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1. 要請書

APPLICATION FORM FOR JAPAN'S DEVELOPMENT STUDIES

Date of entry : month of August, year 2001

Applicant : the Royal Government of Cambodia

1. Project digest

(1) Project Title :

Feasibility Study on Improvement for Post-harvest Technology and Marketing of Paddy

*Enter the project title in English

(2) Location (province/ country name) :

Nine (9) provinces in major rice producing area (Battambang, Banteay Mean Chey, Siem Reap, Pursat, Kompong Chhnang, Takeo, Prey Veng, Svay Rieng, Kampot), two (2) provinces in major rice market area (Kompong Cham, Compong Speu) and Phnom Penh

(City /town/village name):

From the metropolis: About _____ hours' ride / flight

(3) Implementing Agency

Name of the Agency:

Steering Committee consisted of Ministry of Agriculture, Forestry and Fishery (MAFF), and Ministry of Commerce(MOC). (details see Outline of the Project)

*Enter the name of the implementing agency including such details as the name of the bureau or department.

Number of Staff of the Agency:

4,242 staff for MAFF, and 1,225 staff for MOC (details see the attached organization chart)

(On a category basis)

Budget allocated to the Agency: (unit : million Riel)

	1997	1998	1999	2000	2001(plan)
MAFF	17,104.56	12,544.56	11,449.91	7,916.60	20,250.00
MOC	2,154.78	1,207.27	3,438.59	4,572.60	12,500.00

*Attach an organizational chart, and mark the department responsible for the study.

(4) Justification of the Project

*Provide detailed information of the project regarding the items below.

-Present conditions of the sector:

Food Crops Production

Rice, the most important crop in Cambodia, accounts for about 17 per cent GDP and 75 per cent of local per capita food intake. In the year 2000 approximately 1,915,600 ha (86 per cent of the total cultivated food crop areas) was cultivated for rice. The total production of paddy in the year amounted to 4,047,900 ton and surplus of milled rice was about 262,700.

Food Crops Production in 1999/2000

Crops	Cultivated Area (ha)	Harvested Area (ha)	Production (ton)	Yield (ton/ha)
Maize	59,835	59,739	95,274	1.59
Cassava	14,039	14,003	228,512	16.32
Sweet potato	9,431	9,322	32,516	3.49
Mung bean	26,812	26,747	15,913	0.59
Peanut	10,587	10,557	9,244	0.88
Soy bean	35,085	34,945	35,063	1.00
Rice	2,157,592	2,079,442	4,040,900	1.94

Source: Statistic Office, Department of Planning, Statistics and International Cooperation, MAFF

Food Demand-supply

As information on demand and supply of other food crops is not available, only statistics on rice, which is the most important food crop in Cambodia.

Cambodian farmers have been growing rice, at least for as long as 2000 years. Its production has been through a series of impressive development and setbacks over these years. Cambodia was once one of the major rice exporters of the world. This fact is confirmed by a remarkable increase in rice production by the end of the 1960's. In 1968, the area planted for rice 2.47 million ha which produced 3.25 million tons, and the Cambodian Government exported as much as 252,000 tons of milled rice. However, the years of war with its neighbors and its civil war had slumped the country into a period during which the vast majority of its population had little to eat. Now, with the cessation of war, the advent of political stability after democratic election, and the opening up of the economy to international investment, a great expansion in rice production and trading is anticipated.

During the post-war period, Cambodia attained self-sufficiency in rice production from 1995 onwards. In the year 2000, Cambodia produced as much as 4,047,900 tons of paddy; its largest ever total. The demand for food in 2000, in terms of milled rice, is 1,820,336 tons for 12,039,256 people. Therefore, the surplus for the year is 262,714 tons. This surplus amount of rice can generate foreign revenue, even though the national marketing system is weak and further international market are not yet widely accessible. Cambodia can still earn income from its rice surplus from its neighbors, resulting in raising domestic paddy prices.

Production Surplus and Distribution

Only Svay Rieng, Prey Veang, Siem Riap, Bat Dambang, Banteay Mean Chey, Pousat, Kampong Chhnang and Kamport are self-sufficient in rice production. The rest have to rely on the surplus from other provinces; transporting of rice from surplus to deficit areas may be via direct route or through traders in Phnom Penh. However, distribution of the surplus is not efficient not easy because of poor road conditions, and sometimes there is no access at all to the rice deficit areas. Therefore, even though Cambodia claims that it is more than self sufficient in rice production and has enough surplus to export, a part of its population still lives on an amount of rice which is lower than the national average of per capita consumption. People in Mondol Kiri and Rotanak Kiri, where access road conditions are poor and rice cultivation is low yield potential upland rice, have rely on rice imported from Vietnam from where transportation is much easier.

Rice surplus from domestic requirement mainly to Thailand and Vietnam by mean of border trading. Exporting to Thailand is most active at Poi Pet in Bat Dambang Province. Exporting to Vietnam is done across the from southern provinces such as Takaev and Svay Rieng. However, trade in this part is less active than in Poi Pet.

For other major food crops, no statistics of demand supply is available. However, planting area and production are available. It is assumed that most of those of food crops are consumed domestically. Only small amounts of certain products such as maize, soybean and bran, are exported to Thailand and Vietnam. For maize, there is a domestic market for use to feed industry by C.P. company, a Thai owned enterprise.

Currently in Cambodia, the export of most, if not all, agricultural products is carried out illegally. There are no records, no tax, or any control measures in the transactions. Legal export of rice is always a problem, as buyers in the importing countries reportedly do not honor certificates issued by Camcontrol. And as discussed earlier elsewhere, obtaining export license is costly and time consuming, and there are to many regulations that make legal exportation unattractive.

It appears that one major obstacle to the expansion and improvement of crop production is the lack of

markets to absorb products, especially rice. Cambodia has been self-sufficient in rice and other food crops for many years. However, there is not much capacity for greater domestic absorption of incremental production. Unless legal export possibilities and domestic agro-industry are promoted and enhance, the potentially negative effect of increased production on output prices will continue to be a disincentive to efforts towards improvement of farm productivity.

-Sectoral development policy of the national/local government:

National Plan

In the draft SEDP II(Second Socio-Economic Development Plan), the following development objectives are proposed; (a) attain prolonged and sustainable economic growth of 6 to 7 per cent per annum; (b) to ensure fair distribution of the benefits of economic development; and (c) to conserve the natural environment and resources. The Royal Government of Cambodia (RGC) is committed to the maintenance of peace, stability and security, and to the reduction of poverty as its primary development goal. Poverty reduction includes both reducing the number of poor people (“poverty eradication”), and lessening the degree of deprivation that the poor suffer (“poverty alleviation”) through objectives of the SEDP II.

