985 which ultimately resulted in deregulation of many aspects of the economy. The GOI instituted trade and customs reform, financial sector deregulation, and a major devaluation of the Indonesian currency in 1986. Among other outcomes, these reforms fostered increases in non-oil and gas exports, particularly manufactured products such as garments, sport shoes, plywood, and agro-processed items such as rubber, coffee, palm oil and shrimp.

1.1.3 The Importance of the Agribusiness Sub-Sector

As detailed in Annex M, (Macro-economic Analysis), agribusiness products, not raw agricultural commodities, are emerging as the growth leaders in Indonesia's agricultural economy. While plywood and textile exports dominated the exports of non-oil commodities in recent years, with striking 18 percent per year increases, an almost identical rate of growth occurred for processed food products.

It is nearly certain that plywood, rattan and textiles exports cannot continue to grow at the high rate of the past five years, due to normal shifts in the worldwide industry and to resource and quota constraints. The outlook for food processing is less easy to forecast. One of the main factors that will determine the expansion path for agribusiness products is the extent to which certain constraints can be overcome and opportunities seized. If this happens, agribusiness growth will have a major positive impact on meeting Indonesia's employment, income and export imperatives.

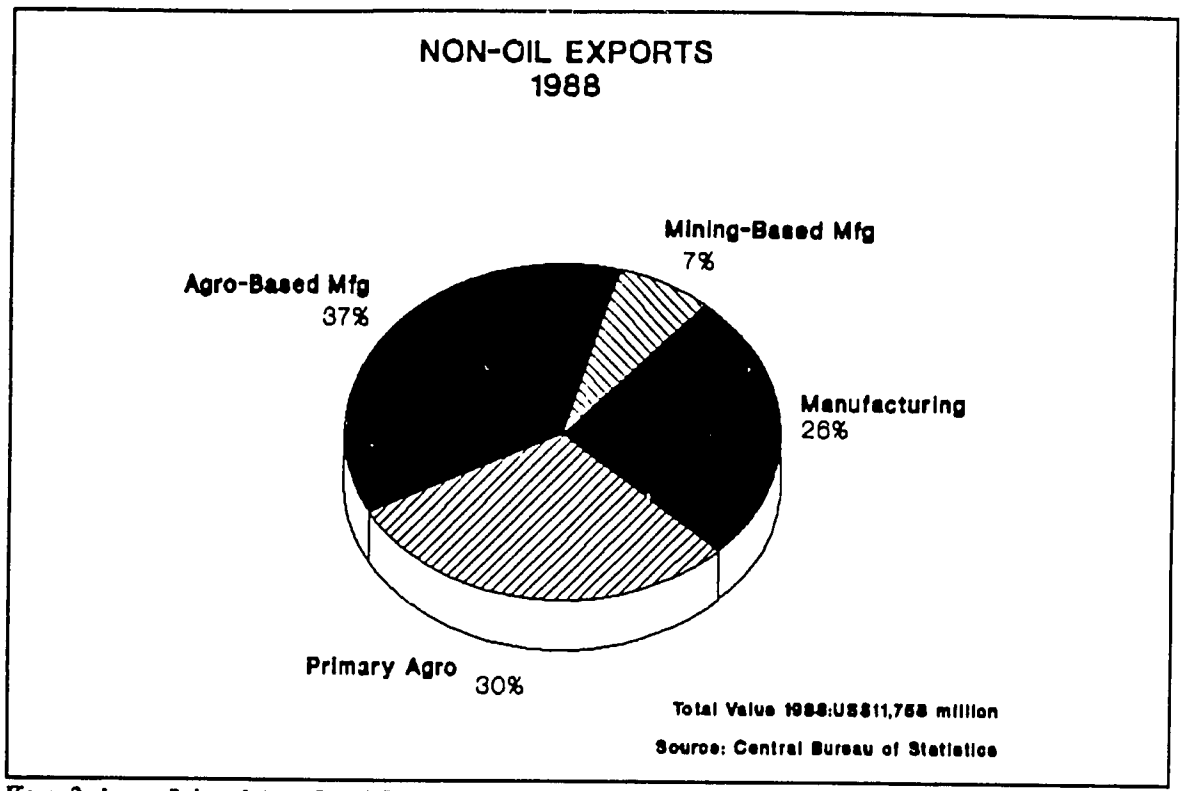

Figure 2: Large Role of Agro-Based Products in Non-Oil Exports

Repelita-V projects a growth in labor force participation of 3 percent per annum, or just under 12 million people between 1988 and 1993. The industrial sector is expected to absorb no more than 20 percent of the labor increment while agriculture is expected to absorb approximately 35 percent. However, this will be difficult to achieve because agriculture is projected to grow only 3.6 percent per year. With an estimated 1.84 million people currently unemployed, and projections of a rapid rise in this figure, particularly among those with senior high or other tertiary educations, employment creation has justifiably been acknowledged as the most pressing socioeconomic problem facing the Government.

In formulating Repelita-V, Government planners sought to identify new areas of growth which could provide jobs for entrants to the labor market and help stimulate alternative foreign exchange earnings. Cash crops, livestock, and fisheries are viewed by the GOI as particularly promising in terms of employment, income and foreign exchange potential. Agro-based enterprises rank high in capital/labor employment effects and value added, while they are not import-intensive.

1.1.4 The Agribusiness Regulatory Climate

As illustrated above, the significant strides that the GOI has made in deregulating trade and the financial system have had a positive impact on agribusiness. However, significant additional growth in agribusiness can be achieved if the GOI begins the process of deregulating the agribusiness sub-sector directly. Annexes C and L indicate the extent and nature of current regulations and policy constraints, and also estimate what can be expected to occur as a result of ADP. The following is a partial list of reasons why the agribusiness sub-sector has remained heavily regulated and a rationale for change.

First, the GOI has taken upon itself the role of controlling the supply and distribution of essential foodstuffs such as rice, wheat, soybeans, and sugar. These commodities are often referred to as "security" commodities; if they become scarce in the market, the stability and security of the country is jeopardized. While the GOI rightly is proud of its success in stabilizing the prices of these items, that very success permits Indonesia to re-evaluate now the costs to the country associated with the current monopolistic structures in these commodities. These structures include such organizations as the National Logistics Bureau (BULOG) and state-owned enterprises that control many of the agricultural inputs as well as the marketing of final output. A number of current studies indicate that deregulation would result in better allocation of scarce resources and production of a wide variety of agricultural products. In turn, this would result in increased nutritional levels in the country and increased exports, to earn valuable foreign exchange.

Second, by viewing the agricultural sector as "the employer of last resort," the GOI has insulated this sector from market forces. While economic and social equity are desirable goals, the Government's actions sometimes seem selective, and in all cases tend to be destructive of efficiently operating markets. Rather than ultimately protecting small-scale farmers from plantations, or family-sized markets from supermarkets, the GOI's regulations have isolated these people from alternative economic activities that would not only benefit them, but consumers in general. The GOI needs to explore various policy and institutional alternatives from around the world that seem more likely to provide the long-term jobs and increased income which they desire for smallholders.

Third, agribusiness activities are more complex than those in other sub-sectors because primary inputs are dependent on ecological systems. The vagaries of weather, natural disasters, and pest and disease outbreaks can seriously disrupt agricultural production, processing, and marketing. The complexity of the sector has deterred reform efforts thus far, but there is considerable interest now in moving ahead with deregulation in agriculture since the more straight-forward reforms have proven successful.

Fourth, even though the GOI increasingly recognizes that agribusiness remains too constrained by government control, no single GOI institution has the brief for setting policy and formulating and implementing regulatory oversight for the agribusiness sub-sector. Responsibilities are divided across a number of powerful central government organizations including the Ministries of Trade, Agriculture, Industry, and Finance as well as Bappenas. Other national-level GOI organizations include the National Logistics Bureau, state trading corporations and a number of medium and large scale, state owned agribusinesses. Regional, provincial and local government policy formulation and implementation also greatly affect firm-level decisions. Finally, there are a number of private sector associations and individual firms which have extraordinary powers granted to them by the GOI for product and market governance. The power of these organizations and firms goes far beyond representation and promotion of agribusiness development to the extent that their actions often have the effect of directing and restraining trade.

1.2 Constraints to Agribusiness Development

1.2.1 Policy and Regulatory Constraints

Annex C lists a number of current policy and regulatory constraints to agribusiness development. Below is an indicative list:

(1) Licensing A large number of licenses are required to establish and to continue to operate a business.

(2) Taxes A wide variety of taxes are imposed by many jurisdictions on various agroprocessing inputs as well as the movement of goods and their processing. Some of these taxes are extra-legal and most are unpredictable in their incidence.

(3) Duties and Tariffs There are duties on most imported inputs. There is a duty draw-back scheme, if the finished product is re-exported. However, this system is highly complex and difficult for smaller firms to access. Tariffs are imposed on many exports, sometimes increasing costs substantially.

(4) Control of Inputs The government controls the availability and price of many agroprocessing inputs through monopolies and price control, raising prices and reducing efficiency.

(5) Transportation The domestic cost of sea, air and land transportation is much higher than it should be due to overregulation and formal and informal taxation.

(6) State-Owned Enterprises State-owned enterprises (SOEs) take on too large a role in agriculture, inhibiting investment and trade. Some of this responsibility should be transferred to the private sector.

(7) Old Patterns Many existing business organizations try to control and restrict business in the name of efficiency, rather than attempting to expand it.

It is important to note that the incidence of the above types of policies and regulations does not affect everyone equally. These constraints tend to affect small, independent producers, processors, and exporters to a much greater extend than they affect larger, well established corporations. In general such policies and regulations result in economic inefficiencies that affect the income of both producers and consumers.

1.2.2 Private Agribusiness Organization Constraints

A healthy, developed economy has as one of its major features a well organized private sector, composed of trade associations and other private sector business organizations operating at national, regional and local levels to serve the interests of their members. A normal function of such organizations is to assist the public sector in the development of policy and regulations and monitoring its impact on members. Another is to provide information, training and technical assistance vital to member development. In Indonesia, such private sector organizations are generally quite weak, or, if strong, tend to focus on limiting market entry to a small number of firms. Deregulation implies that greater responsibility is transferred from the public to the private sector. However, if the private sector is going to absorb this increasing role, it must be organized to do so.

There are approximately two hundred national business associations and federations in Indonesia. Constraints to their development include:

(1) Lack of Services Only a few private sector business organizations are able to provide high quality services to their members.

(2) Inactive and/or Disinterested Membership Most business organizations have been established by government fiat and larger firms are usually required to be members. Members generally remain inactive. In most cases, members have not learned that there is something to be gained by cooperation on certain key issues.

(3) Lack of Financing Most private sector business organizations do not have sufficient income because their members pay only token dues. Thus, these organizations are unable to finance services which are valued by members.

(4) Lack of Professional Management Most associations do not have professional staff who could organize quality services for members.

1.2.3 Firm-Level Constraints

There are a variety of firm-level constraints which also restrain further agribusiness development in Indonesia. In many cases, these constraints result directly from the policy and regulatory environment. Other constraints include the following:

(1) Lack of Information Indonesian firms tend to have extremely limited information. They know little about trends in key markets. Even if they are aware of grades, standards, and quality requirements, they are often unable to produce accordingly. They do not know what types of technology, equipment, or materials are most appropriate for their use or where to get them. Such information is lacking in Indonesia, particularly in a form usable by smaller firms.

(2) Lack of Raw Materials As agroprocessing firms attempt to process uniform quality products in a timely fashion to satisfy markets, they will increasingly face shortages of raw materials, both in terms of quantity and quality. Substantial additional testing of varieties, propagation and extension is required to produce the quantities required in many key crops. New methods of organizing production, such as contract farming, need to be considered.

(3) Lack of Organization and Management Skills Agroprocessing organization and management practices in Indonesia are for the most part quite antiquated. Managers typically have only on-the-job training, which is normally quite limited. There is a critical need to introduce modern agribusiness management techniques and to adapt these to the social and culture environment in Indonesia.

(4) Lack of Trained Manpower There is currently a critical shortage in Indonesia of people technically trained and experienced in modern agroprocessing. This critical shortage of manpower must be ameliorated if agroprocessing is to expand.

1.3 Opportunities for Agribusiness Development

The vast potential of Indonesian agriculture and its comparative advantage in production and processing is obvious from the rapid development of a few relatively unrestricted agribusiness lines, such as fisheries. Export earnings from processed fisheries increased to almost $750 million in 1989 and Repelita-V projects exports to reach $1.3 billion by 1993. It now seems possible that Indonesia could earn $3 billion from fisheries exports by 1995, if key non-policy constraints are reduced. Shrimp and fish exports have increased a striking 21 and 26 percent per year respectively from 1984 to 1989, as shown in Figure 3. Indonesia is now the world's leading producer of cultured shrimp.

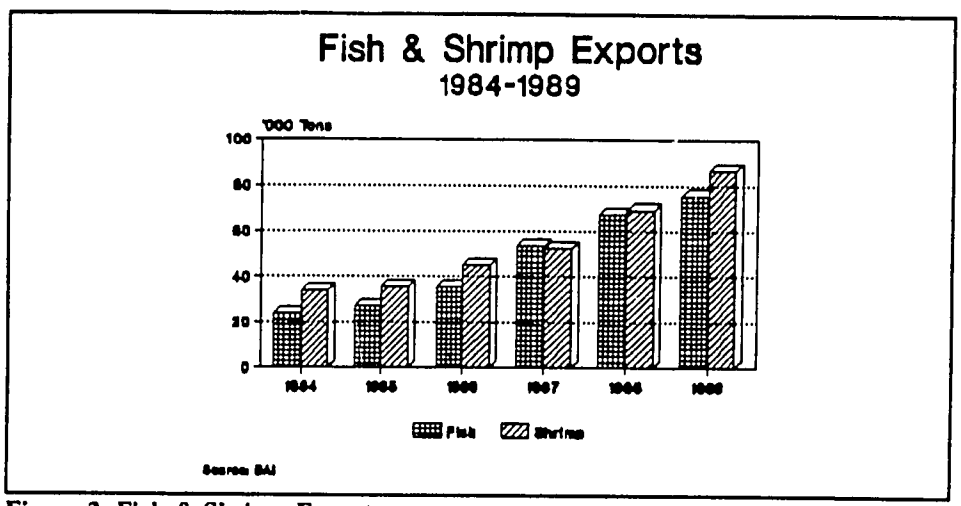

Figure 3: Fish & Shrimp Exports

Other processed foods experiencing rapid growth in exports include vegetable oil, which grew from $175 million in 1984 to $453 million in 1989, canned vegetables, which grew from zero exports in 1984 to $26 million in 1989, canned fruit which grew from $1 million in 1984 to almost $24 million in 1989. Total exports of processed foods (excluding tobacco) grew from $232 million in 1984 to over $950 million in 1989.

Canned pineapple provides a vivid example of the quick changes that are occurring. In 1984, Indonesia exported less than $0.5 million worth of canned pineapple. By 1989, Indonesia was exporting over $22 million worth. This represents 8 percent of the total world's production of canned pineapple.

The domestic market for processed food is also expected to grow in the 1990's. Indonesia's population is projected to reach 216 million by the year 2000. The growing numbers and changing configuration of the population are expected to add 3 percent to yearly total food demand. The structure of consumer demand will also change. There is expected to be a rapid growth of the middle class, which will place increasing requirements on the market for both higher quality and larger quantities of processed food products.

1.4 Strategic Rationale

1.4.1 Why the Agribusiness Development Project

The time is right for expanded support to the agribusiness sub-sector. In a new spirit of economic deregulation, driven by the need for non-oil revenues and new sources of rural employment, the GOI has acknowledged both the need to promote agribusiness growth and exports, and the complexity of doing so.

The public sector tends to look at constraints/problems and the means to solve them. However, the private sector looks at opportunities and methods by which they can be exploited. Since the ADP proposes to support the development of private agribusiness, it is appropriate that the approach of the private sector be adopted in design of this Project.

One clear opportunity is the application of deregulation reforms in agriculture analogous to those that have sparked the manufacturing sector. Policy studies and policy reform, economic deregulation, privatization, and open market operations are activities which USAID generally does well. This is due in part to two decades of work in the agriculture sector in Indonesia as well as to the experience which can be applied from the operations of the U.S. agribusiness sub-sector.

A second clear opportunity is to strengthen the capacity of private agribusiness organizations to both provide services to their members and input to the Government in policy and regulatory reform. Again, USAID has a comparative advantage in providing this input. USAID can draw on the resources of the enormous U.S. agribusiness sub-sector and the many agribusiness organizations that support it to solve technical problems and provide equipment, services and markets.

In further support of the Project, Annex M, the Macro-economic Analysis, indicates that there is a shift in agribusiness exports from other countries in Southeast Asia to Indonesia, as well as a complementary shift within Indonesia from a subsistence-dominated, agriculture-based economy to a modern manufacturing and service-oriented

industrial structure. Therefore, the ADP is quite timely, and will not only help jump-start Indonesian agribusiness development, but it will also foster a more open and competitive business climate.

1.4.1.1 Rationale for Public Sector Component

Due to the need for farmers to receive market signals as to which higher-value crops to plant, the Ministry of Agriculture is a key organization in the GOI in agribusiness development. In recognition of the growing importance of agribusiness development, this Ministry is exploring ways to become more supportive of farmers' interests based on becoming more market and value-added oriented. There is an opportunity to assist the Ministry in its transformation. There is also an opportunity to assist the GOI in the creation and application of deregulation reforms in agriculture analogous to those that have sparked the manufacturing sector. It is possible to have a significant impact on more specific product regulations that significantly constrain agribusiness growth. It may also be possible to affect changes in major policy constraints which impact on agribusiness, dependent, of course, on the existing political climate.

1.4.1.2 Rationale for Private Sector Component

As a result of rising incomes, improved infrastructure and the recent deregulations, agribusiness opportunities have become quite attractive. A number of large conglomerates have already begun to seize some of these opportunities. However, these firms, as well as State Owned Enterprises, are too large to respond efficiently to a number of niche market opportunities.

New private sector leadership is emerging at national, regional and local levels which sees the opportunities for production of high value processed food products. This emergent leadership has little knowledge about how to gain economies of scale by working together with firms that have similar product lines. There is some danger that without outside support, the new leadership may move in the direction of control and restriction and may operate in a manner which does harm to employment and income of smallholders. The opportunity exists to work directly with these emergent organizations and help them increase substantially the production for domestic and export markets of high-value processed food products in the short-term in a socially acceptable manner.

Until associations provide services valued by their members, members will be unwilling to provide financial support; but without the financial support from their members, agribusiness organizations cannot provide services. A solution to this dilemma is to work with agribusiness organizations to launch model service programs which can begin to

prove to members the value of these organizations. Once recognized by members, self-generated financial support should be forthcoming.

Working through agribusiness organizations also provides a cost-effective means of service delivery. It is simply too expensive to assist individual firms directly. Through development of joint programs of assistance, cost-sharing arrangements can bring within reasonable limits the cost of service delivery to each firm.

1.4.2 Relationship to GOI Development Strategy

ADP is fully consistent with the GOI's overall development plans. In March 1988, the GOI shifted the focus of its agricultural programs beyond the production stage when the People's Consultative Assembly adopted the Broad Guidelines of State Policy (GBHN). Repelita-V emphasizes the creation of a more open market-based economy through deregulation and encouragement of private initiative. Guidelines adopted for formulating the Plan's policy framework included the following objectives for the future structure and role of the agriculture sector:

- Achieve significant expansion in international trade with major emphasis on processed agricultural products for export and diversifying domestic consumption patterns;
- Increase private sector involvement in agriculture; and,
- Improve agricultural production, processing and marketing efficiency.

As indicated above, embodied in Repelita-V is the promotion of greater private sector involvement in the emerging agribusiness sub-sector. The Plan states:

"[Among] measures to be taken are the following ... creation of a favorable climate for the establishment of private food processing industrial undertakings throughout the country, particularly in non-rice food production centers."

In order to respond to this mandate, the GOI established in 1989 the inter-ministerial Permanent Agricultural-Industrial Working Commission (PAIWC). During the design of this Project, the Ministries of Agriculture and Industry have expressed a desire for this Project to assist PAIWC to become more active in promoting agribusiness. This includes helping PAIWC to identify opportunities for agribusiness development and constraints which impede these opportunities from being realized. This also includes assisting a number of Directorate Generals as well as fledging not-for-profit agribusiness associations.

Indonesia's private sector has expressed an interest in greater exposure to U.S. technology, equipment, technical assistance, and markets. The Indonesians are quite familiar with what Japan, Korea, Taiwan, China and its ASEAN trading partners can offer, but the U.S. remains an unknown, even though people generally know that the U.S. has excellent technology, services, and a huge potential market for Indonesian exports.

1.4.3 Relationship to AID/USAID Development Strategies

The Agribusiness Development Project is fully consistent with AID development strategies. AID policy, as described in "Private Enterprise Development" (AID Policy Paper, 1985) places private sector growth at the center of the economic development process. It is also consistent with the Bureau's agricultural development strategy for the 1990's "Meeting the Challenge: An Asia and Near East Food Systems Strategy for Growth in the 1990's." USAID/Jakarta's CDSS for 1989-93, articulates the goal of improving long term, sustainable employment and income generation opportunities through means which promote efficiency and productivity. Sub-goals specify support for a more open, less regulated market and trade-oriented economy; increased agricultural productivity; efficiency; and sustainability of agricultural production, processing, distribution and consumption systems. ADP will emphasize the need for the GOI to promote private sector agribusiness investment opportunities by retreating from its long-standing role of controller of markets to a role of manager of more open markets. In addition, while the Project improves the Indonesian agribusiness sub-sector, so too will it improve that in the U.S. By using primarily American advisors, the Project will probably have the side benefit of also strengthening local preferences for U.S. agribusiness technology, goods and services.

Consistent with A.I.D. and USAID concerns for the impact of programs on the environment, ADP will provide short-term training and technical assistance to public and private sector organizations in environmental assessment, mitigation and monitoring procedures. The Project will not fund the purchase of pesticides, and will recommend that producers utilizing pesticides should do so in an environmentally-sound manner.

1.4.4 Complementary USAID Projects

The Agriculture and Rural Sector Support Program (ARSSP) consists of budget support to selected GOI entities and technical assistance in support of our policy dialogue in the areas of agricultural diversification and trade, municipal finance, integrated pest management, financial deregulation, and environmental and natural resources management. During the next few years, expenditure levels will be approximately $1.5

million per year. In prior years, ARSSP emphasized balance of payments support, and then evolved into a policy reform program with a number of indicative benchmarks. ARSSP policy objectives in the agricultural sector are listed in Annex C.

The Fisheries Research Development Project has been generating technologies, particularly some related to shrimp, that will be commercially exploited by ADP. Likewise, the Applied Agricultural Research Project has promoted a more open climate for interaction among GOI, university, and private sector researchers. The Private Voluntary Organization Co-Financing Project has assisted a number of organizations that are promoting agribusiness. The ADP design has benefitted from lessons learned in these projects, and will attempt to build off of their success.

1.4.5 Other Donor Agribusiness Activities

Agribusiness development has attracted the interest of many other donors. Several of them are, or have proposed, funding agribusiness development activities. Given the huge size of the agribusiness sub-sector, and ADP's clearly defined policy focus and recognized comparative advantage with the Ministry of Agriculture, there is no evident duplication; rather these donor projects clearly will be complementary, as indicated below:

World Bank A study of the agribusiness sub-sector was recently completed in preparation for a $250-300 million agro-industrial restructuring loan. The proposed loan will provide credit to agribusinesses through six banks (5 private plus Bank EX-IM). If agreements are reached, loan funds should become available in 1991. Average loan size is estimated at $500,000.

Asian Development Bank (ADB) An on-going agro-industrial credit project provides 15-year term investment and working capital to small and medium scale agro-based enterprises for the establishment, expansion and modernization of facilities. Another ADB project will conduct feasibility studies on proposed schemes for assistance in post-harvest processing. The ADB is also planning a second brackish water aquaculture development project.

The United Nations Development Program (UNDP) Two projects are related to ADP. One is development in the capacity of the Ministry of Agriculture to improve standardization and quality control of food and agricultural products. The second project is improving quality of selected agricultural export commodities to meet target market requirements.

The European Economic Community The EEC program includes a project to assist the Ministry of Trade in establishment of model quality control systems for garment, ceramic and leather industries.

The Federal Republic of Germany (GTZ) Activities planned for 1990 and beyond include a small-scale Agro-Industry Development Project for secondary food crops, horticulture and spices in Lampung, West Sumatra and Central Java, beginning in 1992.

The Netherlands Development Agency. One of the current projects is assisting the Ministry of Trade's Center for Testing and Quality Control to improve grades and standards for agricultural products. FMO, the Netherlands quasi-government venture capital bank, supports agribusiness projects in cocoa, mushrooms and poultry (grandfather stock). Its main function is to match a Dutch company with an Indonesian firm and pay up to 50 percent of the cost of technical assistance to the firm for up to two years.

Japan (JICA) The Japanese Government funds a large export promotion training center in Jakarta, which offers a series of short term courses for those engaged in export businesses. They also support numerous agricultural research and area development programs, as well as subsidize activities of a number of Japanese commercial ventures in the agribusiness arena.

Other donor support for agribusiness is summarized in the Table 1:

Table 1
Other Donor Support to Agribusiness Development

Type of Assist.	IBRD	ADB	UNDP	EEC	GTZ	FMO	JICA
Finance	M	M	H	M	M	M	M
Technology					H	M	M
Quality standards			M	O		M	M
Research & Development		H			H	H	
Comprehensive review		M					
Management			M				
Training		M	M	M	M		M
Marketing			M	O	H	M	M
Information center			M				

H = Horticulture, M = Multiple segments, O = Other segments.

2. PROJECT LOGICAL FRAMEWORK (LOGFRAME) AND DESCRIPTION

2.1 Logical Framework

2.1.1 Project Goal and Purpose

The goal of ADP is to generate sustainable increases in employment and incomes by increasing the competitiveness, efficiency and growth of the agribusiness sub-sector.

The purpose of the Project is to enhance public sector support to agribusiness and to strengthen the private agribusiness sector, especially agribusiness organizations.

End of Project status (EOPS) and illustrative benchmarks that represent changes above normal trend projections:

(1) Efficient and competitive markets for agribusiness production, processing, marketing, and trade, and investment.

- 100 new agroprocessing firms in the market.

• Total agribusiness trade increased by US$1 billion and investment by US$500 million.

(2) GOI institutional structure effectively and efficiently supporting agribusiness development.

• At least 50% of policy agenda items achieved.

(3) Small- and medium-scale agribusiness firms in product lines supported by the Project rapidly expanding their production, processing and marketing of agribusiness products.

• In assisted product lines, new sales of $500,000,000 and investment of $250,000,000, at least $100,000,000 of which represents sales of U.S. goods and services, and 50% of which is not with large firms.

(4) Higher rates of increase in employment, incomes, export, and trade and investment in specific agribusiness product lines supported by the Project than would have otherwise been present.

• In assisted product lines (fisheries, horticulture, etc), at least 100,000 new jobs created (60% women), representing $30,000,000 in new income, of which two-thirds accrue to low- or medium- income beneficiaries.

2.1.2 Project Outputs

Project Outputs cover both the public sector and private sector components. Detailed outputs of an administrative nature will be tracked in the Management Information System. Project Outputs and some illustrative benchmarks include:

(1) Agribusiness policy and regulatory units in MOA and MOI capable of analyzing agribusiness deregulation issues and options and implementing necessary actions.

• At least two major policy studies completed each year.

(2) New GOI institutional framework and services in place to assist and promote the agribusiness sub-sector.

• MOA/MOI offering two new services (e.g. policies/grades/standards) to the private sector.

(3) Public and private sectors effectively collaborating to assist and promote agribusiness development.

- Approximately 10 public/private forums and 25 joint promotion activities conducted.

(4) Private sector agribusiness organizations providing highly-valued, self-financed services to members and input to GOI on policy and regulatory matters.

- Five agribusiness organizations financially self-supporting in delivery of valued agribusiness services.

- Five agribusiness organizations viewed by GOI as partners in development, implementation and monitoring of policy/regulations.

2.1.3 Project Inputs (USAID - Funded)

USAID-funded Project inputs include: (1) Technical Assistance; (2) Short-term Training; (3) Agribusiness Studies; (4) Private Sector Agribusiness Support; and, (5) Other. More detailed financial information on inputs is included in Annex B.

2.1.3.1 Technical Assistance (TA)

A direct A.I.D. umbrella technical assistance (TA) contract with an institutional contractor will be utilized to provide technical assistance, plan and conduct in-country training and workshops, arrange administratively off-shore short-term training and study tours, help develop scopes of work for policy studies, create agribusiness promotion offices and participate in the planning and selection of not-for-profit agribusiness associations that may benefit from Project assistance. Table 2 below summarizes the long term TA inputs as well as long term local administrative support. The direct A.I.D. contractor will be selected jointly by A.I.D. and the GOI.

In addition, there are a number of existing AID/Washington centrally-funded projects which might be called upon to help ADP structure these and other activities from the U.S. side, under a buy-in arrangement using ADP funds outside the prime contract. Existing AID/W projects of interest include the Marketing and Technology Access Project (MTAP), the Agricultural Marketing Improvement Strategies Project (AMIS), Project SUSTAIN, the International Executive Services Corps (IESC), and the American Society of Agricultural Consultants, International (ASACI). Also a new AID/W agribusiness support project is being developed which may become operational late in 1991. ADP will review its needs as the Project gets under way and determine the extent to which buy-ins to these projects might be beneficial. These will be developed into a work plan which will be approved by the ADP's Project Steering Committee.

Table 2
Long-term TA Advisors, their Primary Work Location and Estimated Work Allocation

LONG-TERM TA POSITION	PRIMARY LOCATION	EST. WORK ALLOCATION (as %)	
		GOI	PRIV. SECTOR
Policy Advisor/C. of Party	GOI/PIU	75	25
Project Administrator (expatriate local hire)	GOI/PIU	75	25
Organizations Advisor	Priv. Sector/APO	25	75
Agroprocessing Advisor	Priv. Sector/APO	25	75
Marketing Advisor	Priv. Sector/APO	25	75
Extension Specialists (2 local)	Priv. Sector/APO	25	75
ADMIN SUPPORT			
MIS Specialist (local)	GOI/PIU	70	30
Accountant (local)	GOI/PIU	50	50
Training/T.A.Coordinator (local)	GOI/PIU	75	25
Clerical/Drivers (local)	GOI + APO	40	60

(A) Long-term TA ($5.390 million)

The umbrella contractor will field a seven person long-term TA team, consisting of four expatriate and three local-hire positions. This team will provide a total of 35 person/years of TA. In addition, the umbrella contractor will hire locally full-time a Management Information Systems Specialist, an Accountant, and a Training/Short Term TA Coordinator.

The expatriate Senior Agribusiness Policy Advisor will also serve as the TA team's Chief of Party (COP) on all matters relating to the overall policies and procedures for ADP technical assistance. The Policy Advisor/COP will coordinate work among all TA team members and ensure that the Project's public and private sector programs are carried out

in an integrated fashion. This person will also coordinate ADP's policy strategy and approach by working closely with the various DGs of the MOA and MOI, other GOI ministries, and BAPPENAS. Responsibilities will include managing the drafting of terms of reference for in-depth policy studies, and drafting action plans for achieving agri-business policy targets.

The locally-hired, possibly expatriate Project Administrator, working under the policy guidance of the Senior Agribusiness Policy Advisor, will handle all matters related to general project administration, ensuring compliance with USAID and GOI procedures, as applicable. Principal duties will include establishing a Management Information System (MIS) for the Project and coordination and management of short-term TA, training and support to private agribusiness organizations.

The expatriate Agribusiness Organizations Advisor will work with targeted agribusiness associations to develop their overall program goals, action plans and services for clients/members. This person will conduct program and training needs assessments of the organizations, formulate work plans, assist in the implementation of those plans, and provide formal and on-the-job training. In addition, this person will coordinate the Agribusiness Development inputs described in Section 2.1.3.4.

The expatriate Agroprocessing Advisor, working closely with the Agribusiness Organizations Advisor, will identify solutions to private sector agroprocessing constraints concerned with production, processing and packaging and arrange and/or conduct short-term training. This advisor will also be an important resource in identifying potential U.S.-Indonesian agribusiness trade and investment linkages.

The expatriate Agribusiness Marketing Advisor, also working closely with the above two advisors, will work with not-for-profit agribusiness associations in developing effective marketing strategies and plans for their products. Similar to the Agroprocessing Advisor, this person will be an important resource in identifying potential U.S.-Indonesian agribusiness trade and investment linkages. S/he will also conduct and participate in workshops and seminars.

The two local-hire Agribusiness Extension Specialists will work closely with the above expatriate advisors in providing outreach services to private sector agribusiness organizations and firms. These team members will provide the nucleus of ADP's private sector assistance and will initially support private agribusiness organizations in Jakarta, Surabaya (East Java) and Ujung Pandang (South Sulawesi). Additional agribusiness extension positions may be added later in the life-of-project if necessary. Formal and on-the-job training will be an important part of their efforts.

(B) Short-Term TA ($2.2 million)

The prime contractor will also be responsible for providing or sub-contracting for

expatriate and local short-term technical assistance to both GOI counterpart ministries and private sector agribusiness organizations. However, up to $700,000 will be utilized outside the prime contract to permit USAID to contract directly for support using, for example, "buy-in" or Indefinite Quantity Contract mechanisms. This set-aside will also be used to finance "bridging TA" which will allow Project implementation activities to begin before the prime contractor is selected and mobilized. Approximately forty person/months per year each of expatriate and local short-term TA will be provided, totaling 220 person/months for the life-of-project. Such short-term technical assistance will offer a flexible mechanism for providing specialized TA as needs arise.

Private sector organizations are likely to receive substantial short-term TA which will strengthen their ability to assist their members with production, post-harvest handling and packing, cold storage, processing, transportation, product standards, packaging, and marketing. GOI counterpart ministries will also use short-term TA to help carry out training agribusiness studies (e.g. commercial law and international trade) or market promotion activities.

To ensure compliance with A.I.D. environmental regulations and encourage the development of environmentally-sound agribusiness, short-term environmental-related TA will be provided. This will include TA and appropriate training in environmental assessment procedures, including assessing environmental impacts and monitoring environmental mitigations as appropriate. Short-term TA and appropriate training that incorporates in-plant pollution prevention programs may also be provided. Pollution prevention TA and training will improve process efficiency and profitability while also reducing pollution. Examples are improved packaging operations, intermediate product recovery and reuse, water reuse, reduction of raw material and product losses from spills and poor personnel training.

(C) Administration and Logistics ($1.472 million)

Administrative and logistical costs associated with the TA contractor's implementation of ADP include: (1) Local-hire Administrative Staff; and (2) Travel for Long-term TA and Administrative Staff.

(1) Local-hire Administrative Support Staff The contractor will be responsible for hiring the following Project support staff: a Project Management Information System Specialist, a Project Accountant, a Training and Short-term TA Coordinator, and Clerical Staff and Drivers (as required).

(2) Travel for Long-term TA and Administrative Staff The contractor will administer in-country and international travel funds which will support long-term TA and administrative staff project-related travel.

2.1.3.2 Short-term Training (3 months or less)

Short-term agribusiness training (1141 person/months total) courses, both formal and informal, will be provided to GOI agribusiness staff and private sector participants through the TA contract. No long-term participant training is planned. Annual training plans will be prepared in the Project Implementation Unit (PIU). The selection of trainees will be carried out by Project staff in the PIU, based on guidelines to be established by the Project Steering Committee. To the maximum extent possible, training courses will include both public and private sector trainees. Fees may be charged to help defray training costs. An effort will be made to target at least 40 percent of training for the private sector and 30 percent of training for both public and private sector women, including women in influential management positions. Training will be: (A) In-country; (B) Regional (third-country); and, (C) U.S.-based. All third-country training will be carried out in accordance with Chapter 8, Handbook 10, and required A.I.D./W approval will be obtained for any training in non-code 941 countries.

In addition, approximately 26 percent of the work of the long term TA will be in the form of training, and 36 percent of the work of short term TA will be training. This training assistance alone is valued at approximately $1.3 million.

(A) In-country Training ($1.320 million)

660 person/months of formal and informal in-country training courses will be coordinated and implemented by the PIU. Possible courses include but are not limited to public sector management and program development, policy analysis, agribusiness sub-sector overviews, research and development methodology, international marketing, grades and standards, phyto-sanitary procedures, post-harvest technology, packaging, and management information systems. More applied training courses will focus on agribusiness management aspects of production, processing and marketing. Training may include on-sight training and combinations of training and T.A. The prime TA contractor may provide short-term TA in the form of trainers and instructors, and will cover other training expenses such as facilities, training materials, etc. The GOI will be expected to pay per diem and travel expenses of GOI employees as part of their 25 percent contribution to the Project.

(B) Regional Training ($0.660 million)

264 person/months of regional (e.g. ASEAN) agribusiness training courses are planned. The TA contractor will be responsible for administering this element (preparation of PIO/Ps, etc.), based on selection decisions made by the PIU. Funds will be provided for travel, per diem and course fees. Training may include site visits and participation in events such as symposia, workshops and trade fairs. While it is A.I.D. policy to encourage overseas training in the U.S., there will be cases where regional training will have a greater developmental value and be more cost effective. Consistent with A.I.D.

policy, ADP will not fund, except on an exception basis, training in countries which are also donors to Indonesia's development programs or to countries not included in A.I.D. Geographic Code 941.

(C) U.S. Training ($0.825 million)

217 person months of agribusiness training courses are planned in the U.S. Training may include site visits, and participation in events such as symposia, workshops and trade fairs. The TA contractor will also be responsible for administering this element (preparation of PIO/Ps, etc.), based on selection decisions made by the Steering Committee. Funds will be provided for travel, per diem and course fees.

2.1.3.3 Agribusiness Studies

Elements in this line item include: (A) Agribusiness Studies; (B) Study Tours; and, (C) Workshops and Seminars.

(A) Policy Studies ($1.750 million)

USAID will fund agribusiness policy studies of less than 18 months duration. These studies will average about $87,500 each and not exceed $100,000 per study. Implementation of these studies will be carried out in accordance with USAID/Indonesia policies on the use of Indonesian government agencies in implementing A.I.D. projects.

The prime contractor and the PIU will develop the terms of reference for this work. Funds for the studies will be included in the prime contract.

(B) Study Tours ($0.750 million)

Approximately three overseas study tours in support of ADP objectives (e.g. market promotion, trade shows) are planned per year, and will include both public and private sector representatives. The TA contractor will be responsible for administering and implementing study tours, based on selection decisions made by the PIU. USAID, through the TA contractor, will fund all per diem expenses, but only the U.S. portion of airfares, for study tour participants and expenses related to study tour logistics overseas. Fees may be charged to private sector participants to help defray costs of such study tours (See Section 4.5).

(C) Workshops and Seminars ($0.550 million)

USAID and the GOI will fund jointly at least two workshops or seminars per year. Such workshops or seminars will be related to ADP objectives (e.g. presentation of the results of agribusiness policy studies, agribusiness trade and investment seminars, or trade

shows). Private sector participation in and/or funding for such workshops and seminars will be encouraged.

The prime contractor will fund and administer the U.S. grant portion of these workshops and seminars. Participant fees may be charged to help defray costs of such workshops/seminars (See Section 4.5). Per diem and travel expenses of GOI employees will be the responsibility of the GOI.

2.1.3.4 Private Sector Agribusiness Support

This line item includes two elements: (A) Not-for-Profit Association Assistance; and (B) Agribusiness Promotion Office(s).

(A) Not-for-Profit Association Strengthening Assistance ($1.500 million)

Both USAID and the GOI agree on the importance of strengthening not-for-profit agribusiness associations. However, a Condition Precedent (see Section 5.1) to disbursement of this $1.5 million component is AID/GOI agreement on procedures for administering and implementing this support.

ADP's Private Sector Agribusiness Support activities will provide a flexible mechanism for the delivery of intermediary agribusiness services, through private sector not-for-profit agribusiness organizations that have a broad membership of agribusiness entrepreneurs and firms (See Section 2.2.2.2). USAID recommends that during the initial years of the Project, Project and USAID staff prepare individual workscopes and PIO/Ts for contracts that would provide institutional strengthening assistance to not-for-profit agribusiness associations. However, this funding mechanism tends to be USAID management intensive; and thus not ideal. Therefore, Project and USAID staff would also explore the use of cooperative agreements with select U.S.-based not-for-profit agribusiness, related organizations. Once Indonesian associations are organized well enough to pass USAID's financial and management criteria (probably not until years 3-6 of this Project), USAID and Project Administrative staff will consider providing them with organizational strengthening grants.

USAID further recommends that these not-for-profit organizations be identified through a solicitations of interest process that advertises the availability of funding for the stated purpose and invites interested organizations to submit an application to the Agribusiness Promotion Office (APO) for onward transmission to USAID. Each application would be evaluated and ranked by USAID, the PIU and TA team representatives against clearly defined criteria that include cost sharing, innovation, and potential contributions to increased production and sales of agribusiness products. More specific criteria are shown in Annex K.

Organizations successfully evaluated on the basis of the above criteria would be required to submit a fully defined grant proposal to USAID detailing how grant funds will used for agribusiness promotion activities. The TA contractor would provide short-term technical assistance to assist in the review of proposed assistance activities as well as actual proposals. Within U.S. legislative restrictions, grant funds may be utilized for organizational strengthening, feasibility studies, specific technical assistance, pilot production, promotion and marketing activities, or other activities in support of ADP objectives. No USAID grant funds may be used by grant recipients for fund-raising purposes. The total number of grant recipients would be limited to no more than ten over the life-of-project.

Based on the recommendations of the PIU, final evaluation and approval of grant proposals would be carried out by USAID. Grants and Cooperative Agreements would be administered by the USAID Office of Contract Management, with technical monitoring provided by the USAID Project Officer and the TA team.

(B) Agribusiness Promotion Offices ($1.026 million) In order to facilitate communication with the private sector, an Agribusiness Promotion Office (APO) will be established in Jakarta. The APO will be sponsored by the MOA and supported by USAID via the prime TA contractor. Along with their counterparts from the MOA, three TA staff, as well as administrative support personnel will be located in this office. They will provide technical assistance, trade and market information, and technical/management information to trade/producer association and investors/ businessmen involved in or interested in agribusiness. While the GOI/MOA will make every attempt to provide suitable office space, funds will be included in the technical assistance contract for office rent, telephone/utilities and expendable office supplies. It is anticipated that two additional APOs will be established during Year 2 of the project outside of Jakarta.

2.1.3.5 Other

(A) Vehicles ($.090 million)

A maximum of six project vehicles (mini-buses) will be procured locally by USAID during the life-of-project. Vehicles will be assigned to Project staff at the Project Implementation Unit and Agribusiness Promotion Offices (APOs), based on demonstrated needs.

(B) Computers and Office Equipment ($.175 million) The contractor will be responsible for procuring necessary computer hardware/software and office equipment (furniture, filing cabinets, fax machines, etc.) for the APO(s) and, as required, for the Project Implementation Unit (PIU) in the Ministry of Agriculture. More detailed information is shown in Annexes B and O.

(C) Evaluation ($.300 million)

Mid-term and final evaluations of the Project will be carried out (see Sections 3.2.3.1 and 3.2.3.2). A progress evaluation will be carried out at the end of the first year of the project to identify problems in start-up and recommend appropriate remedies. Per Mission policy, evaluations will be carried out by 8(A) firms.

(D) Audit ($.100 million)

It is anticipated that Financial and Compliance Audits of ADP activities will be carried out twice during the life-of-project. Audits will be implemented under the direct control and supervision of the A.I.D. Regional Inspector General.

(E) Inflation and Contingencies ($1.892 million)

USAID will budget for both inflation and contingencies at approximately 10 per cent of Project costs.

2.1.4 Project Inputs (GOI and private sector funded)

Inputs to the Project provided by the GOI and the participating Indonesian private sector trade/producer associations will include: (1) Project staff and logistic support for technical assistance staff; (2) funds, staff and facilities for in-country workshops, training programs and policy study planning, management and implementation; (3) travel and per diem for short-term training outside Indonesia; (4) matching funds for trade/producer association assistance; and (5) funds from parastatal profits for small agribusiness development. A summary of inputs for the Project is shown in Table 3.

2.1.4.1 Project Staff and Logistical Support for the Technical Assistance Staff ($1,050,000)

The GOI and the Indonesian private sector will provide equal amounts of "in-kind" staff, local transportation, and office facilities for the 35 person-years of long-term TA and 220 person-months of short-term TA.

2.1.4.2 Funds, Staff and Facilities

(A) In-Country Workshops and Training Programs ($800,000)

To support in-country workshop and training programs, funding will be provided by the GOI and participating private sector organizations for non-U.S. travel and per diem. 660 person-months of formal and informal in-country training will be provided in equal amounts between the public and private sectors. Also to be provided are staff to plan

and conduct training programs/workshops, facilities where the training can be conducted and personnel for training.

(B) Policy Studies ($100,000), Study Tours ($700,000), and Workshops/Seminars ($400,000)

The GOI will provide "in-kind" staff and facilities to help prepare the terms of reference for 20 studies. The GOI staff will also help manage the studies and evaluate the results. For additional information about the 25 study-tours and the 11 workshops/seminars, please see section 2.1.3.2.

2.1.4.3 Travel/Per Diem Outside Indonesia ($592,000)

The Government of Indonesia will contribute the cost of international airfares for all travel of GOI personnel outside of Indonesia on activities related to the Project. The private sector will contribute the cost of international airfares for all private sector participants. USAID will reimburse allowable per diem and expenses for GOI personnel outside Indonesia. USAID will reimburse the cost of domestic airfares for GOI personnel within the United States. USAID will reimburse part of the cost of allowable per diem and expenses for private sector participants outside Indonesia, on a sliding scale, based on ability to pay. It is expected that of the 264 person-months of "Regional Training", and the 217 person-months of U.S. training, public sector personnel will utilize approximately 60 percent of the available slots and the private sector participants will utilize approximately 40 percent.

2.1.4.4 Matching Funds for Trade/Producers Association Assistance ($1,000,000)

The private sector will provide "in-kind" and cash contributions in order to match the $1.5 million that is budgeted from USAID's Funds. See Section 2.2.2 for details of how these funds will be used.

2.1.4.5 GOI Agribusiness Programs ($2,000,000)

A limited percentage of the profits from selected agricultural parastatals will be used to strengthen small agribusinesses. Of these funds, approximately $2 million will support programs such as the Bapak-Angkat Program, the plasm-nucleus estate system, and other rural-based programs which link agricultural producers with processors and marketers. The Project's role will essentially be to identify opportunities for use of these $2 million which the GOI has heretofore had difficulty using effectively. The remaining $1 million will support the Agribusiness Promotion Office's efforts, including the opening of two branch offices (see 2.2.1.4 and 2.2.3.4.).

Table 3
Summary Illustrative Financial Inputs
(US$000)

LINE ITEM	USAID	GOI 1/	PRIVATE SECTOR 1/
1. TECHNICAL ASSISTANCE	**9,062**	**525**	**525**
A. Long-term TA	5,390	}375	}375
B. Short-term TA	2,200		
C. Administration and Logistics	1,472	150	150
2. SHORT-TERM TRAINING	**2,805**	**792**	**600**
A. In-country	1,320	400	400
B. Regional	660	132	100
C. U.S.	825	260	100
3. AGRIBUSINESS STUDIES	**3,050**	**850**	**350**
A. Policy Studies	1,750	100	
B. Study Tours	750	500	200
C. Workshops and Seminars	550	250	150
4. AGRIBUSINESS SUPPORT	**2,526**	**3,000 3/**	**1,000**
A. Trade/Producer Association Assistance	1,500		1,000
B. Agribusiness Promotion Office	1,026	1,000 2/	
C. Agribusiness Programs		2,000	
5. OTHER	**2,557**		
A. Vehicles	90		
B. Commodities	175		
C. Evaluation	300		
D. Audit	100		
E. Inflation and Contingencies	1,892		
TOTAL	**20,000**	**5,167**	**2,475**

1/ Both Cash and In-Kind Inputs
2/ In addition to this $1 million, additional support is included under the Technical Assistance
3/ This amount will come from profits, generated by government-owned parastatal organizations, which are to be used to assist in the development of small businesses.

2.2 Project Description

In order to help Indonesia seize agribusiness opportunities, and respond to the problems previously cited, this Project incorporates both a public and a private sector component. The complementary relationship between the public and private sector components in the Project mirror the realities of current-day Indonesia, where the government plays a major role in what are, in other economies, private sector decisions. ADP will encourage a better balance between the two sectors by supporting the current climate of deregulation. ADP will promote agribusiness development through policy/regulatory reform specific to the agribusiness sub-sector, improved implementation of GOI agribusiness programs, and support to private sector agribusiness organizations.

2.2.1 Public Sector Component

The GOI promotes agribusiness development in three main ways. First, it sets the policies and regulations. Second, it encourages private sector activities, essentially by providing information (e.g. research and development, market information, market intelligence, market penetration, etc.). Third, the GOI implements its own production, processing and distribution programs (mainly through state-owned enterprises). The ADP will help all three components, but the emphasis will be on the first and second functions.

2.2.1.1 Initial Policy Agenda

BAPPENAS chaired inter-Ministerial and private sector meetings to discuss ideas for inclusion in the initial policy and regulatory agenda. The MOA refined many of the ideas put forward. The policy negotiation and approval process afforded an excellent opportunity to reach consensus among a number of ministries, and pushed forward new policies that will facilitate future agribusiness development.

This Initial Policy Agenda will, at the outset, provide overall guidance to the Project. It will define for the TA team the topics of policy-related analyses that it should manage, as well as the communication linkages that it should foster. The Initial Policy Agenda is summarized below:

Policy Objective 1

Diversify Agricultural Production Taking Advantage of Regional Comparative Advantage and Promoting Development of Related Agro-industries

Sub-objectives :

1. Allow Farmers to Benefit from Existing Comparative Advantage by Permitting Farmers to Freely Choose from among the Production Alternatives Available to Them.

2. Make the NES Program in Horticulture More Attractive to Private Companies.

3. Remove Unnecessary Restrictions on Importation of Planting Materials and Promote their Domestic Production.

4. Improve Food Quality Control.

Policy Objective 2.

Improve Coordination Between the Ministries of Agriculture and Industry to Better Promote Agribusiness Development

Sub-Objectives :

1. Improve Staff Quality in MOA and MOI.

2. Make MOA/MOI More Capable of Meeting Emerging Demands for Agribusiness Development.

3. Synchronize Agriculture with Agro-processing.

4. Improve Research and Extension for Agribusiness Crops.

Policy Objective 3

Promote Agribusiness Associations as a Means of Promoting Private Sector Agribusiness Development

Sub-Objectives :

1. Modify Rules Governing Business Associations to Enable Them to Promote Effectively the Export of their Products.

2. Remove Restrictions which Inhibit Closer Working Relationships between the Private Sector and the Government.

Policy Objective 4
Improve the Overall Financial and Investment Climate for Agribusiness
Sub-Objectives :

1. Ease Restrictions on Collateral Requirements for Agricultural Lending.

2. Review and Remove Agricultural Investment Options from BKPM's "Negative List".

3. Improve the Investment Climate for both Domestic and Foreign Investors.

4. Explore the Viability of Crop Insurance.

Policy Objective 5
Enhance the Bargaining Position of Small-scale Agribusinesses through Cooperatives

Policy Objective 6
Re-prioritize Government Expenditures so that Services that are Essential and Yield High Returns are Covered
Sub-Objectives:

1. Decrease the Subsidy Level to Fertilizer Distribution.

2. Promote off-Java Development by Improving Transportation Infrastructure.

3. Increase Civil Servant Salaries to Levels Commensurate with Private Sector Levels.

Policy Objective 7
Increase the Efficiency and Competitiveness of Agricultural Trade in Indonesia
Sub-Objectives:

1. Lower Import Tariffs and Surcharges on all Imported Products Including Agricultural Products, and Remove Special Tariff Exemptions, Except those Established under BAPEKSTA.

2. Actively Promote Agricultural Exports.

3. Reduce Trade Barriers on the Output of the Food-Processing Sub-sector.

4. Reduce Constraints and Procedures Associated with the Import or Export of Perishable Commodities.

5. Replace the Existing Allocation System of Import and Export Licenses by a Public Auction so as to Increase Government Revenues and to Improve the Efficiency of the Price Setting Mechanism.

6. Review the Current Duty Drawback Scheme to Encourage Participation from Smaller Manufacturers and Traders.

2.2.1.2 Monitoring and Analyzing Current Policies

Technical assistance staff under the Project will assist the GOI to :

- Monitor progress against the Policy Agenda;
- Catalog past and present policies, regulations decrees, provincial rules, and unwritten conditions that affect agribusiness;
- Improve the GOI institutional capacity to analyze the implications of current and proposed policies and regulations (e.g. commission and review policy studies which consider the costs/benefits and winners/losers of policy reforms, and make recommendations to senior decision-makers in the concerned ministries).
- Help prioritize policies and regulations that should be changed, and then examine alternative approaches that would eliminate or mitigate these constraints;
- Help the GOI prepare position papers for Indonesia policy-makers (at least 2 major ones per year on average);
- Improve GOI and non-governmental procedures that will assure that new policies and regulations are implemented.
- Encourage a process of input and feedback from the private sector and areas outside Jakarta on policy and regulatory changes that need to be made.

2.2.1.3. Generating Future Policy Agenda

The Initial Policy Agenda for the ADP will be revised annually. Criteria for selection of the future policy agenda are included in Annex C. The TA team will encourage and assist BAPPENAS in broadening participation in the process to include EKUIN, and

perhaps other ministries as well. These new agenda would also help to refocus Project studies.

These policy agenda are not an end in and of themselves, but rather an integral part of a continuous policy formulation and revision process. The ADP will support the promulgation of new agribusiness promotion policies, issued by national and regional agencies, after having receiving concepts, proposals and priorities from agribusiness organizations as well as other affected parties. As will be discussed in greater detail in Section 2.2.2, private sector organizations will be encouraged to monitor the effect of new policies on their own agribusinesses. The resulting information, collected by agribusiness organizations with Project assistance, will be fed back to GOI agencies.

2.2.1.4 Improving Operation of Public Sector Programs

The Minister of Agriculture announced in 1991 that, "It is the responsibility of the government and every institution concerned to develop market-oriented and commercial agriculture enterprises." This far-sighted statement essentially calls for substantial changes in how MOA offices operate. Created at a time when Indonesia did not produce enough staple grains for its population, many of these offices still define their success in terms of raw materials supplied, without much thought to the economic cost or what the market demands. This may have been a valid approach in the past, but now the challenge is to shift toward analysis of market demand and identification of how to maximize profit and increase incomes. To improve the operation of public sector programs in line with the Minister's challenge, the Project will modestly and judiciously assist the MOA and MOI to accomplish the following:

- Improve the operation of state-owned enterprises (SOEs) so that they can serve as models for how private sector companies can be more "socially beneficial" without sacrificing efficiency (note that the Indonesian Constitution identifies three agents of economic development- cooperatives, the private sector, and SOEs).

- Promote, monitor, and evaluate agribusiness activities which may serve as models for how to improve linkages between farmers and agribusiness entrepreneurs. This will include:

i) Analysis of how the Nucleus Estate Smallholder System can be modified to be more attractive to collaboration between plantations and small holders.

ii) Assessment of how to better utilize the "Foster Parent System" whereby 1%- 5% of the net profits of state-owned companies are set aside for development of small-scale industry, and 20 percent of bank credits are targeted to small-scale business.

iii) Assessment of marketing and processing options for the crops promoted under the Poverty Alleviation Program.

2.2.1.5 Improving GOI Support to Private Sector Agribusiness

In addition to providing modest assistance to the GOI to improve the operation of some of their public agribusiness programs, the ADP will encourage the Ministries of Agriculture and Industry to serve as facilitators and service providers to the private sector in a more open market setting. The ADP will work to:

- Develop options papers for the MOA and MOI on ways to support the private sector directly.
- Develop options papers on how to increase private sector support for public sector schemes such as the PIR and Bapak Angkat programs.
- Support the development of private agribusiness organizations so they are better able to assume functions previously undertaken by the public sector, but which can be more efficiently handled by the private sector.
- Encourage joint GOI-private sector agribusiness promotion activities.
- Develop case studies of how agribusinesses make the leap from low levels of production for the domestic market to the higher levels of quality and quantity that the foreign market requires.
- Develop improved communication between the public and private sector by undertaking joint studies and other activities which have their origin in the private sector.
- Identify and support private sector initiated schemes for intensive development of particular high value-added products.
- Improve and harmonize grades and standards for products and packaging.
- Improve market intelligence and penetration.

2.2.2 The Private Sector Component

2.2.2.1 Guiding Principles for ADP's Private Sector Component

The private sector component will use a strategy which has proven successful in other USAID-funded trade and investment projects worldwide. ADP's private sector component will be governed by the following lessons learned:

(1) Be pro-active in identifying agribusiness opportunities, based on market-driven opportunities and Indonesia's comparative advantage;

(2) Seek to demonstrate early success by selecting high growth potential agribusiness segments for support;

(3) Keep the scope of project activities relatively simple, but actively seek out small and medium-sized businesses and those owned/managed by women that typically have untapped potential;

(4) Provide enterprise-specific assistance to a limited number of enterprises, through agribusiness organizations, in a limited number of agribusiness segments;

(5) Build in enough project flexibility to permit changes in strategy and target group selection in keeping with a market-driven approach; and

(6) Develop excellent cooperation with other in-country agencies and institutions involved in export or trade and investment promotion.

(7) Accept risk and be ready to admit when something has not worked and quickly move in a more productive direction.

2.2.2.2 Targeting the Private Sector Component

The Project will provide assistance to private sector not-for-profit organizations or groups of firms, whose development is deemed by the Project to be important to the expansion of the agribusiness sub-sector in a manner that also responds to the needs of small-scale farmers and firms. Detailed selection criteria are presented in Annex K which emphasizes the importance of promoting equity along with growth. Potential Project counterparts include trade and producer associations and other non-profit organizations, such as associations of banks, private voluntary organizations, input suppliers, business service providers or groups of individual processors and exporters.

ADP will target selectively a few critical agribusiness product lines in which there will be a significant impact, establishing convincing processes and approaches for agribusiness development. Within each product line, particular products will be identified for promotion, based on market demand and feasibility of large volume production in Indonesia and compliance with U.S. legislative restrictions. Linkages will be sought to PIR, Bapak/Angkat or other GOI schemes which are sensitive to the needs for smallholder participation.

Two agribusiness product lines have been initially selected for emphasis, fisheries and horticulture. Selection criteria are described in Annex K. Once the Project is operational, this selection should again be reviewed to assure that the criteria remain valid. Other product lines such as livestock and estate crops will be added later as justified by available financial and manpower resources.

