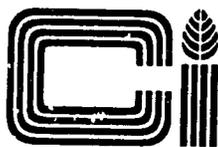


PA-ABL-656

**Executive Briefing:  
PHILIPPINES  
AGRICULTURE AND  
NATURAL RESOURCES  
STRATEGY**

**Technical Services Performed for  
USAID/PHILIPPINES  
Under the Provisions of Contract  
# 398-02490-C-00-9140-00**



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OCTOBER 5, 1990

## Preface

The goal of the five-year (1991-95) Philippine Assistance Strategy (PAS) for the U.S. Agency for International Development (USAID) is to promote broad-based, sustainable economic growth through the active partnership of the public and private sectors in fostering open markets and an open society. The successful achievement of sustainable growth depends on economic efficiency, choice, and the establishment and maintenance of democratic institutions and processes. An open society helps generate, sustain, and distribute economic gains, which in turn assist in preserving democracy.

Three themes cut across the USAID program: policy reform, private sector development, and decentralization. Policy reforms are crucial because many of the major constraints to development are inappropriate policies, and specific activities have little chance for success if the policy environment works against them. USAID focuses on policy constraints, to one degree or another, in all its programs.

The private sector is and will continue to be the primary engine of Philippine economic development. Under competitive conditions, it is the most productive source of growth and the most efficient provider of goods and services. Further, with substantial unemployment and underemployment, job creation by the private sector is essential for political stability and the preservation of an open society.

Decentralization means placing resources, responsibility, and authority at the local level so that citizens have a greater voice in governmental decision making and resource allocation. This is necessary for furthering the openness of the society and effectively delivering infrastructure and basic services. Local officials and entrepreneurs are better positioned to identify and respond to opportunities than are those at the national level.

Within the context of the above goal and cross-cutting themes, USAID's overall program focuses on five objectives of the PAS: a policy/institutional framework stimulating private sector growth; open and competitive markets; an infrastructure that facilitates expanded private sector activity; more efficient delivery of essential services; and sustainable management of natural resources.

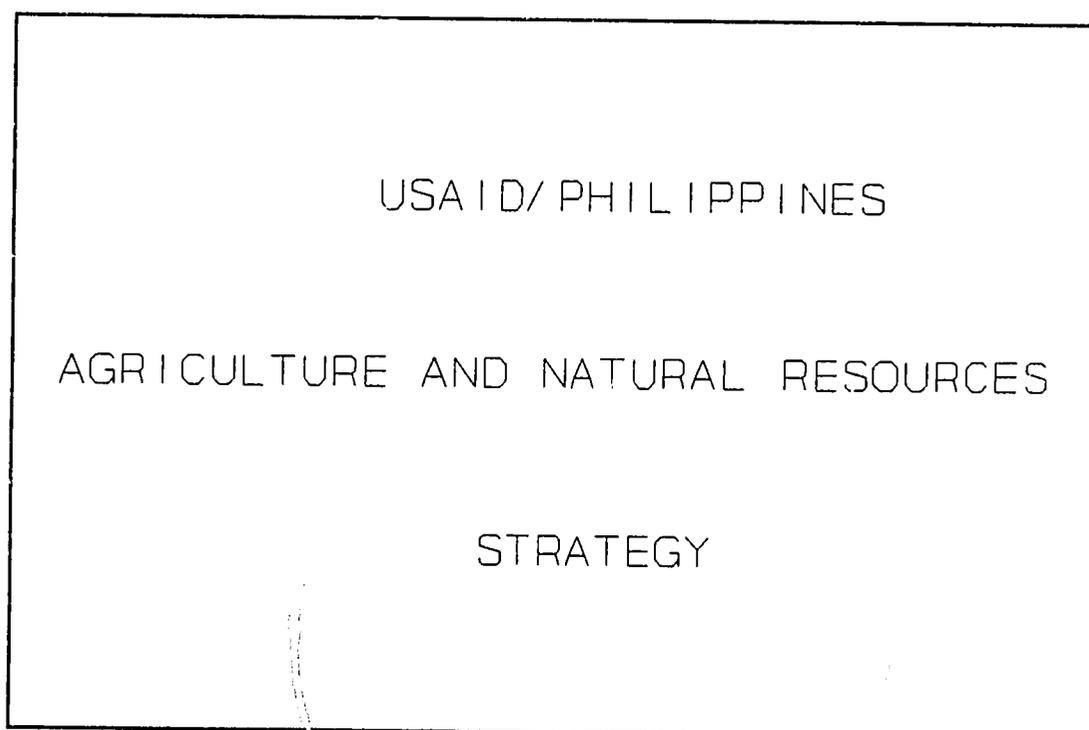
This document is an executive summary of the proposed USAID Agriculture and Natural Resources (ANR) Strategy and provides in 32 exhibits and accompanying text an overview of the key components of the PAS and the proposed interventions in agribusiness, natural resources management, and decentralization. Supporting documents for the ANR Strategy are available from USAID's Office of Rural and Agricultural Development (ORAD).

ORAD is grateful to the committed Filipinos who contributed so willingly and thoughtfully to the analyses that form the foundation of the final ANR Strategy. Special thanks are due to the outstanding technical cooperation and support of the professionals of the U.S.-based Chemonics International Consulting Division, who assisted ORAD's Policy and Planning Division in the preparation of this strategy.

## **INTRODUCTION**

The USAID Agriculture and Natural Resources Strategy has been developed to assist the Government of the Philippines in achieving sustained development of its food and natural resources systems.

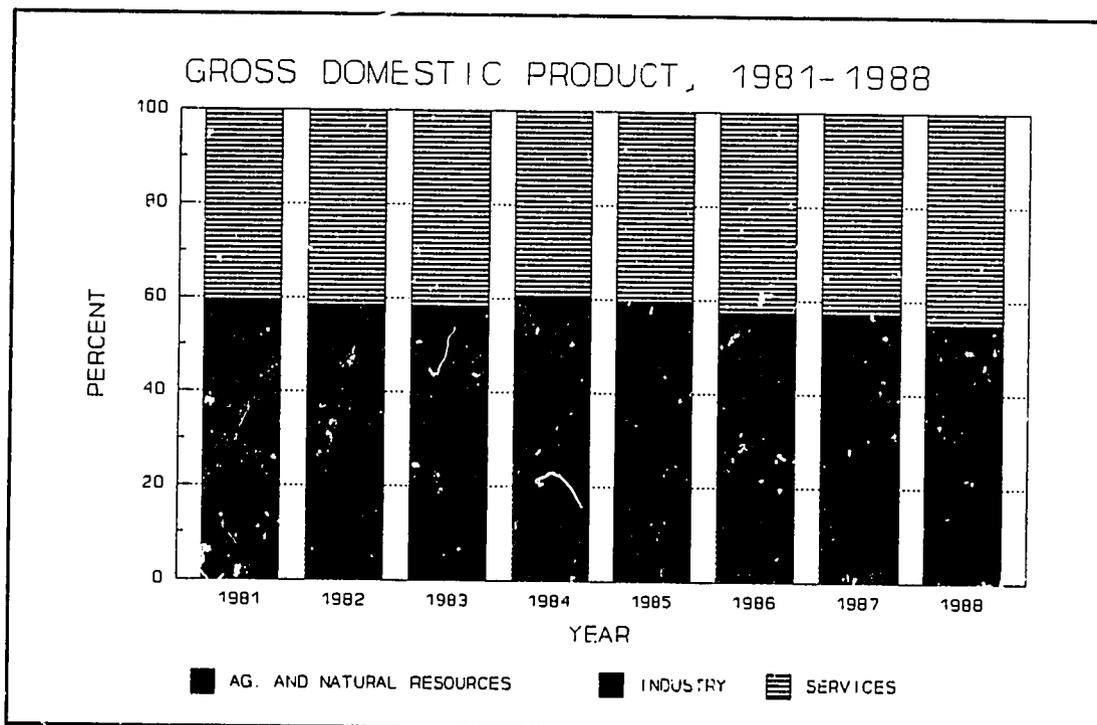
### **Exhibit 1. USAID/Philippines ANR Strategy**



## SECTOR PERFORMANCE

Agriculture, fisheries, and forestry constitute about 25 percent of the Philippines' gross domestic product (GDP). In 1970, the sector produced almost 29 percent of GDP. By 1982, its share had fallen to about 23 percent. However, the economic crisis of the mid-80s caused the sector's GDP share to rise to almost 27 percent.

