

CHAPTER 4 ECONOMIC DEVELOPMENT PLANS AND PRESENT CONDITIONS OF INTERNATIONAL COOPERATION FOR THE AGRICULTURE AND FISHERIES SECTOR

4.1 Outlines of the Guidelines of the State Policy and National Development Plan

4.1.1 Guidelines of the State Policy

411-1 The Guidelines of the State Policy (GBHN) is a fundamental national policy formulated every 5 years in accordance with the provision of Article 3 of the Constitution of Indonesia. The GBHN (2000-2004), which was enacted in October 1999, has established the principal direction for agriculture and food security in Indonesia, which states that: developing a food security system that is based on the diversity of food resources, social institutions and local cultures as a part of the effort to ensure the availability of food and nutrients in adequate quantity and quality at affordable prices without disregarding the incomes and welfare of farmers and fishermen.

4.1.2 Ten-Economic Recovery Acceleration Program

412-1 This program was announced as the decree of the Coordinating Minister of Economic Affairs. Among the 10 programs, the third program, "Increase of the Productivity and Welfare of Farmers," is related to agriculture and food security, stating the following five aims (The Ten-Economic Recovery Acceleration Program, Coordinating Minister of Economic Affairs):

- 1) To conduct seed policy programs in order to boost productivity in the agriculture sector and increase the income of farmers;
- 2) To promote the mechanization in Indonesian agriculture sector, especially in areas outside of Java, in order to increase productivity;
- 3) To choose the top 20 agricultural commodities to be intensively developed in order to be competitive in the domestic as well as international markets;
- 4) To promote processing industries in order to increase the quality and added value of agricultural products, especially post-harvest processing; and
- 5) To promote the development and use of technology in order to increase agricultural productivity.

412-2 The seventh program, "Utilization of the Natural Resources Endowment," addresses the issue in the fisheries sector. Particular attention should be paid to the third item of the program, which aims at the participation of traditional fishermen in vitalizing the maritime sector through the modernization of fishing equipment. With respect to rural development, the ninth program, "Improvement of Public Welfare in the Rural

Areas for Socio-political Stability” has two goals, namely, i) to increase the level of rural wages by improving the terms of trade for agricultural commodities, and ii) to promote infrastructure projects such as tertiary irrigation and rural road projects at the district (Kecamatan) and sub-district (Pedesaan) levels.

4.1.3 National Development Plan 2000-2004 (PROPENAS)

413-1 The PROPENAS, which was formulated in conjunction with the GBHN, has identified the following five points as priority goals:

- 1) developing the democratic political system and maintaining solidarity as a nation;
- 2) establishing the rule of law and good governance;
- 3) accelerating the economic recovery and strengthening the basis for sustainable and fair development based on the public economic system;
- 4) improving public welfare, improving the quality of religious life and cultural resilience; and
- 5) promoting rural development.

(1) Development of agriculture, food and water resources

413-2 The sustainable development of agriculture and food is considered indispensable for the development of the national economy. This is stated as one of the major components of the “Fulfillment of Basic Human Needs and Poverty Alleviation Program”. This program is one of the seven projects for “Acceleration of the economic recovery and strengthening of the basis for sustainable and fair development based on the public economic system”: the other six programs include: i) development of cooperatives and small and medium enterprises, ii) stabilization policy for state finance and economy, iii) reinforcement of economic competitiveness, iv) promotion of investment, v) establishment of public institutions and infrastructures for economic development and vi) sustainable use of natural resources. The program comprises three sub-programs, namely, i) agribusiness development, ii) the improvement of food self-sufficiency, and iii) the development and management of irrigation.

413-3 The sub-program for agribusiness development has five main objectives: i) to improve the yield, quality and output of food crops, horticulture, animal husbandry, fishery, plantation, and forestry; ii) to create job and business opportunities in rural areas; iii) to raise the incomes of people engaged in agriculture, forestry and fishery; iv) to promote the participation of the local people and increase public and private investment for agricultural and rural development; and v) to preserve natural resources and the environment. The sub-program has specified 31 major activities to achieve the above objectives.

413-4 The sub-program for improved food self-reliance is designed to i) increase the diversity and availability of food from cattle, fish, food crops, horticulture, plantations and their value-added products; ii) develop a system to improve food supply, distribution and consumption; iii) develop a competitive food business and prevent monopolies; and iv) improve the stable supply of nutrients and food for the community. The sub-program has specified 27 main activities to achieve the above mentioned objectives.

413-5 The objectives of the sub-program to develop and manage water use and irrigation are: i) the reorganization of duties and roles of the central and regional governments managing irrigation systems; ii) empowerment of community water management organizations to improve water system operations; iii) improved delegation of authority in irrigation network management to communities as the water manager; iv) restructured financing of irrigation networks operations and maintenance, rehabilitation, and improvement; v) greater efficiency of irrigation networks, and enlarged farm lands partly through reclamation of marshlands; vi) protection of irrigated lands from being converted for other uses; vii) increased supply of water for other non agricultural purposes; viii) increased effectiveness and efficiency of the operations, maintenance, and development of the infrastructures to control floods and beach erosion; ix) improved maintenance, repair and upgrading of dams, lakes, and other watershed construction; x) improved management and repair of river flows to maintain and increase their function and use; and xi) increased integration in the use of ground water and surface water, including improved coordination in controlling pollution of ground water and surface water. The sub-program has specified 11 activities to achieve the above objectives.

(2) Fishery Development Program

413-6 This program is part of the sustainable use of natural resources introduced above and aims to i) develop and empower archipelago and coastal communities, ii) improve the rehabilitation and conservation of coastal habitats such as mangrove forests, coral reefs, plains and estuaries in collaboration with the community with the aim of conserving genes, providing raw material, environmental protection and tourism services, iii) improve security and supervision in utilizing coastal and marine resources, including the fishery resources, iv) conduct water, coastal and marine resource management, v) increase the development and utilization of coastal, marine and small islands resources, and vi) increase the efficiency and productivity of coastal and sea fishery resources through the integrated management of various means of utilization in a fair, just and sustainable manner within the frame of increasing local income and community welfare. There are 15 main activities proposed in this program.

(3) Irrigation Development

- 413-7 Irrigation Development is one component of the “foundation of public institutions and infrastructures (PII) for economic development,” including three sub-programs namely, i) the maintenance of PII services, ii) the promotion of the reform and restriction of PII, and iii) the increase in opportunities for people to access PII services.
- 413-8 The sub-program for the maintenance of PII services deals with i) the foundation of PII that fulfills the minimum requirements for economic recovery, ii) continuation of on-going constructions of PII including those that are pre-operational, iii) re-examination of the needs for new PII in the stages of designing and planning, and iv) the establishment of PII relating to the information and data on the sustainable economic growth. It can be seen that these issues reflect the severe financial conditions of Indonesia.
- 413-9 The objectives of the sub-program for promoting the reform and restriction of PII are to i) recover the financial feasibility, ii) introduce competition and regulation in the construction sector, iii) efficiently use the funds of the private sector, and iv) make the roles of the government concise and efficient with transparency. The sub-program has announced 6 major activities.
- 413-10 Lastly, the sub-program for the increase in opportunities for the people to access PII services aims at fulfilling basic needs with the prevalent of the PII services in remote areas. There are 3 major activities in this sub-program.

4.2 Five Year Agriculture Development Plan and Fisheries Development Plan

4.2.1 Five Year Agriculture Development Plan

- 421-1 Under the GBHN and PROPENAS, the MOA published an agriculture development plan for the period of 2000-2004, with the sub-title “The Significance of Agriculture as an Axis in National Economic Development.” The development plan re-appreciated the role of agriculture in the strategy for the economic development of Indonesia. It also strongly emphasized the necessity of policy to support small-scale farmers who have not benefited from past economic development. This means that the future development of the agriculture and fisheries sector should contribute to improving the living standards of small-scale farmers, who make up the majority of people in the country.
- 421-2 In the plan, the following items were regarded as important roles of agriculture in the next five years:

- (1) increase farmers' income and improve their living standards;
- (2) increase food production to meet the domestic demand for food and to strengthen national food security;
- (3) increase agricultural production for export as well as for the raw materials supply to the processing industry;
- (4) increase productivity, employment opportunities and fair business opportunities through agribusiness development; and
- (5) develop the rural economy by promoting environment-friendly agribusiness development.

421-3 Under the new Minister of Agriculture, Dr. Bungaran Saragih, who succeeded the former Minister, Dr. M. Prakosa, the MOA has once again published a new agriculture development plan for 2000-2004 in November 2000. The specific character of this development plan is that it emphasizes the role of agribusiness in the national economy, and has the following major objectives:

- (1) increase the income and living standards of farmers through agribusiness systems and enterprises;
- (2) develop rural economic activities through development of agribusiness systems and competitive, democratic, sustainable and decentralized agribusiness enterprises;
- (3) realize a food security system based on regional food resources, institutions, and local cultural diversities; and
- (4) create jobs and fair business opportunities through development of agribusiness systems.

421-4 In order to attain the above development objectives, the plan has the following two agricultural development programs:

- (1) Agribusiness development program:
 - development of an upstream agribusiness subsystem: development of a supporting infrastructure and facilities, and development of the seed industry;
 - development of an on-farm agribusiness subsystem: increasing agricultural productivity, improving product quality, improving production efficiency, and stimulating commodity development based on regional potential;
 - development of a processing subsystem: stimulating processing business development, reducing post-harvest losses and stimulating the agribusiness supporting industry;
 - development of an agribusiness marketing subsystem: supporting the development of a new domestic and overseas market and improving the domestic food distribution system;

- promotion of agribusiness development: capacity building, and developing an economic institution for agribusiness; and
- development of an agribusiness supporting subsystem: socioeconomic and cultural research, technology research and development, development of agribusiness management, development of an agri-extension system, development of farmers institutions and development of information and data systems.

(2) Food security improvement program:

- increase food supply: increase rice production and reduce food imports;
- promote food diversity: increase the production of non-rice food crops
- improve food-related institutions: develop and strengthen food-related distribution and marketing systems; and
- promote the development of the food processing business and industry.

4.2.2 Five Year Fisheries Development Plan

422-1 The MMAF prepared "The Strategic Plan for Marine and Fishery Development" along with PROPENAS and launched it in May 2002. This plan stands on democratization, decentralization and globalization, and states the following mid-term objectives to undertake the sustainable utilization of all aquatic resources including marine and inland waters.

- Improvement of welfare and living standard of coastal communities
- Raising income of fishermen and aquaculture farmers
- Enlargement of fishery products' consumption for nutritional improvement of Indonesian people
- Environmental protection of marine and inland open waters
- Reviewing the role of ocean for solidarity

422-2 The individual objectives corresponding to the above mid-term objectives are as follows:

- annual fishery production shall be 6.63 million tons;
- annual export of fishery products shall be U.S.\$3.88 billion;
- annual fish consumption per capita shall be 21.84kg;
- labor force in fisheries sector shall be 6.64 million people;
- offensive fishing regulated in the fishing law shall be reduced and pressure to marine and fishery resources shall be alleviated;
- poverty in coastal areas shall be decreased;
- technology for marine and fishery development shall be improved;
- accurate information-related marine and fishery shall be provided;

- intimate cooperative relationships between the central government and regional autonomies shall be established; and
- five marine and fishery-related regulations shall be revised.

422-3 The plan describes how the guidelines of the individual activities could achieve the objectives described above. In addition, the importance of monitoring and evaluating the activities is also stated.

422-4 Furthermore, the MMAF has just announced the national development strategy and plans for the marine and fisheries sector at the Technical Session of the National Coordination Meeting held from May 30 to June 1, 2002. The statement says that it is important to implement proper fishery resources management and promote mariculture for the sustainable utilization of renewable fishery resources.

4.3 Japanese Assistance to the Agriculture and Fisheries Sector in Indonesia

43-1 Indonesia is a very important for Japan both politically and economically, and the two countries have a close interdependent relationship in terms of trade and investment. Indonesia is located in a very important strategic area for Japanese marine transportation, is a supplier of natural resources i.e, oil and gas, and plays an important role to the economic development and stability in Southeast Asia, as a core of ASEAN countries.

43-2 Indonesia has been positioned as one of the most important recipients of Japanese Official Development Assistance (ODA). Until 1981, Indonesia took the largest share of the total value of the Japanese bilateral ODA. After that, Indonesia's share gradually decreased, but still accounts for a large portion and is ranked at about the same level as the People's Republic of China. The following table shows the amount of ODA for the Development Assistance Committee (DAC) countries have extended to Indonesia.

Amount of ODA, extended to Indonesia from DAC Countries

(Unit : million U.S.\$)

	1st		2nd		3rd		4th		5th	
1996	Japan	965.5	Ausl.	84.9	Ausr.	64.6	UK.	46.1	Spain	42.4
1997	Japan	496.9	Germ.	115.2	Ausl.	78.6	UK.	57.2	Ausl.	48.7
1998	Japan	828.5	Germ.	212.8	Ausl.	74.1	UK.	40.1	US	36.6

Note: Ausl.: Australia, Germ.: Germany, Ausr.: Austria, UK.: United Kingdom

Source : Japan's ODA Annual Report 2000

43-3 The Japanese assistance to the agriculture and fisheries sector in Indonesian is shown in the following tables:

Total Amount of Japanese ODA extended to Indonesia (every 5 years)

(Unit : hundred million Yen)

Year	Total amount of ODA	For Agriculture and Fisheries Sectors		
		Loan	Grant Aid	Technical Coop.
1970 – 1974	3,886.70	165.85	125.48	*1
1975 – 1979	3,789.06	453.04	115.54	*1
1980 – 1984	3,710.71	283.78	169.55	*1
1985 – 1989	7,023.37	597.67	203.83	*1
1990 – 1994	9,290.04	1,128.57	98.66	91.70
1995 – 1999	9,842.94	1,225.55	199.96	94.69
Total	37,542.82	3,854.46	913.02	186.39

*1 : There is no separate data for the agriculture or fisheries sectors for the period from 1970 to 1983.

Source : Japan's ODA Annual Report, The annual year book of JICA, 2000

An average yearly amount for every 5 years and a share of the agriculture and fisheries sector

(Unit : hundred million Yen)

(Bracket : Proportion (%) of the agriculture and fisheries sectors out of the whole ODA)

Year	Total amount of ODA	Agriculture and Fisheries Sectors			Share out of Total Amount of ODA (%)
		Loan	Agri-sector To ODA (%)	Technical Cooperation	
1970 – 1974	777.34	33.17 (4)	25.10 (99)	*1	7
1975 – 1979	757.81	90.61 (13)	23.11 (70)	*1	15
1980 – 1984	742.14	56.76 (9)	33.91 (54)	*1	12
1985 – 1989	1,404.67	119.53 (10)	40.77 (52)	*1	11
1990 – 1994	1,858.01	225.71 (14)	19.73 (24)	22.95 (17)	14
1995 – 1999	1,968.59	245.11 (14)	39.99 (40)	18.94 (17)	15

*1 : There is no date for agriculture and fisheries sector alone for the period from 1970 to 1983.

Source : Japan's ODA Annual Report, The annual year book of JICA, 2000

43-4 As shown in the above table, the total amount of Japanese ODA to Indonesia in the past 30 years amounts to 3.75 trillion yen. From the 1970s to the first half of the 1980s, the amount of ODA was about 75 billion yen. Since then, the GOJ's yearly assistance has been about 100 billion yen, and recently reached upward of 200 billion yen (equivalent to about 10% of the total Japanese ODA). The share of Japanese ODA directed to the agriculture and fisheries sector has changed within the range of 10%-15% with some yearly variations.

43-5 The number of Japanese-assisted projects in the agriculture and fisheries sectors during the 30 years from 1967 to 1999 are shown in Table 4.3.1 and summarized as follows:

**A number of Japanese funded Projects in the Agriculture and Fisheries Sector in Indonesia
(1967~1999)**

Types	Agriculture				Live-stock	Fishery	Total
	Production Technique	Infra-structure	Others	Sub- total			
F/S study	10	16	2	28	0	1	29
Grant aid	52	6	1	59	2	2	63
Loan	8	65	0	73	0	8	81
Project type	26	1	5	32	5	3	40
Total	96	88	8	192	7	14	213

Source : Japan's ODA Annual Report and others

- 43-6 The total number of projects in the agriculture and fisheries sector is 213 with an average of 6 projects per year. The number of projects in the agriculture, livestock, and fishery sub-sectors is 192, 7, and 14, respectively. In the agriculture sub-sector, cooperation has been emphasized in the technical production aspects and agricultural infrastructure, with 96 projects for production technique, 88 agricultural infrastructure projects and 8 other projects.
- 43-7 Through the improvement of agricultural production techniques, the Japanese cooperation has contributed toward the increase in agricultural productivity as well as farmers' living standards, in particular, the improvement of production techniques for major food crops. Furthermore, the irrigated area has been expanded from 3.6 million ha. to 5.03 million ha. in the last 10 years under the provision of technical cooperation, loans, and grant aid.
- 43-8 Given the achievements of the Japanese assistance, it can be assessed that the necessity of cooperation in technical matters for production has decreased, particularly in the area of major food crops. Therefore, it is recommended that, in the future, the GOJ gives more priority to technical assistance such as establishment/strength of institutions like a farmer's organizations insitutional building, the training of related officers and farmers, and the operation and maintenance of irrigation facilities.

4.4 Activities of Major Development Agencies in the Agriculture and Fisheries Sector in Indonesia

4.4.1 Asian Development Bank (ADB)

- 441-1 While the ADB's assistance to Indonesia has generally been executed under the ADB's five-year assistance strategy, during the economic crisis in 1997, ADB implemented a three-year emergency operational strategy in close collaboration with other development agencies. When the crisis was almost over in 2000, the ADB prepared the Country Operational Strategy 2001-2005: Indonesia in March 2001.

The five major points of this Strategy are:

- 1) creating and strengthening basic institutions by improving the many relevant areas in the governance;
- 2) supporting the sustainable recovery and pro-poor growth by enabling and encouraging private sector development;
- 3) improving regional equity through balanced regional development, especially targeting the rural areas and less developed islands;
- 4) investing in human and social development and enhancing the role of women; and
- 5) strengthening environment management to ensure sustainable use of natural resources and prevent adverse environmental impact associated with development.

441-2 According to the information from an ADB officer, this Strategy aims at a synergistic effect through the convergence of investment in specific areas and/or issues, and changes from a sector-based approach to a cross-sectoral approach. Agriculture is closely related to all the above five points, but the Strategy has been to place higher priority on the three issues of social development, pro-poor areas and environment than on the agriculture sector.

441-3 While ADB's level of assistance to the agriculture sector used to be 40% or more of the total amount of loan, it has now decreased to 25%.

441-4 For the time being, ADB's assistance will place higher priority on the improvement of existing projects than on new large-scale projects.

441-5 The list of ADB's on-going loan projects is shown in Table 4.4.1.

4.4.2 World Bank

442-1 The World Bank launched the Country Assistant Strategy for Indonesia in February 2001. The basic strategies contained in it are:

- (1) supporting Indonesia's political and economic transition in a highly uncertain environment;
- (2) under the overarching goals of reducing poverty and vulnerability in a more open and decentralized environment, support for the following issues:
 - sustaining economic recovery and promoting broad-based growth;
 - building national institutions for an accountable government, which includes legal and judicial reforms, better public financial management;
 - delivering better public services for the poor.

- 442-2 The basic approach of the World Bank is not specific to the agriculture or fisheries sector, but is focused on rural development for alleviating poverty. The approach is shifting from supporting technical matters in agriculture and resources to support for institutional matters including micro-finance. The World Bank has also given priority to the empowerment of farmer's groups in the context of rural development, and supported development plans formulated by farmer's groups that properly address their problems.
- 442-3 The problem at present is the indefinite role of the central government. From the viewpoint of the efficiency of assistance, the World Bank has stressed direct support to farmer's groups rather than to provide support to governmental agencies.
- 442-4 The list of World Bank's on-going loan projects is shown in Table 4.4.2.

4.4.3 Food and Agriculture Organization of United Nations (FAO)

- 443-1 FAO plays an important role as a coordinator of development projects with various donor agencies. Hence, FAO-related projects tend to target important issues that cover the whole area of agricultural development in Indonesia. As of June, 2002, there are three major projects that FAO coordinates, i.e., i) WATSAL, ii) NPFS and iii) the Food Safety Program. WATSAL is a structural adjustment program aimed at the arrangement of policy, institutions, regulations and the assistance for the restructuring organizations; WB and JBIC also support this program. The NPFS is a national program for food security with aims similar to those of WATSAL (refer to Table 4.4.3). The Food Safety Program is concerned with the safety of agricultural products and foods.

4.4.4 Other Donors

- 444-1 Based on data such as the ADB's Country Operational Strategy, the strategies of major aid agencies can be summarized as follows:
- (1) United Nations Development Programme (UNDP) and other UN Agencies
- 444-2 The strategies of UNDP and other UN agencies have placed emphasis on: 1) community development programs, 2) governance programs, focusing on political governance, 3) environmental management, and 4) assistance in implementing international conventions for the environment, social development and labor.
- 444-3 Major assistance in the agriculture and fisheries sector is to promote funds for community development.

444-4 With particular attention paid to 1) community development programs introduced above, UNDP has conducted such programs as improvement of housing with the approach of empowerment, the poverty reduction program with micro credits and decentralization programs.

444-5 (2) Major Bilateral Agencies

- The United States Agency for International Development (USAID) has recently revised its country operational strategy for Indonesia. The strategy lays out a priority for the strengthening of institutional capacity which aims at democratic reform, decentralization, encouraging sustainable economic growth and reducing conflicts (refer to Table 4.4.3).

Assistance for the agriculture and fisheries sector is being carried out under a five-year plan, 2000-2004. Principal assistance is to study, advise on and monitor the food policies and import/export conditions of food. From 2001 on, USAID is planning the implementation of a food policy program in six provinces: Ache, Irian Jaya, East Kalimantan, North Sumatra, West Java and East Java. The food policy program aims at giving guidance and advice for solving the problems identified through implementing the food policy.

- The Australian Agency for International Development (AUSAID) has focused on poverty reduction, sustainable economic development, improved governance for democratization and addressing vulnerable groups' needs. The assistance to the agriculture and fisheries sector has been implemented as a part of rural development.
- The German Technical Cooperation (GTZ) places priority on decentralization, including good governance, economic reform, the establishment of market economy and infrastructure, particularly for transportation. The assistance to the agriculture and fisheries sector has been carried out with the aim of capacity-building for local governments and community empowerment.
- As for other bilateral cooperations, in cooperation with the former Central Research Institute of Fishery of the AARD, the MOA (presently the Board of Research for Marine and Fishery, the MMAF), the Australian Center for International Agricultural research (ACIAR) and the Cooperative Scientific and Industrial Research Organization for Australia (CSIRO) in Australia have implemented many cooperative research projects in the field of aquaculture. These are more like cooperative research mainly for dispatching short-term experts and providing small-scale equipment.

4.5 Other Relevant Organizations

45-1 There are many other organizations that implement projects in the agriculture and fisheries sector. Of these, the JICA Team has consulted with ten organizations in the central government: i) BAPPENAS, ii) SEKNEG, iii) the Ministry of Finance, iv) the MOA, v) the MMAF, vi) the KIMPRASWIL, vii) the State Ministry of Cooperative and Small & Medium Enterprises, viii) the MOIT, ix) the MOHA, and x) the State Ministry of Women Empowerment. The organizational charts of those ministries are shown in Attachment 5. BAPPENAS is the coordinating agency for the Steering Committee, which was organized for the implementation of the Support Program, and the other nine are the committee members.

CHAPTER 5 EXAMINATION OF COOPERATION COMPONENTS

5.1 Basic Concept of Japan's Cooperation for the Agriculture and Fisheries Sector in Indonesia

- 51-1 In recent years, the international environment surrounding Indonesia has been changing rapidly. With the establishment of the international agreement under the WTO regime and the regional agreement under the AFTA, the nation has been strongly requested to abolish its protections on trade and foreign investment, so that Indonesian's domestic market can be tightly linked with the world market as well as regional ones (Agricultural Development Plan, Ministry of Agriculture). Economic globalization has brought with it the tendency of making the role of the government relatively small in the economic development of Indonesia. The role of the market economy is becoming more important, although it is necessary to keep attention to the current national interest in food security.
- 51-2 On the other hand, recent changes in the domestic situation of Indonesia are also worth noting. As stated by the GBHN (1999-2004) and the PROPENAS, the transparency and democratization of politics and the reinforcement of good governance (as represented by the policy of decentralization) have received the highest priorities as issues to be tackled. In this background, the role of the government is to focus on the enactment and facilitation of laws and regulations for those implementing projects. In this context, the services provided by the government are to be focused concentrically on market institutions, technology development, extensions, finance, and the development of important natural resources (Agricultural Development Plan, Ministry of Agriculture). Moreover, with the decentralization policy commenced in January 2001, the local government in a district or city has come to play an important role in planning and implementing policy in the agriculture and fisheries sector.
- 51-3 Furthermore, as has been extensively deliberated in international meetings such as those in the Organization for Economic Cooperation and Development (OECD), there is a global movement that regards the alleviation of poverty as the ultimate purpose of development. In line with this movement, Japan has also set this issue as an important target in its medium-term cooperation policy. The GOI also gives priority to the alleviation of poverty in PROPENAS, with the view that the development of rural farming and fishing villages leads to the reduction of the poverty as well as to economic growth (An Approach to Macro Food Policy, BAPPENAS, 2001).