Within these two product lines, two agribusiness organizations are initial targets for assistance. Again, other organizations will be assisted later, once support to initially targeted organizations is running smoothly.

2.2.2.3 Detailed Description of Key Activities

Below is a detailed description of key activities.

- Strategic Planning Agribusiness organizations must think strategically. It is important that the modest capabilities of these emergent organizations not be dissipated. So that every activity is successful, it must respond to key needs of the private sector. The Project staff will help assisted organizations develop discrete activities which focus on key local and export products with strong market potential and which can be produced and processed in large volume.

- Development of Information Systems Agribusiness organizations must be able to access and disseminate effectively and efficiently key information on markets, technology, grades and standards, quality control, management systems and training methodologies is critical to the success of the agribusiness organizations. Business associations world-wide have as their primary function collecting, analyzing and disseminating information. The Project staff will assist the leadership of the organizations to determine information needs of their members and then help to identify and collect, analyze and find effective methods to disseminate this information. It will also help develop a means of responding to technical questions from members. In this regard, the Project team will help design and make operational a desktop publishing system in each assisted organization.

- Management Systems. Agribusiness organizations must be effectively and efficiently managed. ADP will assist selected organizations to enhance their

management capability. This will include developing ways of raising money to pay for service delivery. Further, they will learn how to disseminate management systems relevant to the particular products of their members. This will include, for instance, improved management systems for contract farming, or vertically integrated operations, production through marketing. Dissemination of management information is another key function of associations worldwide.

- Relations with Government. The Project will help improve the communications between the public and private sectors. As the economy is deregulated, agribusiness organizations must be able to provide useful input to the GOI on policy and regulatory reform. To be effective in this role, private agribusiness organizations must be able to collect and analyze constraints data. They must know their members problems and needs, and be able to communicate them convincingly. Organizations will be assisted to develop the capacity to analyze government policies and regulations. Studies will be carried out. Meetings will be held with organization members to determine their needs. Recommendations based on thorough studies will be passed to government. Public/private workshops will be organized to discuss the issues raised. Organizations will develop the capacity to monitor the effects of government decisions on an ongoing basis.

- Support of Smallholder Development Schemes Via backward linkages, the ADP will help small and medium-sized farms and agribusinesses. They will be linked to markets for high value products and reap the rewards in employment and higher income. The Project will work with the public and private sector to develop specific products and processes which will be introduced to smallholders through training and technical assistance. Organizational mechanisms, including contract farming, PIR, Bapak Angkat, etc., will be refined to mesh with the technical and market requirements of each product, to assure maximum return to smallholders.

- Training Systems Agribusiness organizations must be able to help train the personnel of their client firms. A skilled workforce is fundamental to Indonesia's role as an emerging industrial power. ADP will help agribusiness organizations develop training programs to upgrade continuously the private sector workforce. Appropriate training materials will be developed which incorporate state-of-the-art technical information adapted to local conditions. Such training materials will include both information about markets, as well as how to produce to the requisite grades, standards, and quality requirements. Although initiated by the private sector, universities and other existing training facilities, will need to be an integral part of the process. The Project will provide technical support to the development of comprehensive training programs responsive to the needs of each industry.

- Market Development Understanding domestic and foreign markets is crucial to the development of agroprocessing in Indonesia. Such knowledge is now lacking in Indonesia, and agribusiness organizations are a cost-effective means for developing the necessary knowledge. Selected organizations will be helped to develop quickly a thorough knowledge of key markets. This will involve periodic visits to the markets, participation in key trade shows, and assistance to buyers, equipment suppliers and others. On-going promotional campaigns will be organized which involve both the private and public sector. The Project will also develop a systematic approach to identifying opportunities in the domestic and international markets and other bilateral donors will be encouraged to help Indonesia develop linkages to their markets.

- Linkage with the U.S. ADP will foster linkages between agribusiness organizations in Indonesian and the United States. Joint activities with these associations may include: (1) participation in trade fairs; (2) exchange of market and technical information; (3) help by Indonesian associations to visiting representatives of companies in U.S. associations; (4) training of Indonesian association members in the U.S.; and (5) assistance by Indonesian associations in establishing a presence for U.S. associations in Indonesia.

2.2.3 Project Management and Implementation Responsibilities

2.2.3.1 The Institutional Home for the Project

BAPPENAS and the Ministries of Agriculture and Industry have agreed that the ADP will be managed by the Ministry of Agriculture. The Project will be under the direct guidance of the MOA's Secretary General.

The Ministry of Agriculture is an obvious home for the Project. Agribusiness is based upon agricultural products, and background studies for this Project have shown that sufficient supply of quality raw materials in a timely fashion is a major constraint. Also, the Junior Minister has expressed strong interest in the Project and support for the concept of creating an efficient and competitive agribusiness sub-sector (see Annex H). In addition, USAID has worked with the MOA for over three decades, and knows well the institutions and personalities involved (many were trained in the U.S.). Finally, the MOA knows USAID, its regulations and requirements, and can effectively administer the Project for the GOI.

Management and implementation units will include a Steering Committee, a Project Implementation Unit or Group (PIU), and Agribusiness Promotion Offices. Figure 4 illustrates ADP's overall administrative structure.

2.2.3.2 Project Steering Committee

The Project's Steering Committee will be chaired by the MOA's Secretary General. The Vice Chairman will be the MOI's Secretary General. The Secretary of the Steering Committee will be the Director of Bureau of Planning-MOA. The membership of the Steering Committee will include a representative from each of the following entities:

- BAPPENAS
- Bureau of Planning, MOI
- D.G. Food Crops
- D.G. Fisheries
- D.G. Livestock
- D.G. Estate Crops
- Bureau of International Cooperation-MOA
- USAID
- D.G. Multifarious Industry
- D.G. Small Scale Industry
- D.G. Domestic Trade, MOT
- NAFED, MOT
- PAIWC Secretariat
- Private sector
- Center for Agro Socio-Economic Research
- TA Team Leader

The SC will be responsible for overseeing project implementation. Other ministries that may be represented later include, Ekuin, Cooperatives, and Health. It will review and approve annual work plans and budgets for the project. In addition, the SC will also serve as a policy forum for discussion of agribusiness issues. As such it will coordinate formulation of agribusiness development policies.

2.2.3.3 Project Implementation Unit (PIU)

A Project Implementation Unit (PIU) will be formed under the direction of the Project Steering Committee. Plans to be implemented by the PIU will be approved by the Project Steering Committee. Overall coordination of project management and implementation functions will reside in the PIU. A Project Leader (Pimpro) from MOA will be appointed to head this unit. Other members of the PIU will include representatives from BOP/MOA, BOP/MOI, Directorates of Binus from D.G.s Food Crops, Fisheries, Estate Crops, Livestock, D.G.s Multifarious Industry and Small Scale Industry, USAID, and the TA Team. TA team advisors assigned to this unit will include the Senior Policy Advisor/Chief of Party and the Project Administrator.

The PIU will coordinate overall administrative and financial management functions for the Project. The PIU will develop annual work plans and budgets (covering both USAID and GOI contributions) for consideration and approval by the Steering Committee. On a monthly basis, or more often as required, the PIU will review and approve activities proposed by the Pimpro and the Team Leader. This will include implementation functions associated with the In-country Training, Policy Studies, and Workshops/seminars elements. Official project communications between USAID and the GOI will be through this Unit.

2.2.3.4 Agribusiness Promotion Office (APO)

An Agribusiness Promotion Office (APO), forming an operational link with the private sector, will be established on a test basis as part of the Project. In terms of overall policy and procedures, the APO staff will work under the direction of the PIU and, hence, the Steering Committee.

Initially, it will be staffed by three long-term TA team members along with local staff, including temporary assignments by GOI agribusiness staff who will continue to be employed by the GOI. This will enhance public- private sector linkages and provide "real world" business experience to GOI staff. The APO will use TA, training, workshops, seminars, and contracts (described below) to encourage the expansion of Indonesian agribusiness.

The APO will not be a new legal entity; rather it will be sponsored by the MOA and supported by USAID via the prime contractor. It is viewed as a means to an end (improved communication between the government and the private sector), not an end in itself that must be sustained as a separate institution. While it would be highly desirable if private sector organizations would loan staff to this Office, this is not realistic until the APO proves its worth. If this happens, then there is a possibility that the APO will become part of a self-financing foundation (or foundation-like entity) which promotes both domestic and foreign agribusiness linkages. This possibility will be explored during the later years of the life-of-project.

Support to agribusiness organizations will be coordinated from the APO e.g. technical assistance, and training, as well as possible grants and cooperative agreement elements of the Trade and Producers Association (see section 2.1.3.4(A) for details). Before assistance will be approved by the PIU (with general guidance from the Steering Committee), the TA contractor will ensure that both an institutional and accounting capacity are present in each organization in accordance with USAID requirements. The APO will also work closely with both the Foreign Commercial Service (FCS) and the Foreign Agricultural Service (FAS) to provide information to U.S. companies on agribusiness trade and investment opportunities in Indonesia.

During Year 2 of the Project, two more small APOs will be established outside of Jakarta, most probably in Surabaya and Ujung Pandang. These offices will report administratively to the Jakarta APO. Other APOs may be established in later years of the Project.

2.2.4 Legal Concerns

ADP activities, including those of the TA contractors, will comply with requirements concerning assistance for agricultural export promotion *vis-a-vis* the Bumpers and Lautenberg Amendments, A.I.D. Policy Determination Number 71 and other applicable

U.S. legislative provisions. ADP will not provide assistance to increase exports of Indonesian agricultural commodities to the U.S. or third-country markets which are likely to cause substantial injury to the competitive position of U.S. producers of the same, similar, or competing agricultural commodities. Nor will ADP provide assistance for agribusiness products such as palm oil, sugar and citrus per A.I.D. Policy Determination 71.

One of the requirements in selecting product lines and agribusiness organization for assistance will be a review and a determination that the proposed assistance would not violate U.S. legislative provisions (e.g. Bumpers, Lautenberg, FY 1991 Appropriation Act). The prime TA contractor will prepare materials for USAID's review and determination.

2.3 Summaries of Project Analyses

2.3.1 Institutional Analyses

In addition to the President, the GOI agencies with the most influence in agribusiness are: the Ministry of Trade (MOT); the National Planning Agency (BAPPENAS); the Ministry of Finance (MOF); the Ministry of Agriculture (MOA); and the Ministry of Industry (MOI). BAPPENAS plays a leading role in formulating long-term development strategies for the National Development Plans, in managing the annual development budget, and in programming donor assistance. BAPPENAS is also involved with analyses of agribusiness policy issues. The Ministry of Finance determines fiscal and monetary policy as well as influencing macro-economic policies, such as trade and management of state enterprises. The Ministry of Trade oversees the logistics and price stabilization of regulated commodities, plus licensing and inter-island trade; supports international trade export promotions and commercial services; and analyses market information to identify export markets and trends. The Ministry of Agriculture is responsible for all crop, fisheries and livestock development. The Ministry of Industry handles post harvest activities including licensing of enterprises, setting of product standards and general supervisors of individual activities.

AGRIBUSINESS DEVELOPMENT PROJECT (ADP)
ADMINISTRATIVE STRUCTURE

Public Sector

Private Sector

Min.of Agriculture | **PAIWC** | **Min.of Industry**

Agribusiness Development Project (ADP)

Project Steering Committee
- Secretary General/MOA, Chairman
- Secretary General/MOI, Vice Chairman
- Dir. BOP/MOA, Secretary

MEMBERS
- BAPPENAS
- BOP/MOI
- DG Domestic Trade, MOT
- NAFED, MOT
- Bureau of Int'l. Cooperation/MOA
- DG Food Crops
- DG Livestock
- DG Estate Crops
- DG Fisheries
- DG Small Scale Industry
- DG Multifarious Industry
- Head, PAIWC Secretariat
- Center for Agro Socio-Econ. Research
- USAID
- TA Team Leader
- Private Sector

USAID ----

Project Implementation Unit (PIU)

PIMPRO

- BOP/MOA
- BOP/MOI
- DG Food Crops
- DG Fisheries
- DG Small Scale Industry
- DG Multifarious Industry
- DG Estate Crops
- DG Livestock
- USAID
- TA Team

- Agri-Business Promotion Office (APO)

The Project focuses on expanding value added to agricultural products through processing and marketing. The Ministries of Agriculture and Industry are the GOI ministries most concerned and directly involved with the production and processing of agricultural commodities. These two Ministries are the ones targeted for initial Project support. See Annex J, the "Institutional Analysis", for more details.

2.3.2 Administrative Analyses

See Section 2.2.3, for a description of the planned administrative structure. With the assistance of technical advisors, it is agreed that this structure is suitable for administering the Project.

USAID/Jakarta will manage the U.S. resources being supplied to the Project by assigning one Project Officer, two Program Specialists, a secretary, as well as sufficient periodic support from the Finance and Contracts Office.

2.3.3 Economic Analyses

For ease of calculation, only those Project-generated exports from assistance to the horticultural and fisheries processing activities (the two areas selected for initial concentration) were included in the benefit stream. Of course, there will be other benefits from the Project, but export earnings are important to national development, and one readily available proxy for the impact of the Project.

The economic analysis indicates that the ADP has a high degree of economic soundness. Even if Project benefits are measured only in terms of export growth of horticulture and non-marine fisheries products, the "with/without" project analyses show that the net increase in the value of exports is $525 million for this $27 million project spanning six years. This is based on a total additional value of production of $1.7 billion, with $300 million in new investment. Later in the Project, additional economic benefits are expected to accrue from Project activities in the livestock or other sub-sectors. Also, economic benefits will accrue from policy reforms, training, strengthening of private agribusiness organizations, and changing the role of the public sector to facilitate more fully private sector activities. Given the strongly positive rate of return to this Project when only a few activities are quantified, expected benefits from these other activities were not quantified. Sensitivity analyses show that the Project's impact is only slightly subject to changes in assumed macro-economic rates of growth.

2.3.4 Social Analysis

The analysis indicates that this Project has a high degree of social soundness as evidenced by analysis according to the six dimensions of the SSA outlined in Handbook

3. The ADP provides initial "bridging" technical assistance to develop base-line impact-level data including disaggregation of beneficiaries by gender sex. The Steering Committee meets at least every six months and will review, among other things, new product-line initiatives and their implication for employment and income generation among the poorer members of society.

Beneficiaries As described in detail in the Institutional Analysis, this Project is targeted at one "niche" in the overall sector of agriculture and agribusiness. Other donors, and the GOI, are making major investments in other parts of the sector, e.g. in credit for agribusiness, development of raw materials, village level production, etc. This Project aims to promote agribusiness development throughout Indonesia, initially at the level of medium scale business, and, to the extent possible, with small scale businesses as well. It will do so by focussing on the two interlocking components of deregulation and privatization of decision-making in the government arena, and with private sector business organizations in the private sector. This two-pronged approach is based on the assumption that if agribusiness opportunities are opened up, a great number of individuals and families will indirectly benefit from the resulting incomes and jobs. The selection of fisheries and horticulture was made in part based on the assumption that interventions in these areas will realize significant indirect benefits for farmers and fishermen across the islands of Indonesia.

The direct beneficiaries of project activities will be the business people mainly involved in the private sector agribusiness organizations and public officials who deal with agricultural and related industrial policies and the regulatory framework. However, conservative estimates are that 100,000 jobs will be created indirectly by the Project in the horticulture and fisheries sectors alone, and that 60 percent of those jobs will be for women from low or medium income families. Indirectly, many more individuals and groups will benefit from the Project as an emphasis is placed on openness of information flows and membership, as well as freer competition in the marketplace. This is particularly true from the assistance the Project will provide to private agribusiness associations. Such assistance will be contingent upon their agreement to have open membership and to disseminate widely training opportunities and information resulting from seminars.

Both fisheries and horticulture are significant employers of females. Gender desegregated analysis will be carried out to ensure that women have equal access to benefits forthcoming from the Project, especially including the employment opportunities opened up by deregulation and membership in agribusiness organizations. The monitoring system of the project will also be used to ensure that women are not advisedly affected by project activities.

2.3.5 Technical Analysis

Various options for Project support *vis-a-vis* agribusiness segments (e.g. horticulture, fisheries, spices, vegetable oils, etc) and private sector organizations were analyzed. Commercial, economic, socio-economic, strategic, legal/A.I.D. Policy, and policy/regulatory criteria were used in selecting the product areas in which to begin. Criteria for selection of organizations to be assisted included commitment, openness, potential and current activities. It was concluded that Project impact would be maximized by focusing initially on no more than two organizations in two agribusiness segments. Assisting all segments simultaneously would result in dissipating the modest resources of the Project, with the probable result that there would be little short-term impact. The fisheries and horticulture segments were selected for initial Project emphasis. Based on these segments, two organizations were identified for possible initial Project support. A description of these two organizations is included in Annex E.

2.3.6 Financial Analysis

There are three financial aspects to this Project: the ability of the GOI to meet its life-of-project commitments, the ability of the private sector to provide the identified level of inputs and the post-project sustainability of activities supported. These aspects are examined below.

The expected GOI contribution to the Project consists of three elements: budgeted funds; in-kind contributions; and profits from parastatal companies. The budgeted amounts represent only a small percentage of the normal development budget of the MOA and MOI. In discussions with officials from the GOI, they have indicated that the specified amounts are within GOI budgetary capability. In-kind contributions consist largely of staff, office space and other items funded from the GOI's recurrent budget. This Project does not require an increase in this budget. The profits from agricultural parastatals total in excess of $100 million annually. The indicated input of roughly $500,000 annually amounts to a very small percentage of this total and is judged highly reasonable.

The expected private sector contributions to ADP are substantial. However, as the economic analysis indicates, the additional sales expected as a result of the Project make these amounts affordable to the companies concerned. With the Project providing valuable services to trade/producer organizations, these organizations will be able and willing to provide the level of financial input budgeted.

Regarding post-Project financial sustainability, two factors stand out. First, the Project is not seeking to build institutional infrastructure that will be expensive to maintain. On the contrary, the Project aims to improve the ability of existing GOI staff and organizations to provide needed services in support of additional private sector growth.

This does not cost more money and may cost less. Second, the intent is to avoid subsidizing activities in the private sector. It is anticipated there will be ample resources and incentives for private sector organizations continue to pay for activities that are valued. Those not value should not be continued.

2.3.7 Environmental Analysis

A categorical exclusion from A.I.D.'s Initial Environmental Examination, Environmental Assessment and Environmental Impact Statements was approved. This determination was in accordance with A.I.D. Regulation 16, Sections 216.2(c)(2)(1) which provides for a categorical exclusion when project activities will not have a direct impact on the environment.

To ensure compliance with A.I.D. environmental regulations, the following environmental activities will be included in the Project:

1. Environmental Technical Assistance and Training Short-term training and TA will be provided to public and private sector organizations assisted through ADP in environmental assessment procedures, including assessing environmental impacts and monitoring environmental mitigations as appropriate.

2. Pollution Prevention Short-term training and TA will be provided to private sector organizations assisted through ADP that incorporate in-plant pollution prevention controls and housekeeping/management programs. Pollution prevention training and TA will improve process efficiency and profitability while also reducing pollution. Examples are improved packaging operations, intermediate product recovery and reuse, water reuse, reduction of raw material and product losses from spills and poor personnel training.

3. PROJECT IMPLEMENTATION PLAN, MONITORING AND EVALUATION

3.1 Implementation Plan and Schedule

3.1.1 Key Activities for Year 1

After the Project Agreement (PROAG) is signed by the GOI and USAID, the GOI and USAID will exchange initial Project Implementation Letters (PILs) setting forth various administrative, legal and financial procedures for the Project. The GOI will approve the overall management and administrative structure for the Project (see Section 2.2.3) and officially designate the membership of the Steering Committee and the Project Implementation Unit, and will appoint the Project Leader (Pimpro). After establishing implementation policies and procedures, the PIU, with guidance from the Steering Committee, will plan initial project activities. The PIU will also coordinate the

formulation of the first Annual Work Plan and unified GOI budgets for activities to take place during IFY 1992/93.

The PIU will identify and establish regional agribusiness committees (probably initially in eastern Java and South Sulawesi), and accredit Technical Assistance to the BAPPEDAs and/or Kanwils for the Ministries of Agriculture and Industry. Initial agribusiness studies will also be identified.

The Scope of Work for the technical assistance contract will be finalized, cleared by the MOA/MOI, and incorporated into a Request for Proposals (RFP) issued by USAID. USAID, with MOA/MOI concurrence, may also contract for short-term "Bridging TA". This "Bridging TA" will assist with the early setup of various project management functions, planning for project activities and with implementation of initial public and private sector activities.

Upon receipt of the proposals in response to the RFP, a MOA/MOI and USAID evaluation panel will review and rank TA proposals for the TA contract. Selection of the TA contractor will be made and the TA team will be mobilized approximately by June, 1992.

As part of mobilization of the TA team, a Project Start-up Workshop is planned in Jakarta. Participants in the Start-up Workshop will include GOI representatives, representatives from the private sector agribusiness organizations to be supported, and USAID representatives. The purpose of this workshop will be to arrive at a clear understanding among participants of ADP's overall objectives, policies and procedures as set forth in the Project Paper and Project Agreement. It will enable the identifications of stakeholders in the project, their interests and actions necessary to facilitate participation and sustainability. The Workshop will also provide an opportunity to review the Project management and implementation plans as outlined in the Project Paper and to revise and update them as necessary. During the remainder of the first year, the TA contractor team will commence work in accordance with the work-plan, including preparation of a management information system.

Second year activities will include an increase in both the level and intensity of support to agribusiness organizations. In addition, intensive support of at least two additional agribusiness organizations will begin. The dates of key implementation actions are shown in Table 4.

3.1.2 Preparation of Annual Plans

The PIU will coordinate the preparation of Annual Work Plans (during the September - December period), which will be presented to the Project Steering Committee for review, modification and approval. These Plans will specify activities for each Project component for the upcoming year and funds required for these activities. Planning

meetings with cooperating private sector agribusiness organizations will be completed, and activity and funding schedules completed, prior to the submission of the Annual Plan to the Steering Committee.

For the DIP/DUP-funded public sector elements of the Project, the planning and budgeting procedures will be those, to the maximum extent possible, that the GOI uses to plan and implement its development activities. The ADP Steering Committee will review and endorse the plan to USAID for those activities requiring the earmarking and commitment of USAID funds, specifically project costs associated with the In-country Training, Agribusiness Studies and Workshops/Seminars elements. The final plans and budgets will be prepared between December and March and submitted with complete details of GOI and USAID contributions during March and April.

For private sector agribusiness activities funded under the prime TA contract, the Annual Work Plan will include major activities for support as well as any proposed grants to organizations.

Final budget approval decisions will be made by USAID. Plans involving the charging of fees must also be approved in advance by USAID.

Table 4: Dates of Key Implementation Actions

NO.	ACTION	DATE(S)
1.	Project Agreement Signed	Sept 1991
2.	GOI Project Staff Designated and Initial PILS Issued	Sept-Dec 1991
3.	RFP Issued for Umbrella TA Contract	Nov 1991
4.	Short-term bridging TA begins	Nov 1991
5.	Procedures for Preparing/Approving Annual Work and Financial Plans Established and 1992/93 Plan Drafted	Dec 1991
6.	Prime TA Contractor Proposals Reviewed	Jan-March 1992
7.	Initial Policy Studies Started	Feb 1992
8.	Prime TA Contract Awarded	March 1992
9.	TA Team Mobilized	June 1992
10.	Start-Up Workshop - Implementation Procedures Established	June 1992
11.	Agribusiness Promotion Office (APO) Established	June 1992
12.	Work-scopes Finalized for Assistance to Agribusiness Associations	June 1992
13.	Steering Committee Semi-Annual Review - 1993/94 Plan Established	June 1992
14.	Steering Committee Semi-Annual Review	Dec 1992
15.	Formal Review of Policy Agenda Progress and Revision	June 1993
16.	Two additional APOs established	June 1993
17.	Steering Committee Semi-Annual Review - 1994/95 Plan Established	June 1993
18.	Steering Committee Semi-Annual Review	Dec 1993
19.	Project Evaluation	Aug 1994
20.	Steering Committee Semi-Annual Review - 1994/95 Plan Established	Dec 1994
21.	Formal Review of Policy Agenda Progress and Revision	June 1995
22.	Steering Committee Semi-Annual Review	June 1995
23.	Steering Committee Semi-Annual Review - 1995/96 Plan Established	Dec 1995
24.	Steering Committee Semi-Annual Review	June 1996
25.	Steering Committee Semi-Annual Review - 1996/97 Plan Established	Dec 1996
26.	Steering Committee Semi-Annual Review	June 1997
27.	Final Evaluation	July 1997
28.	Project Assistance Completion Date	Sept 1997

3.2 Monitoring and Evaluation Plan

3.2.1 Monitoring of Implementation Progress

The Technical Assistance team will establish a Management Information System (MIS) to track Project implementation, financial information, benchmarks, socio-economic data and overall impact in terms of the project's stated objectives, for example, growth in incomes, employment, agribusiness production and exports. Socio-economic data to be tracked will include gender, and may include firm-size, rural versus urban, Java versus off-Java and small agricultural producers' concerns.

The Project will have a system of regular internal monitoring with periodic reports submitted to USAID and the GOI. Annual work plans will be prepared as described in the previous section. Quarterly Reports will be issued by the TA contractor and the PIU on the 15th day of the month following the end of the quarter. Their purpose is to keep the Project's participants well informed of ADP's progress toward its implementation and financial targets and to alert Project managers to implementation obstacles encountered and the proposed actions to overcome them. An Annual Report will be prepared in December each year for a formal review by the Steering Committee. During this annual review a careful assessment will be made of the achievement of logical framework targets. Thus the system will include three key reports: (1) Annual Work Plans, (2) Quarterly Reports, (with reimbursement requests to USAID for GOI-implemented activities), and (3) Annual Reports reviewing overall Project performance.

Insofar as possible, the Agribusiness Promotion Office will assist agribusiness organizations supported by the Project to develop information systems on members, activities, markets, investment, production, trade and exports. Such data will provide evidence of the impact of Project activities on the various dimensions of private sector agribusiness growth as mentioned above.

GOI and USAID project staff will periodically visit Project field sites and counterpart institutions and organizations working on ADP activities in order to monitor progress.

3.2.2 Indicative Benchmarks for Year 1

The following are the types of indicative benchmarks to be used for measuring ADP's performance during Year 1. Additional benchmarks for future years for the Project will be developed as part of the annual planning process.

By the end of 1992

- Complete Technical Assistance team is in place and carrying out Project activities.
- Monitoring and information system is established.

- At least two policy analyses of national relevance are carried out under the supervision of the Secretary General's Office.

- At least one jointly-implemented public-private sector agribusiness promotion activity is completed.

- Policy Agenda benchmarks for Year 1 are achieved.

- The Agribusiness Promotion Office is operational and providing assistance to five agribusiness organizations.

- Real increases in production and sales of agribusiness products take place, which are directly attributable to ADP assistance.

- Project assistance to agribusiness organizations results in participation in at least three international trade shows, short-term training for at least 50 member firms, and intermediary services which result in sales of at least $10 million of U.S. agribusiness goods and services to Indonesia.

3.2.3 Mid-term Evaluation

An external mid-term evaluation will be carried out during the ADP's third year of implementation. It will be contracted under 8(A) procedures by USAID and will include a team of expatriate and Indonesian consultants.

This evaluation will focus on the progress of the Project against the logical framework targets (Annex I). This evaluation should set Project goals and purposes against the delivery of inputs, the attainment of outputs to date, and the performance of Project implementors: the TA contractor, GOI institutions and private sector agribusiness organizations. The evaluators should also measure progress towards achieving the Project's Policy Agenda benchmarks. The mid-term evaluation should also include recommendations to project management on improving implementation.

3.2.4 Final Evaluation

An external final evaluation of the Project will be carried out during the Project's final year (Year 6) of implementation. It will be contracted under 8(A) procedures by USAID and will include a team of expatriate and Indonesian consultants. This evaluation will document ADP's End of Project Status (EOPS) and will identify "Lessons Learned." It will include any recommendations for future assistance and should also examine the question of the Project's Project Activity Completion Date (PACD) to determine whether an extension should be considered.

4. PROJECT FINANCIAL PLAN

4.1 Cost Estimates

The total cost of ADP is US $27.6 million. This consists of $20 million in USAID grant assistance (72% of total project) and $7.6 million in host country cash and in-kind contributions (28% of total project). USAID's grant funds are divided into $16.38 million foreign exchange (FX) and $3.62 in local currency (LC). Host country LC and in-kind contributions consist of an estimated $5.167 million in GOI funds and $2.475 million from private sector agribusiness organizations. Cost estimates are summarized in Table 5. A more detailed summary of cost estimates and their calculation is presented in Annex B2.

4.2 Planned Obligations and Expenditure Projections

USAID expects to obligate $3.306 million in FY 1991. Subsequent USAID obligations will follow incrementally by fiscal year as required, subject to the availability of funds and mutual agreement of USAID and GOI to proceed with the Project as planned. Sufficient funds will be obligated each year to cover anticipated expenditures. GOI funds will be obligated through annual development plans and budgets (DIPs). Planned obligations are shown in Annex B.

4.3 Methods of Project Financing

The Project will finance project components by two methods, direct payment by USAID (through the umbrella TA contract or other mechanisms such as Grants, Cooperative Agreements IQC, PIOs, buy-ins, etc.), and direct payment by the GOI and the private sector. Financing methods by line-item are summarized in Table 6. For a detailed description of grant or contract funding to private agribusiness organizations, see Section 2.1.3.4.

4.3.1 Direct Payment by USAID

Project costs will be directly paid by USAID by means of the TA contract or other USAID direct payment methods.

4.3.1.1 TA Contract (Umbrella Contract)

The umbrella TA contract will be financed by USAID in foreign currency. The contract will include costs for the following line-items and/or elements: Technical Assistance, including Long- and Short-term TA, and Admin./Logistics; Regional and U.S. Training; Agribusiness Promotion Office; Other Commodities; and Study Tours.

4.3.2 Other USAID Direct Payment Methods

Early in the life-of-project, USAID may contract directly (PIO/Ts, Purchase Orders, etc.) with firms and/or individuals for Bridging TA. USAID will also contract directly for short-term TA using "buy-in" or IQCs mechanisms (see 2.1.3). It is anticipated that the Agribusiness Promotion line item will be administered by USAID under Handbook 11 for contracts and Handbook 13 for grants. USAID will directly procure Project vehicles. Evaluation and audit services will be procured by means of an IQC.

4.4 Government of Indonesia Contributions

The GOI is expected to contribute $4.342 million in local currency and $.825 million in-kind to finance TA, Personnel, Administration and Logistics, In-Country Training, Agribusiness Studies, Workshops/Seminars, and related GOI-funded agribusiness programs (e.g. smallholders' development program). The Annual Plans for the Project will contain the detailed breakdown of these costs, clearly delineating between USAID and GOI contributions. The breakdown of GOI DIP/DUP requests by concerned D.G. will be determined during the initial planning phase of the Project.

The GOI is expected to share the operating costs for managing and monitoring project implementation. These will include all salaries, honoraria, per diem and local travel costs of all GOI officials assigned to or involved in implementing and managing the Project. The GOI will also pay for airfare outside the U.S. for all GOI sponsored participants in workshops, trade shows, or study tours. USAID will pay other related costs (such as allowable expenses, per diem, and travel within the U.S.).

The GOI will provide administrative support for the Steering Committee and the PIU. The GOI will also finance office space for technical advisors located in the GOI implementing agencies and operating costs for electricity and communications. It is USAID policy not to compensate host country officials for project implementation activities.

4.5 Private Sector Agribusiness Organization Contributions

Agribusiness organizations supported through the Project are expected to provide contributions totaling $1.350 million in local currency and $1.125 million in-kind. These organizations will provide personnel for ADP activities and will make office space available on an "as-needed" basis for long-term and short-term TA consultants. These organizations will also use their own funds to jointly finance specific activities in the ADP's agribusiness promotion program. These funds will be maintained in a special account by each organization. The occasion may arise when agribusiness organizations wish to transfer some of these funds to a special ADP Project account so that they are readily available for activities that transcend any one organization.

Table 5
Summary Cost Estimate
Agribusiness Development Project
(in US$ 000)

	EST. LIFE-OF-PROJECT CONTRIBUTION								
LINE ITEM	USAID		GOI			PRIVATE SECTOR ORGS.			
	FX	LC	FX	LC	IN-K	FX	LC	IN-K	TOTALS
1. TECH. ASSIST. (TA)									
A. Long-term TA	5,390				275			275	5,940
B. Short-term TA	2,200				100			100	2,400
C. Admin. & Logistics	1,472				150			150	1,772
2. TRAINING									
A. In-country		1,320		300	100		300	100	2,120
B. Regional	660			132			100		892
C. U.S.	825			260			100		1,185
3. AGRIBUS. STUDIES									
A. Policy Studies		1,750			100				1,850
B. Study Tours	750			500			200		1,450
C. Wrkshops/seminars		550		150	100		150		950
4. AGRIB. PROMOTION									
A. Trade/Prod. Assoc.	1,500						500	500	2,500
B. Agrib. Promotion Office	1,026			1,000*					2,026
C. GOI Agrib. Prgms.				2,000*					2,000
5. OTHER									
A. Vehicles	90								90
B. Other Commodities	175								175
C. Evaluation	300								300
D. Audit	100								100
E. Infl./Contingency	1,892								1,892
TOTALS:	16,380	3,620		4,342	825		1,350	1,125	27,642

USAID = 72% GOI = 19% PRISEC = 9%

NOTE: FX = foreign exchange; LC = local currency; IN-K = in-kind

* This amount will come from profits, generated by government-owned parastatal organizations, which are to be used to assist in the development of small businesses.

In addition, private sector participants may be charged fees to defray the costs of training and seminars. Such fees will be considered as part of the host-country and/or private sector contribution to the Project. Any surplus funds must be placed in special accounts and used exclusively for Project-related activities. Funds generated from the private sector can only be used for activities agreed upon in writing by the organizations concerned, the Project PIMPRO and USAID. A special and distinct account will be maintained by the Project for funds generated from entities other than USAID and the GOI. These funds will not be mingled with funds derived from the USAID grant or from the GOI.

5. CONDITIONS AND COVENANTS

5.1 Conditions Precedent to Disbursement

5.1.1 First Disbursement. Prior to the first disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., a statement of the names of the persons holding or acting in the office of the Grantee specified in Section 8.2, and of any additional representatives, together with a specimen signature of each person specified in such statement.

5.1.2 For Project Activities other than Technical Assistance. Prior to disbursement under the Grant for any purpose other than technical assistance, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made with respect thereto, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., written evidence of the establishment of the Project Steering Committee and the Project Implementation Unit. This documentation will include a description of the structure, staffing and responsibilities of each of these two units.

5.1.3 For Activities Implemented by the Ministry of Agriculture and the Ministry of Industry in Project Years Beginning April 1, 1992. Prior to the disbursement of funds under the Grant for activities to be implemented by the Ministry of Agriculture and the Ministry of Industry in each year of the Project starting on April 1, 1992, and thereafter, or to the issuance of documentation pursuant to which disbursement will be made with respect thereto, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., an annual work plan and budget covering both Grantee and A.I.D. contributions to the activities for that year.

Table 6
Summary Methods of USAID and GOI Financing and Procurement

LINE ITEM	FINANCING (US $000)			EXEC. AGENCY	PROCUREMENT METHOD		USAID DOCUMENTS	
	USAID	GOI[1]	TYPE		PRIMARY	SEC.	EAR.	COM.
1. TECH ASSIST (TA)								
A. Long-term TA	5,390	275	UDP	USAID	UC	SC	PIO/T	C
B. Short-term TA	2,200	100	UDP	USAID	UC,DC	SC	PIO/T	C
C. Admin/logistics	1,472	150	UDP	USAID	UC	SC	PIO/T	C
2. TRAINING								
A. In-country	1,320	400	UDP,IDP	USAID,GOI	UC,DIP	-	PIL	PIL
B. Regional	660	132	UDP,IDP	USAID,GOI	UC,DIP	SC	PIO/T	UC
C. U.S.	825	260	UDP,IDP	USAID,GOI	UC,DIP	SC	PIO/T	UC
3. AGRIBUS. STUDIES								
A. Policy Studies	1,750	100	UDP,IDP	USAID,GOI	DIP	-	PIL	PIL
B. Study Tours	750	500	UDP,IDP	USAID,GOI	UC,DIP	SC	PIO/T	C
C. Wshops/seminars	550	250	UDP,IDP	USAID,GOI	UC,DIP	-	PIL	PIL
4. AGRIB. SUPPORT	2,526							
A. Assoc.Grants	1,500		UDP	USAID	G	-	G,PIO/T	G
B. Agribus.Prom.Off	1,026	1,000	UDP,IDP	USAID,GOI	UC	SC	PIO/T	C
C. GOI Agrb. Programs		2,000	IDP	GOI		-	-	-
5. OTHER			UDP	USAID	G	-	G,PIO/T	G
A. Vehicles	90		UDP	USAID			PIO/C	C
B. Commodities	175		UDP	USAID	UC	SC	PIO/T	C
C. Evaluation	300		UDP	USAID	DC	-	PIO/T	C
D. Audit	100		UDP	USAID	DC	-	PIO/T	C
E. Infl/contingency	1,892		UDP	USAID	-	-	-	-

Definitions

UDP : USAID Direct Pay to the Contractor
IDP : Direct Payment GOI and/or Private Sector
DIP : GOI Annual Budgeting Process
DC : USAID Direct Contract
UC : USAID Umbrella Contract
SC : Sub-contract
C : Contract
EAR : Earmark
COM : Commitment
G : USAID Handbook 13 Grant or Cooperative Agreement
PIL : Project Implementation Letter
PIO/T : Project Implementation Order/Technical
PIO/C : Project Implementation Order/Commodities

[1] GOI cash and in-kind contributions are combined.

5.1.4 For Assistance Directly to Not-for-Profit Agribusiness Associations. Prior to disbursement of funds under the Grant for assistance directly to not-for-profit agribusiness associations, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., a description of the specific implementation arrangements for such assistance.

5.2 Special Covenants

5.2.1 Project Evaluation. The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter: (a) evaluation of progress toward attainment of the objectives of the Project; (b) identification and evaluation of problem areas or constraints which may inhibit such attainment; (c) assessment of how such information may be used to help overcome such problems; and (d) evaluation, to the degree feasible, of the overall development impact of the Project.

5.2.2 Equipment Maintenance. The Grantee agrees to provide sufficient funds in its annual development (DIP) or routine recurrent budgets to adequately and properly maintain all equipment financed under the Grant.

5.2.3 Staffing. The Grantee covenants to provide all GOI personnel required to implement the Project in an effective and timely manner. Unless otherwise agreed by A.I.D., (1) all Project Steering Committee members will be appointed by the Grantee not later than 180 days from the date of the signing of this Agreement; and (2) the staff of the Project Implementation Unit will be appointed not later than June 30, 1992.

5.2.4 Ineligible Activities. The Grantee understands and agrees that none of the funds provided under the Grant may be used for certain types of assistance related to the production of agricultural commodities for export from Indonesia if such exports would cause substantial injury to U.S. exports or compete with U.S. products in U.S. or third country markets. The specific types of assistance prohibited and the types of commodity exports covered by this provision will be further detailed in Project Implementation Letters.

LOGICAL FRAMEWORK
AGRIBUSINESS DEVELOPMENT PROJECT

Annex A

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
PROJECT GOAL:	MEASURES OF ACHIEVEMENT	METHOD/SOURCES OF VERIFICATION	ASSUMPTION FOR SUCCESS
To generate sustainable increases in employment and incomes by increasing the competitiveness, efficiency, and growth of the agribusiness sub-sector.	Number of new jobs. Increase in per capita income Increase in agribusiness contribution to GDP. Increases in production and sales of agribusiness products.	GOI Statistics. IBRD reports. USAID project reports and evaluations.	Political and economic stability. Continued GOI commitment to supporting development of agribusiness. World market conditions for agribusiness continue along current positive trend.
PROJECT PURPOSE:			
To enhance public sector support to agribusiness and to strengthen the private agribusiness sector, especially agribusiness organizations.	1) 100 new agroprocessing firms in the market; 2) Agribusiness trade increased by $1 billion and investment by $500 million 3) At least 50% of policy agenda items achieved; 4) MOA/MOI offering 2 new services to the private sector; 5) 5 private sector initiated services supported by GOI; 6) 5 agribusiness organizations operating as full partners in updating policy/regulations; 7) In assisted product lines, new sales of $500 million and investment of $250 million, at least $100 million in U.S. goods and services; 8) In assisted product lines (fisheries, horticulture, etc.), at least 100,000 new jobs created representing $30 million in new income, of which two-thirds to low-medium income people.	Project studies and evaluations; GOI records and statistics; national media. Project studies and evaluations.	Ministry of Agriculture (MOA), Ministry of Industry (MOI), and the Permanent Agriculture-Industrial Working Commission (PAIWC) continue a policy and regulatory process which responds to evidence of economic inefficiencies or opportunities for improving the business climate for agribusiness; MOA, MOI, and the PAIWC are receptive to donor-financed assistance. Stronger PAIWC role supported by line DGs and Bureaus. Targeted organizations can be made capable of providing effective, high-quality agribusiness services to members/clients; demands exists among members/clients for improved and expanded agribusiness services; targeted organizations are receptive to donor-financed assistance.

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
OUTPUTS:			
1) MOA and MOI capable of analyzing agribusiness deregulation issues and options and implementing necessary actions.	1) 2 policy studies completed each year;	1-3) Project work plans and progress reports; project evaluations; GOI, IBRD, and ADB reports and statistics.	1-3) Assistance provided through project results in improved capabilities in MOA, MOI, and PAIWC, and other relevant agencies.
2) New GOI Institutional framework and services in place to assist and promote agribusiness.	2) Agribusiness Promotion Office fully staffed and operating effectively;		
3) Public and private sectors effectively collaborating to assist and promote agribusiness.	3) Approximately 10 forums and 25 joint promotions conducted;	4) Project work plans and progress reports; project evaluations.	4) Assistance provided through project results in strengthened agribusiness organizations; demand exists in private sector for agribusiness organization services.
4) Private sector agribusiness organizations providing highly-valued, self-financed services to members and input to GOI on policy and regulatory matters.	4a) Five agribusiness org. financially self-supporting and delivering services; 4b) Five agribusiness org. viewed by GOI as full partners in development, implementation and monitoring policy/regs.		
INPUTS:			
1) Technical Assistance	($000) USAID / GOI / Priv. Sector	Project monitoring and documentation.	Qualified and acceptable technical assistance available and contract(s) can be negotiated.
A. Long-term TA	5,390 / 275 / 275	USAID project implementation reviews.	A.I.D. and counterpart funding provided as planned.
B. Short-term TA	2,200 / 100 / 100		
C. Admin. & Logistics	1,472 / 150 / 150		
2) Training			
A. In-country	1,320 / 400 / 400		
B. Regional	660 / 132 / 100		
C. U.S.	825 / 260 / 100		
3) Agribusiness Studies			
A. Policy Studies	1,750 / 100 / -		
B. Study Tours	750 / 500 / 200		
C. Workshops/Seminars	550 / 250 / 150		
4) Pri. Sec. Agrib. Promotion	2,526 / 3,000 / 1,000		
5) Other			
A. Vehicles	90 / - / -		
B. Commodities	175 / - / -		
C. Evaluation	300 / - / -		
D. Audit	100 / - / -		
E. Inf./Contingency	1,892 / - / -		
Totals	20,000 / 5,167 / 2,475		

ANNEX B

DETAILED PROJECT BUDGETS

This Annex contains detailed budgets for ADP and assumptions which support the cost estimates for individual activities and projected expenditures and obligations.

Budget tables included in this Annex are listed below:

Table B-1: Detailed Budget and Expenditure Plan

Table B-2: Basis for Budget Calculations

Table B-3: Projections of USAID Obligations

Table B-4: Summary of A.I.D. Inputs by Implementation Mechanism

Table B-1
AGRIBUSINESS DEVELOPMENT PROJECT (ADP)
DETAILED BUDGET & EXPENDITURE PLAN
(IN US$000)

LINE ITEM	PRIMARY LOCATION	UNIT	COST PER UNIT	# OF UNIT PER YEAR 1	2	3	4	5	6	TOTAL UNITS	EXPENDITURES PER YEAR 1	2	3	4	5	6	SUB-TOTALS	TOTAL LINE ITEM
I. TECHNICAL ASSISTANCE											619	1758	1768	1768	1768	1381	9062	9062
A. Long-term TA				2	7	7	7	7	5	35	287	1098	1098	1098	1098	711	5390	
- Senior Agribusiness Policy Advisor (expatriate)	GOI	p/y	250	0.5	1	1	1	1	1	5.5	125	250	250	250	250	250	1375	
- Project Adminstrator Expert LC(expatriate local-hire)	GOI	p/y	50	0.5	1	1	1	1	1	5.5	25	50	50	50	50	50	275	
- Agribusiness Organizations Advisor (expatriate)	APO	p/y	250	0	1	1	1	1	0.5	4.5	0	250	250	250	250	125	1125	
- Agroprocessing Advisor (expatriate)	APO	p/y	250	0	1	1	1	1	0.5	4.5	0	250	250	250	250	125	1125	
- Agribusiness Marketing Advisor (expatriate)	APO	p/y	250	0.5	1	1	1	1	0.5	5	125	250	250	250	250	125	1250	
- Agribusiness Extension Specialist (local-hire)	APO	p/y	24	0.5	1	1	1	1	0.5	5	12	24	24	24	24	12	120	
- Agribusiness Extension Specialist (local-hire)	APO	p/y	24	0	1	1	1	1	1	5	0	24	24	24	24	24	120	
B. Short-term TA				20	40	40	40	40	40	220	200	400	400	400	400	400	2200	
- Expatriate	GOI/Pri Sec.	p/m	15	10	20	20	20	20	20	110	150	300	300	300	300	300	1650	
- Local	GOI/Pri Sec.	p/m	5	10	20	20	20	20	20	110	50	100	100	100	100	100	550	
C. Administration and Logistics											132	260	270	270	270	270	1472	
- Local-hire Administrative Support Staff				7	14	15	15	15	15	81	72	140	150	150	150	150	812	
*Project Management Information System Specialist	PIU/APO(s)	p/y	24	0.5	1	1	1	1	1	5.5	12	24	24	24	24	24	132	
*Project Accounting Specialist	PIU/APO(s)	p/y	24	0.5	1	1	1	1	1	5.5	12	24	24	24	24	24	132	
*Training and Short-term TA Coordinator	PIU/APO(s)	p/y	24	0.5	1	1	1	1	1	5.5	12	24	24	24	24	24	132	
*Clerical staff	PIU/APO(s)	p/y	10	3	5	6	6	6	6	32	30	50	60	60	60	60	320	
*Drivers	PIU/APO(s)	p/y	3	2	6	6	6	6	6	32	6	18	18	18	18	18	96	
- Travel for Long-term TA and Administrative Staff				153	306	306	306	306	306	1683	60	120	120	120	120	120	660	
*In-country	PIU/APO(s)	trips/year	0.3	150	300	300	300	300	300	1650	45	90	90	90	90	90	495	
*International	PIU/APO(s)	trips/year	5	3	6	6	6	6	6	33	15	30	30	30	30	30	165	

60.

Table B-1

LINE ITEM	PRIMARY LOCATION	UNIT	COST PER UNIT	# OF UNIT PER YEAR 1	2	3	4	5	6	TOTAL UNITS	EXPENDITURES PER YEAR 1	2	3	4	5	6	SUB-TOTALS	TOTAL LINE ITEM
2. SHORT-TERM TRAINING																		
A. In-country				136	198	213	213	198	183	1141	315	492	522	522	492	462	2805	2805
	Indonesia	p/mo	2	95	110	125	125	110	95	660	190	220	250	250	220	190	1320	
B. Regional																		
	Asia	p/mo	2.5	24	48	48	48	48	48	264	60	120	120	120	120	120	660	
C. U.S.																		
	U.S.	p/mo	3.8	17	40	40	40	40	40	217	65	152	152	152	152	152	825	
3. AGRIBUSINESS STUDIES																		
A. Policy Studies											285	600	600	650	600	315	3050	3050
	GOI/Priv. Sec	study	87.5	2	4	4	4	4	2	20	175	350	350	350	350	175	1750	
B. Study Tours																		
	Asia, US	s. tour	30	2	5	5	5	5	3	25	60	150	150	150	150	90	750	
C. Workshops and Seminars																		
	GOI/Priv. Sec.	w.shop	50	1	2	2	3	2	1	11	50	100	100	150	100	50	550	
4. AGRIBUSINESS SUPPORT																		
A. Trade/Production Association Grants											54	556	704	504	504	204	2526	2526
	Pri. Sec	grants	100	0	4	5	3	3	0	15	0	400	500	300	300	0	1500	
B. Agribusiness Promotion Office(s) Costs																		
*Office Rent	APO(s)	Office-y	48	0.5	2	2	2	2	2	10.5	54	156	204	204	204	204	1026	
*Utilities	APO(s)	Utility-y	12	0.5	1	3	3	3	3	13.5	24	96	96	96	96	96	504	
*Expendable Office Supplies, Databases, References, etc	PIU/APO(s)	Supply-y	24	1	2	3	3	3	3	15	6	12	36	36	36	36	162	
											24	48	72	72	72	72	360	
5. OTHER																		
A. Vehicles											410	430	533	328	378	478	2557	2557
	PIU/APO(s)	minbus	15	2	4	-	-	-	-	6	30	60	0	0	0	0	90	
B. Computers and Office Equipment																		
*Computers	PIU/APO(s)	H.&S.Ware	5	10	2	2	1	1	1	17	80	70	10	5	5	5	175	
*Office Equipment	PIU/APO(s)	Misc. Eq	30	1	2	-	-	-	-	3	50	10	10	5	5	5	85	
											30	60	0	0	0	0	90	
C. Evaluation																		
	-	eval	150	-	-	1	-	-	1	2	0	0	150	0	0	150	300	
D. Audit																		
	-	audit	50	-	-	1	-	1	-	2	0	0	50	0	50	0	100	
E. Inflation and Contingencies	-																	
											300	300	323	323	323	323	1892	
GRAND TOTAL:											1683	3836	4127	3772	3742	2840		20000

DETB004 WK3/d

Table B-2

BASIS FOR BUDGET CALCULATIONS

LINE ITEM	US $ UNIT COST
1. Technical Assistance (TA)	
A. Long-term TA (cost/person/year)	
Expatriate	250,000
-Salary (FS-1 level)	65,000
-Fringe benefits (25% of salary)	16,250
-Overhead (80% of salary + fringe)	65,000
-Post differential (15% of salary)	9,750
-Relocation, R&R, HL travel (4 persons)	10,000
-Shipping HHE	9,000
-Storage HHE	1,500
-Education allowance (2 children)	12,000
-Emergency travel	800
-Housing	24,000
-Utilities	8,000
-Furnish/appli, uphols./drap.	20,000
-Maintenance of house	3,000
-Misc./contingency	5,700
Local	24,000
-Salary + fringe benefits	24,000
Local Expatriate	50,000
-Salary + fringe benefits	
B. Short-term TA (cost/person/month)	
Expatriate	15,000
-Salary	9,000
-Travel and per diem	5,000
-Misc.	1,000
Local	5,000
-Salary	2,500
-Travel and per diem	1,500
-Misc.	1,000

C. Administration and Logistics

Local-hire administrative staff (cost/person/year)	
-Professional staff person (salary + fringe benefits)	24,000
-Clerical staff position (salary + fringe benefits)	10,000
-Driver (salary + fringe benefits)	3,000

Administration and Logistics cont'd

Travel/year (project-related) for long-term TA and admin. staff	
-In-country: twenty five trips per month at approx. $300/trip.	90,000
-International: six trips per year at approx.$5,000/trip	30,000

2. Short-term Training

A. In-country (cost/person)

In-country are budgeted at $2,000 per person (BAPPENAS rate). This include pro-rated costs for trainers, training facilties and materials and travel.	2,000

B. Regional (cost/person)

Regional courses are budgeted at $2,500 per person. This includes pro-rated costs for courses and per diem.	2,500

C. U.S. (cost/person)

U.S. courses are budgeted at $3,800 per person. This includes pro-rated costs for courses and per diem.	3,800

3. Agribusiness Studies

A. Policy Studies

USAID's contribution for agribusiness studies is estimated at $87,500 per study.	87,500

B. Study Tours

Each overseas study tour is budgeted at $30,000. This includes per diem, study tour logistical costs overseas and follow-up reports upon conclusion of the study tour.	30,000

C. Workshops and Seminars

USAID's contribution for each workshop/seminar is estimated at $50,000. This includes expert speaker expenses, facilities and misc. materials.	50,000

4. **Private Support**

A. Trade/Production Association Assistance

Private sector agribusiness promotion activities may include grants to private sector agribusiness organizations. Each grant is estimated at aproximately $100,000 — 100,000

B. Agribusiness Promotion Office (APO) costs

-Office rent: office space will be rented in Jakarta during Year 1. During Years 2 and 3, additional office space will be rented in at least two provincial capitals. Average cost of rent is estimated at $4,000 per month. — 48,000

-Utilities: electricity, telephone and water is estmated at $1,000 per month. — 12,000

-Expendable office supplies, data base subscriptions and references is estimated at $2,000 per month — 24,000

5. **Other**

A. Vehicles

USAID will procure approximately six project vehicles. Minibuses for 6-8 passengers will be procured, with 1,500 cc engines and air conditioning. Cost of a minibus is estimated at $15,000. — 15,000

B. Computers and Office Equipment

-Computers: cost per unit is estimated at $5,000. This includes IBM-compatible (386-type minimum) desktop or notebook computer, with hard-drive, floppy drives, VGA monitor, laser printer, 1-year operation and maintenance contract, misc. software, 1 UPS and assoc. computer furniture. Ten units will be procured by the contractor for use by the TA team and project staff. — 5,000

-Office equipment: this includes office furniture, file cabinets, faxes, telephones, etc. required for each APO. — 30,000

C. Evaluation

USAID will contract for mid-term and final evalutions. Each evaluation in budgeted at $150,000. — 150,000

D. Audit

Two audits are planned. Each audit, to be carried out under the direction of the A.I.D. Regional Inspector General's Office is budgeted at $50,000. — 50,000

E. Inflation and Contingencies — 1,892,000

This covers inflation and unexpected expeditures, budgeted at approximately 10 percent of planned life-of-project expenditures.

Table B-3

AGRIBUSINESS DEVELOPMENT PROJECT

PROPOSED OBLIGATION SCHEDULE [1)]
(IN U.S.$ 000)

FY	1991	1992	1993	1994	1995
Amount	3,300	5,500	4,200	4,000	3,000

1) Based on project financial needs utilizing a forward funding target of approximately 18 months of expected expenditures.

Table B-4

SUMMARY OF A.I.D. INPUTS
BY METHOD OF IMPLEMENTATION
(IN U.S.$ 000)

I.	Technical Assistance Contractor (A.I.D. Direct)		
	A.	Technical Assistance	6,890
	B.	Administration and Logistics	1,472
	C.	Training (Regional, U.S., In-country Training)	2,805
	D.	Policy Studies	1,750
	E.	Study Tours	750
	F.	Workshops/Seminars	550
	G.	Agribusiness Promotion Office	1,026
	H.	Equipment	175
		Total	15,418
II.	Assistance to Not-For-Profit Associations (A.I.D. Direct)		
		Total	1,500
III.	Other Procurement (A.I.D. Direct)		
	A.	Technical Assistance Buy-Ins and "Bridging" TA	700
	B.	Vehicles	90
	C.	Evaluation	300
	D.	Audit	100
		Total	1,190
IV.	Inflation/Contingencies		1,892
		Total	20,000

ANNEX C
POLICY ANALYSIS BACKGROUND AND POLICY AGENDA

I. Agribusiness Policy Setting

Recent policy reforms in Indonesia have made significant improvements in opening the economy to private investment and initiative. Supported by pronouncements from GOI policy makers in favor of market-led development, GOI institutions have revised and/or repealed a number of key policies and regulations. These changes have been greeted with approbation in many quarters, especially among domestic and foreign business analysts and investors.

However, the agriculture sector (and the agribusiness sub-sector in particular) remains largely untouched by these recent GOI policy reforms. Agribusiness continues to be governed by a complex web of public policies, regulations and public investments which constrain private market initiatives and, in some instances, reduce the domestic and international competitiveness of Indonesian agribusiness output. Public policy has proved resistant to change despite substantial efforts in policy dialogue and technical assistance by the World Bank, the Asian Development Bank and U.S.A.I.D. For example, U.S.A.I.D's Agriculture and Rural Sector Support Program has the following benchmarks:

- Diversify agricultural production taking advantage of regional comparative advantage and promoting development of related agro-industries.
- Align agricultural policy instruments so that farmers receive appropriate market signals to capitalize on natural comparative advantage.
- Implementation of the integrated pest management program in rice and extend it to other crops.
- Produce, distribute and utilize fertilizers efficiently.
- Broaden the national mandate of agricultural research centers to be more responsive to regional needs and introduce a system of direct outreach from research stations to regional extension centers and farmers.
- Take advantage of new market opportunities in fruit crops by encouraging investment opportunities in small plantations.
- Establish a more effective relationship between trade associations and relevant government agencies to promote the export of Indonesian agriculture products.
- Encourage higher quality plantation crops from both state-owned plantations and small holders.

- Lower export tariffs and surcharges on selected imported agricultural products.

Policy Players. The situation is complicated somewhat by the fact that no single GOI institution has the brief for setting policy and formulating and implementing regulatory oversight, for the agribusiness sub-sector. Responsibilities for sector affairs are divided across a number of powerful central government organizations including the Ministries of Industry, Trade, Agriculture, Finance and Bappenas. A second tier of GOI central government organizations, including the National Logistics Bureau, state trading corporations and a number of medium and large scale state owned agribusiness enterprises play a significant role in translating central government's pronouncements into action. The role of regional, provincial and local governments in implementing policy also greatly affects firm-level decisions. Finally, there are a number of private sector associations which have extraordinary powers granted to them by the GOI for product and market governance. These associations' powers go far beyond representation and promotion of sub-sectoral affairs to the extent that their actions have the effect of directing and restraining trade.

There are three levels of involvement in policy setting for agribusiness in Indonesia. The first is at the **national level** where broad direction for national enterprise is set. Policies at this level, some de facto as opposed to de jure, may not be defined as being "agribusiness" policy per se but are policies which have an impact on the conduct of business involving agriculture commodity production, processing and marketing. The second tier of policy-setting is at the **agriculture sector** level where direct governmental intervention in control and allocation of both the means of production and the market place are pervasive. Lastly, **regional**, **provincial** and **local governments** and **quasi-governmental industry** associations exert a powerful and sometimes negative influence on agribusiness development.