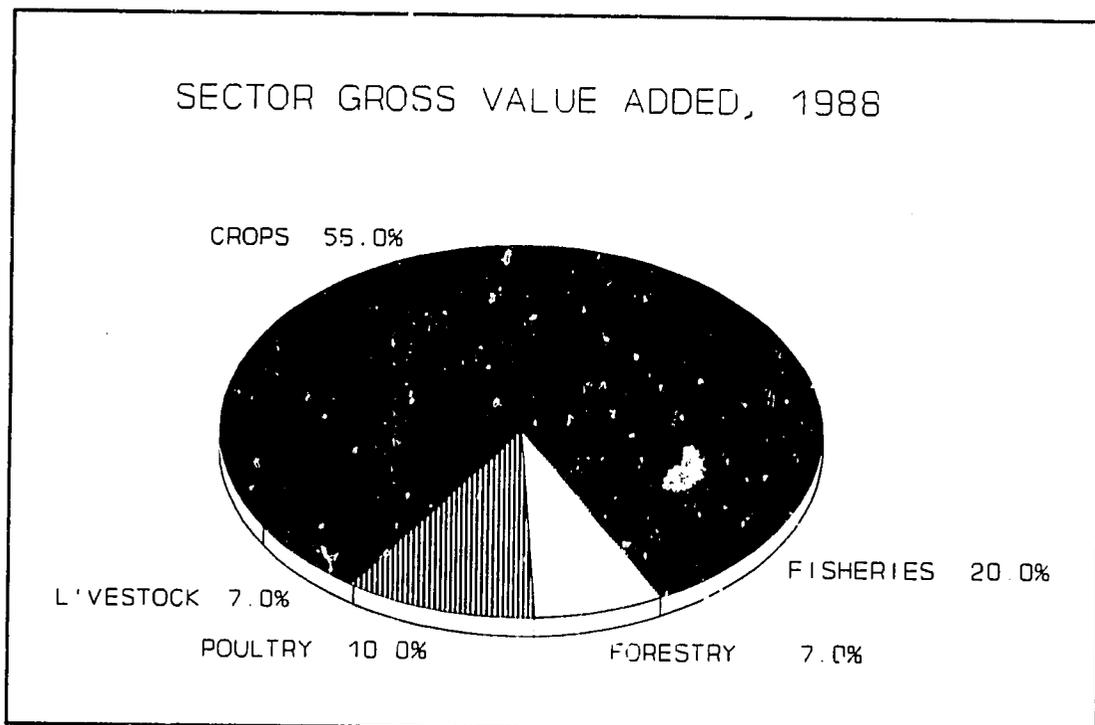
Exhibit 2. Major Sector Shares, 1981-88



## GROSS ADDED VALUE IN AGRICULTURE

Of the 190 billion pesos (\$8.4 billion) of gross value added (GVA) by the sector in 1988, crops were the dominant sector at 55 percent, followed by fisheries at 20 percent, poultry at 10 percent, and livestock and forestry at 7 percent each. During 1980-88, the GVA approximately tripled for crops, livestock, and fisheries.

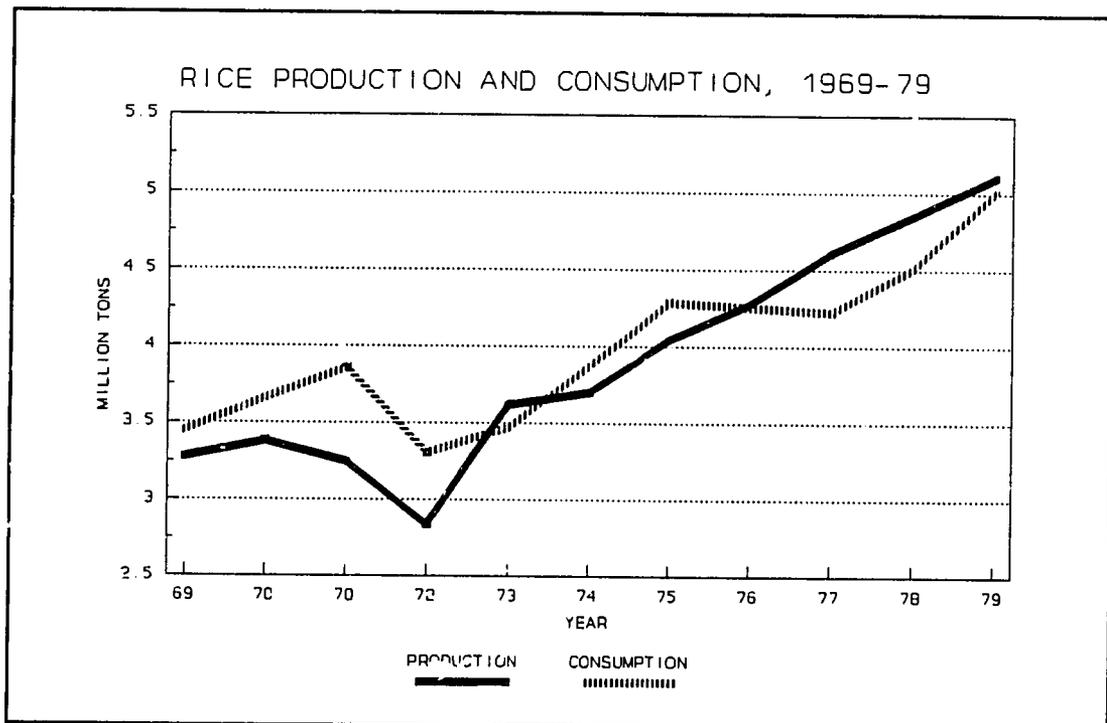
Exhibit 3. ANR Subsector Gross Value Added Shares, 1988



## THE ROLE OF RICE IN FOOD SECURITY

Rice, coconut, and corn occupy 39, 29 and 20 percent, respectively, of the farm land and account for 53 percent of the total value of crop production. Rice is the most important crop in the Philippines' food security strategy. Rice production grew at an average rate of 5.1 percent per annum during 1969-79. By the late 1970s, the country had evolved to become a net rice exporter.

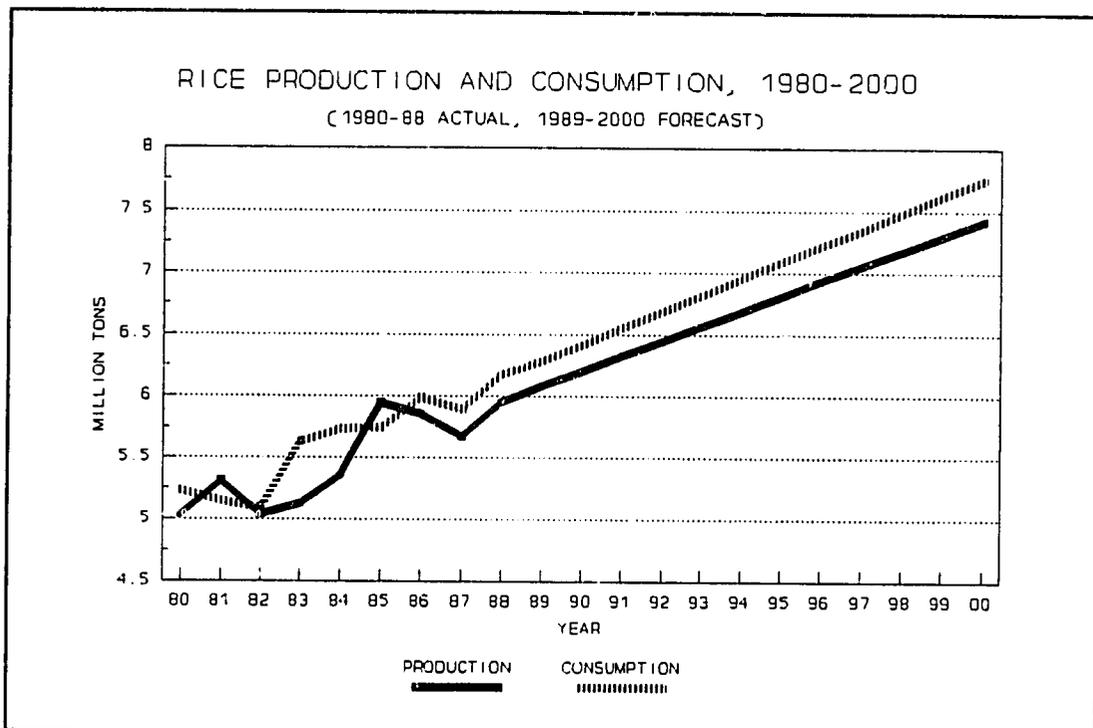
Exhibit 4. Rice Production and Consumption Trends, 1969-79



## RICE GAP

The country reverted to a net import position by the mid-1980s. As a result of a declining general economy and the effects of closed market policies, the annual growth rate of rice production fell to 2.2 percent during 1980-88, while consumption grew at 2.7 percent, closely following the population growth rate. The country currently imports about 200,000 tons of rice annually. Unless policies are adopted to stimulate private sector investment and open markets, the shortfall can be expected to raise to about 330,000 tons by the year 2000, or about 4.5 percent of forecasted total production.

