

Kingdom of Cambodia

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Ministry of Agriculture, Forestry and Fisheries

SUMMARY REPORT

ACTIVITIES AND ACHIEVEMENT 2005 – 2006 AND PLAN 2006-2007 OF THE AGRICULTURE, FORESTRY AND FISHERIES

I. General overview

A. Political, Security and Socio-Economic Situation

Year 2005 is the second year of the third mandate of Royal Government of Cambodia (RGC) under the intelligently and commitment leadership of **Samdech Hun Sen**, Prime Minister of the RGC, Cambodia has great efforts and moving forwards in both nationally and internationally, socio-economic development and poverty reduction for Cambodian people. Internal security, peace, political stability, social order, public order, maintenance of law and democratic path constitute the most important for strengthening macroeconomic stability and promoting sustainable development and poverty reduction. Macro-economic stability is rapidly improved socio-economic development every year with comprehensively competitive efforts. GDP grew at average 7% in 2005 thereby this growth is higher growth if compared with the last many years. Much of this growth came from and contributed from development of agricultural sector. Strengthening cooperation between the Government, external development partners and the private sector is good effort to solve constraints and problems, to harmonize and align in preparing of priority development plan and its effective implementation (programs/projects).

B. Agricultural sector development

Agricultural sector development in 2005-2006 has rapidly developed such as (i) crop production is better and higher productivity than last few years due to favorable climate conditions and less affected by natural disasters including floods and drought, (ii) animal production and health faced Asian fluenza (bird flu) and other common animal diseases problems, however we have prevented and controlled on time and (iii) natural resources management including forestry, fisheries, land, especially forest land faced problems in land grabbing, land clearance and illegal exploitation on forest and natural resources. In the mean time, RGC under the leadership of Prime Minister **Samdech Hun Sen** has been strongly and strickly measured and controlled with these illegal activities.

II. Achievement by Sub-Sector Assessment

A. Agricultural Production and Natural Resource Management

1. Crop Production

Rice Production: Total cultivated areas for rice production were 2,443,530 ha in 2005 including wet-season were 2,121,591 ha and it was higher about 69,355 ha than 2004 and about 210,758 ha higher than last 10 years (1996-2005). Average yield was 2.479 tons per ha in 2005 and it's higher about 0.501 tons per ha than 2004 including, in which wet-season 2.261 tons per ha (0.536 ton per ha higher than last year) and dry season 3.091 tons per ha. Total production of paddy was 5,986,179 tons in 2005 including wet-season 4,734,300 tons (1,601,719 tons higher than last year) and for the dry season 1,251,879 tons. It was 1,815,895 tons higher than in 2004. Food balance was surplus of 1,319,511 tons of rice and equal to 2,061,830 tons of paddy. It was higher about 1,411,646 tons of paddy higher than 2004 and last 1,500,892 tons higher than in the average past 10 years.

Secondary and Industrial crop production: Total cultivated area of secondary crops was 225,575 h and it was 32,614 ha higher than 2004. Total cultivated area of Industrial Crops was 229,931 ha and it was 52,233 ha larger than 2004. The production of secondary and industry crops in 2005 is likely small increased due to fluctuation of market prices and weather conditions.

2. Animal Production and Health

In 2005 animal health and production faced problems the outbreaks animal diseases in some areas and provinces such as Asian Fluenza and foots and mouths diseases. However, these outbreak diseases were not bread out and were prevented and controlled due to commitment of all relevant stakeholders at all levels and with strong assistance and support from donors, external development partners and the RGC. have been prevented by all efforts made from the technical staff in all level, national and international communities, especially from the Royal Government of Cambodia. These disease outbreaks could not be caused any serious problems to the people.

Livestock and animal production is second priority after rice and it main sources of protein and incomes for Cambodia people as well as for draught power.

Household animal production: Total of cattle was 3,184,146 heads in 2005 and it increased about 4.52% compared to 2004, buffalo 676,646 heads in 2005, increased 3.85% compared to 2004. Pig production was 2,688,612 heads in 2005 and it increased 9.67% compared 2004 and poultry was 15,085,547 heads in 2005 and it increased 7.25% compared to 2004.

Commercial farm production

In 2005, total of cattle was 612 heads, Pigs were 900,110 heads, chickens were 456,644 heads and ducks were 381,053 heads.

Animal health and production sub-sector is considered the following activities:

- 0) Improvement of animal health through reducing/ preventing of outbreak diseases and improving animal feeds
- 1) Empowerment and development of local capacity through increasing adoption and practices of livestock production for household farmers and
- 2) Improvement of market value added and income from livestock production, especially for household livestock production

3. Rubber plantation

In 2005, the seven state owned rubber plantations and the Rubber Research Institute of Cambodia carried out (i) exploitation and production, (ii) chopping down aged rubber trees, (iii) replanting of new rubber plantation and (iv) improvement of rubber clones and planting technologies.