- (a) Achieving these objectives of broad-based, sustainable economic growth with equity requires the RGC to:
- Maintain a stable macro-economic environment;
 - Improve the efficiency and effectiveness of the public sector through civil service reform, reform of the judiciary, and public enterprise reform;
 - Enhance private sector development while protecting public interests by improving physical infrastructure, developing the legal and regulatory frameworks within which business enterprises operate, liberalizing trade and investment policies, and supporting financial sector development;
 - Promote agricultural development and off-farm employment creation in both rural and urban areas. In particular through manufacturing development and sustainable tourism development that is based on Cambodia’s environmental and cultural assets;
 - Empower the poor to participate in, and thus benefit from, the growth process by improving their access to natural assets (especially land), health and education service, appropriate technology, micro-finance, and by removing “anti-poor distortions” in product and factor markets.
- (b) Promoting social and cultural development requires the RGC to:
- Increase the quality and quantity of investment in education and health (including reproductive health);
 - Improve access to health and education services, especially for females;
 - Increase participation and empowerment of the poor;
 - Strengthen Cambodian culture; and
 - Create and maintain a social safety net for vulnerable groups.
- (c) Ensuring the sustainable management and use of natural resources and of the environment requires the RGC to:
- Prevent environmental and resource degradation caused by policy distortions and market failures;
 - Establish and implement the legal frameworks for natural resource management;
 - Enhance and build human resources capacity and resource management.

A major overhaul, education and improvement in the area of governance are essential to the achievement of these three development objectives. This can be realized through effective implementation of the Governance Action Plan, which encompasses all elements of governance, such as:

- Accountability: the extent to which officials answerable for their performance and behavior;
- Predictability: the extent to which laws and regulations are enforced fairly and consistently;
- Transparency: the extent to which relevant information on government decision making and

performance is available to the private sector and civil society as a whole; and Participation: the extent to which stakeholders are involved in the design and implementation of development strategies, and civil society is strengthened and encouraged in the fight against corruption and poor governance.

Agricultural Development Plan (2001-2005)

In the SEDP II, the Royal Government declared itself an “economic government”, in that it introduced a development policy for the whole country. For the agricultural sector, it set a very clear development target in conformity with its policy “to assure food security and natural resource conservation”. Based on its natural resource potentials, geography, social economy, favorable political situation in the country as well as in the region, which is evolving toward stability and economic cooperation, Cambodia, which is the youngest member of ASEAN, will progress a future step in the agriculture, forestry and fisheries sectors as well as in other fields in 2005.

- Continue to focus attention on food security, especially at community and family levels; and on reducing poverty, as there are a high number of poor people in the agricultural sector. Promote the increase in food production: especially the rice crop and other alternative food crops.
- Help promote national economic growth through the export of agricultural produce, which are surplus to domestic consumption.
- Improve the quality of agricultural produce and increase its “value-added” component by promoting the development of agro-processing industries; and create new jobs for rural areas.
- Improve family income and reduce poverty through the production of various crops that have high yields with low production costs.
- Manage natural resources effectively through responsible legal and technical regulations in order to assure sustainable development.

As mentioned above, the RGC as well as MAFF place the highest priority for food security through: stabilizing food security at the national level; improving food security, food supply, and capacity to find food for communities and poor families.

In order to secure food security, MAFF is planning paddy production programs which:

- Promote the growing of a second wet-season crop.
- Promote the use of underground water.
- Promote the use of crop varieties that have high yield and are responsive with market demand.
- Increase both dry and wet season cultivated lands.
- Promote applied research activities at research stations and at development centers.
- Accelerate the full process of CARDI.
- Continue cooperation with CIAP in breeding crops.
- Disseminate knowledge on the use of soil according to the conditions in Cambodia.
- Promote agricultural policies that will help mechanize agricultural farming.

In addition to the above, MAFF plans to introduce integrated crop production and intensive farming to guarantee local consumption needs. The strategies include a cropping system for integrated crops, promotion of agro-industry that focus on:

- Promote and educate on how to use seeds.
- Increase cultivation of land for all crops.
- Promote crops research.
- Resolve investors’ difficulties, especially land management.
- Promote the dissemination of agricultural technology and transfer of skills to farmers.
- Improve crop growth and production system in upland areas.
- Increase study tour opportunities for farmers from one region to another.
- Educate farmers to understand market demand and orient their crop production accordingly.

-Problems to be solved in the sector:

Problems from concerned people

Most major problems raised by concerned people in the sector can be concluded as “low paddy price as compared with previous level” from farmers and “there is no market” from rice traders and rice millers. Problems raised in a workshop participated by farmers in a recent study by other mission from Japan were again “low prices of agricultural products”, “low productivity”, “lack of capitals and technologies” and etc.

“Low paddy price” and “no market” can be said as identical because price is solely decided depending on “demand and supply” in the market mechanism. On the other hand the domestic market is too small, where is only Phnom Penh as consuming city and which population is very limited. It is very understandable that the prices will become low and products will be oversupplied in the market if the yearly crop production exceed 4 million-ton compared with the previous 3.5 million-ton. In a sense, massive paddy outflows to Vietnam and Thailand from Cambodia is ironically a kind of helping hand to farmers.

At national rice millers’ annual meeting, they raised “lack of market”, “lack of milling technologies”, “lack of capital” and “low quality of paddy” as their major constrains and submitted their demands to the Government as follows:

- To expand and develop domestic and overseas market.
- To take necessary measures for controlling paddy flow to Vietnam and Thailand.
- To stop inflow of rice from Thailand.
- To publish the results of the tenders carried out by NGOs and organizations.
- To formulate financial system by National Bank, Agricultural Development Bank and NGOs.
- To stabilize paddy price of farmers (to introduce supporting price system).
- To support up-grading of rice mill machinery which will meet overseas’ markets.
- To modernize agriculture.
- To extend superior seed.

Itemized list of above would be enumerated as follows:

- There is no market. Products cannot be sold. No trader comes to buy. Low rice prices. No purchasing power by consumers.
- No incentive prepared for improving the quantity. Bad quality of paddy. Unable to produce salable products (commodities). Low technical level. No up-dated equipment available.
- Very bad road conditions necessary for the transportation. Unreasonable levies on the way.
- Lack of financial supply. High interests rate. No capital fund and consequent no competitiveness.

Problems in marketing and post-harvest processing

Problems listed in general studies are as in the matrix.