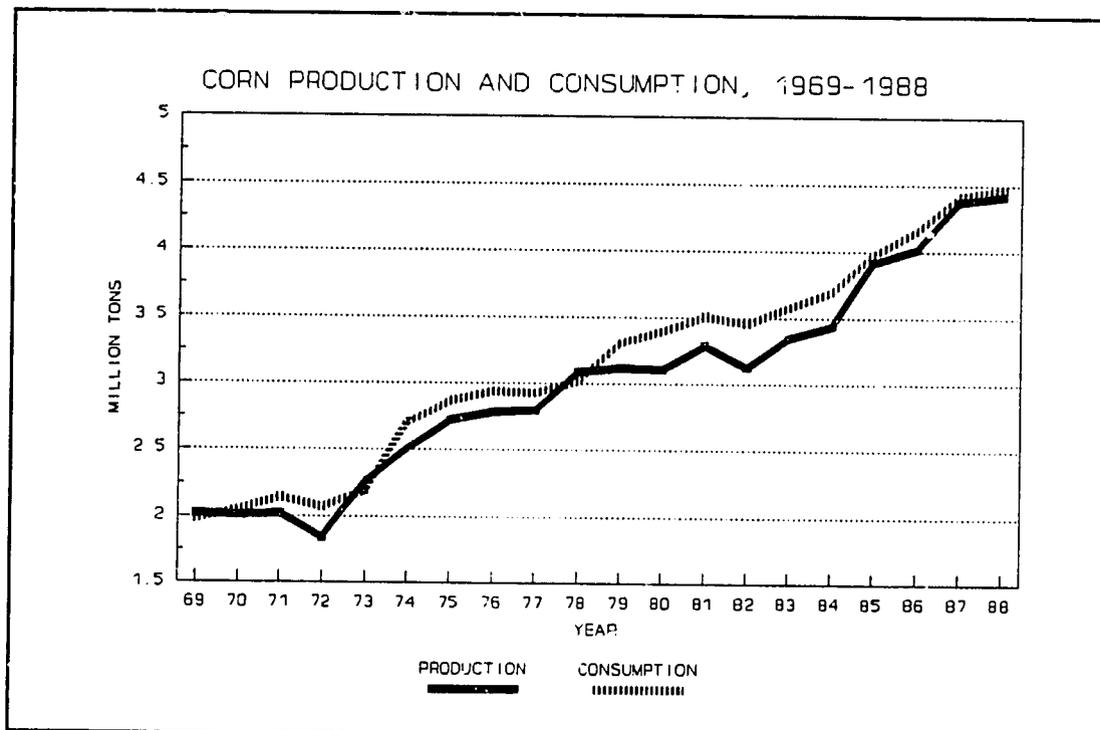
Exhibit 5. Rice Production and Consumption Trends, 1980-2000



## CORN PRODUCTION AND CONSUMPTION

Corn production grew at an annual rate of 5.3 percent during 1969-79, 4.9 percent during 1980-88. About two-thirds of the corn supply is for animal feed. Over the last decade, corn yield per hectare has increased at about 2.7 percent per annum. Consumption generally exceeds production. Annual corn imports have fallen from a steady rate of about 350,000 tons in the early 1980s to a highly variable rate of about 60,000 tons in recent years. Although the growth of corn production has been strong, higher yields and/or higher import levels are needed to support the growing livestock industry.

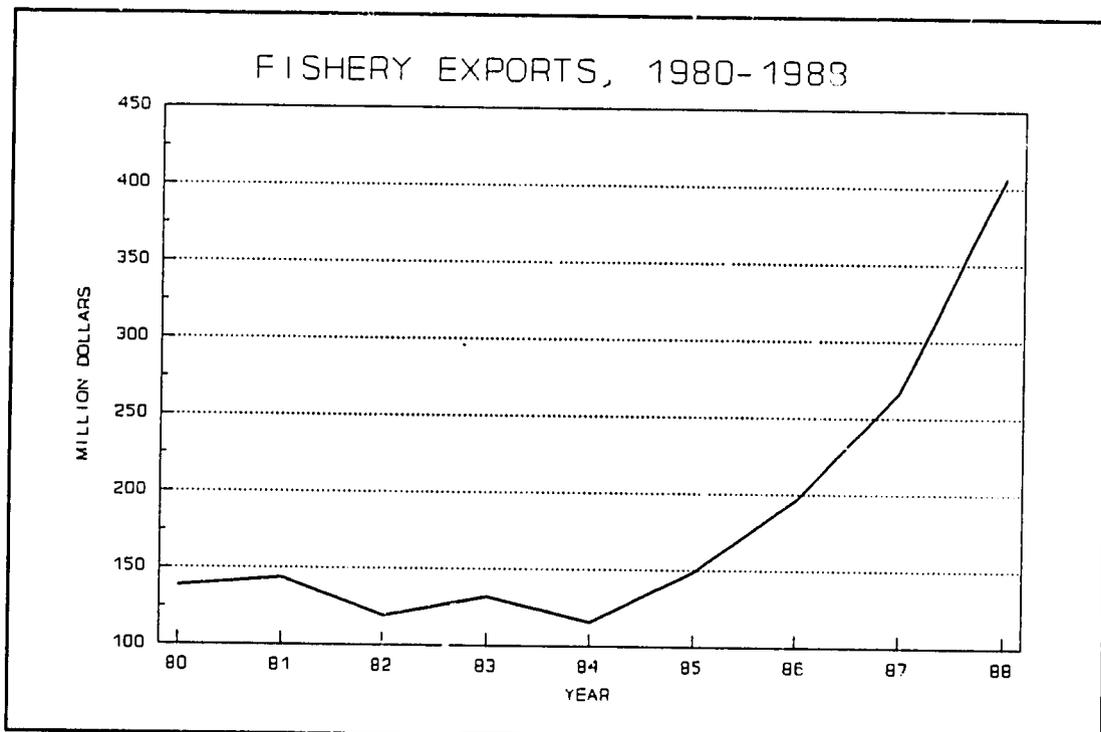
Exhibit 6. Corn Production and Consumption Trends, 1969-88



## FISHERIES

Fishery production grew steadily from 1.7 million tons in 1980 to 2.2 million tons in 1987, with an estimated value added of 37 billion pesos (\$1.6 billion). Fish products have become an important export commodity, with sales growing from \$138 million in 1980 to \$407 million in 1988. Export growth in shrimps and prawns increased sharply in 1985, and by 1988, accounted for about 50 percent of export sales.

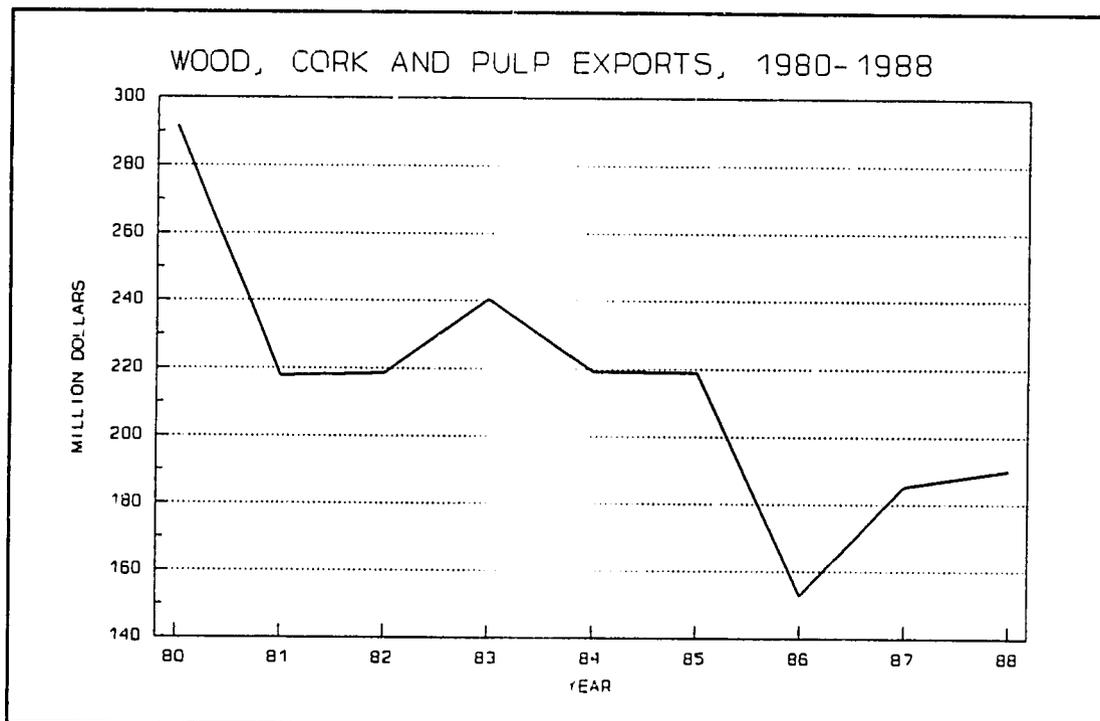
Exhibit 7. Trend in Fishery Export Earnings, 1980-88



## FORESTRY

Annual log production declined from 6.3 to 4.1 million cubic meters during 1980-89. During the same period, annual lumber/plywood production remained relatively steady at about 1.2 and 0.5 million cubic meters, respectively. Veneer production plummeted from 660,000 to 73,000 cubic meters, and pulpwood production increased from 390,000 to 618,000 cubic meters. Wood, cork, and pulp exports declined from \$292 million in 1980 to \$190 million in 1988. The forestry subsector has grown less rapidly than the total sector because of generally depressed international wood prices and a rapidly declining forest base.