51-4 Under the circumstances described above, JICA conducted the Assistance Strategy Formulation Strategy in order to examine the direction of Japan's cooperation for the agricultural and fisheries sector in Indonesia. As a result of this study, the basic concept underlying Japan's cooperation was found: Japan supports Indonesia's policy of aiming to develop the agricultural and fisheries sector in line with the decentralization policy and the globalization of markets, putting farmers and fishermen in the center of the strategy for social development and poverty alleviation. Accordingly, using this concept as the base and taking into account the principle of Japan's cooperation (e.g., the ODA charter) and the development issues prioritized by the GOI, two major issues were selected. They are "Stable Food Supply and Improvement of Nutrition" in terms of the macroeconomy and "Raising Income of Farmers and Fishermen and Vitalization of Rural Economy" from the viewpoint of private economy (Assistance Strategy Formulation Strategy Final Report, 2001). In addition, in the Assistance Strategy Formulation Strategy, the five cooperation programs were formulated under the above two development issues, as stated below.

(1) Stable Food Supply and Improvement of Nutrition

51-5 In the agricultural development plan of the GOI, food security is referred to as the situation in which food in the broad sense of the term (i.e., crop harvest, livestock and fish that promote human health through the supply of carbohydrates, proteins, fats, vitamins and minerals) is supplied, from national level to that of individual households, at prices that are affordable for customers everywhere; the food supplied must be sufficient, safe and rich in terms of amount, quality and nutrients. This development issue was then based on the purpose of steadily supplying food to the people through the optimization of the balance between domestic production and imports from the world market under the WTO system, which enables the survival of internationally competitive agriculture and fisheries sectors.

51-6 This issue was classified into two aspects, namely, the aspect of policy and institutional reform and production supporting services, and that of improvement of production infrastructures. The first, with awareness of the small role of the government, focuses on the improvement of institutions to match the policies of the central government with those of local governments under the decentralization policy. The second, on the other hand, addressing the difficulties of new investment in large-scale infrastructures, prioritizes the effective use, operation and maintenance of existing infrastructures. Moreover, as the fisheries sector is to take a different approach from agriculture to development, through the

sustainable use of limited resources, the content of cooperation for this sector was discussed separately from the agricultural sector. For the above reasons, the following three programs were considered appropriate for the development issue.

- 1) Program for Improving the Institution and Production Support System of Agriculture and Fisheries
 - 2) Program for Improving the Function of the Agricultural Infrastructure and Sustainable Operation and Maintenance
 - 3) Program for the Sustainable Utilization of Fishery Resources
- (2) Raising the Income of Farmers and Fishermen and the Vitalization of Rural Economy

51-7 The purpose of this development issue is to raise the income of farmers and fishermen to alleviate poverty in rural areas through stimulation of the rural economy. The contents of this development issue were examined from two aspects: i) promotion of economic activity in agricultural and fishing villages; and ii) improvement of economic systems to connect the economic activities of villages to the regional economy. In promoting economic activity in rural areas, it is necessary to support the local industries connected to agriculture and fisheries as well as to provide cooperation that deals directly with poverty. With respect to the economic systems, it is crucial to improve and strengthen the market in developing agribusiness. From these considerations, the following two programs are set for the development issue:

- 1) Program for Promoting Community-based Economic Activities in Agriculture and Fisheries
- 2) Program for Improving and Strengthening Markets for Agriculture and Fishery Products

51-8 In each of the above cooperation programs, specific cooperation components are defined, as will be discussed hereinafter. These components are being examined based on the future subjects identified in Chapter 3 through the sector analysis, and taking into account the following six points.

- 1) As the Action Plan is to be implemented for the three years from 2003 to 2005, the priority is put on projects that are in urgent need of implementation.
- 2) Taking into account the policy that the GOI restrains new foreign loans because of financial reconstruction, it is necessary to carefully examine economic and financial sustainability of new investment in large-scale infrastructure development.
- 3) From the viewpoint of the effective use of ODA, issues that have the possibility of competing with the private sector (e.g. estate crop production

and export promotion) will be excluded from the Action Plan.

- 4) Cooperation in the institutional aspect is of great importance, so that the support for production techniques and infrastructures that Japan has provided so far will be effectively utilized.
- 5) It is indispensable to prioritize cooperation components from various options and attain the effective combination of the financial and technical cooperations in order to maximize the potential effects of the assistance with Japan's limited resources for ODA.
- 6) To avoid the overlap of cooperation with other donors, it is necessary to find appropriate contents and target areas for the assistance.

51-9 It is necessary to support the governmental and financial reforms, including decentralization, that the GOI has been promoting since 2001. To ensure the sustainability of the effects of cooperation supports, however, an effective institutional framework for the central and regional government systems needs to be established. This institutional framework is essential to disseminate the benefits of the cooperation to farmers and fishermen. With this institutional basis, projects for model development focusing on the participatory approach will be examined.

5.2 Examination of Cooperation Components

5.2.1 Program for Improving the Institution and Production Support System of Agriculture and Fishery

521-1 In order to realize Stable Food Supply and Improvement of Nutrition, the issues to be tackled encompass not only the improvement of production technique, on which foreign donors, including Japan, have focused, but also the integrated function of various policies and institutions, including macroeconomic policy for finance and financial systems, human resource development, credit schemes, agricultural extension, and capacity building for farmers' organizations. As already mentioned, the globalization in the international economy has been expanding, and promotion of a decentralization policy in Indonesia has been taking place. As a result, of the situation surrounding the planning and implementation of agricultural policy has been changing greatly. It is thus of critical importance to establish consistent policy and institutions in order to link macro policies (e.g. policies for land systems and stable domestic production, and tariffs and subsidies to enable balance with imports) with the agricultural development plans formulated and conducted by local governments at farm level.

521-2 At present, it is generally recognized that some progress has been made in the production technique for food crops in Indonesia (Agricultural Development Plan, Ministry of Agriculture). As Japan has rendered assistance to this area for many years and attained this progress to some extent, the next step required is to utilize the effects of this support. In this regard, too, the highest priority should be given to the improvement of agricultural policy and institutions.

521-3 In light of ODA, the sectors that have relatively greater needs for production support are those of horticulture and livestock rather than those of estate crops, in which the private sector is engaged. Taking into account 1) the fact that the protein is the second most important nutrient (following calories) for the improvement of human nutrition and 2) the necessity for raising the income of small-scale farmers in order to alleviate poverty, development of the livestock sector is an urgent requirement. Considering this reason and the above information, the following two components have been set with respect to the cooperation program.

- 1) Support for policy and various institutional systems in line with the decentralization policy
- 2) Development of livestock industry utilizing local resources

(1) Support for Policy and Various Institutional Systems in Line with the Decentralization Policy

521-4 As already expressed, the integrated function of macro policies (e.g. tariff and subsidy) and the policies for particular issues such as land use, agricultural extension/education and training, agricultural credit, and farmers' organization is necessary for Stable Food Supply and Improvement of Nutrients. In addition, with the decentralization policy, the approach to development has changed from the central government-led type to that led by local governments, in order to respond to regional diversity. It is thus prerequisite to clarify the roles of the central and local governments and develop policy and institutions in line with each of these roles. Based on this perspective, this cooperation component deals with support for the establishment of policy and institutions, which makes the connection at farm level between the effects of macro policies implemented by the central government and those of individual projects carried out by local governments. In particular, to make the best use of the effects of cooperation that Japan has rendered so far, priority will be given to agricultural extension/training, and strengthening farmers' organization.

521-5 To be more specific, in the field of agricultural extension, it is necessary to provide the means for local governments to judge the rationality and feasibility of

plans (e.g., the preparation of guidelines point the way for the appropriate implementation of agricultural extension service in the region). As regards training and education, the extension office (BPP) in the sub-district (Kecamatan) has the function to provide various training programs for farmers. It is generally pointed out that the functions of the BPP are limited due to the insufficient number of extension officers and the lack of budget. Moreover, as the decentralization policy allows local governments to conduct policies unique to them, some districts have halted the BPP activities or admitted them only with limited functions. The functions and activities of some of BPPs have been kept in check due to decentralization, and so there is rising concern that farmers are being prevented from receiving education and training programs.

521-6 Strengthening farmers' organizations is considered to be a significant matter: farmers as members of a group may well enjoy more efficient production with greater benefits than farmers engaged in production individually. In order to create incentives for members to continue to engage in cooperative activities, the efficient implementation of production activities, and cooperative purchase and selling should be considered. Not only in the aspect of production activities but also in the aspects of developing agribusiness and raising farmers' income, the development of "high quality" farmers' organizations is critically important, as this will be the realization of independent, democratic management through the empowerment of farmers. For capacity building, then, it is necessary to provide suggestions for promoting merger and cooperation, which will bring about merits of scale, and to strengthen institutions and policies, including the implementation of training programs and preparation of guidelines regarding the business activities of cooperatives and their financial management. It is also indispensable to elucidate the need for and merits of reinforcing farmers' organizations with the preparation of regulations aimed at the democratic management.

521-7 Based on these points, it can be considered that priority in the component of "Support for Policy and Various Institutional Systems in line with the Decentralization Policy" must be given to support for the establishment of policies and institutions for stable food supply and improvement of nutrition including a) the improvement of extension and training systems and b) strengthening farmers' organizations such as cooperatives.

(2) Development of Livestock Industry Utilizing Local Resources

521-8 In Indonesia, the rise in people's incomes, the diversification of diet and the growth of the population have led to an increase in demand not only for vegetable

protein but also for animal protein (i.e., demand for meat, eggs and dairy products). Although the demand for animal products dropped off temporarily during the period of the Asian economic crisis, the per-capita consumption of protein in 1999 from meat, egg, and milk was 1.86g, 0.74g, and 0.30g respectively, while in 2001 it is estimated that they increased to 2.40g (129%), 1.10g (149%), and 0.57g (190%). These figures are expected to increase further in the near future.

- 521-9 The development of the livestock sector in Indonesia is based on two purposes: a) diversification of farm activities and improvement of the income level of farmers and b) the stable and safe supply of livestock products to the nation.
- 521-10 It is observed that, in the livestock sector, there are two major production systems, namely, local-resources-based, small-scale farms and import-dependent, larger-scale farms including large-scale commercial enterprises.
- 521-11 Import-dependent, commercial-oriented, and large-scale management such as that of commercial poultry and the feed-lot industry of beef cattle may well play a part in industrial development and the improvement of self-sufficiency. However, during the period of the Asian economic crisis, this sector fell into a critical situation due to the rapid increase in the prices of imported feed material and feed steers. Accordingly, this sector should be excluded from being a target of ODA, as it is to be promoted by the private sector.
- 521-12 In order to meet the increasing demand, and increase the income of farmers while reducing poverty, the utmost priority must be given to local-resources-based, small-scale farms rather than large-scale ones. Moreover, in terms of the development of agribusiness and regional economies, too, support for the small-scale farms is critically required.
- 521-13 In particular, the promotion of the small livestock farms that are compatible with the production of food crops is of crucial importance for rural communities.

5.2.2 Program for Improving the Function of the Agricultural Infrastructure and Sustainable Operation and Maintenance

- 522-1 The irrigation area has been expanded under the initiative of the government in order to attain foodstuff self-sufficiency. However, trade liberalization has given rise to serious price competition between local and imported rice. Further, other economic sectors are showing signs of economic recovery from the currency crisis, and this recovery has been improving the people's purchasing power. Under such circumstances, the public focus on food policy seems to be shifting to stable

food supply rather than food self-sufficiency. In this regard, it is necessary to carefully and seriously examine the irrigation development, taking into account the food policy based on the future supply and demand of food.

522-2 Regarding the existing irrigation schemes, there are various subjects to be focused upon. They are: the deterioration of irrigation facilities, the malfunction of irrigation facilities due to poor O&M caused by the unsuccessful hand-over to the WUA for the reduction of budgetary burden, the transfer of irrigated land to other land use on the populous Java Island, and the abandoned irrigated area on the outer islands.

522-3 Taking the above situation into consideration, the priority for Japanese ODA is given to institutional development for O&M of irrigation facilities, which had been expanded under assistance by donors including Japan. In this regard, the following three components have been selected for the irrigation sector:

- 1) Supporting the promotion of turnover of O&M for irrigation facilities to WUAs and local government.
- 2) Strengthening of WUAs and local government for the above-mentioned purpose.
- 3) Rehabilitation of existing facilities and development of small-scale irrigation facilities for the above-mentioned purpose.

For irrigation development and rehabilitation in the medium or larger scale irrigation schemes, their O&M will be taken into consideration as an essential component.

522-4 In order to formulate policy for comprehensive water resource management including the institutional framework, the GOI is accepting policy assistance from the World Bank and JBIC under WATSAL. In the same context, the following two subjects have been raised in close relation to the above programs:

- 1) Formulation of comprehensive plan for land utilization and enactment of related administrative instruction
- 2) Countermeasures against abandonment of irrigation systems on outer islands.

The GOI will be requested to present clear policies to address the above two subjects and bring about their implementation.

522-5 Under the circumstances surrounding the agriculture, large-scale irrigation development will be carefully developed, taking into account an increase of financial burden.

(1) Supporting the Promotion of Turnover of O&M systems for Irrigation

- 522-6 The government had been implementing irrigation development, and the irrigation area reached 5.03 million ha in 1999, corresponding to 62% of 8.11 million ha total paddy field area. The irrigation area thus developed has contributed to attaining a stable supply of food. On the other hand, O&M and rehabilitation are fully dependent on the government budget, and this has become a financial burden on the government. Under these circumstances, the government issued the Irrigation O&M Policy in 1987 to hand over the O&M of irrigation facilities to WUAs and local government, in order to bring about sustainable O&M and efficient water supply through charging irrigation service fees to water users.
- 522-7 Since the late 1980s, donors have supported the implementation of the above policies for the institutional development for O&M, the formation of WUAs, the collection of irrigation service fees, and the handing over of O&M at project basis. In spite of such efforts, the results have been far worse than expected. In order to improve the situation, the government has since 1999 started to strengthen the "institutional framework for O&M" with the aim of "improving irrigation management policy, institution, and regulation", under the support of the WATSAL by the World Bank. The local government mechanism, which is in the process of decentralization, has been undergoing reorganization for the rehabilitation and O&M of irrigation facilities under the institutional framework indicated by WATSAL.
- 522-8 In this regard, along with progress in strengthening the above institutional framework, it is necessary to support the handing over of irrigation O&M to WUAs.

(2) Strengthening of WUAs and Local Government for the above-mentioned Purpose

- 522-9 High economic growth and population increase have brought about an expansion in water demand in urban and industrial sectors. This has prompted the government to shift the focus on water resources from being a natural resource regarded as a social asset to being an economic resource. Since irrigation uses the largest volume of water, accounting for more than 80% of total water consumption, the efficient use of water and transparent operation of facilities are required more than ever in the irrigation sector. And the capacity building of local government is required for strengthening of WUAs.
- 522-10 Appropriate water management is not simple and is widely varied due to the diversity of natural conditions as well as social, cultural, and ethnic ones. The

agriculture sector has been highly protected and subsidized for a long period, and farmers have acquired the rather stereotypical mindset that “the government will always supply irrigation water without participation in O&M”. This mindset does not enable efficient use of water and appropriate O&M of irrigation facilities through the establishment of autonomous WUAs. This situation has led to excessive consumption of irrigation water in upstream areas and forced downstream areas into difficult water-utilization situations. Accordingly, the designed irrigation command area cannot be fully irrigated.

522-11 In order to improve such a situation, it is necessary to organize WUA, suitable for local conditions, and capable of managing the organization in a democratic and sustainable manner as well as managing the finances with transparency and soundness, through changing the mindset of farmers so that they become bearers of O&M responsibility.

(3) Rehabilitation of Existing Facilities and Development of Small-scale Irrigation Facilities for the Above-mentioned Purpose

522-12 After the construction of irrigation schemes, facilities and structures gradually deteriorate, and trouble including canal sedimentation and structural damage arises, even under the normal O&M conditions. Furthermore, lack of proper O&M of irrigation facilities accelerates deterioration of the functions of the schemes.

522-13 Besides, due to the various reasons, irrigation water is not fully supplied to command area in many irrigation schemes. In some schemes, the size of the designated irrigation area is beyond the scope of the available water resources, due to strong requests from the farmers and local leaders to expand the command area. In other cases, there has been a reduction in water resources due to the degradation of watersheds. Low canal density at the on-farm level is also one of the main causes for decreases in the efficiency of distribution of irrigation water to the fields.

522-14 The above situation creates a vicious cycle of inadequate O&M and low collection of irrigation service fees in irrigation management. In such a situation, WUAs are unable to conduct O&M in a sustainable and efficient manner. Therefore, countermeasures are required to remove this vicious cycle before the handing over of irrigation management and O&M to WUAs. Countermeasures include revision of irrigation area to an appropriate size, small-scale water resource development, selection of structure design manageable for farmers, and the rehabilitation of deteriorated facilities in order to enable WUAs to carry out O&M of the irrigation schemes in efficient and effective manner.

5.2.3 Program for the Sustainable Utilization of Fishery Resources

- 523-1 Fishery products play an important role in the nutritional improvement of the people and stable supply of food, since per capita consumption of fishery products in 1999 was about 18kg, which accounts for 60% of the animal protein intake. Fishery resources are the natural resources distributed in the third largest marine area in the world and the vast inland water area, and the products are items for self-supply in Indonesia. Furthermore, in such remote areas as the eastern part and the small island area of Indonesia where no specific useful natural resources are available, fishery plays an important role in creating job opportunities as well as generating cash income for fishermen and related people.
- 523-2 The development subjects, identified in Chapter 3, are broadly categorized into two major aspects, namely, resources management for sustainable fisheries promotion, and the supply of fishery products to the people at affordable low prices. Each aspect of management and supply contains both capture fishery and aquaculture.
- 523-3 Taking the above-mentioned circumstances into account, the following components are conceivable for the cooperation program.
- 1) Cooperation in establishing the resource management system for sustainable development of coastal and inland open water capture fishery and fish culture
 - 2) Promotion of coastal and inland capture fishery and fish culture for expansion of local consumption of fishery products at low prices
- (1) Cooperation in Establishing the Resource Management System for Sustainable Development of Coastal and Inland Open Water Capture Fishery and Fish Culture
- 523-4 Marine capture fishery generates three quarters (3/4) of total fishery production. The product from marine capture fishery is regarded as animal protein resources with the most potential for Indonesia in the future. The potential resource is estimated at about 5 million tons per annum. The utilization of fishery resources is evaluated to be still low in the eastern part on the one hand, but already over-exploited in Western part of Indonesia on the other. As for fishing grounds, over-exploitation can be seen in near-shore areas and bays. However, low utilization of fishery resources is common in offshore areas. Illegal fishing such as fishing by use of dynamite or poison is widely observed in several locations of Indonesia, and there are lots of violent fishing practices being conducted by foreign vessels in IEEZ. Illegal fishing brings about a decrease in coastal fishery

resources and degradation of environment. Marine capture fishery production decreased in 1999 from the previous year; no such decrease in production has been recorded in the past. These situations may indicate a need to revise the policy of utilization of marine and fishery resources.

523-5 It is necessary to introduce an integrated management system conducted by central and regional levels, in order to evaluate fishery resource potential and utilize it in sustainable manner under the control of the central government, provinces and districts. Based upon the integrated guideline, each responsible management body should decide the individual activities of fishery resources management suitable to the particular fishing situation. Coastal fishermen and villagers are required to understand and participate in the management and utilization of fishery resources, and introduction of a community-based resources management that involves such groups as fishermen, fish distributors, and others is expected. Hence, assistance is necessary to establish policies and regulations for fishery resources management and control based on decentralization, to prepare guidelines for deciding measures on resources management corresponding to the particular regional situation, and to train leading personnel such as administrators in provinces and districts.

523-6 Extension of sustainable and environmentally harmonized aquaculture technology is an important strategy in Indonesia. In order to support such extension, aquaculture technology is firstly to be transferred to the national aquaculture development center. Technology is then to be disseminated to aquaculture farmers through provincial or district fishery services, which are to be restructured under coordination of the national center. In order to promote the practice of aquaculture in open waters, assistance is essential to establish policies and institutions relating to fishing license, environmental protection and co-surviving with region from the viewpoint of sustainability.

(2) Promotion of Coastal and Inland Capture Fisheries and Fish Culture for Expansion of Local Consumption of Fishery Products at Low Prices

523-7 The promotion of capture fishery and aquaculture with high development potential such as coastal fishery resources in eastern and small island areas of Indonesia where there are limited development resources other than fisheries, and freshwater aquaculture in undeveloped areas apart from for Java island, is necessary to increase local fish consumption and the intake of protein by supplying cheap fishery products. In addition, it is important to decrease production losses in natural resources and to utilize them efficiently from the viewpoint of the promotion of the protein intake necessary for nutritional improvement and the

sustainable utilization of fishery resources. To reduce post-harvest losses, which are almost equivalent to 20% of the total fishery production at present, it is necessary for artisanal fishermen to improve the handling of post-harvest fish at production sites from fishing grounds to wholesale markets, in order to preserve their freshness and sanitation. Moreover, from an aspect of poverty alleviation, the promotion of capture fishery and aquaculture shall contribute directly to increasing the income of fishermen.

5.2.4 Program for Promoting Community-based Economic Activities in Agriculture and Fisheries

524-1 This program aims to raise the income of farmers and fishermen through the vitalization of their villages, in order to alleviate poverty. Although there are various activities relating to agriculture and fisheries, the program will focus on the development of processing to add value to products, as well as on the creation of job opportunities, as the other aspects such as farm management and fishing have already been promoted by the GOI. In the analysis conducted in Section 3.1.10, Agribusiness, it was found that the issues to be tackled are 1) the construction of information network systems with regard to the partners, markets, techniques, funds, and materials for processing, 2) tax concessions, 3) the preparation of credit schemes for small and medium-sized enterprises, 4) the improvement and preparation of micro credits for small-scale farmers and fishermen, and 5) the development of human resources. These issues are also pointed out in the other Sub-sections of 3.2.3 (4) and so on.

524-2 Based on these findings, with the aim of promoting local processing industries for agricultural and fishery products, the program examines the recommendations for 1) the institutional framework for creation of investment incentives (e.g. tax concessions and credit schemes for small and medium-sized enterprises) 2) improvement and construction of information systems and 3) encouragement and strengthening of farmers' and fishermen's organizations to promote the local processing industry for agricultural and fishery products. Then, in order to promote income-generating activities for poor people, it examines the recommendations and cooperation for the promotion of credit systems and for establishing and strengthening mutual-aid systems for farmers.

524-3 For these recommendations and "model" actions, it is necessary to consider the effectiveness of the participatory approach in rural development, as discovered through the results of the previous cooperations of JICA for South and Southeastern Sulawesi, and also to take into account the financial decentralization prevailing in Indonesia.

524-4 Incidentally, although the previous study of the Assistance Strategy Formulation Strategy pointed out the needs for the improvement of the school-attendance rates of middle-class farmers, fishermen and extension workers at agricultural junior high and high schools for developing human resources, these issues may well be out of the scope of the Action Plan, as they are to be addressed in the middle and long terms.

(1) Encouragement of Local Processing Industries for Agricultural and Fishery products

524-5 This component will consider the following issues as the cooperation of Japan

- ① Recommendation for institutional framework for creation of incentives for investments
- ② Recommendation for Information System
- ③ Encouragement and strengthening of farmers' and fishermen's organizations to promote the local processing industry for agricultural and fishery products.
- ④ Improvement of necessary infrastructures such as small-scale facilities for the above-mentioned purpose

1) Recommendation for the Institutional Framework for Creation of Investment Incentives

524-6 In order to develop new local industries, a prerequisite is to prepare credit for small and medium-sized enterprises, which require some initial investment funds. Although the Unit Desa of BRI, the national bank of Indonesia, provides micro credit to rural enterprises, many small and medium-sized enterprises have received little benefit due to the insufficient number of credit opportunities. This situation forces them to depend on credit from other sources with a higher rate of interest.

524-7 Moreover, despite the need for tax concessions to promote the processing industries, such policies or institutional systems have been disorganized. It is often claimed that the application procedure to receive tax concessions is complex and time-consuming. Hence, in conceiving of policies and institutions, it is desirable to construct an efficient system.

524-8 Therefore, in vitalizing rural economy, support for the establishment of institutional concessions as an investment incentive should be carefully examined, in order to develop agribusiness centering on local industries.

2) Recommendation for the Information System

524-9 In order to promote investment as described above, it is also necessary to prepare the information system, including the construction of the information network with regard to the partners, markets, techniques, funds, and materials for processing.

3) Encouragement and Strengthening of Farmers' and Fishermen's Organizations to Promote the Local Processing Industry for Agricultural and Fishery Products.