National Policies. Among the policies at this level, we identify the following as having a significant impact on the extent and nature of private investments and initiatives in agribusiness in Indonesia. Purporting to foster import substitution, these policies place at risk domestic producers' competitiveness at home and abroad:

1) Public Sector Intervention. A de facto policy deeply rooted in the operations of the GOI, public intervention in private enterprise takes many forms. None is more significant than the policy of public intervention to control "unhealthy competition". GOI intervention in this arena has had the result of restraining trade rather than combatting antitrust problems.

2) Control of Foreign Investment. While there are instances of prosperous foreign investment in industry, the prevailing climate for investment from abroad remains less friendly than in neighboring countries. Rules covering the extent of foreign ownership discourage placement of foreign capital, technical know-how and market savvy.

3) Personal Gain from Public Actions. It is a sine quo non of business in Indonesia that wealth is available to those entrepreneurs who are able to effect changes of public policy and regulation in their favor. While it may be argued that the system of negotiated access to business opportunities is available to all who understand how to work within it, the Indonesian system is not open to all entrepreneurs. Only those with paramount social and political skills and access to powerful patrons (as opposed to those possessing technical and financial assets) can be expected to thrive in a market which is becoming dominated by high profile, increasingly sophisticated and interdependent enterprises of substantial scale. This allocation of opportunities is monopolistic, and discourages economic and social growth.

4) Public Assurance of Economic and Social Equity. The Indonesian Constitution more or less calls for a "leveling the playing field" between larger and smaller enterprises, the native Indonesian and ethnic Chinese business communities and domestic and foreign-based enterprises. While economic and social equity are desirable goals, government action on a case by case basis on how they are to be achieved is destructive of free markets.

5) Private Sector Participation in Policy-making Open and formalized involvement of the private sector in policy formulation is quite limited. Instead, private sector influence often takes the form of special pleading to establish monopolistic positions.

Agriculture Sector Policies. The next strata of policies affecting agribusiness is at the agriculture sector level. These are policies that primarily affect the production and disposition of national agricultural commodities. Major policies include:

1) Crop Production Mandates. There is a long-standing practice of setting production levels for selected "strategic" commodities, principally sugar and rice. While the mandates appear to be effective in increasing production of these commodities, they do so at the expense of potentially more remunerative crops; thus lowering farmers' incomes.

2) Land Use Controls. There are two forms of land use controls that affect agribusiness: 1) land set-aside schemes for mandated crops and other forms of use restriction and 2) constraints on foreign (as well as domestic) land ownership and agricultural land leaseholds. Foreign-owned enterprises cannot hold fee-simple land, and leaseholds of land for production or processing are limited to periods often less than the economic life cycles of the project.

3) Public and Private Monopolies of Key Activities. The GOI, through formation of state owned enterprises and state trading companies, have created monopolies in several key areas and over specific commodities. Powerful "private sector" associations have been granted quasi-governmental authority over operations of key agribusiness segments. Through exclusive licensing arrangements, private individuals have been given absolute monopolies over import and export markets for major commodities.

Agribusiness Subsector Policies. The GOI, at all levels, has set policies and regulations which constrain the agribusiness sub-sector. Also, absence of key policies (and especially regulations and standards) has also constrained agribusiness development.

1) Complex Licensing of Agribusiness Operations. There is a complex set of licenses and permits which the GOI, at the national, regional, provincial, district and local levels, uses to control the extent and direction of agribusiness development. This process is often marked by a vagueness of standards and their seemingly capricious application. these practices raise costs, reduce competitiveness and frustrate and deter investors.

2) Long Customs, Port and Shipping Lead Times. Agribusiness operators report excessively long lead times for moving perishable goods through complex procedures for clearing customs and delivering product to the marketplace. Delays are accompanied by costs for official and unofficial fees for necessary processing of permits and to facilitate movement of goods.

3) Public Import and Export Controls. The GOI is directly involved in controlling not only imports of raw materials and intermediate goods used by agribusiness concerns but also exports of certain products. These controls are effected through quotas and tariffs which result in increased costs of production and reduced domestic, regional and international competitiveness. An example are

the restrictions on imports of animal feed components and compounded feeds.

Furthermore, these trade controls are biased against small firms. Small firms have more difficulty absorbing the capital and administrative costs of these controls, especially where these controls are not clearly spelled out in the form of regulations or are accompanied by unofficial fees. The negative impact of these controls is especially evident in the operation of the duty drawback scheme where small firms (and certainly those which have not passed through the often rigorous and costly license and permit requirements) cannot recapture duties owed them.

4) GOI Controls on Agribusiness Inputs. The control (presumably for phytosanitary reasons) of important seed and planting materials and supplies is so restrictive as to constrain the introduction and/or improvement of commercial crops. These controls make it difficult for Indonesian producers to meet domestic and international horticultural product market standards for variety, productivity and quality. This places Indonesia at a competitive disadvantage with other, more innovative ASEAN agribusiness exporting nations.

5) NES Program Impact on Horticulture. Indonesia's Nuclear Estate Smallholder participation program (NES) presents an often cited and serious risk to the viability of investors in medium and large scale horticulture businesses. While NES is designed to promote, the interest of smallholder agriculture, it seems to be having the opposite effect by scaring investors away. Mandated participation of small holders and out-growers of horticulture products makes the agribusiness investor vulnerable to streams of production not under his control. The agribusiness processor is exposed to the possibility of losing his operating license should throughput fall below (or exceed) specified levels. Processors and producers are enjoined from working in a direct buyer/supplier relationship where quantity, quality and price are negotiated under market-determined conditions. Government agents, often with their own agenda, are allowed (and in fact required) to intervene between the parties.

6) Collateral Standards for Commercial Credit. Common requirements for collateralizing bank loans for new and expanding agribusinesses usually exceed 1:1. Even high quality collateral such as land and buildings are discounted to at least 80% of appraised valuation. This high standard of collateralization is reported to constrain severely agribusiness investors from starting operations.

7) Directed Growth of Agribusinesses. Restrictive license specifications constrain the financial viability, rate of growth and adaptability to market trends of Indonesian agribusiness concerns. Maximum and minimum productivity and efficiency standards are incorporated into licenses which also place specific requirements on the type and quality of output allowed. Operations which diverge from their licensed practice, say in favor of a product more in demand in the market, are subject to losing their business. For example, another form of official trade restraint is illustrated by the recently repealed edict which restricted factory chicken production to less than 5,000 birds for all but a select few existing producers.

8) Officially Sanctioned Restraint of Trade. There are a number of instances in which government regulations, for reasons lost in history or personal interests, have restricted the participation of private enterprise in potentially remunerative agribusiness market segments. For example, substantial trading opportunities in products and inputs are foreclosed to private investors by monopolies of state owned enterprises, trading companies and private licensees. In addition, the government should encourage the private sector to police itself based upon grades and standards approved by the GOI. However, too often the private sector has been allowed to use this power to protect and aggrandize certain companies rather than for purposes of expanding the market and improving the competitiveness of Indonesian products.

9) Lack of Quality Controls and Standards. Indonesian agribusiness products could benefit from uniform, official grades and standards of product quality and cleanliness. The absence of these national standards contributes to poor quality of domestic products in local markets compared to imported goods and a lack of competitiveness (on the basis of quality and price) in the international market.

II. Criteria for Selection of Project Interventions in Agribusiness Policy

While addressing each of the policy and regulatory issues listed above will provide substantial benefits in terms of growth in agribusiness, the project must be selective of those it chooses to pursue. The reasons for selective action can be reduced to the following:

-- Some policies are deeply ingrained and supported by the current constellation of political forces. It is unlikely that the project will be able to bring sufficient attention to bear on the negative

aspects of these policies to result in prompt and substantive charges.

-- Pursuing all of the above policy constraints will dilute the impact of limited project resources.

-- The locus of GOI responsibility/authority for implementing policy change varies from one policy to another.

The following criteria, as well as the Policy Matrix included on the next page, provide a guide that may be used to set priorities for the future policy agenda.

- Demonstrably increase the efficiency of operation of agribusiness. This criterion will limit the scope of the policy agenda to those agribusiness segments that are being directly supported by ADP, initially horticulture and fisheries, later other agribusiness segments. The larger the costs imposed by the policy, the higher the priority for attention and redress.

- Improve opportunities for small and medium enterprises within the agribusiness sub-sector. This criterion prevents ADP from being captive of the largest agribusiness enterprises desiring policy change that does not affect smaller producers.

- Increase exports.

- Promote the sustainable use of natural resources. This criterion will encourage the GOI to address adequately natural resource management issues associated with agribusiness development.

III. Detailed Initial Project Policy Agenda

POLICY OBJECTIVE 1.

DIVERSIFY AGRICULTURAL PRODUCTION TAKING ADVANTAGE OF REGIONAL COMPARATIVE ADVANTAGE AND PROMOTING DEVELOPMENT OF RELATED AGRO-INDUSTRIES.

In order to enhance productivity and efficiency, the GOI would promote market-led, demand-based growth, by permitting the orderly interplay of market forces rather than directly administering commodity by commodity production targets. Part of this process would include promotion of agricultural diversification.

The diversification process includes both vertical and horizontal elements. Vertically, stimulation of agro-processing growth and other agro-industrial activities will provide significant employment and income generating opportunities for rural areas. Horizontally, agriculture diversification will provide farmers with increased profit opportunities, and consumers with a broader variety of foodstuffs to meet the need for growing nutritional requirements.

Sub-objectives :

1. **Allow Farmers to Benefit from Existing Comparative Advantage by Permitting Farmers to Freely Choose From Among the Production Alternatives Available to Them.**

Justification : Mandatory production of crops may reduce many farmers' incomes. If farmers were permitted to produce their most profitable alternative, the agricultural sector would be more productive, resources would be utilized more efficiently, and farm incomes would increase. This policy change would enhance the rice self-sufficiency goal of the Indonesian Government, because rice would often be considered a more desirable crop to grow. However, palawija crop production would also be expected to increase, thus serving the increased nutritional needs of population growing not only in absolute size, but also with increased per capita income demanding a greater variety of foodstuffs.

Impact : Farmer incomes will increase as will production of rice and palawija crops. This will induce employment in rural areas. In the case of sugar, under the present world market situation, decreased domestic production will be offset by sugar imported at typically low world prices. Geographic concentration of food production will shift to areas best suited to production of each crop.

Benchmarks :

- Gradually remove sugar production and planting area from irrigated lands.
- Realign national rice production targets by removing regional self-sufficiency goals.
- Promote regional non-rice crop production based on regional comparative advantage to fulfil national production targets.

2. **Make the NES Program in Horticulture More Attractive to Private Companies.**

Justification : Experience in Indonesia and elsewhere indicates that to encourage production of processed fruits and vegetables requires large-scale, fully integrated, estate-type operations. Such activities are high risk in nature and require large

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investments. Consequently, this type of business is not always attractive to private investors. Meanwhile, the government is strongly committed to improving the livelihood of small farmers including those currently in horticulture production. Hence, the NES program that has been successfully implemented in estate crops needs some adjustments if such a system is to be adopted in horticulture.

Benchmarks :

- Reassess NES Program and increase incentives to the private sector for their participation in horticulture production.

3. **Remove Unnecessary Restrictions on Importation of Planting Materials and Promote Their Domestic Production.**

Justification : The control (presumably for phytosanitary reasons) of imported seed and planting materials constrains the introduction and/or improvement of commercial crops. These controls make it difficult for Indonesian producers to meet domestic and international horticultural product market standards for variety, productivity and quality. In addition, domestic production of seeds and other planting materials, especially for horticulture, has not been developed yet. This places Indonesia at a competitive disadvantage with other, more innovative ASEAN agribusiness exporting nations.

Benchmarks :

- The MOA and MOT will issue a report that identifies regulatory and procedural changes that could take place to improve Indonesian access to improved planting materials, while protecting the country against the introduction of new diseases and pests.
- The MOA will promote the involvement of the private sector in the domestic production and supply of planting materials.

4. **Improve Food Quality Control**

Justification : Indonesian agribusiness products could benefit from uniform, official grades and standards of product quality and cleanliness. The absence of these national standards contributes to poor quality of domestic products in local markets compared to imported goods and a lack of competitiveness (on the basis of quality and price) in the international market.

Benchmarks :

- The GOI will introduce a food act regarding maximum residue levels on fresh food and will adequately inspect products for compliance with the issued standards.
- The GOI will review the current permit requirements to streamline and clarify ambiguous procedures, publish and disseminate required product standards and move toward assigning to companies responsibility for meeting product standards, subject to severe penalties for non compliance.
- The GOI will improve the enforcement of environmental regulations and provide financial assistance to industries installing equipment to mitigate environmental impacts.
- The GOI will introduce more rigorous control and supervision of the sale and use of agricultural pesticides.

POLICY OBJECTIVE 2.

IMPROVE COORDINATION BETWEEN THE MINISTRIES OF AGRICULTURE AND INDUSTRY TO BETTER PROMOTE AGRIBUSINESS DEVELOPMENT.

No single GOI institution has the brief for setting policy and formulating and implementing regulatory oversight for the agribusiness sub-sector. Responsibilities for sector affairs are divided across a number of powerful central government organizations including the Ministries of Industry, Trade, Agriculture, Finance, as well as EKUIN and Bappenas. The role of regional, provincial and local governments in implementing various development policies and programs is also key in determining the achievement of development goals. In addition, there are private institutions which are important in the achievement of development goals.

Coordination in all steps of the development process among all involved institutions is a necessary element. Coordination must start with planning and, implementation, through monitoring and evaluation. With this coordination differences may be resolved, and available resources, natural as well as human, can be optimally and efficiently used.

Sub-Objectives :

1. Improve Staff Quality in MOA and MOI

Justification : The GOI will rationalize and professionalize the MOA and MOI to improve the quality of the services offered to the farm community and agribusiness development. There is no alternative but to upgrade the quality of the civil servants. Reductions in manpower and staffing will be difficult, but an

effort must be made in this direction, simply to bring the size of the bureaucracy back to manageable proportions.

Benchmarks :

- Staff development plans proposed
- Realignment of existing positions proposed.

2. **Make MOA/MOI More Capable of Meeting Emerging Demands on Agribusiness Development**

Justification: It has been for a long time, the emphasis of MOA activities has been on increasing agriculture production. Only just recently more attention is being given on agro-industry, such as post harvest handling. To provide better service on the part of the government in facilitating agribusiness development, improving the capability of MOA staff to handle agribusiness issues is a necessary step. Simultaneously, improvements in data bases and information systems regarding agribusiness development activities and opportunities needs to be expanded.

Benchmarks :

- The MOA will improve understanding of commodity markets by building up staff that have a better understanding of the structure and operation of key agricultural commodity markets, both domestically and internationally.
- Improved knowledge base and information systems regarding agribusiness, within both the MOA and MOI.
- Regular agribusiness contacts established among key staff of the MOA, MOT, MOI, and various trade associations.

3. **Synchronize Agriculture with Agro-processing**

Justification : As mentioned earlier, improvement of coordination among institutions, including the private sector is a necessary condition in fostering agribusiness development. Through such coordination, synchronization between agriculture, agro-processing or agro-industry will be easily facilitated. PAIWC is one forum, among others, that can serve as a vehicle for this purpose. Therefore, strengthening this committee may directly speed up the achievement of goals in agribusiness development.

Benchmarks :

- The GOI will strengthen the role and capacity of PAIWC to serve as a vehicle for coordinating agribusiness development in the areas of: the deregulation process; improved dialogue between the public and private sector; development of trade associations; and promotion of innovative private/public

schemes to develop agribusiness in ways that maximize employment and income gains.

- To avoid the present situation in with multiple ministries intervene and impede agribusiness at a wide variety of points, the GOI will change the structure of its operations to allow it to focus on the full span of a vertically integrated agribusiness. This includes preparation and growing of crops, harvesting, transporting, processing, packaging and marketing.

4. Improve Research and Extension for Horticulture Crops

Justification : A problem of Indonesian fruit and vegetable production is its variable and inconsistent quality. This may be attributed to the low level of technical knowledge. GOI technical support services to the horticulture sector are a very recent development. In 1983 the GOI established a Directorate of Horticulture and a Central Research and Development Division for Horticulture. These relatively new institutions need further budget support and trained manpower. Similar deficiencies exist within the fisheries sub-sector.

Benchmarks :

- The MOA will further increase support for agricultural research and extension, particularly targeted to horticulture and small-scale shrimp and fish farmers.
- MOA will better link research and development with market needs.

POLICY OBJECTIVE 3.

PROMOTE AGRIBUSINESS ASSOCIATIONS AS A MEANS OF PROMOTING PRIVATE SECTOR AGRIBUSINESS DEVELOPMENT

The group best able to promote the export of a commodity is always the group responsible for its manufacture. The producers may not have the resources or the training to do this, but they have the greatest interest in seeing it done. To obtain the resources they need to do this, and to receive assistance in planning their activities, the government is a logical partner. As a consequence, cooperation between these two parties is needed. A closer relationship between trade associations and the GOI will increase the effectiveness of both in promoting agricultural exports. Moving trade associations away from regulatory activities and into export promotion will help stimulate exports.

Sub-Objectives :

1. **Modify Rules Governing Business Associations to Enable Them to Promote Effectively the Export of Their Products.**

Justification : As mentioned above, business associations (which include producer, processor, and marketing associations) have a potentially strong positive role to play in agribusiness promotion. However, to arrive at socially and economically desirable results, that role must be well defined.

Benchmarks :

- Study completed on the possibilities of ways and means for private sector contributions to fund business associations.
- The development of producer/trade associations with emphasis on self regulation of quality standards; development services to members (including market information); technical assistance for determining product standards and inspection; representation/promotion of common interest both domestically and internationally; and discourage the use of associations as producer or trading cartels endeavoring to manipulate prices.

2. **Remove Restrictions Which Inhibit Closer Working Relationships between the Private Sector and the Government**

Justification : KADIN is the exclusive representative of private business to the Government. This regulation does not restrict the access of powerful individuals or their companies to the Government, but it does negatively affect small and medium companies. KADIN tends to be too busy, and it has its own interests to pursue, thus leaving the smaller companies without an effective advocacy mechanism.

Benchmarks :

- Establishment of a formal relationship between trade associations and various ministries including the Ministry of Trade to promote the export of Indonesian agricultural products.
- Relax restrictions on direct, formal contact between the public sector and the private sector (i.e. change the role of KADIN).
- Formalize monitoring/review mechanism for private sector to comment on existing/proposed government regulations.

POLICY OBJECTIVE 4.

IMPROVE THE OVERALL FINANCIAL AND INVESTMENT CLIMATE FOR AGRIBUSINESS

Sub-Objectives :

1. **Ease Restrictions on that which is Considered Adequate Collateral Requirements for Agricultural Lending**

Justification : Collateral standards for commercial credit do not provide incentives for investments in agribusiness, especially for small-and medium firms. Common requirements for collateralizing bank loans for new and expanding agribusinesses usually exceed 1:1. Even high quality collateral such as land and buildings is discounted to at least 80% of appraised valuation. This high standard of collateralization is reported to constrain severely agribusiness investors from starting operations.

Benchmarks :

- Survey the banking sector to determine options which will allow for improved value associated with the collateral that the agribusiness sector usually possesses.
- Issue land titles to those working in newly opened areas.

2. **Review and Remove Agricultural Investment Options from BKPM's "Negative List".**

Justification : The current "Negative List" of BKPM detrimentally protects some monopolies.

Benchmarks :

- The GOI will review the current investment policy measures to allow foreign investors to participate in trade, retail, and many service industries.

3. **Improve the Investment Climate for Both Domestic and Foreign Investors**

Justification : Indonesia does not yet have a package of incentives that is attractive enough to domestic as well as foreign investors. Without falling into the trap of introducing tax loopholes and other means of hemorrhaging state resources, Indonesia should explore ways of becoming a more attractive place to invest.

Benchmarks :

- For agro-based joint ventures, the GOI will set a fixed maximum permissible level for foreign shareholding with no disinvestment requirements over time.
- Credit schemes to smallholders should be expanded. For example, credit to smallholder farmers to improve their ponds, guaranteed by the shrimp processors, is an effective way of overcoming the smallholder problems of collateral, especially where land title is not established.

4. Explore the Viability of Crop Insurance

Justification : Risk is great in agriculture, and ways need to be explored to spread this risk from farmers, consumers, and traders to the private sector.

Benchmarks :

- Study completed of viability of crop insurance.

POLICY OBJECTIVE 5.

ENHANCE THE BARGAINING POSITION OF THE SMALLSCALE AGRIBUSINESSES THROUGH COOPERATIVE.

Justification : Agriculture in Indonesia is dominated by smallscale farming: (1) production centers are scattered which may result in production and marketing inefficiency, (2) farming is done sub-optimally because economics of scale cannot be captured, and (3) farmers are in a weak bargaining position in dealing with the other side of market forces.

It has been proven that the farmer group approach is able to overcome some of these deficiencies in smallscale agriculture. Basically this approach promotes cooperation among farmers who have the same interests. This farmer group approach, as an embryo to developed strong cooperative institution can be used as an instrument to increase memberships, which in this case are farmers or rural community members.

As stated in GBHN, cooperatives are one of the three important economic agents in the structure of Indonesian economy. The presence of cooperatives is complementary to other two economic entities, namely state-owned and private firms, and its roles is necessary to enhance the bargaining power and to protect small agribusiness firms in an increasingly competitive market structure.

Benchmarks :

- Increase bargaining power of selected smallscale agribusiness firms by strengthening the role of cooperatives.
- Means and ways to strengthen the position of agribusiness-cooperatives in the country economy explored.
- Cooperation or mutual-relationships between similar or related smallscale and large agribusiness firms through cooperative movement promoted.
- Improved and strengthened managerial capability of small scale agribusinesses and cooperatives.

POLICY OBJECTIVE 6.

RE-PRIORITIZE GOVERNMENT EXPENDITURES SO THAT THEY COVER SERVICES THAT ARE ESSENTIAL AND YIELD HIGH RETURNS

The GOI, realizing that the public sector cannot serve as the primarily employer of the populace, should continue its efforts to shift public resources in a direction which supports the private sector as the principal source of income and employment generation. At the end, the role of the GOI should be more on facilitating or developing a conducive environment for a sustainable agricultural development.

1. **Decrease Subsidy Levels to Fertilizer Distribution**

Justification: The GOI subsidized fertilizer. This is a drain on the economy. More efficient use of fertilizer would also be promoted of subsidies were reduced.

Benchmarks :

- The GOI will improve efficiency of fertilizer distribution through a pricing system that better reflects actual transportation costs.

2. **Promote off-Java Development by Improving Transportation Infrastructure**

Justification : Considering the high cost of air and sea freight, GOI (through Garuda, Merpati, and other national and international air freight companies) should seek ways of improving the availability of air cargo space and lowering its cost within Indonesia and between Indonesia and the major markets for high value fisheries export commodities (e.g. fresh tuna, fresh reef fish, lobster, smoked fish, etc).

Benchmarks :

- The GOI will review the inter-island transport monopolies fees and controlled freight rates. Further analysis will be done to make the domestic shipping industry more competitive.
- Feeder and main line shipping services will be encouraged to expand further, with a government watchdog set up to oversee the freight rate structure; and if there is evidence of a significant deviation from the cost structure, introduce both recommended and maximum freight rates for specific key routes (i.e. set up an Indonesian liner conference).
- Remove licensing requirements for inter island shipping.
- Implement all phases of the deregulation package November 1988 related to inter island shipping.

3. Increase Civil Servant Salaries to Levels Commensurate With Private Sector Levels

Justification : The existing salary structure does not adequately encourage good performance.

Benchmarks :

- Study conducted on the implications of a salary increase.

POLICY OBJECTIVE 7.

INCREASE THE EFFICIENCY AND COMPETITIVENESS OF AGRICULTURAL TRADE IN INDONESIA.

Although the Government of Indonesia has made significant strides in deregulating trade in recent years, little of the effort has been specifically directed towards agricultural trade. Because of this, agricultural trade remains one of the most highly regulated sectors in the economy.

Trade controls are biased against small firms. Small firms have more difficulty absorbing the capital and administrative costs of these controls, especially where these controls are not clearly spelled out in the form of regulations or are accompanied by unofficial fees. The negative impact of these controls is especially evident in the operation of the duty drawback scheme where small firms (and certainly those which have not passed through the often rigorous and costly license and permit requirements) cannot recapture duties owed them.

This is not to say that no deregulation of agricultural trade has occurred. In fact there have been some notable areas of deregulation. First and foremost has been the deregulation of

cotton imports, which has allowed the current boom in textile exports. Imports of vegetable oil and a number of other products have also been deregulated. This Policy Agenda focuses on the continuation of this process. Six areas which are targeted for further deregulation are presented below. By continuing its efforts toward agricultural trade deregulation, the Government of Indonesia can greatly increase the competitiveness and efficiency of the sector, and thereby lower consumer food prices.

1. **Lower Import Tariffs and Surcharges on all Imported Products Including Agricultural Products, and Remove Special Tariff Exemptions, Except those Established BAPEKSTA.**

Justification : Those few agricultural items whose import does come under the IU + license are subject to high import duties and special surcharges. Over half of the goods are subject to an import duty of 50% or more. Nearly 85% are subject to import duties and surcharges of over 25%. This has led to a tremendous amount of smuggling, where importers either under invoice their products, or make false declarations. It has been reported that they are willing to take this risk when the tariff is greater than 25 percent. On the other hand, exemptions to the tariffs are often given to government importing agencies, or at time to selected private importers while excluding others. This exemption gives the holder a strong competitive edge over other possible importers.

Although it cannot be measured, the loss of tariff revenue to the Indonesian Government is large. Cutting the tariff to more reasonable levels will increase revenue. Eliminating special exemptions will also increase revenue, as well as providing a more competitive market.

Benchmarks :

- Gradually reduce the non tariff barriers (NTB).
- Reduce the level of tariffs on agricultural commodities and those goods that go into agribusiness activities.
- Render tariff structure more transparent by widely publishing it.
- Remove restrictions on import of feed and feed components that would be used particularly those used in the fish and livestock sub-sectors.

2. **Actively Promote Agricultural Exports**

Justification : Indonesian agricultural products are not well-known in world markets, and world markets generally remain a mystery to Indonesians. Numerous trade opportunities are available. Competition in exports will lower per unit costs of exporting, and allow foreign quality requirements to be

introduced in to Indonesia; thus permitting value added production.

Benchmarks :

- Export markets developed for livestock industry.
- Formal relationships developed between trade associations and their government representatives overseas (Agricultural Attaches).
- Detailed inventories and analyses of specific licenses now imposed on trade and processing developed and circulated.
- A market information system which is able to detect and analyze any changes in international markets with high degree of accuracy established and the service made available in a timely and transparent manner.

3. **Reduce Trade Barriers on the Output of the Food-Processing Sub-sector.**

Justification : Indonesia has great potential to become a major processor of agricultural products for export. Entry into these ventures is often restricted, and potentially competing foreign products are effectively discouraged. This results in generally poor quality local products at high cost to consumers.

Benchmarks :

- Reduce barriers to importation of consumer food products.
- Review restriction on foreign participation in Indonesian retailing and wholesaling.

4. **Reduce Constraints and Procedures Associated with the Import or Export of Perishable Commodities.**

Justification : For perishable goods, agribusiness operators report excessively complex procedures for clearing customs and delivering products to the marketplace. Delays are accompanied by official and unofficial fees for processing of permits and movement of goods.

The general claim of businesses is that there are too many forms to fill in with a lot of duplication between different government departments. Also, many forms are irrelevant, or request unnecessarily detailed information which may be considered confidential to the business concerned, without a clear justification being given on its purpose and how it will be used. This only results in a lot of unreliable information being collected which can therefore not be acted upon.

Benchmarks :

- Review clearance and licensing procedures at airports and ports associated with perishable commodities.

5. **Replace the Existing Allocation System of Import and Export Licenses by a Public Auction to Increase Government Revenues and to Improve Efficiency of Price Setting Mechanism.**

Benchmarks :

- Public auction system established for allocation of import and export licenses.

6. **The GOI will Review the Current Duty Drawback Scheme to Encourage Participation from Smaller Manufactures and Traders.**

Justification : Current Duty Draw-back System favors the very largest firms, not giving a chance to firms that can also attain acceptable scales of economy.

Benchmarks :

- Review Duty Draw-back Scheme and propose alternatives.

ANNEX D

UNITED STATES OF AMERICA
AGENCY FOR INTERNATIONAL DEVELOPMENT
AMERICAN EMBASSY
JAKARTA, INDONESIA

INITIAL ENVIRONMENTAL EXAMINATION

(A) PROGRAM COUNTRY: Indonesia
(B) ACTIVITY: Agribusiness Development Project (497-0368)
(C) ESTMATED FUNDING: $20.0 million
(D) PERIOD OF FUNDING: FY 1991 - FY 1996

(E) STATEMENT PREPARED BY: Jon D. Lindborg
Jon D. Lindborg, ARD/APD,
USAID/Indonesia

(F) ENVIRONMENTAL ACTIONS RECOMMENDED:

Categorical Exclusion -- A.I.D. Regulation 16, Section 216.2(c)(2) (i)

(G) ENVIRONMENTAL OFFICER CLEARANCE: Jerry Bisson
Jerry Bisson, ARD/RRM,
USAID/Indonesia

(H) DECISION OF USAID/INDONESIA ACTING DIRECTOR

APPROVED: _____

DISAPPROVED: _____

DATE: 4/9/91

(I) DECISION OF BUREAU ENVIRONMENTAL OFFICER

APPROVED: M. Cox, APRE/DR

DISAPPROVED: _____

DATE: 4-16-91

EXAMINATION OF THE NATURE, SCOPE AND MAGNITUDE OF THE ENVIRONMENTAL IMPACT

A. Description of the Project

The Agribusiness Development Project (ADP) is a six-year effort with estimated life-of-project funding of $20.0 million (grant). The goal of ADP is to generate sustainable increases in employment and incomes by increasing the competitiveness, efficiency and growth of the agribusiness sub-sector. The purpose of the project is to enhance public sector support to agribusiness and to strengthen the private agribusiness sector, especially agribusiness organizations.

ADP will incorporate two complementary components:

1. Public Sector Component Inputs to be provided under this component include long- and short-term technical assistance, special studies, short-term training and administration/logistics. Inputs will support three basic elements:

   (a) Regulatory Reform ADP will work with the GOI's Permanent Agricultural-Industrial Working Commission (PAIWC), which is composed of senior level Ministry of Agriculture (MOA) and Ministry of Industry (MOI) representatives. An initial policy matrix and agenda for action has been developed which will be refined during the first months of the Project. The PAIWC staff and consulting team will then periodically update the agenda through the life-of-project.

   (b) Institutional Reform Because of the strong desire on the part of the GOI to strengthen agribusiness, USAID will assist the GOI in the transition from its role of controller and implementer of production, to one of facilitator and service-provider in an open market environment. A general framework for institutional change within the Ministry of Agriculture has already been defined. This will be further refined through the Project.

   (c) Private Sector Linkages Fostering better communication and cooperation between the public and private sector is a major thrust of ADP. The Project will facilitate the participation of the private sector in PAIWC on a collaborative basis, giving the private sector an opportunity to recommend agribusiness policy changes to the GOI, as well as to comment on changes proposed by the Government. The Project will also encourage public-private cooperation in agribusiness research and development, market development and promotion, and quality assurance programs.

2. Private Sector Component Inputs to be provided under this component include long- and short-term technical assistance, grants to private sector agribusiness organizations for organizational strengthening, special studies, short-term training and administration/logistics. Inputs will support two basic elements:

   (a) Organizational Strengthening In order to expand the role of the private sector in agribusiness development, ADP will strengthen the capacity of private sector agribusiness trade organizations to provide services to their members and to represent their members' views to the Government on policy and regulatory reform issues. The Project will provide technical assistance and training to support the development of such organizations. In addition, USAID will provide organizational strengthening grants to selected organizations. Initially, two organizations will be supported through ADP: The Agri-Business Club and The Indonesian Fisheries Federation. Once assistance has been rendered to these two organizations, the ADP will identify and assist other organizations in a similar manner.

   (b) Services to Private Sector Agribusiness Firms Through its targeted agribusiness organizations, ADP will provide assistance to member firms. Assistance to be provided will include technical assistance, training, seminars, feasibility studies, attendance at trade shows, and initial visits of potential joint venture partners. The intent is to subsidize only those activities that may not be undertaken otherwise, and that have potentially strong economic benefits for Indonesia.

To ensure compliance with A.I.D. environmental regulations, the following environmental activities will be included in the project:

1. Environmental Technical Assistance and Training Short-term training and TA will be provided to public and private sector organizations assisted through ADP in environmental assessment procedures, including assessing environmental impacts and monitoring environmental mitigations as appropriate.

2. Pollution Prevention Short-term training and TA will be provided to private sector organizations assisted through ADP that incorporates in-plant pollution prevention controls and housekeeping/management programs. Pollution prevention training and TA will improve process efficiency and profitability while also reducing pollution. (Examples are improved packaging operations, intermediate product recovery and reuse, water reuse, reduction of raw material and product losses from spills and poor personnel training.)

B. Recommended Environmental Action

Considering the above-outlined project approach, a categorical exclusion from A.I.D.'s Initial Environmental Examination, Environmental Assessment and Environmental Impact Statement is proposed. We believe that ADP meets the criteria for categorical exclusion based on A.I.D. Environmental Procedure Section 216.2(c)(2)(i). This section allows for a categorical exclusion for education, technical assistance, or training programs except to the extent such programs directly affect the environment. ADP's project activities will not have a direct impact on the environment

ANNEX E

CERTIFICATION PURSUANT TO GRAY AMENDMENT

As the Director and the Principal Officer of the Agency for International Development in Indonesia, I certify that during the design of the Agribusiness Development Project (ADP) (497-0368), full consideration has been given to the potential involvement of small and/or economically and socially disadvantages enterprises, and historically black colleges universities and minority controlled private and voluntary organizations covered by the Gray Amendment.

The project procurement plan is based on the need to utilize contractors with highly specific substantive knowledge and technical competence in analyzing agribusiness development constraints on economic growth for formulating improved policies and practices to encourage the public sector and the private sector to promote agribusiness. The necessary knowledge and expertise are not available, to the best of our knowledge, from minority controlled and women-owned firms, historically black colleges and universities, and minority controlled private voluntary agencies. However, it is anticipated that the prime contractor will use such concerns for at least 10% of the total contract value. If all other aspects of the evaluation of contract bids are equal, the participation of such concerns may become the determining factor for selection.

Further, it is the policy of this Mission to use Gray Amendment firms for all interim and final project evaluations.

L. P. Reade
Mission Director

9/27/91
Date

ANNEX F

Agribusiness Development Project

Synopsis cf PID Approval

The PID was reviewed in Washington on 8/16/90 with approval given for field authorization of the project. It was recommended that the Project Paper identify policy constraints for possible intervention, carefully select agribusiness organizations to be assisted and specify export markets that may be targeted. The review committee also pointed out the need to elaborate A.I.D.'s comparative advantage in agribusiness vis-a-vis other donors who may also be working in this area and the need to spell out the interface of the project with other USAID/Indonesia initiatives. Finally, it was recommended that the "home" for the project be carefully considered, training to meet private sector requirements be included and care be taken in preparing the social soundness analysis. AID/W also requested that a cable outlining the policy agenda be sent.

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ANNEX G
STATUTORY CHECKLIST

5C(2) - ASSISTANCE CHECKLIST

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE?	Yes
A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS	
1. **Host Country Development Efforts** (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.	a. Yes b. Yes c. Yes d. Yes e. Yes f. No
2. **U.S. Private Trade and Investment** (FAA Sec. 601(b)): Information and conclusions on how assistance will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	The Project will foster agribusiness trade and investment linkages between the U.S. and Indonesia. In particular, th Project will target linkages between U.S. and Indonesian private sector agribusiness associations

3. **Congressional Notification**

a. **General requirement** (FY 1991 Appropriations Act Secs. 523 and 591; FAA Sec. 634A): If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the notification requirement has been waived because of substantial risk to human health welfare)?	The Project was included in the 1991 Congressional Presentation.
b. **Notice of new account obligation** (FY 1991 Appropriations Act Sec. 514): If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?	N/A
c. **Cash transfers and nonproject sector assistance** (FY 1991 Appropriations Act Sec. 575(b)(3)): If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?	N/A
4. **Engineering and Financial Plans** (FAA Sec. 611(a)): Prior to an obligation in excess of $500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?	a. Yes b. Yes

5. **Legislative Action** (FAA Sec. 611(a)(2)): If legislative action is required within recipient country with respect to an obligation in excess of $500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?	No further legislative action is required.
6. **Water Resources** (FAA Sec. 611(b); FY 1991 Appropriations Act Sec. 501): If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)	N/A
7. **Cash Transfer and Sector Assistance** (FY 1991 Appropriations Act Sec. 575(b)): Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?	N/A
8. **Capital Assistance** (FAA Sec. 611(e)): If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?	N/A
9. **Multiple Country Objectives** (FAA Sec. 601(a)): Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage	a. Yes b. Yes c. No d. Yes

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monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.	e. Yes f. No
10. **U.S. Private Trade** (FAA Sec. 601(b)): Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	The Project will foster agribusiness trade and investment linkages between the U.S. and Indonesia. In particular, the Project will target linkages between U.S. and Indonesian private sector agribusiness associations.
11. **Local Currencies**	
a. **Recipient Contributions** (FAA Secs. 612(b), 636(h)): Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.	The GOI will provide the equivalent of US$4,525,000 in local currency contributions.
b. **U.S.-Owned Currency** (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?	No
c. **Separate Account** (FY 1991 Appropriations Act Sec. 575). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:	N/A
(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of	N/A

A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government? N/A

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes? N/A

(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government? N/A

12. **Trade Restrictions**

a. **Surplus Commodities** (FY 1991 Appropriations Act Sec. 521(a)): If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? No

b. **Textiles (Lautenberg Amendment)** (FY 1991 Appropriations Act Sec. 521(c)): Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility No

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studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

13. **Tropical Forests** (FY 1991 Appropriations Act Sec. 533(c)(3)): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

a. No

b. No

14. **Sahel Accounting** (FAA Sec. 121(d)): If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)?

N/A

15. **PVO Assistance**

a. **Auditing and registration** (FY 1991 Appropriations Act Sec. 537): If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?

N/A

b. **Funding sources** (FY 1991 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"): If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from

N/A

sources other than the United States Government?

16. **Project Agreement Documentation** (State Authorization Sec. 139 (as interpreted by conference report)): Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

Since this agreement will provide grant funding of less than $25.0 million, it is not necessary to follow Case-Zablocki Act procedures.

17. **Metric System** (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

The bulk of the procurement under the Project will be for technical services. To the extent commodities are purchased, efforts will be made to use metric measurements to the maximum extent possible.

18. **Women in Development** (FY 1991 Appropriations Act, Title II, under heading "Women in Development"): Will assistance be designed so that the

Yes

percentage of women participants will be demonstrably increased?

19. **Regional and Multilateral Assistance** (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs. — No

20. **Abortions** (FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 525):

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization? — No

b. Will any funds be used to lobby for abortion? — No

21. **Cooperatives** (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life? — Although not specifically targeted, cooperatives may be assisted as producers/ suppliers of raw materials for processing.

22. **U.S.-Owned Foreign Currencies**

a. **Use of currencies** (FAA Secs. 612(b), 636(h); FY 1991 Appropriations Act Secs. 507, 509): Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services. — N/A

b. **Release of currencies** (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? — No

23. **Procurement**

a. **Small business** (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?	Yes
b. **U.S. procurement** (FAA Sec. 604(a)): Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him?	Yes
c. **Marine insurance** (FAA Sec. 604(d)): If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?	Yes
d. **Non-U.S. agricultural procurement** (FAA Sec. 604(e)): If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)	N/A

e. **Construction or engineering services** (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.) — No.

f. **Cargo preference shipping** (FAA Sec.603)): Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates? — No

g. **Technical assistance** (FAA Sec. 621(a)): If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? — Yes

Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs? — Yes

h. **U.S. air carriers** (International Air Transportation Fair Competitive Practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? — Yes

i. **Termination for convenience of U.S. Government** (FY 1991 Appropriations Act Sec. 504): If the U.S. Government is a — Yes

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party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

j. **Consulting Services** (FY 1991 Appropriations Act Sec. 524): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)?

Yes

k. **Metric conversion** (Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

The bulk of the procurement under the Project will be for technical services. To the extent that commodities are purchased, efforts will be made to use metric measurement to the maximum extent possible.

l. **Competitive Selection Procedures** (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes

24. **Construction**

a. **Capital project** (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used? N/A

b. **Construction contract** (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? N/A

c. **Large projects, Congressional approval** (FAA Sec. 620(k)): If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance have the express approval of Congress? N/A

25. **U.S. Audit Rights** (FAA Sec.301(d)): If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N/A

26. **Communist Assistance** (FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes

27. **Narcotics**

a. **Cash reimbursements** (FAA Sec. 483): Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? Yes

b. **Assistance to narcotics traffickers** (FAA Sec. 487): Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to

believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance?

28. **Expropriation and Land Reform** (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes

29. **Police and Prisons** (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes

30. **CIA Activities** (FAA Sec. 662): Will assistance preclude use of financing for CIA activities? Yes

31. **Motor Vehicles** (FAA Sec. 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes

32. **Military Personnel** (FY 1991 Appropriations Act Sec. 503): Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes

33. **Payment of U.N. Assessments** (FY 1991 Appropriations Act Sec. 505): Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes

34. **Multilateral Organization Lending** (FY 1991 Appropriations Act Sec. 506): Will assistance preclude use of financing to Yes

carry out provisions of FAA section 209 (d) (transfer of FAA funds to multilateral organizations for lending)?

35. **Export of Nuclear Resources** (FY 1991 Appropriations Act Sec. 510): Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? Yes

36. **Repression of Population** (FY 1991 Appropriations Act Sec. 511): Will assistance preclude use of financing for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes

37. **Publicity or Propaganda** (FY 1991 Appropriations Act Sec. 516): Will assistance be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? No

38. **Marine Insurance** (FY 1991 Appropriations Act Sec. 563): Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? Yes

39. **Exchange for Prohibited Act** (FY 1991 Appropriations Act Sec. 569): Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law? No

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B. CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

1. **Agricultural Exports (Bumpers Amendment)** (FY 1991 Appropriations Act Sec. 521(b), as interpreted by conference report for original enactment): If assistance is for agricultural development activities specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?	(1) No (2) No
2. **Tied Aid Credits** (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund"): Will DA funds be used for tied aid credits?	No
3. **Appropriate Technology** (FAA Sec. 107): Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?	Yes
4. **Indigenous Needs and Resources** (FAA Sec. 281(b)): Describe extent to which the activity recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.	The Project will encourage the institutional development of a number of privat sector agribusiness trade associations.

5. **Economic Development** (FAA Sec. 101(a)): Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?	Yes
6. **Special Development Emphases** (FAA Secs. 102(b), 113, 281(a)): Describe extent to which activity will: (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.	(a) The development of agribusiness will directly benefit labor-intensive production and processing of agricultural commodities in rural areas. (b) N/A (c) The Project supports self-help efforts in agri-business. (d) The training component of the Project includes specific targets for women's participation. (e) N/A
7. **Recipient Country Contribution** (FAA Secs. 110, 124(d)): Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?	Yes
8. **Benefit to Poor Majority** (FAA Sec. 128(b)): If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?	Yes

9. **Abortions** (FAA Sec. 104(f); FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 535):

a. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? No

b. Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations? No

c. Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization? No

d. Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services? No

e. In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning? No

f. Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? No

g. Are any of the funds to be made available to any organization if the President certifies that the use of these funds by such organization would violate any of the above provisions related to abortions and involuntary sterilization? No

10. **Contract Awards** (FAA Sec. 601(e)): Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?	Yes
11. **Disadvantaged Enterprises** (FY 1991 Appropriations Act Sec. 567): What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans,or who are economically or socially disadvantaged (including women)?	Approximately 10%
12. **Biological Diversity** (FAA Sec. 119(g): Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?	N/A. The project is not designed to provide funding specifically for biological diversity activities.
13. **Tropical Forests** (FAA Sec. 118; FY 1991 Appropriations Act Sec. 533(c)-(e) & (g)):	
a. **A.I.D. Regulation 16: Does** the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16?	Yes
b. **Conservation:** Does the assistance place a high priority on	N/A. The project is not designed to provide funding for tropical forest related activities.

conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (1) stress the importance of conserving and sustainably managing forest resources; (2) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watersheds and rehabilitate those which have been deforested; (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (9) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; (11) utilize the resources and abilities of all

relevant U.S. government agencies; (12) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land; and (13) take full account of the environmental impacts of the proposed activities on biological diversity?

c. **Forest degradation:** Will assistance be used for: (1) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas; (3) activities which would result in the conversion of forest lands to the rearing of livestock; (4) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands; (5) the colonization of forest lands; or (6) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development? No

d. **Sustainable forestry:** If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry? N/A

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e. **Environmental impact statements:** Will funds be made available in accordance with provisions of FAA Section 117(c) and applicable A.I.D. regulations requiring an environmental impact statement for activities significantly affecting the environment?	Yes
14. **Energy** (FY 1991 Appropriations Act Sec. 533(c)): If assistance relates to energy, will such assistance focus on: (a) end-use energy efficiency, least-cost energy planning, and renewable energy resources, and (b) the key countries where assistance would have the greatest impact on reducing emissions from greenhouse gases?	N/A
15. Sub-Saharan Africa Assistance (FY 1991 Appropriations Act Sec. 562, adding a new FAA chapter 10 (FAA Sec. 496)): If assistance will come from the Sub-Saharan Africa DA account, is it: (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (b) to be used to promote sustained economic growth, encourage private sector development, promote individual initiatives, and help to reduce the role of central governments in areas more appropriate for the private sector; (c) being provided in accordance with the policies contained in FAA section 102; (d) being provided in close consultation with African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa; (e) being used to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to	N/A

support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in assisted policy reforms, the need to protect vulnerable groups; (f) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks, to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

16. Debt-for-Nature Exchange (FAA Sec. 463): If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (a) the world's oceans and atmosphere, (b) animal and plant species, and (c) parks and reserves; or describe how the exchange will promote: (d) natural resource management, (e) local conservation programs, (f) conservation training programs, (g) public commitment to conservation, (h) land and ecosystem management, and (i) regenerative approaches in farming, forestry, fishing, and watershed management. N/A

17. Deobligation/Reobligation (FY I991 Appropriations Act Sec. 515): If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, Yes

and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified?

18. Loans

a. **Repayment capacity** (FAA Sec. 122(b)): Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest. N/A

b. **Long-range plans** (FAA Sec. 122(b)): Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities? N/A

c. **Interest rate** (FAA Sec. 122(b)): If development loan is repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter? N/A

d. **Exports to United States** (FAA Sec. 620(d)): If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest? N/A

19. **Development Objectives** (FAA Secs. 102(a), 111, 113, 281(a)): Extent to which activity will: (1) effectively involve the poor in development, by expanding access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities

(1) The development of agri-business will directly benefit labor-intensive production and processing of agricultural commodities in rural areas.

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to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S.institutions; (2) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help efforts of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries?

(2) N/A

(3) The Project supports self-help efforts in agribusiness.

(4) The training component of the Project including specific targets for women's participation.

(5) N/A

20. **Agriculture, Rural Development and Nutrition, and Agricultural Research** (FAA Secs. 103 and 103A):

a. **Rural poor and small farmers:** If assistance is being made available for agriculture, rural development or nutrition, describe extent to which activity is specifically designed to increase productivity and income of rural poor; or if assistance is being made available for agricultural research, has account been taken of the needs of small farmers, and extensive use of field testing to adapt basic research to local conditions shall be made.

(a) The Project is specifically designed to increase the efficiency and productivity of Indonesia's agribusiness sub-sector. A more efficient agribusiness subsector will indirectly increase the productivity and incomes of rural poor.

b. **Nutrition:** Describe extent to which assistance is used in coordination with efforts carried out under FAA Section 104 (Population and Health) to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value; improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs; and the undertaking of pilot or demonstration programs explicitly

(b) The Project will actively promote improvements in the quality of fruits, vegetables, and non-marine seafood.

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addressing the problem of malnutrition of poor and vulnerable people.

c. **Food security:** Describe extent to which activity increases national food security by improving food policies and management and by strengthening national food reserves, with particular concern for the needs of the poor, through measures encouraging domestic production, building national food reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution.

Through the Project's policy regulatory component, Indonesian policy-makers should have an improved analytical capacity to manage and strengthen national food reserves.

21. **Population and Health** (FAA Secs. 104(b) and (c)): If assistance is being made available for population or health activities, describe extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach.

N/A

22. **Education and Human Resources Development** (FAA Sec. 105): If assistance is being made available for education, public administration, or human resource development, describe (a) extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, and strengthens management capability of institutions enabling the poor to participate in development; and (b) extent to which assistance provides advanced education and training of people of developing countries in such disciplines as are required for planning and implementation of public and private development activities.

(a) Training programs carried out by agribusiness trade associations will include non-formal education activities.

(b) Short-term training activities will include courses related to planning and implementing agribusiness programs.

23. **Energy, Private Voluntary Organizations, and Selected Development Activities** (FAA Sec. 106): If

N/A

assistance is being made available for energy, private voluntary organizations, and selected development problems, describe extent to which activity is:

a. concerned with data collection and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and facilitative of research on and development and use of small-scale, decentralized, renewable energy sources for rural areas, emphasizing development of energy resources which are environmentally acceptable and require minimum capital investment;

b. concerned with technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

c. research into, and evaluation of, economics development processes and techniques;

d. reconstruction after natural or manmade disaster and programs of disaster preparedness;

e. for special development problems, and to enable proper utilization of infrastructure and related projects funded with earlier U.S. assistance;

f. for urban development, especially small, labor-intensive enterprises, marketing systems for small producers, and financial or other institutions to help urban poor participate in economic and social development.

24. **Sahel Development** (FAA Secs. 120-21). If assistance is being made available for the Sahelian region, describe: (a) extent to which there is N/A

international coordination in planning and implementation; participation and support by African countries and organizations in determining development priorities; and a long-term, multidonor development plan which calls for equitable burden-sharing with other donors; (b) whether a determination has been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of projects funds (dollars or local currency generated therefrom).

C. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY N/A

1. **Economic and Political Stability** (FAA Sec. 531(a)): Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?

2. **Military Purposes** (FAA Sec. 531(e)): Will this assistance be used for military or paramilitary purposes?

3. **Commodity Grants/Separate Accounts** (FAA Sec. 609): If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

4. **Generation and Use of Local Currencies** (FAA Sec. 531(d)): Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106?

5. **Cash Transfer Requirements** (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund," and Sec. 575(b)). If assistance is in the form of a cash transfer:

a. **Separate account:** Are all such cash payments to be maintained by the country in a separate account and not to be commingled with any other funds?

b. **Local currencies:** Will all local currencies that may be generated with funds provided as a cash transfer to such a country also be deposited in a special account, and has A.I.D. entered into an agreement with that government setting forth the amount of the local currencies to be generated, the terms and conditions under which they are to be used, and the responsibilities of A.I.D. and that government to monitor and account for deposits and disbursements?

c. **U.S. Government use of local currencies:** Will all such local currencies also be used in accordance with FAA Section 609, which requires such local currencies to be made available to the U.S. government as the U.S. determines necessary for the requirements of the U.S. Government, and which requires the remainder to be used for programs agreed to by the U.S. Government to carry out the purposes for which new funds authorized by the FAA would themselves be available?

d. **Congressional notice:** Has Congress received prior notification providing in detail how the funds will be used, including the U.S. interests that will be served by the assistance, and, as appropriate, the economic policy reforms that will be promoted by the cash transfer assistance?

ANNEX H

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THE JUNIOR MINISTER OF AGRICULTURE
THE REPUBLIC OF INDONESIA

USAID ROUTING
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Nomor:TU.210/50/MM/IV/1991.

Jakarta, April 10, 1991

Mr. L.P. Reade
Director
US Agency for International Development
American Embassy
Jakarta

Dear Mr. Reade,

I am very pleased to note that our initial frank exchange of views is helping propel preparation of the Agribusiness Development Project forward with a better sense of direction.

As you might be aware, notwithstanding the success of massmovement productivity campaigns in achieving rice self-sufficiency, the MOA no longer intends to remain the major actor in agricultural and rural development. Rather, we plan to focus our efforts on creating a climate conducive to private initiatives.

Our interventions will increasingly aim at ameliorating the inefficiencies and inequities spawned by seemingly intractable market imperfections. In the design of Agro-industry, choice of location, scale, and technology should accord due consideration to comparative advantage, i.e, the composition and quality of resources available Furthermore, the resultant linkages between the various actors involved in the different stages comprising

the agribusiness system should reach out to the rural disadvantaged and serve to create the maximum number of meaningful employment opportunities without inflicting damage upon the environment.

In light of the above I consider the proposed Agribusiness Development Project to be both very timely and highly relevant. I am convinced that the strengthening of both the Ministries of Agriculture and Industry will be best served by locating the project in our Working Group, and that the PAIWC Steering Committee - strengthened by representatives of related governmental agencies and private organizations - would be ideally placed to provide the requisite guidance. Therein would the development of an efficient and competitive agribusiness sector be most readily affected.

On behalf of the Government of Indonesia I request that the US-AID/ Indonesia fund the Agribusiness Development Project, and to continue working with my staff to finalize project documentation as soon as possible.

Sincerely yours,

Sjarifudin Baharsjah
Junior Minister of Agriculture

AMPLIFIED PROJECT DESCRIPTION
AGRIBUSINESS DEVELOPMENT PROJECT (ADP)
ANNEX I

The contents of this annex may be changed by written agreement of the authorized representatives of the Parties named in Section 8.2 of this Project Agreement without formal amendment of the agreement, provided that such changes are within the general scope of the Project as set forth in Article 2 of this Agreement.

I. PROJECT DESCRIPTION

A. Project Goal and Purpose

The Agribusiness Development Project (ADP) is a six-year effort with a goal of generating sustainable increases in employment and income by increasing the competitiveness, efficiency and growth of the agribusiness sub-sector. The Project purpose is to:

(1) enhance public sector support to agribusiness; and
(2) strengthen the private agribusiness sector, especially agribusiness organizations.

To achieve these purposes the ADP will implement two complementary components:

(1) The public sector component will assist the Ministry of Agriculture (MOA) and the Ministry of Industry (MOI) examine policy issues at macro and micro levels, expand their ability to be facilitators and regulators of agribusiness and achieve better communication and cooperation with private agribusiness firms.

(2) The private sector component will strengthen the capacity of private sector agribusiness trade/producer associations or other organizations to provide services to their members and provide input to the Government in policy and regulatory reform.

B. Project Outputs

The Project is designed to deliver the following outputs:

(1) Agribusiness policy and regulatory units in MOA and MOI capable of analyzing agribusiness deregulation issues and options and implementing necessary actions.

- At least two major policy studies completed each year.

(2) New GOI institutional framework and services in place to assist and promote the agribusiness sub-sector.

- MOA/MOI offering two new services (e.g. policies/grades/standards) to the private sector.

(3) Public and private sectors effectively collaborating to assist and promote agribusiness development.

- Approximately 10 public/private forums and 25 joint promotion activities conducted.

(4) Private sector agribusiness organizations providing highly-valued, self-financed services to members and input to GOI on policy and regulatory matters.

- Five agribusiness organizations financially self-supporting in delivery of valued agribusiness services.

- Five agribusiness organizations viewed by GOI as full partners in development, implementation and monitoring of policy/regulations.

C. Project Components

(1) Public Sector Component

The GOI promotes agribusiness development in three main ways. First, it sets the policies and regulations. Second, it encourages private sector activities, essentially by providing information (e.g. research and development, market information, market intelligence, market penetration, etc.). Third, the GOI implements its own production, processing and distribution programs (mainly through state-owned enterprises). The ADP will help in all three of these areas, but the emphasis will be on the first and second functions.

(a) Initial Policy Agenda

An Initial agenda of policy items, which has already been developed will be formalized via Implementation Letter at the outset of the Project. It will define the topics of policy-related analyses that should be carried out, as well as the communication linkages that should be fostered.

(b) Monitoring and Analyzing Current Policies

Working with the Initial Policy Agenda, the ADP will assist the GOI to :

- Catalog past and present policies, regulations, decrees, provincial rules, and unwritten conditions that effect agribusiness;

- Improve the GOI institutional capacity to analyze the implications of current and proposed policies and regulations.

- Help prioritize policies and regulations that should be changed, and then examine alternative approaches that would eliminate or mitigate constraints;

- Help the GOI prepare position papers for Indonesian policy-makers (at least 2 major ones per year on average);

- Encourage a process of input and feedback from the private sector (domestic and international) and areas outside Jakarta on policy and regulatory changes that need to be made.

(c) Future Policy Agendas

The Initial Policy Agenda for the ADP will be reviewed and revised annually. The up-dated agenda will help to guide Project studies.

(d) Public Sector Programs

The Minister of Agriculture in 1991 announced that, "It is the responsibility of the government and every institution concerned to develop market oriented and commercial agriculture enterprises." To improve the operation of public sector programs in line with the Minister's challenge, the Project will provide modest assistance to the MOA and MOI to accomplish the following:

- Improve the operation of state-owned enterprises (SOEs) so that they can serve as models for how private sector companies can be more "socially beneficial" without sacrificing efficiency.

- Promote, monitor, and evaluate agribusiness activities which may serve as models for how to improve linkages between farmers and agribusiness entrepreneurs. This will include:

i) Analysis of how the Nucleus Estate Smallholder System can be modified to provide more encouragement to collaboration between plantations and small holders.

ii) Assess how to better utilize the "Foster Parent System" whereby 1%- 5% of the net profits of state-owned companies are set aside for development of small-scale industry, and 20 percent of bank credits are targeted to small-scale business.

iii) Assess marketing and processing options for the crops promoted under the Poverty Alleviation Program.

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(e) GOI Support to Private Sector Agribusiness

In addition to providing modest assistance to the GOI to improve the operation of some of their public agribusiness programs, the ADP will encourage the Ministries of Agriculture and Industry to serve as facilitators and service providers to the private sector in a more open market setting. The ADP will work to:

- Develop options papers for the MOA and MOI on ways to support the private sector directly.
- Develop options papers on how to increase private sector support for public sector schemes such as the nucleus estate and the Bapak Angkat programs.
- Support the development of private agribusiness organizations so they are better able to provide services to their members.
- Encourage joint GOI-private sector agribusiness promotion activities.
- Develop case studies of how agribusinesses make the leap from low levels of production for the domestic market to the higher levels of quality and quantity that the foreign market requires.
- Develop improved communication between the public and private sector by undertaking joint studies and other activities which have their origin in the private sector.
- Identify and support private sector initiated schemes for intensive development of particular high value-added products.
- Improve and harmonize grades and standards for products and packaging.
- Improve market intelligence and penetration.