Exploitation and Production

- Tapping area was 22,085 hectares in 2005 and it was 99.78% of the planning if compared with 2004 it was decreased around 7.50% due to chopping down of aged rubber trees for re-planting.
- Dry rubber production was 20,382 tons, 79.73% of the yearly plan, if compared with 2004 it was down to about 21.39% due to tapping areas decreased, rubber trees became older and the weather is warm from early October 2004 which resulted in making dry on tapping panel.
- Dry rubber export: 20,999 tons amounting to US\$ 29,208,534.00 .If compared with 2004, the revenue was decreased to 4.47% due to the decrease of production. If this compared with the sale price of the year 2005, it was observed that the average selling of rubber was US\$1,391.00/ton (it was increased about 18.38% more than 2004) while the selling price in 2004 was only US\$ 1,175.00/ton.
- Taxation paid to the National Budget: Riels 18,988,257,439.00 (Preliminary figures before closing account of 2005).
- Areas of new plantings: Up to 2005, there are 20,098 hectares of rubber under maintenance including 5,095 hectares recently planted.

Chopping down aged rubber trees: Up to 2005, the total accumulated areas for cutting down rubber old trees were of 21,798 hectares (69% of the chopping plan of 31,562 hectares), in which 4,223 hectares for 2005.

Rubber Smallholder Development: With support from the Agence Francaise de Developpement (AFD), the development of smallholder rubber production projects carried out in Kampong Cham province). During 2003-2005, the achievement of this project was that the areas of 1,524 hectares have been developed with the participation of 437 farmers. From 1999 to 2005, the total areas of 2,411 hectares were achieved with the participation of the 786 farmers volunteered in this project. Up to 2005,45 hectares were typed.

Rubber Research Institute of Cambodia: In 2005, the Institute of Rubber Research of Cambodia carried out and achieved the following:

- Conduct the sustainable research program on rubber clone to find out the one that will provide high yield and appropriate basic techniques. Field trials of introduction 6 clones from CIRAD and another 8 clones were tested. Agronomy trial methodology of plantings, the biomass management on inter-row, the cover crop on inter-row and the relationship between inter-row & multi-cropping were tested in rubber farms. Through APIP project 4 clones (GT1, RRIM600, IRCA18 and PB260) were tested.

- Research on physiology: conduct a study on stimulation frequency for 04 clones, tapping frequency on 03 clones about tapping relax and about technical rules of opening the panel for tapping.
- Carried training and information dissemination, the Institute organized two short training courses on the rubber exploitation and waste-water treatment from factory to provide to staff from different Plantations and smallholder rubber development project.
- Develop quality testing for rubber production by followed the International Rubber Association (IRA) for the International Contract on Technically Specified Rubbers (TSR) and participate 02 times per year in Round Robin Crosscheck with the IRA's Laboratory with satisfactory result. In addition, the Institute has conducted several Parallel Tests with laboratories of Rubber Plantations.

4. Forestry

In 2005 Forestry Authority carried out and achieved the following:

Formulation of the Regulations and laws enforcement: 07 norms and regulations under the forestry laws were developed including 06 ministerial decisions and one sub-degree on procedures regarding to the creation, the assignment and the registration of permanent forestry property. They adopted by the Ministry of Agriculture, Forestry and Fishery and the Council of Ministers. Law and regulations were enforced and carried out including aerostation of forest products and sub-products and wildlife, evidence and guilty persons, document of Forestry Law violation, revenues got from penalization; Statistics of forestry Land grasp throughout the country.

Exportation: Forestry products were exports in 2005 including 4,826.801 m³ of Processing wood, 4,254,506 Double stere of wood of private plantation, 288.078 Tons of non-forest products and 240 Tons of charcoal rectified processing. 455.507 m³ of processing woods were distributed in domestic use.

Forestry Plantation: MAFF has been replanted tree about 5,568 ha during 1999 to 2005 and additional of 862 ha in 2005. Recently, Forestry Administration (FA) has established and operated 101 reforestation centers including new establishing of 51 reforestation centers. Moreover, the FA has provided public awareness about forest management and reforestation to citizens, and provided about 11 million of tree seedlings for local communities in replanting activities.