Exhibit 8. Trends in Wood Product Export Earnings, 1980-88

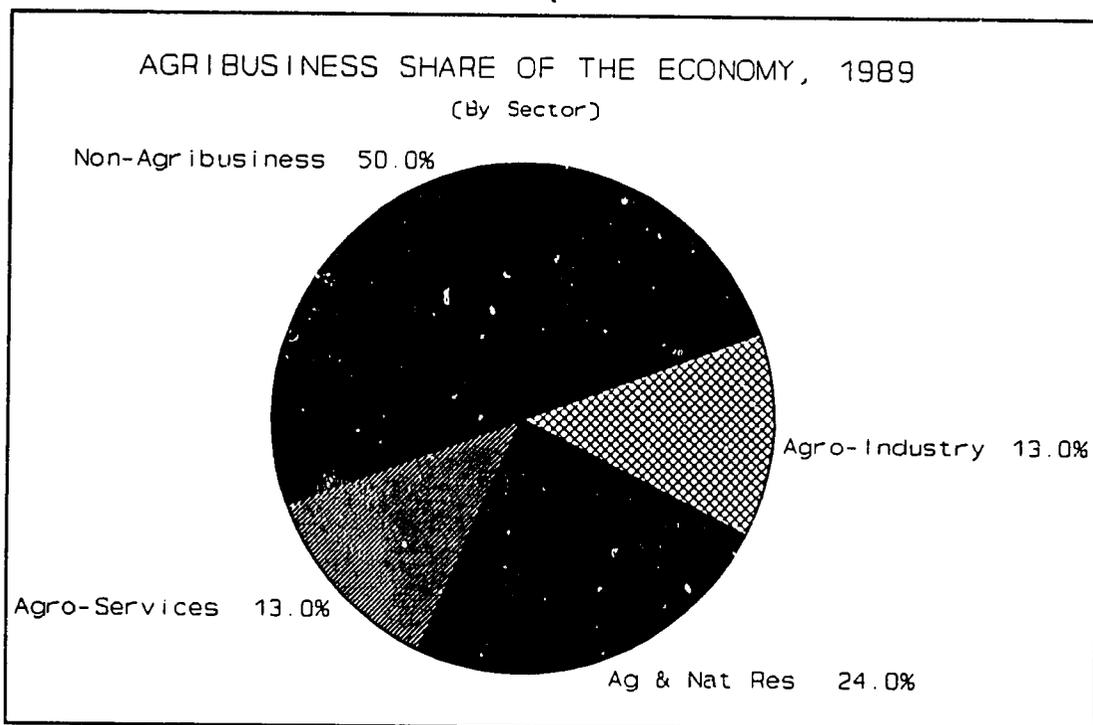


## AGRIBUSINESS

Agriculture generates major demands for inputs and creates a large market for product processing and marketing services. According to aggregate national income statistics for 1989, the economy produced P963 billion of gross value added, with agriculture, industry, and services producing shares of 24, 33, and 43 percent, respectively.

The agribusiness share is far greater than the on-farm production normally considered as agriculture's sole contribution to GDP. Recent estimates have placed the agribusiness share of the economy at nearly 50 percent -- about 24 percent is produced by crops, livestock, poultry, fisheries, and forestry; about 13 percent is produced by industry, primarily agro-based manufacturing; and about 13 percent is from agribusiness services provided by the transport, trade, and finance subsectors.

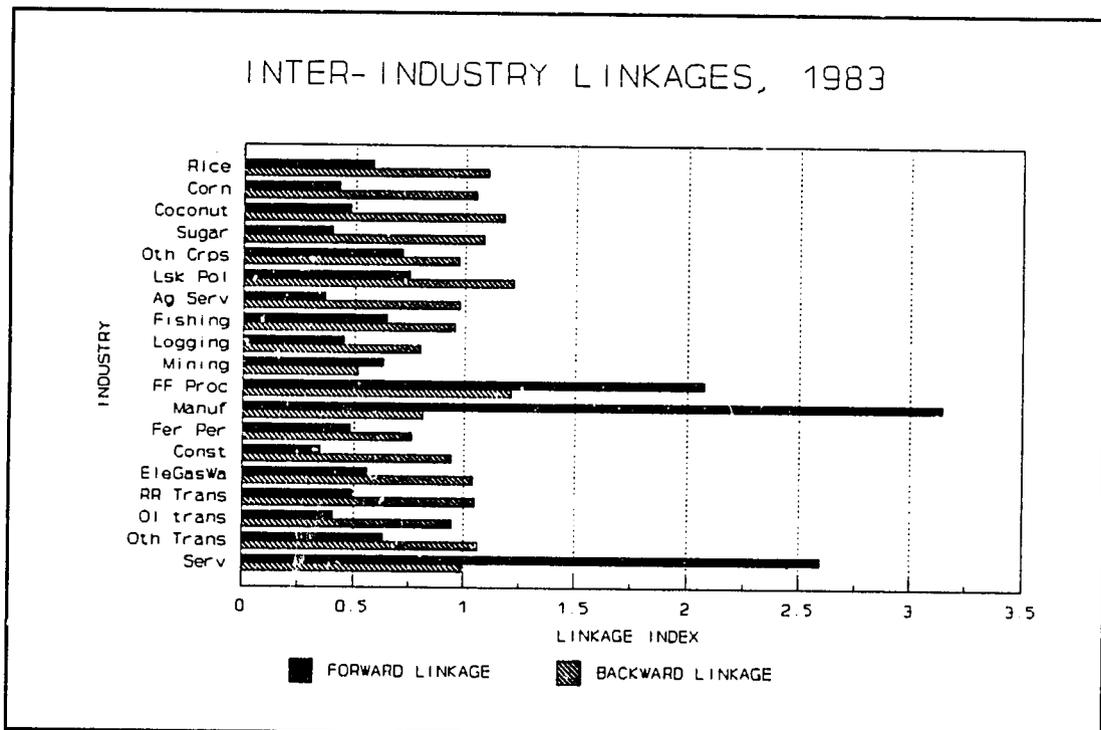
Exhibit 9. Agribusiness Share of the Economy, 1989



## INTER-INDUSTRY LINKAGES

Using a 20-sector (closed model) aggregation of the 1983 Philippines Input-Output (I-O) Model, the forward/backward marketing linkages have been estimated as indices. The crop sectors have some of the highest backward (upstream) linkages, reflecting their strong economy-wide influence through their heavy demand for purchased inputs. Regarding forward linkages (downstream sales), the food/feed processing sector has one of the highest indices. Fishing, livestock and poultry and "other crops," including fruits and vegetables, also have relatively high forward linkages.

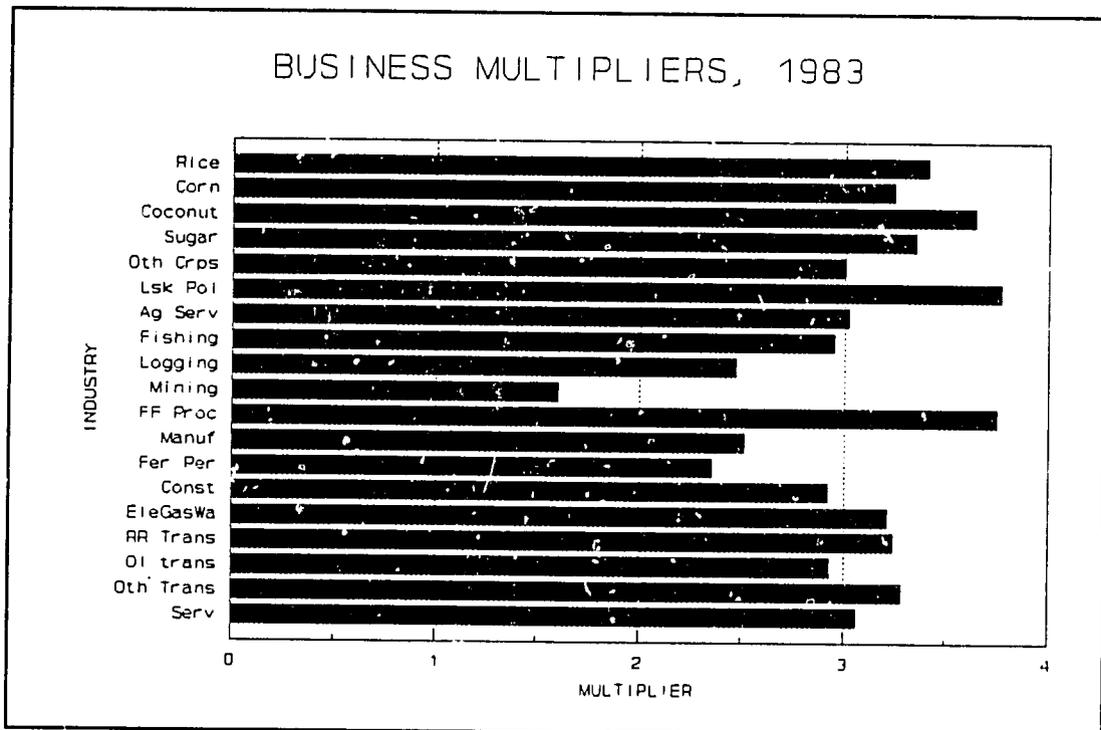
Exhibit 10. Forward and Backward Linkage Indices, 1983



## BUSINESS MULTIPLIERS

The I-O Model was used to estimate business, employment, and import multipliers. The business multiplier is a measure of the amount of additional pesos of business activity generated throughout the economy in response to an additional peso of business activity in the respective sector. If we exclude households because they are not a source of value added, the agriculture and natural resources sector accounts for the top five ranked business multipliers, food and feed processing, livestock-poultry, coconut, rice, and sugar.