524-10 The main business organizations in rural areas are KUDs. Essentially, KUDs are groups that are voluntarily organized by cooperative members. They are developed with government support, and some KUDs have played important roles, though it is difficult to say that they are profit organizations. However, due to heavy dependence on the government and to the poverty relating to the low prices and low-level production of agricultural products, many KUDs function badly, due to a lack of stable, independent management and positive participation by farmers.

524-11 Presidential Decree No.18 announced in 1998 abolished the regulation that restricts the establishment of KUDs to no more than one unit in one sub-district. On its abolition, "new agricultural cooperatives" (Koptan: Koperasi Tani) have increasingly been organized. But there are many problems with them, as they have just come to the new stage of development.

524-12 In order to develop agribusiness, the MOA and MMAF have conducted micro-projects such as micro credit and community-based projects for groups voluntarily organized by farmers and fishermen (e.g., Klompokku). Fundamental education to foster an awareness of participation, to cultivate a sense of identity and responsibility, and so on is required, therefore it may take a long time until they are functioning well as business units. To promote this, technical support on encouragement and strengthening of farmers' and fishermen's organizations is indispensable.

4) Improvement of Necessary Infrastructures such as Small-scale Facilities for the Above-mentioned Purpose

524-13 Improvement of necessary infrastructures such as small-scale facilities for the above-mentioned purpose will be examined.

(2) Support for Income Generation by Poor people: Promotion of Micro Credit Schemes and Recommendations and Support for Promoting and Strengthening Mutual-help Organizations for Farmers and Fishermen

524-14 The businesses of most farmers and fishermen are small in scale, and generally lack the channels and financial resources that are necessary to manage all activities from production through to marketing. Therefore, it is difficult for small farmers to obtain farm inputs such as high quality seeds, fertilizers, and agrochemicals, at the appropriate time and in the appropriate quantity.

524-15 Due to the above reasons, there are cases in which farmers tend to depend on support from private business people such as middlemen and rice millers, in order to procure farm inputs to be required. As a result, it is highly likely that the farmers will end up selling their products at the low prices requested by the private business people. For fishermen, too, it is difficult to individually procure production tools, such as fishing boats, nets, engines, as well as the materials to preserve the freshness of fish, such as ice and container boxes. In particular, those living in remote areas far from markets tend to rely on middlemen or fishing companies for the material and financial aspects, and in return are often required to sell their catches at unfair prices. Also, in the case of small fish farmers, the difficulty to procure high quality feed and fries results in a low incidence of survival and in slow growth, leading to their management falling into critical condition.

524-16 In order to change this situation, the GOI have been implementing various micro credit programs at low interest rates. In general, however, those micro credit schemes tend to limit the credit purposes, periods and amounts, and often work as constraints against those that use them. Moreover, the group-guarantee system adopted in these programs is faced with financial management problems on the borrowers' side, such as cooperatives etc., with a lack of understanding on credit system among their staff as well as the members that leads to unclear handling of the credit repayment process and money usage.

524-17 Addressing this problem requires assistance for small farmers and fishermen so that they may have sufficient capability to properly utilize these micro credit programs. On that account, it is considered important to allocate a sufficient time period for third party supporters, such as NGOs, to enable facilitation of farmers and fishermen actively taking the initiative in managing their groups, together with the provision of practical training courses areas such as organizational and financial management, etc.

5.2.5 Program for Improving and Strengthening Markets for Agricultural and Fishery Products

525-1 As a result of the sector analysis in chapter 3, the improvement in the marketing of agricultural and fishery products have been summarized into the following five points.

- (i) To realize hygienic and efficient market management
- (ii) To establish an effective legal framework governing the market for realization of transparent trade and fair price formation
- (iii) To facilitate access of farmers/fishermen to market information
- (iv) To realize collective marketing by farmers' organizations
- (v) To clarify and improve the situation of post-harvest losses

525-2 Out of five points above, item (iv) is to be studied together with farmers' organization in the Program for Improvement of Institutions and Production in Agriculture. Study of the item (v) is to be considered on a medium-/ long-term basis, since the target ranges vary widely from farms through to the market and distribution. Items (i),(ii) and (iii) are to be taken up for study in this program, focusing on the market.

525-3 Accordingly, the components under this program are to be as follows:

- 1) Recommendation on the improvement of market institutions for agricultural and fishery products
- 2) Recommendation on the establishment of basic market information systems for agricultural and fishery products

(1) Recommendation on the Improvement of Market Institutions for Agricultural and Fishery Products

525-4 Existing wholesale markets of agricultural and fishery products are generally superannuated, congested and not kept hygienic. In addition to this, there is the daily occurrence of dead stock, and increasing post-harvest losses. No license system for wholesalers, no obligation to report dealing data, face-to-face negotiations and incomplete quality standards are constraints on transparent trade and fair price formation. The wholesale markets are centered on distribution between producers and consumers, aiming at the smooth and stable supply of commodities (mostly perishables) through fair and prompt transactions. Improvement of the wholesale market, therefore, is imperative. The effective legal framework governing the market needs to be thoroughly reviewed and improved. The produce collection system, based on collective marketing by farmers' organizations or the equivalent, is an important prerequisite for efficient operation of the markets.

(2) Recommendation on the Establishment of Basic Market Information Systems for Agricultural and Fishery Products

525-5 The market, positioned in between producers (farmers/fishermen) and consumers (product users), should play the important role of information exchange between the two. However, this is not sufficiently in place as of yet. Farmers have difficulties accessing market information. Price data by commodity are regularly collected by central and regional government officials, and released publicly through the media. However, this information is not fully utilized due to the *drawbacks in the quantity, quality, promptness and practicality of the information*. Improvement needs to be carried out to establish effective and wide-ranged market information systems for revitalization of the market. Access to information required for promotion of agribusiness should also be facilitated.

Tables

Table 2.1.1 Gross Domestic Product at Current Market Prices by Industrial Origin, 1996-2000

(Unit: Billion Rupiah)

Industrial Origin	1996		1997		1998		1999*		2000**	
	GDP	Share (%)	GDP	Share (%)	GDP	Share (%)	GDP	Share (%)	GDP	Share (%)
Agriculture, Livestock, Forestry and Fishery	88,791.8	16.7	101,008.4	16.1	172,827.8	18.1	216,913.6	19.5	218,397.6	16.9
a. Farm Food Crops	47,622.1	8.9	52,189.4	8.3	91,346.0	9.6	115,134.9	10.4	110,640.6	8.6
b. Non-food Crops	14,434.6	2.7	16,447.4	2.6	33,289.8	3.5	36,691.7	3.3	34,784.5	2.7
c. Livestock and Products	9,523.8	1.8	11,688.1	1.9	15,743.6	1.6	23,939.4	2.2	27,507.3	2.1
d. Forestry	8,170.5	1.5	9,806.5	1.6	11,700.5	1.2	13,839.7	1.2	15,077.7	1.2
e. Fishery	9,040.8	1.7	10,878.1	1.7	20,747.9	2.2	27,307.9	2.5	30,387.5	2.4
Mining and Quarrying	46,088.1	8.7	55,561.7	8.9	120,328.6	12.6	109,974.1	9.9	166,563.1	12.9
a. Crude Petroleum and Natural Gas	28,118.3	5.3	34,036.5	5.4	74,883.7	7.8	71,847.2	6.5	123,409.8	9.6
b. Non-Oil and Gas Mining	9,097.8	1.7	11,192.4	1.8	35,459.9	3.7	27,668.8	2.5	31,384.9	2.4
c. Quarrying	8,872.0	1.7	10,332.8	1.6	9,984.9	1.0	10,458.2	0.9	11,768.4	0.9
Manufacturing Industry	136,425.9	25.6	168,178.0	26.8	238,897.0	25.0	287,792.7	25.9	336,053.2	26.0
a. Oil and Gas Manufacturing	14,194.3	2.7	15,621.9	2.5	33,172.4	3.5	34,541.6	3.1	49,832.1	3.9
Petroleum Refinery	8,340.1	1.6	8,116.1	1.3	15,002.2	1.6	16,216.5	1.5	21,823.8	1.7
Liquefied Natural Gas (LNG)	5,854.2	1.1	7,505.8	1.2	18,080.2	1.9	18,325.2	1.7	28,108.4	2.2
b. Non Oil-Gas Manufacturing	122,231.6	23.0	152,556.1	24.3	205,724.7	21.5	253,161.0	22.8	286,121.0	22.2
Food, Beverages and Tobacco	58,978.6	10.7	69,569.3	11.1	117,821.0	12.3	154,423.5	13.9	155,403.4	12.0
Textile, Leather Products, and Footwear	11,588.5	2.2	16,868.3	2.7	18,851.1	1.8	19,229.2	1.7	22,793.8	1.8
Wood Products and Other Wood Products	8,113.0	1.5	8,744.0	1.4	10,542.5	1.1	9,580.3	0.9	10,135.6	0.8
Paper and Printing	4,501.4	0.8	5,999.7	1.0	8,538.9	0.9	9,802.0	0.9	11,180.0	0.9
Fertilizers, Chemicals and Rubber Products	15,656.4	2.9	17,544.5	2.8	24,128.7	2.5	28,643.9	2.6	38,556.8	3.0
Cements and Non Metallic Products	4,203.0	0.8	5,081.5	0.8	5,305.5	0.6	5,635.8	0.5	6,945.4	0.5
Iron and Basic Steel	4,609.4	0.9	5,773.1	0.9	6,614.0	0.7	7,297.5	0.7	8,329.9	0.8
Transport Equipment, Machinery and Apparatus	15,898.7	3.0	22,037.5	3.5	15,133.0	1.6	17,833.9	1.6	32,106.6	2.5
Other Manufacturing Products	672.6	0.1	949.2	0.2	690.0	0.1	704.9	0.1	689.8	0.1
Electricity, Gas and Water Supply	6,892.6	1.3	7,832.4	1.2	11,283.1	1.2	13,429.0	1.2	15,072.4	1.2
a. Electricity	5,660.4	1.1	6,452.8	1.0	9,325.3	1.0	11,201.4	1.0	12,638.6	1.0
b. Gas	230.9	0.0	290.9	0.0	312.4	0.0	353.2	0.0	429.0	0.0
c. Water Supply	1,001.3	0.2	1,088.7	0.2	1,645.4	0.2	1,874.5	0.2	2,005.8	0.2
Construction	42,024.8	7.9	46,878.8	7.4	61,761.6	6.5	74,496.4	6.7	92,175.9	7.1
Trade, Hotel and Restaurant	87,137.2	16.4	99,581.9	15.9	146,740.1	15.4	175,663.7	15.9	198,049.5	15.2
a. Wholesale and Retail Trade	69,375.4	13.0	77,543.3	12.4	116,888.5	12.2	141,008.6	12.7	160,323.8	12.1
b. Hotel	3,258.4	0.6	3,887.4	0.6	5,365.6	0.6	8,240.7	0.6	8,761.7	0.5
c. Restaurant	14,503.6	2.7	18,151.2	2.9	24,686.0	2.6	29,324.2	2.6	32,964.0	2.6
Transport and Communication	34,926.3	6.6	38,530.9	6.1	51,937.2	5.4	55,169.6	5.0	64,559.1	5.0
a. Transport	29,240.4	5.5	31,497.5	5.0	41,837.2	4.4	42,735.7	3.9	49,336.7	3.8
Railway Transport	287.4	0.1	307.9	0.0	504.0	0.1	622.3	0.1	743.7	0.1
Road Transport	16,631.7	3.1	18,240.4	2.9	22,461.6	2.4	20,594.8	1.9	22,538.9	1.7
Sea Transport	3,108.5	0.6	3,930.2	0.5	4,284.1	0.4	5,321.3	0.5	6,629.5	0.5
Inland Water Transport	1,922.4	0.4	1,973.7	0.3	2,597.4	0.3	2,751.9	0.2	3,430.3	0.3
Air Transport	2,277.1	0.4	2,643.4	0.4	3,664.1	0.4	3,572.9	0.3	4,108.1	0.3
Services Allied to Transport	5,019.2	0.9	5,402.0	0.9	8,326.1	0.9	9,772.5	0.9	11,888.1	0.9
b. Communication	5,679.9	1.1	7,033.3	1.1	10,100.0	1.1	12,453.9	1.1	15,213.4	1.2
Financial, Ownership and Business Services	43,981.9	8.3	54,360.3	8.7	69,891.7	7.3	70,641.8	6.4	80,047.2	6.2
a. Bank	17,708.4	3.3	20,287.0	3.2	26,823.5	2.7	24,163.8	2.2	27,844.6	2.2
b. Non Bank Financial Institutions	3,817.9	0.7	4,534.2	0.7	5,404.6	0.6	5,852.4	0.5	6,465.9	0.5
c. Services Allied to Financial	326.3	0.1	374.0	0.1	482.1	0.1	522.9	0.0	590.6	0.0
d. Building Rental	13,648.6	2.6	17,715.4	2.8	23,140.3	2.4	24,433.5	2.2	27,272.2	2.1
e. Business Services	8,479.7	1.6	11,439.7	1.8	15,041.2	1.6	15,679.3	1.4	17,873.0	1.4
Services	46,289.4	8.7	55,962.0	8.9	82,088.8	8.6	104,968.7	9.5	121,775.3	9.4
a. General Government	29,752.9	5.6	32,127.9	5.1	40,641.0	4.3	56,745.0	5.1	69,460.2	5.4
Government Administration and Defence	22,685.1	4.3	23,003.6	3.7	28,449.1	3.0	38,493.3	3.5	44,499.0	3.4
Other Government Services	7,067.8	1.3	9,124.3	1.5	12,191.9	1.3	18,251.7	1.6	24,961.2	1.9
b. Private	16,546.5	3.1	23,834.1	3.8	41,445.8	4.3	48,223.7	4.3	52,315.1	4.1
Social and Community Services	3,385.3	0.6	4,164.0	0.7	5,850.7	0.6	7,128.6	0.6	8,107.2	0.6
Amusement and Recreation Services	1,087.7	0.2	1,373.2	0.2	2,083.3	0.2	2,167.9	0.2	2,460.0	0.2
Personal and Household Services	12,073.5	2.3	18,296.9	2.9	33,411.8	3.5	38,927.2	3.5	41,747.9	3.2
Gross Domestic Product	532,568.0	100.0	627,895.4	100.0	956,753.5	100.0	1,109,979.5	100.0	1,290,684.2	100.0
Gross Domestic Product Non-Oil Gas	490,255.3	92.1	578,037.0	92.1	847,697.4	88.7	1,003,590.7	90.4	1,117,342.3	86.6

*Preliminary Figures **Very Preliminary Figures

 Source: Central Bureau of Statistics of Indonesia (<http://www.bps.go.id>)

Table 2.1.2 Trend of Export by Industrial Origin 1997-2000

(Unit: US\$ Million, %)

Industrial Origin	1997		1998		1999		2000		2001 Jan.~July	
	Value	Growth	Value	Growth	Value	Growth	Value	Growth	Value	Growth
I. Oil and Gas	11,823	-0.8	7,873	-32.3	9,792	24.4	14,387	46.7	8,079	88.3
Crude Oil	5,480	-4.1	3,340	-38.9	4,517	34.9	6,090	34.8	3,725	91.8
Oil Products	1,303	-14.1	708	-45.7	918	29.7	1,852	80.0	742	54.8
Gas	4,840	7.7	3,816	-21.2	4,357	14.2	6,825	52.1	3,812	88.8
II. Agricultural Products	3,272	12.3	3,653	11.6	2,901	-20.6	2,709	-6.8	1,035	38.7
Coffee	503	-14.6	579	15.1	458	-20.9	312	-31.9	101	-22.9
Shrimp	1,008	-0.8	1,007	-0.1	888	-11.8	1,003	13.0	575	85.7
Tea	84	22.9	108	28.6	92	-14.8	108	17.4	80	57.9
Spices	230	45.8	278	20.9	374	34.5	315	-15.8	93	-18.4
Fish and Other Related	424	-1.4	390	-8.0	403	3.3	359	-10.9	208	82.2
III. Industrial Goods	34,846	8.5	34,593	-0.7	33,332	-3.6	42,003	26.0	28,687	18.1
Plywood	3,411	-5.1	2,078	-39.1	2,258	8.6	1,989	-11.8	1,057	48.5
Lumbering	380	-19.7	164	-56.8	296	80.5	331	11.8	162	37.3
Tin	275	-0.4	281	2.2	250	-11.0	233	-6.8	130	71.1
Aluminium	400	-5.0	351	-12.3	278	-20.8	452	62.8	255	85.8
Nickel	173	-21.0	108	-37.8	191	78.9	268	40.3	382	315.2
Steel	837	12.1	787	23.5	757	-3.8	834	10.2	n.a	n.a
Garments	2,876	-19.6	2,588	-10.0	3,818	47.5	4,703	23.2	2,839	88.9
Textile Goods, Threads, and Other Related	4,534	52.4	4,803	5.9	3,418	-28.8	3,634	6.3	1,873	51.7
Processed Rubber	1,029	-13.4	1,548	-19.8	1,236	-20.2	1,320	6.8	704	50.7
Palm Oil	1,446	75.3	745	-48.5	1,114	49.5	1,087	-2.4	486	32.4
Electrical Appliance	3,831	2.5	3,279	-9.7	3,419	4.3	6,758	97.7	1,817	57.0
Processed Food	837	-13.0	758	-9.7	958	28.7	955	-0.3	546	71.7
Cements	33	73.7	85	157.8	137	61.2	143	4.4	101	74.1
Furniture & Parts	755	-20.2	354	-53.1	1,231	247.7	1,508	22.5	n.a	n.a
Chemical Goods	721	30.6	1,008	39.8	988	-2.2	1,287	30.5	884	58.7
Fertilizer	312	15.1	169	-45.8	187	10.7	212	13.4	102	27.5
Leather Goods	138	109.1	174	26.1	91	-47.7	112	23.1	65	82.5
Paper Materials	938	-1.8	1,428	52.0	1,988	37.9	2,291	16.5	1,049	30.8
Others	8,103	15.8	10,299	27.1	7,729	-25.0	10,605	37.2	15,849	-8.2
Footwear	1,531	-30.3	1,208	-21.2	1,602	32.8	1,672	4.4	986	-8.5
IV. Mining Products	3,107	1.7	2,704	-13.0	2,826	-2.9	3,041	15.8	2,200	173.0
Copper Ore	1,497	-14.4	1,307	-12.7	1,156	-11.8	1,621	40.2	1,208	243.2
Nickel Ore	38	-11.8	27	-28.9	26	-3.7	42	61.5	32	111.3
Coal	1,485	32.5	1,348	-9.4	1,314	-2.4	1,278	-2.9	882	113.9
Total Value	53,444	7.3	48,848	-8.8	48,665	-0.4	62,124	27.7	40,001	32.3

Source: Central Bureau of Statistics of Indonesia (<http://www.bps.go.id>)

Table 2.2.1 State Budgets (FY 2001 and FY 2002)

(Unit: Billion Rupiah)

Items	2001		2002	
	Adjustment	% to GDP	Budget	% to GDP
A. Total Revenue and Grants	286,006.1	19.5	301,874.3	17.9
I. Domestic Revenues	286,006.1	19.5	301,874.3	17.9
1. Tax Revenues	185,260.2	12.6	219,627.5	13.0
a. Domestic Taxes	174,254.8	11.9	207,028.9	12.3
i. Income Tax	94,970.5	6.5	104,497.2	6.2
1. Oil and gas	25,725.0	1.7	15,551.9	0.9
2. Non-oil and gas	69,245.5	4.7	88,815.3	5.3
ii. Value added tax	53,456.5	3.6	70,099.8	4.2
iii. Land and building tax	5,094.4	0.3	5,924.2	0.4
iv. Duties on land and building transfer	1,195.0	0.1	2,205.0	0.1
v. Excises	17,600.6	1.2	22,352.9	1.3
vi. Other taxes	1,937.8	0.1	1,949.7	0.1
b. International trade tax	11,005.4	0.7	12,598.8	0.7
i. Import duties	10,398.1	0.7	12,249.0	0.7
ii. Export tax	607.3	0.0	349.8	0.0
2. Non-Tax Revenues	100,745.9	6.9	82,246.8	4.3
a. Natural Resources	79,446.2	5.4	63,195.4	3.7
i. Oil	57,857.1	3.9	44,013.3	2.8
ii. Gas	17,368.7	1.2	14,524.3	0.9
iii. General mining	928.1	0.1	1,340.0	0.1
iv. Forestry	3,000.6	0.2	3,028.0	0.2
v. Fishery	291.7	0.0	291.8	0.0
b. Profit Transfer from SOEs	9,000.0	0.6	10,351.4	0.6
c. Other Non Tax Revenues	12,299.7	0.8	8,700.0	0.5
II. Grants	-	-	-	-
B. Expenditures	340,325.7	23.2	344,008.8	20.4
I. Central Government Expenditures	258,849.2	17.7	246,040.0	14.6
1. Current Expenditures	213,387.8	14.5	193,740.9	11.5
a. Personnel expenditure	38,206.4	2.6	40,748.2	2.4
b. Material (Goods and Services)	9,909.1	0.7	12,863.2	0.8
c. Interest payments	89,569.7	6.1	88,499.9	5.3
i. Domestic	61,174.3	4.2	59,524.6	3.5
ii. External	28,395.4	1.9	28,975.3	1.7
d. Subsidies	66,269.3	4.5	41,586.3	2.5
i. Petroleum	53,774.0	3.7	30,377.0	1.8
ii. Non-Petroleum	12,495.3	0.9	11,209.3	0.7
e. Other current expenditures	9,433.3	0.6	10,043.4	0.6
2. Development Expenditures	45,461.4	3.1	52,299.1	3.1
a. Rupiah financing	21,712.1	1.5	26,469.1	1.6
b. Project financing with foreign loans	23,749.3	1.6	25,830.0	1.5
II. Balance Funds	81,476.6	5.5	97,968.8	5.8
1. Revenue Sharing	20,259.3	1.4	24,600.4	1.5
2. General Allocation Fund	60,516.7	4.1	69,114.1	4.1
3. Special Allocation Fund	700.6	0.0	817.3	0.0
C. Primary Balance (A-(B-B.I.I.c))	35,250.0	2.4	46,365.4	2.6
D. Overall Balance (A-B)	(54,319.7)	(3.7)	(42,134.5)	(2.5)
E. Financing (E..I+II)	54,319.7	3.7	42,134.5	2.5
I. Domestic	34,386.7	2.3	23,500.8	1.4
1. Domestic Bank Financing	-	-	-	-
2. Domestic Non Bank Financing	34,386.7	2.3	23,500.8	1.4
a. Privatization proceeds	6,500.0	0.4	3,952.2	0.2
b. Asset recovery	27,000.0	1.8	19,548.8	1.2
c. Government bond (net)	886.7	0.1	-	-
i. Bond issuance	886.7	0.1	3,930.5	0.2
ii. Amortization of domestic debt	-	-	(3,930.5)	(0.2)
II. Foreign Financing (net)	19,933.0	1.4	18,633.7	1.1
1. Project loan	23,749.3	1.6	25,830.0	1.5
2. Amortization of foreign debt	(20,157.7)	(1.4)	(43,966.8)	(2.6)
3. Program loan and rescheduling of foreign debt	16,341.4	1.1	36,770.5	2.2

Source: Bank Indonesia

Table 2.2.2 Breakdown of Development Expenditure in FY 2002 Initial Budget

(Unit: Billion Rupiah)