Wildlife Conservation

In 2005, the FA cooperated with the National/international Organizations and other Non-governmental Organizations including: CAT, FFI, WCS, ITTO, wild Aid, CI, Birdlife International, WWF, WPA, ICF etc to strengthen the laws enforcement, research study and provided awareness on the wildlife conservation to local community through implementing of 09 projects including crane conservation at Ang Trapeang Thmâr Boeung Prek Lopov and Anlong Pring, FA-FFI Gibbon conservation survey project, The " FA-FFI Asian Elephant conservation Project, The "FA-FFI Cambodia crocodile conservation Project, The "FA-WILDAID Law Enforcement", The "FA-WCS SIMA Biodiversity Conservation Project ", The "FA-WWF Srepok Wilderness Area Project, The "FA-WPA Cambodia Galliformes Conservation Program, and The "FA-CI Central Cardamon Conservation Project. Wildlife saving in Phnom Tamao conserved 962 heads of wildlife animals.

Forestry Communities: in 2005 FA developed 8 years of the National Forestry Community Operation Plan and cooperation with Concern Organization in formulating of forestry community in three (03) provinces of Pursat, Kampong Chhang and Kampong Cham. FA also collaborated with the Ministry of Environment (MoE), the Royal University of Agriculture (RUA) and Forestry Community Research Project to implement Forestry Community Research Study in two provinces of Kampot and Kratie province. FA also established 274 forestry communities in 19 provinces as participatory community base forestry resources management and conservation.

Forest and Wildlife Research: FA in collaboration with concerned ministries, WWF, WCS and CITES implemented projects such as Japan - Cambodia Collaboration Project of the alteration of water in Mekong River Bank (CWCM), Good Development Mechanism Project: One official from the Institute was assigned to be counterpart with this good development mechanism Project and Cambodia Tree-seed Project. In forest and wildlife research, FA collaborated with relevant stakeholders has discovered the existence of significant wildlife of 1,113 kinds herein included 122 kinds of mammal, 537 kinds of birds and 114 kinds of reptile and 40 kinds of aquatic animals and 30 kinds of butterflies and has determined to create the forest bio-diversity resource and wildlife protection area of 29 places covered land area of 4.45 million hectares equals to more than 25 percents of total area nationwide in which is the higher figure ahead in the world. MAFF also established 8 locations of tree seed conservation and 12 of tree genetic resources and preserved tree seeds and endangered species.

5. Fisheries

In 2005, the Fishery sector continued to implement the fishery reform policy by developing laws and legislation frameworks, establishing and strengthening of fishery communities, carried out research and conservation of fish sanctuary, aquaculture development and extension, and suppression of illegal fishing activities.

Preparation of Law and legislation: The fisheries law was developed with discussion and consultation with relevant stakeholders, and was adopted by the 3rd mandate of National Assembly in the 4th plenary session on 12 March 2006.

Fishery Department has also developed sub-laws and Royal Decrees on Protection and Conservation of Dolphin, the Protection and Conservation of Fisheries Resources in the coastal fisheries the establishment of community fisheries, Sub-Decree on the Procedures and Conservation of the Fisheries Resources in the coastal fisheries and Sub-Decree on Identifications of Endangered Fisheries Resource Types, sub-law on community fisheries management, a guideline on community fisheries which covers the by-law on action plan, the community fisheries agreement and regulations being prepared and in use.

Inland Capture Fisheries: The total inland fisheries production in 2005 was 324,000 tons or 92.57% of 350,000 tons planed last year and it's higher than 74,000 tons compared 2004. Inland fishery production is catch from the following sources:

- Fishing lots and middle scale fisheries 2005 was 94,500 tons or 94.5% of 100,000 tons planed last year and it's increased 24,400 tons compared to 2004.
- Family fishery is 137,700 tons or 91.8% of 150,000 tons planed last year.
- Rice field fisheries are 91,800 tons or 91.8% of 100,000 tons planed last year.

Marine capture fisheries: Total catch of marine fisheries in 2005 was 60,000 tons or 133.33% of 45,000 tons planned last year, it's increased 4,200 tons compared to 2004.

Aquaculture production: in 2005, Fish and shrimp culture was 26,000 tons (Fish 25,890 tons, shrimp 110 tons) or 74.29% of 30,000 tons planned last year and it's increased 5,165 tons compared to 2004. Seaweed culture was 18,000 tons or 90% of 20,000 tons planned last year, it's increased 1,160 tons compared to 2004. Crocodile farming is 120,000 heads or 150% of 80,000 heads planned last year and it's increased 45,180 heads compared to 2004, and Fish seed production was 18,733,000 fingerlings or 74.93% of 25,000,000 fingerlings planned last year. The seed production decreased 2,940,000 fingerlings compared to 2004.