Problems	Causes/ Reason
Variation of rice quality by the year	Climate, cultivating technologies
Variation and instability of rice production by the year	Agriculture depending on the rainwater
Low productivity	
Too much seed being spent	
Low quality fertilizers are being sold	
Inadequate operation and management of irrigation facilities	
Sticking with native rice variety for the own consumption	Culture and traditions
Circulation of wrong knowledge on fertilizers	
Unsuitable seed to the soil conditions is extended	
Expensive fertilizer	Imported fertilizers
Water shortage in the dry season	
Rare renewal of seed (limited sources of new seed)	
Su-divided land	
Main production is for self-consumption, not market oriented	
Inadequate paddy inspection practice/ low inspection technologies	Lack of knowledge, rough management at rice mill
No paddy collector comes for purchase (no market)	No domestic market, export market of Vietnam is hanging low

Unstable uniform paddy quality	Inter-mixed varieties, inferior paddy drying
Dead stocked paddy at farmer/ no paddy collector comes for	Being dependent on Vietnam market
Insufficient paddy market	
Saturation of domestic market/ Low operation ratio in rice mills	
Poor capability to develop export market and difficult to access overseas market	
Less than the production cost due to lowered selling price	
Shortage of paddy drying yards	
No sources to access post-harvest processing technologies	
Unreliable weight measuring practice	
Daily fluctuation of paddy prices in Vietnam	
Lack of information in supply side/ non-existing of crop forecasting system/ differed prices from actual demands	
Unstable rice prices in production area, especially in BTB	
Undeveloped communication infrastructure (telephone networks)	
Lack of white rice price information at rural markets	Isolated situation from MIS, markets
Lack of paddy price information at rural markets	Isolated situation from MIS, markets
Depreciation of paddy price at harvesting seasons	Moderation of supply and demand
Fluctuation of paddy price, no stabilized price	
Non of insufficient data of export & import and production & consumption in order to grasp the actual balance	
Non preparation of foods security program	
Shortage funds for purchasing paddy	
Worst conditions of NR5 from TBD to PP for rice transportation	
Worst conditions of NR6 from BTB/SR to K.Tom for rice transportation	
Poor facilities of the markets (drainage, roof, access road, car parking)	
Illegal check points on NR5	
Illegal check points in Takaev Province	
Illegal check points at boarder area with Thailand	
Expensive rental fee in a market	Higher fee compared with profits, petty retailers
Unclear registration system for industry and commerce	
Non preparation of quality standards and inspection procedures	
Troublesome works for paddy collection from individual farmers	
Slow transportation by railways	
Poor preparation of waterways	
Excessive broken rice caused by rice milling works	
Huge price differences between production and consumption areas, caused by high transportation fee	
Old type rice milling machines	
Lack of management ability by rice mill owners	
Decrease of sales volume caused by increase of new comers	Low barriers to new comers and saturated supply and demand
Non transparent rice procurement for the army	
Uncertainty to banks = cash transactions	
Inferior purchasing power against Vietnamese traders	
Lack of capital for the expansion of the operation	
Lack of information on the financial system including on commercial banks	
Refraining the investment with scaring of possible political instability	
Superiority of BTB rice in PP market = Low competitiveness of other are.	
Too many rice millers existing as comparison with the size of the market	
No domestic rice machine manufacturer is existing	
Illegal inflow of Thai white rice	
Illegal outflow of paddy to Thailand and Vietnam	

-Outline of the Project :-

Many commercial rice millers of RMA member made the study tour to Thailand with the assistance

from EDC and have visited the paddy markets in Thailand. Needs of rice millers on the paddy market have been confirmed by the effectiveness of quality-wise and variety-wise paddy procurement and by the advantage of the improvement of paddy quality in the procurement.

Using the paddy markets in Thailand as reference model, introduce the open paddy market that suited the actual condition of Cambodia.

(1) Scale of the Project

The important rice production areas/provinces with surplus rice shall be the target areas for this project. Fundamental conditions for the market establishment are surplus production in district level, existence of commercial rice mills and paddy traders who will be main buyers and good accessibility from surrounding areas.

Following locations are assumed to fulfill these conditions.

Province	Candidate Location 1	Candidate Location 2	Provincial Surplus
Bat Dambang	Bat Dambang District, around the junction of NR57 and NR5	Moung Russei Distric. near/along NR5	57,800 ton
Banteay Mean Chey	West of Sisophone alongside of NR5	South of Sisophone alongside of NR56	33,200 ton
Siem Reap	Kralanh District, near NR6 or NR68	Chi Kraeng Districe, near/alongside of NR6	12,200 ton
Pursat	Alongside NR5		10,800 ton
Kampong Chhnang	Rolea Bier District, along NR5 or NR53		12,900 ton
Takev	Around Takev town		159,600 ton
Prey Veang	Peam Ro District or alongside of NR1 at crossing points with waterway to Vietnam	Between Prey Veang town to Kg. Cham (alongside of NR11)	146,400 ton
Svay Rieng	Alongside of NR1		61,100 ton
Kamjot	Alongside of NR3		74,700 ton

(2) Procedures for Project Implementation

1) Phased introduction of the paddy markets

Open paddy markets are widely dispersed at about 70 places in Thailand and it is judged as an effective means of improving the rice marketing system. Despite this fact, phased introduction of the paddy markets should be planned to make sure the feasibility of the project because there are many differences between Thailand and Cambodia in social/economical situation, in human/financial resources of governmental institutions. The advantages of phased introduction are as follows.

- Reduce the investment risk
- Monitor and evaluate the validity of a paddy market in Cambodia with a test case in F/S and a pilot project, and feed back the results into the planning of the next stage.
- Utilize the trained personnel and the established facility in a test case in F/S and a pilot project for training of personnel required for the next stage.

2) Outline of activities in each phase

Phase 1: Feasibility Study

- Confirm the government policy on the contents of the project, and prepare the TOR
- Implementation of the Feasibility Study
 - Examination of the validity of a paddy market with a test case
 - Determination of operating agency, and planning of personnel training program
 - Planning of overall program of the open paddy market establishment
 - Planning of pilot project for model paddy market

Phase 2: Pilot Project

- 1 Training manpower for the operating agency
- 2 Establishment of operating agency and its management system

- 3 Design and procurement to facility/equipment for model paddy market
- 4 Operation of model paddy market
- 5 Evaluation of the pilot project, and feedback the results into the overall program of the open paddy market establishment

Phase 3: Extension of the open paddy market system

- 1 Establishment of markets facility/equipment in line with the overall program of the open paddy market establishment
- 2 Personnel training of the operating agency
- 3 Establishment of operating agency and its management system
- 4 Monitoring of implementation of overall program
- 5 Monitoring and evaluation of the overall program

(3) Functions of market and content of facility

Incentive to market users

It is essential to secure a smooth access to/from the trunk national road and major areas of surplus production. Moreover, it is necessary to realize the under-mentioned benefits for each market user.

Market User	Benefits
Seller: Farmer, middleman/ paddy trader	Can sell anytime: Immediate cash payment: Can sell even small quantities: Price corresponding to quality: Chance for better price (chance to see many buyers: chance to have better price even for minor local varieties and small quantity of product)
Buyer: Commercial rice miller, middleman/ paddy trader	Can buy anytime: Can buy large quantities variety-wise and quality-wise: Price corresponding to quality

1) Function and Facility/ Equipment of the market

Following functions and facility/ equipment shall be necessary, to realize the above mentioned incentive and the purposes of the project.