Items	RAPBN (National Budget) 2002			Distribution (%)
	Pure Rp.	Foreign Loan	Total	
01 SECTOR INDUSTRY	155.1	1,381.3	1,536.4	3.3
02 SECTOR AGRICULTURE, FORESTRY, MARINE AND FISHERY	1,774.2	1,457.6	3,231.8	6.9
1 Sub-Sector Agriculture	1,085.5	1,068.4	2,153.9	4.6
2 Sub-Sector Forestry	70.5	119.0	189.5	0.4
3 Sub-Sector Marine and Fishery	618.2	270.2	888.4	1.9
03 SECTOR WATER RESOURCES	1,380.6	1,998.1	3,378.7	7.2
1 Sub-Sector Water Resources Development and Management	795.0	1,056.2	1,851.2	3.9
2 Sub-Sector Water Sources Development and Management	585.6	941.9	1,527.5	3.2
04 SECTOR MAN POWER	127.8	22.1	149.9	0.3
05 SECTOR FOR TRADE, DEVELOPMENT OF NATIONAL BUSINESS, FINANCE AND COOPERATIVE	1135.8	102.9	1238.7	2.6
1 Sub-Sector Domestic Trade	41.5	0.0	41.5	0.1
2 Sub-Sector Foreign Trading	107.5	0.0	107.5	0.2
3 Sub-Sector National Business Development	37.1	0.0	37.1	0.1
4 Sub-Sector Finance	616.3	2.9	619.2	1.3
5 Sub-Sector Cooperative and Micro, Small and Mid Business Enterprises	333.4	100.0	433.4	0.9
06 SECTOR TRANSPORTATION, METEOROLOGY AND GEOPHYSICS	2,023.6	4,440.9	6,464.5	13.7
1 Sub-Sector Road Infrastructure	1,197.3	2,141.3	3,338.6	7.1
2 Sub-Sector Land Transportation	454.0	615.1	1,069.1	2.3
3 Sub-Sector Sea Transportation	160.9	650.0	810.9	1.7
4 Sub-Sector Air Transportation	190.0	1,034.5	1,224.5	2.6
5 Sub-Sector Meteorology, Geography, Search and Rescue	21.4	0.0	21.4	0.0
07 SECTOR MINING AND ENERGY	685.8	2,821.3	3,507.1	7.4
1 Sub-Sector Mining	41.1	0.0	41.1	0.1
2 Sub-Sector Energy	644.7	2,821.3	3,466.0	7.4
08 SECTOR TOURISM, POSH, TELECOMMUNICATION AND INFORMATION	112.3	892.9	1,005.2	2.1
1 Sub-Sector Tourism	77.1	2.9	80.0	0.2
2 Sub-Sector Post, Telecommunication and Information	35.2	890.0	925.2	2.0
09 SECTOR REGIONAL DEVELOPMENT	669.0	2,693.4	3,362.4	7.1
1 Sub-Sector Regional Autonomy	31.6	32.1	63.7	0.1
2 Sub-Sector Regional Development and Community Empowerment	637.4	2,661.3	3,298.7	7.0
10 SECTOR NATURAL RESOURCES, LIVING ENVIRONMENT AND SPATIAL MANAGEMENT	215.5	385.0	600.5	1.3
1 Sub-Sector Natural Resources and Living Environment	134.0	293.1	427.1	0.9
2 Sub-Sector Spatial Management Land Affairs	81.5	91.9	173.4	0.4
11 SECTOR EDUCATION, NATIONAL CULTURE, YOUTH AND SPORTS	7,138.7	4,414.1	11,552.8	24.5
1 Sub-Sector Education	6,803.0	4,393.6	11,196.6	23.7
2 Sub-Sector Extra Curricular Education	215.0	10.0	225.0	0.5
3 Sub-Sector National Culture	45.0	10.5	55.5	0.1
4 Sub-Sector Youth and Sports	75.7	0.0	75.7	0.2
12 SECTOR POPULATION AND FAMILY	248.8	62.6	311.4	0.7
13 SECTOR SOCIAL WELFARE, HEALTH AND WOMEN EMPOWERMENT	3,223.1	1,081.0	4,304.1	9.1
1 Sub-Sector Social Welfare	1,056.0	0.0	1,056.0	2.2
2 Sub-Sector Health	2,140.5	1,073.3	3,213.8	6.8
3 Sub-Sector Women Empowerment	26.6	7.7	34.3	0.1
14 SECTOR HOUSING AND SETTLEMENTS	738.7	268.3	1,007.0	2.1
1 Sub-Sector Housing	222.1	0.0	222.1	0.5
2 Sub-Sector Settlements	516.6	268.3	784.9	1.7
15 SECTOR RELIGION	69.0	5.9	74.9	0.2
1 Sub-Sector Religion Live Service	27.5	5.9	33.4	0.1
2 Sub-Sector Religion Education Development	41.5	0.0	41.5	0.1
16 SECTOR SCIENCE AND TECHNOLOGY	455.1	146.7	601.8	1.3
1 Sub-Sector Science and Technology Service and Application	117.6	50.5	168.1	0.4
2 Sub-Sector Research and Development of Science and Technology	165.4	57.5	222.9	0.5
3 Sub-Sector Science and Technology Infrastructure and Facilities Institution	93.6	38.7	132.3	0.3
4 Sub-Sector Statistics	78.5	0.0	78.5	0.2
17 SECTOR LEGAL	422.7	40.0	462.7	1.0
1 Sub-Sector National Law Development	37.0	0.0	37.0	0.1
2 Sub-Sector Law Apparatus Development	385.7	40.0	425.7	0.9
18 SECTOR STATE APPARATUS AND SUPERVISION	499.7	308.9	808.6	1.7
1 Sub-Sector State Apparatus	473.3	289.7	763.0	1.6
2 Sub-Sector System Efficiency and Control Implementation	26.4	19.2	45.6	0.1
19 SECTOR HOME POLITICS, FOREIGN RELATION, INFORMATION AND COMMUNICATION	143.4	0.0	143.4	0.3
1 Sub-Sector Home Politics	14.3	0.0	14.3	0.0
2 Sub-Sector Foreign Relation	18.8	0.0	18.8	0.0
3 Sub-Sector Information and Communication	110.3	0.0	110.3	0.2
20 SECTOR DEFENCE AND SECURITY	1,533.2	1,872.0	3,405.2	7.2
1 Sub-Sector Defence	1,171.0	1,362.0	2,533.0	5.4
2 Sub-Sector Security	362.2	510.0	872.2	1.8
Total	22,752.1	24,395.0	47,147.1	100.0

Source: Ministry of Finance

Table 2.2.3 Trend of External • Domestic/Public • Private Debts 1994-2000

Year	1994	Month	Bank Indonesia Rate of Rp. for \$	Domestic Debts				External Debts				
				Private		Public		Private		Public		
				For Banks (Rp. in Billion)	\$ in Million	for IBRA (Rp. in Billion)	\$ in Million	(Rp. in Billion)	(\$ in Million)	(Rp. in Billion)	(\$ in Million)	
		3	2,144	178,136	83,086	-	-	-	n.a.	n.a.	129,107	60,218
		6	2,160	184,414	85,377	-	-	-	n.a.	n.a.	134,724	62,372
		9	2,181	195,387	89,586	-	-	-	n.a.	n.a.	140,443	64,394
		12	2,200	209,979	95,445	-	-	-	83,347	37,885	140,114	63,688
	1995	3	2,219	217,202	97,883	-	-	-	n.a.	n.a.	149,956	67,578
		6	2,246	230,249	102,515	-	-	-	n.a.	n.a.	157,402	70,081
		9	2,276	245,805	107,999	-	-	-	n.a.	n.a.	150,601	66,169
		12	2,308	258,364	111,943	-	-	-	111,347	48,244	148,658	64,410
	1996	3	2,338	265,599	113,601	-	-	-	111,862	47,845	148,496	63,514
		6	2,342	280,592	119,809	-	-	-	n.a.	n.a.	144,298	61,613
		9	2,340	294,719	125,948	-	-	-	n.a.	n.a.	142,864	61,053
		12	2,383	314,816	132,109	-	-	-	130,750	54,868	140,704	59,045
	1997	3	2,419	326,720	135,064	-	-	-	146,369	60,508	136,156	56,286
		6	2,450	350,648	143,122	-	-	-	159,152	64,960	141,926	57,929
		9	3,275	397,947	121,511	-	-	-	213,658	65,239	184,766	56,417
		12	4,650	407,339	87,600	-	-	-	334,577	71,952	269,049	57,860
	1998	3	8,325	521,931	62,694	n.a.	n.a.	-	696,211	83,629	482,867	58,002
		6	14,900	699,580	46,952	n.a.	n.a.	-	1,269,420	85,196	881,708	59,175
		9	10,700	593,498	55,467	n.a.	n.a.	80,000	7,477	889,352	83,117	668,911
		12	8,025	539,585	67,238	n.a.	n.a.	100,000	12,461	674,164	84,008	573,579
	1999	3	8,685	393,114	45,264	n.a.	n.a.	164,500	18,941	707,871	81,505	629,888
		6	6,726	281,811	41,899	n.a.	n.a.	322,100	47,889	499,453	74,257	501,343
		9	8,386	292,820	34,918	234,456	27,958	322,100	38,409	596,194	71,094	661,060
		12	7,100	245,277	34,546	235,787	33,209	510,070	71,841	512,869	72,235	573,140
	2000	3	7,590	246,551	32,484	223,337	29,425	510,070	67,203	523,642	68,991	606,987
		6	8,735	261,779	29,969	284,235	32,540	610,190	69,856	591,167	67,678	711,745
		9	8,780	262,007	29,841	258,266	29,415	640,397	72,938	574,177	65,396	706,070
		12	9,380	287,240	30,623	286,278	30,520	660,070	70,370	574,177	66,777	750,062

Source: Bank Indonesia, Indonesian Financial Statistics (<http://www.bi.go.id>)

Note: 1) The issue of government bonds was commenced on 25th of September in 1998.

2) In the records up to December in 1997, the external debts for the private sector exclude corporate bonds.

3) The data of March and September in 2002 in the records for IBRA apply the data as of 15th of March and 31st of August as the alternative.

4) As regards the data of December in 1999 and March and June in 2000 in the records for IBRA, the debt amounts, which the IBRA calculated with the exchange rate of 7,000Rp for 1 dollar, are converted to the amounts with the exchange rate of Bank of Indonesia. With respect to the data of September and December in 2000, however, it was not possible to recalculate the debt amount with the month-end exchange rate of Bank Indonesia.

Table 3.1.1 Land Use by Province

(Unit: km²)

Region	Wet Land*1	Dry Land*2	Meadows	Fallow	Dyke	Water Pond	House compounds	Estate	Wood Land	Total
Daerah Istimewa Aceh	2,930	7,462	2,253	2,744	410	147	2,628	6,412	2,452	27,438
Sumatera Utara	5,641	8,255	1,413	3,585	146	56	3,185	19,772	4,547	46,600
Sumatera Barat	2,279	4,654	361	779	13	88	1,089	5,262	5,706	20,231
Riau	1,343	6,988	230	6,634	327	41	3,581	18,991	3,758	41,893
Jambi	1,505	5,075	142	2,121	3	38	1,383	12,943	4,310	27,520
Sumatera Selatan	4,458	7,337	603	6,404	180	258	3,565	20,226	11,961	54,992
Bengkulu	695	2,452	92	1,750	20	22	605	2,688	1,829	10,153
Lampung	2,879	7,753	185	1,387	98	68	2,590	8,414	960	24,334
Sumatera	21,730	49,976	5,279	25,404	1,197	718	18,626	94,708	35,523	253,161
D.K.I. Jakarta	28	17	0	4	2	2	130	0	2	185
Jawa Barat	11,434	10,408	349	428	371	289	4,909	3,767	2,528	34,483
Jawa Tengah	10,075	7,721	407	60	343	28	5,695	800	703	25,832
D.I. Yogyakarta	603	995	0	14	0	4	825	1	234	2,676
Jawa Timur	11,614	11,789	745	215	591	11	5,802	1,627	1,107	33,501
Jawa	33,754	30,930	1,501	721	1,307	334	17,361	6,195	4,574	96,677
Bali	861	1,274	0	29	4	4	431	1,219	109	3,931
Nusa Tenggara Barat	4,004	4,220	712	2,361	121	227	620	738	5,164	18,167
Nusa Tenggara Timur	1,115	6,488	6,908	7,680	17	55	1,578	2,641	3,844	30,326
Bali, Nusa Tenggara	5,980	11,982	7,620	10,070	142	286	2,629	4,598	9,117	52,424
Kalimantan Barat	3,385	6,866	232	18,032	41	183	2,514	17,432	14,320	63,005
Kalimantan Tengah	1,745	3,991	1,287	15,187	37	36	1,942	9,759	3,272	37,256
Kalimantan Selatan	4,430	3,706	2,461	7,847	84	29	1,657	4,800	2,476	27,490
Kalimantan Timur	1,101	2,849	307	12,924	387	115	1,867	5,850	7,588	32,988
Kalimantan	10,661	17,412	4,287	53,990	549	363	7,980	37,841	27,656	160,739
Sulawesi Utara	781	3,957	248	921	11	39	726	3,816	989	11,488
Sulawesi Tengah	1,261	3,468	1,444	5,700	66	35	1,002	8,670	4,479	26,125
Sulawesi Selatan	6,182	6,540	2,902	2,686	1,175	95	1,844	5,302	4,503	31,229
Sulawesi Tenggara	716	3,423	961	3,115	95	17	1,148	4,307	2,211	15,993
Sulawesi	8,940	17,388	5,555	12,422	1,347	186	4,720	22,095	12,182	84,835
Total	81,065	127,688	24,242	102,607	4,542	1,887	51,316	165,437	89,052	647,836

Note:

*1; various types of paddy fields

*2; including shifting cultivation

Source: Statistical Year Book of Indonesia

Table 3.1.2 Transition of Land Utilization

(Unit: km²)

	Year				
	1995	1996	1997	1998	1999
Wet Land	84,847	85,191	84,900	85,049	81,064
House Compounds and Surroundings	51,554	52,914	53,315	55,164	51,317
Dry Land / Garden	82,449	83,836	83,823	85,687	91,367
Shifting Cultivation	31,236	31,792	32,259	32,472	36,320
Meadows	18,894	19,531	20,563	20,170	24,245
Swamps	38,830	41,729	42,705	42,687	40,802
Dyke	4,226	4,385	4,673	4,813	4,543
Water Pond	1,822	1,839	1,687	1,684	1,886
Fallow Land	69,679	73,356	75,779	77,203	102,605
Wood Land	95,550	94,461	91,336	90,724	89,052
Agricultural Estates	138,357	144,884	150,160	164,610	165,437
Total	617,444	633,918	641,200	660,263	688,638

Source:

Agricultural Statistics 2001

Table 3.1.3 Population and Density by Province

Province	Population (No.)	Population Density (persons/km ²)
1 DI. Aceh	3,930,905	72
2 Sumatera Utara	11,649,655	160
3 Sumatera Barat	4,248,931	99
4 Riau	4,957,627	50
5 Jambi	2,413,846	45
6 Sumatera Selatan	6,899,675	71
7 Bengkulu	1,567,432	71
8 Lampung	6,741,439	188
9 Kep. Bangka Belitung	900,197	na
Sumatra	43,309,707	88
10 DKI Jakarta	8,389,443	12,628
11 Jawa Barat	35,729,537	1,009
12 Jawa Tengah	31,228,940	948
13 DI. Yogyakarta	3,122,268	976
14 Jawa Timur	34,783,640	720
15 Banten	8,098,780	na
Jawa	121,352,608	945
16 Bali	3,151,162	555
17 NTB	4,009,261	190
18 NTT	3,952,279	83
Bali, Nusatenggara	11,112,702	124
19 Kalimantan Barat	4,034,198	26
20 Kalimantan Tengah	1,857,000	12
21 Kalimantan Selatan	2,985,240	81
22 Kalimantan Timur	2,455,120	12
Kalimantan	11,331,558	20
23 Sulawesi Utara	2,012,098	103
24 Sulawesi Tengah	2,218,435	32
25 Sulawesi Selatan	8,059,627	125
26 Sulawesi Tenggara	1,821,284	46
27 Gorontalo	835,044	na
Sulawesi	14,946,488	75
28 Maluku	1,205,539	25
29 North Maluku	785,059	na
30 Papua	2,220,934	5
Maluku, Papua	4,211,532	8
Whole Country	206,264,595	106

Source) Brief Analysis, 2000 Population Census, Central Bureau of Statistics

Table 3.1.4 Number of Households by Land Holding Size

Rural (Unit : No.)

Province	Area of Agricultural land Owned (ha)									Total
	Do Not Own	< 0.10	0.10 - 0.24	0.25 - 0.49	0.50 - 0.74	0.75 - 0.99	1.00 - 1.24	1.25 - 1.99	> 2.00	
1 DI. Aceh	194,631	6,695	46,941	84,392	92,647	30,656	82,951	45,792	73,778	658,483
2 Sumatera Utara	490,768	24,975	95,457	139,242	158,671	70,487	162,376	96,882	177,026	1,415,884
3 Sumatera Barat	278,797	23,506	43,120	95,937	97,281	30,431	70,259	45,393	52,175	736,899
4 Riau	169,390	1,150	3,760	14,027	21,658	9,148	53,509	73,582	218,128	564,352
5 Jambi	94,489	5,255	2,806	18,272	21,292	11,813	64,321	30,727	143,123	392,098
6 Sumatera Selatan	288,383	4,132	7,259	48,695	86,647	28,729	175,467	120,574	323,425	1,083,311
7 Bengkulu	46,154	762	1,983	11,134	21,497	8,985	42,075	31,015	71,787	235,392
8 Lampung	297,083	4,703	28,545	139,469	180,097	74,307	193,226	122,467	215,975	1,255,872
9 DKI Jakarta										0
10 Jawa Barat	3,006,900	329,209	626,853	659,252	395,924	148,747	182,657	129,415	148,021	5,626,978
11 Jawa Tengah	1,937,778	219,763	810,780	935,611	489,654	165,548	151,695	114,620	92,096	4,917,545
12 DI. Yogyakarta	75,285	45,885	67,662	50,836	31,034	14,957	13,814	13,141	8,669	321,283
13 Jawa Timur	2,474,165	336,757	881,616	1,086,052	557,605	177,137	182,236	155,742	137,609	5,988,919
14 Bali	177,761	8,569	45,667	70,285	50,670	17,494	24,693	16,891	41,394	453,424
15 NTB	311,623	19,107	69,251	103,873	64,684	31,641	38,823	29,831	36,146	704,979
16 NTT	75,598	3,428	13,368	46,661	92,616	53,076	118,474	110,755	113,572	627,548
17 Timor Timur	25,672	554	1,379	4,778	14,151	3,468	34,889	25,633	43,892	154,416
18 Kalimantan Barat	132,799	3,912	8,851	29,678	40,445	18,533	76,468	55,478	237,701	603,865
19 Kalimantan Tengah	65,333	315	975	3,442	10,854	5,596	46,540	34,847	120,082	287,984
20 Kalimantan Selatan	160,555	3,150	30,794	69,826	55,200	24,697	53,108	38,151	58,814	494,295
21 Kalimantan Timur	95,044	2,278	4,557	11,711	11,679	7,227	28,805	26,636	78,543	266,480
22 Sulawesi Utara	168,682	861	11,568	33,120	59,340	18,159	84,186	35,168	72,006	483,090
23 Sulawesi Tengah	62,698	1,372	1,826	12,136	35,999	10,600	63,537	44,507	94,077	326,752
25 Sulawesi Tenggara	53,742	1,536	3,958	9,236	31,906	11,516	45,476	42,742	61,490	261,602
24 Sulawesi Selatan	289,146	11,055	50,832	135,417	170,517	100,735	142,722	135,812	155,586	1,191,822
26 Maluku	55,132	1,792	4,814	3,661	14,221	2,919	61,040	30,772	138,526	308,544
27 Irian Jaya	44,330	6,006	6,811	19,563	37,417	32,679	45,533	56,652	79,147	328,141
Whole Country	11,071,938	1,066,727	2,867,103	3,836,306	2,843,706	1,109,285	2,238,880	1,663,225	2,992,788	29,689,958

Urban and Rural (Unit : No.)

Province	Area of Agricultural land Owned (ha)									Total
	Do Not Own	< 0.10	0.10 - 0.24	0.25 - 0.49	0.50 - 0.74	0.75 - 0.99	1.00 - 1.24	1.25 - 1.99	> 2.00	
1 DI. Aceh	346,284	7,415	48,432	88,418	95,871	30,851	87,480	46,880	78,437	830,068
2 Sumatera Utara	1,312,347	29,748	118,820	158,869	173,389	78,003	175,396	100,295	198,937	2,345,804
3 Sumatera Barat	483,649	25,418	44,839	101,667	103,591	31,989	76,313	47,564	56,993	972,023
4 Riau	428,395	1,974	6,455	16,353	28,396	9,823	60,093	76,349	226,418	854,256
5 Jambi	213,159	6,282	3,410	20,083	23,760	11,813	68,177	31,829	152,135	530,648
6 Sumatera Selatan	698,107	5,826	9,303	55,434	94,838	30,962	184,386	126,049	340,017	1,544,922
7 Bengkulu	114,266	1,314	1,983	12,242	22,978	9,187	46,064	32,370	75,916	316,320
8 Lampung	488,592	5,307	29,187	143,356	184,040	76,120	198,085	124,546	220,431	1,469,664
9 DKI Jakarta	2,017,648	2,916	1,417	865	1,525	218	2,824	872	10,135	2,038,420
10 Jawa Barat	6,486,587	410,267	709,948	727,815	432,418	163,748	208,394	140,419	173,037	9,452,633
11 Jawa Tengah	3,881,183	257,617	887,143	1,031,175	528,848	179,869	163,330	122,922	102,893	7,154,980
12 DI. Yogyakarta	426,867	95,538	115,795	62,964	44,464	15,912	17,585	18,991	9,143	807,259
13 Jawa Timur	4,829,619	378,604	951,740	1,176,329	607,129	188,976	198,766	164,316	152,602	8,648,081
14 Bali	372,241	11,312	59,126	84,258	56,932	19,611	26,642	17,130	44,492	691,744
15 NTB	439,235	22,461	76,260	110,194	68,515	32,504	40,857	31,503	38,270	859,799
16 NTT	149,133	3,573	14,761	51,007	96,988	55,288	120,989	112,775	116,525	721,039
17 Timor Timur	37,016	624	1,675	5,033	15,056	3,579	35,926	26,234	45,030	170,173
18 Kalimantan Barat	270,219	4,456	8,987	30,756	43,124	18,861	79,907	56,341	241,454	754,105
19 Kalimantan Tengah	140,318	496	1,567	4,262	12,388	6,082	48,312	36,172	122,707	372,304
20 Kalimantan Selatan	349,008	4,128	32,602	73,205	57,637	26,035	55,277	39,370	61,799	699,061
21 Kalimantan Timur	319,469	3,728	6,213	13,744	17,044	8,951	36,487	30,434	89,706	525,776
22 Sulawesi Utara	320,353	1,914	12,775	34,572	63,178	20,000	92,457	37,201	78,526	660,976
23 Sulawesi Tengah	131,305	1,472	2,342	13,717	39,095	11,738	67,583	45,823	101,277	414,352
25 Sulawesi Tenggara	110,722	2,073	4,010	10,187	34,275	12,558	50,256	44,561	64,768	333,410
24 Sulawesi Selatan	649,891	15,167	59,319	148,252	185,580	105,185	155,391	143,613	172,744	1,635,142
26 Maluku	144,406	1,898	576	4,104	15,917	3,506	64,579	32,324	141,778	409,088
27 Irian Jaya	140,760	8,836	8,933	20,577	39,539	33,083	47,195	58,655	83,459	441,037
Whole Country	25,300,779	1,310,364	3,217,618	4,199,438	3,086,515	1,184,452	2,408,751	1,745,538	3,199,629	45,653,084

Source) Results of the 1995 Intercensal Population Survey, Central Bureau of Statistics (Hasil Survey Penduduk Antar Sensus 1995, BPS)

Table 3.1.5 Harvested Area and Production of Major Food Crops by Province in 2000

(Unit: 1,000 ton)

Production	Paddy	Maize	Cassava	Sweet Potato	Peanut	Soybean
1 DI. Aceh	1,405	37	65	25	9	72
2 Sumatera Utara	3,514	667	480	127	24	13
3 Sumatera Barat	1,759	56	95	33	9	8
4 Riau	431	48	70	13	4	3
5 Jambi	537	24	55	14	2	4
6 Sumatera Selatan	1,864	94	327	27	8	9
7 Bengkulu	363	46	93	64	6	3
8 Lampung	1,946	1,123	2,924	43	10	22
Sumatra	11,819	2,095	4,109	346	72	134
9 DKI Jakarta	16	78	2	-	1	-
10 Jawa Barat	10,750	412	1,816	386	109	55
11 Jawa Tengah	8,475	1,714	3,092	142	160	204
12 DI. Yogyakarta	654	174	701	7	54	68
13 Jawa Timur	9,224	3,488	3,622	194	180	385
Jawa	29,119	5,866	9,233	729	504	712
14 Bali	827	95	159	65	15	14
15 NTB	1,488	66	99	10	28	71
16 NTT	461	527	836	156	15	3
17 Timor Timur	-	-	-	-	-	-
Ball, Nusatenggara	2,776	688	1,094	231	58	88
18 Kalimantan Barat	903	31	176	17	2	2
19 Kalimantan Tengah	363	9	107	18	3	5
20 Kalimantan Selatan	1,332	37	129	19	17	9
21 Kalimantan Timur	402	14	91	20	2	2
Kalimantan	3,000	91	503	74	24	18
22 Sulawesi Utara	514	225	50	23	8	7
23 Sulawesi Tengah	577	53	44	18	6	2
24 Sulawesi Selatan	3,659	633	492	73	48	42
25 Sulawesi Tenggara	315	87	203	21	8	3
Sulawesi	5,065	998	789	135	70	54
26 Maluku	36	7	312	30	2	2
27 Irian Jaya	81	7	47	281	7	7
Maluku, Irian	117	14	359	311	9	9
Total	51,896	9,752	16,087	1,826	737	1,015

(Unit: 1,000 ha)