Research development, conservation and technology transfer: In collaboration with CMDP, Fishery Department has conducted research study on Dolphin conservation zones in Kratie and Steung Treng province and discovered 9 Dolphin hold habitats including 5 holds in Kratie and 4 holds in Steung Treng province. These areas were made boundary for protection and conservation. In collaboration with UNEP, DoF has identified of the protection and conservation of Fisheries Resources in the coastal areas including sea weeds and coastal fishery resources in Koh Sdach of Koh Kong province and Koh Rung and Koh Rung sanlem in Sihanouk Ville, and continued to study the protection and conservation areas in Kampot province and Kep. In collaboration with MRC and World Fish Center, DoF developed website and information worldwide work, and developed technical scientific and extension documents and materials of fishery for dissemination and trainings.

Fish Export: Fresh and processed products of 52,000 tons were exported in 2005 equal to 130% of 40,000 tons planned, increased 6,150 tons compared to 2004 due to increased fish catchment in 2005 and high demands from neighboring countries markets.

Community Fisheries Development: Up to 2005 DoF established 440 fishery communities including 405 in freshwater fisheries and 35 in the marine fisheries domains.

Control of illegal fishing for preventing fisheries natural resource: DoF suppressed the illegal fishing 2,326 cases (2,178 cases in inland fishing grounds & 148 cases in marine fishing grounds). The number of illegal fishing in 2005 decreased 910 cases compared to that of last year (it dropped 396 cases in inland fisheries and 514 cases in marine fisheries). The result of suppression on illegal fishermen and confiscated fishing gears include 3,249,903 m of Mosquito barriers net, 7,020 m² of Long tubular of mosquito net (Lusbai Mong), Mosquito fishing net (oun sbai mong) 58,168 mouths, Battery and converter 22,710 sets, Fry bag net (Dai kon trey pra) 665 mouths, Dai trey ling (Fish bag net of thynnichthy thynnoides) 415 mouths, Tong duk 99,633 sets, Bamboo fend 364,803 mouths, Yang Karv (Dai masin, one-boat trawl) 73,360 units, Brush park 433,128 m², Board 147 sets and Handing over the cases to courts and imprisonment 131 people

B.Supporting Services and the Management

1. Administration Affairs

The main activities of administration affairs are management, coordination and facilitation of all MAFF affairs including control over MAFF's security, organizing the meetings, workshops, office equipment and materials supply, and salary, circulated letters, preparation of the reports of MAFF's activities and all general MAFF affairs.

2. Personnel and Human Resource Development

Personnel and Staffing: in 2005 the Ministry of Agriculture, Forestry and Fisheries has 8,393 personnel staff including 1,306 women (16.56%). 4,343 staff are working at central level including 691 women (15, 91%) and 3,998 staff are working at provincial and district levels including 611 women (15.28%), 8 staff are working in financial autonomous and 44 staff are working in Economic public enterprises.

Training and Capacity Building: Capacity building and HRD are main factor to ensure the effectiveness and efficiency, and equitability implementation and management of MAFF. In 2005 MAFF sent 276 officers to participate in both local and oversea trainings including 02 PhD study, 16 Master Degrees and 01 Bachelor study, and 257 officers in the short training courses.

Gender awareness also was considered by MAFF by mainstream of gender in at all levels of MAFF and agricultural sub-sector. Gender mainstreaming policy of MAFF and gender action plan were developed and implemented.

3. Agricultural Legislation

Agricultural Materials Standard Management: In 2005 MAFF granted the permits to 32 companies and registered 27 companies for operation of agricultural material supply and distribution in Cambodia. MAFF also granted import permits to 25 companies for agricultural materials and get service charge about 28,500,000.00 Riels.

Legislation development: Developed 02 Royal degrees, 01 sub-degrees, 01 policy statement and 07 ministerial decisions.

4. Inspection

In 2005 General Inspectorate of MAFF investigated and inspected on 26 cases including animal traffics, Heng Chhea Saw Mill, Branch of Colexim enterprise, fishing lots, illegal fishing and implementation of fishing lots, implementation of economic land concession, forestry management and other unfair documents.

5. Accounting and Finance

Department of Finance and Accountant of MAFF facilitated and coordinated revenue and financial management for all sub-sectors of MAFF and provincial department of agriculture.

Revenue: Total annual revenue in 2005 was (CR) Cambodian Riel 19,322,933,895.00 equivalent to 41.09% of the annual planned which was CR 47,027,000,000.00 including fiscal revenue of CR 17,605,803,076.00 or equivalent 37.65% of planned, which was CR 46,762,000,000.00, budget revenue of RC 123,949,390.00 or 44.27% of planned and non-tax revenue of CR 1,717,030,819.00 equivalent 647.94% of planned which was CR265,000,000.00.