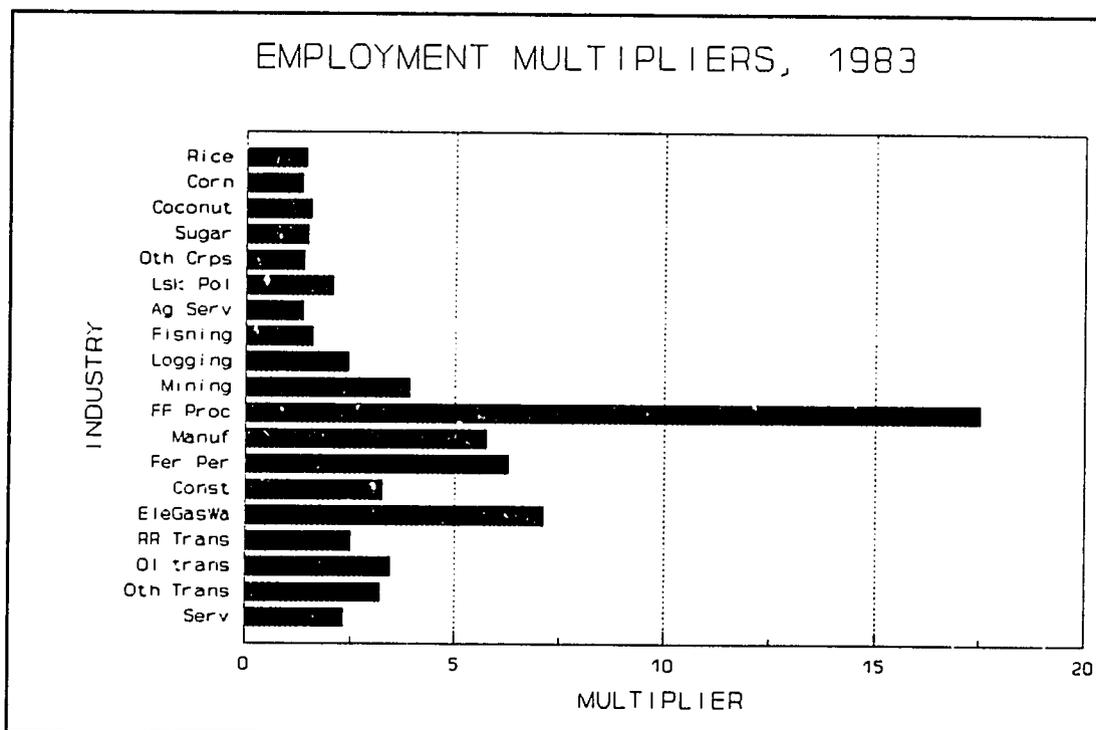
Exhibit 11. Business Multipliers



## EMPLOYMENT MULTIPLIERS

An employment multiplier is the ratio of the total economy-wide employment effect to the direct employment effect in a particular sector. Employment multipliers of the agricultural commodity sectors are relatively low, as is the usual case. However, the food/feed processing subsector's high employment multiplier indicates a very strong potential for generating off-farm employment in the initial and middle stages of the rural-urban economic transformation of the country. The food/feed subsector can also be used as a model for spinning off auxiliary local and regional manufacturing enterprises which also enjoy relatively high employment multipliers.

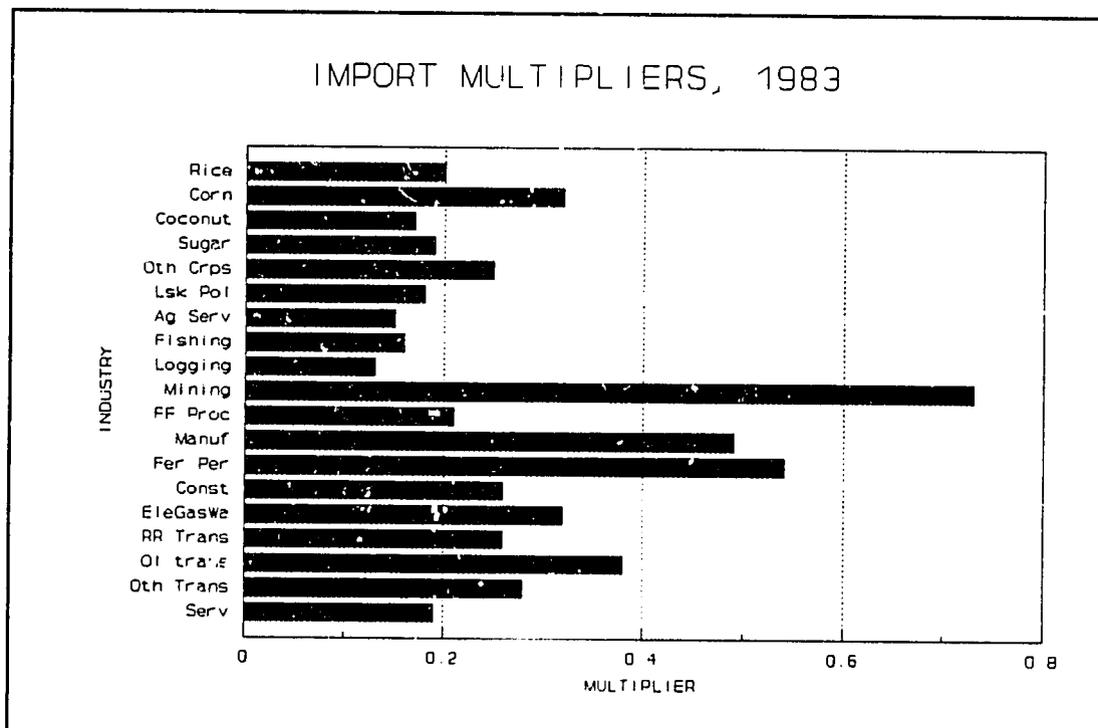
Exhibit 12. Employment Multipliers



## IMPORT MULTIPLIERS

An import multiplier is the measure of the total value of additional imports required throughout the economy in response to an additional peso of business activity in a given sector. Of the 19 non-household sectors in the I-O model, the agriculture and natural resources complex accounts for six of the lowest import multipliers, led by logging, agricultural services, fishing, coconut, livestock-poultry, and sugar.

Exhibit 13. Import Multipliers



## GENERAL CONSTRAINTS SUMMARY

The agriculture and natural resources sector faces several major development constraints. A group of general constraints has been identified that will require broad national action well beyond sector-level programs. The most important general constraints are: restrictive fiscal and monetary policies; inadequate rural infrastructure; and rapid population growth.

### Exhibit 14. General Constraints Summary

#### GENERAL NATIONAL CONSTRAINTS

- RESTRICTIVE FISCAL/MONETARY POLICIES
- INADEQUATE RURAL INFRASTRUCTURE
- RAPID POPULATION GROWTH

## **RESTRICTIVE FISCAL AND MONETARY POLICIES**

The most serious general constraint is in the area of fiscal and monetary policy. The peso is generally believed to be overvalued, which has contributed to a severe balance of payments deficit by stimulating demand for imports while restricting agricultural exports. Moreover, the government's chronic budget deficit has severely restricted funding of basic government services and infrastructure.

### **Exhibit 15. Restrictive Fiscal and Monetary Policies**

#### RESTRICTIVE FISCAL, MONETARY POLICIES

- OVERVALUED PESO
- BALANCE OF PAYMENTS DEFICIT
- BUDGET DEFICIT

## **INADEQUATE RURAL INFRASTRUCTURE**

Infrastructure development of rural regions has been neglected in past pro-urban economic policies. As a result, rural regions have inadequate land transport and seaport systems. Less than one-half of the country's road system meets all-weather standards. Truck operating costs on existing rural roads are the highest in the region because of inadequate road maintenance. Many areas with high food-feed grain production do not have access to farm-to-market roads. Many other rural areas are uncompetitive with international markets due to a lack of local seaports.