Harvested Area	Paddy	Maize	Cassava	Sweet Potato	Peanut	Soybean
1 DI. Aceh	337	16	5	3	7	59
2 Sumatera Utara	848	222	40	14	23	12
3 Sumatera Barat	397	24	8	3	8	7
4 Riau	142	22	7	2	4	3
5 Jambi	171	12	5	2	2	4
6 Sumatera Selatan	555	41	30	4	7	8
7 Bengkulu	109	25	8	7	6	3
8 Lampung	497	382	258	4	9	24
Sumatra	3,056	744	361	39	66	120
9 DKI Jakarta	4	1	1	-	1	-
10 Jawa Barat	2,188	139	137	35	97	45
11 Jawa Tengah	1,669	582	227	12	143	147
12 DI. Yogyakarta	138	66	56	1	54	54
13 Jawa Timur	1,754	1,170	249	18	171	306
Jawa	5,753	1,958	670	66	466	552
14 Bali	155	38	14	6	13	10
15 NTB	341	32	9	1	25	67
16 NTT	176	253	84	20	15	4
17 Timor Timur	-	-	-	-	-	-
Ball, Nusatenggara	672	323	107	27	53	81
18 Kalimantan Barat	361	18	15	2	2	2
19 Kalimantan Tengah	162	6	10	3	3	4
20 Kalimantan Selatan	433	25	10	2	16	7
21 Kalimantan Timur	138	8	7	2	2	2
Kalimantan	1,094	57	42	9	23	15
22 Sulawesi Utara	122	100	5	3	8	6
23 Sulawesi Tengah	161	23	5	2	6	2
24 Sulawesi Selatan	806	242	45	9	42	33
25 Sulawesi Tenggara	86	42	18	3	10	4
Sulawesi	1,175	407	73	17	66	45
26 Maluku	15	5	28	4	2	2
27 Irian Jaya	29	5	4	33	9	7
Maluku, Irian	44	10	32	37	11	9
Total	11,794	3,499	1,285	195	685	822

Source : Agricultural Statistics 2001, Ministry of Agriculture

Table 3.1.6 Harvested Area and Production of Major Food Crops in Indonesia

Year	Paddy			Soybean			Cassava			Sweet Potato			Peanut			Maize		
	Harvested Area (ha)	Unit Yield (ton/ha)	Production (ton)	Harvested Area (ha)	Unit Yield (ton/ha)	Production (ton)	Harvested Area (ha)	Unit Yield (ton/ha)	Production (ton)	Harvested Area (ha)	Unit Yield (ton/ha)	Production (ton)	Harvested Area (ha)	Unit Yield (ton/ha)	Production (ton)	Harvested Area (ha)	Unit Yield (ton/ha)	Production (ton)
1968	8,020,773	2.1	17,195,343	676,087	0.6	419,932	1,503,502	76	11,355,634	403,866	59	2,364,297	394,601	0.7	286,698	3,220,012	1.0	3,166,046
1969	8,013,723	2.6	20,464,474	553,783	0.7	388,907	1,467,146	74	10,916,529	369,443	61	2,260,185	372,279	0.7	267,158	2,435,823	0.9	2,292,876
1970	8,135,078	2.4	19,323,533	694,732	0.7	497,883	1,398,070	75	10,478,308	357,568	61	2,175,317	380,060	0.7	281,309	2,938,611	1.0	2,825,215
1971	8,324,322	3.2	26,392,175	679,625	0.8	515,644	1,406,093	76	10,689,691	356,866	62	2,211,360	375,752	0.8	283,773	2,626,595	1.0	2,606,494
1972	7,897,638	3.2	25,351,110	697,500	0.7	518,229	1,468,412	71	10,384,952	337,811	61	2,066,325	353,818	0.8	282,205	2,160,053	1.0	2,254,382
1973	8,403,604	2.7	23,090,849	743,657	0.7	541,040	1,428,813	78	11,185,592	378,725	63	2,386,764	415,831	0.7	290,104	3,433,164	1.1	3,689,802
1974	8,508,598	3.5	29,376,492	768,027	0.8	589,239	1,509,440	86	13,030,674	330,250	75	2,469,208	410,663	0.7	307,166	2,666,868	1.1	3,010,781
1975	8,495,096	3.4	29,201,619	751,689	0.8	589,831	1,410,025	89	12,545,544	310,917	78	2,432,614	474,519	0.8	379,683	2,445,866	1.2	2,902,887
1976	8,368,759	3.6	30,470,458	646,336	0.8	521,777	1,353,328	90	12,190,728	301,055	79	2,381,213	414,211	0.8	341,088	2,095,054	1.2	2,572,139
1977	8,359,568	2.8	23,347,132	646,121	0.8	522,821	1,363,552	92	12,487,664	326,239	75	2,460,364	507,249	0.8	408,950	2,566,509	1.2	3,142,654
1978	8,929,169	2.9	25,771,570	733,142	0.8	616,599	1,302,903	99	12,902,011	300,540	69	2,082,801	506,445	0.9	445,812	3,024,611	1.3	4,029,201
1979	8,803,564	3.0	26,282,663	784,489	0.9	679,825	1,439,315	96	13,750,767	286,878	76	2,194,409	473,246	0.9	424,362	2,593,621	1.4	3,605,535
1980	9,005,065	3.3	29,651,905	732,346	0.9	652,762	1,412,481	97	13,726,336	276,048	75	2,078,767	506,401	0.9	469,808	2,734,940	1.5	3,990,939
1981	9,381,839	3.5	32,774,176	809,978	0.9	703,811	1,387,536	96	13,300,911	274,905	76	2,093,572	507,958	0.9	474,591	2,955,039	1.5	4,509,302
1982	9,021,524	3.8	34,103,865	606,408	0.8	513,549	1,302,944	97	12,676,211	243,896	78	1,896,911	470,194	0.9	436,822	2,061,299	1.6	3,234,824
1983	9,162,469	3.9	35,303,106	639,876	0.8	536,103	1,220,808	99	12,102,734	280,173	79	2,213,027	480,514	1.0	460,421	3,002,227	1.7	5,086,875
1984	9,763,580	3.9	38,136,446	858,892	0.9	769,384	1,350,448	105	14,167,090	263,854	82	2,156,529	537,591	1.0	534,815	3,086,246	1.7	5,287,825
1985	9,902,293	3.9	39,032,945	896,220	1.0	869,718	1,291,845	109	14,057,027	256,086	84	2,161,493	510,037	1.0	527,852	2,439,966	1.8	4,329,503
1986	9,988,453	4.0	39,726,761	1,253,767	1.0	1,226,727	1,169,886	114	13,312,119	253,067	83	2,090,568	601,261	1.1	641,878	3,142,759	1.9	5,920,374
1987	9,922,594	4.0	40,078,195	1,100,565	1.1	1,160,963	1,222,151	117	14,356,336	229,070	88	2,012,846	550,754	1.0	533,106	2,626,033	2.0	5,155,680
1988	10,140,155	4.1	41,676,170	1,177,360	1.1	1,270,418	1,302,581	119	15,471,111	247,822	87	2,158,629	607,602	1.0	589,265	3,405,751	2.0	6,651,917
1989	10,531,207	4.2	44,725,582	1,198,096	1.1	1,315,113	1,407,880	122	17,117,249	240,178	93	2,224,346	620,817	1.0	619,585	2,944,199	2.1	6,192,512
1990	10,502,357	4.3	45,178,751	1,334,100	1.1	1,487,433	1,311,564	121	15,829,635	208,732	94	1,971,466	635,014	1.0	650,560	3,158,092	2.1	6,734,028
1991	10,281,519	4.3	44,688,247	1,368,199	1.1	1,555,453	1,319,143	121	15,954,467	214,316	95	2,039,212	628,256	1.0	652,119	2,909,100	2.2	6,255,906
1992	11,103,317	4.3	48,240,009	1,665,706	1.1	1,869,713	1,351,324	122	16,515,855	229,786	94	2,171,036	719,703	1.0	739,050	3,629,346	2.2	7,995,459
1993	11,012,776	4.4	48,181,087	1,470,206	1.2	1,708,528	1,401,640	123	17,285,385	224,098	93	2,088,205	624,289	1.0	638,708	2,939,534	2.2	6,459,737
1994	10,733,830	4.3	46,641,524	1,406,918	1.1	1,564,847	1,356,580	116	15,729,232	197,170	94	1,845,178	642,998	1.0	631,971	3,109,398	2.2	6,868,885
1995	11,438,764	4.3	49,744,140	1,477,432	1.1	1,680,007	1,324,259	117	15,441,481	228,673	95	2,171,027	739,305	1.0	760,148	3,651,838	2.3	8,245,902
1996	11,569,729	4.4	51,101,506	1,279,286	1.2	1,517,181	1,415,101	120	17,002,455	211,681	95	2,017,516	688,908	1.1	737,815	3,743,573	2.5	9,307,423
1997	11,140,594	4.4	49,377,054	1,119,079	1.2	1,356,891	1,243,366	122	15,134,021	195,436	95	1,847,492	628,142	1.1	688,345	3,355,224	2.6	8,770,851
1998	11,730,325	4.2	49,236,692	1,095,071	1.2	1,305,640	1,205,353	122	14,696,203	202,093	96	1,935,054	651,098	1.1	692,357	3,847,813	2.6	10,169,488
1999	11,963,204	4.3	50,866,387	1,151,079	1.2	1,382,848	1,350,008	122	16,458,544	172,243	97	1,665,547	624,980	1.1	659,586	3,456,357	2.7	9,204,036
2000	11,607,980	4.4	50,696,424	860,099	1.2	1,046,138	1,260,854	121	15,317,482	170,508	96	1,630,885	673,176	1.1	710,266	3,373,910	2.7	9,155,544

Source) Central Bureau of Statistics

Table 3.1.7 Perspective of Supply and Demand of Rice for 2002 by Province

	Province	Production*)	Population	Consumption**)	Demand*)	Balance*)	Ratio	Balance
1	Sumatera Selatan	2,501,075	7,874,517	125.72	989,984	1,511,091	2.53	Surplus
2	Kalimantan Selatan	649,031	2,886,827	131.53	379,704	269,327	1.71	Surplus
3	Sumatera Barat	1,035,232	4,252,203	150.45	639,744	395,488	1.62	Surplus
4	NTB	874,497	3,871,860	148.55	575,165	299,332	1.52	Surplus
5	Lampung	1,229,678	6,719,567	120.75	811,388	418,290	1.52	Surplus
6	Jawa Tengah	5,268,436	31,109,851	113.85	3,541,857	1,726,579	1.49	Surplus
7	Bali	526,069	3,162,795	119.86	379,093	146,976	1.39	Surplus
8	Sulawesi Tengah	350,072	2,107,102	120.55	254,011	96,061	1.38	Surplus
9	Jawa Timur	5,267,493	34,961,981	110.83	3,874,836	1,392,657	1.36	Surplus
10	DI. Aceh	761,094	4,077,846	146.15	595,977	165,117	1.28	Surplus
11	Sulawesi Utara	2,028,554	11,607,102	139.64	1,620,816	407,738	1.25	Surplus
12	DI. Yogyakarta	411,704	3,130,284	105.96	331,685	80,019	1.24	Surplus
13	Bengkulu	232,348	1,430,773	131.88	188,690	43,658	1.23	Surplus
14	Kalimantan Barat	578,194	3,803,971	128.80	489,951	88,243	1.18	Surplus
15	Sulawesi Selatan	1,093,917	7,923,271	122.17	967,986	125,931	1.13	Imbang
16	Jambi	337,989	2,444,157	127.46	311,532	26,457	1.08	Imbang
17	Kalimantan Timur	257,735	2,503,306	100.91	252,609	5,126	1.02	Imbang
18	Jawa Barat	6,114,852	44,498,021	137.42	6,114,918	-66	1.00	Imbang
19	Kalimantan Tengah	222,365	1,849,604	126.43	233,845	-11,480	0.95	Imbang
20	Sumatera Utara	307,551	2,858,920	119.41	341,384	-33,833	0.90	Defisit
21	Sulawesi Tenggara	189,629	1,822,629	115.56	210,623	-20,994	0.90	Defisit
22	NTT	218,537	4,004,477	94.93	380,145	-161,608	0.57	Defisit
23	Riau	224,742	4,913,365	115.99	569,901	-345,159	0.39	Defisit
24	Irian Jaya	38,923	2,167,688	69.06	149,701	-110,778	0.26	Defisit
25	Maluku	21,762	1,990,820	73.56	146,445	-124,683	0.15	Defisit
26	DKI Jakarta	7,879	8,398,269	119.32	1,002,081	-994,202	0.01	Defisit
	Total	30,749,358	206,371,206	123.96***)	25,581,775	5,167,583	1.20	Surplus

Remarks: *) ton

**) kg/kapita/year

***) Agriculture Census 1999

Source: Central Bureau of Statistics

Table 3.1.8 Domestic Production and Traded Quantities of Major Food Crops

(Unit: 1,000ton)

Year	Rice			Maize			Soybeans			Potatoes			Vege			Fruits		
	Production	Import	Export	Production	Import	Export	Production	Import	Export	Production	Import	Export	Production	Import	Export	Production	Import	Export
1969	12,019	620	0	2,293	0	156	389	0	1	104	0	0	2,055	33	15	3,003	5	1
1970	12,894	981	0	2,825	0	286	498	0	4	70	0	1	2,179	28	32	3,576	8	8
1971	13,467	519	0	2,606	0	219	516	0	1	123	0	1	2,328	20	51	3,475	12	3
1972	12,936	754	0	2,254	0	80	518	0	3	124	0	3	2,387	26	19	3,681	17	3
1973	14,333	1,911	0	3,690	35	181	541	0	36	174	0	4	2,506	36	32	4,086	21	1
1974	14,989	1,162	0	3,011	0	197	589	0	4	120	1	5	2,550	63	43	3,967	27	5
1975	14,900	710	0	2,903	0	51	590	18	0	124	1	5	2,628	57	39	3,742	27	7
1976	15,542	1,335	0	2,572	69	4	522	172	1	154	1	7	2,131	71	44	2,965	43	7
1977	15,573	2,025	0	3,143	15	10	523	89	0	248	0	8	2,097	80	53	3,736	35	8
1978	17,190	1,890	0	4,029	46	21	617	130	0	233	0	2	2,335	74	18	3,223	35	10
1979	17,531	1,972	0	3,606	84	7	680	177	0	204	0	1	2,396	102	42	3,785	32	15
1980	19,778	2,064	10	3,991	35	15	653	101	0	230	1	0	2,467	122	34	4,268	34	18
1981	21,860	553	0	4,509	9	10	704	361	0	217	1	0	2,454	168	37	4,575	41	12
1982	22,400	321	0	3,235	88	1	521	361	0	158	14	0	2,299	173	36	4,661	54	7
1983	23,547	1,203	0	5,087	34	18	536	222	0	250	2	2	2,602	52	45	4,567	26	6
1984	25,437	433	0	5,288	68	160	769	401	0	372	3	12	2,770	132	44	5,150	15	16
1985	26,035	51	263	4,330	54	4	870	302	0	373	3	19	3,235	34	41	4,832	16	15
1986	26,498	51	137	5,920	64	4	1,227	360	0	446	2	22	3,815	33	37	5,618	18	33
1987	26,732	79	34	5,156	227	5	1,161	287	0	369	1	34	4,000	32	30	5,413	12	51
1988	27,798	65	0	6,652	70	37	1,270	466	0	418	1	58	3,892	35	54	5,531	14	58
1989	29,832	289	109	6,193	49	242	1,315	391	0	559	5	73	4,349	55	70	4,795	19	91
1990	30,134	74	5	6,734	23	146	1,487	541	0	629	10	77	4,385	50	75	5,760	45	100
1991	29,807	203	1	6,256	340	34	1,555	673	0	526	17	99	4,273	57	102	5,937	49	155
1992	32,176	647	45	7,995	76	163	1,870	694	4	703	17	97	4,817	69	114	5,887	66	185
1993	32,137	36	361	6,460	516	61	1,709	724	1	809	27	128	5,027	98	129	5,916	95	274
1994	31,110	648	174	6,869	1,178	38	1,565	801	0	877	27	89	5,529	117	138	6,477	123	293
1995	33,179	3,237	1	8,246	1,024	79	1,680	608	1	1,035	36	103	6,464	133	121	9,321	149	368
1996	34,085	2,202	1	9,307	639	27	1,517	747	1	1,110	42	83	6,590	157	119	7,454	173	597
1997	32,934	321	9	8,771	1,123	19	1,357	617	1	813	58	38	5,576	178	80	7,480	245	357
1998	32,841	2,964	3	10,169	327	634	1,306	343	0	998	25	32	5,958	241	49	6,764	99	221
1999	33,928	4,725	6	9,204	635	93	1,383	1,302	1	924	79	33	6,322	494	97	7,152	140	608
2000*	34,616	1,361	3	9,677	1,286	28	1,018	1,278	2	977	49	31	6,166	305	106	7,724	297	481

Source: FAO

Table 3.1.9 Production of Major Horticultural Crops in Indonesia

(Unit: 1,000 ton)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Mango	640	485	460	668	889	783	1,088	600	827	876
Citrus	353	396	260	393	1,005	731	696	491	450	644
Banana	2,472	2,651	2,644	3,087	3,805	3,023	3,057	3,177	3,376	3,747
Rambutan	336	273	278	323	364	370	296	278	263	296
Durian	205	153	171	269	290	267	236	210	194	237
Chili	627	704	773	724	1,590	1,044	802	849	1,008	728
Shallot	509	528	561	637	593	769	606	599	938	773
Tomato	334	401	362	476	652	592	461	547	562	593
Cabbage	975	1,213	1,266	1,418	1,625	1,580	1,339	1,459	1,448	1,336

Source : General Information on Horticulture Production, DG Horticulture Production Development

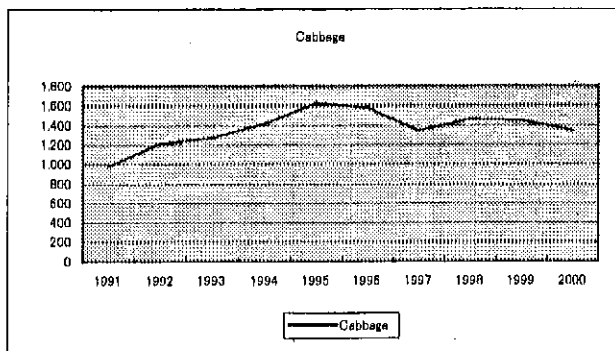
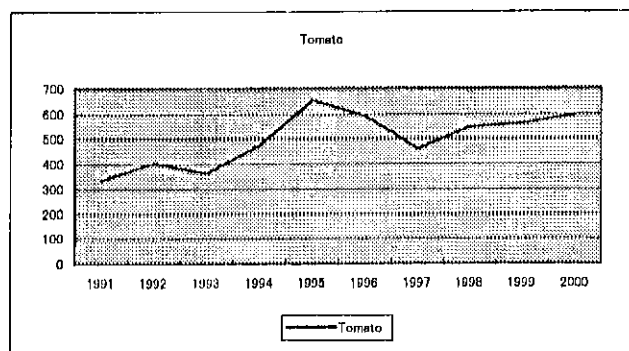
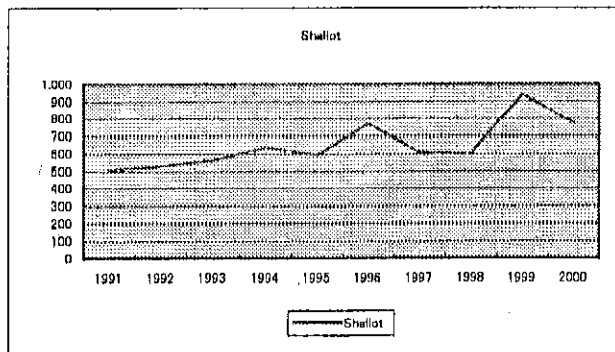
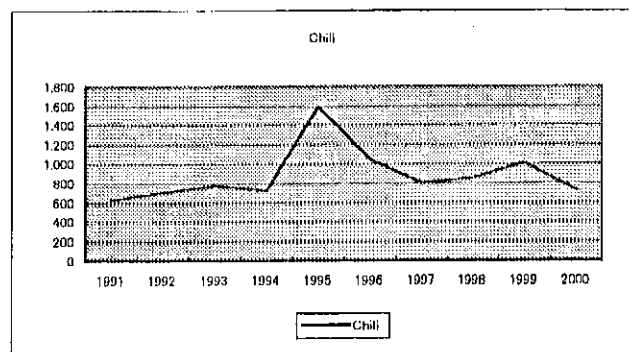
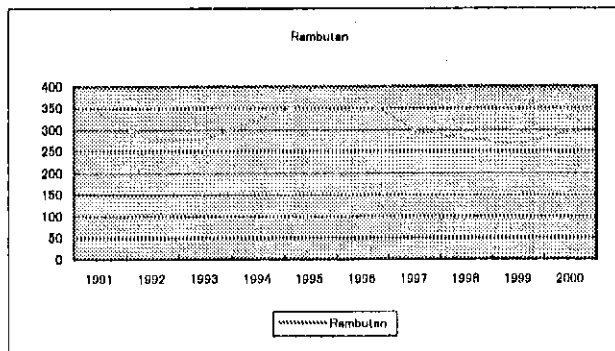
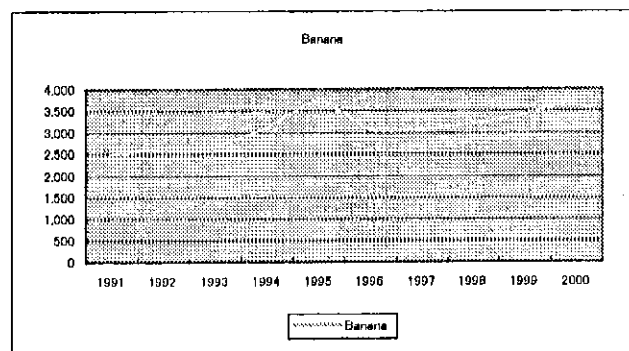
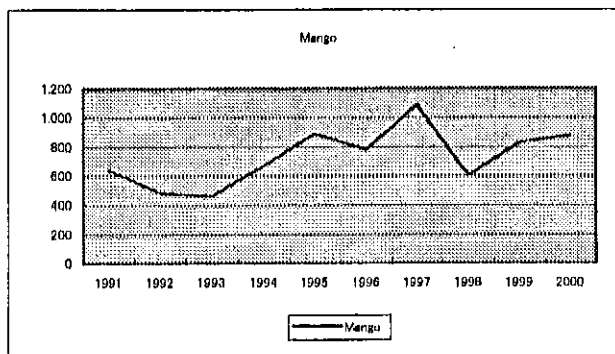
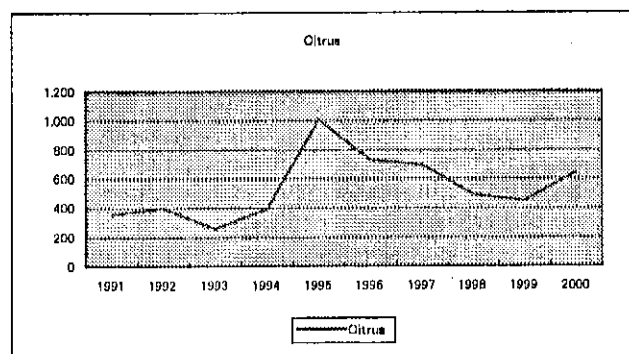


Table 3.1.10 Harvested Area and Production of Major Vegetables by Province in 2000

(Unit: ton)

Production	Onion	Potato	Cabbage	Carrot	Chili	Tomato
1 DI. Aceh	4,402	4,599	2,921	424	16,806	6,079
2 Sumatera Utara	49,294	215,981	268,896	57,848	90,785	124,305
3 Sumatera Barat	14,944	21,213	45,978	1,528	23,725	10,424
4 Riau	-	-	-	-	3,835	364
5 Jambi	1,319	41,754	16,628	4	6,800	2,787
6 Sumatera Selatan	231	292	2,325	1,468	18,591	8,360
7 Bengkulu	1,083	4,268	43,005	8,139	12,834	19,838
8 Lampung	495	2,041	9,049	762	8,400	6,048
Sumatra	71,768	290,148	388,802	70,173	181,776	178,205
9 DKI Jakarta	-	-	-	-	39	5
10 Jawa Barat	122,389	462,800	501,381	157,830	190,612	291,036
11 Jawa Tengah	237,850	86,424	207,005	43,079	119,497	22,063
12 DI. Yogyakarta	9,751	4	822	5	12,293	738
13 Jawa Timur	221,958	81,372	131,986	43,334	126,638	30,121
Jawa	591,948	630,600	841,194	244,248	449,079	343,963
14 Bali	7,259	6,384	51,841	3,588	21,400	14,481
15 NTB	21,315	12	1,034	-	23,487	827
16 NTT	3,986	853	838	1,233	1,868	1,547
17 Timor Timur	-	-	-	-	-	-
Bali, Nusatenggara	32,560	7,249	53,713	4,821	46,755	16,855
18 Kalimantan Barat	-	-	22	-	3,793	1,029
19 Kalimantan Tengah	-	-	18	-	1,822	1,312
20 Kalimantan Selatan	47	2	18	-	3,494	1,140
21 Kalimantan Timur	70	-	414	10	5,347	6,463
Kalimantan	117	2	472	10	14,456	9,944
22 Sulawesi Utara	7,566	15,974	3,846	1,459	16,886	6,511
23 Sulawesi Tengah	5,214	354	1,042	238	2,194	5,054
24 Sulawesi Selatan	60,493	32,720	46,310	5,741	15,674	28,948
25 Sulawesi Tenggara	994	302	690	3	1,588	2,661
Sulawesi	74,267	49,350	51,888	7,441	36,342	43,174
26 Maluku	328	-	60	-	67	15
27 Irian Jaya	1,830	-	281	-	272	236
Maluku, Irian	2,158	0	341	0	339	251
Total	772,818	977,349	1,336,410	326,693	728,747	592,392