Expenditure: Total expenditures for year 2005 was CR 31,192,756,145.00, equivalent 94.52% of planned which was CR 33,000,000,000.00.

Accounting Affairs

State Property/Asset Management: Issued letter to enforce all line departments and provincial of MAFF submit list of asset for year 2002, 2003 and 2004 and collaborated with senior official staff from MEFF to conduct a reconciliation of asset list between year 2003 and 2004 in various provincial of agriculture; there are Kandal, Kampong Chhnang and Sihanouk Ville.

Public Enterprise and Book Keeping: In 2005 DFA in collaboration with MEF senior officers reviewed and closed account 2004 of 7 Rubber Plantation companies, Cambodian Rubber Research Institute, Agricultural Input Company (AIC), KAMFIMEX fisheries company and for year 2003 account at the Kandal Stoeung State Fishing Unit. DFA Collaborated and coordinated on the first step implementation investment of all 7 Rubber Plantation companies, AIC and KAMFIMEX in order to support of basic information to the Government conducts the divestment of these entities and checked the governmental revenues and expenses, state properties management revenues for 2002, 2003, and the relevant years in MAFF line departments and institutions.

6. Policy Planning, Monitoring and Evaluation, Public and Private Investments, and Development Cooperation

6.1. Policy Planning

The policy planning consists of four-main sectors: (i)-General Planning; (ii) Public investment programme and official development assistance; (iii)Business and private investment; and (4)-Strengthening the capacity of policy planning under APiP (WB) project and FSP of French assistance.

General Planning: Organized the meetings for the instruction to fulfill the matrix for preparing the national strategic development plan 2006-2010, agricultural sector strategic development plan 2006-2010 and prepared the long-term strategy and master plan for development of agriculture sector 2006-2025.

Public Investment Programmes: Prepared the project for public investment programme (PIP) 2006-2008 of MAFF including 10 new projects proposed (2006-2008); revised 17 projects have been revised and requested to moving to implement 128 projects. We also requested 12 projects for official development assistance of Japan Government (ODA) 2006.

Private Investment on Land Concession

The situation of investment on land concession in 2005: After the Royal Government canceled the principle and contract of 27 land concession companies, recently 41 land concession companies have validity operation in 13 provinces with

909,185 ha of total land area including 41 companies have signed the contract of 831,045 ha, 04 companies had authorized principle but have not yet signed agreement (contract) over 36,900 ha and 03 companies being requested for no objection of authorized principle from Council of Ministers with the total areas of 41,240 ha.

The process and implementation of Investment on land concession: The private investment on land concession has been progressed starting since 2005 up to March 2006, the Ministry of Agriculture Forestry and Fisheries has signed agreement (contract) with 16 of land concession companies including: Ratanakiri 01 company, Kampong Cham 02 companies, Kampong Thom 01 company, Kampot 02 companies, Kratie 03 companies, Stung Treng 07 companies, and requested for authorized principle from Council of Ministers for 05 companies. Commonly, the private investment on land concession has been progressed during the year 2005 in connection with Government's sub-decree of economic land concession adapted.

To enforce and strengthen the effectiveness and efficiency management of economic land concession, MAFF revised the contract form based on the circular no. 5 dated 01.July. 2005. Meanwhile, the Ministry of Agriculture Forestry and Fisheries established an inter-ministry committee for definition of land concession's fees followed by the decision no.280/618 dated on 13 June, 2005.

Strengthening the capacity of policy planning of the agricultural productivity improvement project (APIP): Conducted assessment the staff capacity on policy planning of who had been trained on the new role of agricultural policy planning in market economy which was held in 2003 in six provinces (Svay Rieng, Prey Veng, Kampong Cham, Kampong Thom, Kratie and Takeo). Training course and workshops were also conducted at central and provincial levels about policy development, planning and programs/projects development in agricultural sectors.

6.2. Project Coordination, Monitoring and Evaluation

Project coordination, Monitoring and evaluation (PCME) unit reviewed, consulted and appraised the programs/projects within MAFF line agencies for submitting to RGC and external development partners. PCME facilitated and coordinated 54 MAFF projects for integrated into Basin Development Program (BDP) of MRC. 82 projects in agricultural sectors were reviewed and listed including 69 on-going projects and 12 completed projects, and 01 pipeline project. PCME also involved monitoring and evaluation of programs/projects in MAFF.

PCME also facilitated and coordinated the Technical Working Group on Agriculture and Water (TGAW) activities such as meetings, workshops, consultation and formulation of agriculture and water resources strategy, at the mean time the inception report of strategy, strategic profile and strategic option for strategy of A&W were developed.