Purpose	Function	Facility/ Equipment
Formation of open index price	Declaration system of transaction (price and quantity)	Communication apparatus Data store/ processing apparatus
Strengthen of Market Information Service	Collection of data (price/ quantity) of transactions made in the market Immediate distribution system of collection data Report the collected information to MAFF/ AMO	Office equipment
Widen the outlets of farmer and paddy trader	Market information service on other areas Weight measurement services Purchasing small lots Temporary storage services Quality inspection services Transportation services	Truck scale and other weighing equipment Warehouse Information bulletin board Truck
Improvement of quality Control of paddy	Handling by variety-wise Quality control service (drying service) Storage function Assembling small lots by variety	Drying yard/ roof area Bulk handling equipment
Introduction of quality standard of rice	Quality inspection services	Quality inspection apparatus

2) Scale of the market

Paddy collection and distribution through the existing marketing channels in each region are supposed to continue in parallel in the future. A market scale is examined and set up according to the quantity of surplus rice and the quantity handled by the existing rice mills in surrounding area as a base.

(4) Operating Agency

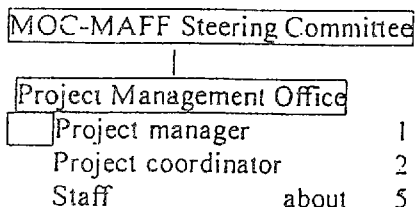
The one of the major difficulty of this project aside from the financial difficulty is that market-operating agency has to be newly established in the project. As for paddy market in Thailand, BAAC, the private enterprise and the agricultural cooperative are the operating agencies. The organization similar to BAAC does not exist in Cambodia. In case of the management of existing markets in Phnom Penh, the private sector is commissioned to management business, such as rental fee collection and garbage collection under the control of the municipal office and the market office of each market. Moreover, in the western part of Phnom Penh, as the first case in Cambodia, the housing development project that includes market facility by the private enterprise is going on. However, in the present time and in the near future, it is hard to expect the existence of any private enterprise that can perform market operation in the remote areas. In view of the present situation of farmer's organization in Cambodia, agricultural cooperative cannot consider as the candidate for an operating agency.

At present, (1) establish a new Public Enterprise, (2) establish a new section in GTC, (3) consigning to private sector/ NGO are assumed as an operating agency. In any case, provision of training and technical assistance is indispensable.

(5) Implementation Agency

1) Implementation agency of the project

Project Office under Steering Committee and Task Force, consisted of Ministry of Agriculture, Forestry and Fishery(MAFF), and Ministry of Commerce(MOC) will be organized, and the project will be carried out by both MOC and MAFF, and MOC shall be in a leading position. Implementation organization is assumed as follows.



Since the capability of government staff is insufficient, technical assistance for F/S and implementation of the pilot project shall be indispensable. On-the-job short-term training at paddy market in Thailand (1 to 2 person(s) x 2 months) shall be planned

2) Supervision body for market operation

Market administration is under jurisdiction of the provincial government. Presently, there are no department/ agency, which take charge of market administration, exist in the central government level. Based on this, supervising body for market operation shall be formed in the provincial level to which a market belongs. As for the central level, MOC and MAFF shall form a steering committee.

-Purpose (short-term objective) of the Project:

Open Paddy Market Project unifies an idea of paddy market project for the circulation of domestic marketing and an idea of border market project for the rice circulation of neighboring countries. The project has the following five purposes. The background and rationale for every purposes are summarized as follows.

- Formation of Open Index Price

Price formation is performed in the closed business connections between the individual to individual. Enhance the efficiency and fairness in the pricing, by establishing the public open markets at the production areas and/or at the key points of rice marketing where prices will be formulated among many buyers and sellers. The open prices formed in such markets will work for reducing the price imbalance among the regions. Especially the price formed at Bat Dambang will serve as a nation-wide index price.

- **Strengthening Market Information Service**

The open index price formed at paddy markets will be an important price information. By adding the information into the contents of radio program of MAFF/AMO, present information service will be upgraded.

- **Widen the Outlets of Farmer and Paddy Trader**

In the paddy sales, farmers are generally in a disadvantageous position due to limited opportunity to meet the number of buyers, limited capability to evaluated paddy quality, limited information resources, and the small scale of production for sale. Paddy traders also have limited outlets for their paddy. Paddy market will provide farmers and paddy traders an opportunity to meet better buyers. Moreover, with the function of assembling the varieties of small lot in the paddy market, the higher selling price can be expected.

- **Improvement of Quality Control of Paddy**

With the function of providing the quality control service to paddy buyer in the market, the efficient quality control of large amount of paddy can be achieved. Moreover, by providing the quality inspection service at the paddy market, farmers will be aware of the actual quantity of their paddy clearly and will be able to stand on the start point of quality improvement activities.

- **Introduction of Quality Standard of rice**

Price gaps of paddy among varieties are smaller than the price gaps of milled rice in urban markets. Moreover, in the paddy trade, it is hard to say that paddy quality is evaluated properly and reflected in prices because the quality is seldom evaluated with the numerical index. By giving the function of the quality inspection service with the introduction of rice quality standard in the market, enhance the proper pricing in the paddy trade, i.e. the economical incentive to farmers for quality improvement activities. In paddy border trading, it could also promote the sales by showing and providing the paddy quality to buyers positively.

-Goal (long-term objective) of the Project:

Development targets as Goal (long-term objective) of the Project are mentioned as follows;

- Stable and balanced regional supply-demand
- Reasonable price mechanism under modern business system
- Improvement of post-harvest quality control of rice
- Development of rice border trade

-Prospective beneficiaries:

Most of the nations including the poor people receive benefits by means of income improvement of rice growing farmers. Especially, farmers who bring paddy to the paddy market get benefits. Also, the paddy traders and rice millers who access to the paddy market will become beneficiaries.

-The Project's priority in the National Development Plan / Public Investment Program:

This Project fundamentally contributes to the following objectives in SEDP II as important policies;

- Sustainable economic growth
- Enhance private sector development
- Liberalizing trade and investment policies

- Agricultural development
- Appropriate technology
- Micro-finance
- Social safety net for vulnerable groups
- Fight against corruption and poor governance.

The Project is also prioritized under Agricultural Development Plan (2001-2005) in the following manner;

- To assure food security, and to continue to focus attention on food security
- To promote the increase in food production, especially the rice crop
- To improve the quality of agricultural produce and increase its "value-added" component
- To be responsive with market demand
- To accelerate the full process of CARDI
- To promote the dissemination of agricultural technology
- To increase study tour opportunities for farmers
- To educate farmers to understand market demand and orient their crop production

(5) Desirable or Scheduled time of the commencement of the Project:

month April year 2002

(6) Expected funding source and / or assistance (including external origin) for the Project:

*Describe the concrete policies for the realization of the project, and enter the prospects for realization and funding sources.

Official Development Aid by the Government of Japan

(7) Other relevant Projects, if any:

Application of Grant Aid Projects and Technical Assistance

Aid from FAO and from South Korea who provide experts, advisors and technicians to conduct studies and develop and agricultural market system.

Aid from the EC for launching the Program of Rehabilitation and Support to the Agricultural Sector of Cambodia (PRASAC) in cooperation with the RGC. The RGC and the EC signed an agreement in Phnom Penh on 2 September 1994 to launch the first phase of the program (PRASAC I) worth 39 millions ECU, from January 1995 to April 1999.