2. The Private Sector Component

(a) Targeting the Private Sector Component

The Project will provide assistance to private sector not-for-profit agribusiness organizations which emphasize the importance of promoting equity along with growth. Potential Project counterparts include trade and producer associations and associations of other non-profit organizations,

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cooperatives, input suppliers, business service providers or groups of individual processors and exporters.

ADP will target a few critical agribusiness product lines selected using commercial, economic, socio-economic, strategic, legal, policy and regulatory criteria. Linkages in these product lines will be sought with PIR, Bapak/Angkat or other GOI schemes which are sensitive to the needs for smallholder participation.

Two agribusiness product lines have been initially selected for emphasis - fisheries and horticulture. Once the Project is operational, this selection will again be reviewed to assure that it remains valid. Other product lines such as livestock and estate crops will be added later as justified by available financial and manpower resources.

Within these two product lines, agribusiness organizations will be selected for possible assistance using criteria as set forth in the project paper. Once support to initially selected organizations is running smoothly, other organizations will be evaluated for possible assistance.

(b) Detailed Description of Key Private Sector Activities

Strategic Planning. Several organizations will be helped to develop discrete activities which focus on key domestic and export products with strong market potential and which can be produced and processed in large volume.

Development of Information Systems. The project will assist private organizations to access and disseminate effectively and efficiently key information on markets, technology, grades and standards, quality control, management systems and training methodologies.

Management Systems. ADP will assist selected organizations to enhance their management and financial capability as well as to assist their membership with these issues.

Relations with Government. The Project will help improve the communications between the public and private sectors.

Support of Smallholder Development Schemes. The Project will work with the public and private sector to develop specific products and processes which will be introduced to smallholders through training and technical assistance.

Training Systems. Technical support will be provided to develop comprehensive training programs responsive to the needs of each industry.

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Market Development. Selected organizations will be helped to develop quickly a thorough knowledge of key markets. This will involve periodic visits to the markets, participation in key trade shows, and assistance to buyers, equipment suppliers and others.

Linkage with the U.S. ADP will foster linkages between agribusiness organizations in Indonesia and the United States. Joint activities with these associations may include: (1) participation in trade fairs; (2) exchange of market and technical information; (3) help by the Indonesian association for visiting representatives of companies in U.S. associations; (4) training of Indonesian association members in the U.S.; and (5) assistance by the Indonesian associations in establishing a presence for the American associations in Indonesia.

II. Implementation Responsibilities

The ADP will be managed by the Ministry of Agriculture. The Project will be under the direct guidance of the MOA's Secretary General, and programmatically supported through the Project Steering Committee.

A. Project Management and Implementation

Management and implementation units will include a Steering Committee, a Project Implementation Unit (PIU) and Agribusiness Promotion Offices.

(1) Steering Committee (SC)

The Project's Steering Committee will be chaired by the MOA's Secretary General. The Vice Chairman will be the Secretary General of Ministry of Industry. The Secretary of the Steering Committee will be the Director of Bureau of Planning-MOA. The membership of the Steering Committee will include a representative from each of the following:

- BAPPENAS
- Bureau of Planning-MOI
- D.G. Food Crops
- D.G. Fisheries
- D.G. Livestock
- D.G. Estate Crops
- Bureau of International Cooperation-MOA
- USAID
- D.G. Small Scale Industry
- D.G. Multifarious Industry
- D.G. Domestic Trade
- National Agency for Export Development (NAFED)
- PAIWC Secretariat
- Private Sector
- Center for Agro Socio-Economic Research
- TA Team Leader

Other ministries that may be represented later include Ekuin, Cooperatives, and Health. The Senior Agribusiness Policy

Advisor/Chief of Party will serve as an ex-officio participant in meetings of the Steering Committee, along with one representative from USAID.

The SC will be responsible for overseeing project implementation. It will review and approve annual work plans and budgets for the project. In addition, the SC will also serve as a policy forum for discussion of agribusiness issues. As such it will coordinate formulation of agribusiness development policies.

(2) Implementation Unit (PIU)

A Project Implementation Unit (PIU) will be formed under the direction of the Secretary General Ministry of Agriculture as Chairman of the Project Steering Committee. Plans to be implemented by the PIU will be approved by Project Steering Committee. Overall coordination of project management and implementation functions will reside in the PIU. A Project Leader (PIMPRO) from MOA will be appointed to head this unit. Other members of the PIU will include representatives from BOP/MOA, BOP/MOI, Directorates of Binus from D.G.s Food Crops, Fisheries, Estate Crops, Livestock, D.G.s Multifarious Industry and Small Scale Industry, USAID, and the TA Team. TA team advisors assigned to this unit will include the Senior Policy Advisor/Chief of Party and the Project Administrator.

The PIU will coordinate overall administrative and financial management functions for the project. The PIU will develop annual work plans and budgets (covering both USAID and GOI contributions) for consideration and approval by the Steering Committee. On a monthly basis, or more often as required, the PIU will review and approve activities proposed by the PIMPRO and the Team Leader. This will include implementation functions associated with the In-country Training, Policy Studies, and Workshops/seminars elements. Official project communications between USAID and the GOI will be through this Unit.

(3) Agribusiness Promotion Office (APO)

An Agribusiness Promotion Office (APO), forming an operational link with the private sector, will be established on a test basis. In terms of overall policy and procedures, the APO staff will work under the direction of the PIU and, hence, the Steering Committee.

Initially, it will be staffed by three long-term TA team members, along with local staff, including temporary assignments by GOI agribusiness staff who will continue to be solely employed by the GOI.

The APO will not be a new legal entity; rather it will be sponsored by the MOA and supported by USAID via the prime

contractor. During Year 2 of the Project, two more small APOs will be established outside of Jakarta, most probably in Surabaya and Ujung Pandang. These offices will report administratively to the Jakarta APO. Other APOs may be established in later years.

B. Training

Approximately 30 percent of the work of the Long Term Technical Assistance, and 45 percent of the Short Term Technical Assistance team-members will be in the form of training. In addition, formal and informal training programs will be conducted.

Formal, short-term agribusiness training courses (totally 1141 person/months of training) will be provided to GOI agribusiness staff and private sector participants. Informal training may include study tours to visit agribusiness projects; participation in trade fairs and other agreed learning experiences. No long-term participant training is planned. To the maximum extent possible, training courses will include both public and private sector trainees. Fees may be charged to private sector participants in order to help defray training costs, and the funds will be held in a special account and used solely in support of training programs. An effort will be made to target 30 percent of training in terms of person-months for women.

(1) In-country Training

660 person/months of formal in-country training courses will be coordinated and implemented by the PIU. Possible courses include public sector management and program development, policy analysis, agribusiness sub-sector overviews, research and development methodology, international marketing, post harvest technologies, phyto-sanitary procedures, transportation, packaging and management information systems. More applied training courses will focus on agribusiness management aspects of production, processing and marketing. The TA contractor may provide short-term TA in the form of trainers and instructors. The prime TA contract will also cover expenses such as training facilities, training materials, and communications. The GOI will pay per diem and travel expenses of GOI employees as part of their 25 percent contribution to the Project.

(2) Regional Training

220 person/months of regional (e.g. ASEAN) agribusiness training courses and study tours are planned. The TA contractor will be responsible for administering this element (preparation of PIO/Ps, etc.), based on selection decisions made by the PIU. Funds will be provided for travel, per diem and course fees. While it is A.I.D. policy to encourage overseas training in the U.S., there will be cases where regional training will have a greater developmental value and be more cost effective.

Consistent with A.I.D. policy, ADP will not fund, except on an exceptional basis, training in countries which are also donors to Indonesia's development programs or to countries not included in A.I.D. Geographic Code 941.

3) U.S. Training

165 person months of agribusiness training courses and study tours are planned in the U.S. The TA contractor will also be responsible for administering this element (preparation of PIO/Ps, etc.), based on selection decisions made by the Steering Committee. Funds will be provided for travel within the U.S., per diem and course and other fees costs.

C. Technical Assistance (TA)

A direct AID umbrella TA contract with an institutional contractor will be utilized to provide technical assistance which will:

(1) plan and conduct in-country training and workshops;
(2) arrange administratively off-shore short-term training and study tours;
(3) develop scopes of work, contract, and monitor policy studies;
(4) create agribusiness promotion offices;
(5) participate in the selection of counterpart organizations, and prepare work-scopes for potential assistance to not-for-profit agribusiness associations.

Table 1 summarizes the long term TA inputs as well as long term local administrative support. The direct AID Contractor will be selected jointly by AID and the GOI.

(1) Long Term TA

The Contractor will field a seven person long-term TA team, consisting of four expatriate and three local-hire positions, totalling 35 person/years of TA. In addition, this umbrella contractor will hire locally full-time a Management Information Systems Specialist, an Accountant, and a Training /Short Term TA Coordinator.

(2) Short-Term TA

TA contractor will be responsible for providing or sub-contracting for expatriate and local short-term technical assistance to both GOI counterpart ministries and private sector agribusiness organizations. Approximately 40 person/months per year each of expatriate and local short-term TA will be provided, totalling 220 person/months for the life-of-project. Such short-

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term technical assistance will offer a flexible mechanism for providing specialized TA as needs arise.

Agribusiness associations will receive substantial short-term TA which will strengthen their ability to assist their members with production, post-harvest handling and packing, cold storage, processing, transportation, product standards, packaging, and marketing. GOI counterpart ministries will also use short-term TA to help carry out training, agribusiness studies (including, but not limited to, commercial law and international trade analysis), or market promotion activities.

Table 1
Long-term TA Advisors, their Primary Work Location and Estimated Work Allocation

LONG-TERM TA POSITION	PRIMARY LOCATION	EST. WORK ALLOCATION (as %)	
		GOI	PRIV. SECTOR
Policy Advisor/C. of Party	GOI/PIU	75	25
Project Administrator (expatriate local hire)	GOI/PIU	75	25
Organizations Advisor	Priv. Sector/APO	25	75
Agroprocessing Advisor	Priv. Sector/APO	25	75
Marketing Advisor	Priv. Sector/APO	25	75
Extension Specialists (2 local)	Priv. Sector/APO	25	75
ADMIN SUPPORT			
MIS Specialist (local)	GOI/PIU	70	30
Accountant (local)	GOI/PIU	50	50
Training/T.A.Coordinator (local)	GOI/PIU	75	25
Clerical/Drivers (local)	GOI + APO	40	60

Short-term environmental-related TA will be provided to encourage the development of environmentally sound agribusiness activities and assist in implementing A.I.D. environmental objectives.

D. Not-for-Profit Association Strengthening Assistance

In order to provide a flexible mechanism for support to not-for-profit agribusiness associations, $1.5 million has been set aside. Criteria which will guide the evaluation and selection of organizations to be supported are as indicated in Section I.C.2. (a). Final implementation procedures for these funds will be agreed upon before disbursement of funds.

E. Policy Studies

ADP will provide funding for approximately 20 major in-country policy studies. These studies will examine government programs and analyze options for government assistance to agribusiness development. Section I.C.1 (d) of this Annex provides additional details. These funds will be included under the TA contract and managed in collaboration with the PIU.

F. Workshops and Seminars

ADP will fund approximately 11 major workshops and seminars. These are an effective mechanism for information gathering, dissemination, and consensus attainment. These funds will be managed by the prime contractor in collaboration with the PIU.

G. GOI Agribusiness Programs

The GOI will provide to the ADP the equivalent of $2 million generated from the profits of the state-owned enterprises for improvement of agribusiness programs. These funds will be used to assist in the development of small and medium-sized agribusinesses. Agribusiness programs including contract farming, the nucleus estate system, Bapak Angkat, etc., will be improved to mesh with the technical and market requirements of agribusiness products that have been identified as having immediate commercial potential. Section I.C.1(d) of this Annex provides additional details concerning the objectives of these programs.

III. Implementation Plan

The following table identifies key implementation action dates:

Table 4: Dates of Key Implementation Actions

NO.	ACTION	DATE(S)
1.	Project Agreement Signed	Sept 1991
2.	GOI Project Staff Designated and Initial PILS Issued	Sept-Dec 1991
3.	RFP Issued for Umbrella TA Contract	Nov 1991
4.	Short-term bridging TA begins	Nov 1991
5.	Procedures for Preparing/Approving Annual Work and Financial Plans Established and 1992/93 Plan Drafted	Dec 1991
6.	Prime TA Contractor Proposals Reviewed	Jan-March 1992
7.	Initial Policy Studies Started	Feb 1992
8.	Prime TA Contract Awarded	March 1992
9.	TA Team Mobilized	June 1992
10.	Start-Up Workshop - Implementation Procedures Established	June 1992
11.	Agribusiness Promotion Office (APO) Established	June 1992
12.	Work-scopes Finalized for Assistance to Agribusiness Associations	June 1992
13.	Steering Committee Semi-Annual Review - 1993/94 Plan Established	June 1992
14.	Steering Committee Semi-Annual Review	Dec 1992
15.	Formal Review of Policy Agenda Progress and Revision	June 1993
16.	Two additional APOs established	June 1993
17.	Steering Committee Semi-Annual Review - 1994/95 Plan Established	June 1993
18.	Steering Committee Semi-Annual Review	Dec 1993
19.	Project Evaluation	Aug 1994
20.	Steering Committee Semi-Annual Review - 1994/95 Plan Established	Dec 1994
21.	Formal Review of Policy Agenda Progress and Revision	June 1995
22.	Steering Committee Semi-Annual Review	June 1995
23.	Steering Committee Semi-Annual Review - 1995/96 Plan Established	Dec 1995
24.	Steering Committee Semi-Annual Review	June 1996
25.	Steering Committee Semi-Annual Review - 1996/97 Plan Established	Dec 1996
26.	Steering Committee Semi-Annual Review	June 1997
27.	Final Evaluation	July 1997
28.	Project Assistance Completion Date	Sept 1997

IV. Financial Responsibilities

A. Financial Plan

The total cost of the Agribusiness Development Project is US$ 27,642,000 (calculated in U.S. dollars and including the GOI contribution). The financial plan for the project as shown in Attachments A and B to this Annex is illustrative and changes may be made to it by representatives of the parties named in Section 8.2 of the Project Grant Agreement without formal amendment to the Agreement. Adjustments of up to 15% of any budget line item

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may be made by authorized representatives of the Parties. However, any such changes may not cause (1) A.I.D.'s contribution to exceed the amount specified in section 3.1 of the Agreement, or (2) Indonesia's contribution to be less than the amount specified in section 3.2 of the Agreement.

B. Republic of Indonesia Contributions

Inputs to the Project provided by the GOI and the participating Indonesian private sector trade/producer associations will include:

(1) project staff and logistic support for the technical assistance staff.
(2) funds, staff and facilities for in-country workshops, training programs and policy study planning, management and implementation;
(3) international airfares for short-term training for GOI personnel;
(4) travel and per diem for short-term training inside Indonesia for GOI personnel;
(5) office facilities, as practical, and staff for APOs; and
(6) funds from state-owned-enterprises' set aside for small agribusiness development.

C. USAID Contributions

USAID-financed contributions will include:

(1) long-term and short-term technical assistance;
(2) per diem, course fees and other costs for regional and U.S. short-term training, study tours, trade fairs, etc.;
(3) airfares for travel within the U.S.;
(4) support costs for in-country training, study tours, workshops and policy studies;
(5) costs of agribusiness promotion offices including rent, if necessary, telephone/utilities, furniture, equipment and expendable office supplies for APOs;
(6) evaluations and audits as needed; and
(7) grants/contracts to agribusiness organizations per paragraph II.D.

Through the technical assistance contract, USAID will provide funds to finance office space for the APO, project administrative staff training, policy studies, and seminars.

D. Private Sector Contribution

As indicated above, it is anticipated that private agribusiness associations and firms will be involved in the project. They are expected to contribute staff, use of equipment, facilities and operating costs. These contributions will be specified in the implementing agreements for activities.

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E. Project Financing Procedures

Commitment, and subsequent disbursement of funds used for most project activities, other than technical assistance and training in the U.S., will be based upon the preparation and presentation of annual plans and budgets. The GOI procedures and timetable used for the Development Budget (DUP and DIP) will be used in this Project. Annual plans and budgets should be capable of modification throughout the year to respond to emerging agribusiness opportunities/needs.

In the case of contracts or other agreements entered into directly by USAID, USAID will make payments directly to the contractor or recipient. Disbursement procedures for other project activities will be agreed upon by GOI and USAID in PILs.

V. Local Source Procurement

Local source financing is authorized under the Grant for:

1) locally required technical assistance, local costs of training, seminars and workshops, policy studies, and local administrative and logistic services, as more fully described in the Agribusiness Project Paper;

2) local procurement of other commodities and services as listed in paragraph 18A1c, Chapter 18, AID Handbook 1, Supplement B; and

3) such other locally required goods and services as may be agreed to by AID in project implementation letters.

VI. Evaluation and Audit

A. Evaluation

The Project Steering Committee, Project Implementation Unit and USAID will be collectively responsible for monitoring and evaluation of Project activities. Informal evaluations will be made at the end of each year of Project operation. These evaluations will identify problems in Project implementation and make recommendation for improvement to the Project Steering Committee. An external mid-term evaluation will be carried out during the ADP's third year of implementation. This evaluation will focus on the progress of the project against original targets and objectives.

An external final evaluation of the Project will be carried out during the Project's final year (Year 6) of implementation. This evaluation will document ADP's End of Project Status and will identify "Lessons Learned." It will include any recommendations for future assistance.

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B. Audit

It is anticipated that selected Project activities may need to be audited to facilitate implementation and ensure that project accounts are correct. Provision is made in the budget for periodic audits.

Attachment A

Agribusiness Development Project No. 497-0368
Illustrative Financial Plan: FY 91 Obligation
(In U.S. $000)

Project Element	A.I.D. FY 91 Obligation	Life of Project Contributions*		Project Cost Total A.I.D. and G.O.I.
		A.I.D.	G.O.I.	
Technical Assistance	3,000	15,418	6,642	22,060
Assistance to Not-for-Profit Associations	0	1,500	1,000	2,500
Other Procurement	106	1,190	0	1,190
Inflation/Contingencies	200	1,892	0	1,892
T o t a l	3,306	20,000	7,642**	27,642

* It is planned that the project will be incrementally funded between 1991 and 1995. Future obligations are subject to the availability of funds and mutual agreement of the parties to proceed.

** Includes $ 2,475,000 in anticipated contributions from Indonesian private sector participants. This amount also includes "in-kind" contribution from both the G.O.I. and the Indonesian private sector in the amount of $1,950,000 and $1,125,000 respectively.

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ATTACHMENT B

SUMMARY OF ADP COSTS
by Output
(in U.S. $000)

	USAID CONTRIBUTION	PERCENTAGE
Agribusiness Climate Improvement	**3,775**	**19**
Long-Term T.A	1,695	
Short-Term T.A.	330	
Policy Studies	1,750	
Human Resources Development	**6,390.58**	**32**
Long-Term T.A.	1,493.58	
Short-Term T.A.	792	
In-country (formal)	1,320	
Regional	660	
U.S.	825	
Study Tours	750	
Workshops/Seminars	550	
Agribusiness Expansion	**6,100.42**	**30**
Long-Term T.A.	2,496.42	
Short-Term T.A.	1,078	
Agrib. Promotion Office	1,026	
Trade/Producer Assoc.	1,500	
Miscellaneous	**3,734**	**19**
Local-hire Support Staff	1,081	
- M.I.S.		
- Accounting Specialist		
- Training Coordinator		
- Project Administrator		
- Clerical Staff		
Vehicles/Drivers	186	
Office Equipment	175	
Evaluation	300	
Audit	100	
Inflation/Contingency	1,892	
TOTAL	**20,000**	**100 percent**

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ANNEX J

INSTITUTIONAL ANALYSIS ANNEX

1. Agribusiness Setting in Indonesia.

Until the mid 1980's, Indonesia's industrial development policy was inward-looking and oriented towards protecting manufacturers who were developing the domestic market. A wide range of import licenses, import tariffs and non-tariff barriers and regulations were enforced. This has resulted in a highly regulated system of importation, production, distribution and pricing of agribusiness inputs.

In addition, the GOI's agribusiness development strategy has been dominated by a food self-sufficiency strategy, especially emphasizing rice. Indonesia has advanced from being the largest rice importer in the world to becoming rice self-sufficient since 1984. In the 1970's, Indonesia imported on average 1.73 million metric tons of rice per year costing about US$ 500 million in scarce foreign exchange. The attainment of rice self-sufficiency, while an impressive example of collective effort, required substantial resource mobilization and a high rate of subsidy.

The GOI now realizes that farmer incomes from rice and other traditional food crops, especially in Java where land is scarce, can no longer be increased through acreage expansion, and any higher yields per hectare will come only as the result of the slow evolution of agricultural research and the expansion of high-cost irrigation schemes. By contrast, the agribusiness sub-sector, growing on a base of non-traditional crops, continues to demonstrate enormous growth potential.

Indonesia has begun to emphasize the production of higher value crops, as well as value-added processing of these commodities for domestic and export markets. The share of processed commodities to total production is still low. Indonesia's exports have been dominated by raw agricultural commodities. For example, in 1987, Indonesia's total exports of bulk commodities (coffee, tea, shrimp and fish, pepper and other spices) totaled US$ 1.6 billion. During the same period, however, total exports of fully processed foods totalled US$ 20 million -- which represented only 1.5 percent of Indonesia's food exports.

Despite the fact that the processed foods industry continues to be highly regulated, the sub-sector has started to grow rapidly over the past five years. For example, production of processed shrimp for the international market in 1988 reached almost US$ 750 million. Processing of tuna is now in the take-off stage. Other fisheries products, both frozen and canned, will undoubtedly enter the national and international market in large quantities over the next few years. Other processed foods experiencing rapid growth in exports include vegetable oil, which

grew from US$ 175 million in 1984 to US$ 453 million in 1989; canned vegetables, which grew from zero exports in 1984 to US$ 26 million in 1989; and canned fruit which grew from US$ 1 million in 1984 to US$ 24 million in 1989. In horticulture, canned mushrooms and canned pineapple are already being successfully exported. Canned asparagus is just beginning to emerge as a major export product. Other items which are being produced for the domestic and export market include catsup, shrimp crackers, canned crab, soy sauce, banana chips, sago, bamboo shoots, cassiavera, and poultry products.

Given this situation, the GOI has been seeking ways to enhance productivity and efficiency by moving from "import-substitution-industrialization" to an "export-led-growth" strategy; and to develop market-oriented commercial agriculture enterprises which are responsive to improved technology, efficiency, and market opportunities. This means development of processed foods desired by the market and which offer a good return on investment. The GOI has also been seeking ways to develop a large, modern agro-processing industry which can take advantage of Indonesia's agronomic advantages and its cheap labor. The primary objectives are to provide a growing source of foreign exchange and to increase employment and incomes by promoting value added processing and product diversification.

In line with this, the government's role in distributing production inputs and providing seeds is gradually being shifted to private companies and village cooperative units (KUD). Through extension services, farmer independence is being strengthened by shifting traditional farming practices to market-oriented farming which is more responsive to price changes and able to anticipate market opportunities.

The prospect is that processed food products will expand rapidly in the next few years, especially if key opportunities are taken and key constraints are removed or lessened.

2. Analysis of Options for Project Development

2.1. Selecting the Approach

ADP's approach to assisting the agribusiness sub-sector must be compatible with the requirements of the GOI and fit within the context of other donor assistance. It must be constructed on the basis of USAID's comparative advantage and knowledge that while complex Projects may be more attractive in theory, in practice they tend to fail due to managerial and administrative constraints.

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2.1.1. **The Options.** In the process of preparing the Project Identification Document and the Project Paper, a large number of options were discussed at length with the GOI and the private sector. Discussions were also held on a continuing basis with the various other donors interested in agribusiness. The following is an analysis of the major options considered:

2.1.1.1. **Development of Adequate Raw Materials.** The lack or poor quality of raw materials is clearly the most important non-policy constraint at the moment to agribusiness development. It will be a difficult and expensive constraint to overcome. Fortunately, major funders, including the UNDP/FAO, World Bank, Asian Development Bank, The Netherlands and Germany will all be focusing major attention on this issue. ADP will cooperate closely with these efforts. But modest USAID resources can more productively be focused elsewhere.

2.1.1.2. **Export Promotion and Domestic Market Penetration.** Market development must be a major aspect of any Project focused on agribusiness. Surprisingly often, the Ministry of Agriculture promotes production of a commodity without letting market trends drive their decision. The result is often a crash in per unit prices, and farmer losses. ADP will pay special attention to marketing in everything that it does. ADP's approach is to develop both the domestic and foreign markets. The guiding principle is that the ADP will promote development of agribusiness product lines that are the most profitable and create the most additional income for employees. The foreign market is larger than the domestic market for most items, thus it is targeted. The domestic market will be a lesser but increasingly important target.

2.1.1.3. **Village Level Production.** The Indonesian government is keenly interested in promoting small farmers as a socially desirable way of supplying larger agribusinesses. The GOI is placing substantial financial resources behind this objective. ADP, operating through PAIWC, will work with business organizations to identify firms or groups of firms willing to cooperate in the development of various experimental models. ADP support for such experimentation could take the form of technical assistance and training provided through agribusiness organizations at national, regional and local level. The ADP will also provide some assistance to improving the GOI's overall program design programs in this area.

2.1.1.4. **Enterprise Development.** USAID/Indonesia has experience working directly with individual firms, particularly with the Central Java Enterprise Development Project and the P.V.O. Co-Finance Project. The approach has required intensive management both by USAID and by the technical team to assure that objectives were reached. This approach tends to be prohibitively

expensive, given USAID's operating procedures, unless other ways of achieving economies of scale are found. The ADP hopes to achieve such economies this by assisting business organizations rather than individual enterprises.

2.1.1.5. **Grades, Standards, and Packaging.** The development of improved quality processed products is essential if agro-industry is to find increasing local and international markets. At the moment, product quality, with a few exceptions, does not meet international standards. This problem is recognized by the GOI and they have already begun to substantial help from international agencies to solve the problems. Both the World Bank and the Dutch Government are assisting the Ministry of Trade which is responsible for product standards. The FAO is assisting the Ministry of Agriculture, which is specifically responsible for food quality. For the time being, these inputs seem sufficient. ADP will coordinate fully with these efforts to assure that the results are incorporated in our activities.

2.1.1.6. **Agribusiness Finance.** Credit does not appear to be a constraint for agribusiness development. The World Bank has plans to add $250 million in loan funds primarily for agro-industrial development. The Asian Development Bank has a $200 million loan fund for fisheries development and is planning another even larger. The local banks have sufficient liquidity. It can be argued that the current tight money policy is a constraint. However, this policy is expected to ease somewhat in the near future.

What is a constraint, however, is equity capital. Smaller, newer agribusiness firms, particularly pribumi firms, have a difficult time amassing sufficient equity capital to start a new processing activity. Often this problem is solved simply by bringing in wealthy partners. In Indonesia, this usually results in the smaller entrepreneur being gobbled up by the larger partner. A solution to this problem may be the development of a venture capital firm. Only one or two are now operating in Indonesia. A few are under development. However, the basic legal framework for such institutions has only recently been put in place. Many existing laws and regulations continue to restrict formation of venture capital companies or any similar entities. Because of the legal uncertainties, it is premature to consider this as a component of ADP. However, some continuing analysis of this option is warranted. If this analysis concludes that this is a viable option, either ADP might be amended or another Project might be developed with venture capital as a focus.

2.1.1.7. **Policy/Regulatory-Only Project.** Indonesia's private sector is shaped by policies emanating from the GOI. Currently some of these policies and regulations are impeding agribusiness development. USAID by dint of its overall approach

and years of policy assistance to the MOA, has developed a comparative advantage with respect to agricultural policy reform in Indonesia. Therefore, policy analysis and reform must be an integral component in the ADP.

Yet policy constraints are not the sole impediments to an expanded agribusiness sub-sector. There are issues of technology, management, organization, packaging and marketing that deserve attention. Providing assistance to deal with these problems through the government could be counterproductive, encouraging an increased level of intervention by the public sector in what should be free market operations. Support of private business organizations is necessary to the success of the Project. It is needed to serve both as a vehicle for reducing constraints faced by firms and as a mechanism in the private sector to which Government can transfer an increasing amount of responsibility as it deregulates.

Some macro policies are made at the national level, others at provincial levels. Working solely at one or the other would not accomplish Project objectives of establishing an improved policy environment for agribusiness development. Including all regional governments is not possible with the limited resources of ADP. Only a few, both on-Java and off-Java, can be selected.

Further, policy reform needs to be grounded in the experience of the firm. Means of obtaining information from the firm on its policy/regulatory needs and priorities are vitally important. Feedback from firms on the impact of policy/regulatory changes is also vital. Both because of the need to 'ground truth' policy/regulatory change and to solve critical non-policy problems, it seems appropriate to go beyond a project focused only on policy and regulatory reform.

2.1.1.8. **Private Business Organization Focus.** Over the next few years, the natural process of industrial and agribusiness development will result in the strengthening of private agribusiness organizations to provide both services to their members and access for them to government decision-making. The faster this development occurs, the faster can be the process of passing increasing numbers of decision-making responsibilities from the public to the private sector. Development of private agribusiness organizations is, therefore, an essential part of the de-regulation process. While development of such agribusiness organizations can be considered a natural process, this process can be thwarted or sidetracked at various stages. Support of these organizations through ADP at this critical stage of their evolution will assure that they grow to play an increasingly important role in support of the needs of their members, particularly small- and medium-scale firms, and as a contributor to government policy/regulatory reform. The U.S. has a vast network of trade associations, whose experience can be

drawn upon in establishing and strengthening organizations in Indonesia.

2.1.2. **The Choice.** After considering the approaches mentioned above, it was concluded that ADP should have two interlocking components. It will work with the public sector, primarily on deregulation and privatization of decision-making. It will work with the private sector, primarily on development of private sector business organizations which could undertake the functions transferred to the private sector as a result of deregulation, as well as providing services to private sector firms in overcoming key constraints. This choice was based primarily on consideration of the opportunities available to USAID, the comparative advantage USAID might have in responding to these opportunities and the role other funders were choosing to play.

The choice of a two-component approach is perhaps an obvious one within the context of Indonesia at this time. At present, the role of government in agribusiness is overwhelming. Although the GOI wishes to deregulate, this will not be an easy process. Given USAID's strategy of promoting open markets and considerable previous experience in Indonesia on deregulation issues, it was natural that the GOI should seek USAID assistance and equally natural that we should offer it.

An open market system is an appropriate solution for the United States, but is unlikely in Indonesia (at least in the short run). Oversight of private enterprises to ensure public good dominates decision-making. Even among Indonesians who believe in the theoretical importance of open competition, there remains the more important goal of protecting public welfare from the excesses of private enterprise. For example, a likely outcome of the next cycles of policy reform is that Indonesia may resemble the Japanese system of guided entrepreneurship.

If the public sector is to feel comfortable in relinquishing some responsibility for generating adequate employment and incomes for all Indonesians, it must feel confident that the private sector is willing and able to accept these societal objectives. In more developed economies, individual firms and their umbrella associations are generally self policing. The ADP will therefore assist Indonesian private sector agribusiness organizations to build up their capacity to promote objectives held by the GOI.

2.2. Channeling Resources

The financial management plan for this Project reflects three objectives: (1) sound financial management; (2) flexibility; (3) minimization of USAID's involvement in daily implementation so as to promote Indonesian "ownership" of the Project. The project will finance project components by two

methods; direct payment by USAID, and direct payment by the GOI and the private sector. USAID will manage directly some ADP funds in order to cover evaluations and buy-ins with centrally funded projects.

2.3. GOI Project Home

Agribusiness is principally influenced by the National Planning Agency, the President, and three ministries: Agriculture, Industry and Trade. Of the three ministries, two, Agriculture and Industry, have been joined together by the GOI to form a joint committee to improve agribusiness development. This joint working committee (PAIWC) has also been established in all 26 of Indonesia's regions; thus it offers a mechanism to foster decentralized development. Therefore, PAIWC represents an excellent vehicle for USAID support. The Ministry of Trade is being supported by other USAID funding, and it will be invited to join PAIWC within the near future. These organizations are described in greater detail later.

2.4. Summary of Options

In summary, ADP will support two interrelated sectors, public and private. It will operate at two levels, national and provincial. Two principal ministries will be involved, Agriculture and Industry. This arrangement is made viable through the functioning of PAIWC as a coordinating mechanism, with responsibilities incorporating all of the above elements. Policy change and private sector strengthening require little continuing institutional infrastructure. The scaffolding can safely be withdrawn when the policy analysis leading to private sector development has become institutionalized and accepted. The same is true of the private sector organizations. When the Project ends, agribusinesses will have been strengthened to continue self-sustaining growth within a policy environment that has eliminated the worst of the restricting regulations, while benefiting from positive policy changes that promote private sector development.

3. Public Sector Institutional Analysis

In addition to the President, the GOI agencies with the most influence agribusiness are: the Ministry of Trade (MOT); the Ministry of Finance (MOF); the Ministry of Agriculture (MOA); the Ministry of Industry (MOI); and State-owned Enterprises (SOEs). These ministries and organizations play important roles in the agricultural development as a whole including agribusiness.

3.1. The Ministry of Trade (MOT)

The Ministry of Trade has responsibilities for the following: a) overseeing the logistics and price stabilization of regulated commodities, small business support, licensing, and inter-island trade; b) supporting international trade negotiations, commercial services, export promotion, standard and quality control administration, and export quota administration; and c) analyzing market information provided by the Central Bureau of Statistics and other agencies in order to identify export markets and market trends. These functions are carried out by several Directorates General and related agencies (DG of Domestic Trade and DG of Foreign Trade), the Research and Development Agency, the Commodity Exchange Agency, the National Agency for Export Development, and Regional Offices.

Specifically, the MOT carries out the following tasks that affect agriculture and agribusiness: 1) regulates trading in a limited number of commodities (coffee, rubber, clove); 2) develops markets for agricultural product; 3) regulates the pricing and distribution of some agricultural commodities (CPO, salt, milk) at the farm level; 4) monitors and controls the production and distribution of key commodities which include: regulated commodities (coffee, nutmeg, mace, plywood, cassia vera, vegetables, and rattan mats) supervised commodities (salt, soybean, palm oil, palm kernel oil, coconut oil, copra, palm kernel, rice and clove) and commodities whose export is banned (unprocessed rattan, low grade rubber, remilled and smoked rubber, shrimp fry, and kapok seed); 5) oversees and prepares technical guidance for the issuance of Certificates of Origin (SKA); 6) checks prices of export commodities and issues export authorizations; 7) oversees the allocation of export quotas for regulated and supervised products; 8) monitors and controls importation of equipment, fuels and other goods used in the production of export commodities. This includes conducting appraisals, establishing check prices and import classification systems, monitoring import flows, issuing importers' licenses and evaluating importers' bona-fides.

3.2. The Ministry of Finance (MOF).

The Ministry of Finance is responsible for the following: a) formulating technical policies, providing guidance, developing and overseeing monetary and credit activities - financial institutions - and pawn-houses - public accountants - public investment - subsidies - and state-owned enterprises (SOEs); b) managing public revenues from oil, non-oil, and export taxes; c) collecting and analyzing routine and development budgets, and overseeing foreign loans, and public assets.

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To perform these functions, the MOF is supported by: 1) the Directorate General of Budgeting, 2) the Directorate General of Customs, 3) the Directorate General of Tax, 4) the Directorate General of Monetary Affairs, 5) Financial Education and Training Center, 6) Capital Exchange Executive Agency, and 7) Financial Data Processing and Export Facilities Service Agency.

Particularly, the MOF performs the following responsibilities which affect agriculture and agribusiness: a) preparing policies on the development of SOEs in terms of enterprise establishment, organization, paid up capital, budgets, investment, assets; b) processing and analyzing data on the development of SOEs; c) monitoring interest subsidy and investment; d) reviewing and evaluating production, sales, price, costs of goods sold, source and use of funds and SOEs' assets; e) determining patterns, procedures and allocation of budgets for the production, post harvest, processing, and distribution of food crops, livestock, estate crops and fisheries; f) preparing policies regarding price ceilings for food crops products in conjunction with Government's financial capability; g) preparing policies on budget allocation for field preparation, fertilizer, pesticides, and seed supply, structural investment and equipment for food production; h) together with the MOT and the MOI, regulating the drawback system in which import duty is paid at the time of importing goods and materials to be used for the production of export commodities; i) overseeing and allocating funds for agricultural integrated credits which include Farm credit (KUT), small business credit (KUK), and small trader's credit (KCK). These credits are channeled through the village cooperative (KUD), BRI, and Bank Pasar.

3.3. State-Owned Agricultural Enterprises (SOES)

In Indonesia, there are more than 200 State Owned Enterprises (SOEs) which play an important role in the overall economic development of the country. Forty (40) of them are under the jurisdiction of the Ministry of Agriculture. Twenty-six (26) of the 40 MOA's parastatals are estate plantation or PTPs which grow basic crops for export such as rubber, palm oil, tea, coffee, cacao, spices, and coconut, in large scale; the remainder concentrate in fisheries and other agricultural areas.

During the past three decades, many PTPs have not been operated at a profit. This has been due, to some extent, to the complicated bureaucracies, given the status of the PTPs as government-owned companies. Consequently, the PTPs have not been able to allocate their resources to capture business opportunities in an efficient manner. In this context, the GOI launched a re-assessment of the SOEs in order to improve their efficiency and productivity and issued Decree # 740 in June 1989. The Decree includes the following options: a) spinning off

certain portions of SOEs that could be better run by private enterprises; b) privatization of selected functions or services; c) marginalization or "quiet liquidation"; and d) utilization of contract management, leasing, or franchising systems.

3.4. The Ministry of Agriculture (MOA).

Being responsible for all crops, fisheries, and livestock development, the MOA spearheaded the much heralded success in transforming Indonesia from the world's largest importer of rice to a self-sufficient nation during the 1980's. However, the MOA now recognizes that large, mass-movement, command-type production campaigns belong to the past.

The MOA realizes that it should focus its efforts on creating a climate conducive to private initiatives rather than trying to manage production schemes themselves. The MOA considers its extant structure along commodity lines to be no longer adequate and is seeking to develop a structure and operating procedures more in line with its evolving mandate. This structure will permit the MOA to respond better to prevailing agricultural systems that are both horizontally and vertically integrated. Horizontal in the sense that farmers plant multiple crops on a rotating basis in very small family plots. Vertical in the sense of including production, harvesting, transporting, processing, packaging, and marketing.

The Minister is responsible for overall policy decisions, and is assisted by the Secretary General who is responsible for coordinating the activities of the various line agencies. There are four line agencies, each led by a Director General: a) DG of Food Crops, b) DG of Estate Crops, c) DG of Animal Husbandry, and d) DG of Fisheries. In addition, there are three specialized service agencies - the Agricultural Education, and Training Agency (AETA); the Agency for Agricultural Research and Development (AARD), and the Rice Production Intensification Agency (BIMAS).

Junior Ministers for Agriculture and Industry The Junior Ministers for Agriculture and Industry were appointed by the President to work hand-in-hand with the Ministers of Agriculture and Industry in overall policy decisions under the jurisdiction of the two Ministries. However, the Junior Ministers do not have any official authority or responsibilities over the line Directorates within the Ministries. They do, however, report directly to the President.

The Junior Ministers of Agriculture and Industry work very closely in the efforts of promoting agribusiness. The Junior Minister of Agriculture is the chairman of the national steering committee of PAIWC, and the Junior Minister of Industry is the vice chairman of the committee.

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The formal planning arm of the Secretary General and the Ministry as a whole is the Bureau of Planning (BOP). Each Directorate General, however, has its own planning unit with responsibility for its own particular sub-sector (each D.G. also has an office for agro-processing). The Bureau of Planning (BOP) is responsible for preparing, processing, reviewing, and coordinating policy formulation regarding agricultural development. This includes the following responsibilities:

(i) identifying agricultural resources and formulating plans for agricultural development;

(ii) coordinating and formulating policies for agricultural commodity development and agro-industry, prices and subsidies, agricultural commodity standard and analysis regarding environmental impact (AMDAL), investment, manpower and energy;

(iii) formulating the development budget plan for the Ministry along with the Bureau of Finance;

(iv) coordinating and formulating agricultural development programs and projects both at national level and regional level; and

(v) monitoring, evaluating and reporting the implementation of agricultural programs and projects.

The Secretary General and the Director of BOP are eager to develop the Bureau's capability to plan ahead, anticipate opportunities across the sector, provide broad strategic guidance to the DGs, and to synthesize long-term planning recommendations for the Minister, BAPPENAS and other influential planning bodies.

In August 1990, the BOP's organization was restructured to take on a more high-quality service approach to rural development, as is required in a more commercial agricultural environment. Three of the five new BOP Divisions will play a particularly important role as the Bureau's responsibilities expand to include efforts to enhance the development of agribusiness sub-sector. The Regional Agricultural Planning Division will identify agricultural resources and formulate plans for future regional agricultural development. The Agricultural Commodity Planning Division will formulate policies for commodity as well as agro-industry development. The General Agricultural Planning Division will formulate policies for prices and subsidies, agricultural standardization and AMDAL, investment, manpower and energy.

In 1991, the Ministry of Agriculture has been trying to harmonize its activities with the Ministry of Industry by viewing agricultural and industrial activities as being vertically

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integrated in order to promote agribusiness. To begin with, the MOA is now beginning to rehabilitate the horticultural sub-sector by consolidating the farmers' land into 500-hectare farming units. Using the 1991/1992 budget funds of US$ 32 million, the Ministry is targeting to consolidate as much as 47,000 hectares of land (25,000 hectares for mixed farming; 5,000 hectares for monoculture farming; and 16,500 hectares for plantation). The program will be implemented in 17 provinces--each province consists of 2 Kabupatens--and each Kabupaten will cover 2 Kecamatan. This is an attempt to overcome the raw material supply problem faced by food processors. It is not clear how this idea will be made operational.

3.5 BAPPENAS

Reporting directly to the President, National Planning Agency BAPPENAS is responsible for the following:

a) Formulating short term, medium term,and long term national development plans;
b) Coordinating planning and integrating sectoral as well as regional plans into national development plan;
c) Formulating State Development Budget along with the Ministry of Finance;
d) Formulating credit and investment policies along with the related agencies;
e) Formulating policies on acceptance and use of foreign assistance along with the related agencies;
f) Observing preparation and implementation of national development, and synchronizing programs and projects;
g) Evaluating the implementation of national development plans, and considering necessary adjustments within programs and projects;
h) Conducting survey and research needed for planning and evaluation of national development; and
i) Performing other related duties as required by the President.

To perform these functions BAPPENAS is supported by: 1) Vice Chief, 2) Deputy for Economic Affairs, 3) Deputy for Social/Cultural Affairs, 4) Deputy for Fiscal And Monetary Affairs, 5) Deputy for Implementation Control Affairs, 6) Deputy for Regional And Local Affairs, 7) Deputy for Human And Natural Resources Development Affairs, and 8) Deputy for Administration Affairs. Agricultural development responsibilities are under the jurisdiction of the Bureau of Agriculture and Irrigation (BOAI) within the Office of Economic Affairs. The BOAI is supported by five (5) Divisions: food crops, estate crops, fisheries, livestock, and irrigation.

BAPPENAS is particularly influential in terms of agricultural policy formulation. Its Chairman of longstanding is recognized leader in these policy discussions.

3.6. The State Secretariat

The State Secretariat (SEKNEG) The State Secretariat assists the President in administration in general and coordinates administration and financial services of non-departmental institutions. SEKNEG is also involved in agricultural development through coordinating, administering, and allocating the **"Presidential Assistance" ("Banpres")** to local government. Request for **"Banpres"** is submitted to SEKNEG by Governors after being recommended by the Ministry of Agriculture. **"Banpres"** is not included in the technical Ministry's DIP, even though large sums of money are involved. The President comes from a farm family and retains a great personal interest in agricultural development. For example, the price of rice and cooking oil is discussed with him before any adjustments are made. He also maintains a model farm to which he often invites his guests.

3.7. The Ministry of Industry (MOI).

The MOI's jurisdiction includes handling of post harvest activities, licensing of enterprises, setting of product standards and general supervision of industrial activities. The Minister is assisted by the Secretary General who is responsible for coordinating the activities of the various line agencies. There are four line agencies, each led by a Director General: a) DG of Basic Metal and Machinery Industry, b) DG of Basic Chemical Industry, c) DG of Multifarious Industry, and d) DG of Small Scale Industry.

The agribusiness sub-sector is under the jurisdiction of the DG of Multifarious Industry and the DG of Small Industry. Each of them has a directorate dealing with the food industry. The Bureau of Planning (BOP) serves as the formal planning arm of the Secretary General and the Ministry as a whole although each Directorate General has its own planning unit (Bina Program) with responsibility for its own particular sub-sector. The Bureau is responsible for preparing, processing, reviewing, and coordinating policy formulation regarding industrial development, investment and regional development/ industrial growth centers. To fulfill these functions the BOP performs the following tasks:

(i) formulates plans for short-term, mid-term, and long-term development; coordinates planning for development program activities; and harmonizes the sectoral as well as the non-sectoral program activities within the Ministry;

(ii) prepares and develops the implementation of the national industrial development plans within the Ministry, and coordinates them with programs as well as Projects;

(iii) evaluates the implementation of industrial development programs and makes necessary adjustments;

(iv) formulates plans and coordinates investment activities which include preparing yearly plans, controlling, registering investment/licenses and promoting industrial efforts;

(v) prepares, processes and formulates plans for regional development of industrial growth centers, and prepares programs for environmental control;

Four out of the five Divisions in the Bureau are closely related to the development of agribusiness sub-sector: a) the Program Formulation Division, b) the Program Monitoring Division, c) the Investment and Promotion Division, and d) the Regional Development Division.

The Program Formulation Division is responsible for formulating and coordinating programs including routine and development activities, as well as preparing routine and development budgets for the Ministry. The Program Monitoring Division is responsible for monitoring and controlling the implementation of routine and development activities. Both divisions have sub-divisions dealing with various industries and small industry. The Investment and Promotion Division is responsible for formulating the yearly investment plan, registering investment, and coordinating industrial licenses for investment and promotion of industrial activities. The Regional Development Division is responsible for formulating regional development in the industrial sector (e.g. agro-processing), developing industrial potential, and environmental protection.

To promote agribusiness, now the MOI is encouraging the development of export oriented industries either through creating new industries or shifting the current industries from a domestic market orientation towards an international market strategy. This will include the development of processing industries of agricultural products such as fruits and vegetables, meat, fish, cassava flour, rubber, coffee (instant coffee with low caffeine), cacao (low calorie), sea weed, milk (non cholesterol), rice and secondary crops (for snack food), palm oil, coconut, shrimp, oleo-chemical, etc.

In this context, the MOI focuses in the improvement of quality and efficiency; enhancement of the production of products which have large market opportunities through products and raw

materials diversification; improvement in the provision of information to processors regarding investment opportunity, export, and technology; promotion of foreign cooperation in the areas of investment, technical assistance, and marketing; adjustment in Indonesia's Industrial Standard (SII) in compliance with international standard; and improvement of control of production systems to eliminate problems in the use of raw materials, processing, packaging, storage, and distribution.

In addition, the MOI also supports the development and production of fertilizer, pesticides, and agricultural machinery. The fertilizer industry is focused on increasing the production of single component fertilizer (urea, ZA, TSP), compound fertilizer (NPK, DAP), natural fertilizer (natural phosphate, dolomite, and compost) in accordance with agricultural development requirements, and directed towards the use of efficient and low production cost processes. The MOI is attempting to optimize the current production capacities, extend existing industries and/or create new industries in this area.

The pesticides industry includes formulating pesticides ready for use including growth stimulator substances; manufacturing of active ingredients including the intermediary products; optimization of existing production capacities; product diversification as needed by the agricultural sector as well as for export; continued supply of active ingredients; and involvement of public and private research institutions to do research in product diversification, production upgrading, invention of new pesticides which are safe for the environment, the use of local inputs, and quality testing (e.g. power tillers, rice milling, polishers, etc.)

The agricultural machinery/equipment industry is focused on promotion of products which are suitable for farmers needs being simple in design and low in costs (the MOI provides local and foreign TA to producers). New equipment is eligible for "small investment credit" (KIK).

3.8. Coordination Between Ministry of Agriculture and Industry

Coordination between MOA and MOI in the development of agribusiness has been very weak. Each Ministry focused on its own mandate. The MOA has focused principally on crop production, especially rice self-sufficiency. Very little attention has been given to post harvest activities. The MOI's effort to develop agribusiness, especially agro-processing, has been dependent upon continued and good quality of agricultural raw materials supervised by the MOA. Beside developing agribusiness, the MOI has also focused in the development of machinery, metal, electronic, and chemical industries. As a result, efforts towards eliminating constraints of agribusiness stemming from

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both ministries were difficult to implement due to lack of concentrated effort.

Given the need for better coordination in developing agribusiness, in April 1989 the MOA and the MOI established the Permanent Agricultural-Industrial Working Commission (PAIWC) through a mutual letter of decision. Through PAIWC, both the MOA and the MOI will develop a policy and regulatory framework impacting on agribusiness in the direction towards more open markets. Particularly, the PAIWC will focus on micro policies and regulations impeding operations of agribusiness. PAIWC's role and capacity will be strengthened to serve as a vehicle for coordinating agribusiness development regarding the deregulation process; improving dialogue between the public and the private sector; development of trade associations; promoting innovative private/public schemes to develop agribusiness in ways that maximize employment and income gains.

The MOA and the MOI are promoting their **"Bapak Angkat" ("foster fathers")** program in which the state-owned companies are required to set aside 1 to 5 % of their net profit for assisting rural small companies. In this program, large companies are obliged to assist small companies in marketing their products and develop them by providing market information which includes quality level -quantity - price - and delivery time, technical assistance for processing, production inputs, and working capital.

To enhance the development of rural small industries, some SOEs under the Ministry of Agriculture and the Ministry of Industry have implemented this program through a nucleus system. Some others are still trying to start to implement the program, and many others have not joined the program due to lack of detailed instructions from the two ministries. PAIWC will seek ways to further develop these programs. Appropriate activities would include project identification, some feasibility studies, information dissemination, and linkages among relevant entities.

4. PAIWC

4.1. PAIWC: The Statutory Foundation

The Permanent Agriculture and Industry Working Commission (PAIWC) will be the operational "focus" of the Project. PAIWC also serves as a rallying point around which key players in MOA and MOI can focus on agribusiness issues.

The Permanent Agricultural-Industrial Working Commission (PAIWC), is a relative newcomer to GOI agribusiness coordination efforts. The PAIWC is based on two directives (Presidential Decrees No. 64/1974 A, as amended of March 21, 1988 and No. 47 of

November 19, 1988. The administrators of the MOA and MOI were directed by the President in early January 1989 to set up the Commission. A joint Decree for the Minister for Agriculture and the Minister of Industries created the PAIWC on April 24, 1989.

4.2. PAIWC: The Structure

The Guiding Team of PAIWC is chaired by the Junior Minister of Agriculture. The Vice Chairman is the Junior Minister of Industry. The full Guiding Team is very large and meets approximately every six months. It includes the Heads of the Planning Bureau of both ministries as well as all the echelon I people (Secretary Generals and the Director Generals). The main function of the Guiding Team is to direct and determine programs, and to determine program implementation. At least once a year, the Team meets to formally report on progress to the Ministers of Agriculture and Industry.

Reporting to the Guiding Team is a smaller Technical Team chaired by the Head of the MOA Bureau of Planning, with the Head of MOI's Planning Bureau as Vice Chairman, plus only four other people. This Team meets frequently to conduct business. The Technical Team is responsible for developing program proposal; and monitoring, assessing and controlling program implementation. There are three Working Groups reporting to the Technical Team. The Working Groups implement the programs that have been determined, report the progress to the Commission, and recommend follow-up actions.

The Governors in each province chair provincial Working Groups on which representatives of Agriculture, Industry and sometimes Trade are represented. Provincial Working Groups have been formally organized in 16 of the 27 provinces, as of the report to the 23 June 1990 meeting of the PAIWC. In practice, the Provincial Working Groups operate under the coordination of the Vice Governor and/or the provincial planning agency (BAPPEDA) with heads of provincial MOA and MOI offices and other agency personnel serving as required by local priorities and circumstances.

The provincial Working Groups report on their province's agro-industrial problems and constraints, and suggestions for resolution, to the PAIWC Secretariat in an agreed-upon format during the first week of June and December. An organizational chart for the Commission and the provincial framework respectively, are attached as Figure 1.

4.3. The PAIWC Program

The PAIWC Guiding Team is responsible for making program decisions and reporting to the Ministers (Governors or Bupati at the provincial levels); the Technical Team is tasked with

drafting and monitoring the program; and the Working Groups implement the programs, report on progress and recommend follow-up actions.

The role of the PAIWC is defined as:

a. To synchronize agro-industrial planning between MOA and MOI by identifying opportunities for integrated support, both with respect to region and commodity - and to ensure the implementation of decisions reached at the annual national integrated workshop;

b. To monitor the implementation of this plan, analyze problems confronted and to recommend feasible solutions which can be promoted by the MOA and MOI at national and regional levels;

c. To monitor and direct the working groups at the provincial level, which are organized by the respective Governor;

d. To motivate business entrepreneurs, especially in rural areas, to invest in priority areas through integrated policy making;

e. To report on the implementation of the agro-industrial plan to the national workshop, to other forums and to the respective ministry heads.

The PAIWC program is designed to increase the value added of agricultural products. This is seen as a means of increasing rural employment and incomes. Among the targeted agricultural product groups are horticultural and fishery commodities. (See Figure 2)

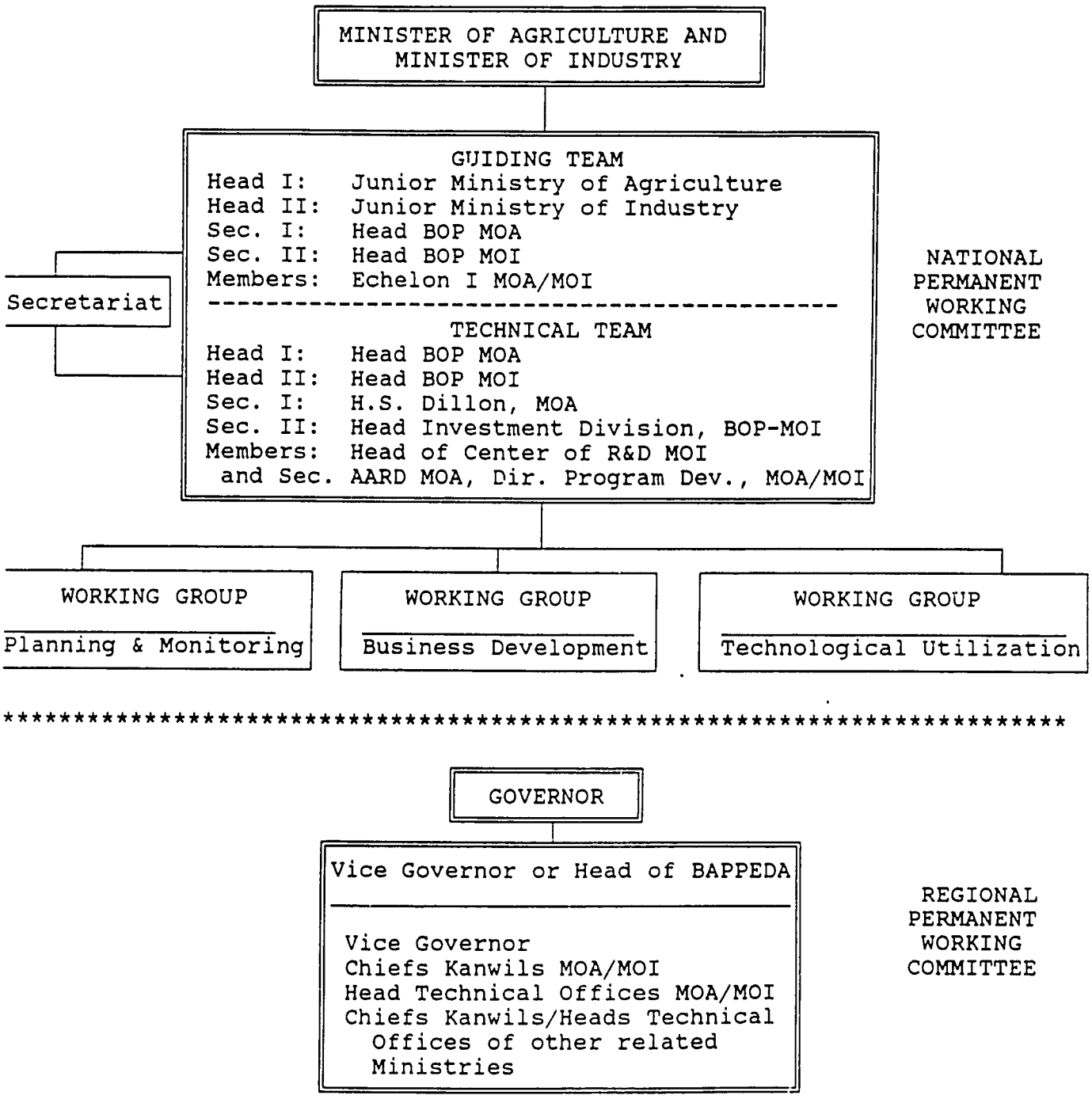
4.4. PAIWC: Functions

Although some broad terms of reference for the PAIWC were spelled out in the Joint MOA/MOI Ministers Decree of April 24, 1989, the PAIWC is continuing to refine its work plan. A principal focus is to harmonize the activities of the two primary Ministries involved - MOI and MOA. This includes identification of integrated business opportunities, review of constraints impeding business operations and provision of recommendations to the MOI and MOA to solve the problems. Future work of the PAIWC could include some activities that are very micro-oriented. One example would be preparation of model feasibility studies for individual firms. The PAIWC also focuses on firm-neutral types of studies and analyses of policy options.

There is excellent staff support capability already available to the PAIWC which allows it to function at a high level of professionalism. The Junior Minister of Agriculture decided to make his Task Force on Agricultural Policy Analysis

Figure 1

ORGANIZATIONAL CHART OF THE PERMANENT
AGRICULTURAL-INDUSTRIAL WORKING COMMISSION (PAIWC)



(TFAPA) available to the Commission. The stage is now set for the Commission to move into a period of intense activity.