6.3. Agricultural Statistics

In 2005 agricultural statistics of MAFF strengthened and improved the capacity building on survey, management and collection mechanism and distribution of agricultural statistic data, and monitoring of crop cuts of rice, cash crops, industry crops and other agricultural sector information and data, yield and evaluated and analysed annual food

balance in Cambodia. We also conducted survey on farm budget of agricultural products in 09 provinces in Cambodia.

6.4 Agricultural Marketing:

The market and prices of agricultural products are main issues for Cambodian farmers. Our commitment in 2005 is aimed to improve market access and reasonable price of agricultural products for farmers getting income from selling of agricultural products. We improved marketing systems through developing daily information, weekly, monthly and annually marketing bulletins, and disseminating marketing information by daily media and radio systems. We also prepared draft agricultural marketing information strategy for strengthening of agricultural marketing information service. In collaboration with JICA, we also implemented pilot Rice open market in Prey Veng province. We also have been implementing of 5 years project of agricultural marketing information in Cambodia with financial and technical assistance from CANADA Government through CIDA.

6.6. International Cooperation and Grant & Loan Projects

Cooperation with UNDP: In 2005, AFF implemented protected forest management and Cardamom wildlife habitats project including Samkok Mt wildlife habitat and Oral Mt wildlife habitat projects.

Cooperation with the Food and Agricultural Organization (FAO)

In collaboration with FAO, MAFF implemented several projects related to food security, agricultural sector development, policy and programme formulation and participatory community base of natural resources management. The following programs/projects were implemented:

- National programme for Food Security and Poverty Reduction: Implemented in 180 villages of 15 districts and 6 provinces in Cambodia for improving household for security and incomes through intensification and diversification of agriculture (crops, livestock, fisheries and water controls), empowerment of local community (FOs, FWUC), self help group (savings) and community micro-projects.
- Food insecurity and vulnerability information and mapping systems: Established information systems and mapping of food insecurity and vulnerability in Cambodia.
- Formulation of Household Food Security and Poverty Reduction for 2006-2010.
- Participatory Community base natural resources management including fishery and forestry communities.
- Strengthening the Capacity in Fisheries Information Gathering for Management
- Diagnostic Laboratory and Surveillance Network Coordination for Control and Prevention of Avian Influenza in Southeast Asia, Emergency Regional Support for Post-Avian Influenza Rehabilitation and *Emergency Assistance for the Control of Avian Influenza*.

Australia-Cambodia Cooperation

Cambodia-Australia Agricultural Extension Project: CAAPE-Phase-II implemented within 13 provinces to strengthen on National extension Media, provincial and district

extension workers capacity, transfer technology to farmers and monitoring and evaluation of extension media.

Quality Improvement Project (AQIP): improve food insecurity and household incomes through provision on services on techniques of seed production, post harvest, and market for production, vegetables and edible fruits. Project implemented in 4 provinces of Takeo, Kandal, Prey Veng and Svay Rieng with main activities including Seed production, post harvest technology, Fruits and Vegetables marketing, Irrigation support and rehabilitation and Human resource development.

Technical Working Group on Agriculture and Water: AusAID is played important role as co-facilitator of TWGAW with AFD to facilitate and coordinate agriculture and water resources development with external development partners.

Cambodia Agricultural Research and Development Institute-Assistance Project/CARDI-AP: strengthen CARDI operation and management including governance, development corporation, service provision and project management.

Cooperation with European Union

Smallholder Livestock Production Programme: implemented in Kampong Speu, Kampong Chhnang, Pursat, and Takeo with aimed to ensure Poverty reduction and rural food security through increase growth rate of NGP and increase farmers' by Improved animal health, Strengthen local capacity of production, Effectiveness of market and equity of income from production.

Economic and Social Relaunch of Northwest Provinces (ECOSORN) implemented in the 3 Northern Provinces of Battambang, Banteay Meanchey and Siem Reap, focusing on the 14 poorest districts with aiming to contribute to poverty reduction in rural areas. The activities are (i) Increase agriculture, livestock and fisheries productions through implementation of integrated agricultural farming systems. Develop small scale irrigated area with irrigation capacity less than 200 ha, (ii) promote off-farm job creation through professional training oriented market (iii) Build capacity of district-commune councils to have skill in planning implementation, monitoring and promotion of farmer communities in order to maintenance physical infrastructure, illiterate education, dissemination of sanitation, hygiene, health, gender and mine and (iv) Promotion of clean water through well digging, ponds, culprit network and promotion of land ownership, upgrade sustainable communal capacity in land management, planning for development and activities of mine clearance.