### **Exhibit 16. Inadequate Rural Infrastructure**

#### INADEQUATE RURAL INFRASTRUCTURE

- INADEQUATE ROAD MAINTENANCE
- INSUFFICIENT FARM-TO-MARKET ROADS
- INSUFFICIENT LOCAL SEAPORTS

## **RAPID POPULATION GROWTH**

The natural resource base is under increasing pressure to support a population estimated at 65 million. About 60 percent of the population lives in rural areas, where the average farm size has declined to less than 2.8 hectares. About one-fourth of the population lives in upland areas, where subsistence agriculture on public forest lands has contributed to deforestation and environmental damage. Population growth has outpaced non-farm employment opportunities. The consequences of rapid population growth have pulled one-half of the population below the poverty income level. Average rural family incomes are only one-half of urban incomes. The present population-poverty syndrome may be even more serious in the future. At a current annual growth rate of 2.4 percent, the population is expected to double by 2020.

### **Exhibit 17. Rapid Population Growth**

#### **RAPID POPULATION GROWTH**

- FARM SIZE DECLINING
- POPULATION EXCEEDS AVAILABLE JOBS
- ONE-HALF POPULATION IN POVERTY
- POPULATION MAY DOUBLE BY 2020

## **SPECIFIC CONSTRAINTS SUMMARY**

The agriculture and natural resources sector faces several specific constraints that can be addressed directly through program, project, and policy interventions. The most important of these constraints are: restrictive price and market controls; a large, inefficient parastatal agribusiness complex; excessive centralized government structure; inappropriate natural resources management policies; and an ineffective technology generation and transfer system.

### **Exhibit 18. Specific Constraints Summary**

#### **SPECIFIC SECTOR CONSTRAINTS**

- RESTRICTIVE MARKET CONTROLS
- LARGE PARASTATAL AGRIBUSINESS COMPLEX
- EXCESSIVE GOVERNMENT CENTRALIZATION
- INAPPROPRIATE NATURAL RESOURCE POLICIES
- INEFFECTIVE TECHNOLOGY SYSTEM

## **PRICE AND MARKET CONTROLS**

Extensive price and international trade controls have led to domestic production shortfalls, increased imports of food and feed grains, decreased private sector investment, and a weaker food security position.

### **Exhibit 19. Price and Market Controls**

#### MARKET CONTROLS

- AGGRAVATE PRODUCTION SHORTFALLS
- INCREASE FOOD AND FEED IMPORTS
- DISCOURAGE PRIVATE INVESTMENT
- WEAKEN NATIONAL SECURITY

## PARASTATAL AGRIBUSINESS COMPLEX

Widespread government ownership of agribusiness corporations has caused a substantial decline in competition and efficiency in the industrial, service, and trade components of the agribusiness subsector. Public ownership of these firms has become a heavy drain on public finances, for working and fixed capital and periodic supplements to cover operating losses. Diversion of public capital into these enterprises further aggravates the budgetary deficit and distorts the capital market. Continued heavy government presence as a monopolist in these industries erodes private sector business confidence and ultimately causes large economic losses to both consumers and producers.

### Exhibit 20. Parastatal Agribusiness Complex

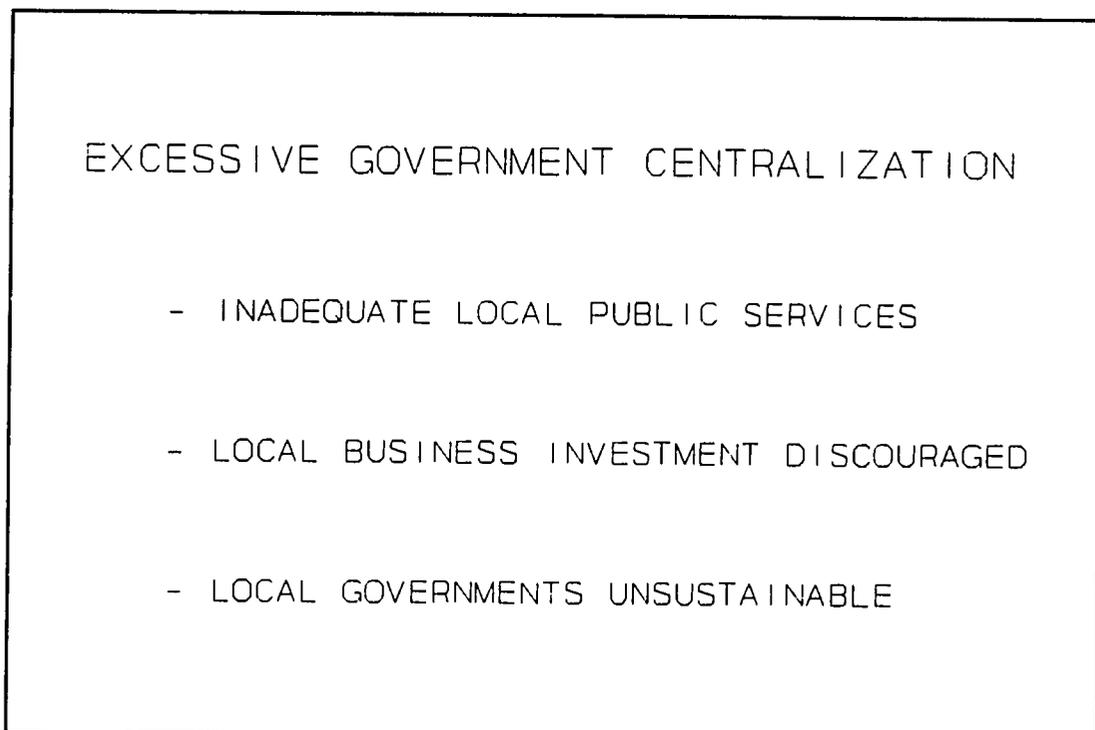
#### PARASTATAL AGRIBUSINESS COMPLEX

- DRAINS PUBLIC CAPITAL
- AGGRAVATES BUDGET DEFICIT
- DISTORTS CAPITAL MARKET
- ENCOURAGES MONOPOLY CONSTRAINTS
- DISCOURAGES PRIVATE SECTOR COMPETITION

## **EXCESSIVE GOVERNMENT CENTRALIZATION**

The Philippines has a long history of centralized government. The shortcomings of centralization were highlighted during the Marcos years when excessive political and financial control of local government units further restricted the supply of basic public services to rural areas and denied most rural citizens the opportunity to participate in the political process. Lack of public services has discouraged private sector investors from investing in agribusiness. Onerous central government controls have seriously undermined the ability of local governments to provide basic services to their citizens with local revenues. As local governments have been unable to raise local taxes, the national tax-public service delivery system has been severely distorted.

### **Exhibit 21. Excessive Government Centralization**



## **INAPPROPRIATE NATURAL RESOURCES MANAGEMENT POLICIES**

The Philippines' abundant natural resources base has been managed on a depletive, rather than renewable basis. Failure to use market mechanisms to balance public and private sector natural resource allocation needs has caused severe overcutting of timber without required replanting. As deforestation has increased, upper watersheds have been damaged by increased soil erosion. Simultaneously, heavy population pressure on uplands has accelerated slash-and-burn agriculture in public forests and aggravated the erosion problem. Forest species diversity has declined and the private wood processing industry has had inadequate incentive to invest in more effective equipment and to stabilize the supply of timber.

### **Exhibit 22. Inappropriate Natural Resources Management**

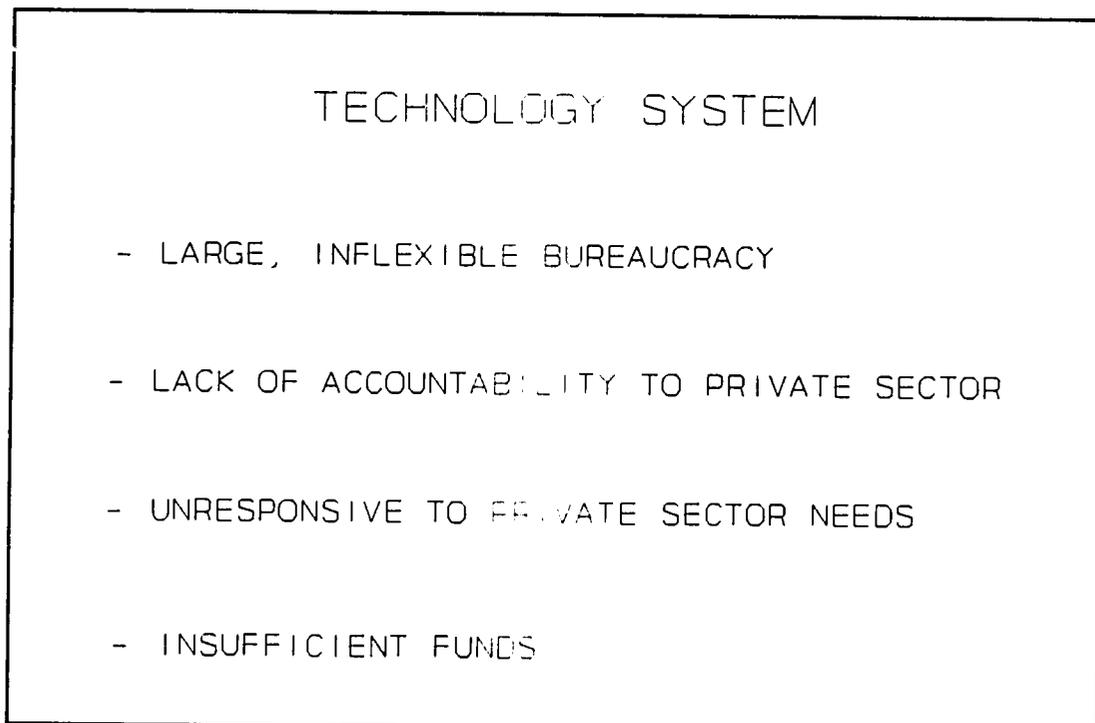
#### NATURAL RESOURCES MANAGEMENT

- LACK OF MARKET MECHANISMS
- DEFORESTATION CAUSING ENVIRONMENTAL DAMAGE
- BIODIVERSITY THREATENED
- NO INCENTIVE TO SUSTAIN TIMBER SUPPLY

## **INEFFECTIVE TECHNOLOGY GENERATION AND TRANSFER SYSTEM**

The Philippines has developed an extensive public agricultural technology development and transfer system over the last three decades. However, the system is increasingly ineffective in meeting food security needs because it has a relatively large and inflexible bureaucracy and lacks accountability to the rest of society for the usefulness of its products. It is unresponsive to private sector demand for new technology by agribusinesses and farmers and has insufficient funds to support necessary research and extension activities.