This focused on irrigation work, clean water, rural credit and micro-enterprise activities. For the second phase (PRASAC II) starting from May, 1999 to December 2003, the RGC and the EC signed a financing agreement worth 39 millions ECU on 20 April 1999. It will focus on enhancing the activities and results achieved in PRASAC I, aimed at improving food security and reduction poverty. The following is a summary of the results obtained from PRASAC I and PRASAC II (for a period of 4 months) in early 2000 including the following rural credit services:

- Organized 777 Savings and Credit Associations (SCA) in PRASAC I and 58 more SCAs in PRASAC II. The total credit granted to farmers and micro-enterprises amounted to 37,480,543,320 Riels (US\$9,863,300); and
- The credit granted to farmers and micro-enterprises in PRASAC II so far is worth 3,976,927,000 Riels, which is equivalent to US\$1,046,560.

Australian Aid (AusAID): Since 1986, this agency has assisted Cambodia in the agricultural sector, by focusing on 3 objectives: agricultural technology research, dissemination of agricultural techniques and the improvement of agricultural production quality.

Agricultural Technology : Presently this has been conducted in the 4th phase starting from July 1996 till 2001 with the amount of 10,177 millions Australian dollars, focusing on 3 tasks:

- Agricultural technology development (to improve rice seeds, agricultural machines and the integrated crop production measures).
- Cultivation system improvement (to reduce damage of agricultural produce and evaluate economic and social impacts).
- Institutional development (workshops and human resources training).

Agricultural Quality Improvement Project (AQUIP): 5 million Australian dollars has been already allocated to RGC by Australia. This project will be implemented in 4 provinces – Kandal, Takaev, Prey Veang and Svay Rieng – for 6 years, starting from August 2000.

2. Terms of Reference of the proposed Study

*Please fill in (1) and (2) below, paying particular attention to the following items.

- In the case that a study was conducted in the same field in the past, describe the grounds for requesting this study, the present status of the previous project, and the situation regarding the technology transfer.
- Whether there are existing studies regarding this requested study or not.
- Coordination with other economic and technical cooperation from Japan

(1) Necessity/Justification of the Study:

Rice is by far the most important crop. Its cultivation is concentrated around the Tonle Sap Lake and the upper reaches of the Mekong delta.

Regarding the marketing of rice, while Cambodia is transiting from a centrally-planned economy to a market-oriented economy, the state-owned trade sector has been reduced from its former role as an agricultural products purchaser and seller to just a mediator between traders and farmers/ producers. Cambodia started to perceive troubles in the marketing mechanism, because the private traders are much more interested in undertaking fast earning trade activities rather than buying and selling agricultural products where so many constraints exist.

Although rice marketing has now been liberalized and a free market system exists, the food security problem is also related to the problem of internal communications within the country, affecting the distribution of rice. The lack of rural infrastructure for rice marketing as well as the lack of purchasing power by poor households will result in the situation where paddy is flown to the neighboring countries such as Thailand and Vietnam.

(2) Necessity/Justification of the Japanese Technical Cooperation:

The Government of Japan has been significantly contributing to the agricultural sector, and it is well recognized that the Government of Japan, through JICA, has been involved in a wide range of the project for the improvement of marketing and post-harvest quality control of rice. Therefore, it is the most justifiable for Cambodia to apply for the Japanese technical cooperation program.

This request for Feasibility Study has been originated from "Master Plan Study on Rice Marketing System and Post-harvest Quality Control Improvement" that was carried out under JICA Development Study in 2000-2001. Feasibility Study would follow the prioritized projects in above Master Plan.

The Minister of Commerce explained a matter of significance in the improvement of rice marketing system and post-harvest for Council of Ministers in February 2001. As the result of discussion, a further step in details shall be considered

(3) Objectives of the Study:

*Describe the objectives of the study in detail. Also, indicate who will benefit from the study in as much detail as possible, and describe the beneficial effect in terms of quantity. Enter in a concise manner the goal expected to be achieved in the future by conducting the study.

*When the requested study is the only input scheme there is in the cooperation program, enter the same sentences given in the "Objective of the Cooperation Program" in the summary sheet. When more than one scheme is requested including this one, describe clearly the role of the requested study.

- To confirm the possibility of introduction and effectiveness of Open Paddy Market that is popularized in Thailand.
- To prepare the entire plan for Open Paddy Market, and make action plan followed under real condition.
- Site selection, scale design, grasp of paddy marketing volume in a district, presence of many paddy traders and rice millers around possible site, and to confirm no serious constraints to access to a market.
- To study on functions needed for a market where is the place for paddy trade, but also for practical introduction of rice standards in order to improve quality. Furthermore, to consider processing, inspection, storage, transportation, micro-credit, seed distribution, and custom milling, etc. It requires real needs for respective market.

- Social environmental consideration should be taken into account carefully. New marketing system needs sometime to work effectively in existing society. The market should be purely neutral to access from both sides of more sellers and buyers.
- During Feasibility Study, experimental market is practically operated at a few sites after selection from whole site plan. To monitor effectiveness and sustainability of a market, and feed back the result of monitoring to next stage of the plan to make it secure more realization.
- To train personnel in charge of managing a market by means of transfer the skills of market operation.
- A public organization or NGO will operate the experimental market on the contract base under supervision of the study team.

(4) Area to be covered by the Study:

*Enter the name of the target area for the study and attach a rough map to the document submitted. The attached map should be at a scale that clearly shows the project site. Mark the site in red.

Ten(10) provinces in Cambodia as major rice producing area (Battambang, Banteay Mean Chey, Siem Reap, Pursat, Kompong Chhnang, Kompong Thom, Takeo, Prey Veng, Svay Rieng, Kampot), and Phnom Penh

(5) Scope of the Study:

*Enter in a concise manner using an itemized statement.

1) Contents of the Study

a. Study area: Rice surplus provinces in the M/P study area and Banteay Meanchey province

b. Study items:

- Preliminary examination of the validity of a paddy market with a test case
- Determination of operating agency, and planning of personnel training program
- Planning of overall program of the open paddy market establishment
- Planning of pilot project with model paddy market

2) Important points of the Study

a. Planning of personnel training program for the operating agency

As mentioned above, major difficulty of this project is that market-operating agency have to be newly established in the project. Although several forms of operating agency are assumed, in any case, provision of training and technical assistance is indispensable. The contents of the personnel training program is assumed to include following contents in each stage.