French Cooperation

Technical Working Group on Agriculture and Water: AFD is played important role as co-facilitator of TWGAW with AusAID to facilitate and coordinate agriculture and water resources development with external development partners.

In collaboration with French Cooperation, MAFF implemented the following projects:

- The project: "Fonds de Solidarite Prioritaire-FSP" was implemented to support the training of the development of professors' capacities, engineering of training and the support to re-education for the royal university of agriculture.
- FSP assisted three ministries of MAFF, MOWRAM and MRD for the definition of agricultural policy planning, with focus on: rural land assurance, irrigation management, forest resources management strategy, and enhancement of farmer's organization.

- AFD project smallholder rubber production to support institutional strengthening, vocational profession, and integrated crop systems application.
- AFD assisted in the project of strengthening business capacity to support the rubber certification in the framework of PRCC.
- AFD assisted in the project of Indication Geographiques Protegees-IGP. PRCC and IGP are under management of ministry of commerce, and implemented by the MAFF.

Thailand-Cambodia Cooperation

Participated in ACMECS-WG meeting on the 2nd meeting of the joint agricultural working group between Thailand and Cambodia, ACMECS Foreign Ministerial meeting and ACMECS ministers with partner development on August 04-05, 2005 in Siem Reap and Participated in ACMECS-WG meeting on the 1st meeting of the sector working group on agriculture and industry cooperation.

China-Cambodia Cooperation

Two projects of Kampong Cham National School of Agriculture submitted to China including Construction Building Dormitory of Kampong Cham National School of Agriculture and construction of Field practice and Research Farm.

Cooperation CIDA

Implemented the agricultural market information project in Cambodia with CD\$ 5 million during 5 years and started since early 2006.

Asian Development Bank

Agriculture Sector Program (ASP) Loan No. 1445 CAM (SF)2001-2005: This program developed the medium-term work plan 2001-2005 for implementing the policy strategy of agricultural sector development. During this stage program considered on agricultural research development such as plant breeding programme, soil science and water, socio-economic science, agricultural engineering, agronomy and farming systems and plant protection programmes. It constructed research and development infrastructures including publication center of agricultural extension technologies, building of legislation department and infrastructures in CARDI such as office buildings, training center, seed management building, dormitory and cafeteria, CARDI protected fends and dikes, irrigation and drainage systems, laboratories and research facilities.

Agriculture Sector Development Program (ASDP): Program Loan No. 2022-CAM (SF): This program cooperated with cooperated and facilitated with both ADB TA-4228 and TA-4310, TAs and Working Groups and it established 5 years action plan and submitted to MEF for review and approval as stated in agreement frameworks.

Agriculture Sector Development Project (ASDP) Loan No. 2023-CAM [SF]: Program Loan No. 2022-CAM [SF] : This program implemented in 04 target provinces of Kampong Cham, Kampong Speu, Takeo and Kampot province.

World Bank Funded Project

In 2005 project trained 214 technical staff and 11,022 farmers. Project also developed complex labs for DAALI research activities, constructed 27 Small Scale Irrigation Scheme 27 Schemes in Kampong Thom and Kraties and supplied facilities and tools such as 1 Pellet Machine, 1 Generator and 1 Electric Solar system. office

equipment (computer, printers and photocopiers) and office furniture technical materials (audio-visual) to Department of Administration Affaires, Inspection, Internal Audit and Accounting and Finance) and 11 motorcycles, 1 boat with engine and 560 bicycles for Department of Animal Health and Production. Project also carried out adaptive research on soil fertility management and conservation with 1,000 field trials and 150 compost pits demonstrations, and established 300 farmer clubs for integrated pest management.

IFAD Funded Project

Rural Poverty Reduction Project (RPRP): For rural poverty reduction in 2005 RPRP assisted 120,600 household in Prey Veng and Svay Rieng province for improving livelihoods through improvement of food production and income generations such intensification and diversification of crops, livestock, participatory natural resources management. 05 components were carried out including Livelihood Improvement Group, Farming Systems Improvement, Improvement of Agricultural Support Services, Natural Resource Management and Implementation Support Component.

Agricultural Development Support to SEILA (ADESS): In 2005 ADESS carried out main three activities including production start-up programme with 82 farmer groups, Agricultural Improvement Programme and Technical Support and Capacity Building.

WTO: Participated in a meeting with MAFF on cooperation with Korea Republic on status capacity building in Cambodia for competitiveness and developed 2006-2010 workplan for implementation of ADB Framework, and Participated with WTO negotiation team in a workshop on current status and future direction of the Doha development agenda in Cambodia.