(Unit: ha)

Harvested Area	Onion	Potato	Cabbage	Carrot	Chili	Tomato
1 DI. Aceh	530	336	200	43	5,049	1,287
2 Sumatera Utara	4,521	15,275	11,641	2,790	15,797	5,453
3 Sumatera Barat	1,760	1,404	1,786	159	6,356	1,496
4 Riau	-	-	-	-	2,393	174
5 Jambi	169	2,630	517	1	2,070	505
6 Sumatera Selatan	33	47	238	114	5,705	1,643
7 Bengkulu	140	523	2,690	891	5,025	2,463
8 Lampung	70	228	781	143	5,138	1,645
Sumatra	7,223	20,443	17,853	4,141	47,533	14,666
9 DKI Jakarta	-	-	-	-	10	1
10 Jawa Barat	13,310	27,778	21,101	6,418	25,889	13,510
11 Jawa Tengah	25,997	7,176	13,339	3,268	32,203	2,842
12 DI. Yogyakarta	1,393	2	26	2	1,565	148
13 Jawa Timur	23,079	7,551	9,563	4,360	39,748	3,630
Jawa	63,779	42,507	44,029	14,048	99,415	20,131
14 Bali	974	330	1,376	280	2,860	854
15 NTB	3,045	2	74	-	8,044	263
16 NTT	1,208	662	212	216	729	487
17 Timor Timur	-	-	-	-	-	-
Bali, Nusatenggara	5,227	994	1,662	496	11,633	1,604
18 Kalimantan Barat	-	-	5	-	827	159
19 Kalimantan Tengah	-	-	5	-	1,064	618
20 Kalimantan Selatan	5	1	5	-	1,328	418
21 Kalimantan Timur	10	-	70	4	1,346	811
Kalimantan	15	1	85	4	4,565	2,006
22 Sulawesi Utara	1,020	5,795	493	280	4,213	1,226
23 Sulawesi Tengah	687	134	191	40	1,031	1,139
24 Sulawesi Selatan	5,866	3,182	2,449	898	5,699	3,711
25 Sulawesi Tenggara	142	12	113	1	568	701
Sulawesi	7,715	9,123	3,246	1,219	11,511	6,777
26 Maluku	18	-	22	-	6	5
27 Irian Jaya	61	-	17	-	45	26
Maluku, Irian	79	0	39	0	51	31
Total	84,038	73,068	66,914	19,908	174,708	45,215

Source : Agricultural Statistics 2001, Ministry of Agriculture

Table 3.1.11 Harvested Area and Production of Major Fruits by Province in 2000

(Unit: ton)

Production	Orange	Durian	Mango	Papaya	Pineapple	Banana	Rambutan
1 DI. Aceh	17,074	6,946	6,633	3,386	552	28,076	4,426
2 Sumatera Utara	186,926	18,990	4,816	15,309	24,456	52,132	6,930
3 Sumatera Barat	25,643	10,421	2,166	6,039	660	60,015	10,957
4 Riau	50,965	1,139	1,957	2,094	61,090	37,827	9,109
5 Jambi	1,785	5,259	1,936	2,824	2,673	12,301	4,801
6 Sumatera Selatan	21,218	14,439	6,291	5,222	92,607	39,457	13,915
7 Bengkulu	3,970	2,849	949	1,061	81	11,010	841
8 Lampung	8,486	5,954	12,355	11,973	3,589	142,153	17,800
Sumatra	316,067	65,997	37,103	47,908	185,708	382,971	68,779
9 DKI Jakarta	3	158	2,396	1,648	-	2,741	2,143
10 Jawa Barat	37,228	36,634	107,136	63,892	76,466	1,435,103	62,685
11 Jawa Tengah	31,553	26,989	130,360	54,242	11,285	508,801	47,742
12 DI. Yogyakarta	1,097	2,923	13,244	8,420	349	28,581	11,695
13 Jawa Timur	46,488	37,156	390,680	165,195	97,814	706,266	50,395
Jawa	116,369	103,860	643,816	293,397	185,914	2,681,492	174,660
14 Bali	55,489	4,008	18,576	8,085	455	60,381	7,552
15 NTB	1,694	1,184	27,366	3,039	5,496	69,048	2,646
16 NTT	19,039	160	65,767	42,521	3,013	173,446	2,074
17 Timor Timur	-	-	-	-	-	-	-
Bali, Nusatenggara	76,222	5,352	111,709	53,645	8,964	302,875	12,272
18 Kalimantan Barat	1,034	16,745	1,446	2,289	1,381	46,055	7,485
19 Kalimantan Tengah	2,065	5,772	1,555	1,946	6,030	14,395	7,388
20 Kalimantan Selatan	10,687	6,701	2,461	3,842	1,225	22,706	6,128
21 Kalimantan Timur	3,934	1,637	1,619	3,929	1,718	24,247	4,502
Kalimantan	17,720	30,855	7,081	12,006	10,354	107,403	25,503
22 Sulawesi Utara	409	1,366	3,060	2,270	296	11,479	701
23 Sulawesi Tengah	1,151	1,552	4,446	1,091	143	34,354	417
24 Sulawesi Selatan	110,120	13,401	61,474	15,685	1,478	145,999	12,089
25 Sulawesi Tenggara	4,995	738	4,168	2,782	421	34,601	1,662
Sulawesi	116,675	17,057	73,148	21,828	2,338	226,433	14,869
26 Maluku	153	3,459	78	364	16	4,326	11
27 Irian Jaya	843	44	92	59	8	1,462	9
Maluku, Irian	996	3,503	170	423	21	5,788	20
Total	665,267	241,063	879,318	434,429	393,299	3,746,419	310,018

(Unit: ha)

Harvested Area	Orange	Durian	Mango	Papaya	Pineapple	Banana	Rambutan
1 DI. Aceh	826	589	410	108	7	1,096	1,096
2 Sumatera Utara	6,219	1,305	239	322	886	1,526	1,257
3 Sumatera Barat	1,594	1,172	99	95	16	1,434	2,146
4 Riau	4,044	1,123	88	69	1,108	867	1,624
5 Jambi	100	1,286	83	77	53	438	1,348
6 Sumatera Selatan	2,304	2,410	224	91	2,378	3,155	2,512
7 Bengkulu	234	228	32	39	1	259	149
8 Lampung	428	785	662	329	74	3,659	4,199
Sumatra	15,749	8,898	1,837	1,130	4,523	12,434	14,331
9 DKI Jakarta	0	24	73	21	-	82	406
10 Jawa Barat	808	2,802	4,822	1,150	820	22,899	8,843
11 Jawa Tengah	1,463	2,769	7,561	1,075	219	11,046	6,597
12 DI. Yogyakarta	72	329	1,008	183	6	678	1,481
13 Jawa Timur	2,101	2,663	17,051	3,155	1,032	10,265	6,210
Jawa	4,444	8,587	30,515	5,584	2,077	44,970	23,537
14 Bali	2,503	220	1,092	203	9	1,886	915
15 NTB	95	227	2,145	140	165	2,980	744
16 NTT	1,423	25	1,710	852	44	2,585	147
17 Timor Timur	-	-	-	-	-	-	-
Bali, Nusatenggara	4,021	472	4,947	1,195	218	7,451	1,806
18 Kalimantan Barat	59	1,058	62	68	17	1,118	1,476
19 Kalimantan Tengah	132	434	68	53	57	448	1,389
20 Kalimantan Selatan	826	1,084	135	99	22	711	2,136
21 Kalimantan Timur	240	144	54	173	44	569	559
Kalimantan	1,257	2,720	319	393	140	2,846	5,560
22 Sulawesi Utara	37	149	148	67	4	365	117
23 Sulawesi Tengah	111	103	167	46	2	581	75
24 Sulawesi Selatan	10,943	1,467	5,939	356	24	4,158	2,239
25 Sulawesi Tenggara	312	56	292	80	5	482	483
Sulawesi	11,403	1,775	6,546	549	35	5,586	2,914
26 Maluku	29	563	8	32	1	193	8
27 Irian Jaya	217	6	13	3	0	59	2
Maluku, Irian	246	569	21	35	1	252	10
Total	39,424	25,431	44,409	8,977	9,372	76,694	50,670

Source : Agricultural Statistics 2001, Ministry of Agriculture

Table 3.1.12 Transition of Harvested Area and Production of Major Estate Crops

(1) Production Unit: 1,000 ton

Estate Crops		1996	1997	1998	1999	2000
Rubber	Large estate	335	331	333	304	331
	Small farmers	1,193	1,175	1,381	1,295	1,240
	Total	1,528	1,506	1,714	1,599	1,571
Coconut	Large estate	74	73	88	89	90
	Small farmers	2,687	2,620	2,690	2,700	2,689
	Total	2,761	2,693	2,778	2,789	2,779
Oil Palm	Large estate	2,560	4,081	4,013	4,025	4,268
	Small farmers	1,134	1,293	1,348	1,441	1,503
	Total	3,694	5,374	5,361	5,466	5,771
Coffee	Large estate	27	31	29	28	29
	Small farmers	436	396	470	466	466
	Total	463	427	499	494	495
Cocoa	Large estate	47	66	61	59	75
	Small farmers	304	264	370	384	391
	Total	351	330	431	443	466
Tea	Large estate	132	121	133	126	125
	Small farmers	34	33	34	35	34
	Total	166	154	167	161	159
Cashew	Large estate	1	1	1	1	0
	Small farmers	67	73	87	88	90
	Total	68	74	88	89	90
Sugarcane	Large estate	2,160	2,187	1,929	1,907	2,093
	Small farmers	0	0	0	0	0
	Total	2,160	2,187	1,929	1,907	2,093

(2) Planted area Unit: 1,000ha

Estate Crops		1996	1997	1998	1999	2000
Rubber	Large estate	538	558	549	545	541
	Small farmers	2,979	2,958	3,082	3,131	3,201
	Total	3,517	3,516	3,631	3,676	3,742
Coconut	Large estate	132	120	126	127	127
	Small farmers	3,604	3,548	3,580	3,585	3,580
	Total	3,736	3,668	3,706	3,712	3,707
Oil Palm	Large estate	1,146	1,739	1,878	1,993	2,119
	Small farmers	739	813	891	972	1,053
	Total	1,885	2,552	2,769	2,965	3,172
Coffee	Large estate	47	62	63	63	63
	Small farmers	1,032	1,105	1,068	1,057	1,055
	Total	1,079	1,167	1,131	1,120	1,118
Cocoa	Large estate	130	146	151	155	159
	Small farmers	489	381	437	446	448
	Total	619	527	588	601	607
Tea	Large estate	89	89	91	92	92
	Small farmers	65	65	66	65	66
	Total	154	154	157	157	158
Cashew	Large estate	9	9	9	10	10
	Small farmers	484	490	523	547	550
	Total	493	499	532	557	560
Sugarcane	Large estate	400	378	405	402	405
	Small farmers	0	0	0	0	0
	Total	400	378	405	402	405
Total	Large estate	2,491	3,101	3,272	3,387	3,516
	Small farmers	9,392	9,360	9,647	9,803	9,953
	Total	11,883	12,461	12,919	13,190	13,469

Source : Statistic Indonesia 2000, Central Bureau of Statistics

Table 3.1.13 Harvested Area and Production of Major Estate Crops by Province in 1999

(Unit: ton)

Production	Rubber*1	Oil Palm*1	Coffee Robusta*2	Coffee Arabica*2	Cocoa*1	Cashew	Sugarcane*1	Tobacco*1
1 DI. Aceh	28,718	368,651	15,282	15,206	3,595	54	-	213
2 Sumatera Utara	334,555	2,395,853	34,819	-	42,219	24	57,513	1,972
3 Sumatera Barat	47,698	321,624	13,652	-	4,628	-	-	531
4 Riau	178,598	1,262,434	1,862	-	4,754	-	-	-
5 Jambi	200,190	303,625	5,123	-	603	-	-	63
6 Sumatera Selatan	313,541	459,140	138,475	-	177	6	43,984	20
7 Bengkulu	26,289	85,250	50,894	439	1,063	-	-	25
8 Lampung	41,492	97,774	94,709	-	5,684	3	497,832	126
Sumatra	1,171,081	5,294,351	354,816	15,645	62,723	87	599,329	2,950
9 DKI Jakarta	-	-	-	-	-	-	-	-
10 Jawa Barat	53,064	29,305	6,452	-	5,890	-	62,272	3,294
11 Jawa Tengah	23,735	-	9,670	481	1,880	6,294	112,551	29,198
12 DI. Yogyakarta	-	-	465	-	131	336	19,438	1,238
13 Jawa Timur	18,999	-	39,201	11,839	14,802	8,802	658,281	67,667
Jawa	95,798	29,305	55,788	12,320	22,703	15,432	852,542	101,397
14 Bali	79	-	8,652	5,368	3,440	2,997	-	3,339
15 Nusa Tenggara Barat	-	-	3,051	-	527	5,513	-	26,510
16 Nusa Tenggara Timur	-	-	12,634	-	14,925	11,304	-	1,016
Nusa Tenggara	79	0	24,337	5,368	18,892	19,814	0	30,865
17 Timor Timur	-	-	-	-	-	-	-	-
18 Kalimantan Barat	162,233	366,345	3,377	-	1,513	-	-	-
19 Kalimantan Tengah	74,162	35,611	583	-	117	8	1,445	-
20 Kalimantan Selatan	64,249	47,836	2,216	-	229	40	-	-
21 Kalimantan Timur	21,505	73,221	4,476	-	12,254	17	-	-
Kalimantan	322,149	523,013	10,652	0	14,113	65	1,445	0
22 Sulawesi Utara	-	-	4,219	8	1,568	700	20,249	-
23 Sulawesi Tengah	4,226	18,692	5,115	-	73,533	1,940	-	-
24 Sulawesi Selatan	9,473	88,014	21,842	16,590	120,659	22,887	20,368	164
25 Sulawesi Tenggara	-	-	3,164	-	33,973	27,979	-	8
Sulawesi	13,699	106,706	34,340	16,598	229,733	53,506	40,617	172
26 Maluku	818	-	1,228	-	6,224	1,322	-	-
27 Irian Jaya	735	51,524	480	14	13,087	78	-	-
Maluku + Irian Jaya	1,553	51,524	1,708	14	19,311	1,400	0	0
Total	1,604,359	6,004,899	481,641	49,945	367,475	90,304	1,493,933	135,384

(Unit: ha)

Harvested Area	Rubber*1	Oil Palm*1	Coffee Robusta*2	Coffee Arabica*2	Cocoa*1	Cashew	Sugarcane*1	Tobacco*1
1 DI. Aceh	71,987	206,145	39,294	21,752	9,191	827	-	434
2 Sumatera Utara	472,404	627,545	62,520	-	54,290	40	12,640	3,530
3 Sumatera Barat	125,632	168,027	30,456	-	10,466	-	-	1,042
4 Riau	433,171	633,413	6,035	-	5,029	-	-	-
5 Jambi	541,894	265,571	27,190	-	7,755	-	-	111
6 Sumatera Selatan	756,054	329,242	259,857	-	790	258	11,504	100
7 Bengkulu	65,188	54,191	90,179	1,351	17,489	-	-	59
8 Lampung	72,955	99,557	131,536	-	13,304	41	87,794	263
Sumatra	2,539,285	2,383,691	647,067	23,103	118,314	1,166	111,938	5,539
9 DKI Jakarta	-	-	-	-	-	-	-	-
10 Jawa Barat	89,023	20,926	21,698	-	19,309	944	26,574	6,293
11 Jawa Tengah	30,173	-	31,432	3,681	7,706	32,888	36,529	37,307
12 DI. Yogyakarta	-	-	1,766	-	2,486	19,396	5,005	2,147
13 Jawa Timur	24,531	-	85,803	17,442	31,465	56,265	142,979	91,082
Jawa	143,727	20,926	140,699	21,123	60,966	109,493	211,087	136,829
14 Bali	104	-	23,939	16,017	6,224	15,814	-	1,919
15 Nusa Tenggara Barat	-	-	10,165	-	3,759	52,098	-	18,908
16 Nusa Tenggara Timur	-	-	60,164	-	25,613	125,470	-	3,485
Nusa Tenggara	104	0	94,268	16,017	35,596	193,382	0	24,312
17 Timor Timur	-	-	-	-	-	-	-	-
18 Kalimantan Barat	442,445	314,616	9,924	-	8,629	-	-	-
19 Kalimantan Tengah	254,399	99,877	4,959	-	2,142	292	-	-
20 Kalimantan Selatan	142,361	105,999	8,857	-	4,642	353	1,277	-
21 Kalimantan Timur	52,100	116,888	15,316	-	32,962	520	-	-
Kalimantan	891,305	637,380	39,056	0	48,375	1,165	1,277	0
22 Sulawesi Utara	-	-	9,300	408	10,160	3,611	5,292	-
23 Sulawesi Tengah	5,909	39,318	20,412	-	72,696	22,763	-	-
24 Sulawesi Selatan	9,720	62,993	45,059	45,212	157,025	75,179	12,617	579
25 Sulawesi Tenggara	-	-	13,103	-	99,424	134,815	-	12
Sulawesi	15,629	102,311	87,874	45,620	339,305	236,368	17,909	591
26 Maluku	1,788	-	7,359	-	34,520	11,069	-	-
27 Irian Jaya	3,222	27,855	4,391	700	30,639	4,939	-	-
Maluku + Irian Jaya	5,010	27,855	11,750	700	65,159	16,008	0	0
Total	3,595,060	3,172,163	1,020,714	106,563	667,715	557,582	342,211	167,271

Source :

*1: Agricultural Statistics 2001, Ministry of Agriculture

*2: Statistical Estate Crops of Indonesia 1999 - 2001

Table 3.1.14 Number of Livestock by Province (1/4)

(1) Beef Cattle		(Unit: Heads)				
	1997	1998	1999	2000	2001*	
1	DI. Aceh	680,027	692,538	697,304	668,489	670,135
2	Sumatera Utara	268,364	246,279	247,485	247,781	248,078
3	Sumatera Barat	415,252	420,688	425,338	429,336	434,145
4	Riau	135,253	141,907	140,897	144,678	147,289
5	Jambi	151,108	156,350	150,253	142,054	142,500
6	Sumatera Selatan	515,539	522,090	407,812	420,617	441,143
7	Bengkulu	94,522	81,223	78,811	79,180	79,544
8	Lampung	451,913	443,044	409,762	375,115	377,307
	Sumatra	2,711,978	2,704,119	2,557,662	2,507,250	2,540,141
9	DKI Jakarta	0	0	0	0	0
10	Jawa Barat	183,286	151,543	157,725	174,697	174,189
11	Jawa Tengah	1,260,278	1,247,995	1,236,580	1,317,341	1,326,661
12	DI. Yogyakarta	197,428	201,142	202,138	206,714	206,815
13	Jawa Timur	3,382,670	3,223,055	3,380,547	3,312,015	3,345,135
	Jawa	5,023,662	4,823,735	4,976,990	5,010,767	5,052,800
14	Bali	538,753	524,615	526,013	529,074	533,042
15	NTB	471,847	429,847	374,940	376,526	392,090
16	NTT	717,111	715,704	726,439	485,329	517,857
	Bali, Nusatenggara	1,727,711	1,670,166	1,627,392	1,390,929	1,442,989
17	Timor Timur	146,485	161,104	0	0	0
	Timor	146,485	161,104	0	0	0
18	Kalimantan Barat	163,295	166,838	151,968	151,598	155,330
19	Kalimantan Tengah	48,282	49,790	45,346	45,326	45,303
20	Kalimantan Selatan	166,597	143,922	140,553	143,416	148,436
21	Kalimantan Timur	84,733	40,457	45,907	50,773	53,707
	Kalimantan	462,907	401,007	383,774	391,113	402,776
22	Sulawesi Utara	294,666	294,666	271,887	276,524	280,451
23	Sulawesi Tengah	262,027	273,818	234,489	234,444	234,902
24	Sulawesi Selatan	840,642	823,245	749,392	718,139	751,277
25	Sulawesi Tenggara	289,143	292,846	295,717	300,451	301,950
	Sulawesi	1,686,478	1,684,575	1,551,485	1,529,558	1,568,580
26	Maluku	109,835	114,228	97,938	97,938	98,000
27	Irian Jaya	69,800	74,942	80,462	80,462	86,390
	Maluku, Irian	179,635	189,170	178,400	178,400	184,390
	Total	11,938,856	11,633,876	11,275,703	11,008,017	11,191,676

(2) Dairy Cattle		(Unit: Heads)				
	1997	1998	1999	2000	2001*	
1	DI. Aceh	155	158	67	55	65
2	Sumatera Utara	8,811	6,386	6,411	6,420	6,445
3	Sumatera Barat	829	640	580	526	542
4	Riau	0	0	0	0	0
5	Jambi	23	26	23	23	27
6	Sumatera Selatan	134	133	197	202	207
7	Bengkulu	0	0	0	0	0
8	Lampung	78	83	96	106	110
	Sumatra	10,030	7,426	7,374	7,332	7,396
9	DKI Jakarta	4,293	4,355	4,472	3,857	3,471
10	Jawa Barat	95,224	79,237	80,749	84,788	86,127
11	Jawa Tengah	102,825	102,113	105,181	114,834	125,936
12	DI. Yogyakarta	3,453	3,836	4,105	4,069	4,080
13	Jawa Timur	118,121	124,618	129,775	139,075	141,161
	Jawa	323,916	314,159	324,282	346,623	360,775
14	Bali	71	55	62	67	67
15	NTB	0	0	0	0	0
16	NTT	0	0	0	0	0
	Bali, Nusatenggara	71	55	62	67	67
17	Timor Timur	44	36	0	0	0
	Timor	44	36	0	0	0
18	Kalimantan Barat	62	65	62	50	69
19	Kalimantan Tengah	0	0	0	0	0
20	Kalimantan Selatan	98	60	62	59	60
21	Kalimantan Timur	65	65	65	25	26
	Kalimantan	225	190	189	134	155
22	Sulawesi Utara	22	24	22	0	0
23	Sulawesi Tengah	0	0	0	0	0
24	Sulawesi Selatan	0	32	30	25	25
25	Sulawesi Tenggara	0	0	0	0	0
	Sulawesi	22	56	52	25	25
26	Maluku	0	0	0	0	0
27	Irian Jaya	63	70	72	72	72
	Maluku, Irian	63	70	72	72	72
	Total	334,371	321,992	332,031	354,253	368,490

Note: *: Preliminary figures up to May 2001
Source : Statistical Book on Livestock 2001

Table 3.1.14 Number of Livestock by Province (2/4)

(3) Goat		(Unit: Heads)				
	1997	1998	1999	2000	2001*	
1	DI. Aceh	644,654	663,131	622,501	626,983	631,497
2	Sumatera Utara	785,229	691,228	694,338	698,851	703,393
3	Sumatera Barat	292,697	299,475	234,537	236,929	239,346
4	Riau	319,000	395,305	215,702	222,912	264,393
5	Jambi	126,422	124,731	120,340	122,386	125,000
6	Sumatera Selatan	574,001	597,838	420,639	432,080	450,357
7	Bengkulu	156,749	101,417	102,370	103,356	104,348
8	Lampung	601,506	725,895	734,026	628,514	727,806
	Sumatra	3,500,258	3,599,020	3,144,453	3,072,011	3,246,140
9	DKI Jakarta	6,767	8,349	6,415	9,338	9,618
10	Jawa Barat	1,935,346	1,698,631	1,666,500	1,705,605	1,185,000
11	Jawa Tengah	3,053,791	2,899,335	2,812,151	2,968,072	3,033,952
12	DI. Yogyakarta	277,583	263,265	263,397	266,894	266,975
13	Jawa Timur	2,618,502	2,232,229	2,264,992	2,284,244	2,307,086
	Jawa	7,891,989	7,101,809	7,013,455	7,234,153	6,802,631
14	Bali	122,225	110,350	103,037	96,003	96,243
15	NTB	343,064	273,184	234,063	240,877	251,248
16	NTT	629,009	636,466	654,922	361,714	389,988
	Bali, Nusatenggara	1,094,298	1,020,000	992,022	698,594	737,479
17	Timor Timur	196,968	218,375			
	Timor	196,968	218,375	0	0	0
18	Kalimantan Barat	110,072	111,082	123,086	117,797	120,660
19	Kalimantan Tengah	22,676	22,676	27,008	29,880	33,059
20	Kalimantan Selatan	71,882	64,640	66,756	69,827	73,172
21	Kalimantan Timur	73,544	60,754	59,913	57,501	59,594
	Kalimantan	278,174	259,152	276,763	275,005	286,485
22	Sulawesi Utara	104,604	106,696	123,126	125,897	126,300
23	Sulawesi Tengah	202,027	210,714	183,314	181,139	206,218
24	Sulawesi Selatan	468,967	489,433	461,115	478,594	502,427
25	Sulawesi Tenggara	117,587	212,967	122,323	115,374	115,950
	Sulawesi	893,185	1,019,810	889,878	901,004	950,895
26	Maluku	261,385	292,751	331,800	331,800	376,058
27	Irian Jaya	46,290	49,532	53,002	53,002	56,714
	Maluku, Irian	307,675	342,283	384,802	384,802	432,772
	Total	14,162,547	13,560,449	12,701,373	12,565,569	12,456,402