Before starting operation (preparation stage)

- On-the-job training for management staff at paddy market Thailand:
2 persons x 1 year (in the case of personnel experienced in management: about 6 months)
- Preparation of operating manuals
- Staff training according to the operating manuals
- Training of operation and maintenance for facility/ equipment

After starting operation

- On-the-job training/ management instruction by the specialist: 2 persons x 1 year

b) Suitable land for market

The important point in market formation is in the location. It is a pre-condition whether there is any land of required size in a good location. MOC was in charge of rice circulation at the time of past central management economy and still has many warehouses at the important positions in the rice marketing in each provinces, and effective use of those warehouses shall be examined.

c) System of pricing

There are two ways of pricing: negotiation or bidding. Although, a bidding system is desirable, the realistic system in accordance with the capability of operating agency and social conditions shall be examined.

d) Scale of market

In each region, paddy collection with the existing marketing channels is supposed to remain in parallel in the future. A market scale is examined and set up, based on the quantity of surplus rice and the quantity handled by the existing rice mills in surrounding area.

e) Examination of the validity of a paddy market

Collect the necessary information for examining the possible/ effective methods of realizing the required/ planned functions, of realizing benefits for market user's, of establishing the operating agency, etc. in the study.

Detailed analysis on the cases of success and failure of paddy markets in Thailand and a test running of paddy market in very limited scale/ functions are considered as effective method of the study. Bat Dambang Province, where conditions for market formation are best ready at present time, is presumed as a site for running the test.

f) Study in Thailand

It is considered that application of on-the-job training at paddy market in Thailand and/ or utilization of Thai specialist as the instructor/ trainer are effective for human resource development in the pilot project. Therefore, in addition to the detailed analysis of paddy markets in Thailand as mentioned above, it will be necessary to create the cooperative relations with the Thai authorities such as Ministry of Commerce, PWO etc.

g) Function of seed cleaning and distribution at paddy market

It is considered that better quality seed than the one being used by most farmers can be obtained by cleaning the paddy brought to the paddy market. Exchanging this cleaned seed with ordinary paddy in the paddy market shall easily attain wide range distribution of better quality seed. Although this function is completely different from ordinary activities/ functions of the market, feasibility shall be examined.

h) Provision of micro-credit service at paddy market

Credit/ Banking services are provided at the paddy markets in Thailand because the BAAC is one of the operating agencies. In Cambodia, banking services in the provinces are underdeveloped and the micro-credit are mostly provided by NGOs. In this study, examine the possibility and practical ways in which NGO, such ACLEDA, can provide the micro-credit services to farmers/ paddy traders in the paddy market.

Pilot Project

At present, Bat Dambang Province is cited as a first proposed site for the pilot project because the conditions of market formation are most ready and the highest effect of open index price in the marketing system is expected. Takev Province or Prey Veang Province is the next proposed site, they are the major production areas in southern part of the country and active paddy trade with Vietnam is performed. As the market facility for border trade, Prey Veang Province is considered as better suited for market formation due to its location and better access by waterway from Vietnam.

It is required to select the best location by examining the various factors such as availability of appropriate land, road/ waterway access to the market, opposition from the existing marketing agencies in the area and effect as a model.

(6) Study Schedule:

*Enter the time/period of the study.

It is necessary for the study to observe yearlong situation of paddy marketing, for twelve (12) months from the month of April, 2002

(7) Expected Major Outputs of the Study:

Phase	Outputs
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Phase 1: Feasibility Study	<ul style="list-style-type: none"> • Plan for overall program of the open paddy market establishment • Plan for pilot project
Phase 2: Pilot Project	<ul style="list-style-type: none"> • Basic/ detail design for paddy market pilot project • Organization of operating agency • Trained person in operating agency • Operation manuals for paddy market • Evaluation result of the pilot project • Amended plan for overall program of the open paddy market establishment
Phase 3: Extension of the open paddy market system	<p>Through establishment of paddy markets at major rice production areas, achieve;</p> <ul style="list-style-type: none"> • Formation of Open Index Price • Strengthen of Market Information Service • Widen the outlets of farmers and paddy traders • Improvement of quality control of paddy • Introduction of rice standard in paddy trading

(8) Possibility to be implemented / Expected funding resources:

Open Paddy Market as new paddy marketing system in rural area has a long history for more than 20 years with good reputation among farmers. The high level of realization and appreciation are greatly expected.

(9) Request of the Study to other donor agencies, if any:

*Please pay particular attention the following items:

- Whether you have requested the same study to other donors or not.
- Whether any other donor has already started a similar study in the target area or not.
- Presence/absence of cooperation results or plans by third-countries or international agencies for similar projects.
- In the case that a study was conducted in the same field in the past, describe the grounds for this study, the present status of the previous project, and the situation regarding the technology transfer.
- Whether there are exiting studies regarding this requested study or not. (Enter the time/period, content and concerned agencies of the existing studies.)

Nil

(10) Other relevant information

*Enter relevant information other than that described above, if any.

Pre-conditions and assumptions

- Land at appropriate location is secured
- Responsible ministry is designated definitely
- Incentive to government staff in implementation agency is maintained
- Quality standard is available for use
- Administration procedures, such as law enactment, proceed without delay
- Sufficient talented persons are recruited for market operating agency
- Sufficient budget is allocated to the project activities

Risk

- Opposition from the existing marketing agencies such as paddy/ collector
- Market operating agency must newly be formed
- Possibility of unlawful behavior on money management

3. Facilities and information for the Study

(1) Assignment of counterpart personnel of the implementing agency for the Study:
(number, academic background, etc.)

(2) Available data, information, documents, maps, etc. related to the Study:
(Please attach the list)

(3) Information on the security condition in the Study Area:

The study area is under good security condition.

4. Global Issues (Environment, Women in Development, Poverty, etc.)

- (1) Environmental components (such as pollution control, water supply, sewage, environmental management, forestry, biodiversity) of the Project if, any.

Facilities for marketing and post-harvest quality control are not normally related to environmental components.

- (2) Anticipated environmental impacts (both natural and social) by the Project, if any.

There will be no natural impacts, but anticipate social impact to existing marketing system.

- (3) Women as main beneficiaries or not.

Women are also included as family member. It is widely recognized that 75% of the agricultural activities are from women, the improvement of the post-harvest control and the marketing system, which increases the farmers' income, will significantly enhance the living standard of women in the study area.

- (4) Project components which require special considerations for women (such as gender difference, women specific role, women's participation), if any.

The project does not require any particular considerations for women.

- (5) Anticipated impacts on women caused by the Project, if any.

No negative impacts on women will be anticipated.

- (6) Poverty alleviation components of the Project, if any.

The project will contribute to poverty reduction especially for poor farmers by means of components to strengthen farmers' bargaining power.

- (7) Any constraints against the low-income people caused by the Project.