TFAPA is an outgrowth of one of the major recommendations in the January 1989 FAO/UNDP agricultural policy options report, calling for the creation of an Agricultural Policy Analysis Cell. The report recommended staffing as follows:

> ... A proposed Agricultural Policy Analysis Cell for Indonesia need not be large" -- no more than 10 or 12 specialists. All the members should be highly trained, however, with a mixed expertise including agricultural production economics, farm management, natural resources economics, agribusiness and international trade. The group should include recent Ph.D. graduates who are skilled in the latest analytical techniques and some members with long term policy analysis experience.

The TFAPA is staffed in close accordance with the above quoted suggestions. Seven of the staff have Ph.Ds in agricultural economics or other relevant disciplines. Three additional economists are scheduled to join the TFAPA.

4.5. PAIWC: Performance to Date

Although PAIWC is still quite new, it has already made both the MOA and MOI more cognizant of agribusiness issues and this is reflected in their speeches and other public activities. The Junior Minister of Agriculture has already directed his policy task force to study some issues that could remove agricultural regulatory constraints to raw material supply and provide other incentives desired by agribusiness firms.

Some important policy-oriented staff work is beginning to emerge from the TFAPA. Several policy briefs have recently been completed. A study of the feasibility of extending a BIMAS-type subsidy program to secondary food crop producers has been contracted out to the Research and Economic Development Center at Gadjah Mada University. A study to investigate the feasibility of using a contract farming mechanism by small-scale agro-processing firms in rural areas has also been initiated.

PAIWC still needs to improve its relationship with BAPPENAS and the MOA's Bureau of Planning. For example, access to funds remains a problem.

Figure 2

PAIWC - REPELITA-V PROGRAM
TO INCREASE SUPPORT TO VALUE-ADDED AGRICULTURAL PRODUCTS

PROGRAM OF ACTIVITIES

- Area Development
- Agricultural Product Development
- Agro-industrial Development
- Provision of Machinery/Industrial Material
- Development/Utilization of Technology
- Agro-industrial Human Resource Development
- Parastatals' Foster-father Program

PROGRAM TARGETS:

- Food Crops & Horticultural Commodities
- Estate Crop Commodities
- Livestock Commodities
- Fishery Commodities
- Agricultural Waste

5. Private Sector Institutions

5.1. Variety of Private Sector Agribusiness Organizations

There are a wide variety of organizations which directly or indirectly relate to and assist agribusiness. These include banks, accounting firms, seed suppliers, trading companies, wholesalers, retailers, exporters, and non-profit organizations established to service agribusiness such as foundations, cooperatives and associations.

A major component of ADP will be to identify and support the development of private agribusiness organizations suited to the Indonesian environment. ADP is structured to support any private sector organization which seems appropriate. Throughout the Project, there will be a continuing search to identify appropriate organizations.

During the course of the ADP design, a variety of organizations were analyzed to assess their needs and suitability as a vehicle for ADP to promote agribusiness development. Some of these are described in the section which follows. On the basis of this initial analysis, two were deemed worthy of initial Project support, the Agri-business Club and the Indonesian Fisheries Federation.

As one of its first functions, the Project technical team should reconfirm that support to the Agri-Business Club and the Indonesian Fisheries Federation continues to be appropriate. The Technical Team should then continue to identify and prioritize other organizations worthy of support.

5.2. Trade Associations

5.2.1. Role of Trade Associations World-Wide

In many countries, trade associations perform the dual functions of providing services to firms to solve information/technology/manpower problems, and encouraging a dynamic interaction between the public and private sector on policy/regulatory matters. Trade associations in the United States work to define the common problems and needs of their members. Many of these associations receive substantial financial support from their members to respond to these problems and needs, whether they relate to lack of technical information or a bill in Congress which they would like to see changed. It is not uncommon for associations to help their members combine in various ways to improve their market access and even to attempt to influence prices in the market.

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5.2.2. Trade Associations in Indonesia

Many of the constraints faced by the private sector in Indonesia, particularly small- and medium-scale firms, are the result of weak private sector organizations. While some trade associations are in place, traditionally they have not been able to respond to the problems of the industry. Trade associations in Indonesia have largely been created by government to serve as a vehicle for explaining new government policies to the private sector. Until recently, associations have not had any programs of their own.

The Government of Indonesia has traditionally viewed The Indonesian Chamber of Commerce and Industry (KADIN) as the principle vehicle through which the private sector communicates with government. KADIN was established in 1956. KADIN branches have been established in each region of the country. All other associations are required by law to belong to KADIN. Most of the principal officials in KADIN are either active or retired Government officers. Many view KADIN as an extension of Governmental apparatus.

Many commodity-specific trade associations also have a long history, especially those associated with plantation crops. The associations dealing with tea, rubber, timber, etc. have existed on the average for 20-30 years. Many associations were established in the period 1972-1974, at the specific behest of the Government. The Essential Oils Association, the National Fisheries Association and a number of others, were set up at that time by the Director Generals responsible for those particular products.

All of these older associations have been closely supervised by the Government. They have not been encouraged to provide feedback on the reactions of their members to various policy changes.

Traditionally, associations have not provided much in the way of services for their members. Generally, they have been relatively inactive except when called upon by Government to convene a meeting or act on a particular subject.

5.2.3. Change and Opportunity

Over the last five years, some associations have begun to develop programs for their members and to take a stance which is distinctive from the Government. There are a number of reasons for this change. The general deregulation policies have been the most important. In specific product sectors, special factors have also played a role. The Indonesian Plywood Association emerged as a powerful force, organizing the plywood industry. This was made possible by a powerful businessman who took over

this association. He and his close associates had sufficient influence to encourage the government to establish a policy framework very favorable to development of a competitive plywood industry in Indonesia. This organization proved to be a very effective as well in marketing, quickly establishing Indonesia as the number one source of hardwood plywood in the world and heavily influencing the international price. The same man is now trying to duplicate this success with the Indonesian Furniture Association, focusing on the development of rattan furniture exports.

Over the past two-to-three years, there have been a flurry of new associations and association-like organizations formed. These new associations seem to be less encumbered by the more public sector tone of their predecessors and are quickly developing the nucleus of effective programs. In the agriculture sector, these include the Cocoa Association, the National Fisheries Federation (GAPPINDO), the Agri-Business Club and the Horticultural Business Association.

One can clearly see a dynamic process at work. Business and Government people are recognizing the utility of private sector organizations. For example, while established by the private sector, the Agri-Business Club was formed with the full support of the Minister of Agriculture. He and the Junior Minister both sit on the Board of Advisors. However, unlike in the past, the private sector initiators are being allowed relatively free rein to develop the Agri-Business Club, without Government direction. The same has been true of GAPPINDO. Although originally set up by the Director General of Fisheries, he has fully supported the initiatives of the private sector to establish programs for GAPPINDO members. As long as such groups do not take on political overtones, it seems likely that the public sector will continue to support their evolution.

Many associations face a serious constraint, however. Their role is quite often misunderstood by people both in the public sector and the private sector. More often active associations are viewed as a threat rather than as an asset. These views result primarily from a lack of familiarity with the type of services that associations could normally supply. Information and support could be of considerable help in promoting and equipping these emerging organizations. In the absence of such help, there is a danger that these associations will be used by a few vested interests to control and manipulate the private sector.

5.2.4. Complementing the World Bank's Agro-Industry Project

The concept of promoting selected associations has been echoed by the study team on agro-industrial processing for the

World Bank. They offered the following recommendation to the Ministry of Industry:

> The process of deregulation and liberalization implies a withdrawal by the Government from its former direct involvement in many aspects of private sector activity. This withdrawal should be accompanied by a transfer of responsibility from the government to the private sector for the management of their own affairs. In particular, **the segmental studies have seen a need to review the role and function of trade and producers Associations.** The Government has often used membership of an Association as a condition for the grant of licenses. Such licenses might include production ceilings or export quotas. The result has been for Associations to see themselves, and for the Government to see them, as pressure groups defending and seeking privileges from the Government. Except for efforts to create cartels to manipulate sales and prices, few Associations attempt to promote members' interest outside the official spheres of influence.
>
> In the new business environment as it evolves the role of the Associations will have to change: they will have to be more democratic, represent members' interests in wider areas and take responsibility for self regulation. It is suggested that a project to restructure agro-industry should place considerable emphasis on fostering and guiding changes within the Associations... The outcome should be proposals in which restructured Associations:
>
> - Take a more active role in representing and promoting members' interests in their markets;
> - Undertake to establish quality standards and grades for members' products to ensure compliance with importing country regulations;
> - Provide market and technical information and services to their members; and
> - Work closer with the government services to promote their interests.[1]

5.2.5. USAID Role: Anticipated Outcome and Impact

Given the process of change going on in Indonesia and in the agro-processing industrial sector in particular, USAID believes

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[1] World Bank, "Restructuring Study", Main Report, pp. 24-25.

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that agribusiness associations can be strengthened to provide services to their members as well as to serve as a vehicle for feedback to the public sector concerning refinements to the existing policy/regulatory framework. The result of this will be two-fold: (1) it will allow the public sector to feel more comfortable in transferring to the private sector responsibility for decision-making; (2) it will allow the associations to help the private sector remove key constraints to expanded agribusiness development.

5.2.6. Choosing the Focus

It is expected that during the six year life of project, as many as six to ten product lines will be assisted through their respective trade associations and other private sector organizations at national, regional and local levels in order to have as broad an impact as possible in the agro-processing sub-sector. However, during the start-up phase, no more than two product lines will be targeted. Approaches will be developed which can later be replicated in support of other product lines.

Criteria for selection of the product lines for initial focus are organized as a matrix, which is described in Annex F. It is recognized that by the time of project implementation, the relative importance of some of these factors may have changed. Thus, the relative weights attached to these factors may need to change as well. During the Start-Up Workshop and the baseline studies which are carried out during the first six months of the Project, the choice of product lines should be reviewed.

5.2.7. Initial Choice of Organizations

Below is a description of the organizations in these two sub-sectors which are proposed as the initial private sector delivery mechanisms for the Project.

5.2.7.1. The Indonesian Fisheries Federation
Gabungan Pengusaha Perikanan Indonesia (GAPPINDO)

ADP will initially support two different models of agribusiness organization in the fisheries and horticulture product lines. GAPPINDO was established in 1988 by the Director General of Fisheries, MOA. The initial purpose of GAPPINDO was to represent the Indonesian fisheries industry in regional fora including the ASEAN Fisheries Federation, which has an Indonesian Chairman. There were a number of important regional issues emerging which the Government felt required strong private sector participation. The fisheries associations existing at that time did not seem to represent a broad enough spectrum to be useful in the international arena.

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Other fisheries associations include the Indonesian Pond Fisheries Association, the Indonesian Fisheries Association (sea catch) and the Indonesian Cold Storage Association (mostly shrimp processors). These associations were established at the national level by the Director General of Fisheries in the early 1970's and 1980's. These national associations also have branches in various parts of Indonesia. The Indonesian Cold Storage Association has branches in Surabaya, Bali, Medan and Ujung Pandang. The Indonesian Pond Fisheries Association has branches in Surabaya and Ujung Pandang. The Indonesian Fisheries Association has scattered branches, mostly in rural areas, where there are concentrations of small seagoing vessels.

The leadership of these associations, both central and local, has always been appointed by the office of the Director General of Fisheries or by delegation to the local office of fisheries. In most cases, the associations have been inactive, except when called upon to meet by the Director General of Fisheries. However, local branches of these associations have, on occasion, taken initiative. In 1988, the leadership of the local branch of the Indonesian Pond Fisheries Association in Surabaya took the initiative to establish a local foundation called Bina Mina Praktika. The purpose of this foundation was to provide training to small pond operators to upgrade their operations. Initial funding for the foundation was obtained from a large local shrimp pond owner and processor. Three training cycles have so far been undertaken. But at the moment, the training has been suspended because providing the training was found to be too expensive for either the small pond owners or for the large pond owner/processors.

In 1989, the local chapter of the Indonesian Cold Storage Association in Medan decided to provide technical assistance for their members. They received support from two volunteers from the International Executive Services Corps (IESC) who visited plants in Medan and helped them upgrade their quality control and explore marketing opportunities in the U.S. In 1990, this Medan chapter organized assistance from the Director General of Fisheries and USAID to help them solve the problem of a serious outbreak of disease in the shrimp ponds.

The local associations in Surabaya and Medan have over the last few months organized chapters of GAPPINDO. GAPPINDO appears to be the vehicle through which such local initiatives can be promoted.

In general, the traditional attitude of the private sector to associations has been one of skeptical tolerance. They have participated because they felt they were required by the government to do so. However, they participated only as much as they felt they had to, since they perceived little benefit from their participation. When GAPPINDO was created by the Director

General in 1988, the reaction of the private sector was again one of skepticism. They were not sure that a new federation, encompassing all the old associations, would be any more likely than they had been to be responsive to their needs. Again, the leadership was appointed. Those appointed were not too sure how seriously to get involved.

However, the timing of establishment of GAPPINDO coincided with the emergence of a number of issues, both local and international, which required some cooperative vehicle for solution. The Director General has continued to encourage the private sector to utilize GAPPINDO to deal with these issues, and the appointed leaders of GAPPINDO have begun to make a real commitment to promoting the Indonesian fishing industry.

USAID had a hand in encouraging this leadership commitment. Just at the time GAPPINDO was being established, USAID was approached by the Export Support Board (ESB), an agency of the Ministry of Trade which has received World Bank support to encourage Indonesian exports. ESB was seeking USAID help for Indonesian shrimp processors interested in entering the U.S. market who were facing the need to meet FDA standards. USAID arranged for an FDA team to come to Indonesia and a USAID person helped shrimp processors and the Ministries of Trade and Agriculture prepare for this visit. As GAPPINDO was just being formed, USAID people interacted with some of the initial leadership.

As a follow-up to this successful visit, GAPPINDO requested assistance from USAID to provide people to continue the quality upgrading work with shrimp processors along the lines laid out by the FDA team. USAID arranged for a second FDA team to train laboratory technicians and for the International Executive Services Corps (IESC) to receive a small grant to organize an experimental program of support for GAPPINDO. Three IESC volunteers ultimately participated in this eight month program. Fifteen processors were assisted during that period. About half of them are now exporting to the U.S. as a result of this assistance. However, more importantly, it provided the leadership of GAPPINDO the opportunity to see what a program of assistance could do to contribute to the development of the fisheries industry.

In addition to this program of work with IESC, GAPPINDO has been very active in national and regional programs. The ASEAN Fisheries Federation, has tackled a number of issues important to Indonesia, including negotiations with Thailand over tuna. Indonesia is a major tuna fishing area, and most of this tuna continues to be exported in fresh or frozen form either to Japan, Korea or Thailand. The largest quantity goes to Thailand where it is canned. GAPPINDO was involved in protracted and successful negotiations which have resulted in an agreement to gradually

transfer tuna canning to Indonesia over the next three-to-five years.

GAPPINDO has also been active in national fisheries meetings, and they are now beginning to organize participation by their members in international trade shows. A delegation of seven processors went to Seafare in Long Beach California in February, 1991 and the Boston Seafood Show in March, 1991, which are the two biggest seafood shows in the U.S. The Director General of Fisheries also participated in Seafare. Again, USAID helped to organize GAPPINDO participation and a USAID person accompanied the group to Seafare. As a result of the success of these events, GAPPINDO intents to organize group participation in other international trade fairs.

Like many other associations, GAPPINDO has relied on the Government for office space. The Director General of Fisheries has provided a small office for GAPPINDO across from his own office. The office has a phone and a secretary paid for by GAPPINDO, as well as a part-time professional. In recent months, however, given the increased level of activity, GAPPINDO set up a second office inside the office of their Vice Chairman. The Vice Chairman has provided GAPPINDO with office equipment, a secretary and has loaned GAPPINDO the part-time use of a highly-qualified professional.

At the moment, GAPPINDO is not in a position to set up a fully independent office. Although they have over three hundred association and private members, only about 70 of these so far have paid a nominal membership fee. They feel they cannot ask members to pay more until they have services to offer them, hopefully by the end of 1991. They are also negotiating with the GOI to establish a small fee to be added for the licenses of all large-scale fishing boats. This fee would go directly to GAPPINDO to help pay its costs of operation.

USAID recently funded a small project to provide GAPPINDO with technical support to establish an information system. A technical advisor spent a month in Indonesia, assessing the needs of GAPPINDO members. Members will be charged the full cost of providing this information.

ADP will help GAPPINDO to expand their range of technical assistance and training resources. Technical assistance from the Prime Contractor, both long-term and short-term, would be used to help GAPPINDO set up and properly organize a professionally-run office. It would also help to organize specific services for which GAPPINDO could begin to charge its members, including publications and other forms of information dissemination. Since GAPPINDO is deeply involved in helping the government, both national and regional, to define and redefine policy and regulations, the ADP will help design and fund studies which

would assist GAPPINDO in this role. Basically, ADP would seek to be as responsive as possible in meeting the needs of GAPPINDO members.

5.2.7.2. The Agri-Business Club (ABC)

The Agri-Business Club was established in 1989 by a small group of dynamic business people. The Agri-Business Club is not an association. However, it is recognized as a legal organization and is registered with KADIN, of which it is a member. ABC was set up with the full support of the Minister of Agriculture, who is on the Board of Advisors. The idea was to identify areas in which agribusiness people were willing to cooperate and build on these. In mid-1989, a small group was invited to the first meeting. This small group decided that a monthly luncheon meeting, which invited someone who might be of interest to a larger group, might be appealing. These meetings would also give people the opportunity to talk to others dealing with similar problems and perhaps to strike up business relationships.

The idea quickly caught on. Each successive monthly meeting drew in more people. An average monthly meeting now includes 40-60 people. Over 70 people have paid Rps. 350,000 to join the Club. This payment entities them, among other things, to reduce their monthly luncheon payment from Rps. 60,000 to Rps. 30,000.

In addition to the luncheons, the Club sponsored a tour to Germany late in 1989 to allow people in agribusiness to understand the market better and make contacts with buyers. This trip was viewed as highly successful by the participants.

In mid-1990, with the encouragement of Minister Habibie, the Club sponsored a two day workshop on banana production and processing. This very successful workshop was attended by over 200 people. A follow-up workshop is planned for April, 1991. Similar seminars are planned to focus on packaging, transportation, insurance and other topics of interest. The Club is self-financing and has good informal connections with the Ministry of Agriculture. The Club has a strong leadership group and a rapidly growing range of services which respond to the needs of their members and the larger horticulture community. The Club includes the senior leadership of the Horticulture Business Association, a recent creation of the Ministry of Agriculture with 40 firms registered as members but currently no budget and no active leadership or program of services (described briefly later).

To help its members get into the banana business, the Club is now putting together a cooperative. Such a cooperative can gain access to credit at lower interest rates.

The Club is now trying to put together the beginnings of an information system for horticulture products. The information system will provide technical and market data on various products, beginning probably with tropical fruits such as bananas.

ADP proposes to assist the leadership of the Club to establish permanent offices with a small supporting staff, and assist in providing services requested by members. To encourage broader membership, the Project would cover some of the costs of technical services. The Club is already particularly interested in government policy and regulations as they affect agribusiness. The ADP funded studies would be utilized to encourage this interest and to provide the Club with quality input to use in their dialogue with the government. In addition, the Project will develop member services which would include training, technical assistance, and market information.

Of major concern to horticulture export growth is the establishment of regular, standardized, quality supplies of raw materials that meet international market standards. In a country where access to land is regulated, and small farmers selected as the primary production units beyond state-owned plantations, vertical integration is not a viable solution for most horticulture enterprises. Instead, some form of rural village production or nucleus estate model better suits Indonesia. But there are major constraints to making nucleus estates deliver international quality horticulture. Tight government control which is established, in theory, to protect small farmers, in practice operates to greatly restrict horticulture enterprises from becoming markets for rural produce.

One service that should be tested under ADP is a freer-market contract farming model of horticulture production. Such a solution to the most difficult problem of input supply would link producers and enterprise buyers in a potentially symbiotic network. Indonesia has a scheme which currently approximates this model called PIR. In a few cases, this model has proven successful. Acknowledging the difficulties of success, the potential rewards for rural producers and farm workers, horticulture enterprises, horticulture trade associations, GDP and export earnings could be very large. This is the kind of non-conventional constraint that ADP is designed to identify, in conjunction with organizations such as ABC.

Once supporting services have proven to be useful to the Jakarta-based Agri-business Club, and if the leadership agrees, similar organizations could be established in East Java, South Sulawesi and/or other appropriate locations. The Jakarta Club would become a de facto national-level headquarters, with Surabaya and Ujung Pandang chapters operating within the framework of government acceptance (through KADIN registration),

but acting on behalf of the voluntary membership of agribusiness enterprises.

5.2.8. Support to Other Private Organizations

ADP will also assist other agribusiness organizations. Assuming initial analysis by the Prime Contractor confirms that Project assistance should go to GAPPINDO and ABC, establishing Project activities with these organizations will be the primary initial task. Once assistance to these organizations is firmly in place, the Project may consider funding small activities of a few additional agribusiness organizations to test whether they should later receive more substantial assistance. To justify this assistance, the organizations should be carefully studied to determine whether assistance to them is appropriate.

During the course of preparation of the Project Paper a number of agribusiness organizations, in addition to GAPPINDO and ABC, were briefly analyzed. A few of these are described below.

5.2.8.1. The Indonesian Horticultural Business Association (IHBA)

The IHBA was formed in 1988, at the request of the Ministry of Agriculture to assist in the development of the horticulture industry, which includes flowers and ornamentals. IHBA currently has 40 members. There is no regular collection of dues. The organization does not have regular meetings. Its activities tend to focus on special projects which are either requested by the Ministry of Agriculture or initiated by its Chairman. The Chairman is an advisor to the Minister and other people in the Ministry.

The principal activities of IHBA to date have been the preparation of policy papers for government and the convening of two conferences on horticulture. IHBA feels that its position papers have been influential within the government, as witnessed by the fact that the President has incorporated some of the ideas from the papers in his speeches. Their two conferences were co-sponsored by the Dutch and Australian governments respectively and provided a venue for matching Indonesian business people with business people from those countries.

IHBA now operates out of the office of its Chairman. While the Chairman and some of the members are quite energetic, the Association still has more potential than actualization so far.

For example, the Chairman says he wants to be able to offer services to members. Before IHBA was formed, he prepared a proposal to set up a horticultural service center. The center would provide information, access new technology and expertise

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and carry out project pre-feasibility and feasibility studies in horticulture. The center would be able to recruit and assign long and short-term experts to projects. Through the center, training would be made available both in Indonesia and abroad. Limited research would be carried out. The center would keep abreast of market trends to help firms select product focus. The proposal requests assistance to cover one long-term advisor, short-term advisors and overhead. The center would be self-supporting in three years. This proposal was turned down by the Dutch because they felt it was too ambitious. The center, as designed, did not really appear to be a private sector at all, but merely an extension of existing public sector activities.

If participation in this organization can be broadened, support by ADP may be justified.

5.2.8.2. Indonesian Essential Oils Trade Association (INDESSOTA)

INDESSOTA was formed in the period 1972-4 at the request of the Government to serve as a vehicle to organize essential oils traders. It now has 28 members, most of whom are traders. Only one firm, owned by the Chairman, actually produces essential oils. Small producers and distillers are not encouraged to join. There is no association at present to assist producers and distillers. The current Chairman is also the largest trader of essential oils and has been Chairman for most of the organization's history.

Currently, essential oils generate about $35 million in domestic and international sales. INDESSOTA has a small part-time secretariat in the office of the Chairman, and the membership meets when there are issues of importance to discuss. The Association's major current function is to be aware of proposed changes in regulations and to fight for changes where these proposals would be detrimental. For instance, they successfully removed the long-standing law which prohibited distillation of clove leaf in most of Indonesia.

The Chairman would like to set up a foundation to provide technical assistance to farmers and distillers in production, distillation and quality control. He thinks this should be financed by a tax on exports. The Chairman said that it is currently difficult to get members to pay a membership fee.

Support to this organization would be justified if it were prepared to undertake a program of services broadly supported by its members and for which its members were willing to pay a substantial proportion of the costs.

5.2.8.3. Yayasan Agribusiness (YA)

YA was founded in 1978. Its objective is to ameliorate the lives of rural poor through agribusiness development. In 1985, YA established P.T. Pusat Pengembangan Agribusiness (PPA), which is basically a consulting firm. YA carries out direct projects for village groups. PPA carries out Projects for donors under contract. YA employs about 70 and PPA employs about 180 people. PPA has worked for USAID, CIDA, IDRC as well as for the MOA, MOI and MOT. YA has developed its own projects in fish/shrimp extension, agricultural cooperative formation, and small business assistance in Sumatra Barat, Lampung, Jawa Barat and Jawa Tengah.

ADP assistance to either organization would most likely relate to a specific project which ADP deemed likely to pay dividends in terms of development of rural farmer organizations supportive of development of a particular cash crop needed as an input for processing.

6. Connection to U.S. Associations and Other Organizations

Linkage to U.S. trade associations and other organizations is viewed as logical and necessary to Project success. Such linkages should benefit the Indonesian associations by providing them with role models for organizational development, improved sources for technology and equipment, and potential private sector investors and markets.

Obviously, the U.S.-based associations are further along the learning curve regarding service delivery. They will almost always be more responsive to the needs of their membership and play a stronger advocacy role vis-a-vis government policy. ADP will use some of the more successful and willing stateside business associations as role models for the younger Indonesian associations. ADP will also establish organizational linkages between pairs of such associations, with the hope of developing "sister association" relationships.

The AID/Washington financed Market and Technology Access Project (MTAP) has recently completed an assessment of representative industry and trade associations in the U.S.[2] Their assessment notes several promising areas for USAID collaboration with associations, including:

- Technical training and consultation for host country nationals to view U.S. operations and evaluate U.S.-source equipment and services;

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[2] Survey of Representative Industry and Trade Associations; MTAP; Williams, Thomas and Barton; November 1990.

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- Assistance for U.S. and host-country firms to assess joint ventures, options for technology transfer and two-way trade opportunities; and

- Strengthening associations in host countries by fostering "sister" relationships with U.S. counterparts.

Of the 32 U.S.-based trade associations surveyed in the MTAP report, four are most relevant to ADP. Those organizations are:

- The Agribusiness Council (ABC) in Washington, D.C., a forum for international agricultural issues;

- The National Food Processors Association (NFPA), which maintains information on international trade regulations, quotas and tariffs and supports its 600 members' overseas marketing efforts;

- The Dairy and Food Industries Supply Association (DFISA), which provides marketing and technical services to 722 manufacturers and distributors of machinery and supplies;

- The Food Processing Machinery & Supplies Association (FPM&SA), which includes 500 firms manufacturing machinery and providing services and supplies for the canning, freezing and food and beverage processing industry, produces an annual exposition and offers export and marketing services to its members;

FPM&SA was noted by the MTAP team to be particularly well-suited and willing to cooperate with a USAID Project. The mission of FPM&SA is to provide educational, information and developmental programs to its members and to the prepared food and beverage industries; to provide marketing assistance programs and sponsor expositions that enhance the viability of the membership; to foster a positive public image of the industries it serves; and to be the leading Association for those companies that provide equipment, supplies and services to the prepared food and beverage industry.

FPM&SA and the NFPA have formed the Food Industries International Trade Council. NFPA represents commercial packers of food products such as fruit, vegetables, meats, seafood, and canned,frozen, dehydrated, pickled, and other preserved food items. The Council serves members who have in interest in developing trade, joint ventures and sale of machinery and services in the international marketplace. Initial efforts have been focused on the Soviet Union. The Council will also begin initiatives in Eastern Bloc countries, Latin America and the Pacific Rim.

FPM&SA, operating through the Council, has established an office in Brussels to develop links with similar associations in the European Community for standards coordination and joint-venture promotion. They also have a representative office in Moscow. They are interested in setting up offices in Latin America and in the Pacific Rim. They often bring buying missions to the U.S., particularly in conjunction with their annual trade show in Chicago. They also sponsor overseas trade missions for their members. For overseas trade missions, arrangements are made through the Department of Commerce. They are interested in the idea of arranging internships for foreign participants in member companies. Through their members, they can arrange training in a large number of technical specialties.

The President of FPM&SA has stated that he favors linkages with industry and trade associations as a means for helping FPM&SA member firms establish a long-term presence in selected markets. The linkages with local associations could be of two types:

(1) Protocol relations with overseas associations representing local food processing machinery manufacturers. This facilitates cooperation in the exchange of technical information and coordination of equipment standards and in the planning of trade shows (coordinating dates to avoid overlap, offering pavilion space to other associations, etc.). It can also facilitate the establishment of joint ventures between U.S. equipment manufacturers and local firms.

(2) Formal agreements with local food processing associations overseas (local equivalents of the NFPA) to facilitate information exchanges on technology and management. This provides FPM&SA member firms a means for contacting users (possible buyers) of food processing machinery. Members of local associations are normally invited to the FPM&SA annual trade show.

7. Sale of American Goods and Services

As part of ADP's support to private sector Indonesian agribusiness organizations, the prime contractor will foster linkages between agribusiness organizations in Indonesia and the United States. An expected by-product of these linkages will be American agribusiness exports of processing equipment, technical assistance, and finished products to Indonesia. This is viewed as a useful spinoff benefit from the development of Indonesian business organizations, whose primary objective will be to promote Indonesian exports to the U.S. and elsewhere.

Development through trade is not a new idea. Previous efforts by USAID and the Foreign Commercial Service worldwide have, however, been far from universally successful. A recent study of USAID trade and investment projects in developing countries concludes, nevertheless, that they can make a

difference if the environment is appropriate and if they are properly targeted. Several such efforts by other countries in Indonesia have shown remarkable success. These include the efforts of the Dutch, the Germans and the Canadians, among others. Each of these countries takes a quite different approach:

o Canada. The Canadians have a very active commercial counselor, assisted by a small staff. They operate in a flexible manner to broker deals with Canadian firms.

o Germany. The German government has established EKONID, an organization similar to a Chamber of Commerce, with a large membership, most of which (unlike the American Chamber of Commerce) are Indonesians, including the Chairman. EKONID has a relatively large, professional secretariat, including five Germans. One of these is a lawyer. They have a data system which can immediately identify a German firm interested in selling to or buying from Indonesia. They have been very successful in encouraging German/Indonesian joint ventures. They charge for their services and 70% of their budget is covered by fees. The remaining 30% is paid by the German Government.

o Dutch. The Dutch entity FMO is more modest in scale, but even more successful. FMO is not a membership organization. It is a state corporation of the Dutch Government, and it has two Dutch professionals in Jakarta. What it has principally done is create marriages between individual Dutch firms and Indonesian firms. FMO will pay up to 50% of the cost of technical assistance provided by a Dutch firm to an Indonesian one and 50% of the cost of training of an Indonesian firm manager in the Dutch firm in Holland. In FMO's experience, this has almost always resulted in a strong relationship between the two firms, with the Indonesian firm initially selling to the Dutch firm. A later stage is often a joint venture between the two firms, but this is not supported by FMO financially. FMO also has funds that can be used to pay for feasibility studies and other things, which it has not used. The costs of this operation are supported by a grant from the Dutch Government. FMO has been so successful, it now has been given funds by the EEC to use in a similar way with non-Dutch European firms.

The USAID study previously cited concluded that trade and investment projects which focus on development via an expansion of two-way trade and additional investment can be effective, if the project:

(1) Provides enterprise-specific assistance to a limited number of producers in a limited number of sectors;
(2) Is kept relatively simple and targeted;
(3) Seeks to demonstrate early success;
(4) Has enough flexibility to adapt to later changes in strategy and target group selection;

(5) Has extremely capable and motivated local and foreign contractor staff;
(6) Has clearly targeted and defined objectives;
(7) Has cooperation from other in-country agencies and institutions involved in export or investment promotion; and
(8) Has appropriate phasing and level of funding.

Building on lessons learned from previous USAID experience, ADP will take the following approach:

o Narrow Focus The approach of this Project will be extremely narrow and focused and will not be broadened unless it is clear it has the capacity to be successful by doing so.

o Small Staff The creation of business linkages will be one of the Contract Teams's on-going functions. No special staff will be hired. No prestigious board. No fancy meetings.

o Informal Sales of U.S. goods and services will be an informal activity handled on a part-time basis by the Contract Team. No special budget will be available. The Contract Team will focus principally on providing information on business opportunities which stimulates self-interest among Indonesian trade/producer associations and utilizes this as a primary mechanism to encourage growth.

ANNEX K

AGRIBUSINESS DEVELOPMENT PROJECT

TECHNICAL ANALYSIS ANNEX

Summary

Various options for Project support vis a vis agribusiness segments (e.g. horticulture, fisheries, spices, vegetable oils, etc.) and private sector organizations were analyzed. It was concluded that Project impact would be maximized by focusing initially on no more than two organizations in two agribusiness segments. Assisting all segments simultaneously would result in dissipating the modest resources of the Project, with the probable result that there would be little short-term impact. The fisheries and horticulture segments were selected for initial Project emphasis. Based on these segments, two organizations were identified for possible Project support, the Indonesian Fisheries Federation (GAPPINDO) and the Agri-Business Club (ABC). A description of these two organizations is included in Annex J.

To adjust for possible changes from the time of this analysis to Project start-up, the agribusiness segments and organizations will be reviewed again against the selection criteria during the Project Start-Up Workshop. New opportunities may emerge of which the Project should take full advantage.

1. Criteria for Selection of Agribusiness Segments and Organizations

1.2. Criteria for Selection of Segments

1.2.1. Commercial Criteria

Commercial criteria, based on favorable return-on-investment to agribusiness firms/entrepreneurs, include the following:

a. Strength of Market Demand, Domestic and Foreign. Is the market for segment products strong and growing, domestically, internationally? Are the prices offered attractive, with acceptable margins? Is the market penetrable by new suppliers?

b. Competitive Strength of Indonesia. Is Indonesia in a good competitive position to build a domestic and foreign market for segment products in the medium- to long-term? Does it have cost advantages which will remain for some time?

c. Current Availability of Raw Materials. Does Indonesia currently have enough raw materials to produce a sufficient amount of the product to be a factor in the market? Is the technology in place to produce the raw materials? Can necessary raw materials be produced within the life-of-project of ADP?

d. Current Availability of Processing Technology. Does Indonesia currently have the technology in place to process this particular product? Can a sufficient amount be installed to make an impact on the market within the time frame of this Project?

1.2.2. Economic Criteria

Economic criteria establish whether or not the segment can contribute significantly to the economic development of Indonesia. There are two important economic criteria:

a. Contribution to Trade Balance. Can the segment contribute significantly to either export earnings or to domestic sales to reduce imports?

b. Contribution to Employment. Is the segment labor-intensive and does it offer substantial opportunities for both increasing industrial employment and contributing to rural farm and non-farm employment?

1.2.3. Socio-economic Criteria

Socio-economic criteria establish whether the segment offers opportunities for enhancing the development impact of agribusiness on less-developed regions of Indonesia, small/medium firms and low-income groups. They include:

a. Geographical Distribution. Does the segment offer development opportunities for several regions of Indonesia?

b. Presence of Both Small/Medium Firms. Do segments include both small- and medium-sized firms?

c. Presence of Smallholder Suppliers. To what extent are raw materials provided by large numbers of smallholders who could benefit from the development of the agribusiness segment?

d. Dispersal of Control of the Segment. To what extent is the segment unencumbered by monopolistic or oligopolistic control? Is the segment relatively open, so as to promote competition and broadly-based growth?

1.2.4. Strategic Criteria

Strategic criteria establish whether or not the segment offers opportunities to achieve the Project's overall objectives. They include:

a. Impact on Employment and Incomes Goal. Will assistance from this Project have the potential to significantly increase employment and incomes in the segment?

b. Applicability to Other Segments. Through provision of assistance to the segment, will the Project be able to learn lessons and apply successful approaches to other segments?

c. Potential Number of Firms Which Could Be Impacted. Are there a significant number of firms either in the segment now or likely to be in the immediate future who would benefit from the Project impact?

1.2.5. Policy/Regulatory Criteria

Policy/Regulatory criteria establish whether or not their are opportunities in the segment to significantly impact on Government policy and regulatory constraints. They include the following:

a. The Need for Policy and Regulatory Change. Is the segment constrained by policies and/or regulations, either at the central or regional levels or both, which must be changed to make the segment more efficient and competitive?

b. GOI Recognition of the Need for Policy/Regulatory Change. Do key policy-makers in the GOI recognize the need for change? Are they willing to advocate changes?

c. Likelihood of Project to Leverage Change. Is it likely that the Project will be able to leverage policy/regulatory changes in the segment through its GOI counterparts in the MOA and MOI?

1.2.6. Legal/A.I.D. Policy Criteria

Legal/A.I.D. Policy Criteria establish whether there are legislative or policy restrictions on assistance to the commodity, product or product line proposed for assistance. These possible restrictions include the following:

a. The Bumpers Amendment. No assistance can be made available for agricultural development activities except where such agricultural development activities are designed to increase food security in developing countries ..... and cannot reasonably be expected to have a significant impact

on the export of a similar U.S. agricultural commodity or will not lead to direct competition with U.S. agricultural exports.

b. The Lautenberg Amendment. No assistance can be provided for certain activities directly assisting the manufacture for export from developing countries to the United States of textiles, apparel, footware and certain other import-sensitive articles, as well as the manufacture for export to third countries of those same articles in direct competition with United States exports. With respect to these commodities, the Amendment prohibits use of assistance funds to procure feasibility or prefeasibility studies for, or profiles of potential investment in, the manufacture of the commodities for export or to assist in the establishment of facilities specifically designed for manufacture of the commodities for export.

c. A.I.D. Policy Determination Number 71. Because of the potential injury to U.S. producers of similar products, A.I.D./W will as a matter of general policy examine at the earliest possible stage proposed projects involving production, processing or marketing of sugar, palm oil or citrus for export. Approval to proceed with project development in these cases must be made by the appropriate Regional Assistant Administrator.... These divisions will examine potential injury to U.S. producers on the basis of data supplied by the Mission on the export potential of the project, likely export markets, magnitude of production resulting from the project, and the recipient country's relative share of the world market and/or U.S. import market; and on information available in Washington about the condition of the U.S. industry.

d. Other - FY 1991 Appropriations Act. Assistance is prohibited for the production of any commodity for export which is likely to be in surplus on world markets at the time the resulting productive capacity becomes operative and which would cause substantial injury to U.S. producers of the same, similar or competing commodities.

1.2.6.1 <u>Initial Bumpers, Lautenberg, and PD-71 Determinations</u>

The Lautenberg Amendment is concerned with protecting the interests of U.S. producers and exporters of certain manufactured commodities such as leather wearing apparel. This Project is not focused on the promotion of any of the items mentioned by this Amendment.

A.I.D. Policy Determination 71 is concerned with protecting the interests of U.S. producers of sugar, palm oil, and citrus. This Determination is not germane to this Project as it will not

promote these commodities.

The Bumpers Amendment, as mentioned above, is concerned with protecting the interests of U.S. exporters of agricultural commodities. Our analysis of U.S. production and trade, as well as Indonesian production and exports of horticulture and non-marine fish, indicates that the Project will not "have a significant impact on the export of similar U.S. agricultural commodity or will not lead to direct competition with U.S. agricultural exports." Therefore, the Bumpers Amendment currently does not apply to this Project.

Rather than **compete** with U.S. exporters, this Project is designed to **promote** U.S. exports of U.S. technology and equipment. Where the Project will also promote the export of agricultural commodities, this is primarily into the U.S. market, not into markets where the U.S. might be a competitor.

Horticulture. The Asian market, where Indonesia might theoretically compete with the U.S., was a major market for the U.S. exports in 1989 of fresh grapefruit (316,000 m.t.), fresh oranges and tangerines (264,000 m.t.), fresh apples (149,000 m.t.), fresh lettuce (22,000 m.t.), frozen potatoes (153,000 m.t.), and processed orange juice (1.2 m.m.t). Indonesia, primarily a tropical country, does not export similar items to that market, nor does it have the potential comparative advantage in these commodities, some of which are temperate commodities. Indonesia's major fruit and vegetable exports in 1989 to other Asian countries were processed pineapples (1,500 m.t.), prepared mushrooms (433 m.t.), and fresh potatoes (71,000 m.t.). We do not foresee Indonesia becoming a competitor with the U.S. in frozen potatoes because Indonesian varieties are not suitable for this market.

In the Indonesian market in 1990, the U.S. sold only $6 million in fresh and processed fruits and vegetables (compared with worldwide sales of $5.7 billion). Thus, any displacement of U.S. fruit and vegetable exports to Indonesian would only affect an insignificant one-tenth of 1 percent of total U.S. fruit and vegetable exports. More than likely, this Project will increase, not decrease, total U.S. exports to Indonesia as the Project improves the domestic market for processed fruits and vegetables.

Non-marine fish. In terms of shellfish, and other fish products, the U.S. is a net importer. In 1990, for example, the U.S. exported 225,000 m.t., while importing about 458,000 m.t. The Project will encourage the export of Indonesian shrimp and prawns to the U.S. market, where only 8 percent of its 70,000 m.t. were exported in 1989. No significant negative impact to U.S. exporters of shrimp and prawns will result from this Project, since the U.S. does not have significant exports to the Asian

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market. In this market, Indonesia will increasingly take market share away from Thailand, Taiwan, and Malaysia.

Once the Project commences, commodity-specific marketing feasibility studies will be conducted which will identify, among other things, other commodities that may be assisted by the Project. At that point in time, the above-mentioned criteria and methodology will be applied to make sure that the Project is in compliance with foreign assistance legislation such as the Bumpers and Lautenberg Amendments.

For example, while agronomically it is unlikely that Indonesia will compete with the U.S. in the export of apples, oranges, grapefruits, and potatoes, the Project should be cautious of funding pineapples. In 1989 the U.S. exported 9,000 m.t. of processed pineapple, while Indonesia, currently expanding world market share of processed pineapple, exported 480,000 m.t..

1.3. Criteria for Selection of Organizations

Criteria for selection of agribusiness organizations include the following:

a. Is Organization Active in Selected Segment? Is the agribusiness organization a progressive and dynamic player in the agribusiness segment? Does the organization have a clear set of objectives? Are services being provided by the organization to its members? Can the organization significantly improve the efficiency and competitiveness of the segment as well as improve the profitability of its member firms?

b. Initial Commitment of Agribusiness Organization. Whatever its initial strengths or weaknesses, does the leadership of the relevant organization appear to be fully and meaningfully committed to the objectives of the Project? Does the organization have a group of leaders (not just one person) committed to achieving these objectives? Are these leaders willing to spend time and energy achieving these objectives?

c. Openness. Does the leadership group represent the interests of the majority of the members? Is membership open to all firms in the agribusiness segment and do most firms in the segment belong, both large and small/medium firms? Is the organization focused on expanding broad-based growth in the segment as opposed to controlling/limiting market access?

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d. Initial Commitment of Member Firms. Do key firms in the organization appear to be fully committed to the objectives of the Project, including making the organization effective?

e. Potential of the Organization to Advocate Policy/Regulatory Change. Is the organization likely to be in a position during the life-of-project to effectively represent its views on policy/regulatory change to the GOI?

f. Involvement of Organization with a Commodity or Product Line Eligible for U.S. Assistance. Is the organization currently or likely to be in the future focused on a commodity or product line that is eligible to receive U.S. assistance?

g. Willingness/ability to cost-share. Is the organization prepared and willing to cost-share the agribusiness promotion activities? Will the percentage of costs borne by the organization increase over time?

h. Financial Suitability. Is the accounting system and staff capabilities such that the organization can responsibly handle a U.S. grant or cooperative agreement in accordance with A.I.D. Handbook 13 requirements?

A summary of selection criteria (excluding legal/A.I.D. Policy Criteria is shown in Table 1.

2. General Production and Marketing Trends: Horticulture and Fisheries

Since the decline in oil prices in the mid-1980's, the GOI has made major efforts to boost non-oil exports, both agricultural and non-agricultural. This has fostered an increase in production of a number of agricultural products utilized in agroprocessing and the development of a variety of processed foods, both for the domestic and foreign markets. As indicated in Table 2, since 1985, substantial growth in production of agricultural products has been experienced in a wide range of food crops (particularly corn, soybean), fisheries (salt and fresh water), animal products (meat, eggs, milk) and certain cash crops (palm oil, coconut/copra, cane sugar, coffee, tea and cloves).

Statistics on processed food products in Indonesia normally exclude quick frozen products, thus eliminating frozen shrimp, which is a major export item. GOI statistics on other processed food products at present show a very small figure, as can be seen in Table 3. This shows production value of only $5 million in 1987. Principal growth in processed products has been in milk

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Table 1 CRITERIA FOR THE SELECTION OF AGRIBUSINESS SEGMENTS

	FISHERIES	FRUITS	VEGETABLES	ESSENTIAL OILS	SPICES	CASH* CROPS	VEGETABLE OIL
1990 Production Volume (1,000 tons)+	3,000	4,100	4,200	80	106	53,000	2,300
1989 Export Value (US$1,000,000)+	718	13	20	243	182	713	410
1. Commercial Criteria:							
a. Strength of Market Demand, Domestic & Foreign	5	5	5	4	3	3	3
b Competitive Strength of Indonesia	5	3	3	3	3	3	3
c. Current Availability of Raw Materials	4	1	1	3	5	4	4
d. Current Availability of Processing Technology	3	2	2	3	1	1	3
2. Economic Criteria.							
a. Contribution to Trade Balance	5	2	2	3	3	5	4
b. Contribution to Employment	5	3	3	3	3	2	2
3. Socio-economic Criteria:							
a. Geographic Distribution	5	4	4	3	3	3	4
b. Presence of Small Medium Firm	5	4	4	2	3	1	1
c. Presence of Smallholder Suppliers	5	4	4	2	3	1	1
d. Dispersal of Control of Segment	5	4	4	1	1	1	1
4. Strategic Criteria:							
a. Impact on employment and incomes goal	5	5	5	2	2	2	2
b. Applicability to Other segments	4	5	5	2	3	3	2
c. Number or Firms which Could be Impacted	5	2	2	1	3	1	1
5. Policy/Regulatory Criteria:							
a. The need for Policy/Regulatory Change	3	3	3	3	4	4	3
b. GOI Recognition of Need for Policy/Regulatory Change	3	3	3	2	2	2	2
c. Likelihood of Project to Leverage	4	3	3	2	2	2	2
d. Degree that Segment is Under Control Change of MOA and MOI	4	4	4	4	3	3	3
6. Organization Criteria:							
a. Organization Active in Segment	3	3	3	3	4	4	4
b Initial Commitment of Organization	4	4	4	2	2	2	3
c. Openness	3	4	4	1	1	3	1
d. Initial Commitment of Member Firms	3	4	4	1	1	3	1
e. Potential of Org. to Advocate Policy Reg. Change	4	4	4	4	3	3	3
TOTAL	93	77	77	56	55	64	53

Scoring: 5 highest, 1 lowest

* Cash Crops: coffee, cocoa, tea, sugar

\+ Source. CPS, January, 1991

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products, fish and shrimp, coconut oil, bakery products and clove cigarettes.

More accurate figures on processed food exports show much larger figures, as can be seen in Table 4, although it also excludes frozen foods. Total processed food exports in 1989 were $234 million. It is expected that more recent data, when available, will show rapidly increasing values. Principal growth has been in frozen shrimp, canned and frozen fish, cereal preparations, canned pineapple, tobacco and refined palm oil.

3. HORTICULTURE

3.1. Macro-Perspectives on Horticulture

3.1.1. Horticultural Production

Horticulture is currently a major component of Indonesian production statistics. In terms of production volume among major agriculture product lines in Table 2, only rice, cassava and cocoa surpass it. In 1987, Indonesia produced a total of just over 5 million tons of fruit on approximately 710,000 hectares of land. In the same year, a total of just over 4 million tons of vegetables were produced on approximately 1,500,000 hectares of land. Principal fruits produced are banana, tangerine, guava, mango, papaya and pineapple. Principal vegetables are shallots, potato, cabbage, lobak, chinese radish, red bean and cucumber. These production figures make horticulture one of the major agricultural product lines of Indonesia, even though it is not normally included in summary statistics of agricultural products, such as Table 2. Both in fresh and processed form, the potential in horticulture is substantial and justifies an initial focus by the Agribusiness Development Project.

One of the principal reasons for its under-representation in statistics about agro-processed products, is that fact that most of the products are currently consumed in local markets in a fresh form. Transportation, handling and processing systems have not yet developed to deal with these highly perishable products.
insert table 1 - criteria

Table 2
Growth in Production of Several Major Agricultural Products, 1985-1990
(1,000 tons)

PRODUCT	1985	Growth (%)	1986	Growth (%)	1987 1)	Growth (%)	1988 1)	Growth	1989 2)	Growth %	1990 3)	Growth %
1. Rice 4)	39,033	2.35	39,727	1.78	40,078	0.88	41,676.2	3.99	44,725.6	7.32	44,966.7	0.54
2. Corn	4,329	-18.14	5,920	36.75	5,155	-12.92	6,651.9	29.04	6,192.5	-6.91	6,741.2	8.86
3. Cassava	14,057	-0.78	13,312	5.30	14,356	7.84	15,471.1	7.77	17,117.2	10.64	16,284.5	-4.86
4. Seel potatoes	2,161	0.19	2,091	3.24	2,013	-3.73	2,158.6	7.23	2,224.3	3.04	2,146.9	-3.48
5. Soybeans	870	13.13	1,227	41.01	1,161	-5.38	1,270.4	9.42	1,315.1	3.52	1,428.6	8.63
6. Peanuts	528	-1.31	642	21.59	533	-16.98	589.3	10.56	619.6	5.14	645.7	4.21
7. Sea fish	1,822	6.36	1,923	5.54	2,017	4.89	2,170.0	7.59	2,272.0	4.73	2,362.9	4.00
8. Freshwater fish	574	4.74	607	5.75	653	7.58	711.0	8.88	754.0	6.05	813.2	7.85
9. Meat	808	8.89	879	8.79	896	1.93	937.0	4.58	1,008.0	7.53	1,078.9	7.03
10. Eggs	370	4.23	437	18.1	452	3.43	443.0	-1.99	464.0	4.74	430.3	-7.26
11. Milk 5)	192	7.26	220	14.58	235	6.82	265.0	12.77	326.0	23.02	324.4	0.49
12. Rubber	1,055	2.23	1,040	-1.42	1,130	8.65	1,176.0	4.07	1,256.0	6.83	1,294.0	3.03
13. Oil Palm	1,243	8.65	1,269	2.09	1,506	18.68	1,800.0	19.52	1,879.0	4.39	2,319.4	23.44
14. Inti Sawit	258	4.88	265	2.73	319	20.38	360.0	12.85	376.0	4.44	476.9	26.84
15. Coffee	311	-4.89	339	9.00	389	14.75	386.0	-10.77	423.0	9.59	365.3	-13.64
16. Tea	127	2.42	136	7.09	126	-7.35	137.0	18.73	153.0	11.68	160.0	4.58
17. Cloves	43	-10.42	54	25.58	71	31.48	61.0	-14.08	72.0	18.03	40.0	44.44
18. Sugar	1,899	5.15	2,017	6.21	2,086	3.42	1,918.0	-18.05	2,047.0	6.73	1,352.5	-33.93
19. Cacao	31,000	14.81	32,000	3.23	50,000	56.25	56,000.0	12.00	54,000.0	-3.57	51,371.6	-4.87

Source: Appendix to the State Address of the President of the Republic of Indonesia, August 16, 1990.
the Concise Bulletin of the Central Bureau of Statistics, various editions.

1) Revised figures.
2) Preliminary figures (except for food plants).
3) Projected figures (except for food plants which were based on II CBS forecast).
4) Unhulled dry paddy.
5) In millions of litres.

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Table 3
PRODUCTION VALUE OF PROCESSED FOOD PRODUCT
VALUE IN CURRENT U.S. DOLLAR

1810	DESCRIPTION	OUTPUT 1975	OUTPUT 1980	OUTPUT 1985	OUTPUT 1986	OUTPUT 1987
31112	Processing and Preserving of meat	4,722	16,202	23,663	24,147	25,289
31121	Condensed and dried milk, butter, and cream	69,559	190,518	216,310	228,510	222,650
31122	Ice cream and similar products	2,894	4,076	6,813	5,601	7,229
31130	Canning and processing of fruits and vegetable	2,096	5,317	10,863	20,133	20,868
31140	Canning and processing fish, crustacea & foods	39,820	89,566	247,856	200,508	255,774
31151	Coconut oil	130,424	285,208	476,056	269,765	256,929
31159	Vegetable and animal oil and fat	124,691	418,165	447,181	442,612	513,036
31171	Noodle and other kind of noodle	9,347	25,947	44,241	44,562	44,533
31179	Bakery products	15,480	37,864	72,919	83,186	77,131
31181	Sugar factories	363,412	577,192	752,233	803,726	725,871
31190	Chocolate powder and sugar confectinneries	15,340	41,840	48,916	52,130	55,109
31210	Tapioca flour, sago, cassava flour & others	17,970	36,691	51,512	59,676	62,280
31230	Ice	8,604	19,694	22,146	22,473	18,699
31241	Soya souce	1,799	7,776	18,344	21,449	16,261
31242	Tahu, tempe, oncom, karak & other chips	2,169	5,957	9,849	13,257	9,373
31250	Krupuk, emping, karak & other chips	4,171	12,520	21,880	26,604	23,813
31260	Coffee, powder and fried	1,705	6,330	15,129	21,457	21,365
31270	Seasoning	25,086	55,641	83,224	95,803	73,417
31290	Other products not elsewhere classified	9,555	22,994	40,097	50,498	47,705
31310	Alcoholic liquors	1,501	1,422	544	801	887
31320	Wine	762	2,396	11,260	21,706	18,898
31330	Malt liquors and malt	39,727	84,016	84,130	89,544	79,384
31340	Soft drinks & carbonated waters	23,538	44,538	116,422	110,943	108,673
31410	Drying and processing tobacco	59,737	123,347	138,081	111,227	120,474
31420	Clove cigarettes	633,476	1,609,166	2,463,352	2,173,313	2,021,419
31430	Cigarettes	167,519	293,844	186,920	171,426	146,694
31490	Other tobacco products	15,380	25,769	186,784	146,041	113,931
	TOTAL U.S. DOLLAR	1,790,487	4,043,999	5,796,725	5,311,098	5,087,695

Source: Central Bureau of Statistics

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In 1988, processed fruits and vegetables still only generated approximately $26 million in foreign exchange earnings.

3.1.2. Worldwide Horticultural Markets

The prospects for processed horticultural products in domestic and foreign markets are excellent. The growth in domestic demand is partly reflected in rapid growth in production. Fruit production grew by approximately 500,000 tons between 1984 and 1987. Vegetable production grew by nearly 1,000,000 tons during the same period. During this period, prices for horticultural products remained strong despite the growing supply, suggesting continuing growth of demand to keep pace with supply. The domestic market for processed fruits and vegetables is still small. The principal products remain sauces such as catchup and hot sauce. However, data on the domestic market is poor, at best.

Much more data is available on the international market. And here, prospects for marketing of Indonesia's processed horticultural products look particularly bright[1]. During the period 1983-1985, horticultural products constituted 12 percent of world agricultural trade and this percentage is growing. For developing countries, horticultural products represent 13 percent of agricultural exports, which is the third largest agricultural export following oilseeds, fats and oils and is more important than agricultural raw materials and sugar.

Horticultural exports from developing countries are growing at rates ranging from 1.6 to 3.4 percent a year and will amount to US$12-15 billion a year by the year 2,000. During the period 1983-1985, developing countries' share of world exports of fruit was 42 percent and vegetables was 28 percent.

The major markets for horticultural products are developed countries, although there is an increasing trade in horticulture between developing countries. Due to slow growth rates projected for developed countries, aggregate annual demand for horticulture products is only expected to grow by 1.31 percent for fruit and 1.08 percent for vegetables between now and the year 2000. However, the ratio of imports to aggregate domestic demand in developed countries is estimated to increase by 28 percent for fruits and 45 percent for vegetables between now and the year 2000. The growth in demand of processed products will be steeper than for fresh products.

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[1] Nurul Islam, Horticultural Exports of Developing Countries: Past Performances, Future Prospects, and Policy Issues, Research Report 80, International Food Policy Research Institute, April 1990.

A limited number of developing countries now dominate horticultural exports. Twelve countries accounted for 22 percent of the world market and 65 percent of the exports of developing countries in 1983-85. There was stiff and aggressive competition among them and their market shares have shifted with comparative speed. In Asia, for the period 1983-85, the twelve major exporters (and their export value and their world rankings) were China ($554 million; ranked 3rd), Taiwan ($544 million; ranked 4th), Philippines ($358 million; ranked 6th) and Thailand ($296 million; ranked 8th). Indonesia had no ranking. Although more recent data is not available, it is known that China and Thailand are expanding very rapidly.

Table 4

Processed Food Exports of Indonesia
(Thousands of U.S. Dollars)

PRODUCT	1983	1984	1985	1986	1987	1988
PREPARED MEATS	2	14	1	28	51	63
CANNED MILK	0	0	0	0	504	3,361
OTHER MILK	4	0	1	2	998	1,315
CANNED BUTTER	0	0	0	61	13	88
CANNED FISH	4,532	4,485	2,572	4,763	12,349	26,963
CEREAL PREPARATIONS	6,390	6,011	4,482	5,677	7,630	13,055
CANNED MUSHROOMS	0	0	0	3,540	3,352	3,078
OTHER CANNED VEGETABLES	0	0	0	0	395	6,582
CANNED PINEAPPLE	0	345	5,315	8,533	13,757	14,322
OTHER CANNED FRUIT	1,627	754	700	876	1,668	2,407
SUGAR PREPARATIONS	193	573	183	131	901	2,049
INSTANT COFFEE	0	21	0	107	252	598
CHOCOLATE PREPARATIONS	1,844	294	132	59	83	448
GROUND PEPPER	0	0	0	0	0	403
MARGARINE	6	0	28	1,481	3,772	223
OTHER PREPARED FOOD	2,222	2,718	2,613	3,528	3,870	4,700
BEVERAGES	261	459	160	398	695	3,908
TOBACCO, MANUFACTURED	9,294	10,123	5,464	5,761	13,910	22,502
REFINED PALM OIL	0	0	0	0	15,799	28,306
REFINED COCONUT OIL	0	16,310	15,654	0	2,981	869
TOTAL	26,375	42,107	37,305	34,943	82,980	135,240

Source: Central Bureau for Statistics

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3.1.3. Processing Capacity

A study recently completed for the World Bank by Landell Mills (et al.) on Agro-Industry[2] in Indonesia has documented census figures which show the number of Indonesian fruit and vegetable processors increasing from 13 establishments in 1987 to at least 33 by the end of 1989. As Table 5 illustrates, production has increased in line with capacity, keeping plant utilization at near 80% over the last three years.