(4) Pig		(Unit: Heads)				
	1997	1998	1999	2000	2001*	
1	DI. Aceh	322	443	461	154	205
2	Sumatera Utara	976,277	765,652	767,566	787,223	807,375
3	Sumatera Barat	46,955	47,078	47,147	47,449	47,753
4	Riau	525,088	757,332	514,566	351,909	439,886
5	Jambi	16,192	14,479	13,905	13,446	14,000
6	Sumatera Selatan	72,564	75,802	48,894	50,155	57,834
7	Bengkulu	1,103	1,142	1,179	1,202	1,225
8	Lampung	72,280	82,041	84,868	62,124	64,261
	Sumatra	1,710,781	1,743,969	1,478,586	1,313,662	1,432,539
9	DKI Jakarta	0	0	0	0	0
10	Jawa Barat	25,550	18,119	11,136	14,539	9,456
11	Jawa Tengah	100,532	94,823	80,590	108,302	124,479
12	DI. Yogyakarta	6,741	5,972	6,908	8,317	8,350
13	Jawa Timur	54,610	27,876	27,426	39,698	39,698
	Jawa	187,433	146,790	126,060	170,856	181,983
14	Bali	1,131,283	967,402	968,011	939,046	954,728
15	NTB	26,153	21,447	21,507	30,577	37,728
16	NTT	2,229,134	2,233,369	2,287,302	725,457	982,160
	Bali, Nusatenggara	3,386,570	3,222,218	3,276,820	1,695,080	1,974,616
17	Timor Timur	375,866	308,540			
	Timor	375,866	308,540	0	0	0
18	Kalimantan Barat	331,786	293,286	357,783	323,853	336,010
19	Kalimantan Tengah	145,838	146,338	156,840	163,442	170,323
20	Kalimantan Selatan	11,075	6,466	6,752	6,657	6,770
21	Kalimantan Timur	116,170	90,703	87,742	122,166	125,232
	Kalimantan	604,869	536,793	609,117	616,118	638,335
22	Sulawesi Utara	505,051	303,301	240,202	298,691	310,639
23	Sulawesi Tengah	226,670	247,954	108,023	108,646	132,103
24	Sulawesi Selatan	575,061	598,102	507,474	461,277	484,248
25	Sulawesi Tenggara	18,523	22,056	23,160	20,126	20,300
	Sulawesi	1,325,305	1,171,413	878,859	888,740	947,290
26	Maluku	109,335	119,175	107,258	107,258	110,000
27	Irian Jaya	532,680	548,660	565,120	565,120	582,074
	Maluku, Irian	642,015	667,835	672,378	672,378	692,074
	Total	8,232,839	7,797,558	7,041,820	5,356,834	5,866,837

Note: *, Preliminary figures up to May 2001

Source: Statistical Book on Livestock 2001

Table 3.1.14 Number of Livestock by Province (3/4)

(5) Native Chicken		(Unit: Heads)				
	1997	1998	1999	2000	2001*	
1	DI. Aceh	15,157,846	19,278,293	15,914,184	16,192,682	16,476,054
2	Sumatera Utara	21,160,000	19,574,500	19,736,970	20,532,960	21,361,054
3	Sumatera Barat	7,253,675	7,369,734	7,435,908	7,510,267	7,585,700
4	Riau	4,069,102	4,231,866	5,727,608	7,994,993	8,514,667
5	Jambi	3,773,435	4,051,183	3,994,049	4,195,949	4,350,000
6	Sumatera Selatan	15,129,000	15,612,000	14,965,000	16,500,000	17,789,000
7	Bengkulu	4,037,642	2,790,011	2,801,171	2,919,951	3,043,756
8	Lampung	14,209,000	14,810,531	14,989,740	13,300,148	13,512,950
	Sumatra	84,789,700	87,718,118	85,564,630	89,146,950	92,633,181
9	DKI Jakarta	110,512	127,427	121,736	150,212	151,714
10	Jawa Barat	32,767,621	28,638,481	33,152,942	34,091,782	29,075,217
11	Jawa Tengah	34,330,205	31,458,193	31,584,135	31,970,524	32,395,732
12	DI. Yogyakarta	5,054,116	4,879,562	5,033,246	5,105,777	5,190,500
13	Jawa Timur	37,097,943	36,411,485	36,920,771	37,176,008	38,663,048
	Jawa	109,360,397	101,515,148	106,812,830	108,494,303	105,476,211
14	Bali	6,544,878	5,672,902	5,111,395	5,055,649	5,080,927
15	NTB	6,086,941	6,036,800	3,760,284	3,325,722	3,492,008
16	NTT	8,000,441	8,743,074	9,153,997	9,153,997	9,584,235
	Bali, Nusatenggara	20,632,260	20,452,776	18,025,676	17,535,368	18,157,170
17	Timor Timur	576,260	617,550	0	0	0
	Timor	576,260	617,550	0	0	0
18	Kalimantan Barat	4,043,892	3,654,740	3,948,971	3,841,321	4,000,205
19	Kalimantan Tengah	2,246,369	2,384,399	2,747,369	3,150,775	3,613,309
20	Kalimantan Selatan	5,356,484	3,705,167	3,980,461	4,648,037	5,112,841
21	Kalimantan Timur	4,309,200	3,160,800	2,988,400	3,048,600	3,146,200
	Kalimantan	15,955,945	12,905,106	13,665,201	14,688,733	15,872,555
22	Sulawesi Utara	2,175,963	2,282,150	2,631,518	2,709,843	2,818,345
23	Sulawesi Tengah	2,553,679	2,604,752	1,150,483	1,219,590	1,285,626
24	Sulawesi Selatan	14,961,920	14,707,768	14,684,327	15,617,718	16,395,480
25	Sulawesi Tenggara	6,327,525	6,611,864	6,439,833	6,165,289	6,227,000
	Sulawesi	26,019,087	26,206,534	24,906,161	25,712,440	26,726,451
26	Maluku	2,105,649	2,253,044	2,140,392	2,140,392	2,150,000
27	Irian Jaya	1,395,400	1,465,162	1,538,411	1,538,411	1,615,322
	Maluku, Irian	3,501,049	3,718,206	3,678,803	3,678,803	3,765,322
	Total	260,834,698	253,133,438	252,653,301	259,256,597	262,630,890

(6) Layer		(Unit: Heads)				
	1997	1998	1999	2000	2001*	
1	DI. Aceh	213,375	228,727	260,640	245,592	259,763
2	Sumatera Utara	6,266,676	3,763,760	10,746,077	15,723,936	16,117,034
3	Sumatera Barat	1,322,620	1,095,512	1,295,507	3,210,126	3,867,524
4	Riau	792,184	856,351	596,323	683,667	717,850
5	Jambi	272,858	254,078	205,163	268,497	400,000
6	Sumatera Selatan	1,167,000	2,209,000	1,383,000	3,000,000	3,208,000
7	Bengkulu	50,750	30,174	17,963	29,100	44,232
8	Lampung	871,179	1,467,354	1,553,194	3,116,304	3,118,400
	Sumatra	10,956,642	9,904,956	16,057,867	26,277,222	27,732,803
9	DKI Jakarta	12,232	0	0	500	525
10	Jawa Barat	11,939,916	7,510,987	8,682,421	12,432,950	6,280,087
11	Jawa Tengah	10,290,716	5,646,294	5,641,263	6,730,818	7,604,470
12	DI. Yogyakarta	2,142,185	847,258	1,029,243	1,142,601	1,210,000
13	Jawa Timur	24,055,506	5,991,993	6,818,930	14,358,602	15,076,532
	Jawa	48,440,555	19,996,532	22,171,857	34,665,471	30,171,614
14	Bali	2,162,685	924,605	1,065,474	1,567,321	1,724,053
15	NTB	438,693	306,768	41,479	53,605	56,285
16	NTT	119,611	35,883	36,601	50,000	0
	Bali, Nusatenggara	2,720,989	1,267,256	1,143,554	1,670,926	1,780,338
17	Timor Timur	39,907	36,485	0	0	0
	Timor	39,907	36,485	0	0	0
18	Kalimantan Barat	1,743,750	1,678,300	1,689,000	1,710,550	1,826,820
19	Kalimantan Tengah	27,248	18,787	16,565	19,162	22,167
20	Kalimantan Selatan	661,709	593,137	554,032	549,527	560,518
21	Kalimantan Timur	739,084	379,400	545,100	324,910	330,000
	Kalimantan	3,171,791	2,669,624	2,804,697	2,604,149	2,739,505
22	Sulawesi Utara	837,947	860,069	631,592	631,592	672,633
23	Sulawesi Tengah	142,997	142,997	204,946	395,507	527,844
24	Sulawesi Selatan	3,591,554	3,436,432	2,161,831	2,787,881	2,926,717
25	Sulawesi Tenggara	207,709	34,280	34,449	13,205	13,400
	Sulawesi	4,780,207	4,473,778	3,032,818	3,828,185	4,140,594
26	Maluku	124,863	124,863	0	0	0
27	Irian Jaya	387,817	387,817	320,053	320,053	362,979
	Maluku, Irian	512,680	512,680	320,053	320,053	362,979
	Total	70,622,771	38,861,311	45,530,846	69,366,006	66,927,833

Note: *, Preliminary figures up to May 2001

Source: Statistical Book on Livestock 2001

T 3.1.14 Number of Livestock by Province (4/4)

(7) Broiler (Unit: Heads)

	1997	1998	1999	2000	2001*
1 Dl. Aceh	1,108,100	887,624	951,548	965,155	978,957
2 Sumatera Utara	72,510,000	21,347,000	20,154,215	26,893,165	27,565,494
3 Sumatera Barat	4,555,663	9,983,704	10,196,748	10,400,682	11,440,750
4 Riau	13,726,918	13,829,870	6,746,549	8,427,829	9,270,611
5 Jambi	2,182,855	1,799,321	2,817,880	4,793,997	5,000,000
6 Sumatera Selatan	13,852,000	4,866,000	13,851,000	15,500,000	16,326,000
7 Bengkulu	2,165,532	2,273,809	2,387,499	2,453,080	2,520,539
8 Lampung	7,306,488	2,301,647	15,655,272	23,929,600	19,981,964
Sumatra	117,407,556	57,288,975	72,760,711	93,363,508	93,084,315
9 DKI Jakarta	1,067,500	610,400	854,000	889,000	897,890
10 Jawa Barat	145,950,581	88,483,024	88,765,654	196,422,402	180,827,754
11 Jawa Tengah	142,864,962	68,585,024	71,244,629	71,554,382	71,862,066
12 Dl. Yogyakarta	11,107,061	8,679,083	10,137,478	12,431,023	12,740,000
13 Jawa Timur	156,304,232	89,300,169	42,904,080	88,077,360	92,481,228
Jawa	457,294,336	255,657,700	213,905,841	369,374,167	358,808,938
14 Bali	16,001,811	1,159,607	1,574,084	18,646,404	20,511,044
15 NTB	0	0	2,038,477	2,705,129	2,840,385
16 NTT	714,244	338,408	345,258	354,313	359,628
Bali, Nusatenggara	16,716,055	1,498,015	3,957,819	21,705,846	23,711,057
17 Timor Timur	470,559	506,933	0	0	0
Timor	470,559	506,933	0	0	0
18 Kalimantan Barat	14,335,390	8,919,070	10,234,795	15,787,359	16,340,000
19 Kalimantan Tengah	1,332,185	1,234,415	1,376,500	1,616,795	1,899,087
20 Kalimantan Selatan	6,020,064	2,621,151	2,411,338	6,148,602	6,456,032
21 Kalimantan Timur	8,242,800	4,333,800	12,390,800	14,306,200	15,004,300
Kalimantan	29,930,439	17,108,436	26,413,433	37,858,956	39,699,419
22 Sulawesi Utara	2,832,597	2,061,130	3,443,941	4,121,368	4,318,782
23 Sulawesi Tengah	806,432	5,870,823	745,400	974,015	975,768
24 Sulawesi Selatan	13,701,758	10,756,746	1,570,930	1,890,100	1,984,227
25 Sulawesi Tenggara	0	972,230	115,000	152,420	156,300
Sulawesi	17,340,787	19,660,929	5,875,271	7,137,903	7,435,077
26 Maluku	961,884	942,646	0	0	0
27 Irian Jaya	1,252,200	1,339,869	1,433,677	1,433,677	1,534,051
Maluku, Irian	2,214,084	2,282,515	1,433,677	1,433,677	1,534,051
Total	641,373,816	354,003,503	324,346,752	530,874,057	524,272,857

(8) Duck (Unit: Heads)

	1997	1998	1999	2000	2001*
1 Dl. Aceh	3,399,178	3,418,914	3,292,047	3,314,103	3,336,307
2 Sumatera Utara	2,265,317	2,192,490	2,210,690	2,223,951	2,237,294
3 Sumatera Barat	1,658,999	1,676,750	1,683,673	1,711,790	1,740,377
4 Riau	270,414	274,470	302,831	401,744	532,964
5 Jambi	552,130	632,294	625,627	628,169	700,000
6 Sumatera Selatan	1,705,000	1,252,000	2,131,000	2,198,000	2,297,000
7 Bengkulu	654,760	229,166	210,258	225,650	241,851
8 Lampung	387,844	418,331	419,532	559,827	560,219
Sumatra	10,893,642	10,094,415	10,875,658	11,263,234	11,646,012
9 DKI Jakarta	49,996	61,551	124,064	140,144	141,545
10 Jawa Barat	3,603,423	2,905,893	3,921,126	4,204,705	4,085,317
11 Jawa Tengah	3,781,155	3,781,155	3,292,498	3,661,805	3,927,895
12 Dl. Yogyakarta	231,770	202,130	203,627	227,476	227,800
13 Jawa Timur	2,986,181	2,252,515	2,281,549	2,311,665	2,346,340
Jawa	10,652,525	9,203,244	9,822,864	10,545,795	10,728,897
14 Bali	713,343	534,171	539,024	616,460	628,789
15 NTB	594,132	382,579	415,806	490,958	515,506
16 NTT	161,176	183,050	191,653	191,653	200,653
Bali, Nusatenggara	1,468,651	1,099,800	1,146,483	1,299,071	1,344,948
17 Timor Timur	28,559	29,074	0	0	0
Timor	28,559	29,074	0	0	0
18 Kalimantan Barat	326,076	264,300	278,176	283,240	295,755
19 Kalimantan Tengah	147,421	153,831	147,223	150,350	153,552
20 Kalimantan Selatan	3,116,289	1,497,340	1,955,751	2,316,779	2,432,618
21 Kalimantan Timur	324,200	227,700	228,600	214,500	217,800
Kalimantan	3,913,986	2,143,171	2,609,750	2,964,869	3,099,725
22 Sulawesi Utara	417,649	417,649	99,138	106,264	107,858
23 Sulawesi Tengah	145,310	148,216	102,019	151,285	152,798
24 Sulawesi Selatan	2,322,324	2,308,503	2,379,148	2,243,335	2,355,053
25 Sulawesi Tenggara	262,351	273,672	278,443	223,020	224,140
Sulawesi	3,147,634	3,148,040	2,858,748	2,723,904	2,839,849
26 Maluku	109,360	121,389	122,000	122,000	123,000
27 Irian Jaya	105,620	110,903	116,449	116,449	122,274
Maluku, Irian	214,980	232,292	238,449	238,449	245,274
Total	30,319,977	25,950,036	27,551,952	29,035,322	29,904,705

Note: *, Preliminary figures up to May 2001

Source: Statistical Book on Livestock 2001

Table 3.1.15 Livestock Production

(Unit: 1,000ton)

	Meat	Egg	Milk
1969	309.3	57.7	28.9
1970	313.6	58.6	29.3
1971	332.2	68.4	35.8
1972	366.2	77.5	37.7
1973	379.4	81.4	35.0
1974	403.1	98.1	56.9
1975	435.0	112.2	51.1
1976	448.9	115.6	58.0
1977	467.7	131.4	60.7
1978	474.6	151.0	62.3
1979	486.5	164.5	72.2
1980	571.3	262.6	78.4
1981	596.0	275.2	85.8
1982	628.5	297.0	117.6
1983	651.5	316.0	174.6
1984	742.2	355.3	179.0
1985	808.9	369.9	191.9
1986	879.0	437.2	220.2
1987	895.5	451.5	234.9
1988	937.0	443.1	264.9
1989	971.1	456.2	338.2
1990	1,027.7	484.0	345.6
1991	1,099.2	510.4	360.2
1992	1,239.2	572.3	367.2
1993	1,378.3	572.9	387.5
1994	1,492.9	668.6	426.7
1995	1,507.1	736.0	433.4
1996	1,632.2	779.8	441.2
1997	1,555.1	765.0	423.7
1998	1,228.5	529.8	375.4
1999	1,192.0	640.1	436.0
2000	1,445.2	783.3	495.6
2001	1,450.7	793.8	505.0

Note:

-Preliminary figures for 2000

-Estimated figures for 2001

Source: Statistical Book on Livestock 2001

Table 3.1.16 Trade Balance of Livestock Products

Import

Species	Unit	1996	1997	1998	1999	2000
I. Livestock						
Cattle Breed	1,000heads	3.8	4.4	1.9	0.2	0.5
Feeder Steers	1,000heads	205.1	277.0	49.9	118.4	267.7
Pig Breed	1,000heads	0.0	0.2	0.0	0.0	0.3
PS	1,000heads	1,287.9	693.2	496.6	1,862.5	1,610.1
Poultry	1,000heads	74.0	234.7	105.8	28.9	158.2
II. Meat						
Bovine	ton	15,772.8	23,315.3	8,813.8	10,552.9	26,962.3
Sheep/Goat	ton	702.0	675.4	412.2	434.7	591.8
Pork	ton	96.0	101.3	57.6	107.8	320.6
Poultry	ton	2,051.2	811.1	571.5	4,070.4	14,017.4
Bovine Liver	ton	11,416.5	8,942.2	6,228.9	7,746.0	30,403.1
III. Livestock Products						
Milk Products	ton	51,788.5	48,783.3	32,737.4	59,926.7	117,268.2
Butter	ton	32,315.8	29,795.3	17,944.3	28,478.7	41,391.6
Cheese	ton	6,119.4	4,691.3	3,809.9	4,274.8	6,062.2
Egg	1,000pcs	161.4	162.7	80.5	531.8	533.0

Export

Species	Unit	1996	1997	1998	1999	2000
I. Livestock						
Pig	1,000heads	161.9	184.9	260.0	486.6	801.3
PS/FS	1,000heads	1,371.4	466.3	270.1	1,192.4	1,070.1
Poultry	1,000heads	1,537.8	527.8	148.6	40.4	699.5
II. Meat						
Bovine	ton	4.2	5.0	1.2	17.1	26.1
Sheep/Goat	ton	0.0	0.0	68.5	12.5	34.6
Pork	ton	40.9	366.2	188.7	222.4	689.7
Poultry	ton	0.3	1.8	3,006.5	2,859.3	703.8
III. Livestock Products						
Milk	ton	4,978.3	1,730.6	2,385.1	2,352.7	31,482.4
Butter	ton	311.5	2,728.5	4,936.1	14,562.2	29,171.3
Cheese	ton	17.7	9.9	167.5	13.0	21.7
Egg	1,000pcs	0.9	4.9	0.0	0.0	77.7

Source: Statistical Book on Livestock, 2001

Table 3.1.17 Annual Per Capita Consumption of Livestock Products

	Annual Consumption per Capita (kg)			Daily Protein Consumption per Capita (g)			
	Meat	Egg	Milk	Meat	Egg	Milk	Total
1969	2.74	0.23	1.46	1.20	0.10	0.10	1.40
1970	2.70	0.23	1.82	1.20	0.10	0.10	1.40
1971	2.80	0.29	1.70	1.10	0.10	0.40	1.60
1972	3.02	0.35	1.73	1.20	2.00	0.20	3.40
1973	3.06	0.35	2.64	1.42	0.13	0.14	1.69
1974	3.18	0.45	1.96	1.48	0.16	0.18	1.82
1975	3.34	0.50	1.95	1.27	0.15	0.19	1.61
1976	3.37	0.52	2.82	1.29	0.16	0.27	1.72
1977	3.42	0.80	3.06	1.25	0.26	0.79	2.30
1978	3.41	0.88	3.53	1.25	0.27	0.41	1.93
1979	3.46	0.94	3.72	1.21	0.37	0.36	1.94
1980	3.92	1.44	4.36	1.40	0.43	0.42	2.25
1981	4.00	1.50	3.08	1.43	0.45	0.38	2.26
1982	4.12	1.58	4.17	1.41	0.51	0.37	2.29
1983	4.32	1.66	3.88	1.44	0.53	0.29	2.26
1984	4.64	1.84	3.90	1.55	0.58	0.34	2.47
1985	4.95	1.88	3.31	1.63	0.64	0.28	2.55
1986	5.37	2.13	3.43	1.70	0.67	0.30	2.67
1987	5.27	2.20	3.38	1.74	0.74	0.34	2.82
1988	5.40	2.10	4.20	1.76	0.70	0.37	2.83
1989	5.69	2.12	3.72	1.80	0.72	0.33	2.85
1990	5.70	2.31	3.44	1.86	0.74	0.30	2.90
1991	5.99	2.40	4.46	1.95	0.77	0.38	3.10
1992	6.78	2.73	4.39	2.15	0.86	0.38	3.39
1993	7.40	2.69	4.23	2.40	0.86	0.37	3.63
1994	7.83	3.16	4.75	2.54	1.00	0.42	3.96
1995	7.90	3.33	6.99	2.52	1.06	0.61	4.19
1996	8.41	3.49	5.72	2.70	1.11	0.50	4.31
1997	7.95	3.46	5.25	2.57	1.10	0.46	4.13
1998	4.24	2.29	4.16	2.00	0.73	0.36	3.09
1999	4.20	2.82	5.23	1.98	0.89	0.46	3.33
2000	5.16	3.48	6.50	2.43	1.10	0.57	4.10
2001	5.11	3.47	6.46	2.40	1.10	0.57	4.07

Note:

-Preliminary figures for 2000

-Estimated figures for 2001

Source: Statistical Book on Livestock 2001

Table 3.1.18 Current Situation of BIPP

Province	Districts	Current Situation of BIPP									Total
		Centre	Agency	Office	Unit	Sub-Division	Section	Group	Not decided yet	Abolished	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1 DI. Aceh	13	1	1	10	0	1	0	0	0	0	13
2 Sumatera Utara	19	6	0	3	2	7	0	1	0	0	19
3 Sumatera Barat	15	1	0	0	0	6	1	6	0	1	15
4 Riau	14	4	0	1	0	2	0	0	6	1	14
5 Jambi	10	3	0	1	1	2	0	1	2	0	10
6 Bengkulu	4	4	0	0	0	0	0	0	0	0	4
7 Lampung	10	0	0	1	0	3	0	1	2	3	10
8 Sumatera Selatan	7	0	0	0	2	3	1	1	0	0	7
9 DKI Jakarta	0	0	0	0	0	0	0	0	0	0	0
10 Jawa Barat	23	4	0	5	1	4	0	5	3	1	23
11 DI. Yogyakarta	5	0	0	0	2	1	0	1	1	0	5
12 Jawa Tengah	35	4	0	0	5	4	3	17	1	1	35
13 Jawa Timur	37	7	0	7	0	9	4	9	1	0	37
14 Bali	9	1	0	0	0	2	0	2	2	2	9
15 NTB	7	0	1	1	3	2	0	0	0	0	7
16 NTT	14	1	2	6	0	4	0	0	0	1	14
17 Kalimantan Barat	9	0	0	0	0	5	0	2	2	0	9
18 Kalimantan Tengah	6	3	0	1	2	0	0	0	0	0	6
19 Kalimantan Selatan	11	0	0	1	2	0	3	4	1	0	11
20 Kalimantan Timur	12	3	0	1	0	2	2	0	1	3	12
21 Sulawesi Utara	5	1	1	0	2	1	0	0	0	0	5
22 Sulawesi Tenggara	5	0	0	4	1	0	0	0	0	0	5
23 Sulawesi Tengah	8	2	0	2	1	1	0	1	1	0	8
24 Sulawesi Selatan	24	5	0	8	1	3	2	2	2	1	24
25 Maluku	5	0	0	1	0	0	0	0	4	0	5
26 Irian Jaya	14	4	0	4	0	0	0	0	6	0	14
27 Banten	6	1	0	0	1	1	0	1	2	0	6
28 Gorontalo	3	0	0	2	0	1	0	0	0	0	3
29 Bangka-Belitung	3	1	0	0	1	1	0	0	0	0	3
30 Maluku Utara	3	1	0	2	0	0	0	0	0	0	3
Total	336	57	5	61	27	65	16	54	37	14	336