Nothing particular constraints


5. Undertakings of the Government of (the recipient country)

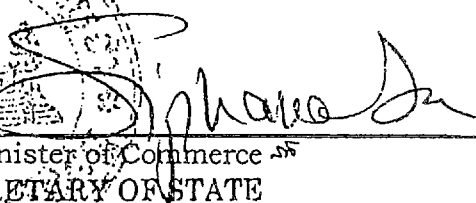
In order to facilitate the smooth and efficient conduct of the Study, the Government of (the recipient country) shall take necessary measures:


- (1) to secure the safety of the Study Team,
- (2) to permit the members of the Study Team to enter, leave and sojourn in (the recipient country) in connection with their assignment therein, and exempt them from foreign registration requirements and consular fees,
- (3) to exempt the Study Team from taxes, duties and any other charges on equipment, machinery and other materials brought into and out of (the recipient country) for the conduct of the Study,
- (4) to exempt the Study Team from income tax and charges of any kind imposed on or in connection with the implementation of the Study,
- (5) to provide necessary facilities to the Study Team for remittance as well as utilization of the funds introduced in (the recipient country) from Japan in connection with the implementation of the Study,
- (6) to secure permission for entry into private properties or restricted areas for the conduct of the Study,
- (7) to secure permission for the Study Team to take all data, documents and necessary materials related to the Study out of (the recipient country) to Japan, and
- (8) to provide medical services as needed. Its expenses will be chargeable to members of the Study Team.
- (9) to provide, at their own expense, the Japanese Study Team with the following, in cooperation with other organizations concerned;
 - available data, information and maps related to the Study
 - counterpart personnel
 - suitable office space with necessary equipment and furniture including telephone and office assistants in Phnom Penh and in the field sites

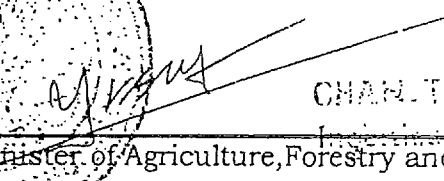
- credentials or identification cards, and
 - additional surveys related to the Study, if necessary.
6. The Government of Cambodia shall bear claims, if any arise against member(s) of the Japanese Study Team resulting from, occurring in the course of or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the member of the Study Team.
 7. (The implementing Agency) shall act as counterpart agency to the Japanese Study Team and also as coordinating body in relation with other governmental and non-governmental organization concerned for the smooth implementation of the Study.
 8. (The implementing Agency) will, as the executing agency of the project, take responsibilities that may arise from the products of the Study.
*In the case that Detail Design Study is requested.

The Government of (the recipient country) assures that matters referred to in this form will be ensured for the smooth conduct of the Development Study by the Japanese Study Team.



Signed  SOK SIPHANA
The Minister of Commerce
SECRETARY OF STATE

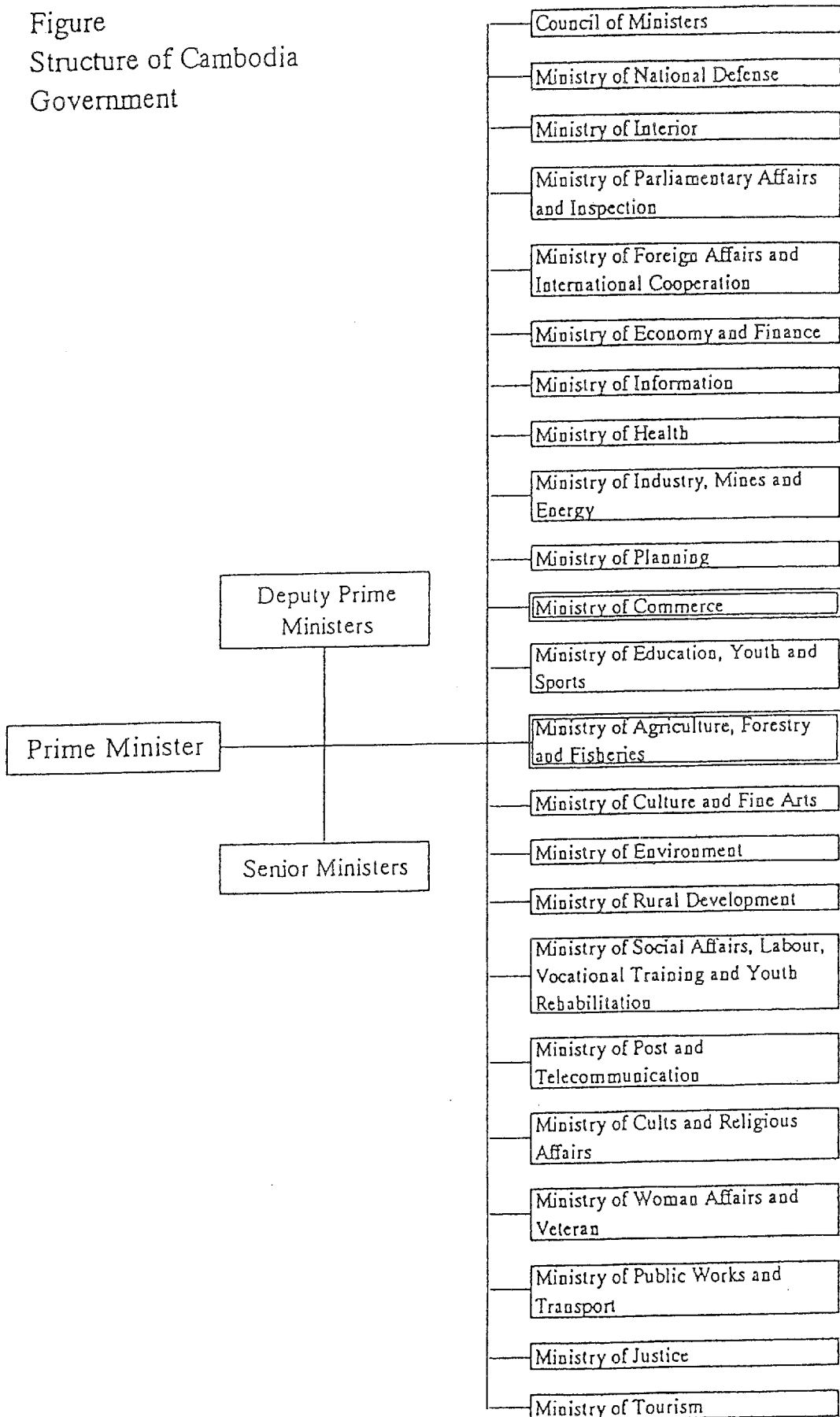


Signed  CHARLTONG YVES
The Minister of Agriculture, Forestry and Fisheries
ACTING MINISTER