These official statistics are tempered, however, in the World Bank's study, which suggests that only a few plants operate three shifts. The single largest constraint limiting production is a dependable raw material supply. Limited raw materials force the majority of plants to operate a single processing shift. This suggests that the production capacity could actually be much higher, and utilization much lower, than is estimated in Table 5.

Table 5: Indonesian Canned Fruits, Vegetables, & Juices; Capacity/Production 1983-89.

Year	Capacity (tons)	Production (tons)	Plant Utilization
1982/83	NA	28,900	NA
1983/84	NA	34,500	NA
1984/85	58,374	40,860	70%
1985/86	121,842	51,400	42.2%
1986/87	122,067	96,300	79.9%
1987/88	133,263	100,350	75.3%
1988/89	137,860	111,400	80.8%

Source: Ministry of Trade and Industry, as reported in World Bank Restructuring Study, October 1990.

The World Bank report attributes some of this growth to the relative lack of government regulation and interference in the horticulture segment. Inadequate Raw material supplies, however, have been the major constraint.

3.1.4. Current Horticultural Export Trends

From 1983-1989, Indonesian horticultural exports which experienced annual growth rates of over 20% included fresh/dried vegetables, preserved vegetables, fresh fruit and prepared fruit. Figure 1 reflects the trend of increasing fruit and vegetable exports.

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[2] Industrial Restructuring Project Agro-Industry Sub-sector Study, Final Report, Landell Mills Associates and Institut Pertanian Bogor (IPB), December 1990.

The rationale to choose horticulture as the main segment to develop is not primarily because of the high current level of exports, considering the relatively low export totals ($160 million in 1989). The annual rates of growth of these exports are strong, however, when compared to the 11% average for food and beverages.

3.1.5. Processed Food Products Export Trends

Exports of processed food products are increasing. As shown in Table 17, the export of processed foods from Indonesia grew tenfold from 1983 to 1989, from $26 million to $263 million. A break-down of the 1989 figures reveals three products comprised nearly 60% of processed food exports. These include:

Product	% of Exports
Tobacco	23%
Canned fish	19%
Palm oil	17%
Total	59%

Several up-and-coming horticultural products have experienced strong annual increases. This second tier of processed food exports includes:

Product	% of Exports	Growth %/Yr
Canned Pineapple	9%	70%
Other Canned Veg.	8%	198%

Processed fruit and vegetable exports, when isolated from other products, are steadily increasing also. This is reported in the Landell Mills (et al.) study, Horticulture Annex, as follows:

Table 6: Processed Fruit & Vegetable Exports 1984-1989 - Role of Indonesia in Horticultural Markets (in U.S.$000)

	Pine-Apples	**Fruit Juices**	**Other Fruit Products**	**Mush-rooms**	**Other Vegetable Products**	**Total**
1984	344.6	-	93.8	126.1	89.4	653.9
1985	5314.7	-	118.6	481.7	18.3	5933.3
1986	8532.6	180.6	124.0	3540.0	493.9	12871.1
1987	13757.2	856.5	312.0	3352.1	450.8	18728.6
1988	14321.8	1218.8	611.6	3078.0	584.2	19814.4
1989 (10 mos)	17550.5	NA	NA	4058.0	NA	NA

Source: World Bank 'Restructuring Report' 1990.

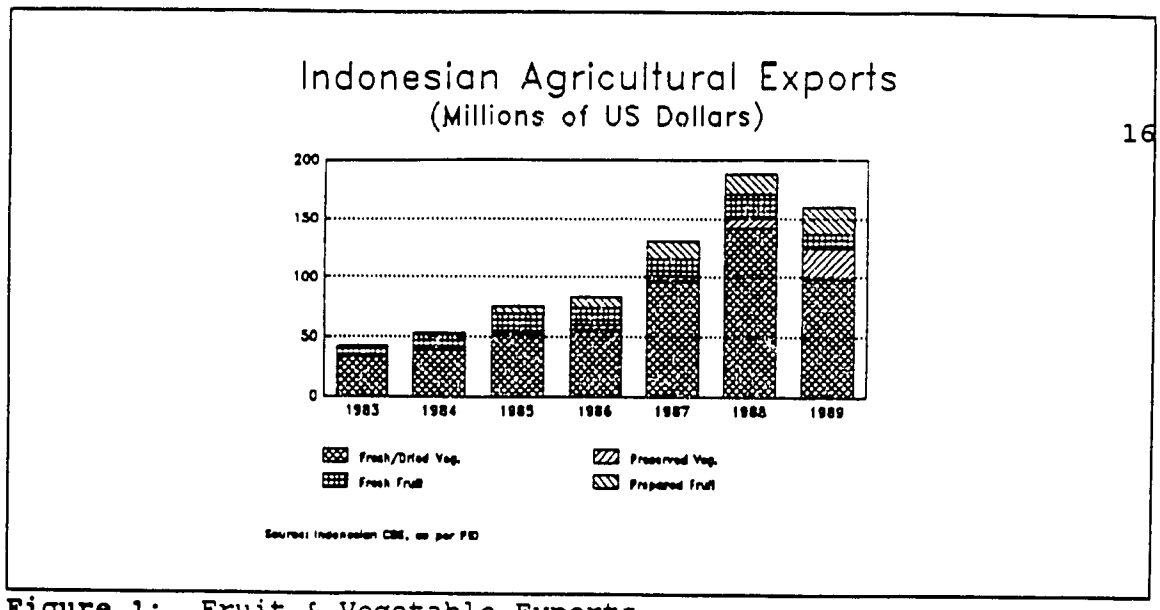


Figure 1: Fruit & Vegetable Exports.

Indonesia has the potential to play a major role in processed horticultural products for the domestic and international markets. It has already begun to play a modest role in specific products. In 1989, Indonesia exported $24 million worth of canned mushrooms. In the same year, it exported $22 million worth of canned pineapple. This latter figure represents 12 percent of the world canned pineapple market, a status achieved in less than five years. Both of these figures represent the exports of single companies, Mantrust in the case of mushrooms and Great Giant in the case of pineapple. Indonesia clearly has the potential to continue to expand in these two product areas and to move into a wide range of others as well.

3.2. Provincial Production and Export Trends

It should be noted that distribution of production in Indonesia is heavily influenced by population concentration. Most of the horticultural export is from Java, because the material for export is abundant, labor is cheap, transportation is much better compared with other regions and infrastructure is better. Java is also the seat of the central Government. Access to capital and a more highly developed banking system is easier. Since business licenses and capital are essential, investment decisions remain centralized and Java/Jakarta remains a magnet.

North Sumatra, because of its proximity to Singapore, has a high comparative advantage in exporting fresh vegetables to Singapore. South Sulawesi, with Ujung Pandang serving as the central trading port for eastern Indonesia, has been able to export passion fruit juice and fisheries products, as well as provide food products to mining camps in Kalimantan and other eastern islands.

To have a broader idea of how Indonesian horticultural production is distributed by region, information related to some selected horticultural commodities is presented in Table 25. So

far, only a very few provinces are involved in horticultural exports.

3.3. Marketing and Distribution System for Horticulture

Horticultural marketing is characterized by its complexity, its perishability, by the large price fluctuations and the subsequent high risk. Frequently, farmers have to bear the highest risk, simply because they are the weakest link in the marketing system. High price fluctuations are primarily due to seasonality, perishability, or market imperfections.

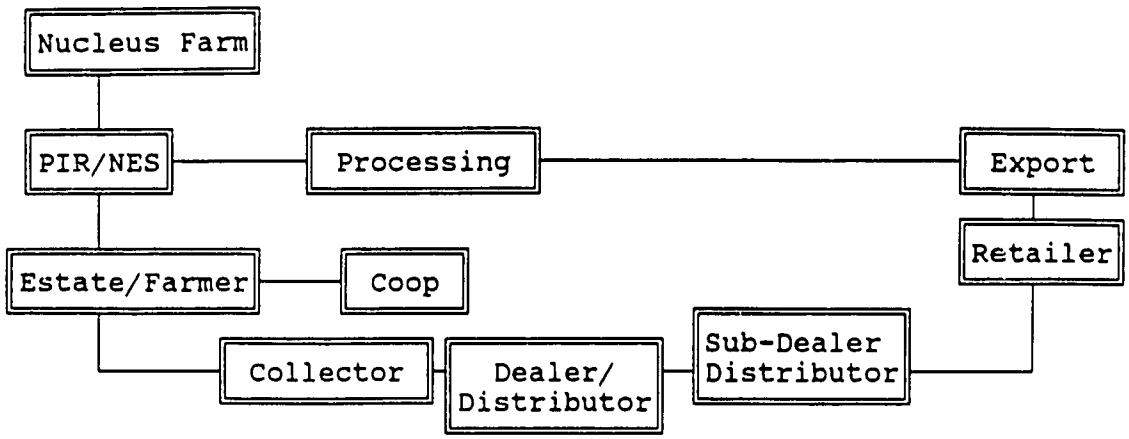
In the West Java upland horticulture areas, a large part of the land is owned by large farmers, who rent out some of the land to smallholder or landless renters. A large farmer may operate as a collector as well as marketer of products directly to the central market in the big cities. Large farmers usually have their own means of transportation.

In these upland areas vegetable production may pose an environmental problem. Part of the area cultivated for vegetables is classified as forestry land with slopes of more than 30 percent. Under the guise of the "regreening program" the land is actually rented out to farmers. The system has been established for many generations and is difficult to change, especially considering the limited land resources and the increasing population pressure in these upland areas. In many cases the land rights have never been clearly settled.

Some of the farmers are deeply entrenched in the "ijon" system, a credit system where farmers sell their standing crop long before harvest at a very low price to money lenders, who charge a very high interest. The "ijon" system often results in the farmer eventually losing his land holdings.

The diagram below attempts to illustrate the general characteristics of the marketing system. In the newly established Nucleus Estate System (PIR or Proyek Inti Rakyat - NES), farmers are under the guidance of the NES. The farmer receives all purchased inputs and sells their product to the NES. Inputs are generally purchased on NES credit. The NES itself usually has "nucleus" land, which it directly farms and from where it manages the inputs of small farmers.

Figure 2: The Nucleus Estate System



If a large operation, the NES may try to handle distribution as well, or even sell to retailers, such as supermarkets in the cities. But for a small NES, the flow of the product is through the existing marketing channel. Cooperatives (KUD) may play an important role in one location but be absent in others, depending on their strength.

The NES usually has its own processing unit that may also receive raw materials from the dealer or collector. For processing enterprises having no farm land, the raw material procurement is through client-collectors, who receive advanced payment from the processing enterprise.

Tables 32 and 33 show the agribusiness characteristics of Champignon mushrooms and garlic in West Java in 1989. The Champignon mushroom was produced by a nucleus estate. What is interesting to note is the farm gate price received by the farmers (22% of retail selling price), and the fact that the other 78% of the consumer's buying price goes to the marketing channel between the farmer and the Jakarta consumer. The markup by the NES, including processing and packaging, was 33%. The following markups went to the various distribution and marketing agents:

Central Distributor	10.6 %
Sub-distributor	22.4 %
Retailer	11.1 %

The case presented in Table 33 shows that farmers received a higher portion of the end-user price for garlic cultivated and sold individually, commanding a sub-margin of 60%. The number of marketing agents is the same as the case of mushroom industry,

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suggesting that if a farmer by-passes the NES and is able to sell directly to a distributor, he will receive a better price.

3.4. A Commodity Systems Approach

3.4.1. The Product Line Approach

The framework for examining agroprocessors is the product line approach. A product line is defined as a meaningful grouping of economic activities related vertically and horizontally by market relationships. The product line represents a manageable division of the economy for comprehensive investigation and, in this case, activities targeted for specific changes. This holistic perspective, from the farmers or fishermen through distribution and processing to consumers, embodies the demand-pull orientation for both fresh and processed products while in this case emphasizing agroprocessing.

Figure 3 illustrates the key features of this framework and includes variables important to both the public and private sectors. The analysis based on this framework identifies potential points of impact at the national level where policy and guidance are particularly important, and at the provincial level, where practical, hands-on activities are necessary to create the desired increases in employment and incomes. Likewise, this approach allows one to explain how improvements at one point in the system can generate substantial employment impacts both downstream and upstream.

The central portion of the Figure 3 details the food processing system from input, downstream to the domestic or foreign consumer. On either side of this product flow are public and private sector factors which influence it product flow. In the public sector, for example, policies and regulations are formulated which dictate the business environment. In the private sector, examples of influencing factors include the availability of financing, storage facilities and market information.

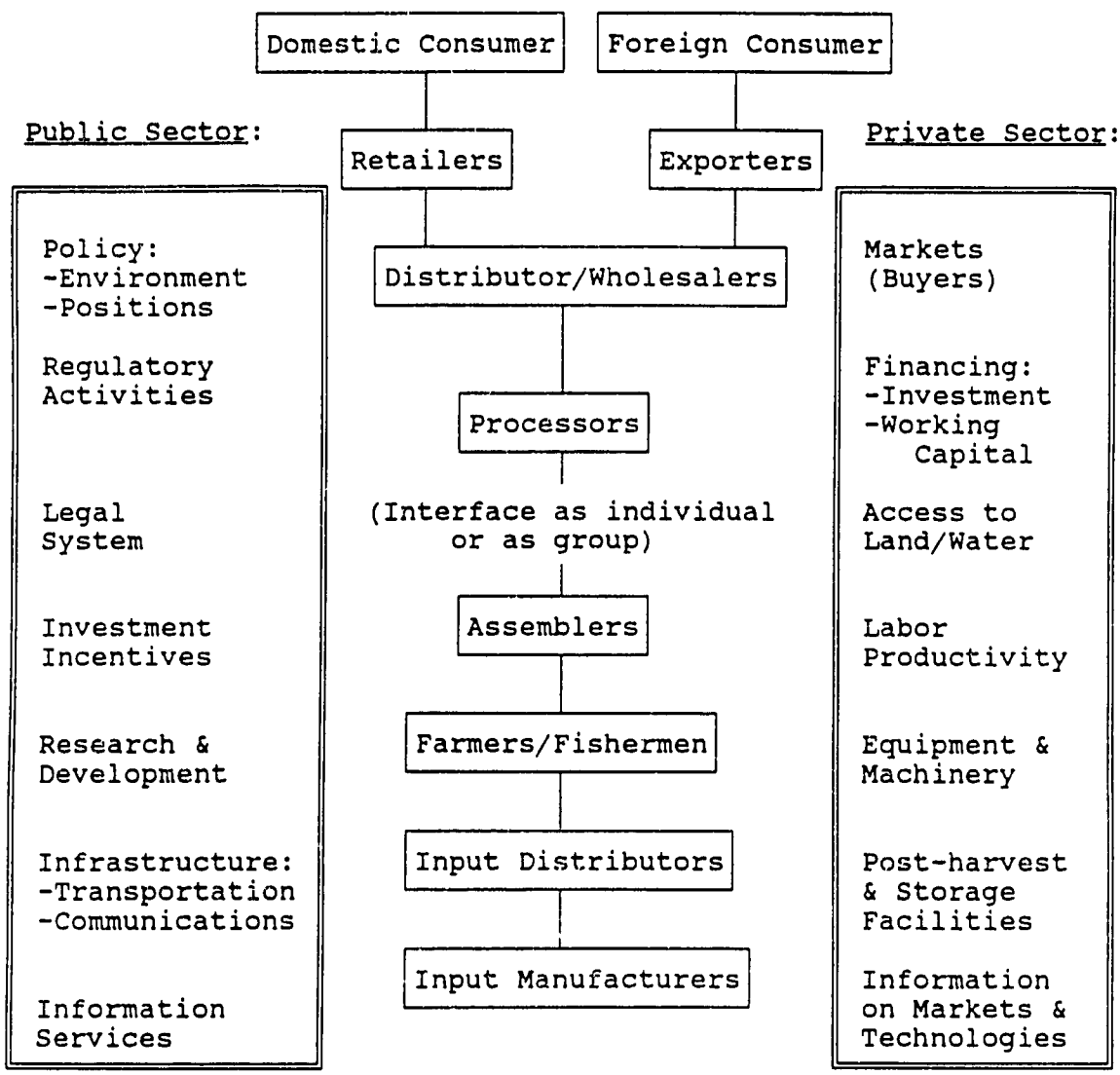
3.4.2. Agroprocessing Firms

Agroprocessing firms vary markedly. Major sources of variation include raw material base, ethnic origin of owner/managers, outside country participation in joint ventures, relative size and diversity of the firm and the province(s) in which the firm has a substantial portion of its operations.

For example, the raw material base substantially influences the organization and operation of the firm. Likewise,

Figure 3:

SUB-SECTOR FRAMEWORK FOCUSED ON AGROPROCESSORS
Food System Orientation



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the differences in the entrepreneurs' ethnic group, such as those of Indonesian versus Chinese versus European versus American origin, have substantial effects on their investment and management styles.

The size of the firm also makes a large difference. And the provincial location of the processing facilities directly influences the firm and its ability to rapidly grow and the types of problems encountered.

In other words, there is no such thing as only **one** approach or type of intervention that will quickly and directly strengthen or improve **agroprocessing** as a whole. This is especially true given the consequences of the entry of larger-scale, high-technology, and capital-intensive firms to displace the more labor-intensive technologies or smaller scales of operation.

An illustrative list of the implications of those sources of variation per firm include:

- Varied barriers to entry into a product line, depending on requirements regarding technology and investment, as well as working capital base and scope of the end markets;

- Varied expectations regarding active participation in common activities organized around "associations", given realistic fears that the largest/strongest firm will dominant and control the benefits of such a group;

- Different levels of influence or abilities to independently advocate government policy changes, based on self-interest;

- Varied degrees of access to adequate information, expertise, and financing for any given type of agribusiness;

- Varied levels of willingness and ability to take substantial financial risks for a particular investment;

- Different responses to the trade-offs between hiring more laborers or investing in capital-intensive equipment that displaces labor;

- Different responses to any given policy or regulation impacting upon the firm's performance, including ignoring it, going around it (loopholes), and the like; and

- Different motives for operating any particular facility

or type of business, such as, tax write-off, token response to public sector pressure for support of small farmers, profit seen in the short or long run, establishment of a market position from which to launch a new complementary business, and the like.

In other words, an agribusiness project cannot be built on the assumptions of substantial homogeneity and common motivation (such as only profit maximization) among agroprocessing firms. Field investigations will quickly provide a "reality check" for any such misplaced assumptions.

Consequently, a well focused set of activities and mechanisms with effective incentives which match the needs of the target types of agroprocessors are required. If most types of firms within an agribusiness segment are not accounted for, it will be difficult to predict the consequences or relevance of any particular intervention.

3.5. Supply and Demand Considerations

The horticultural product line under consideration consists mainly of tropical fruits and temperate and tropical vegetables. This product line can generate income and employment benefits not only at a commercial level, but for small-scale production and sales in local markets. The commercial export dimension of the horticultural product line is relatively new and is just beginning to show considerable promise, especially when compared to neighboring countries, such as Thailand and Malaysia.

Fruit which can be produced in Indonesia include the following three major types:

- Year-round fruits, such as banana and pineapple;
- Seasonal fruits, such as mango and durian; and
- Fruits which originated in or were mostly cultivated in cold areas, such as strawberries.

For vegetables there are:

- Varieties for the lowland versus higher elevation;
- For the fresh market versus culls for processors; and
- Rainfed versus irrigated.

Each of those types presents different opportunities and implications for the agroprocessors and exporters. Although Indonesia has a tremendous potential for horticultural

development in terms of soils, climate and labor, there are substantial constraints impeding its progress.

3.5.1. Supply Conditions

Fruits and vegetables are mostly grown on small plots of land around the house or in relatively small fields. Vegetable production is most extensive around major population centers or in especially favorable climates, such as Bandung.

For vegetables, the largest hectarage in 1987 was covered by red peppers (230,429 ha.), eggplant (69,466 ha.) and shallot (65,164 ha.). In 1987, cabbage, chinese radish, and shallots were the top three crops in terms of volume.

For fruits, banana (171,385 ha.), mango (120,065 ha.) and citrus (76,407 ha.) covered the most area and yielded the largest volume (2.19, 0.52, and 0.56 million m.t., respectively).

Although fruits and vegetables are generally grown on small plots, a major exception are the very large pineapple plantations for processed pineapple exports. In that case, the agro-processors explain that pineapple in the fresh market can earn the farmers around Rp 200-300/kg, however, this company can only afford to pay Rp 60-70/kg in order to compete in the international market with high quality, sliced and canned pineapple. The contention is that only through high technology and mechanization can this company produce and sell such a competitive commodity.

For a more extensive listing of horticultural products being produced and exported, see Tables 21, 22, and 23. Table 24 shows the magnitude of horticultural commodities imported. The range and quantity of imports underlines the fact that domestic demand is high and responsive; domestic demand is also very income elastic. The magnitude of horticultural imports would be much higher if the Government did not have restrictive import regulations, such as those imposed on fresh fruit items.

3.5.2. Demand Conditions

The main product types with substantial demand in the export markets are fresh and processed tropical fruits (especially pineapple). Processed vegetables also show promise either as substitutes for substantial imports (tomato paste) or as ingredients for processed, exportable products, such as tomato puree in pastas, soups, sauces, and the like.

Although the 1989 export of fresh fruits (US$ 3.8 million) was relatively small, it has grown dramatically from 1985 (US$ 324,000). For Indonesia, major fresh fruits export (i.e.,

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exports of over US$ 200,000 per year) include fresh young coconuts, durian, mango, langsat, mangosteen, papaya and guava. Other types with smaller volumes of export include avocado, oranges, watermelon, rambutans, and duku.

Regarding imports, in 1988 garlic imports amounted to US$ 10.6 million with US$ 0.91 and US$ 0.78 million for onions and shallots, respectively.

Canned fruits and vegetables are the major traded processed form with over US$ 12.8 million of exports in 1988, compared to US$ 2.8 million of imports in 1986. Starting from a very low level in 1984, exports of canned fruits and vegetables have increased substantially each year. Canned pineapple and mushroom are the leading export products and are primarily destined for the European and American markets. These products are usually exported as bulk items rather than branded products. Popular fruit juices from orange, jambu, pineapple, passion fruit and grapefruit are mainly for the domestic market, although pineapple concentrate is exported.

3.5.3. Major Current Markets

In the growing international market for tropical fresh fruits (18% per year between 1984-1988), Indonesia's current role is negligible. In 1988 Indonesia exported U.S.$ 2.8 million of tropical fruits compared to France's tropical fruit imports of over U.S.$ 107 million in that same year.

3.5.3.1. Tropical Fruits

Export market patterns for tropical fruits from 1984 to 1988 show a substantial dependency on the Singapore market. However, there is an emerging shift away from Singapore's former dominance. In 1984, Singapore had a 85% market share, but this dropped to 67% in 1988 (See Table 7). By 1988, Saudi Arabia, Taiwan and Netherlands have become important market outlets. Japan's purchases have declined significantly.

Durian has recently replaced mango as the export volume leader. Together, these two fruits represent two-thirds of Indonesian tropical fruit exports. A breakdown of the top six tropical fruit exports (by volume) is provided below in Table 8. The table reflects rapid growth in exports of each of the six fruits. Growth in 1988 was dramatic. The 1988 tonnage is a nearly five-fold increase over 1987.

Table 7: Tropical Fruit Export Markets (1984 & 1988).

Destination	1984 (tons)	%	1988 (tons)	%
ASEAN				
Singapore	518.2	85.1	2318.5	66.7
Malaysia	1.3	0.2	29.5	0.8
Hong Kong	-	-	64.8	1.9
Taiwan	-	-	293.4	8.4
Japan	51.0	8.4	26.2	0.8
Other ASEAN	0.7	0.1	36.8	1.1
TOTAL ASEAN	571.2	93.8	2769.2	79.7
MIDDLE EAST				
S. Arabia	13.9	2.3	357.5	10.3
EEC				
Netherlands	0.5	0.1	153.5	4.4
Belgium/Lux			45.8	1.3
France			47.2	1.4
U. Kingdom			10.4	0.3
TOTAL EEC	0.5	0.1	256.9	7.4
Others	23.2	3.8	91.2	2.6
TOTAL EXPORTS	608.8	100.0	3474.8	100.0

Source: National Trade Statistics and World Bank Restructuring Report 1990.

Table 8: Top Six Tropical Fruit Exports 1984-1988 (tons).

Fruits	1984	1985	1986	1987	1988
Durian	52.6	191.6	275.3	141.0	943.6
Mango	120.8	41.7	46.8	306.6	738.1
Langsat	-	15.1	-	3.5	286.7
Mangosteen	0.7	-	3.7	35.6	262.4
Guava	-	3.0	-	0.8	109.2
Papaya	23.1	59.6	9.8	18.6	94.7
TOTALS:	197.2	311.0	355.6	506.2	2434.7

Source: National Trade Statistics

The market prospects for fresh tropical fruit exports are promising for France and Singapore. France's large, year-round fruit requirements have made it the number one European importer with approximately US$ 107 million worth of imports in 1989. Its highest demand is during the fall and cold seasons. The "Manalagi" variety of mango from East Java is reportedly very popular there due to its exceptional quality. Singapore is heavily dependent upon its imports of fruits which in 1989 included over 49% of Indonesia's volume of fresh fruit exports. Also, its lack of restrictive tariffs makes it particularly promising for the growing fresh fruit export sector.

Thailand is not only a major competitor for the export of fresh fruits but represents a model of a well-organized and fully supported export sector. Thailand has a highly organized system that begins at the farm level, extending to its research agency and onward to the actual export facilities and transportation arrangements.

3.5.3.2. Vegetables

The export patterns for vegetables indicate the prominence of Malaysia and Singapore, especially for the bulkier vegetables, such as potatoes and cabbage. The these two countries accounted for 97% of Indonesian vegetable exports in both 1984 and again in 1988.

Between 1984 and 1988, the value of vegetable exports from Indonesia more than doubled. Malaysia's share of the exports decreased from 66% to 56%, while Singapore's portion increased from 30% to 40%. Export commodity and destination breakouts are detailed in Tables 9 and 10.

Table 9: Vegetable Exports by Commodity (US$ 000's).

COMMODITIES	1984	1988
	Value	Value
Potatoes	1356	6225
Cabbages	4276	3858
Shallots	2	1995
Tomatoes	17	300
Mushrooms	0	26
Vegetables	603	11
Others	63	1456
TOTAL	6317	13871

Source: Central Bureau of Statistics.

Table 10: Vegetable Export Destinations (US$ 000's).

COUNTRY OF DESTINATION	1984	1988
	Value	Value
Malaysia	4190	7826
Singapore	1933	5605
Netherlands	2	174
Japan	21	26
Saudi Arabia	168	39
Others	13	201
TOTAL	6327	13871

3.6. Processing of Horticulture Commodities

A major part of the Government's development plan is the promotion of value-added processing for agricultural commodities. Horticultural commodities are particularly well suited for processing and export.

Most large-scale agroprocessors contacted noted that vertical integration, i.e., control over plantations, harvesting, transporting and packaging, was important for their efficient export operations. The perishability of the raw material, strict quality specifications for inputs in order to produce quality exportable products, lack of adequate local infrastructure, and the need for the continuous operations of their processing facilities were given as motivating reasons for such integration.

The agricultural products processing industry is classified by the Indonesian Central Bureau of Statistics (CBS) in a two-digit code as Industry Division 31. Furthermore, the Industry Major Group code is 311 and its Industry Group code is 31130, representing Canned and Preserved Fruits and Vegetables.

3.6.1. Value-Added from Processing of Horticultural Commodities

Based on CBS data, the value-added from processing of agricultural commodities by any size of industry tends to be growing as shown in Table 11. The percentage value is largest in the medium/large industry classification. However, the percentage value-added in the medium-large size tends to be

declining over the years, while those of small and household size tend to be growing.

Table 11: Value-Added for the Agricultural Products Processing Industry by Size (in Rps millions).

Size	1974/75 (%)	1979 (%)	1982 (%)
Medium/Large	226,754 (78.3)	674,109 (75.8)	1,274,001 (72.9)
Small	25,637 (8.8)	92,498 (9.3)	164,321 (9.4)
Household	37,300 (12.9)	133,172 (14.9)	309,256 (17.7)
Totals	289,601 (100)	889,770 (100)	1,748,578 (100)

Source: Central Bureau of Statistics

3.6.2. Number of Firms and Employment

Table 12, below, presents labor absorption growth by size of industry. The Table shows that the total labor absorbed by all of the industries has been increasing over the years. The percentage of labor that can be absorbed by household industry remains higher than by small or medium-large industries.

Table 12: Growth of Labor Absorption in the Agricultural Processing Industry by Size (persons)

Size	1974/75 (%)	1979 (%)	1982 (%)
Medium/Large	268,338 (14.7)	294,441 (14.3)	323,561 (13.0)
Small	151,194 (8.3)	403,517 (19.6)	348,889 (14.1)
Household	1,401,177 (77.0)	1,362,762 (66.1)	1,808,484 (72.9)
Totals	1,820,759 (100)	2,060,720 (100)	2,480,934 (100)

Source: Central Bureau of Statistics

The growth of the medium/large group for industry is summarized in Table 35. The Table shows that in terms of the number of establishments, Industry Major Group 311 (Processed Food Products) has increased by about 64 percent, and the total number of employees has also increased by 39 percent from 1982 levels. The table also shows that the input costs, value of output, and indirect taxes have more than doubled their 1982 levels. Likewise, the value-added (at either market prices or factor costs) has increased by more than 100 percent.

For the Canned and Processed Fruits and Vegetables Industry (Industry Code 31130), the rate of growth has been substantial. The number of industries doubled from 7 to 14 units. The rates of growth in the cost of inputs, value of output, value added (at either market prices or factor costs) has been substantial increasing to almost 20 times its 1982 level. Growth rates in total employment and indirect taxes have also been high. They increased by 800 and 500 percent, respectively.

3.6.3. Cost of Processing

The total costs of operations in the small scale industry Code 311 is far below that of the medium and large scale industry within the same industry Code 311 (Table 35). The costs in small industry are less than a quarter of the medium and large industry costs.

3.6.3.1. Labor Costs

Out of the costs, 5.83% and 8.71% are the expenses paid to the workers in small scale and medium-large industry respectively, with the remaining 94.17% and 91.29% for purchased inputs. Clearly, employment costs are small relative to other input costs.

3.6.3.2. Other Inputs

The major expenses were paid out to purchase raw materials, ranging from 86.31 percent in small scale industry to 73.53 percent in medium-large industry.

The second largest percentage was to purchase power supplies, amounting to 3.48 percent of total expense in small scale manufacturing. For medium-large manufacturing, this expense only ranks third. Other expenses are the same in either small or medium-large industry.

Carrying out the same analysis on the manufacturing industry for Canned and Processed Fruits and Vegetables (Code 31130), the conclusion is that employment costs are still far below the other input costs in either the small or medium/large industry.

3.6.4. Constraints

Some large scale agroprocessors and supermarkets are interested in integrating backwards into the production or contracting for select vegetable crops. However, the ability of these firms to do this at present is quite limited.

Although some agroprocessors mention interest in the Nucleus Estate System (NES) as advocated by the GOI, few successful cases could be cited in the fruit and vegetable sectors. This is unfortunate, given the contract farming systems that have proven to be the backbone of the fruit and vegetable processors in Taiwan and Thailand. The intention of combining capital investment and good management skills of the private sector with the labor and limited planting area of small holders is good in theory. But it has proven extremely difficult to orchestrate in practice in Indonesia for fruits and vegetables, due to the perishability of the product, limited organizational skills and skepticism of the producers.

Tin plate manufactured locally is of irregular quality and priced 10-15% above comparable quality tin plate in Malaysia. Smaller scale processors with weak bargaining positions have to rely on local can fabricators rather than imported tin plate. Large scale agroprocessors with their own can fabricating machines can bargain for lower priced imported tin plate and get quantity discounts due to their large import volume. This situation is particularly a problem for agroprocessors with products for the domestic market or new products targeted for lower income consumers.

The high commercial interest rates of 24-34% are clearly discouraging agribusinessmen from investing in fruit tree orchards. Even if the long term IRR on this investment were higher than 35%, the risks and uncertainties are too great for most investors.

3.6.5. Production Sub-Systems for Horticulture

This section is intended to analyze representative horticultural cultivation operations based on selected commodities for which data are available. The data limitation dictates that the analysis is only on two commodities, i.e. asparagus in East Java and pineapples in West and East Java (based on Sugiarto et. al.).

3.6.5.1. Asparagus

Asparagus processors in East Java do not possess land to produce raw materials. Many processors run below the optimal capacity. Sugiarto et. al. estimate they are running at only 20

percent of capacity. In order to maintain factory operations and to minimize per unit cost of outputs, the factories are attempting to diversify their products by also processing other vegetables and fruits as shown in Table 13:

Table 13 Product Diversification of the Asparagus Processing Industry in Kabupaten Malang, 1985

Commodities	Cans	Percent
Asparagus	105,815	67.6
Baby Corn	2,709	1.7
Fruit Cocktail	20,817	13.3
Peanut Soup	4,891	3.1
Green Peas	7,490	5.0
Sweet Corn	11,000	7.0
Sweet Peas	3,900	2.4
Total	156,622	100.0

Source: Sugiarto, Y. Marisa, R. Sayuti, M. Rachmat, and Y. Yusdja. 1986. Laporan Penelitian Prospek dan Pembangunan Industri Pertanian Tanaman Horticultura. Proyek Penelitian Agro Industri. PPAE, Bogor.

One asparagus processing company produces 105,915 cans of asparagus (about 67.5 percent of total cans), which is far larger than those of other commodities, but the company is still operating below optimum capacity. To amortize the factory costs, the company also cans fruit cocktail, sweet corn, green peas, peanut soup, sweet peas, and baby corn.

The factory has also tried to persuade farmers in surrounding areas to cultivate asparagus, which would be purchased by the factory at a fair price. This way, supplies of raw materials to the factory would be guaranteed. But for the farmers to make this decision, they should consider the incentives for asparagus farming. This is shown in Table 38, "Estimated costs and returns per hectare of asparagus farming, 1985".

If we assume that the asparagus crop is removed after 5 years, then total revenue stream in the five year period would be Rp. 32,544,635 and total investment and operating costs would be Rp. 11,222,605, with the interest rate of 12 percent per year. This would give B/C ratio of 2.90, which is high and attractive. However, asparagus cultivation is labor and capital intensive and requires additional knowledge of asparagus farming, which an average farmer does not have, not to mention skills in harvesting and post-harvest handling. Another important problem which is vital to farmers is seedling procurement. Good seedlings are usually expensive and difficult to find. Therefore, a farmer is tempted to use non-recommended seedlings on his farm which in turn causes low returns.

3.6.5.2. Pineapple

Pineapple farming is less sophisticated than asparagus farming. Table 39, "Estimated Costs and Return per Hectare of Pineapple Farming in West Java and East Java," summarizes the farm analysis of pineapple production based on Sugiarto et. al.'s (1986) survey in West and East Java.

Table 39 shows that land rental in West Java is higher than in East Java, amounting to Rp. 300,000 and Rp. 200,000 per year, respectively. This suggests that the opportunity cost of land in West Java is higher than in East Java.

The use of male labor in pineapple farming in East Java is almost three times as much as in West Java (1,175 man/days in East Java and 400 man/days in West Java). Female labor use in East Java is only about one and a half times as much as in West Java.

Plant density in East Java is also much higher than West Java. In the cultivation in East Java, they used 56,000 seedling/hectare, while in West Java only 20,000 seedlings/hectare were used. Profit per hectare was much higher in West Java than in East Java, amounting to Rp. 1,942,250 as opposed to Rp. 853,900 in East Java. This would give a much higher B/C ratio in West Java (2.31) than in East Java (1.62). Nevertheless, pineapple cultivation was profitable for the farmers in both locations.

According to Sugiarto et al (1986), price levels for pineapple in West Java were much higher than in East Java. Farm-gate prices in West Java were Rp. 60, while only Rp. 40 in East Java. Village trader prices were Rp. 75 in West Java, but only Rp. 50 in East Java, and collector trader prices were Rp. 115 in West Java, but only Rp. 75 in East Java. Retailer prices in West Java were Rp. 175, more than twice as much as in East Java (Rp. 85).

4. FISHERIES

4.1. Macro-Perspective on Fisheries

4.1.1. Fisheries Production

Indonesian fishery production and exports enjoyed substantial growth in the 1980's. Shrimp and seaweed production and exports have been part of this general fisheries increase.

According to the Directorate General of Fisheries (DGF), the production statistics on marine fishery production are as follows:

Table 14: Marine Fishery Production 1981-1987 ('000 m.tons)

Type Product	1981	1984	1987	81-87 % Incr.
Fresh	691	854	1,061	54%
Dry/Salted	465	561	627	35%
Boiled	82	121	120	46%
Fermented	61	44	55	25%
Smoked	35	45	55	58%
Other	11	16	17	60%
Frozen	49	46	65	34%
Canned	11	16	13	23%
Fish Meal	5	9	4	-13%
Total	1,408	1,713	2,017	43%

Source: DGF, 1989. Fisheries Statistics of Indonesia 1987, as reported in World Bank Restructuring Report, 1990.

During the six year period 1981-1987, fresh fish production grew 54%. It consistently has accounted for half of fishery production. This means that half of Indonesian production is processed in some way to extend its storage life. Salt-drying is the most popular method, accounting for two-thirds of preservation in 1987. The DGF estimates the annual potential sustainable yield from marine fisheries at 6.6 million tons, roughly three times the 1987 yield.[3] However, actual production figures are likely higher than those quoted, given the high degree of artisinal fishing in Indonesia.

More details on Indonesian fish and shrimp production are

[3] World Bank Restructuring Report, 1990. Fish and Fish Processing Working Paper.

available in Tables 26& 27.

4.1.2. Worldwide Fisheries Markets

Fishery exports are an increasingly important source of foreign exchange earnings for Indonesia. Fisheries exports have grown from 1.3% of total Indonesian exports in 1985, to 3.5% of exports in 1989. As illustrated in Figure 4, between 1984 and 1989, fish and shrimp exports have enjoyed annual volume increases of 26% and 21% respectively.[4] The items of most rapid growth during this period have been cultured shrimp and tuna.

Table 28 outlines fishery product exports from Indonesia (1969-1989). Shrimp exports have nearly tripled in value between 1984 and 1989. Seaweed exports have quadrupled in value over the same time period.

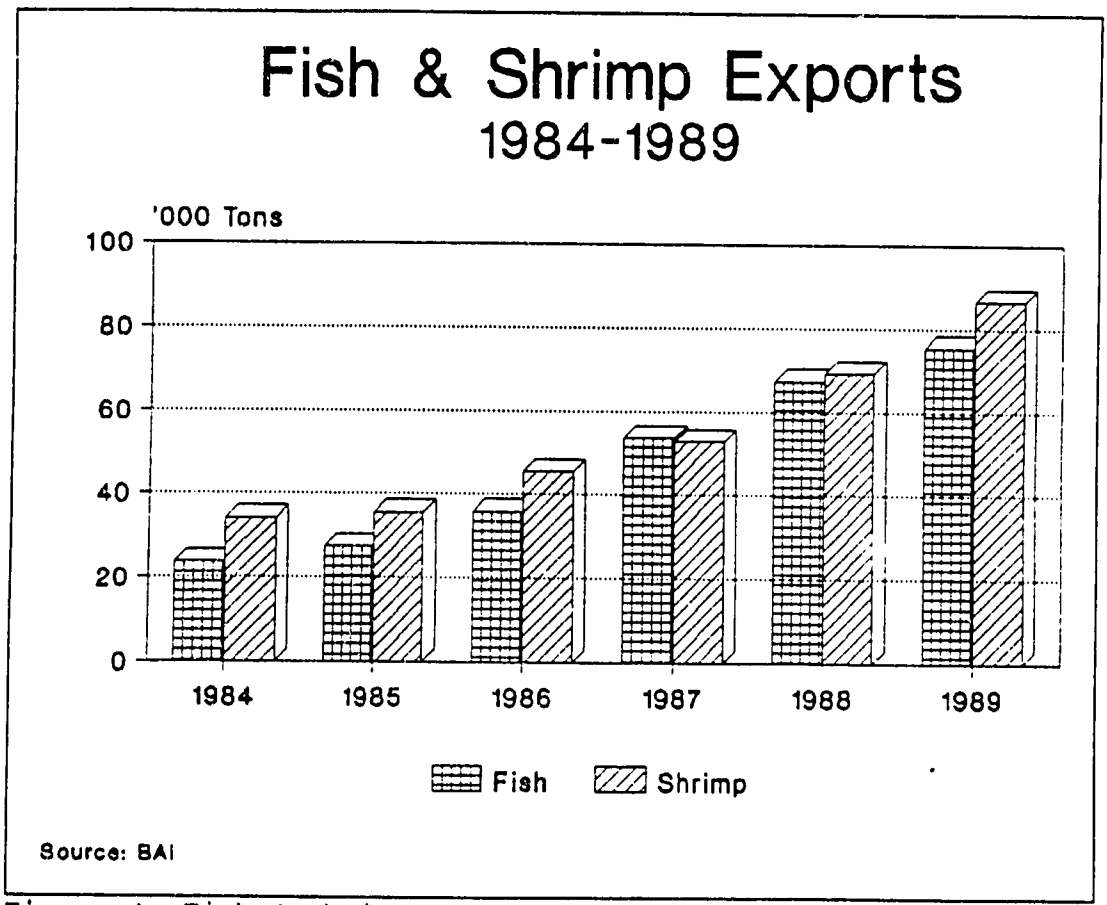

Figure 4: Fish & Shrimp Exports.

[4] "The Costs of Doing Business in Indonesia", Business Advisory Indonesia, 1990.

4.2. Provincial Production and Export Trends

While shrimp and seaweed production and export have significantly increased, there is some indication that the brackishwater pond acreage has only slightly increased. Available data suggests that the increase in both production and export have been very much related to the improvement of marine fishing and aquaculture techniques.

Data from the Central Bureau of Statistics suggests that motorized fishing boats have increased during the last two Pelita's. These boats are actively catching shrimp and account for a major part of the increase in the shrimp catch.

Large-scale shrimp pond operators have entered the aquaculture business over the last few years, bringing with them high productivity approaches to shrimp farming. The shrimp harvest from this source has also increased substantially.

There are factors that are currently limiting substantial further expansions of both sea catch and pond harvesting. These include: (1) for sea catch: the cost of modern boats and gear and over-fishing of certain areas; (2) for aquaculture: the cost and quality of feeds, disease problems, water management difficulties, the natural limit on areas for pond expansion, environmental consequences and theft of product from ponds. These problems are amendable to solution, if the proper organization and management systems are initiated.

Approximately 96% of Indonesia's production of brackishwater shrimp takes place in five Indonesian provinces: Aceh, West, Central and East Java, and South Sulawesi.[5] East Java and South Sulawesi, provinces critical to Indonesian fisheries, have dramatically increased their exports of shrimp and seaweed during the last two Pelita's. See Tables 26& 27 for more details.

4.3. Future Trends in Fisheries

The World Bank's Restructuring Report is optimistic about the future potential of brackishwater shrimp production, calling the potential for increased productivity of the ponds, "excellent."

East Java and South Sulawesi are two key fishery provinces for ADP. Their future increases of shrimp production will likely be from increases of the marine catch and increases in productivity of traditional ponds as they begin to adopt modern growing techniques.

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[5] World Bank Restructuring Report, 1990. Fish and Fish Processing Working Paper.

4.4. Production Systems for Fisheries

Aquaculture in brackishwater ponds has been practiced in Indonesia for several hundred years, especially near Surabaya. The traditional crop cultivated was milkfish, with the fry being caught in coastal tidal areas. Since the ponds were connected to the sea, shrimp larvae entered these ponds and were also cultivated. With the development of vastly improved techniques for shrimp cultivation, the brackishwater pond operators have switched from milkfish cultivation to shrimp production. This entails a number of risks and higher input levels, and, hence, requires better management.

Because of favorable returns on investment prospects during the last five years, the industry has changed from only small operators to a combination of highly capitalized, very "intensive" operations, "semi-intensive" smaller operations, and less capital-intensive "extensive" operations.

Table 40 summarizes the average size of holdings of brackishwater ponds based on 1983 Agricultural Census Data. For East Java and South Sulawesi, average sizes of holdings were more than 3 hectares per household and, for the whole country, less than 3 hectares. However, it must be noted that the major advances in shrimp cultivation have occurred since then.

In East Java, reclamation is going on to convert relatively unproductive wetland rice fields into brackishwater ponds, but the extent of such reclamation has not yet been documented. In addition, because of credit problems, many small-scale shrimp producers have become tenants on their own land as sharecropper, lessees or even pond laborers.

In the early 1980's, brackishwater aquaculture relied on low-input techniques (Table 41). The use of commercial supplemental feeds, fertilizers, chemicals and hatchery-raised larvae was very limited until the mid-80's. Many brackishwater aquaculturists were not even familiar with the benefits of fertilizer usage.

The GOI's export promotion strategy and accompanying policy improvements such as credit facilities, the establishment of hatcheries, cold-storage facilities, and canals for water management, have encouraged the adoption of the high-input aquaculture techniques (see Table 43). Many large pond enterprises run their business with much higher inputs, cultivating 200 to 300 thousand shrimp post-larvae per season. The heavy use of commercial feeds characterizes such shrimp ponds.

For Kabupaten Pati (the most eastern part of Central Java) and Gresik (East Java), milkfish raising is more dominant and

high use of fertilizers is common. Milkfish prefer natural feeds such as algae and plankton, which multiply better in fertilized ponds. Milkfish cultivation is dominant for two reasons. First, the local communities prefer milkfish to shrimp. Secondly, the greatest potential domestic market for shrimp, Jakarta, is far from these areas, resulting in higher transportation costs. Over the past four years, however, many shrimp processing plants have opened in East Java, with direct connections to foreign markets. Many ponds formerly growing milkfish have switched to shrimp.

In shrimp production from brackishwater ponds, farm gate prices are dictated by local collectors, traders and exporters. High risk and uncertainties prevail, but profit potential is also substantial.

For the Fifth Five-Year Plan, the Directorate General of Fisheries intends to promote higher fish production through diversification, intensification, extensification and rehabilitation of fishery resources, such as inland public water resources (rivers, lakes, swamps, and the like), marine fisheries and brackishwater ponds. Increasing fishery production to meet external market demand would be attained through fishery product quality improvement, selection and promotion of high market-value products such as shrimp, and improved bargaining position in the world market.

To improve the performance of brackish water operations, the GOI has instituted three systems of organization: Nucleus Brackishwater Pond System or PIR, the Bapak Angkat System, and the independent aquaculturist. Each of the systems has its advantages and disadvantages.

The PIR system is still in a pilot stage and is being implemented in Kabupaten Karawang. The strength and weaknesses of the system are not yet well understood. However, if it works, the risk and uncertainties of the present situation would, in theory, be substantially lowered as compared to those encountered by independent aquaculturists.

The Bapak Angkat system differs from the PIR in that there is less interdependence between the leading aquaculturist and the surrounding ones. In the Bapak Angkat system, the leading aquaculturist, usually possesses a large pond area and has been able to vertically integrate his business. The idea is that he would assist the smaller and less capable aquaculturists in the form of credit and/or inputs to be repaid after the harvest.

Independent aquaculturists, as far as the existing circumstances are concerned, are not yet a guarantee for socially optimal input-output combinations. Their poor liquidity is one of the major constraints. Another is their lack of understanding of advanced aquaculture techniques. Brackishwater aquaculture,

and shrimp, in particular, is a high risk business which prevents independent small-holders from easily obtaining credit from formal sources.

4.5. Marketing and Distribution Systems

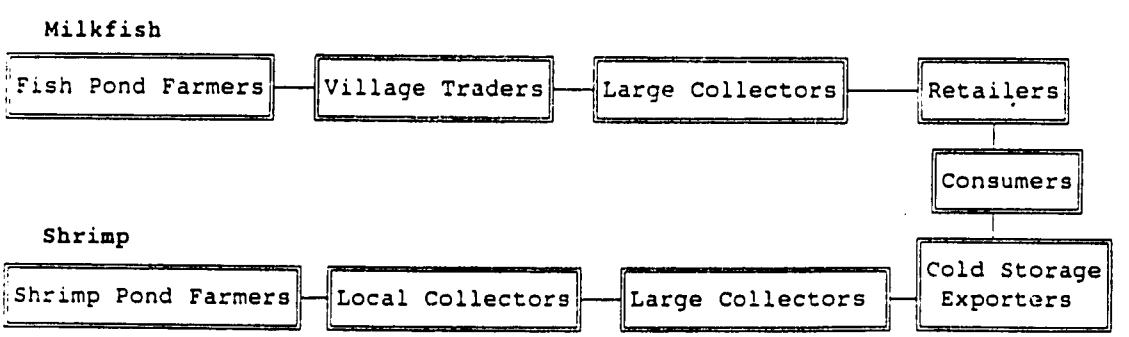
The marketing system and the marketing channels for brackishwater pond products, shrimp and milkfish, are basically similar in a number of fishery communities. Many brackishwater pond producers complain that the market for their product is not competitive and open, especially the local shrimp market. The milkfish market is more competitive because there are many more small traders and collectors with limited working capital who can enter the market.

In shrimp aquaculture, the producers are generally limited to a few large buyers, who are often the owners of the cold storage and also the exporters. These big buyers are in a stronger bargaining position, especially if the producers concentrate on producing exportable sizes of shrimp. Frequently, the collectors who buy from the farmers at the local level actually work for the cold storage owners. Several studies suggest that, when the cold storage owners employ local traders and collectors, the export price fluctuations do not significantly affect the farm gate prices.

This situation has been changing, however, especially in East Java, as a result of the rapid development of new processing plants. As a result of this situation, competition for shrimp is keen, and farmgate prices have reportedly been high and margins for processors have been shrinking for the past two years.

The following diagram, Figure 6, shows the market channels for both milkfish and shrimp:

Figure 6: Milkfish and Shrimp Market Channels



Apparently, the shrimp market in South Sulawesi is still dominated by a few buyers who pay low prices and then are able to get high margins when they sell the shrimp. This was confirmed by an agricultural official in the Province. Because of the lack of competition, the producers (brackishwater pond operators) are receiving low prices and have a poor incentive to expand their operations. They have very poor access to market information on these commodities and must rely almost entirely on the buyers statements on prices. This situation is also changing, however, as new processing plants come into operation and plants from Java increasingly compete for product.

4.6. Fisheries Segment Analysis

Indonesia is an archipelagic state, which consists of more than 13,000 islands spread over a vast area of marine waters covering 5.8 million sq. km. That area consists of 3.1 million sq. km. of territorial waters and 2.7 million sq. km. of Exclusive Economic Zones (E.E.Z.). In addition, there are sizeable inland fisheries.

Fisheries operations are extremely varied, ranging from small-scale inland catch fisheries to modern, capital-intensive pelagic fisheries. Market outlets, channels, and marketing practices vary widely with product type and location. Marine fisheries reportedly engages 1.37 million fishermen, with another 1.1 million fish farmers operating brackish water culture, fresh water culture, paddy cum fish culture and cage culture in open waters.[6]

Estimated production trends for fisheries as a whole from 1984 to 1988 indicate a yearly growth rate of about 7% for marine and 5% for inland fisheries. Fishery exports have increased an average of 31% per year over that period in value terms.[7]

Two products with high market potential are shrimp and seaweed. Although the shrimp industry seems to be already well established and making a very substantial contribution to employment, income generation, and export earnings, serious problems must be addressed if it is to fully mature. On the other hand, seaweed production has only recently emerged. Yet can provide substantial opportunities for value-added processing, not only in terms of substituting for processed imports, such as gelatin powder, but has export potential for several high-valued derivatives with a wide range of demands. Unfortunately, there

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[6] "Fisheries in Indonesia, Its Potential and Opportunities for Investment and Exploitation", MOA, DG Fisheries, 1989.

[7] Ibid.

is still only limited Indonesian processing of most such products.

A brief overview of each of these products illustrates what agribusiness opportunities and promising changes can be facilitated by this Project.

4.6.1. Shrimp

4.6.1. Supply Conditions

The two major sources of shrimp are marine capture and culture. Regarding the marine fishery, a ban on demersal trawls in West Indonesia was introduced in 1981 to protect the livelihood of the artisanal fishermen along the coasts of Java and Sumatra and to reduce over-fishing in western Indonesia. By 1987 this fishery was fully exploited, with 131,000 m.t. of marine penaeid shrimp landings.

Meanwhile, the large-scale, trawl fishery in eastern Indonesia, controlled by vessel licensing, has been producing about 6,000 m.t. per year. This shrimp is processed, frozen on board and shipped directly to markets such as Japan. There, it earns especially high prices due to its exceptional quality.

Brackishwater shrimp culture reached 55,967 m.t. in 1987, with Black Tiger shrimp accounting for much of the production increase since 1984. Aceh, West, Central, and East Java, and South Sulawesi are the five provinces that account for over 95% of this shrimp production.

The three main types of shrimp culture are the "extensive", "semi-intensive", and "intensive" cultivation. Extensive farms (tambaks) are the least costly shrimp producers. They rely on the natural productivity of the pond, and maintain the lowest density of shrimp. The semi-intensive farms supplement the natural productivity of a pond by the use of fertilizer or, with the addition of some compounded feeds, maintain a higher density of shrimp, depending on hatchery-reared post-larvae. The intensive farms (i.e., above 150,000 shrimp/ha) depend on hatchery-reared fry and provide a nutritionally complete ration, water pumping, aeration paddles, and other intensive management practices.

Production costs for the extensive farms equal about US$ 2.00/kg, semi-intensive ranges from US$2.00-4.00/kg, and intensive farms can be US$5.00/kg or more. Investments in

intensive farms have proliferated over the last few years.[8]

Although the Indonesian shrimp industry was booming in the early 1980's with yearly increases in exports, a combination of surpluses in the world market, excess local capacity and the spread of a viral disease in Indonesia contributed to a sharp decline in 1988-1989. Although there has been a gradual recovery for local ponds, the current limited supply and increased price of fresh shrimp are causing problems for several processors, especially those not integrated backward into production. Figure 7 shows the shrimp segment from production-level through marketing channels.

4.6.1.2. Shrimp Demand

The main processed form of shrimp in Indonesia is the headless, block-frozen form. Other forms of processing include whole head-on, peeled and deveined, peeled un-deveined, cooked shrimp, and specialties. Collectively those forms are referred to as "high value" products and are becoming the focus for future growth and diversification of the processors. In the domestic markets, one will also find live shrimp, canned and dried. The trade names, Indonesian names, and scientific name of shrimp are listed below in Table 15:

Table 15: Shrimp/Prawn Commodity Names

TRADE NAME	INDONESIAN NAME	SCIENTIFIC NAME
White shrimp	Udang jerbung/putih	Penaeus merguiensis
Black tiger shrimp	Udang windu/pacet	Penaeus monodon
Pink shrimp	Udang api-api/dogol	Metapenaeus spp
Flower shrimp	Udang kembang	-
Lobster	Udang barong	Panulirus spp
Freshwater shrimp	Udang galah	Macrobrachium rosenbergii

4.6.1.3. Major Shrimp Markets

Japan remains the dominant market for Indonesian shrimp exports, with over 71% and 78% of the export market share in volume and value terms, respectively, in December 1988. Although Singapore had the next largest share (8.6%) in terms of volume in December 1988, its share of value was only 4.9%, due to its comparatively lower average price of US$5/kg. The higher average

[8] Volume II: "Fish and Fish Processing" Industrial Restructuring Project Report: Agro-Industrial Sub-sector Study, October 1990.

prices for Switzerland, Canada, France, Germany, U.S.A. and Spain (all over U.S.$9.40/kg) usually reflected the value-added processing required.

In 1989, rapidly increasing exports of shrimp from Southeast Asia and China flooded the world market and caused a major drop in the world price. Since that time, the market has been recovering, although some studies predict continued lower prices.[9]

Several Indonesian shrimp processors plan to or are considering going into joint venture types of arrangements with U.S. companies in order to sell more value-added products in U.S. market. In fact, one such large scale, market entry scheme is already being implemented.

4.6.1.4. Shrimp Processing Technologies

The basic processing involves de-heading the shrimp with its shell-on, arranging them in pans for freezing into 1.8 kg net weight frozen blocks, placing the block in waxed cartons and then into master cartons for export. This form is considered a "commodity" and is mostly sent to Japan. It is common for the Japanese importing firms to facilitate such arrangements and even to station one or two Japanese quality control specialists in the Indonesian plant to train in quality standards.

The processing required for the value-added forms includes boiling, individual quick freezing (IQF) and a variety of specialty processes. Often, the processor who adds a new form according to the specifications of his foreign buyer, such as cooked shrimp, will request the buyer's advice on the processing technology as well as promising suppliers for that equipment. In the case of certain U.S. importers, U.S. equipment has been procured by the Indonesian firm, along with technical advice, especially on quality control and assurance.