Note)

- Since the extension system is managed by each province, the names of organizations are not unified across districts. However, the organizations can be classified into the following categories according to function.
- (1), (2), (3): Units operated as it is under Governor. Their ordinary function is maintained.
- (4), (5), (6), (7): Units transferred to the the agricultural department of the Districts: only the function is transferred with the breakup of the BIPP
- (8): not settled down in restructuring the BIPP
- (9): Abolished

Source) Ministry of Agriculture (June 2002)

Table 3.1.19 Deployment of Extension Officers by Province

	Province	Kabupaten	Kecamatan	Desa	BIPP	BPP	Farmers Group	Famers Household	Extension Officer
1	DI. Aceh	13	185	4,992	12	155	8,457	443,351	1,137
2	Sumatera Utara	19	262	1,997	11	242	18,298	1,240,765	1,814
3	Sumatera Barat	15	151	1,545	1	107	7,366	534,686	1,199
4	Riau	14	84	348	5	72	7,059	419,017	1,106
5	Jambi	10	80	589	5	55	5,743	444,428	895
6	Bengkulu	4	49	674	4	35	3,455	456,074	679
7	Lampung	10	104	1,147	1	81	10,299	798,564	1,042
8	Sumatera Selatan	7	135	1,809	3	95	15,783	687,054	1,536
9	Bangka-Belitung	3	36	186	2	13	944	91,370	182
10	DKI Jakarta	6	-	-	-	9	369	-	166
11	Jawa Barat	24	487	4,180	10	424	28,646	4,549,350	3,087
12	Banten	5	92	300	3	91	6,663	915,685	511
13	DI. Yogyakarta	5	75	161	2	50	4,991	305,881	495
14	Jawa Tengah	35	545	6,288	9	444	35,070	4,710,849	3,316
15	Jawa Timur	37	564	5,287	15	564	28,928	5,740,506	3,410
16	Bali	8	37	156	1	31	4,885	533,119	524
17	NTB	7	88	306	5	63	8,255	449,367	1,001
18	NTT	14	128	1,180	9	124	6,106	623,463	1,092
19	Kalimantan Barat	0	104	430	-	71	6,973	361,923	1,056
20	Kalimantan Tengah	6	85	731	6	56	5,129	225,361	1,240
21	Kalimantan Selatan	11	105	918	3	90	9,194	395,926	1,169
22	Kalimantan Timur	12	73	7,457	5	46	3,738	60,695	299
23	Sulawesi Utara	5	79	1,173	4	76	4,235	306,768	830
24	Gorontalo	3	21	-	2	23	-	113,484	301
25	Sulawesi Tenggara	5	77	520	5	71	5,246	197,039	1,045
26	Sulawesi Tengah	8	74	879	5	55	5,164	291,429	940
27	Sulawesi Selatan	24	256	1,784	15	511	5,530	793,606	2,244
28	Maluku	5	8	187	1	4	223	-	101
29	Maluku Utara	3	31	59	3	14	1,092	95,927	25
30	Irian Jaya	14	111	25	8	70	2,746	107,470	590
	Total	332	4,126	45,308	155	3,742	250,587	25,893,157	33,032

Source: Internal data from Ministry of Agriculture, June 2002

Table 3.1.20 Classification of Households by Income Source in Rural Areas

(Unit : %)

Province	Source of Income					Total
	Non-Agriculture	Agriculture	Mixed			
			Main Source Agriculture	Main Source Non-Agriculture	Sub-total of Mixed	
1 DI. Aceh	25	58	9	8	17	100
2 Sumatera Utara	22	61	8	9	17	100
3 Sumatera Barat	28	46	13	13	26	100
4 Riau	26	59	9	6	15	100
5 Jambi	20	63	10	7	17	100
6 Sumatera Selatan	23	62	8	7	15	100
7 Bengkulu	19	61	10	10	20	100
8 Lampung	18	67	9	6	15	100
9 DKI Jakarta						
10 Jawa Barat	39	34	12	15	27	100
11 Jawa Tengah	29	39	16	16	32	100
12 DI. Yogyakarta	23	32	19	26	45	100
13 Jawa Timur	27	41	16	16	32	100
14 Bali						
15 NTB	29	40	17	14	31	100
16 NTT	13	71	11	5	16	100
17 Timor Timur	19	67	8	6	14	100
18 Kalimantan Barat	19	60	14	7	21	100
19 Kalimantan Tengah	20	57	14	9	23	100
20 Kalimantan Selatan	25	46	17	12	29	100
21 Kalimantan Timur	38	40	12	10	22	100
22 Sulawesi Utara	26	51	13	10	23	100
23 Sulawesi Tengah	22	53	15	10	25	100
24 Sulawesi Selatan	20	57	13	10	23	100
25 Sulawesi Tenggara	19	52	14	15	29	100
26 Maluku	22	59	9	10	19	100
27 Irian Jaya	11	78	7	4	11	100
Whole Country	27	46	14	13	27	100

Source) Results of the 1995 Intercensal Population Survey, Central Bureau of Statistics
(Hasil Survey Penduduk Antar Sensus 1995, BPS)

Table 3.1.21 Performace of KKP by Banks
(Unit : Million Rupiah)

	Fund	Loan Amount	Investment Rate *(%)
I. State Bank	1,847,000	540,105	29.24
1. BANK BRI	675,000	288,736	42.78
2. BANK BNI	200,000	46,592	23.30
3. BANK MANDRI	200,000	12,614	6.31
4. BANK BUKOPIN	340,000	52,610	15.47
5. BANK BCA	100,000	9,306	9.31
6. BANK AGRO NIAGA	132,000	119,340	90.41
7. BANK BII	50,000	0	0.00
8. BANK NIAGA	50,000	6,815	13.63
9. BANK DANAMON	100,000	4,092	4.09
II. Regional Development Bank	235,240	45,709	19.43
1. BPD DKI	2,000	0	0.00
2. BPD JABAR	25,000	4,814	19.26
3. BPD JATENG	28,370	973	3.43
4. BPD DIY	1,500	618	41.20
5. BPD JATIM	30,000	12,336	41.12
6. BPD SUMUT	2,620	317	12.10
7. BPD RIAU	10,000	160	1.60
8. BPD SUMBAR	2,000	517	25.85
9. BPD SUMSEL	10,000	2,701	27.01
10. BPD LAMPUNG	1,500	644	42.93
11. BPD BALI	100,000	21,097	21.10
12. BPD KALBAR	1,500	468	31.20
13. BPD KALTENG	5,000	295	5.90
14. BPD KALSEL	1,500	39	2.60
15. BPD KALTIM	1,500	362	24.13
16. BPD SULTENG	1,500	0	0.00
17. BPD SULSEL	3,000	196	6.53
18. BPD SULUT	5,000	0	0.00
19. BPD MALUKU	1,250	0	0.00
20. BPD PAPUA	2,000	172	8.60
Total	2,082,240	585,814	28.13

Note : Data at the end of May 2002.

No data on repayment situation

*: (Loan Amount/Fund) x 100 (%)

Source : Ministry of Agriculture (Internal Document)

Table 3.1.22 Performance of KKP for Commodity

(Unit : Million Rupiah)

	Food Crops	Sugarcane	Poultry	Fishery	Procurement of Rice	Total
1. DI. Aceh	549	0	0	0	1,456	2,005
2. Sumatera Utara	3,418	0	493	2,331	450	6,692
3. Sumatera Barat	1,455	0	517	0	65	2,037
4. Riau	51	0	426	22	15	514
5. Jambi	218	0	0	75	0	293
7. Sumatera Selatan	5,696	0	894	353	175	7,118
6. Bengkulu	40	0	0	0	0	40
8. Lampung	2,105	0	3,782	96	1,230	7,213
9. DKI Jakarta	376	0	0	0	799	1,175
10. Jawa Barat	34,094	12,980	10,127	1,393	11,403	69,997
11. Jawa Tengah	16,661	95,412	3,750	171	10,823	126,817
12. DI. Yogyakarta	3,273	5,000	722	47	314	9,356
13. Jawa Timur	26,714	240,832	10,201	798	10,364	288,909
22. Bali	14,796	0	19,068	71	9,356	43,291
23. NTB	5,312	0	0	0	225	5,537
24. NTT	953	0	137	0	287	1,377
14. Kalimantan Barat	66	0	385	155	145	751
15. Kalimantan Tengah	53	0	124	171	55	403
16. Kalimantan Selatan	1,843	0	81	0	150	2,074
17. Kalimantan Timur	166	0	0	362	90	618
18. Sulawesi Utara	597	0	0	0	0	597
19. Sulawesi Tengah	0	0	0	0	0	0
21. Sulawesi Selatan	2,637	200	304	314	1,274	4,729
20. Sulawesi Tenggara	1,131	0	0	0	0	1,131
25. Maluku	0	0	0	0	0	0
26. Papua	2,790	0	100	100	150	3,140
Total	124,994	354,424	51,111	6,459	48,826	585,814

Note: Figures in the table are data at the end of May 2002.

Source : Ministry of Agriculture (Internal Document)

Table 3.1.23 Current Situation of P4K as of September 2001

Project Coverage

Povince	District	Sub-District	Village	Field Extension Worker	Self-Help Group
West Java	20	209	1,458	956	11,494
Central Java	24	278	1,535	983	14,549
DI Yogyakarta	4	56	299	252	4,983
East Java	24	234	1,376	792	15,381
Bali	9	46	414	294	3,792
West Nusa Tenggara	7	51	336	298	7,796
Riau	4	23	186	162	919
Bengkulu	4	25	227	204	401
South Sumatera	4	19	161	106	862
Lampung	7	36	173	178	788
South Kalimantan	6	29	141	147	655
South Sulawesi	9	37	246	197	1,613
Total	122	1,043	6,552	4,569	63,233

Source) Brochure for P4K, Ministry of Agriculture

Disbursement of Credit (Rp)

Povince	Credit Disbursed
West Java	32,268,585
Central Java	56,928,929
DI Yogyakarta	12,938,435
East Java	52,181,361
Bali	19,199,071
West Nusa Tenggara	35,179,324
Riau	1,864,100
Bengkulu	1,672,050
South Sumatera	1,462,900
Lampung	1,414,300
South Kalimantan	2,169,600
South Sulawesi	5,866,200
Total	223,144,855

Situation on Operation of P4K Credit

(1) Total credit received by the groups (Rp.)	223,144,855
(2) Total repayment (Rp.)	143,315,370
(3) Total credit outstanding (Rp.)	79,829,485
(4) Total arrears	6,331,153
Arrears to credit disbursement (%)	2.84
Arrears to credit outstanding (%)	7.93

Table 4.4.1 List of On-going Projects of Asian Development Bank (ADB) (1/2)

Name of Projects (Executing Agency)	Approved Date/ Closing Date	Related Area	Description
1. Marine and Coastal Resources Management Project (Ministry of Marine Affairs and Fisheries)	Oct. 26, 2000 Jun. 30, 2007	n.a.	Assistance in sustainable management of marine and coastal resources and protection of the environment in a decentralized framework of government.
2. Community Empowerment for Rural Development (Ministry of Home Affairs)	Oct. 19, 2000 Jun. 30, 2007	11 Districts in 6 Provinces	Assistance to empower rural communities by strengthening their capacity to plan and manage their own development activities, and support investments, foster rural-urban linkages, and establish rural infrastructure to promote agricultural productivity and off-farm business enterprises.
3. Central Sulawesi Integrated Area Development and Conservation (Ministry of Home Affairs)	Jan. 27, 1998 Sep. 30, 2005	Central Sulawesi	Promotion of sustainable development in an ecologically sensitive area, i.e., encouraging environmentally sound social and economic development in tandem with protection of the biological wealth and ecological functions that makes it possible.
4. Coral Reef Rehabilitation and Management (Indonesian Institute of Science)	Mar. 26, 1998 Oct. 31, 2002	Riau, North/West Sumatera,	Assistance in rehabilitation and management of coral reefs throughout Indonesia in order to protect livelihoods of coastal communities as well as to conserve biodiversity.
5. Rural Income Generation (n.a.)	Nov. 25, 1997 Sep. 30, 2005	n.a.	n.a.
6. Northern Sumatra Irrigated Agriculture Sector Project (Ministry of Settlement and Regional Infrastructure)	Nov. 13, 1997 Oct. 31, 2004	5 provinces in Sumatera	Assistance in improvement of farm productivity and incomes through the improvement of existing irrigated systems and smallholder agriculture
7. South Java Flood Control Sector Project (Ministry of Settlement and Regional Infrastructure, Directorate General of Reforestation and Land Rehabilitation in the Ministry of Forestry, and Directorate General of Regional Development in the Ministry of Home Affairs)	Nov. 07, 1996 Sep. 30, 2003	West/Central Java (south coast)	Assistance in improvement of the quality of life for populations in the project area.
8. Coastal Community Development and Fisheries Resource Management (Ministry of Agriculture)	Nov. 04, 1997 Dec. 31, 2003	4 fishing sites	Assistance in promoting conservation and sustainable management of coastal fisheries resources; and reducing the extensive poverty in coastal areas by providing opportunities for increasing income and living standards of coastal communities.
9. Participatory Development of Agriculture Technology (n.a.)	Jul. 01, 1997 Sep. 30, 2004	n.a.	n.a.

n.a.: no information available

Table 4.4.1 List of On-going Projects of Asian Development Bank (ADB) (2/2)

Name of Projects	Approved Date/ Closing Date	Area Concerned	Description
10. Segara Anakan Conservation and Development (Ministry of Settlement and Regional Infrastructure, Ministry of Home Affairs)	Oct. 17, 1996 Sep. 30, 2002	Central/West Java	To conserve, develop and sustainably manage the Segara Anakan environs so as to ensure that economically and socially valuable ecosystems are protected for the benefit of current and future generations.
11. Integrated Pest Management for Smallholder Estate Crops (Directorate General of Estates in Ministry of Agriculture)	Sep. 26, 1996 Sep. 30, 2004	12 Provinces	Promotion of the adoption of cost-effective, environmentally-sound integrated pest management (IPM) practices by strengthening selected Government institutions and farmer groups, which will (i) enhance and protect the environment, and (ii) improve product quality and increase the productivity and farm income of smallholder estate crop farmers.
12. North Java Flood Control Sector Project (Ministry of Settlement and Regional Infrastructure)	Jan. 18, 1996 Mar. 31, 2002	West/Central Java (north coast)	Assistance in improvement of the quality of life for populations in the project area.
13. Farmer-Managed Irrigation Systems Project (Ministry of Settlement and Regional Infrastructure)	Sep. 21, 1995 Mar. 31, 2003	South/North Sulawesi, Central Tenggara, West Java and Yogyakarta	Assistance in the rehabilitation and improvement of farmer-managed irrigation systems to meet farmers' needs as perceived and requested by the farmers themselves.
14. Sulawesi Reinfed Agriculture Development Project (n.a.)	Jan. 31, 1995 Sep. 30, 2002	n.a.	n.a.
15. Capacity Building in the Water Resources Sector (n.a.)	Dec. 06, 1994 Jun.30, 2002	n.a.	n.a.

n.a.: no information available

Table 4.4.2 List of On-going Projects of the World Bank

Name of Projects (Executing Agency)	Approved Date/ Closing Date	Related Area	Description
1. Elephant Landscapes Project (Fauna & Flora International)	Dec.13,1999 Dec.31,2002	n.a.	n.a.
2. Decentralized Agricultural and Forestry Extension Project (n.a.)	Aug. 31,1999 Mar. 31,2004	20 Districts in 10 Provinces	Assistance in enhancing farmers' capacity to participate in extension activities and in strengthening the capacity of the district-level integrated agricultural and forest extension system.
3. Water Resources Sector Adjustment Loan Project (BAPPENAS)	May 18,1999 Jun. 30,2003	Whole Country	Assistance to support a structural adjustment program of policy, institutional, regulatory, legal, and organizational reforms in the management of water resources and the irrigation sector.
4. Bengkulu Regional Development Project Convention on Biological Diversity Project (Bengkulu Province)	Mar. 3,1998 Aug. 31, 2004	Bengkulu	Assistance to alleviate poverty through rural development in Bengkulu, and to generate economic growth in rural areas of Bengkulu where growth potential is high.
5. Convention on Biological Diversity Project (Ministry of Home Affairs, Ministry of Agriculture)	Apr.30,1996 Sep. 30, 2002	n.a.	n.a.
6. Sulawesi Agricultural Area Development Project (Ministry of Home Affairs, Ministry of Agriculture, and the local governments in the two participating)	Apr.30,1996 Jun. 30, 2003	Sulawesi Tengah and Sulawesi Tenggara	Assistance in reducing the incidence of poverty in the related provinces through the increase of rural incomes, the promotion of equitable regional development, the promotion of environmentally sustainable farming practices, and the strengthening of local level institutions.
7. Nusa Tenggara Agricultural Area Development Project (Ministry of Home Affairs, Ministry of Agriculture, and the local governments in the two participating provinces)	Mar.5,1996 Sep. 30, 2002	Nusa Tenggara Barat and Nusa Tenggara Timur	Assistance to raise smallholder incomes, strengthen local level institutions, and foster broad-based participation at the grassroots level.
8. Agricultural Research Management Project (Agency for Agricultural Research and Development)	May16,1995 Dec. 31, 2002	12 Provinces (17 units of Assessment Institutes for Agricultural Technology)	Assistance to strengthen regional agricultural Research and Development (R&D), based on local human and natural resources, by collaboratively developing and transferring location-specific technology which is market-oriented and client-driven to support agro-business and agro-industry development.
9. Java Irrigation Improvement and Water Resources Management Project (Ministry of Home Affairs, Ministry of Agriculture)	Jun. 21,1994 Dec. 31, 2002	Central Java West Java Yogyakarta	Assistance to support the institutional reforms and basin focused operations, expand the Irrigation Service Fee program for cost recovery, privatize small public schemes, support the implementation of remedial works, and complete technically and economically viable rehabilitation of unimproved public irrigation systems.

n.a: no information available

Table 4.4.3 Measures and Actions taken by Government of Indonesia and Donors regarding Food Security (1/3)

GOI and Donors	Direction or Outline for Action	Measures and Actions	Source
<p>Government of Indonesia (GOI)</p>	<ul style="list-style-type: none"> - Guidelines of the State Policy 1999-2004 (GBHN) - National Development Plan 2000 - 2004 (PROPENAS) - Policy of Agriculture (Renstra) 	<ul style="list-style-type: none"> - Food security is based on the diversity of food resources, social institutions and local cultures as a part of the effort to ensure the availability of food and nutrients in adequate quantity and quality at affordable prices without disregarding the incomes and welfare of farmers and fishermen. - Food is the broad meaning including calories, protein, fats, vitamins and mineral. Food supply system involves institutions and industries from production to consumers via processing and distribution. - Development direction of agriculture and food is 1) improvement of productivity in the rural area focusing on the poor, 2) poverty alleviation, 3) increase of value added in agriculture and food through integration with other economic sector. - Food supply system would be constructed at the level of household, rural community, region, and national with integrated manner. - Ministry of Agriculture has been implementing the policy based on the grand strategy of agricultural development in the form of agribusiness system development in the rural. 	<ul style="list-style-type: none"> - Item 14 of "B. Economy" in Chapter IV "Policy Direction" in the Guidelines of the State Policy (GBHN: Garil-Garil Besar Haluan Negara), No. IV/MPR/1999, October 1999. - Section 1.4 of "Development of Agriculture, Food and Irrigation" in Chapter IV "Economic Development", National Development Program (PROPENAS) 2000-2004, Appendix of PP No. 25 of 2000. - Agricultural Development Plan, Ministry of Agriculture, November 2001 - Agricultural Development Plan, Ministry of Agriculture (revised draft in August 2002).
<p>Food and Agricultural Organization (FAO)</p>	<ul style="list-style-type: none"> - The President of GOI requested FAO to support for formulation of National Program for Food Security (NPFS). - Technical cooperation is under preparation to formulation of NPSF for NFSC and Ministry of Agriculture for 1.5 to years from the 4th Quarter of 2002. 	<ul style="list-style-type: none"> - Focus of NPFS is on agriculture productivity, diversification of farmers economy, processing and marketing, income generation and dynamic rural economy, and improvement of nutrition. Food security at kabupaten level is taken into consideration through coordination at national level. - The rural development projects will implemented in about 100 priority kabupaten in 5 years as the first phase. Experience and lessons from SPFS presented below will be applied as the master approach. Finance will be arranged through existing and new projects from the donors through coordination and based on the GOI intension. 	<ul style="list-style-type: none"> - Draft Aid Memoir – National Food Program for Food Security, May 2002.

Table 4.4.3 Measures and Actions taken by Government of Indonesia and Donors regarding Food Security (2/3)

GOI and Donors	Direction or Outline for Action	Measures and Actions	Source
FAO	<ul style="list-style-type: none"> - FAO supports WATSAL through coordination relevant agencies. - Technical cooperation is under consideration to support Ministry of Agriculture for policy support. 	<ul style="list-style-type: none"> - Special Program for Food Security has been implementation since 2001 in 5 provinces (about 20 villages) under the trust fund of GOJ (US\$3.4 million for 5 years). The projects are mainly small scale rural development in different eco-system in order to construct food security model in village level. 	<ul style="list-style-type: none"> - Interview to the Regional SPFS Officer (Special Program for Food Security), June 2002. - Seminar material for SPFS in May 2002.
World Food Program	<ul style="list-style-type: none"> - Review of circumstances factors surrounding food security in Indonesia for BAPPENAS. 	<ul style="list-style-type: none"> - Holistic approach was recommended for formulation of food security policy including rural development and pricing policy, taking into account the context of food security defined in the World Food Summit in 1996. 	<ul style="list-style-type: none"> - Revised Draft on Food Security, Rural Development and Rice Policy: An Integrated Perspective, July 2001
World Bank	<ul style="list-style-type: none"> - No particular policy regarding food security alone. - Food security is practically included in the projects in the context of rural development 	<ul style="list-style-type: none"> - Projects under loan are implemented in kabupatens for the sectors of agriculture and irrigation (9 on-going projects and 1 new projects). Synergy effects are expected to support other sectors. 	<ul style="list-style-type: none"> - Interview to Sector Coordinator for Rural Development and Operational Officer. - World Bank in Jakarta Website.
Asian Development Bank	<ul style="list-style-type: none"> - No particular policy regarding food security alone. - Food security is practically included in the projects in the context of rural development, poverty and environment. 	<ul style="list-style-type: none"> - Projects are implemented in selected kabupatens with the wide range for the sectors of agriculture, rural development and natural resources management (14 on-going projects and 3 new projects under loan scheme, 3 projects under TA schme). Synergy effects are expected to support other sectors. - Support to Ministry of Agriculture is under preparation to formulate the development strategy of agriculture and rural development (scheduled from Aug. 02 to Mar. 03, but delayed). - Prioritization of implementation capacity is under process of analysis for all of 334 kabutatens. 	<ul style="list-style-type: none"> - Interview to the Senior Sector Specialist, May and August 2002. - Technical Assistance to Indonesia for the Agriculture and Rural Development Strategy Study

Table 4.4.3 Measures and Actions taken by Government of Indonesia and Donors regarding Food Security (3/3)

GOI and Donors	Direction or Outline for Action	Measures and Actions	Source
USAID	<ul style="list-style-type: none"> - Support on formulation of food policy to provide analysis on various information until 2001 after the crisis. The support seems to be extended for 1.5 years. - Direct access to the poor. 	<ul style="list-style-type: none"> - Since 1999, activities "Improved Food Security for the Vulnerable Groups" have been carried out for support to analyze of food policy (BAPPENAS/USAID/DAI Food Policy Support Activities). Direct access was made to the poor for support (US\$3.0 million per annum). - In 2002, activities entitled as "Impact of Conflicts and Crises Reduced" are scheduled to improve food security of the poverty and to monitor its progress by BGO (US\$4.2 million). - Food Policy consist of 1) farm income, 2) access of consumers to food, 3) the poor linked into rapid economic growth, under the global market economy. Policy analysis is conducted to create a dynamic rural economy to integrating these three components - Policy analysis indicates the direction to diversify agriculture and restructure rural economy with minimum public cost and low risk, through studies on available measures for poverty alleviation, food diversification and rural food security by utilizing advantage of low international rice price. 	<ul style="list-style-type: none"> - FY2001 Program Description and Annual Report FY2002. - Website of macro food policy - An Approach to Macro Food Policy, BAPPENAS/ USAID/ DAI Food Policy Activities, March 2001 - Rice Production and Marketing: A Report from Five Kabupatens, CASER and BAPPENAS/ USAID/ DAI Food Policy Activities, March 2001
United Nations Development Program (UNDP)	<ul style="list-style-type: none"> - Publishing "Human Development Report, 2001" in collaboration with Central Bureau of Statistics (BPS). 	<ul style="list-style-type: none"> - The report presents various indicators of human development, particularly regarding poverty by Kabupaten. 	<ul style="list-style-type: none"> - Indonesia Human Development Report 2001, BPS/ BAPPENAS/ UNDP, October 2001