On behalf of the Royal Government of Cambodia

Date : August 1, 2001

Figure
Structure of Cambodia
Government



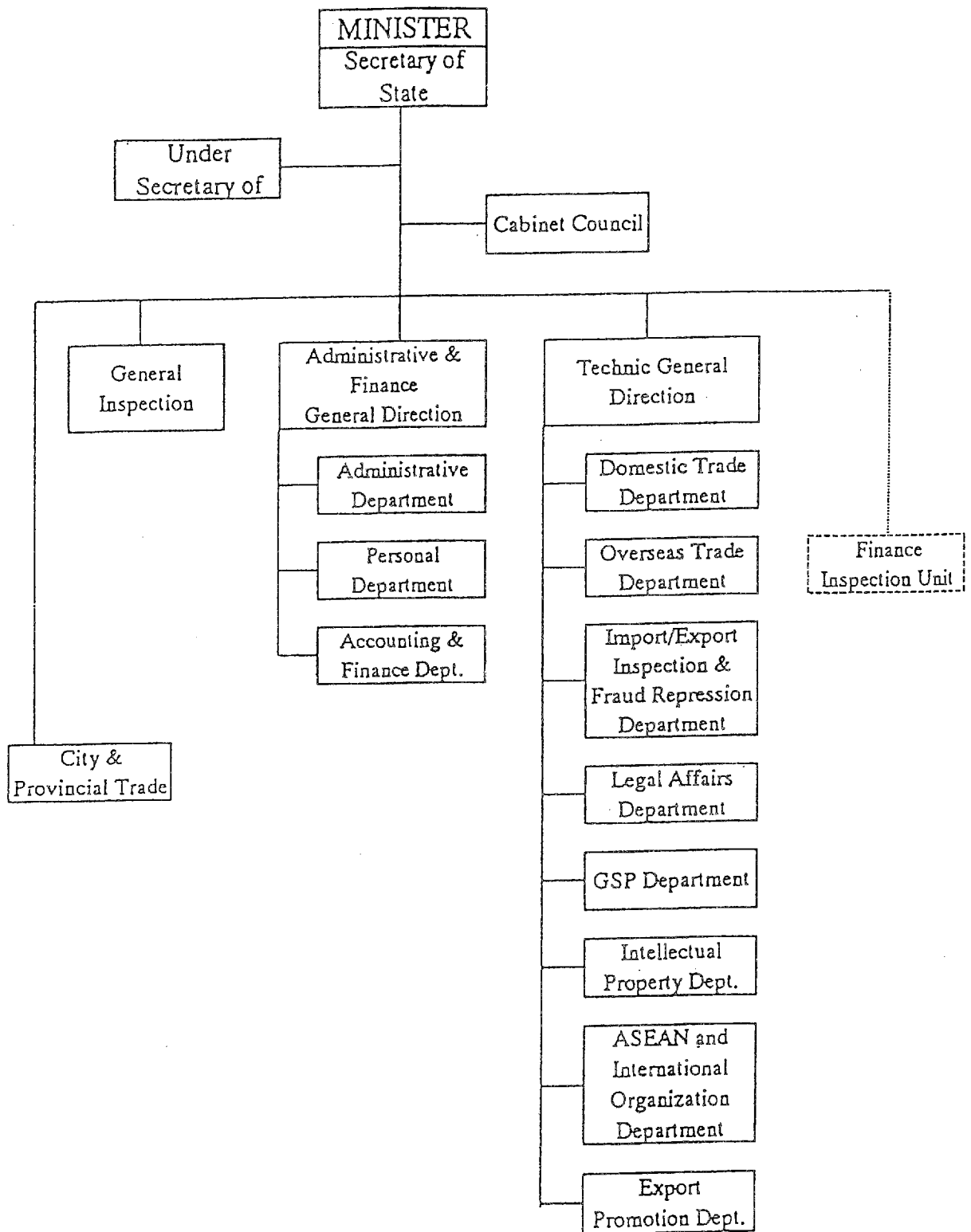


Figure Organization Structure of MOC

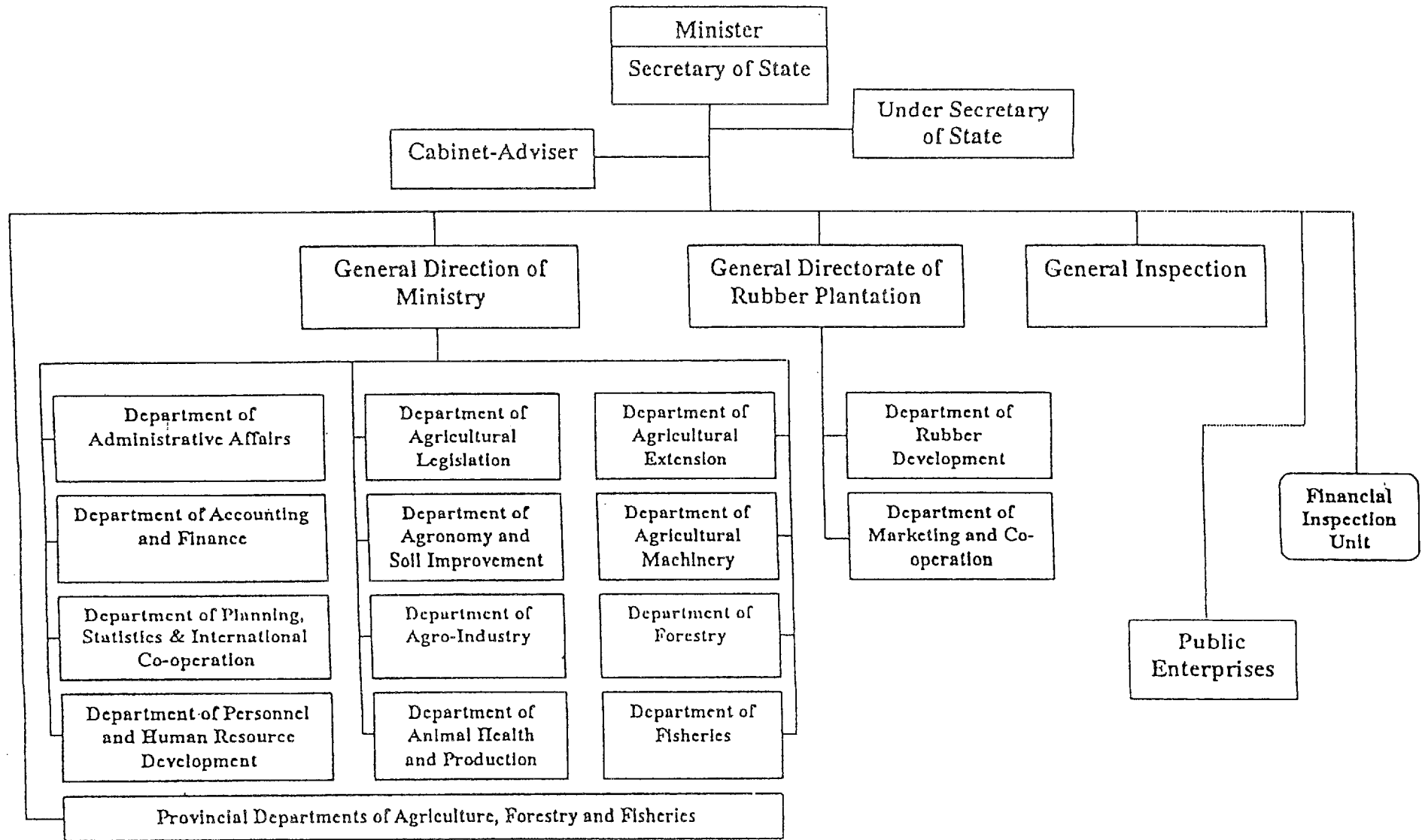


Figure Organization Structure of MAFF