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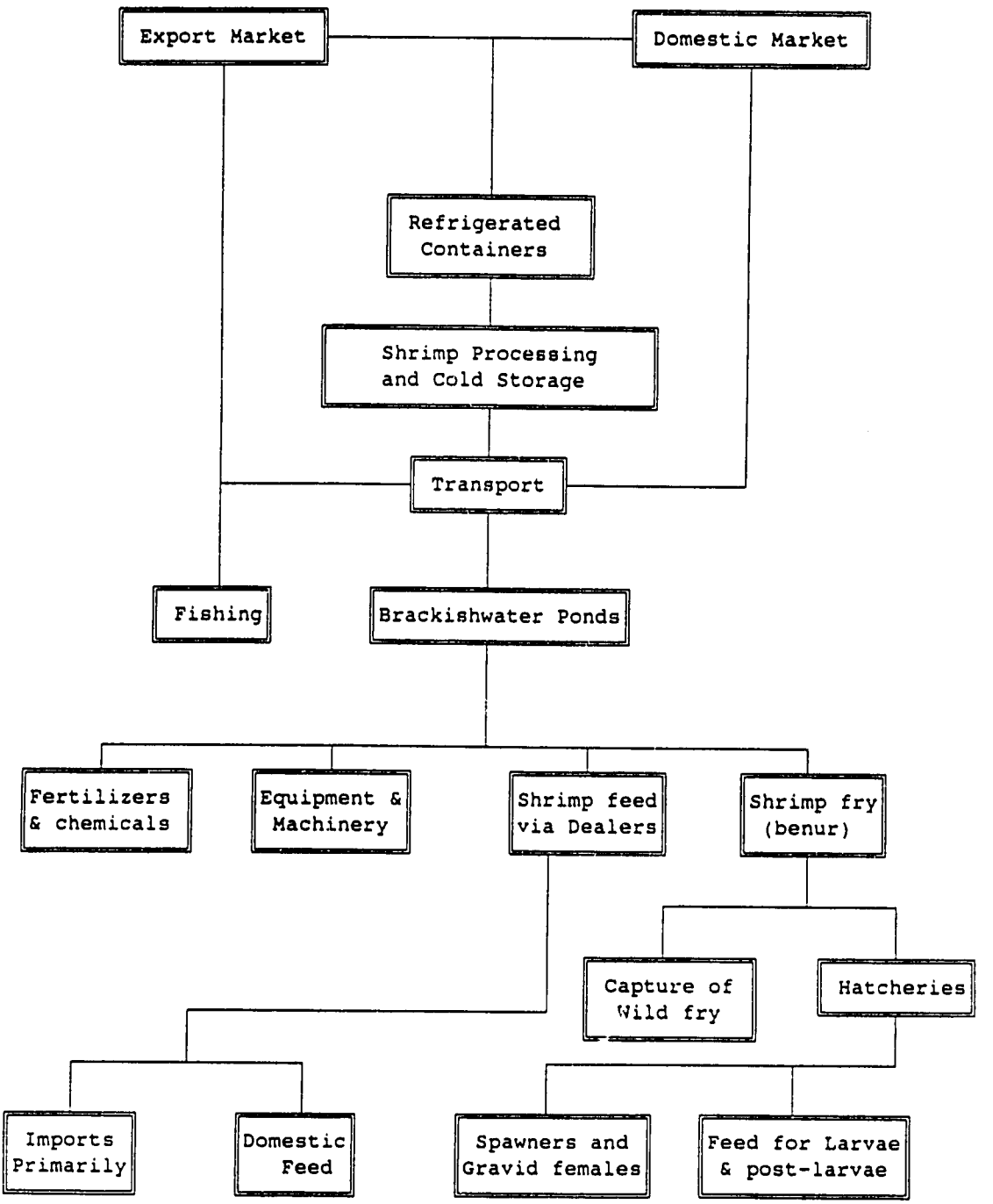
[9] "Aquatic Farming", World Bank Study, 1989.

Figure 7:
The Shrimp Segment



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4.6.1.5. Constraints to Shrimp Development

Several problem areas still hamper the shrimp industry from reaching its full potential. An illustrative list includes:

- Sharply falling prices over the past few years;
- Time consuming procedures for obtaining investment licenses from local government offices;
- Inadequate infrastructure to fully support large-scale shrimp ponds off-Java;
- Limited local production of high-quality, competitively priced shrimp feed;
- Serious shrimp disease problems in various locations;
- Inefficient operations of the smaller, extensive pond operations;
- Inadequate services of the fishery associations to the less accessible growers;
- U.S. FDA "block listing" (automatic detention upon import) of Indonesian shrimp products;
- Limited response to potential for value-added forms of processed products instead of frozen blocks; and,
- Over-investment in certain industry components, such as cold storage and hatcheries.

Many feed millers recognize the cost implications of import restrictions on prices of feed ingredients and some are working with fish canneries to access acceptable quality fishmeal as a substitute. Others anticipate a reduction in the costs to imported soymeal.

From an investment perspective, the Regional Investment Coordinating Board (BKPMD) of Central Sulawesi indicates that only one of 11 shrimp farming investment projects totaling Rp 136 billion, as licensed since 1987, has actually been realized. This situation is typical on a national basis, wherein numerous investors once considered this to be a very promising type of business, but only a portion actually are on-line. It is important to recognize that the failures to realize investments resulted from many causes. Examples cited include ulterior motives of the investors (i.e., intention to profit from harvesting mangroves rather than invest in shrimp production), irregular practices of local partners that discouraged foreign investors, and no clear specification of project sites.

4.6.2. Seaweed

The natural environment of Indonesia is particularly conducive to seaweed growth and cultivation. Although at least 555 species of seaweed have been identified in Indonesia's territorial waters, only about 55 species are currently utilized.

The greatest potential for seaweed is in eastern Indonesia, where there has been the least progress in the agroprocessing sector. South Sulawesi shows considerable promise as a center for the development of seaweed production and marketing.

The species which dominate the current market are Gracillaria and Eucheuma, with the former species used mostly for agar-agar and the latter for carrageenan. However, their production environments differ. Eucheuma is cultivated in coastal waters and Gracillaria is suitable for pond cultivation, including polyculture with shrimp and other species of pond fish. Although suitable for large-scale cultivation, there are few successful cases of such production.

4.6.2.1. **Seaweed Supply Conditions**

Seaweed can be both collected and cultured, thus offering a wide variety of alternative employment opportunities. The supply of seaweed products in Indonesia comes mainly from the eastern part of the country, led by Bali, South Sulawesi and Maluku.

According to Directorate General of Fishery production data, the 1985 production of 62,974 m.t. was almost seven times greater than the previous year, i.e., 9,087 m.t. in 1984. Since that time, the growth rate has been about 10,000 m.t. per year.

Over 85% of the 1987 production of about 85,416 m.t. was from Bali, with Nusa Penida, Maluku, NTB/NTT, and Sulawesi supplying most of the balance. It is difficult to estimate the proportion of seaweed production from cultivation versus collection. Likewise, the contention of wide fluctuations in production needs to be verified.

Although large-scale efforts have been successful in the collection of seaweed, the systematic cultivation of seaweed around Bali reportedly has many problems and pitfalls. [10]

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[10] Volume II "Fish and Fish Processing" Industrial Restructuring Project Report: Agro-Industry Sub-sector Study, October 1990.

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4.6.2.2. Seaweed Product Demand

Dry seaweed is the major form used locally and exported. It primarily serves as a raw material for gelatin powder (agar-agar), carrageenan, and alginate. Each of these products is processed from different species of seaweed. Agar-agar is a widely used food product in the Indonesian diet and its increased use should parallel population growth.

Polysaccharides are being extracted from seaweed and used in drugs, food and other industries. The market for this type of extract is both vast and strong because it includes use in such products as the manufacturing of drinks, cosmetics, detergents, cartons, wrapping paper, textiles, paints, lubricants and many others. This product competes with cereal gum, yet reportedly has better reaction power.[11]

4.6.2.3. Major Markets for Seaweed

In addition to the local market for agar-agar, Indonesia exports and imports dry seaweed and gelatin powder. Exports of dry seaweed increased from 690 m.t. in 1981 to 10,835 m.t. by 1988, whereas value jumped from US$ 61,000 to US$3.78 million within that period. By 1989, the volume of exports reportedly reached 11,424 m.t., with a value of US$ 5.70 million or a 51% increase over 1988. That does not include the 0.73 m.t. export of gelatin powder in 1988.

The main destinations of Indonesian seaweed have changed substantially between 1984 and 1988. In 1984, the main destinations, in terms of value, were: 1st Singapore; 2nd Hong Kong; 3rd Japan; 4th Denmark; and, 5th South Korea. In 1988 the ranking was Japan, Hong Kong, Denmark, USA and Singapore, respectively. The USA began to directly import from Indonesia as recently as 1986, but has risen to become the fourth greatest buyer in 1988, behind Japan, Hong Kong, and Denmark.

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[11] "The Export Potential of Indonesian Seaweed"' Business News, September 13, 1990.

Table 16: Seaweed Export Markets, 1984-1988 (Metric Tons; US$000's)

Countries of Destination	1985		1986		1987		1988	
	Qty	Val	Qty	Val	Qty	Val	Qty	Val
1. Japan	266	131	286	189	370	187	620	902
2. Hong Kong	1558	356	4207	1151	3970	900	3349	891
3. Singapore	2706	746	1906	571	2249	599	1612	397
4. France	-	-	50	18	190	46	1134	327
5. Denmark	811	140	541	181	2342	644	1732	512
6. S. Korea	24	19	91	34	158	70	214	80
7. U.S.A.	-	-	30	11	443	136	1521	477
8. Philippines	-	-	-	-	144	13	403	97
9. N Zealand	-	-	-	-	16	3	229	84
	5446	1413	7111	2154	9882	2598	10835	3782

Source: Central Bureau of Statistics (Reported by Arisanto)

Besides Indonesia, the major world exporters of seaweed are the Philippines for Eucheuma and Chile and Turkey for Gracillaria. Indonesia's share of the world market for the Eucheuma species is reportedly approximately 20%.[12]

4.6.2.4. Seaweed Processing Technologies

The most common forms of processing are sun drying and manual baling for shipment to end-markets. The dry seaweed is processed into gelatin. The manufacturing process for gelatin consists of these steps: a) extraction; b) filtration; c) freezing; d) cutting; e) drying; f) hammer crushing; g) powder milling; h) adding chemicals; and ,i) packing. There are several types of machinery required for a relatively large-scale operation, along with 30 to 150 workers, depending on the type of equipment.

The combination of "home industry manufacturing" and middle scale manufacturing reportedly produced 9,563 tons/year of seaweed products and 444.8 tons/year of gelatin powder in 1986. Unfortunately, production figures are not verifiable. The home industry manufacturers consisted of about 14 firms spread around Jakarta, Bandung and Surabaya, with a total estimated output of about 92.8 m.t. of gelatin powder. Whereas the 10 listed middle scale firms reportedly manufactured 352 m.t. of gelatin powder.[13]

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[12] Ibid.

[13] "Seaweed Manufacturing Industry", Anonymous.

Unlike gelatin, processing of carrageenan and alginate are not widely done in Indonesia. The only recognized processors of both the agar and carrageenan species are P.T. Banti Murung Indah located near Ujung Pandang, South Sulawesi and P.T. Ghalic in Jakarta. This situation represents a new opportunity for Indonesian entrepreneurs, perhaps in joint venture with outside firms. The high value technology worth special attention is the local extraction of polysaccharide, which otherwise will continue to be imported.

There is the need for developing processing capacity for higher valued forms of seaweed, together with improved technologies for small fishermen to efficiently dry, compact, and transport it to end-markets.

4.6.2.5 Constraints to Seaweed Development

This commodity system faces a wide array of constraints in production, markets, raw material base, and processing in Indonesia. Primary among those constraints is the lack of verifiable information on the agroprocessing and trade components of the system. Examples of the constraints facing this sector include:

- Possible concentration of control over major end-markets abroad may be causing difficulties for accessing improved processing technologies for establishment in Indonesia;
- Insufficient domestic processing capacity for locally consumed gelatin powder is both a constraint and opportunity for new business, given irregularity of imports;
- Transporting bulky, dry seaweed is relatively cumbersome and expensive unless somehow compacted or compressed (baled) for shipment while not spoiling its quality;
- Supply to some processors was reportedly irregular in recent years, so that it is difficult to ensure consistent supply of seaweed products to promising overseas buyers over time;
- In some locations, the value of dry sea weed is not competitive with other fishery products; and,
- Fishing villages spread over expanses of sea have difficulty arranging for the assembly of sufficient quantities for shipment to distant markets.

4.5.2.6. Potential Focus of Assistance in Seaweed

The scarcity of reliable information on the seaweed production and processing system, especially the agroprocessing of seaweed warrants, the commissioning of a regional study on seaweed at the earliest possible time. The study could revolve around major transhipment and processing sites, such as Ujung Pandang and Surabaya, and explore local processing technologies at all levels of the system.

Likewise, feasibility studies for joint ventures on further processed products can help expand the demand for local seaweed. The results of such studies should be disseminated to all interested parties in Indonesia and abroad.

At the processing level, basic quality control during the drying process and improved techniques for compacting/baling seaweed are research and development or technology options for village level introduction. From the industrial processors' perspective, factory processing technologies for semi-refined or refined carrageenan and alginate or polysaccharides could be brought to Indonesia through joint venture options with foreign companies as is the case with the new, proposed MERCK pharmaceutical factory in Surabaya. This would provide value-added for both exports and satisfy local market demand for emulsifiers, stabilizers and similar ingredients.

Backward integration from the agroprocessor to the collection and cultivation of the seaweed may be required to obtain adequate quantity and quality on a regular basis. A South Sulawesi processor is presently contracting for thousands of rafts of seaweed from farmers. Such integration can take several forms, but if the small fisherman is to be involved it will be useful for an NGO to provide the organizational component, to develop and supply a simple technology for compacting the bales of dry seaweed before shipment, and perhaps orchestrating the sales. The costs involved and skill required for such services may not be within the agroprocessors budget or interests.

For the communities of small fishermen, limited economies of scale (volume per individual household), subsistence mentality, distrust of outsiders, and uncoordinated activities (particularly marketing) are among the factors that contribute to the high risks associated with depending on seaweed supply from the fishing villages. Services by community-based institutions, such as yayasans or cooperatives, which reduce those limitations, can provide substantial opportunities for improvement, both to the small fishermen and the agroprocessing industry.

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Table 17.

Value of Agricultural Exports by Sub-Sector, 1983-1988, in US $ million

Items c)	Year						Average growth rate (%)/year
	1983	1984	1985	1986	1987 a)	1988 b)	
Agriculture							
1 Food Crops	59.1	58.9	77.1	75.9	124.3	113.2	10.61
2 Animal husbandry	23.1	36.9	35.8	40.2	50.9	39.3	14.36
3 Fisheries	257.0	248.1	259.4	374.1	475.5	714.3	23.62
4 Plantation	1,744.4	2,126.1	1,960.0	2,226.7	2,284.6	2,734.9	11.56
Total d)	2,084.2	2,470.0	2,332.3	2,716.9	2,934.9	3,601.7	12.00
Food Crops							
1 Cassava chips	27.9	32.3	45.5	49.8	89.6	67.7	24.3
2 Grains	12.6	4.6	6.5	2.0	6.5	5.0	-22.1
3 Vegetables	5.3	6.3	6.5	5.5	7.2	13.6	25.3
4 Fruits	4.9	11.8	15.7	13.6	14.8	20.4	41.4
5 Others	8.4	3.9	2.9	5.0	6.4	6.5	5.3
Total	59.1	58.9	77.1	75.9	124.5	113.2	20.4
Fisheries							
1 Shrimp	194,447	195,532	202,729	284,875	352,435	499,841	22.1
2 Tuna	14,776	10,674	13,770	18,128	30,951	52,914	34.9
3 Other sea fishes	5,076	3,981	4,611	4,883	12,092	14,418	33.4
4 Frog leg	8,753	4,122	6,571	13,139	8,939	17,995	35.2
5 Decorative fishes	166	190	471	1,238	1,509	4,905	112.0
6 Jelly fish	8,181	4,672	2,716	7,869	7,370	16,453	44.4
7 Others	25,649	28,872	28,576	43,985	61,227	10,765	36.0
Total	257,048	248,063	259,444	374,117	474,523	714,291	24.5

Note: a) Revised; b) Provisional

c) Forestry sub-sector not included because lately most of forest export products are in the form of processed products: therefore, they are included in industrial product export.

d) In this table, semi processed rubber products such as crumb-rubber and smoked-sheet are not classified as industrial export but as agriculture export.

Source: Junior Minister of Agriculture's Office Computer Data File (1990).

Table 18.

FOOD AND AGRICULTURAL EXPORTS OF INDONESIA BY COMMODITY
(MILLIONS OF US DOLLARS)

PRODUCT	1983	1984	1985	1986	1987	1988	1989	Rate of growth % /Y
FOOD & BEVERAGES								
FISH, FRESH/FROZEN	20	15	19	34	45	84	115	34
CRUSTACEANS,FRESH/FROZEN	204	202	207	297	369	528	578	20
CEREAL PREPARATIONS	6	6	4	6	8	13	9	12
VEGETABLES,FRESH/DRIED	34	39	52	56	97	141	98	23
VEGETABLES,PRESERVED	1	1	1	4	4	10	26	56
FRUIT,FRESH	5	12	16	14	14	20	12	13
FRUIT,PREPARED	2	1	6	9	15	17	24	50
SUGAR AND HONEY	32	27	22	40	37	28	20	1
COFFEE	430	568	562	822	539	552	491	1
COCOA	42	53	64	61	66	82	82	10
TEA	120	226	149	99	119	125	163	- 2
SPICES	94	112	126	209	240	222	183	14
FEEDSTUFFS	66	65	65	72	74	89	100	4
TOBACCO	47	43	49	68	71	65	108	13
OILSEEDS	14	5	7	3	8	3	4	- 17
VEGETABLE OIL	148	175	414	166	290	537	453	19
OTHER*)	28	42	88	61	58	97	124	20
SUBTOTAL	1,304	1,592	1,851	2,011	2,054	2,613	2,590	11
NON-FOOD:								
RUBBER	848	952	718	713	961	1,248	1,014	5
WOOD	348	366	244	281	416	582	909	16
CRUDE VEGETABLE/ANIMAL FIBER	122	113	112	118	192	124	60	- 5
OTHER**)	20	39	37	31	14	28	61	6 8
SUBTOTAL	1,338	1,467	1,111	1,143	1,583	1,980	2,044	8
TOTAL :	2,642	3,059	2,962	3,154	3,637	4,593	4,634	10

Source : Central Buroau of Statistic, as presented in the PID

*) Other food includes: Live animals except fish; meat and edible meat salted/dried; meat and edible meat prepared/preserved; milk and cream; rice; barley; sugar preparations; chocolate preparations; margarine; beverages; cotton; other vegetable fibers; animal oils and fat, and tanned hides.

**) Other non-food includes: Hides/skin; rough cork and waste; pulp and waste paper; silk and silkwaste; jute; synthetic and other synthetic fibers suitable for spinning; wool and other animal hair, and old cloth and other old textiles.

Table 19.

PROCESSED FOOD EXPORTS OF INDONESIA
(THOUSANDS OF US DOLLARS)

PRODUCT	1983	1984	1985	1986	1987	1988	1989	Rate of growth % /Y
PREPARED MEATS	2	14	1	28	51	63	92	66
PROCESSED MILK	4	0	1	2	1,502	4,676	9,065	165
CANNED BUTTER	0	0	0	61	13	88	72	24
CANNED FISH	4,532	4,485	2,572	4,763	12,349	26,963	49,265	44
CEREAL PREPARATIONS	6,390	6,011	4,482	5,677	7,630	13,055	8,874	11
CANNED MUSHROOMS	0	0	0	3,540	3,352	3,078	5,338 *)	11
OTHER CANNED VEGETABLE	0	0	0	0	395	6,582	20,792	198
CANNED PINEAPPLE	0	345	5,315	8,533	13,757	14,322	22,472 *)	70
OTHER CANNED FRUIT	1,627	754	700	876	1,668	2,407	1,260	9
SUGAR PREPARATIONS	193	573	183	131	901	2,049	5,440	51
INSTANT COFFEE	0	21	0	107	252	598	2,139	90
CHOCOLATE PREPARATIONS	1,844	294	132	59	83	448	3,583	8
GROUND PEPPER	0	0	0	0	0	403	806	69
MARGARINE	6	0	28	1,481	3,772	223	2,740	98
OTHER PREPARED FOOD	2,222	2,718	2,613	3,528	3,870	4,700	13,348	25
BEVERAGES	261	459	160	398	695	3,908	6,775	55
TOBACCO, MANUFACTURED	9,294	10,123	5,464	5,751	13,910	22,502	60,682	29
REFINED PALM OIL	0	0	0	0	15,799	28,306	43,980	51
REFINED COCONUT OIL	0	16,310	15,654	0	2,981	869	6,221	41
TOTAL	26,375	42,107	37,305	34,945	82,980	135,240	262,945	36

Source : Central Bureau of Statistics, as presented the in PID

*) Includes all airtight containers, but excludes dehydrated, etc., products.

Table 20

PRODUCTION VALUE OF PROCESSED FOOD PRODUCT VALUE IN CURRENT US DOLLARS ('000)

ISIC	DESCRIPTION	OUTPUT 1975	OUTPUT 1980	OUTPUT 1985	OUTPUT 1986	OUTPUT 1987
31112	Processing & preserving of meat	4,722	16,202	23,063	24,147	25,289
31121	Condensed and dried milk, butter, and cream	69,559	190,518	216,310	228,510	222,650
31122	Ice cream and simliar products	2,894	4,076	6,813	5,601	7,229
31130	Canning and processing of fruits & vegetable	2,096	5,317	10,863	20,133	20,868
31140	Canning and processing fish, crustacea & foods	39,820	89,566	247,856	200,508	256,774
31161	Coconut oil	130,424	285,208	476,056	269,765	250,929
31169	Vegetable and animal oil and fat	124,691	418,165	447,181	442,612	513,036
31171	Noodle and other kind of noodle	9,347	25,947	44,241	44,562	44,533
31179	Bakery products	15,480	37,864	72,919	83,186	77,131
31181	Sugar factories	363,412	577,192	752,233	803,726	725,871
31190	Chocolate powder and sugar confectionneries	15,340	41,840	48,916	52,130	55,109
31210	Tapioca flour, sago, cassava flour & others	17,970	36,691	51,512	59,676	62,280
31230	Ice	8,604	19,694	22,146	22,473	18,699
31241	Soya sauce	1,799	7,776	18,344	21,449	15,261
31242	Tahu, tempe, oncom, karak & other chips.	2,169	5,957	9,849	13,257	9,373
31250	Krupuk, emping, karak & other chips	4,171	12,520	21,880	26,604	23,813
31260	Coffee, powder and fried	1,705	6,330	15,129	21,457	21,365
31270	Seasoning	25,086	55,644	83,224	95,803	73,417
31290	Other products not elsewhere classified	9,565	22,994	40,097	50,498	47,705
31310	Alcoholic liquors	1,501	1,422	544	801	887
31320	Wine	762	2,396	11,260	21,706	18,898
31330	Malt liquors and malt	39,727	84,016	84,130	89,544	79,384
31340	Soft drinks & carbonated waters	23,538	44,538	116,422	110,943	108,573
31410	Drying and processing tobavco	59,737	123,347	138,081	111,227	120,474
31420	Clove cigarettes	633,476	1,609,166	2,463,352	2,173,313	2,021,419
31430	Cigarettes	167,519	293,844	186,920	171,426	146,694
31490	Other tobacco products	15,380	25,769	186,784	146,041	113,931
	TOTAL US Dollars	1,790,487	4,043,999	5,796,725	5,311,098	5,087,595

Source : Central Bureau of Statistics, as presented in an Analysis of the Emerging Agribusiness Sub-Sector in Indonesia, USAID, 1989.

Table 21.

. HARVESTED AREA AND PRODUCTION DEVELOPMENT OF SELECTED HORTICULTURAL CROPS IN INDONESIA, 1983 AND 1987.

Commodity	Harvested area (ha)			production (t)		
	1983	1987	Annual Percentage of growth	1983	1987	Annual Percentage of growth
Fruit						
Avocados	15,495	22,543	11.4	45,745	71,550	14.1
Mangoes	85,103	121,254	10.6	447,900	515,949	3.8
Rambutans	27,614	47,909	18.4	91,052	184,643	25.7
Durians	24,810	41,648	16.9	124,493	199,361	15.0
Papayas	23,321	32,004	9.3	240,502	321,499	8.4
Bananas	170,610	175,616	0.7	1,781,469	2,192,332	5.8
Pineapples	49,025	44,348	-2.4	322,954	347,827	1.9
Citrus	64,696	80,256	6.0	493,047	557,345	3.3
Vegetable						
Red onions	61,43	65,143	1.6	283,819	412,522	11.3
Garlic	5,065	15,729	52.6	18,275	87,648	94.9
Potatoes	30,305	32,019	1.4	249,986	368,961	11.9
Cabbage	33,168	44,953	8.9	391,345	835,556	23.4
Carrots	5,504	11,690	28.1	53,057	132,229	37.3
Chinese cabbage	24,142	27,556	3.6	134,804	216,270	15.1
Red peppers	120,368	230,429	22.9	295,760	436,189	18.9
Tomatoes	30,175	52,066	18.1	88,909	187,430	27.7

Source: Direktorat Jenoral Pertanian Tanaman Pangan (1989), as presented by Hutabarat, op.cit. in IARD Journal 1989.

Table 22

. Number of farms, plants, and production of cut flowers in Jakarta, 1979–1984.

Year	Number of farms	Number of plants	Production (stalk)	Index of production growth
1979	520	3,372,395	8,685,482	100
1980	488	2.059,423	5,303,014	61
1981	632	3,447,613	8,954,853	103
1982	608	3,705,617	9,335,332	107
1983	664	3,986,757	10,267,760	118
1984	705	3,982,020	12,197,165	140

Source: Dinas Peratanian Tanaman Pangan DKI Jakarta (various issues), as presented by Hutabarat, op.cit., in IARD Journal 1989.

Table 23

. Quantity and Value of (fresh and processed) Fruit and Vegetable Exports, 1986.

Product	Main country of destination	Quantity t	F.O.B. value (US$ 1,000)
Fruit			
Avocados	Singapore, Netherlands	10.8	1.2
Mangoes	Singapore, Hongkong	46.8	16.6
Mangosteen	Singapore, Netherlands	3.7	6.6
Lemons and limes	Netherlands	9.9	7.2
Other citrus	Malaysia Netherlands	6.9	5.7
Apples	Singapore	0.4	0.1
Other stone fruit	Saudi Arabia	19.8	17.1
Durians	Singapore Malaysia	275.2	64.2
Papayas	Australia	9.8	6.1
Jackfruit	Malaysia	9.2	4.2
Rambutans	Netherlands	4.9	7.0
Other fresh fruit	Netherlands, Malaysia, S. Arabia	373.1	415.5
Preserved fruit	Singapore, Hongkong	978.6	199.9
Fruit in syrup	West Germany	19,077.0	8,619.3
Fruit juices	Singapore, USA	330.0	180.4
Vegetables			
Potatoes	Singapore, Malaysia	21,872.2	2,173.1
Tomatoes	Singapore, Malaysia	694.9	67.4
Shallots	Singapore, Hongkong	2,146.1	282.0
Cabbage, cauliflower	Singapore, Malaysia	24,938.2	2,560.0
Other leafy and stem vegetables	Singapore, Malaysia, S. Arabia	2,992.5	446.7
Onions	Singapore	1.5	3.2
Fresh red peppers	Singapore	2.2	1.1
Dried red peppers	Singapore, Hongkong	35.1	12.1
Dried or preserved vegetables	Singapore, USA, Netherlands	1,938.5	3,653.4
		75,777.3	18,755.1

Source: Central Bureau of Statistics (1988a), as presented by Hutabarat, op.cit., in IARD Journal, 1989.

Table 24

Quantitaty and Value of (Fresh and Processed) Fruit and Vegetable Imports, 1986.

Product	Main country of origin	Quantity (t)	C.i.f. value US$ 1.000
Fruit			
Oranges	Singapore, Israel, USA, Australia	9.9	14.7
Lemons and limes	Singapore, USA	1.5	3.1
Grapefruit	Singapore	0.2	0.4
Other citrus	Singapore, USA	5.1	12.7
Apples	Singapore	8.3	12.4
Pears	Singapore	2.1	3.0
Other fresh fruit	Singapore	0.7	2.2
Frozen fruit	Hungary, Jugoslavia	4.2	23.0
Preserved,dried fruit	Hongkong, Singapore, USA, Taiwan	623.7	521.6
Mangoes, guava puree	New Zealand	19.7	7.8
Jams and jellies	Netherlands, USA, Singapore	332.8	513.0
Fruit in syrup	Singapore, Taiwan, China, Hongkong,USA	1,281.7	863.7
Fruit juices	Singapore, Australia		
Vegetables			
Seed potatoes	West Germany, France	442.2	246.1
Potatoes	Singapore, USA	65.7	61.9
Tomatoes	Philippines	5.7	3.6
Onions	Australia, New Zealand, USA, Netherlands	1,995.6	607.9
Shallots	Thailand, Philippines	2,015.7	673.7
Garlic	Hongkong, China, Singapore	11,195.8	1,236.7
Leeks	Australia	18.1	8.1
Cabbage,cauliflower	Singapore	2.4	3.9
Beans, gourds	Singapore	0.7	1.8
Lettuce, spinach	Singapore	0.6	0.6
Other leafy or stem vegetables	Singapore, Japan, France	4.7	13.9
Frozen vegetables	New Zealand, USA Singapore	1,371.8	1,192.5
Vegetables in brine	USA, Singapore, Hongkong	125.4	202.5
Mushrooms, truffles	Hongkong, China, Singapore	232.2	41.2
Processed shallots	Thailand	28.9	10.7
Processed garlic	Taiwan, China, USA	65.5	44.7
Processed onions	Japan,USA	65.4	252.6
Processed leafy vegetables	China, Singapore	97.0	32.1
Bamboo shoots	China	37.7	31.4
Other processed Vegetables	Taiwan, China Singapore	1,285.3	1,202.4
Black, green, red beans	Taiwan, China	14,358.3	5,090.0
Dried red peppers	Taiwan, China	3,583.4	2,096.2
Other dried vegetables	Taiwan, China	2,360.6	907.6
Peas	U.K, New Zealand	10,481.5	3,343.6
		52,130.1	19,283.3

Source: Central Bureau of Statistics (1986b), as presented by Hutabarat, op.cit., in IARD Journal, 1989.

Table_25

Production Distribution of Selected Horticultural Crops by Region, in Quantity (ton) and Share (%), 1988.

Crop	Region						
	Sumatra	Java	Bali/ NTT/NTB	Kalimantan	Sulawesi	Maluku & Irian Jaya	Indonesia
1. Chilli	111632 (26)	298330 (66)	14457 (3)	7268 (2)	15358 (3)	1679 (0)	448722 (100)
2. Onion	48616 (13)	293803 (77)	17718 (5)	46 (0)	18576 (5)	621 (0)	379380 (100)
3. Potato	97238 (23)	304335 (73)	3254 (1)	(0) (0)	13123 (3)	204 (0)	418154 (100)
4. Mangoes	17539 (3)	342649 (64)	44646 (8)	4882 (1)	118261 (22)	5191 (1)	531968 (100)
5. Pineapple	210298 (59)	118976 (33)	10319 (3)	9712 (3)	6726 (2)	1644 (0)	357675 (100)
6. Rambutan	50774 (22)	151000 (65)	5820 (3)	13929 (6)	4826 (2)	5329 (2)	231676 (100)

Source: Directorate General of Food Crop Agricultural.

Table 26

Fish and Shrimp Production, Indonesia (Mt); 1969–1989

Year	Fish (Including Shrimp)					Shrimp				
	Marine	Inland	Brackish Water	Other	Total	Marine	Inland	Brackish Water	Other	Total
1969	785,344	314,201	5,187	62,978	1,214,399					
1970	887,391	286,519	55,908	78,694	1,228,512					
1971	820,447	285,746	60,788	77,575	1,244,556					3,248
1972	836,289	301,412	51,203	80,005	1,268,909					3,049
1973	888,518	249,592	61,481	78,921	1,277,512	53,377	7,151	8,583	69,111	3,156
1974	948,568	240,893	66,756	80,053	1,336,268	49,866	8,379	8,757	66,792	3,008
1975	996,856	228,571	78,776	85,871	1,390,074	58,465	9,603	6,416	74,484	8,425
1976	1,081,589	246,711	80,158	74,484	1,482,942	106,877	14,059	6,138	126,874	3,750
1977	1,157,691	254,243	87,304	72,114	1,571,852	127,582	21,172	3,837	152,591	4,098
1978	1,227,386	249,146	87,995	83,137	1,647,664	129,525	16,891	11,901	157,318	5,521
1979	1,317,744	248,181	60,664	88,828	1,748,397	130,917	23,856	6,915	161,688	5,945
1980	1,394,810	254,498	97,898	102,456	1,849,662	108,572	23,532	10,648	142,552	7,548
1981	1,408,272	264,983	112,916	128,334	1,914,505	111,346	28,111	6,898	145,154	7,251
1982	1,490,719	265,348	129,279	89,954	1,975,300	100,440	30,502	6,907	137,949	7,479
1983	1,682,019	265,562	134,072	132,847	2,214,500	111,384	27,595	7,083	146,062	9,607
1984	1,712,804	269,321	142,404	136,460	2,260,989	101,428	31,389	10,800	144,217	9,067
1985	1,821,725	259,256	156,367	148,204	2,395,552	107,190	37,399	7,992	152,581	62,974
1986	1,922,781	273,012	170,310	163,796	2,529,899	117,707	41,070			72,305
1987	2,017,350	276,291	192,123	184,736	2,670,500	131,907	55,967			85,418
1988	2,165,500	714,500	218,300		2,880,000	153,806	77,451	65,975	297,232	
1989										

Source: Directorate General of Fisheries and the Central Beurau of Statistics

Table 27

Shrimp Production, Indonesia (Mt); 1973-1988.

Year	Marine				Brackishwater		
	Tiger	Banana	Other	Total	Tiger	Other	Total
1973	11.732	25.434	16.211	53.377	1.561	5.590	7.151
1974	10.583	25.849	13.324	49.656	1.788	6.591	8.379
1975	12.244	27.534	18.687	58.465	3.803	5.800	9.603
1976	9.252	18.974	78.451	106.677	5.099	8.690	14.059
1977	7.716	24.346	95.520	127.582	4.079	17.093	21.172
1978	9.275	31.927	87.294	128.526	4.600	17.018	16.891
1979	9.027	31.620	90.270	130.917	6.965	16.891	23.856
1980	10.703	38.554	59.315	108.572	6.317	17.315	23.632
1981	9.100	22.196	80.049	111.345	7.219	20.892	28.111
1982	10.068	30.693	59.679	100.440	8.783	21.819	30.602
1983	10.726	37.330	63.278	111.384	7.550	20.045	27.595
1984	14.209	26.123	61.091	101.428	10.318	21.671	31.989
1985	10.481	24.610	72.099	107.190	13.068	24.331	37.399
1986	14.097	32.887	70.723	117.707	15.424	25.646	41.070
1987	10.720	35.766	85.421	131.907	25.202	30.765	55.967
1988	12.301	42.750	98.755	153.806	44.450	188.833	233.283

Source: Directorate General of Fisheries

Table 28

Export of Fishery Products, Indonesia; 1969-1989.

Year	Total		Shrimp		Seaweed		Non-Oil
	Q'tity (mt)	Volume (000 US$)	Q'tity (mt)	Volume (000 US$)	Q'tity (mt)	Volume (000 US$)	Volume (million US$)
1969	21,426	2,444	5,637	878	2,252	58	870.8
1970	22,060	6,959	7,333	4,278	3,071	85	661.8
1971	30,756	18,994	15,319	14,697	3,888	100	755.7
1972	41,156	34,941	23,411	29,809	3,721	115	864.6
1973	52,178	68,185	28,787	57,562	3,309	109	1,602.1
1974	54,953	92,344	32,721	84,571	3,344	94	2,214.9
1975	40,738	88,191	26,121	78,431	1,602	49	1,791.9
1976	54,389	131,380	31,463	116,991	1,983	51	2,542.4
1977	57,510	163,018	31,627	140,233	2,783	168	3,474.5
1978	63,466	193,424	32,620	161,955	2,527	98	3,657.6
1979	68,484	236,827	34,943	200,483	1,836	170	5,426.4
1980	78,705	226,354	31,934	180,903	597	143	6,168.8
1981	75,178	225,387	24,971	162,827	690	61	4,501.3
1982	89,618	249,416	25,575	181,640	2,111	166	3,929.0
1983	88,365	257,048	26,166	194,447	3,402	347	5,005.2
1984	75,095	248,063	28,025	195,552	3,061	659	5,869.7
1985	84,490	259,450	30,980	202,729	5,446	1,413	5,868.9
1986	107,443	374,117	36,101	284,875	7,111	2,154	6,578.4
1987	140,378	475,523	44,267	352,435	9,878	2,698	8,579.5
1988*	181,214	714,299	56,794	499,841	10,835	3,782	11,536.9
1989**	228,590	823,125	77,190	556,760	11,424	5,704	

Source: Government Revenue-Expenditure; 1990/1991

*) Revised figures

**) Prelimanary figures

Table 29

Seaweed and Brackish Water Pond Production of Shrimp; East Java and South Sulawesi (Mt)

Year	East Java			South Sulawesi		
	Tiger	Other	Total	Tiger	Other	Total
1977	209	5782	5806	2485	2541	5206
1978	194	2779	2973	2969	2229	5198
1979	1837	2475	4312	3920	2936	6856
1980						
1981	2192	4951	7143	3883	2652	6535
1982	1876	2243	4119	5289	3348	8637
1983	1239	2091	3330	5316	3279	8595
1984	1758	3174	4932	5997	3106	9103
1985	2443	3373	5816	5214	3270	8484
1986	2736	3941	6727	6999	2573	9572
1987	5355	4881	10236	9654	3125	12779

Source: Directorate General of Fisheries

Table 30

Shrimp and Seaweed Export; East Java and South Sulawesi

Year	East Java				South Sulawesi			
	Q'tity (mt)	Value (000 US$)	Q'tity (mt)	Value (000 US$)	Q'tity (mt)	Value (000 US$)	Q'tity (mt)	Value (000 US$)
1972	1,637	1,464	144	16	3,122	4,713	1,506	41
1973	1,470	3,368	65	11	1,644	2,872	1,610	33
1974	2,508	6,073	54	12	1,599	4,199	1,466	26
1975	1,254	4,903	22	28	876	3,326	764	14
1976	1,232	6,227	43	32	1,207	6,585	1,314	26
1977	913	5,060	243	39	1,504	9,411	2,045	46
1978	1,029	6,866	159	19	1,785	13,166	3,974	43
1979	1,227	7,066	62	17	2,212	19,601	1,503	50
1980	1,025	6,601	146	7	2,015	15,998	288	45
1981	1,971	14,410	107	14	1,574	17,745	552	20
1982	1,832	16,428	44	20	1,761	17,755	1,945	57
1983	2,100	18,789	236	53	2,064	20,046	2,592	194
1984	2,839	25,575	388	96	2,800	25,298	2,455	446
1985	3,478	30,526	2,243	443	3,332	24,594	3,131	928
1986	5,567	55,124	4,525	1,238	3,128	31,806	2,496	858
1987	7,534	71,024	6,687	1,685	3,219	36,331	2,920	927
1988	11,097	114,644	6,534	2,172	4,482	50,722	3,974	1,346
1989 *	19,212	154,976	7,416	3,476	4,688	44,106	3,117	2,118

Source: Directorate General of Fisheries and Central Bureau Statistics
*) Provisional Data

Table 31

Marketing Margin Analysis of Champignon Mushrom, Domestic Market, 1989

	Component/ Activity	Cost/kg *) (Rp/kg)	Price/kg *) (Rp/kg)	Share (%)
I.	Farm gate price, plasma farmer		1,468.43	22.99
II.	Buying price,		1,468.43	22.99
	by NES/PIR	210.36		3.15
	A. Processing			
	1. Supporting material	30.48	0.46	
	2. Energy (solar)	44.05	0.66	
	3. Direct wage	49.55	0.74	
	4. Machinery depreciation	33.04	0.49	
	5. Technical fee	53.23	0.80	
	B. Packaging	1,099.89	16.47	
	1. Can	926.43	13.87	
	2. Cardboard	80.76	1.21	
	3. Lable	88.11	1.32	
	4. Adhesive tape	4.59	0.07	
	C. Fixed Cost, factory	747.05	11.19	
	1. Repair	23.86	0.36	
	2. Interest	392.80	5.88	
	3. Employer	146.84	2.20	
	4. Depreciation	183.55	2.75	
	D. Profit Margin	204.17	3.06	
III.	Selling price, Factory Level		3,729.90	55.85
	Buying price, central distributor		3,729.90	55.85
	A. Advertising	14.24	0.21	
	B. Storage	127.91	1.92	
	C. Transportation	284.84	4.26	
	D. Employees	71.21	1.07	
	E. Profit margin	213.90	3.20	
IV.	Selling price, central Distributor		4,442.00	66.51
	Buying Price, sub-distributor		4,442.00	66.51
	A. Storage	149.41		2.24
	B. Transportation	747.06		11.19
	C. Employees	149.41		2.24
	D. Profit margin	448.24		6.71
V.	Selling price, sub-distributor		5,936.12	88.88
	Buying price, retailer		5,936.12	88.88
	A. Tax (PPN 10%)	593.61		8.89
	B. Retail cost	148.97		2.23
VI.	Selling price, retailer		6,678.70	100.00
	Buying price, consumer		6,678.70	100.00

*) Equivalent of 1 kg processed mushrom

Source: Ignatius Widya Kristiari (1989). Laporan Praktek Lapang. Fakultas Pertanian, IPB.

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Table 32

Marketing Margin Analysis of Champignon Mushrom, Domestic Market, 1989

	Component/ Activity	Cost/kg *) (Rp/kg)	Price/kg *) (Rp/kg)	Share (%)
I.	Farm gate price, plasma farmer		1,468.43	22.99
II.	Buying price,		1,468.43	22.99
	by NES/PIR	210.36		3.15
	A. Processing			
	1. Supporting material	30.48	0.46	
	2. Energy (solar)	44.05	0.66	
	3. Direct wage	49.56	0.74	
	4. Machinery depreciation	33.04	0.49	
	5. Technical fee	53.23	0.80	
	B. Packaging	1,099.89	16.47	
	1. Can	926.43	13.87	
	2. Cardboard	80.76	1.21	
	3. Lable	88.11	1.32	
	4. Adhesive tape	4.59	0.07	
	C. Fixed Cost, factory	747.05	11.19	
	1. Repair	23.86	0.36	
	2. Interest	392.80	5.88	
	3. Employer	146.84	2.20	
	4. Depreciation	183.55	2.75	
	D. Profit Margin	204.17	3.06	
III.	Selling price, Factory Level		3,729.90	55.85
	Buying price, central distributor		3,729.90	55.85
	A. Advertising	14.24	0.21	
	B. Storage	127.91	1.92	
	C. Transportation	284.84	4.26	
	D. Employees	71.21	1.07	
	E. Profit margin	213.90	3.20	
IV.	Selling price, central Distributor		4,442.00	66.51
	Buying Price, sub-distributor		4,442.00	66.51
	A. Storage	149.41		2.24
	B. Transportation	747.06		11.19
	C. Employees	149.41		2.24
	D. Profit margin	448.24		6.71
V.	Selling price, sub-distributor		5,936.12	88.88
	Buying price, retailer		5,936.12	88.88
	A. Tax (PPN 10%)	593.61		8.89
	B. Retail cost	148.97		2.23
VI.	Selling price, retailer		6,678.70	100.00
	Buying price, consumer		6,678.70	100.00

*) Equivalent of 1 kg processed mushrom

Source: Ignatius Widya Kristiari (1989). Laporan Praktek Lapang. Fakultas Pertanian, IPB.

Table 33

Marketing Margin of Garlic in Ciwidey Kecamatan, 1989.

	Component/ Activity	Channel I			Channel II		
		Cost (Rp/kg)	Price (Rp/kg)	%	Cost (Rp/kg)	Price (Rp/kg)	%
1	Farm gate Price		800.00	17.20		800.00	16.00
	- harvest	9.00		0.19	9.00		0.18
	- transport	12.50		0.26	12.50		0.25
	- unloading	10.00		0.21	10.00		0.20
	- cleaning	15.00		0.31	15.00		0.30
	- cleaning loss	200.00		4.25	200.00		4.00
	- drying	300.00		6.30	300.00		6.00
	- drying loss	900.00		19.15	900.00		18.00
	- cutting	15.00		0.32	15.00		0.30
	- cutting loss	200.00		4.25	200.00		4.00
	- goni sack	3.00		0.06	3.00		0.06
	- profit	535.50		11.39	535.50		10.71
	Selling price		3,000.00	63.80		3,000.00	60.00
2	Buying price collector		3,000.00	63.80		3,000.00	60.00
	- transport	3.50		0.07	3.50		0.07
	- profit	190.50		4.18	190.50		3.93
	Selling price		3,200.00	68.08		3,200.00	64.00
3	Buying price dealer		3,200.00	68.08		3,200.00	64.00
	- goni sack	7.50		0.16	7.50		0.15
	- loading	3.00		0.06	3.00		0.06
	- transport	50.00		1.06	140.00		2.80
	- unloading	4.00		0.08	4.00		0.08
	- retribution	1.50		0.03	1.50		0.03
	- profit	434.00		9.23	644.00		12.88
	Selling price		3,700.00	78.72		4,000.00	80.00
4	Buying price distributor		3,700.00	78.72		4,000.00	80.00
	- losses	80.00		1.70	80.00		1.60
	- retribution	10.00		0.21	10.00		0.20
	- profit	360.00		7.66	410.00		8.20
	Selling price		4,150.00	88.29		4,500.00	90.00
5	Buying price retailer		4,150.00	88.29		4,500.00	90.00
	- transport	15.00		0.32	15.00		0.30
	- packaging	60.00		1.27	60.00		1.20
	- losses	50.00		1.06	50.00		1.00
	- profit	425.00		9.04	375.00		7.50
	Selling price		4,700.00	100.00		5,000.00	100.00
6	Buying price consumer		4,700.00	100.00		5,000.00	100.00

Surce: Heru Binawan (1989). Laporan Praktek Lapang, Fakultas Pertanian, IPB.

Table 34

Administrative Distributions of Small Scale Establishments with Basic Statistics, 1986

	Province	Number of establishments	Total number of person employed			Value added of market price (Rp 1000)	Productivity workers (Rp 1000)
			Male	Female	Total		
1	D.I. Aceh	1,005	6,021	1,270	7,291	12,556,602	1,722
2	Sumatera Utara	3,990	23,661	8,384	32,045	38,444,340	1,200
3	Sumatera Barat	1,243	5,844	3,249	9,093	14,508,752	1,596
4	Riau	921	6,418	944	7,362	9,787,116	1,329
5	Jambi	550	3,317	402	3,719	9,626,562	2,588
6	Sumatera Selatan	1,565	9,441	2,967	12,408	16,519,372	1,331
7	Bengkulu	193	1,080	238	1,318	1,151,758	874
8	Lampung	1,141	6,679	2,088	8,767	11,286,996	1,287
9	D.K.I. Jakarta	7,852	53,814	14,587	68,401	140,374,588	2,052
10	Jawa Barat	15,866	93,312	31,401	124,713	134,368,500	1,077
11	Jawa Tengah	27,115	147,231	85,175	232,406	157,064,396	676
12	D.I. Yogyakarta	2,446	12,710	5,986	18,696	13,445,738	719
13	Jawa Timur	20,244	115,438	50,445	165,883	131,920,038	795
14	Bali	1,599	7,887	6,209	14,096	14,527,044	1,031
15	Nusa Tenggara Barat	1,140	6,070	2,350	8,420	4,957,208	591
16	Nusa Tenggara Timur	344	1,969	532	2,501	7,055,556	2,821
17	Timor Timur	21	161	18	179	198,342	1,108
18	Kalimantan Barat	463	2,918	451	3,369	4,315,060	1,281
19	Kalimantan Tengah	386	2,457	379	2,836	3,471,582	1,224
20	Kalimantan Selatan	959	5,767	1,353	7,120	6,174,516	867
21	Kalimantan Timur	417	2,975	472	3,447	5,349,192	1,552
22	Sulawesi Utara	657	3,859	933	4,792	10,862,128	2,267
23	Sulawesi Tengah	572	3,497	453	3,950	5,383,374	1,363
24	Sulawesi Selatan	3,055	15,886	5,357	21,243	19,526,384	919
25	Sulawesi Tenggara	438	2,526	421	2,947	1,925,602	653
26	Maluku	277	1,647	241	1,888	1,789,410	948
27	Irian Jaya	155	1,131	123	1,254	2,695,432	2,149
	TOTAL	94,534	543,716	226,428	770,144	775,303,596	1,007

Source: Economic Census of 1986: Small Scale Manufaturing Industry Statistics, Central Bureau of Statistics, 1989.

Table 35.

Growth of medium–large size manufacturing of Industry Major Group 311 and Industry Code 31130, 1982–1987

	Items	Industry major group 311 a			Industry Code 31130 b			Percentage of	Percentage of	Percentage growth
		(1) 1982	(2) 1987	Percentage growth	(3) 1982	(4) 1987	Percentage growth	(5)–(3)/(1)	(6)–(4)/(2)	(1)–(6)–(5)
I.	Number of establishment	943	1,546	63.94	7	14	100.00	0.74	0.91	0.17
II.	Total number of person engaged	121,101	228,818	88.78	551	5,166	837.57	0.45	2.26	1.81
III.	Input costs (Rp 1000)	852,787,128	3,335,428,875	286.59	1,097,977	23,227,000	2,015.44	0.13	0.70	0.57
IV.	Value of gross output (Rp 1000)	1,189,148,263	4,224,589,603	255.26	1,507,310	31,155,480	1,966.99	0.13	0.74	0.61
V.	Value added at market prices (IV-III)(Rp 1000)	326,361,135	888,660,728	172.29	409,333	7,928,480	1,836.93	0.13	0.89	0.76
VI	Indirect taxes (Rp 1000)	19,278,198	58,957,490	205.82	21,503	130,097	505.02	0.11	0.22	0.11
VII	Value added of factor costs (V-VI)(Rp 1000)	307,082,939	829,703,323	170.19	387,830	7,798,383	1,910.77	0.13	0.94	0.81

a Industry major group 311 along with Industry major group 312 is classified as Food Manufacturing but Industry major group 312 is not presented because Industry code 31130 only belong to Industry major group 311

b Industry code 31130 is classified as Canning and Preserving of Fruits and Vegetables

Source: CBS. 1984. Industrial Statistics 1982: Survey of Manufacturing Industry; Large and Medium, Indonesia. Volume I. Jakarta, Indonesia

CBS. 1989. Industrial Statistics 1982: Survey of Manufacturing Industry; Large and Medium, Indonesia. Volume I. Jakarta, Indonesia

Table 36

Processing Costs of Manufacturing Industry code 311 (Processed Foods) based on Scale of Operation, 1986.

	Cost Type	Small scale a		Medium-Large b	
		(Rp 1000)			
1	Employment costs	31,766,358	(5.83)	210,551,611	(8.71)
2	Inputs costs	513,535,958	(94.17)	2,206,005,129	(91.29)
	a. Raw materials	470,677,520	(86.31)	1,776,933,716	(73.53)
	b. Fuel, electricity and gas	19,002,170	(3.48)	106,488,675	(4.42)
	c. Other materials	13,530,714	(2.48)	198,907,585	(8.23)
	d. Repairs and industrial services recived	960,866	(0.18)	27,621,455	(1.41)
	e. Rent of building, machinery and equipment	634,222	(0.12)	44,733,229	(1.85)
	Non industrial services received	8,730,466	(1.60)	51,320,469	(12.12)
3	Total	545,302,316	(100.00)	2,416,556,740	(100.00)

a. Source: Central Bureau of Statistics (1989)
b. Source: Central Bureau of Statistics (1987)

Table 37

Processing Costs for Canned and Processed Fruits and Vegetables (Manufacturing Industry code 31130) by Size of Operation, 1986.

	Cost Type	Small scale a		Medium-Large b	
		(Rp 1000)			
1	Employment costs	208,406	(14.20)	894,373	(10.61)
2	Inputs costs	1,259,668	(85.80)	7,533,404	(89.39)
	a. Raw materials	1,085,212	(73.92)	3,287,930	(39.01)
	b. Fuel, electricity and gas	72,920	(4.98)	1,060,557	(12.58)
	c. Other materials	54,062	(3.69)	2,988,055	(35.46)
	d. Repairs and industrial services recived	1,280	(0.09)	15,391	(0.19)
	e. Rent of building, machinery and equipment	6,204	(0.42)	26,328	(0.31)
	Non industrial services received	39,606	(2.70)	155,089	(1.84)
3	Total	1,468,074	(100.00)	8,427,782	(100.00)

a. Source: CBS (1989). Economic Census of 1986: Small Scale Manufacturing Industry Statistics. CBS, Jakarta
b. Source: CBS (1987). Economic Census of 1986: Large and Medium Manufacturing Industry Statistics. CBS, Jakarta

Table 38

Estimated costs and returns per hectare of asparagus farming, 1985

	Items	Rupiahs
A.	Investment costs	2,490,000
	1. Cultivation (0-2 months)	2,490,000
	a. Seedlings : 20000 pieces/kg	
	b. Fertilizer :	
	i. NPK : 1500 kg	
	ii. Manure : 100 m3	
	c. Pesticides : 20 kg	
	d. Labor 480 MD (mandays)	1,611,000
	2. Nursery (2-12 months)	
	a. Fertilizer : 1500 kg	
	b. Labor : 1200 MD	
	3. Production costs	1,853,000
	a. Fertilizer	
	i. NPK : 2000 kg	
	ii. Manure : 100 m3	
	b. Pesticides : 30 kg	
	c. Labor 730 MD (mandays)	
	Total Costs	5,954,000
B.	Returns	7,290,000
C.	Profit	2,069,000

Source: Sugiarto et.al (1986).

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Table 39

Estimated Costs and Return per Hectare of Pineapple Farming, 1985 in West Java and East Java, 1985

	Items	Jawa Barat		Jawa Timur	
		(Rupiahs)			
A.	Production costs				
	1. Land rental (Rupiah)	300,000	(20,30)	200,000	
	2. Labor : male (mandays)	400 MD		1,175 MD	
	Female (womandays)	100 MD		150 MD	
	3. Seedling :	20,000		56,000	
	4. Fertilizers :	1,600		1,100	
	5. Pesticides :	10 botles		56 kg	
	Sub-Total	1,285,000		1,205,300	
	Interest per year (12 percent)	192,750		180,300	
	Total costs	1,477,750	(100.00)	1,386,000	(100.00)
B.	Returns	3,420,000		2,240,000	
C.	Profit	1,942,250		853,900	
D.	B/C Ratio	2.31		1.62	

Source: Sugiarto et.al. 1986.

Table 70.

Brackishwater Fisheries Households by Size of Holdings; East Java and South Sulawesi.

Pond Size Class (Ha)	East Java			South Sulawesi			Indonesia		
	No. of HH	BA as Main Source of Inc.	Average Pond Size (ha)	No. of HH	BA as Main Source of Inc.	Average Pond Size (ha)	No. of HH	BA as Main Source of Inc.	Average Pond Size (ha)
< 1.00	1,909	763	0.371	3,934	1,817	0.420	14,289	6,157	0.441
1.00 – 1.99	1,380	838	1.241	2,560	1,876	1.266	14,081	9,598	1.291
2.00 – 2.99	1,219	894	2.192	2,313	1,703	2.160	11,793	8,851	2.226
3.00 – 3.99	1,015	850	3.151	1,198	975	3.148	6,713	5,142	3.231
4.00 – 4.99	840	624	4.168	876	762	4.160	4,327	3,243	4.239
5.00 – 9.99	1,609	1,354	6.242	1,994	1,748	6.309	6,729	5,597	6.486
10.00 – 14.99	332	271	11.802	517	457	11.059	1,564	1,321	12.002
> 15.00	207	188	24.525	265	224	35.761	951	812	30.616
All	8,511	5,782	3.622	13,657	9,582	3.301	60,447	40,721	2.884

Note: Compiled from 1983 Agricultural Census Data; H-Series.
BA = Brackishwater aqua-culture.

Table- 41

Input Use in Brackishwater Aquaculture, East Java and South Sulawesi; 1983

Input	Unit/Ha Harvested Area	East Java	South Sulawesi	Indonesia
I. Brood				
- Shrimp: Post-Larva	'000 pcs	1.00	1.85	0.78
Nautilus	'000 pcs	0.06	0.61	0.21
- Milkfish: "Nener"	'000 pcs	2.28	1.87	1.74
"Glondongan"	'000 pcs	0.20	0.50	0.59
II. Fertilizers				
- Compost/Manure Rp1000.00		0.57	0.91	0.59
- TSP	Kg	18.34	79.51	30.31
- DSP	Kg	0.21	0.70	0.53
- Urea	Kg	13.19	57.69	30.20
- Other	Kg	1.61	1.62	1.67
III. Chemicals				
- Brestan	Lt	0.88	3.01	1.91
- Thiodan		1.15	4.30	2.57
- Diazinon	Lt	0.21	0.73	0.48
- Photeno	Lt	0.01	0.24	0.14
- Other: solid	Kg	0.59	0.13	0.19
liquid	Lt	0.65	0.64	0.48

Note: Compiled from 1983 Agricultural Census Data.

Table 42

Per Hectare Input Use by Sample Households, 1989

Inputs	Cirebon		Brebes		Pati		Gresik	
	W	W/O	W	W/O	W	W/O	W	W/O
1. Brood ('000 pcs):								
- "Nener"	0	0	0	0	9	9	2	1
- "Glondongan"	8	0	27	0	244	0	1	1
- Post-larva	9.5	187	159	156	7	8	11	14
- Nautilus	0	0	0	0	0	0	0	1
2. Fertilizer (Kg)								
- Urea	225	110	14	0	121	120	41	12
- TSP	17	65	7	0	110	52	39	63
- Organil	0	0	6	0	38	0	25	32
- KCl	0	0	0	0	1	0	0	0
3. Lime	35	3153	1697	1472	7	0	28	17
4. Chemicals (Rp1000)	28	115	213	146	12	15	9	5
5. Feed (Kg)								
- Crembel	310	3065	2912	3509	73	17	17	12
- Bran	53	0	0	0	2	15	0	0
- Rebon	0	391	0	0	0	0	0	0
- Hideng	0	78	0	0	0	0	0	3
- Bekatul	0	0	9	0	0	0	0	0
- Katril	0	0	0	0	2	0	0	0
6. Labor (Ld's)								
- Family	62	105	85	5	94	256	330	212
- Hired	299	1266	799	768	378	112	92	99
7. O & M of equipment and machiniries (Rp1000.00)	31	1054	1094	1240	28	59	53	38
8. Average pond size (Ha)	1.99	2.02	2.05	2.50	2.94	2.33	4.64	4.72

Source: DGF. 1990. Project Benefid Monitoring and Evaluation Study of The Brackishwater Aquaculture Development Project. Jakarta: P.T. Mirazh.

Note: w=inside the project area; w/o=outside the project.

Table 43

Brackishwater Fish Production, East Java and South Sulawesi, 1983.

Pond Size Class (Ha)	East Java			South Sulawesi			Indonesia		
	Shrimp	Milk Fish	Other	Shrimp	Milk Fish	Other	Shrimp	Milk Fish	Other
	Kg/Ha Harvested Area								
< 1.00	113	175	184	53	566	37	42	420	131
1.00 - 1.99	41	227	164	52	390	42	50	237	168
2.00 - 2.99	28	153	116	58	302	33	30	229	92
3.00 - 3.99	13	147	116	35	265	21	19	163	75
4.00 - 4.99	45	187	183	35	224	25	23	163	90
5.00 - 9.99	9	154	81	37	189	30	20	167	62
10.00 -14.99	12	191	59	41	127	21	19	157	59
> 15.00	92	315	36	41	108	9	41	202	49
All	34	193	98	41	219	26	29	203	83

Note: Compiled from 1983 Agricultural Census Data.