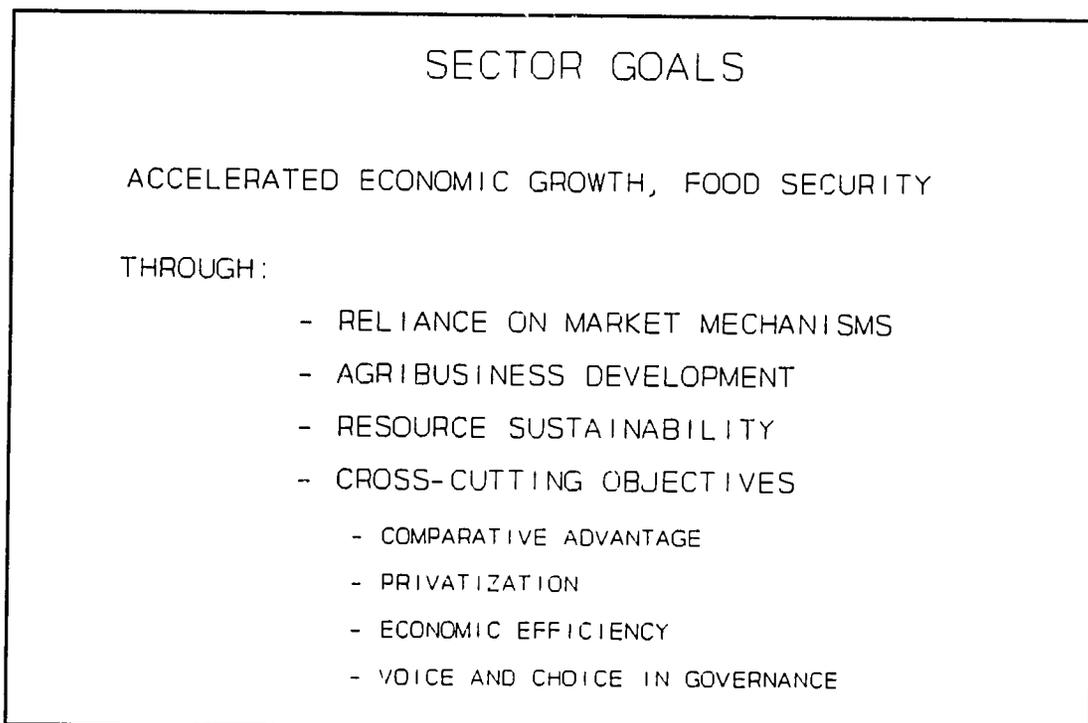
**Exhibit 23. Ineffective Technology Generation and Transfer System**



## SECTOR GOALS

The goal of the agriculture and natural resources sector is to accelerate private sector-led economic growth and improve national food security through increased reliance on open market mechanisms, agribusiness development and participation, and financial and natural resource sustainability. Cross-cutting objectives for the entire sector will be comparative advantage, privatization, economic efficiency in both public and private sectors, and increased opportunities for voice and choice in governance.

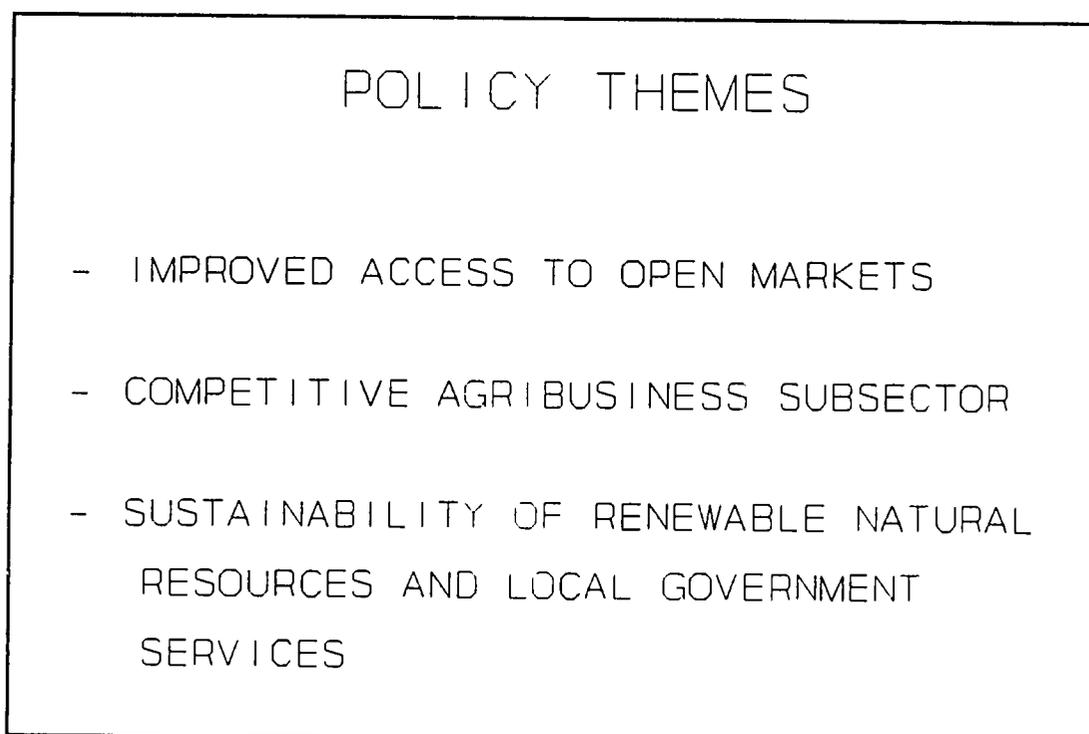
### Exhibit 24. Sector Goals



## **POLICY THEMES**

Most of the sector objectives cannot be accomplished without fundamental policy reform across a broad front. The main policy themes to be pursued while implementing the strategy are improved access to open markets, a competitive agribusiness subsector, and sustainability of renewable natural resources and local government services.

### **Exhibit 25. Policy Themes**



## THE OPEN MARKETS POLICY THEME

The strategy will emphasize open market policy reforms, improvements in economic efficiency, and development according to comparative advantage. Decontrol of domestic markets will be pursued to allow agricultural and natural resource prices to vary according to domestic and international supply and demand conditions. Divestiture of agribusiness parastatals will be pursued to relieve government budgetary pressure, to eliminate wasteful government competition with the private sector, and to remove the monopolistic effects of parastatals. Reduction of tariff and non-tariff restrictions on agricultural trade will be pursued to stimulate sector development according to the country's comparative advantage.

### Exhibit 26. Open Markets Policy Theme

#### OPEN MARKETS POLICY THEME

- DECONTROL OF DOMESTIC MARKETS
- DIVESTITURE OF AGRIBUSINESS PARASTATALS
- REDUCED AGRICULTURAL TRADE RESTRICTIONS

## **THE AGRIBUSINESS POLICY THEME**

The strategy will pursue policies that exploit the agribusiness subsector's great potential for enhancing economic growth and food security. Agribusiness is defined as the provision of services and products facilitating agricultural production, processing and marketing operations that are, or can be, profitably managed by private sector firms. Private sector business associations, firms, and institutes will be assisted to strengthen their ability to advocate policy reform and identify investment priorities in sector-related research, infrastructure development, and finance. Linkages will be established between private sector entities in the U.S. and the Philippines to promote market development, technology development and transfer, joint ventures and policy analysis of sector development issues. Policies will be pursued to reduce barriers to private sector entry/exit in key subsectors such as fertilizer, paper products, stevedoring/arrastre services, transport, and communications.