Table 44

Fish Production and Productivities of the sample households, BADP; 1989

Inputs	Cirebon		Brebes		Pati		Gresik	
	W	W/O	W	W/O	W	W/O	W	W/O
I. Production (Kg/HH/Year)	185	2228	3894	5480	240	246	570	557
- Tiger shrimp	263		219		18		106	39
- Shrimp	1011		278		3388	1830	771	659
- Milkfist							257	454
- Tilapia								
II. Productivity (Kg/HH/Year)								
- Tiger shirmp	62	1103	1902	2192	92	89	123	118
- Shrimp	132		67		7		16	4
- Milkfish	509		136		1244	659	166	140
- Tilapia							53	95

Source: DGF. 1990. of cit.

Note : w=inside the project area; w/o=outside the project.

Table 45

Costs and Returns of BADP Sample Households (Rp 1000/Ha/Year), 1989.

Inputs	Cirebon		Brebes		Pati		Gresik	
	W	W/O	W	W/O	W	W/O	W	W/O
I. Total Revenue	1530	10656	0217	24019	2727	1702	1876	1445
- Shrimp	596	10656	0101	24019	791	953	1446	1217
- Milkfish	920	0	91	0	1915	749	304	172
- Other fish	14	0	26	0	21	0	46	56
II. Variable costs	1088	8907	14597	15938	2008	1007	798	813
- Brood	341	1643	3085	2554	773	533	352	349
- Ferty & Lime	32	108	129	113	46	34	15	17
- Chemicals	28	115	213	146	12	15	9	5
- Feed	232	3650	7179	8319	123	14	38	28
- Hired labor	423	2336	2897	3567	1025	353	331	376
- O & M equipment and machinery	32	1055	1094	1240	28	59	53	38
III. Gross farm income (I-II)	442	1749	-5621	8080	720	695	1078	632
IV. Capital cost adjustment	404	3790	6569	6335	742	397	326	317
- Depreciation	12	584	1314	597	19	34	39	24
- Interest of cash outlays	392	3206	5255	5738	723	363	287	293
V. Net farm income (III-IV)	38	-2041	-948	1745	-22	298	752	315
VI. Family labor **	105	183	311	23	267	822	1147	847
VII. Residual (V-VI)	-67	-2224	-1259	1722	-289	-524	-395	-532

Source: DGF. 1990. op cit.

Notes: Assumed 36% of variable costs

** Assumed the opportunity costs of family labor is equal to prevailing average wage rates.

ANNEX L

SOCIO AND ECONOMIC SOUNDNESS ANALYSIS

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INTRODUCTION

SOCIO-ECONOMIC IMPACT OF THE AGRIBUSINESS DEVELOPMENT PROJECT USING A SAM-BASED MODEL

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INTRODUCTION

This annex seeks to identify the socio-economic impact of a project designed to promote agribusiness development through policy reform that leads to freer markets and targeted promotion, while directly assisting private sector producers associations. The search for benefits must be conducted among entrepreneurs, workers, and input suppliers to agribusinesses. Detailed information on two of the segments to be supported, horticulture and fisheries, is presented in other Annexes. Overall project impact would include the benefits accruing to the horticulture and fisheries segments, and two or three other segments that will be added to the project over the course of its five-year life.

Rather than build a hypothetical model of an enterprise and its beneficiaries, multiplying by some number to acquire overall project impact, the Design Team has elected to search through the economic models that apportion increases in production among household income recipients. Through the assistance of the DSP II project, data has been assembled that allows magnitudes to be examined and considered.

Both the model and the data presented are open to criticism, but there are none better available. We believe the following presentation provides general approximations of the beneficiaries, and by how much they might benefit, if the project is successful.

SOCIO-ECONOMIC IMPACT OF THE AGRIBUSINESS DEVELOPMENT PROJECT USING A SAM-BASED MODEL

Introduction

This analysis is based on the proposition that the Agribusiness Development Project will have an impact on the growth rate of exports in horticultural and fisheries processing activities. While increasing exports is not the sole or even primary objective of the project, export earnings are important to national development and will be one outcome of a successful agribusiness project.

Current growth rates in many segments of the agribusiness subsector reflect underperformance against unsustainable medium term potential due to policy and regulatory, entrepreneurial management, input supply, quality, and marketing constraints. Where the project is successful at addressing such problems, growth rates of domestic and overseas sales should increase. The analysis that follows is based upon growth rates of exports since only export earnings allow the disaggregation necessary to identify horticulture and fisheries in the input/output model.

Given Indonesia's current statistical classification system, agribusiness activities per se are actually spread over several categories, including basic agricultural production, industrial processing, and services related to research, marketing, and distribution (trade and transport). There is no sure method of separating strictly agribusiness activities from other activities in these sectors.

While this mis-match between the broad, cross-cutting definition of agribusiness and the existing classifications is regrettable, it is still possible to indicate the orders of magnitude of benefits flowing from a project focussing on expanding agribusiness activities. Almost all chains of agribusiness activities involve some type of processing, whether it be simple packaging or more complicated techniques such as freezing, or canning. Input-output (I/O) tables are constructed to recognize the links between different sectors of an economy, and these tables are, in effect, simple models representing the magnitudes of various levels of inputs along the processing chain.

Even more useful for a socio-economic impact analysis, the Indonesian I/O table has been expanded into a Social Accounting Matrix (SAM), incorporating consumption and income distribution patterns by type of household. This makes it possible to determine to what extent expansion in certain sectors generate increased income flows for low-income versus high-income groups.

Elements in the Analysis:

- Absolute level and growth trends for 6 segments within the fisheries and horticulture sectors (Table 1);
- Estimates of the expected rate of growth in each sub-sector with and without the project (Table 1);
- The direct impact of the project is the difference in sales between the "with" and "without" estimates over a 5-year period (Table 1);
- The 1985 Social Accounting Matrix (an extended version of the Input-Output Table) provides a framework for estimating the multiplier impact of changes in the two main sectors, horticulture and fisheries (Table 2);
- Changes in total output, income, and consumption by four household types encompasses the direct and indirect effects of the project, with special emphasis on distribution of income effects (Tables 2 and 3);
- The capital intensity and industrial structure (number of establishments) of existing enterprises can be used to determine at least the order of magnitude of investment, employment generation, and impetus to small and medium sized establishments that are consistent with the increase in output estimated in Table 1 above, (Tables 4, 5, 6 and 7); and
- Female participation rates in horticulture and fisheries segments (Table 8).

Growth Rate Projections

Export figures for 1983-88 for 6 commodity lines are aggregated into two segments and presented in Table 1. These figures, extracted from a Ministry of Agriculture database, have been converted from nominal US dollars to real 1988 dollars using the US GDP deflator from the IMF International Financial Statistics, Aug. 1990 in order to remove spurious inflation from the growth figures. The average real annual growth rate has been calculated using the exponential growth formula, and the same trend is extended to 1992. Assuming that the project can begin affecting agribusiness growth rates in 1993, and that benefits beyond a 5-year period are too problematic to reasonably forecast, growth rates and total exports for the period 1993-98 are projected.

This difference between growth rates with and without the project is a subjective judgment. A sensitivity analysis determined that exceedingly small changes in rates of growth over the five year period led to very large changes in export growth. As a reality check, the rates chosen for the project are lower

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TABLE 1:
EXPORTS IN MILLIONS OF CONSTANT 1988 US$

SUB-SECTOR	1983	1984	1985	1986	1987	1988	EXPONENTIAL AVG ANNUAL REAL GROWTH RATE (83-88)	ESTIMATED EXPORT BASE IN 1992	<- GROWTH RATE -> 1993-98 WITHOUT PROJECT	WITH PROJECT	<- EXPORTS -> 1993-98 WITHOUT PROJECT	WITH PROJECT	NET INCREASE
Vegetables	6.2	7.1	7.1	5.9	7.4	13.6	17.1%	26	14.0%	15.0%	248	257	9
Fruits	5.7	13.3	17.2	14.5	15.2	20.4	28.9%	56	22.0%	23.0%	719	743	24
Shrimp	227.0	219.6	221.6	303.2	363.0	499.8	17.1%	940	12.0%	13.0%	8,541	8,838	297
Tuna	17.3	12.0	15.1	19.3	31.9	52.9	25.1%	129	15.0%	16.0%	1,303	1,348	45
Other Sea Fishes	6.0	4.5	5.0	5.2	12.5	14.4	19.3%	29	15.0%	16.0%	294	304	10
Other Fish	49.9	42.5	41.4	70.3	80.9	146.9	24.1%	349	20.0%	21.0%	4,155	4,296	141
SUB-TOTALS:													
Horticulture:	11.9	20.3	24.3	20.3	22.7	34.0	23.3%	79	20.6%	21.6%	967	1,000	33
Fisheries:	257.0	248.0	259.0	374.0	474.0	714.0	22.7%	1,617	12.4%	13.4%	14,293	14,786	493
TOTAL:	268.9	268.3	283.3	394.3	496.7	748.0	46.0%	1,696	12.9%	13.8%	15,260	15,786	526

Source: Intersys Report, Table 1 (note that some items were incorrectly reported as thousands instead of millions)

1% level:	526
4% level:	2,206
10% level:	6,072

Increase in growth with project expressed as "% level".
Change this value to expore different growth rates ===> 1%

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than average growth rates for the period 1983-1988. It is the difference between the with and without growth rates that provide project impact. The Design Team settled on one percentage point across all commodity lines to distinguish the impact of the project on horticulture and fisheries segments of the agribusiness subsector.[1]

The details of export projections for the years between 1993 and 1998 are not shown in the table, but the sum of the difference between them is presented as the last column in Table 1 and the first column in Table 2.

Economic Soundness of the ADP Project

The above economic analysis indicates that the ADP has a high degree of economic soundness. Even if project benefits are measured only in terms of export growth of horticulture and non-marine fisheries products, the "with/without" project analysis shows that the net increase in the value of exports is $525 million for this $27 million project spanning six years. This is based on a total additional value of production of $1.7 billion, with $300 million in new investment. Of course, additional economic benefits are expected to accrue from project activities in the livestock or other sub-sectors later in the project. Also, economic benefits will accrue from policy reforms, training, strengthening of private agribusiness organizations, and changing the role of the public sector to more fully facilitate private sector activities. Given the strongly positive rate of return to this project when only a few activities are quantified, it was decided to not incur greater expense in trying to quantify expected benefits from these other activities.

Indirect Impact Measured by Social Accounting Matrix (SAM)

The Central Bureau of Statistics (BPS) has recently completed a SAM based on the 1985 Economic Census. The part of the SAM used here is essentially an augmented input-output matrix, with the **A** matrix of input-output coefficients bordered by smaller matrices showing the distribution of income from the economic activity in each sector among four household types (matrix **B**), and the distribution of consumption of each sector's output across those same households (matrix **C**). This section describes briefly the steps involved in the calculation, and the strengths and weaknesses of the SAM formulation for the present application.[2]

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[1] This is a key assumption that relates to the magnitude of the benefits, but does not affect the distribution of benefits among households.

[2] Rather than use the <u>total (domestic + imports)</u> I/O coefficients, here we use the domestic alone. This way, increases in demand are not all assumed to be supplied by

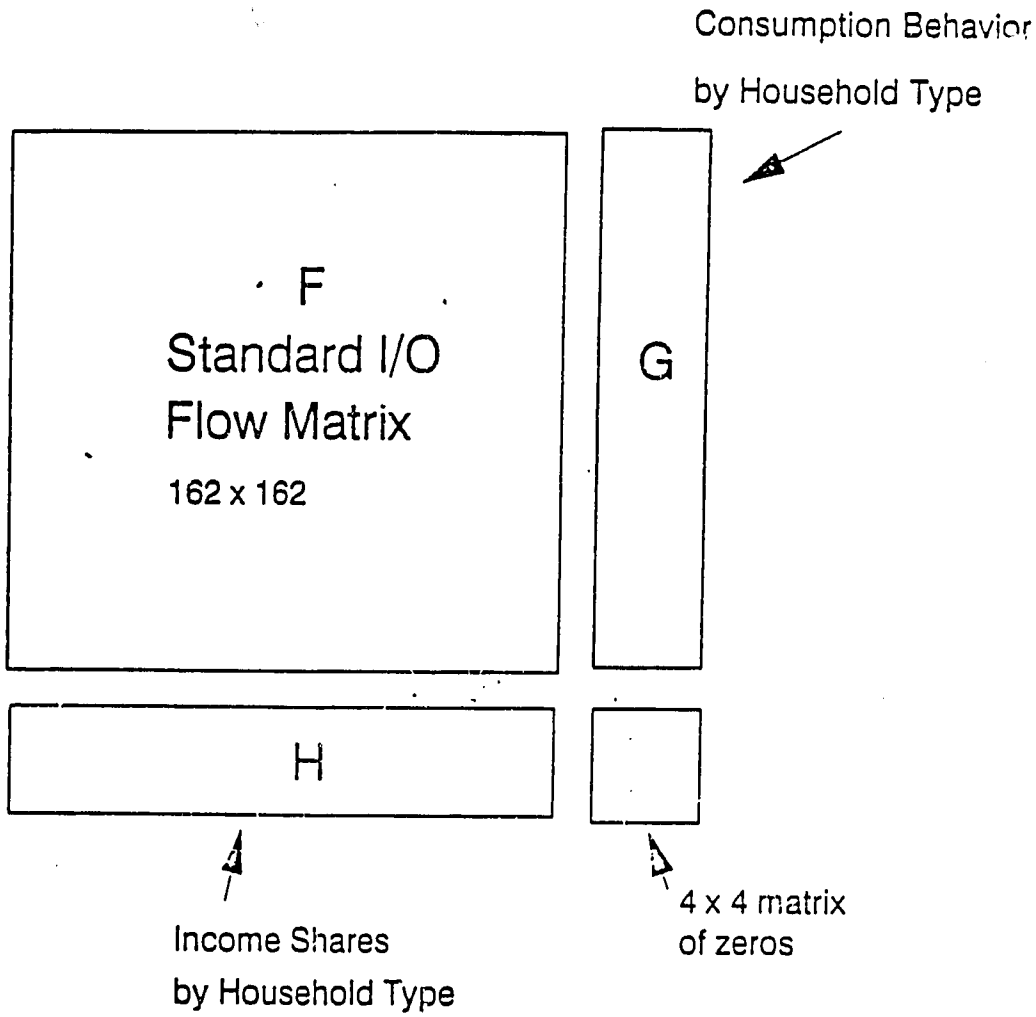

Figure 1
Social Accounting Matrix

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TABLE 2:
CALCULATION OF PROJECT BENEFITS (MILLIONS OF CONSTANT 1988 US$)

SUB-SECTOR	TOTAL INCREASE IN EXPORTS OVER 1993-98	EXPORT MULTIPLIER EFFECT	INCREASE IN OUTPUT	< -- HOUSEHOLD TYPE -- > AGRIC WORKERS	AGRIC PROP-RIETORS	NON-AG LO-WAGE EARNERS	NON-AG HI-WAGE EARNERS
Vegetables	9	3.16	27	1	9	4	6
Fruits	24	3.16	77	3	24	10	17
Shrimp	297	3.25	964	53	415	145	246
Tuna	45	3.25	146	8	63	22	37
Other Sea Fishes	10	3.25	33	2	14	5	8
Other Fish	141	3.25	460	25	198	69	117
SUB-TOTALS:							
Horticulture:	33	3.16	104	5	33	13	23
Fisheries:	493	3.25	1,602	89	690	242	409
TOTAL:	526	3.24	1,706	93	723	255	432

1 – Export estimates based on Table 1.
2 – Multiplier effect and distribution of income derived using BPS 1986 SAM.
3 – Investment and employment generation estimates are based on ratios derived in Table 8.

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The analysis begins with the flow matrix, F, of a standard input-output table (the standardized BPS 162-sector input-output table for domestic transactions is used here), which details the inputs needed from each sector in order to produce the output of a single sector. As an example, the purchases of the fish products processing sector shows as a column of numbers, where the single largest element is purchases of freshly caught (unprocessed) fish. While purchases from other firms are part of the standard input/output formulation, the purchases of households (matrix G) can be added as four additional columns (the information is derived mainly from BPS' annual household consumption survey, Susenas). Similarly, from BPS' household income and employment survey (Sakernas), the builders of the SAM were able to augment the standard flow matrix with a description of which type of household received the income generated in each sector (matrix H). Figure 1 depicts the relationship between these matrices.

In order to estimate the impact of an expansion in activity in a single sector, it would be a relatively straight forward matter to augment the inputs column for that sector by a fixed percentage. For example, a ten percent increase in demand for canned vegetable products should generate an increase in purchases of inputs from the fresh vegetable producers of ten percent, etc. The additional income generated for workers in the canned vegetable sector would also be ten percent greater in each income group, and the additional consumption by income group could be derived from the G matrix.

However, this will only capture the <u>first-round effects</u> of the original increase in demand. It would fail to take into account the impact of additional income on each of the upstream industries supplying inputs to the canning sector, and the effect of their increased consumption on the demand for other products (such as rice and housing) that are totally unrelated to the canning sector.

The indirect impact of the increased activity in vegetable canning sector will be an infinite series of successively smaller demands making their way through the system, a phenomenon

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domestic production, but by a historically accurate split between imported and domestic production. This procedure, too, has its disadvantages in the current context, since, during the period we are forecasting (mid 1990s), the proportion of domestically supplied industrial inputs may have risen. However, on the whole, the assumption that some inputs will be imported is more attractive, and the shares for 1985 is a good first approximation of the shares in 1995.

Since increases in domestic demand are not all met domestically, the multipliers we observe should be "damped", and indeed they are compared to the original projections.

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normally referred to as the <u>income-consumption multiplier</u>. The multiplier effect is captured by converting the flow matrices (**F**, **G**, and **H**) to unit coefficients (matrices **A**, **B**, and **C**), forming a single large matrix **AA**, and calculating the Leontieff inverse of **AA** using the formula $Z = [I - AA]^{-1}$. As in a standard input-output framework, the **Z** matrix can now be used to derive outputs, by using the relationship $X = ZY^*$, where Y^* is the vector of "exogenous" final demands (final demand - private consumption).

In this model, the element of Y^* corresponding to a particular sector, such as vegetable canning, is increased by the amount of additional exports that is forecast, and the resulting **X** vector shows the increase in output for each sector, as well as the distribution of income for the four household types. Thus the total export multiplier for Sector 53 (processed and preserved vegetables) is 2.16, and the export multiplier for Sector 54 (processed and preserved fish) is 2.71. (The standard input-output framework attributes a much lower share of this total to income earners than the model presented here, because all sources of income are distributed to the four household categories, not just wages. Thus retained earnings takes up a much smaller proportion of value-added in this formulation.)[3]

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[3] There are several shortcomings to a social accounting matrix framework which deserve mention. First, in this demand-driven model the high multipliers are based on the assumption that there is excess supply of all factors of production at current prices. In an economy with a rate of inflation that has recently climbed to ten percent per year, this assumption is violated. Capital and skilled workers are two factors for which the market price has risen recently. However, Indonesia has by no means hit sharp supply constraints in all markets, and there is no strong evidence of particularly binding constraints in the sectors under consideration. This implies that the multiplier effects may not reach their theoretical maxima.

Second, the parameters for individual sectors only represent averages. So while imports represented the lion's share of industrial inputs in 1985, domestic supply may play a significantly larger role by 1995. A careful analysis would probably result in upwards revision of the multiplier.

However, increased domestic consumption has not been estimated separately for the two product categories. This is not based on solid theoretical reasoning, but simply due to the lack of data on total production which is as consistent and reliable as the reporting on exports. If such data had been available, a lower multiplier would be used for increased domestic sales, primarily because some demand for horticulture and fish products will simply be diverted from other products, such as rice and meat. The effect of this omission on the Socio-Economic Impact Assessment will also tend to increase the multiplier effect (some portion of the new domestic sales will be new, rather than

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Tables 2 and 3 summarize the income distribution effects of the multiplier, where the four income groups are:

- Agricultural workers;
- Agricultural proprietors, aggregated from owners of less than .5 hectare, .5 to 1 hectare, and over 1 hectare;
- Low-wage non-agricultural workers; and
- High-wage non-agricultural workers (including owners of capital who are paid a salary).

Table 3B displays the percentage shares of the projected increase in output among the four household types, and everything else, aggregated from retained earnings, depreciation, indirect taxes and subsidies. There are several interesting relationships that are important for ADP. First, the returns to capital, mainly retained earnings with a much lower share for depreciation and even less for indirect taxes and subsidies, are below 20 percent of the total increased production for all categories except processed commodities.[4] In processed vegetables or fish, returns to agricultural proprietors are lower while returns to skilled workers higher, as would be expected.

Second, agricultural proprietors: small farm and shrimp pond owners, fisherman, those growers of fruit and vegetables on less than half a hectare, receive half of the total increase in income. Low wage and high wage workers, either agricultural or non-agricultural in approximately equal amounts (18 percent each) and proprietors make up more than two thirds of total returns. The remaining third is split between high wage earners and owners of capital.

For a project that promotes a private sector that requires returns to capital to compensate for increased investment, this distribution of shares of increased output from exports seems

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diverted demand), since these omitted sales are benefits derived from the project. The net effect of these shortcomings of the model makes it likely that the overall order of magnitude of the multiplier as it appears in tables 2 and 3 is conservative but reasonable.

[4] It is impossible to say what proportion of the combination of retained earnings, depreciation and indirect taxes and subsidies are used for investment, since some firms park their retained earnings abroad, and thus it just becomes corporate savings that is deferred (or hidden) income. In any case, the breakdown between depreciation and actual retained earnings is of no use in predicting investment.

TABLE 3A: MULTIPLIERS AND DISTRIBUTION OF HOUSEHOLD INCOME

HORTICULTURE SEGMENT	AGRIC WORKERS	AGRIC PROP-RIETORS	NON-AG LO-WAGE EARNERS	NON-AG HI-WAGE EARNERS	RETAINED EARNINGS/ DEPRECIA	TOTAL INCREASE	MULTIPLIER
OTHER BEANS	25	192	37	59	45	358	3.58
FRESH VEGETABLE	25	185	35	55	49	349	3.49
FRESH FRUIT	24	179	33	52	52	340	3.4
PROCESSED VEGE	11	76	28	41	60	216	2.16
AVERAGES	21	158	33	52	52	316	3.16
FISHERIES SEGMENT	SHARES OF HOUSEHOLD INCOME						
SEA FISH	21	163	33	53	51	321	3.21
FRESH WATER FISH	21	165	32	51	54	323	3.23
DRIED FISH	26	209	41	64	43	383	3.83
PROCESSED FISH	15	113	35	54	54	271	2.71
AVERAGES	21	163	35	56	51	325	3.25

TABLE 3B: MULTIPLIERS AND DISTRIBUTION OF HOUSEHOLD INCOME PERCENTAGES

HORTICULTURE SEGMENT	AGRIC WORKERS	AGRIC PROP-RIETORS	NON-AG LO-WAGE EARNERS	NON-AG HI-WAGE EARNERS	RETAINED EARNINGS/ DEPRECIA
	PERCENTAGE SHARES OF HOUSEHOLD INCOME				
OTHER BEANS	0.07	0.54	0.10	0.16	0.13
FRESH VEGETABLE	0.07	0.53	0.10	0.16	0.14
FRESH FRUIT	0.07	0.53	0.10	0.15	0.15
PROCESSED VEGE	0.05	0.35	0.13	0.19	0.28
AVERAGES	0.07	0.49	0.11	0.17	0.17
FISHERIES	PERCENTAGE SHARES OF HOUSEHOLD INCOME				
SEA FISH	0.07	0.51	0.10	0.17	0.16
FRESH WATER FISH	0.07	0.51	0.10	0.16	0.17
DRIED FISH	0.07	0.55	0.11	0.17	0.11
PROCESSED FISH	0.06	0.42	0.13	0.20	0.20
AVERAGES	0.06	0.50	0.11	0.17	0.16

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reasonable. Grouping the first three categories of households: agricultural and non-agricultural low wage workers and agricultural proprietors together, **two thirds of the increased income accrues to low or medium income families.**

Employment and Investment Generation

Using data that provides both output/worker and capital/worker from the 1988 BPS Census of Manufacturing Establishments, it is possible to predict the employment and new investment to be generated by the estimated increased output **assuming that linear relationships hold for the period 1993-1998.** Table 4 shows the derivation of the relationships in 1988, Table 5 uses these to predict nearly 100,000 new jobs, and 300 million dollars in new investment, based upon a total value of production of 1.7 billion 1988 dollars on increased export earnings of approximately 500 million dollars.

Even reducing the estimated increase in exports by half, or two-thirds retains strong benefits for the Agribusiness Development Project in generating increased employment, income and investment.

Capital/Labor Ratios

Tables 6 and 7 investigate the capital/labor ratios in the two agribusiness segments. The small number case in horticulture and fisheries, where establishments are desegregated by number of employees, shows no strong relationship between number of employees, capital base, and the K/L ratio. The range is relatively low, $2,000 in fisheries reflecting, we assume, the low investment in tambak shrimp ponds, and the number of workers required. Higher average horticulture numbers, $7,000 per worker, reflect two large processing firms undoubtedly using expensive, imported machinery.

Table 7 provides K/L ratios for Cold Storage Enterprises that show, generally, that the larger the investment the higher the K/L ratio, but with significant deviations. With an average of $4,555 in capital per worker, this subdivision of the fisheries industry still retains good employment prospects when new investment is committed.

Female Participation Rates

Table 8 displays the female work force in horticulture and fisheries by size of firm. For reasons that are not obvious from the figures, as the size of the fisheries enterprises goes up, the percentage of female participation goes up, suggesting processing lines employing mainly female labor. Yet for horticulture, female participation decreases with firm size. Yet both are significant employers of females, particularly in the

TABLE 4
OUTPUT AND CAPITAL PER WORKER

SECTOR	N	TOTAL WORKERS	OUTPUTS	OUTPUT/ WORKER	CAPITAL/ WORKER
HORTICULTURE	11	7,233	38,107,938	5,269	7,108
FISHERIES	118	14,487	272,781,787	18,829	2,076

SOURCE: 1988 BPS CENSUS OF MFG ESTABLISHMENTS AND 1986 ECONOMIC CENSUS. OUTPUTS AND CAPITAL IN USD CONVERTED FROM 1988 RUPIAH AT 1850 TO $1.

TABLE 5
EMPLOYMENT AND INVESTMENT GENERATION

SECTOR	INCREASE IN OUTPUT	EMPLOYMENT GENERATION	INVESTMENT GENERATED
HORTICULTURE	104	19,738	140
FISHERIES	1,602	85,082	177

SOURCE: CALCULATED FROM TABLES 1 AND 8. OUTPUT AND INVESTMENT IN MILLIONS OF US DOLLARS CONVERTED FROM 1988 RUPIAH AT AT 1850 TO $1.

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TABLE 6:
CAPITAL/LABOR RATIO

	31130 – HORTICULTURE				31140 – FISHERIES			
SIZE	LABOR	CAPITAL	N	CAPITAL/ LABOR RATIO	LABOR	CAPITAL	N	CAPITAL/ LABOR RATIO
< 20	33	107861	2	3,269				
20–49	28	19054	1	681	325	3401205	12	10,465
50–99					434	1052492	6	2,425
100–199					2411	6535580	17	2,711
200–499	307	1307241	1	4,258	2688	3501648	9	1,303
500 +	1650	12909468	2	7,824	1544	872757	2	565
ALL	2018	14343623	6	7,108	7402	15363683	46	2,076

NOTES:

1 CAPITAL IN 1986 CURRENT RUPIAH CONVERTED TO USD AT 1850 TO $1
2 N IS NUMBER OF ESTABLISHMENTS IN SAMPLE (NOT A CENSUSI)
3 SOURCE: BPS 1986 ECONOMIC CENSUS OF MANUFACTURING ESTABLISHMENT

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Table 7: Capital/Labor Ratios

Cold Storage Enterprises in Indonesia			EMPLOYMENT GENERATED	CAPITAL/LABOR RATIO
COMPANY	INVESTMENT (Rupiah)	(US$) *		(US$)
PT KEDAMAIAN	2,250,000,000	1,216,216	1168	1,041
SARANA BAHAGIA	9,027,000,000	4,879,459	700	6,971
PT LAUT SUBUR	2,721,587,155	1,471,128	622	2,365
PT CENTRAL JAVA MARINE	2,158,950,000	1,167,000	423	2,759
PT SEMARANG COLD STORAGE	1,329,935,923	718,884	420	1,712
CV DHARMA MULIA	6,916,420,000	3,738,605	415	9,009
PT TRI FOOD INDUSTRI	130,400,000	70,486	315	224
PT SURABAYA MARINE PRODUCT	1,583,012,500	855,682	285	3,002
PUMAR	550,000,000	297,297	274	1,085
PT SEKAR MULIA	1,161,000,000	627,568	250	2,510
PT WIRONTONO COLD STORAGE	2,285,481,000	1,235,395	206	5,997
PUSKUD MINA BARUNA	1,435,460,000	775,924	195	3,979
PT CENTRAL JAWA COLD STORAGE	900,000,000	486,486	180	2,703
PT MINA MAS UTAMA	1,249,090,000	675,184	118	5,722
PT ALIMA UTAMA	614,879,000	332,367	105	3,165
PT SEKAR BUMI	2,300,000,000	1,243,243	81	15,349
PT INDONESIA BULFORG INDUSTRI	357,299,000	193,135	81	2,384
PT NAGA MAS SAKTI PERKASA	1,200,000,000	648,649	79	8,211
PT SEKAR MULIA	515,600,000	278,703	55	5,067
PT INDO SUBUR	74,731,908	40,396	42	962
PT KSATRYA BHAKTI	782,518,735	422,983	37	11,432
AVERAGES:	1,883,017,391	1,017,847	288	4,555

* Investments converted to US$ at Rps1850 = $1.

Source: P.T. Intersys Compilations

TABLE 8
FEMALE PARTICIPATION RATES

SIZE	31130 TOTAL FEMALE	31130 TOTAL MALE	31140 TOTAL FEMALE	31140 TOTAL MALE	PERCENT FEMALE HORT 31130	PERCENT FEMALE FISH 31140
< 20	17	16	.	.	52%	–
20–49	10	18	142	183	36%	44%
50–99	.	.	135	299	–	31%
100–199	.	.	1,135	1,276	–	47%
200–499	164	143	1,906	782	53%	71%
500 +	392	1,258	1,376	168	24%	89%
ALL	583	1,435	4,694	2,708	29%	63%

FROM SAMPLE OF BPS 1986 "ECONOMIC CENSUS"

fisheries segment which, when ranked by the projected increase in production, is 15 times larger than horticulture.

Social Soundness Analysis

The analysis above indicates that this Project has a high degree of social soundness as evidenced by analysis according to the six dimensions of the SSA outlined in Handbook 3. The ADP provides initial "bridging" technical assistance to develop base-line impact-level data including disaggregation of beneficiaries by sex. The Steering Committee meets every six months and will review, among other things, new product-line initiatives and their implication for employment and income generation among the poorer elements of society.

Context This Project has been designed in a context which, on the one hand is highly regulatory and constraining of agribusiness development, but on the other, is favorable to the extent that significant changes are both possible and underway. In addition, Indonesia is undergoing impressive, sustained economic growth, much of which is increasingly based on growth of the non mineral export sector, including agriculture. Furthermore, the GOI is committed to opening the economy to private sector initiative, and espouses in clear and determined terms its commitment to broad-based development that recognizes and takes into account the needs of the rural poor. While there is a widely recognized and significant gap between the modern and traditional sectors, this project, by focussing on a dynamic aspect of agriculture which is capable of spawning jobs at all income levels, should work to reduce this gap.

More than 80 percent of agro-processing as well as consumption occurs on the island of Java, but the potential long-term growth areas are outside Java. The project has chosen Java as the headquarters, but with a branch office in one of these outer islands. There is an ethnic dichotomy between those in the ministries, and those in private agribusiness who tend to be much wealthier. The project will work on bridging this gap by setting up the Private Sector Office and by strengthening the agribusiness associations in conformance with the social objectives of the GOI.

Beneficiaries As described in detail in the Institutional Analysis, this Project is targeted at one "niche" in the overall sector of agriculture and agribusiness. Other donors, and the GOI, are making major investments in other parts of the sector, e.g. in credit for agribusiness, development of raw materials, village level production, etc. This Project aims to promote agribusiness development throughout Indonesia, initially at the level of medium scale business, and to the extent possible, with small scale businesses as well. It will do so by focussing on the two interlocking components of deregulation and privatization

of decision-making in the government arena, and with private sector business organizations in the private sector. This two pronged approach is based on the assumption that if agribusiness opportunities are opened up, a great number of individuals and families will indirectly benefit from the resulting incomes and jobs. The selection of fisheries and horticulture was made in part based on the assumption that interventions in these areas will realize significant indirect benefits for farmers and fishermen across the islands of Indonesia.

The direct beneficiaries of project activities will be business people involved mainly in the private sector agribusiness organizations. Policy makers in various ministries will also benefit from interaction with the Project.

Recognizing the need to ensure a "level playing field" for potential beneficiaries, special studies and monitoring will be carried out before and during project implementation. In particular, gender disaggregated analysis will be carried out to ensure that women have equal access to benefits forthcoming from the Project, especially including the employment opportunities opened up by deregulation and membership in agribusiness organizations.

In addition, patterns of involvement of potential beneficiaries from a range of ethnic groups will be tracked to ensure that obstacles to openness and equal access are identified and removed. It is emphasized, however, that although the Project will involve itself directly with assistance to the GOI in deregulation, it will not attempt to "engineer" social policy. The aim is to open up opportunity and to help individuals and groups take advantage of the increased access provided, and to monitor and identify any major significant negative effects that occur as a result of deregulation and improved information flows and management skills.

Participation A critical issue in project design is the extent to which the incentives are favorable among potential individuals and groups having a stake in Project activities to generate and sustain the participation aimed for under the Project. At the GOI institutional level, the constructive and sustained collaboration of various ministries, especially Agriculture and Industry, will be an essential to project success. Participation of a wide variety of businesses from representative regions in the agribusiness organizations is also critical.

The concerns listed above underscore the need for an efficient management information system which can rapidly identify and respond to participants' needs and interests. Provision of useful information through mass media (e.g. via a monthly journal, radio, etc.) is an example of the means to be explored. Also very important to the success of the Project is the spread effect to occur as membership grows and additional organizations are formed. In addition to an MIS to track demand and supply,

the Project will also fund specific studies carried out to address ways in which the regulatory framework constrains sustainable participation, e.g. within and across government ministries. Factors inhibiting the creation and spread of legal agribusiness organizations throughout Indonesia will be another key topic. Pilot interventions are also planned as a means to identify and test viable approaches prior to major investments.

Sociocultural Feasibility Despite Indonesia's diversity of geography, societies, and history, the GOI displays a strong national commitment to balanced development. A major objective of the GOI is to promote agricultural development across the breadth of the country. It is aided in this aim by a single national language, and a traditional economy based on agriculture. While there are ethnic groups which have historically had greater involvement in agribusiness than others, such as the ethnic Chinese, for example, the aim of the GOI, and the Project is to increase access to opportunities in the sector across the variety of ethnic groups and regional economies of Indonesia.

Although national in scope, an initial focus on horticulture and fisheries will result in project activities being undertaken in two areas in which there is already extensive knowledge and experience as to how various ethnic groups and individuals within these groups will take advantage of opportunities provided. Establishment of management information systems described in the Monitoring and Evaluation section of the PP will assist in providing additional information as to how opportunities offered under the Project will be taken advantage of by various groups and individuals.

Impact A key to success of this Project is its multiplier effect. Mainly this will occur: 1) through the replication effect of other successful private sector agribusiness organizations being formed following success of those in existence (assuming deregulation creates the conditions for replication); 2) through the spread effect of agribusiness expansion leading to new companies being formed, job creation and raised incomes throughout the economy; and 3) through the creation of communication linkages across public-private, central-regional, and gender lines.

The MIS will be structured to track these three dimensions of Project impact. This information will then be used by the GOI to change policies/regulations/incentives to promote different patterns of growth if imbalances are identified. Special studies will also be used to better understand the dynamics of agribusiness, the incentives for participation, and the various effects on different groups that stand to win or lose from project-related activities.

Issues By encouraging improved lines of communication among GOI ministries, between the GOI and the private sector, and among

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private sector firms, this Project will shake up existing relations, and may even challenge some "sacred cows." The Technical Assistance Team will have to be sensitive to shifts away from tradition-bound patterns of communication.

ANNEX M

MACROECONOMIC ANALYSIS

Growth Rate

The capacity for growth of the Indonesian economy is one of the key factors that will influence the success or failure of a private sector development project such as ADP. During the period 1968-81, the real gross domestic product (GDP) grew at an 8% annual rate, driven by public sector investment programs that concentrated on infrastructure and credit delivery, which in turn was supported by oil and gas export revenues.[1] When oil prices fell in 1981, government investment was slashed and many infrastructure projects were cancelled or left incomplete, and the growth rate fell correspondingly, averaging 3% per year. Only recently, under the Fifth National Development Plan (Repelita V), has the economy's growth rate rebounded again to the 7-8% range.

The conventional explanation for this pattern relies on the correlation between the world price of oil and Indonesia's growth rate. It is for this reason that the authors of Repelita V decided that the prudent course would be to plan for a 5% growth rate based on a conservative $13 per barrel estimate of the oil price. By planning for lower growth, they have set some of their infrastructure investment targets unnecessarily low; on the other hand, their low forecast has had the perhaps unintended effect of shrinking the public sector share of the economy.

Another explanation has emerged[2] which, while only subtly altering the interpretation of recent events, offers greater insights into what drives growth in the Indonesian economy, and has implications for sectoral and macroeconomic policies. This explanation starts by pointing out that growth needn't have fallen so drastically in the early 1980's, since demand management policies or greater openness to overseas markets could have provided the stimulus that oil-based government spending was no longer providing. In an economy with multipliers ranging from 2-3.5% by sector, it is not surprising that slashing government spending would cause a severe recession.

When government spending revived over the period 1985-88, GDP growth rates began to recover to the 5-6% range. The alternative explanation points out that, by 1986, oil revenues commanded a far lower share of foreign exchange revenues, and that other factors, such as trade and customs reform, financial deregulation, and devaluation played an equally important role in the recovery. The final confirmation of the explanatory power of this interpretation lies in the even higher growth rates (7-8% per year) achieved during 1989 and 1990, a period when oil revenues have only made up two-fifths of export earnings, but when steady devaluation, and increasing deregulation of trade, transport, banking and monopolies have made Indonesian businesses more capable of responding to world demand and better able to exploit comparative advantage.

Structure of Economy

It is revealing to examine the sectors that have contributed most strongly to the overall growth of the economy. Manufacturing, which includes food processing, has steadily risen from a 10.6% average annual growth rate over 1975-83 to 13.5% in 1988, and a respectable 12.2% in 1989.[3] Output of unprocessed agricultural commodities, on the other hand, has been fluctuating between 2.2% and 4.4% per year, and growth in services has varied between 6% and 9% per year. It is important to note that, while all agribusiness production has its roots in agriculture, the greatest increase in agribusiness activity will be reflected in the national accounts as an increase in value-added in services and manufacturing -- not as increased agricultural production.

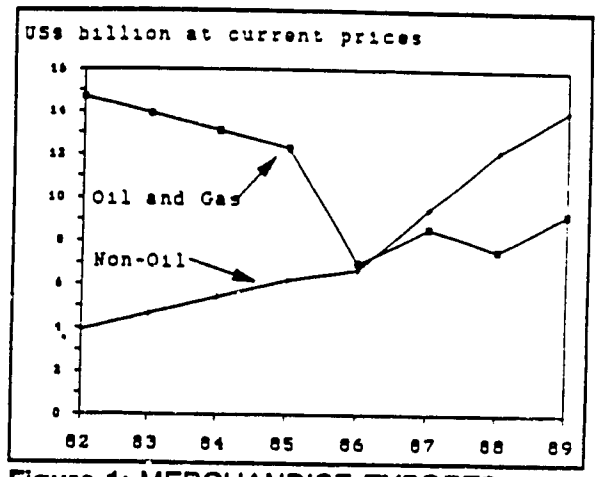

Figure 1: MERCHANDISE EXPORTS

Therefore it is worth looking at a break-out of food-based manufacturing, rattan and fibre-based, and other manufacturing (see Figure 2). The emphasis here is on exports rather than production, not only because the data is more reliable, but more importantly, export production demonstrates efficient production, capable of meeting world standards of quality and cost-consciousness. Also, due to the generally higher sophistication required for export production, value-added per unit of output tends to be higher than for goods consumed domestically, implying more jobs and greater remuneration per kilo of farm output. As Indonesia looks for models for emulation, exports are a strong signal of excellence.

TABLE 1:
EXPORTS BY NON-OIL COMMODITY[4]

	ANNUAL GROWTH RATE 1986-1990[5]
UNPROCESSED AGRICULTURAL COMMODITIES	-8%
PLANTATION CROPS (RUBBER, COFFEE, TEA)	-4%
FOOD PROCESSING (SHRIMP, OILS, FOOD)	18%
FIBRES & FOREST (PLYWOOD, RATTAN, TEXTILES)	18%
LIGHT INDUSTRY (GARMENTS, PAPER, HANDICRAFTS)	28%
HEAVY INDUSTRY & MINING	22%
TOTAL	15%

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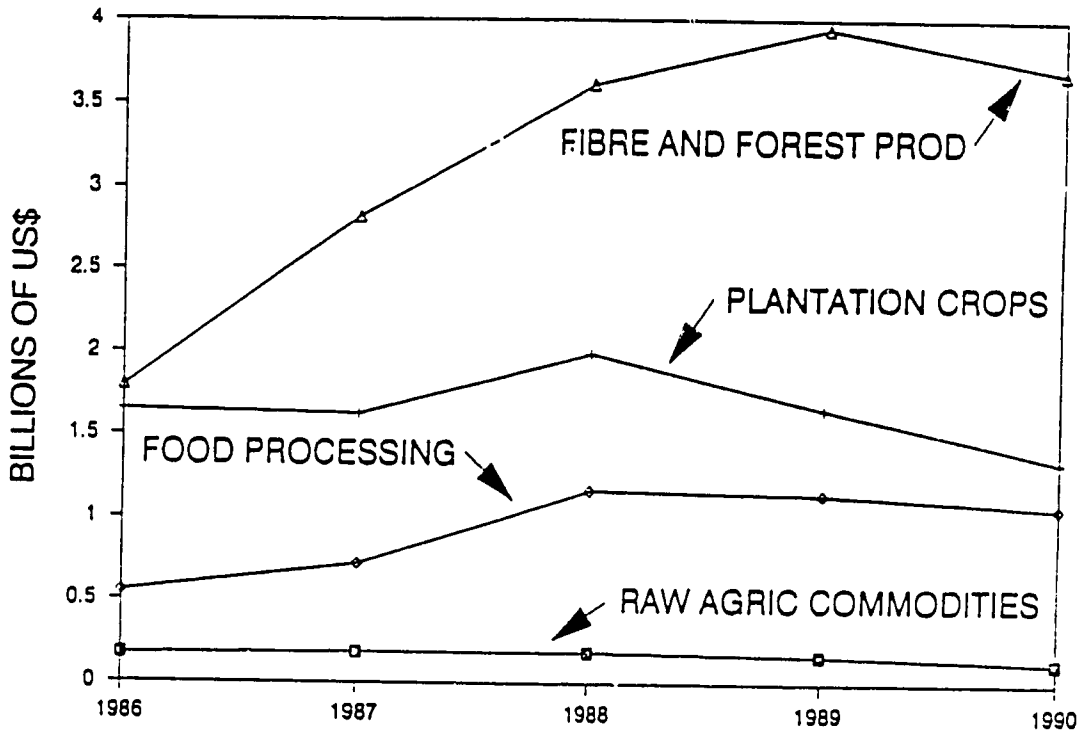

SOURCE: BANK INDONESIA (See endnote #4)

FIGURE 2:

Exports by Commodity Group

The striking increases in plywood and textile exports dominate the exports of non-oil commodities. These commodities already started from a high base in 1986, and exports grew at an 18% rate during the period covered in Table 2. Note that this is almost identical to the rate of growth of processed food products, which is the domain of agribusiness.

While it is nearly certain that plywood, rattan and textiles exports cannot continue to grow at the high rate of the past five years, due to resource and quota constraints, the outlook for food processing is less easy to forecast. One of the main factors which will determine the expansion path for these agribusiness products is the extent to which product cycle effects are observed in Southeast Asia.

Product Cycle

The product cycle concept was originally derived to explain how large shifts in trade patterns could take place in response to slight changes in economic conditions such as costs of production and technological capabilities. The sharp increase in textile and athletic shoe exports from Indonesia over the past decade is a clear example of the product cycle at work: increasing wage levels in Korea, Taiwan, Malaysia, and the Philippines, coupled with Indonesia's deregulatory drive -- both gradual phenomena -- induced buyers to shift sharply towards Indonesia.

Are world market and domestic economic conditions suitable for a similar shift in demand and supply of processed agricultural commodities? There are FOUR factors to consider:

- **Domestic Macroeconomic Conditions** have been steadily improving since the early 1980s: successive devaluations of the Rupiah, financial deregulation, tariff reductions, and low to moderate inflation have provided a strong foundation for growth.

- **Domestic Sector-Specific Conditions** have also seen secular improvement in general, but vary widely from sector to sector. Policies which promote neither economic growth nor equity still plague many sectors. These policies are described in more detail in Annex ____, "ADP Policy Matrix".

- **Trade Barriers** -- the failure of GATT's Uruguay Round to enact meaningful trade reforms to date is a serious blow to exporters of raw agricultural products, particularly countries such as Indonesia that export "tropical commodities". Those agribusiness products that are processed (counted as manufactured goods and therefore addressed by previous GATT rounds) are still subject to escalating tariffs and other forms of protection that are less prevalent for non-food manufactured goods.

- **Regional Trade** within ASEAN is dominated by exports from most members of ASEAN to Singapore, where the goods are either consumed directly or processed and re-exported to OECD countries. Several countries, notably Thailand and Malaysia, have carved out niches where they successfully export directly outside ASEAN. To date, Indonesia has only managed to combine all the elements necessary for vertical integration and export-quality production in the tuna and shrimp markets. Given Indonesia's increasing advantage in the cost of labor, Indonesia's prospects for picking up a major share of the region's agribusiness exports will depend on its ability to carry out policy reforms that accommodate agribusiness expansion.

The explanatory power of the product cycle is enhanced when the technological sophistication of the products in question are taken into account. New products using innovative methods of production are generally developed in advanced industrial economies. Once these technologies become standardized or easily replicable, less advanced economies can produce and export them more cheaply. The increasing availability of educated workers at all stages of production in Indonesia points to a rapidly growing capability to adopt more and more advanced technologies, encouraging the product cycle phenomenon.

Role of Agribusiness in Indonesia's Structural Transformation

The shift in agribusiness exports from other countries in Southeast Asia to Indonesia complements another transformation which is taking place in each of these economies -- the shift from a subsistence-dominated, agriculture-based economy to a modern manufacturing- and service-oriented industrial structure. Most of Indonesia's regional competitors are more advanced in this transformation process; this is the fundamental structural reason why these economies are facing escalating wage rates, which in turn drives the product cycle.

According to the 1990 census, there are now just under 180 million people in Indonesia. Repelita V assumes a 1.9 per cent growth rate and expects the population to grow to just under 193 million by 1993. Almost exactly sixty per cent of the population continue to live on Java, and almost 31 per cent now live in urban areas.

Labor force participation is growing at 3 per cent per annum, or just under 12 million people between 1988 and 1993. Agriculture is still expected to absorb almost 35 per cent of these new workers over the next five years, while the industrial sector will absorb only 20 per cent. Therefore, employment creation in agriculture and agribusiness has justifiably been acknowledged as the most pressing socio-economic problem facing the Government. The concern of Government centers not only on the numbers but the compotition of those newly seeking employment.

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While manufacturing value-added has grown dramatically, it still accounts for only 8% of the work force. Services account for an additional 36%, leaving 56% still engaged in agriculture.[6] The economy has already undergone a significant change since 1965, when 71% were engaged in agriculture.

But the strategy of the government of Indonesia is to encourage workers to remain in the rural areas, whether or not they are engaged primarily in agricultural production. This strategy is aimed at reducing the pressure for urban development, and all the social and economic upheavals that accompany this transformation. Again, in 1965 84% of the population lived in the countryside, as compared with 74% today.

The key to successfully implementing the government's strategy will be it's ability to generate off-farm employment. This is an area where agribusiness development has the potential to contribute both service (extension, post-harvest storage, transport, marketing) and manufacturing jobs (provision of inputs, post-harvest processing, packaging, transport).

To the extent that poverty is concentrated in rural areas, and minimum requirements for government services are higher in cities, targeting agribusiness as a priority for development would be an efficient strategy to enhance the ability of rural areas to retain their populations. The social pressures and economic costs of rural-urban migration are well understood, and while such flows are inevitable in an industrializing economy, damping the rate of migration is a desirable outcome of government policy.

Agribusiness development, off-farm employment, and rural diversification in general all imply a need to move away from the primacy of rice in agricultural policy. To the extent that government policies can be altered to promote expansion of horticulture, fisheries, livestock, spices and industrial crops, the stronger a basis can be laid for expansion in agro-based services and manufacturing, the sectors where the real increases and employment and income will be derived. Even if rice self-sufficiency continues as an inviolate principle for Indonesia, a more flexible definition involving <u>trend</u> self-sufficiency over a five-year period would reduce the resources devoted to this one crop.

NOTES

1. While it might be argued that this explanation can only adequately cover the growth following the 1974 OPEC oil price increases, the growth from 1965-74 is largely a story of rebound-type growth from a very low base left behind by the Old Order's increasingly repressive and irrational economic policies.

2. See R. M. Sundrum, "Indonesia's Slow Economic Growth: 1981-86," *Bulletin of Indonesian Economic Studies*, Vol. 24, No. 1, April 1988, and R. M. Sundrum, "Indonesia's Rapid Economic Growth: 1968-81," *Bulletin of Indonesian Economic Studies*, Vol. 22, No. 3, December 1986.

3. Source: World Bank, *Indonesia: Foundations for Sustained Growth*, May 1990.

4. The export figures are derived from the following table:

TABLE 1A: EXPORT VALUE BY MAJOR NON-OIL/GAS COMMODITIES
SOURCE: BI Indonesian Financial Statistics, June-Aug 1990 (p. 130)
(Thousands of US$)

COMMODITY	1986	1987	1988	1989	1990*
RAW COMMODITY	174,357	185,072	185,593	167,201	125,946
PLANTATION	1,651,589	1,629,346	1,991,259	1,658,815	1,342,692
FOOD PROCESSING	553,982	720,694	1,166,216	1,146,730	1,063,852
FIBRES & FOREST	1,794,283	2,827,395	3,618,569	3,949,434	3,686,174
LIGHT INDUSTRY	726,888	894,800	1,355,563	1,946,017	1,960,372
HEAVY IND & MINI	776,531	951,106	2,154,933	2,363,894	1,513,366
TOTAL	5,677,630	7,208,413	10,472,133	11,232,091	9,692,402

* *1990 data estimated from data covering January-June*

5. Exponential growth rate derived by regression on export time series by constant and time trend. This method reduces the effect of bad outlier data by weighting each observation in the series equally, rather than using only the endpoints as in standard growth rate derivations.

6. Source: Central Bureau of Statistics, *Statistic Indonesia 1989*, page 66.

ANNEX N

LOCAL SOURCE PROCUREMENT AND BUY AMERICA CONSIDERATIONS

To successfully implement and achieve the objectives of the project, local cost financing will be required. The needed goods and services, by category, are identified in the following along with a specific justification for each category.

Est.Amount $790,000 (Funded through T.A.Contract)

a. **Technical Assistance** - to implement agribusiness development activities. In implementing agribusiness development activities the majority of the technical assistance will be provided by U.S. contractor(s). However, reaching effectively the membership of Indonesian trade and producer associations requires Indonesian language skills (perhaps including local dialects) and local knowledge not normally available from outside experts. Utilization of Indonesians to perform these interaction functions as well as to extend to local people technical knowledge gained from the expatriate advisors is also very cost effective. Utilizing a local technical expert to increase the impact of a single foreign advisor by about 10% pays for the cost of a local technical assistance expert.

$1,500,000 (PIL)

b. **Technical Assistance** - to conduct studies and analyses of issues which directly or indirectly impact on agribusiness development. There are three reasons why local procurement of this expertise is required. First, an important objective of the project is improvement in the ability of Indonesian organizations to analyze the issues and provide needed information on which sound decisions can be made. This requires hands-on experience which can only be obtained by the actual conduct of such studies. Second, Indonesians and Indonesian organizations bring host country knowledge to such data collection and analysis which American sources would not bring. Working with the expatriate experts the results are thus much more likely to be immediately useful and applicable to Indonesian decision-makers. Third, the individual studies will be small in value while the range of topics will be extremely

broad. The interest of U.S. firms in these studies and their ability to field needed experts on a timely basis is likely to be limited.

$1,870,000 (PIL) c. **In-Country Training/Workshops** - to provide training of various types to members of trade/producer associations and Government of Indonesia staff. Training or the transfer of knowledge is recognized as a key to sustainability of project activities. A majority, in cost terms, of project-funded training will be provided in the U.S. or in the Region. However, given the limits of project resources, reaching significant numbers of trade/producer association members and GOI staff with new technology/practices/information can only be accomplished through in-country programs. Such in-country training/workshops also avoid the serious problem of limited English language skills which preclude participation of many people in external training programs. Utilization of Indonesian trainers, supported by U.S. technical experts, is the most effective way of providing this important project input.

$1,472,000 (through T.A.Contract) d. **Administration and Logistics** - to support project implementation and the U.S. technical assistance contractor. Operating a project in Indonesia necessarily means that a number of goods and services will be obtained in Indonesia. These include items such as housing, office space, utilities, expendable office supplies, in-country transportation and staff such as drivers, secretaries, accountants, computer operators, training coordinators and management information specialists. The use of American contract staff to fill the identified administrative staff roles would be prohibitively expensive. By their nature and as a practical matter the other goods and services can only be acquired, performed or incurred in Indonesia.

$1,026,000 (through T.A.Contract) e. **Agribusiness Promotion Office(s)** - to enable establishment and operation of centers that will provide services and support for private sector agribusiness development. Support for agribusiness development is the primary objective of the project. A method of reaching trade/producer associations with needed information and services in accessible, user-friendly locations to be tested by the project is the creation of small, agribusiness promotion

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offices. Operation of these offices will involve office rent, utilities and expendable office supplies as well as small amounts of office furniture, file cabinets, etc. Local procurement of these items is justified on the basis of small value, service availability and impracticality of procurement from U.S. sources. All computer equipment will be of U.S. source and origin.

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ANNEX O

PROCUREMENT PLAN
AGRIBUSINESS DEVELOPMENT PROJECT (ADP)
(IN US$000)

PROCUREMENT LIST	SPECIFICATION	SOURCE/ORIGIN	DELIVERY SCHEDULE	UNIT(S) PROCURED	UNIT COST	TOTAL COST	FUNDING SOURCE USAID	GOI	PRI SEC	METHODS OF PROCUREMENT
1. TECHNICAL ASSISTANCE	Umbrella contract/year	U.S.	06/92	5.5	1648	9062	9062	525	525	
A. Long-term TA	Person-years			35	154	5390	5390	375	375	Umbrella Contract
-Expatriate	Person-years	U.S.	06/92	25	206	5150	5150			
-Local	Person-years	Indonesia	06/92	10	24	240	240			
B. Short-term TA	Person-months			220	10	2200	2200			Umbrella Contract
-Expatriate	Person-months	U.S.	06/92	110	15	1650	1650			
-Local	Person-months	Indonesia	06/92	110	5	550	550			
C. Administration and Logistics							1472	150	150	Umbrella Contract
-Local-hire Administrative Support Staff	Person-years	Indonesia	06/92	81	10	812	812			
-Travel for Long-term TA and Administrative Staff						660	660			
*In-country	number of trips	Indonesia	06/92	1650	0.3	495	495			
*International	number of trips	U.S.as available	06/92	33	5	165	165			
2. SHORT-TERM TRAINING	Person-months			1141	2.5	2805	2805	792	600	
A. In-country	Person-months	Indonesia		660	2	1320	1320	400	400	Part of Umbrella Contract & GOI
B. Regional	Person-months	Third Country		264	2.5	660	660	132	100	Part of Umbrella Contract & GOI
C. U.S.	Person-months	U.S.		217	3.8	825	825	260	100	Part of Umbrella Contract & GOI

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ANNEX O

PROCUREMENT LIST	SPECIFICATION	SOURCE/ORIGIN	DELIVERY SCHEDULE	UNIT(S) PROCURED	UNIT COST	TOTAL COST	FUNDING SOURCE USAID	GOI	PRI SEC	METHODS OF PROCUREMENT
3. AGRIBUSINESS SUPPORT							3050	850	350	
A. Policy Studies	GOI studies	Indonesia	02/92	20	87.5	1750	1750	100		GOI Budgeting Process
B. Study Tours	Study tours	U.S. or Third Country		25	30	750	750	500	200	Umbrella Contract & GOI
C. Workshops and Seminars	Workshops/seminars	Indonesia		11	50	550	550	250	150	GOI Budgeting Process
4. AGRIBUSINESS SUPPORT							2526	3000	1000	
A. Trade/Production Association Grants	Grants	Indonesia	06/92	15	100	1500	1500		1000	
B. Agribusiness Promotion Office(s) Costs							1026	1000		GOI and P.T.P.
*Office Rent	Office-years	Indonesia	06/92	10.5	48	504	504			
*Utilities	Utility-years	Indonesia	06/92	13.5	12	162	162			
*Expendable Office Supplies, Databases, References, etc.	Supply-years	U.S. and/or Indonesia	06/92	15	24	360	360			
C. Agribusiness Program	GOI programs	Indonesia						2000		P.T.P. profits
5. OTHER							2557			
A. Vehicles	Minibuses	Indonesia	06/92	6	15	90	90			Direct Pay
B. Commodities							175			Direct Pay
*Computers	Hard & Software	U.S./Indonesia	06/92	17	5	85	85			
*Office Equipment	Misc.Equipment	U.S./Indonesia	06/92	3	30	90	90			
C. Evaluation	Mid and Final Evaluations	Indonesia	08/94, 07/97	2	150	300	300			Direct Pay
D. Audit	Financial & Compliance Audits	Indonesia	08/94, 07/96	2	50	100	100			Direct Pay
E. Inflation and Contingencies		Indonesia					1892			Direct Pay

ANNEX P

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