### Exhibit 27. Agribusiness Policy Theme

#### AGRIBUSINESS POLICY THEME

- STRENGTHEN BUSINESS ASSOCIATIONS
- ESTABLISH PHILIPPINES-U.S. TRADE LINKAGES
- REDUCE PRIVATE SECTOR ENTRY/EXIT BARRIERS

## THE SUSTAINABILITY POLICY THEME

Sustained harvest of renewable natural resources will be encouraged by pursuing policies that balance long-term production and consumption requirements. Policies will be pursued to increase land tenure rights and collection of economic rents through market-determined prices to ensure that renewable natural resources are managed on a sustainable basis. To sustain the delivery of local government services, the strategy will be to pursue policies that reduce the recurrent cost deficit for public sector development and infrastructure maintenance through proceeds from tax enforcement, divestiture of parastatals and improved government operating efficiency. Policies will be formulated to promote the devolution of authority and responsibility to local governments to collect and expend taxes, set and pursue local development priorities, and manage natural resources in their domain for the public good.

### Exhibit 28. Sustainability Policy Theme

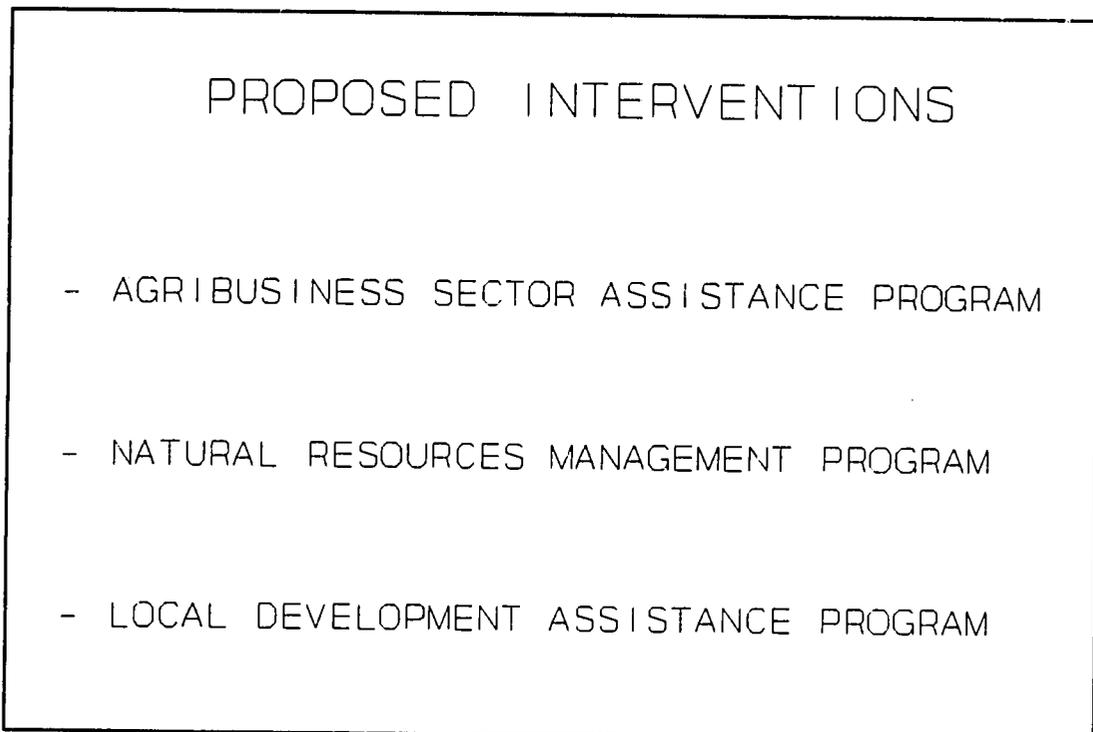
#### SUSTAINABILITY POLICY THEME

- BALANCE LONG-TERM NATURAL RESOURCE MARKET
- USE MARKET MECHANISMS
- LOCAL NATURAL RESOURCES MANAGEMENT
- REDUCE RECURRENT COST DEFICIT
- LOCALIZE AUTHORITY FOR TAX COLLECTION AND SPENDING

## **PROPOSED INTERVENTIONS**

The agriculture and natural resources strategy will be implemented through interventions that address the major sector-specific constraints. The key proposed interventions are: the agribusiness sector assistance program, the natural resources management program, and the local development assistance program.

Exhibit 29. Proposed Interventions



## **AGRIBUSINESS SECTOR ASSISTANCE PROGRAM (ASAP)**

The agribusiness sector support program will expand private sector agribusiness investment and accelerate market-led agricultural growth through two components. The first component will encourage cooperation among local industry, research, financial and governmental entities to improve market linkages between farmers, agribusinesses, consumers, and international markets by supporting agribusiness R&D proposals and selected Philippines-U.S. joint ventures in feasibility analyses and financing.

The second component will link performance-based disbursements to critical agribusiness policy reforms that will be supported by technical assistance to strengthen the private sector's ability to conduct policy analysis/advocacy, to enhance the Government of the Philippines' overall capacity for market-based sectorial management; and to monitor progress on targeted policy reforms.

### **Exhibit 30. Agribusiness Sector Assistance Program**

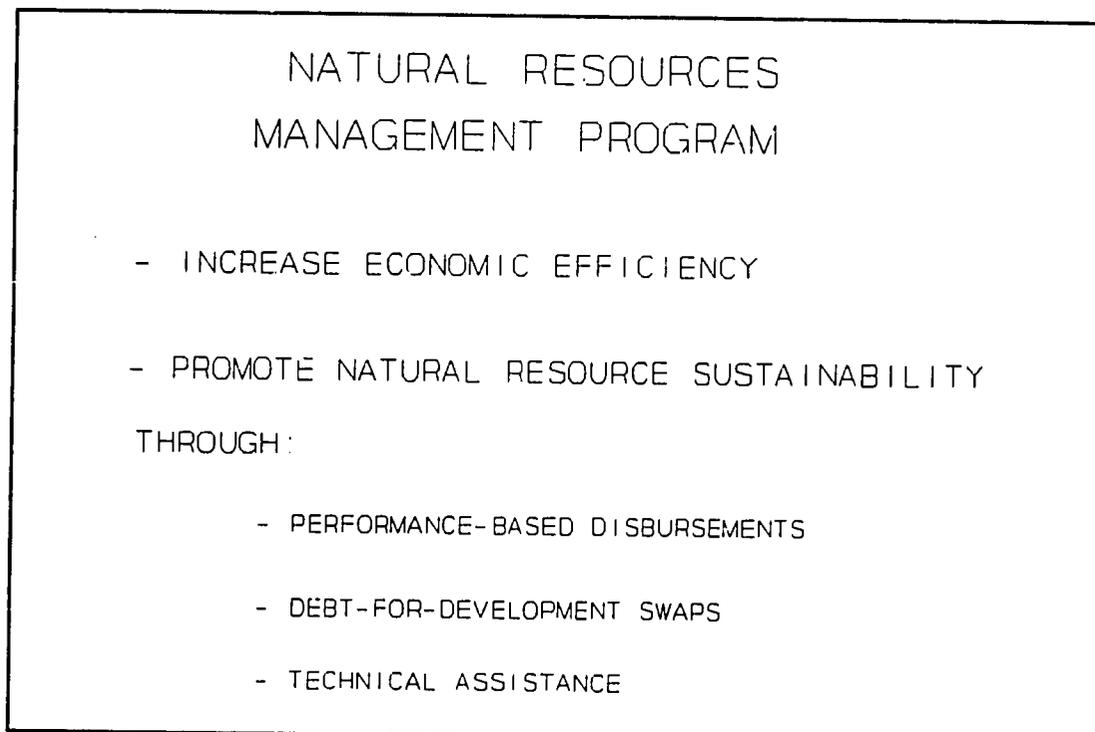
#### AGRIBUSINESS SECTOR ASSISTANCE PROGRAM

- PUBLIC-PRIVATE SECTOR COOPERATION
- PERFORMANCE-BASED DISBURSEMENTS
- TECHNICAL ASSISTANCE TO:
  - STRENGTHEN PRIVATE SECTOR POLICY ANALYSIS
  - ENHANCE MARKET-BASED MANAGEMENT
  - MONITOR POLICY REFORM PROGRAM

## NATURAL RESOURCES MANAGEMENT PROGRAM (NRMP)

The proposed natural resources management program will increase economic efficiency in forest products and wood-processing industries and promote sustained management of natural resources, including protection of tropical rainforests and biodiversity. Program components will include: performance-based disbursements for the implementation of specified policy reforms; NGO debt-for-development swaps; and technical assistance for policy implementation, research, monitoring, evaluation, and audit services.

### Exhibit 31. Natural Resources Management Program



## **LOCAL DEVELOPMENT ASSISTANCE PROGRAM (LDAP)**

The local development assistance program will support the Government of the Philippines' policy reform in nationwide decentralization as a necessary condition for more rapid economic development outside the national capital region. Decentralization will increase authority, responsibility, and discretionary resources of local governments to: accelerate local economic and social development; increase the financial and environmental sustainability of infrastructure investments; and support new opportunities for voice and choice in local governance. The major program element will be performance-based disbursements for policy reforms and encouragement of private sector delivery of basic services wherever adequate economic incentives exist.

### **Exhibit 32. Local Development Assistance Program**