7. Agricultural Research and Development

Plant Breeding: CARDI completed in 48 rice breedings for good quality and drought tolerance variety and produced purify seeds and carried out 150 experiments.

Plant Protection: Four research projects (02 CARF, 02 ACIAR) are implemented. These four projects is targeted to rice, peanut, soy bean and sesame, which were conducted in Kampong Cham, Kampong Chhnang, Prey Veng, Takeo, Kandal, Battambang provinces included in CARDI's glass house.

Soil and water Science: Carried out nine research projects on improving the production of rice and non-rice crops in relation to soil fertility management, land capability and land suitability, and crop productivity assessment on various soil types, water quality and use for agricultural purposes. Sixty experiments were conducted in 06 provinces on rice and upland crops including Kampong Cham, Takeo, Battambang, Siem Reap, Prey Veng and Koh Kong.

Agricultural engineering: Conducted 64 experiments by pre harvest technology post-harvest technology and prototype development in 06 provinces and in institute. Flet bed dryer was established one model for farmer's community at Baray district in Kampong Thom province.

Agronomy and Farming Systems: Conducted fifteen types of research experiments on rice, beans, maize, cassava, banana and mango, and also on ricefield rat

management and rice-fish culture, which are in a total of forty four experiments in both lowlands and uplands of CARDI, Kandal, Kampong Speu, Kampong Cham, and Battambang provinces. Up to date, all experiments have been completed with data collection, observation and evaluation, and been under way of statistical analysis.

Socio Economic Science: 13 research studies on rice, fruit crops, non-rice upland crops, and eco-system analysis were conducted in Takeo, Kampong Cham, Battambang and Siem Reap provinces. Pest damaged reduced the crop yields were also determined. Most of these research studies are continuing in the same areas in this year.

Human Resource Development: Conducted 9 of training courses and workshops with participation of 221 participants. We supervised the agricultural student in writing thesis in bachelor degree 6 people from Royal University of Agriculture and master degree 11 people from Royal Academy and Royal University of Agriculture.

Station management and infrastructure: Completing construction of Seed Center, Training Center, Irrigation System, Bad Water Irrigation, Bitumen Road, Seed Processing, Rice Milling Machine.

8. Agricultural Extension Services

Extension is one of the key factors to increasing income and products for farmers that are in line with the government's policy on poverty reduction. The Department of Agricultural Extension (DAE) implemented the extension programs in 13 provinces through training and followed by practical implementation such as farmer field schools, field days, demonstrations on livestock rearing, aquaculture and vegetable growing which produce better yield with participation of 82,743 farmers.

9. Agricultural Machinery

To enhance agricultural productivity to assure quantity and quality of the technical supporting service, the innovations of agricultural mechanization into farmer's agricultural production system have highly increased in wide country, and those are including the strengthening of support service on the activities through training, research, modification, experiment, and extension which refer to help production base especially farmers. In 2004-2005 agricultural mechanization utilization has been increased, especially for small scale and medium scale machineries.

10. Agro-Industry: training of Technical Barriers to Trade and Sanitary, Phytosanitary Measures (TBT and SPS) training of Processing and Drying Rice for two weeks in People Republic of China and sent 10 staff to attend oversea workshops. DAI also joint developed Master Plan for National Agricultural Research and Agro-industry Development Strategy 2006-2010.

11. Agricultural Inputs Supply

Based on the previous experiences, AIC changed the business strategy from large procurement contracts to medium-scale procurement contracts for the supply of fertilizers. This is recognized that medium contracts supplied by contractors will promptly deliver the fertilizers to provide timely to the producers.

In the year of 2005, 04 contracts were signed with Green Mount Co., Ltd. for the importation of NPK and Urea of 10,500 tons (procurement planning 2005 is 15.000 tons). The Agricultural Input Company has 03 owned warehouses: 02 warehouses located in Phnom Penh and 01 warehouse in Sihanouk Ville.

III. Conclusions

The performances and outcomes in 2005 are reflected to the following strength and weakness:

1. Strengths

- *Agricultural development policy of the Royal Government of Cambodia (RGC) is strongly focused on the enhancement of agriculture sector to be as the leading sector among the main sectors for the growth of the national economy. The agriculture will be contributing to the reduction of the poverty for the Cambodian people.*
- *The RGC is trying to utilize the existing local resources for the multi-culture, diversification to ensure the stable growth of the economy, employment generation, increasing rural incomes as well as the food security for all people.*
- *The RGC encourages the participation of private sector in the agriculture development by providing the land titles, properly distributing the agricultural land through the social land concession framework.*
- *The RGC promotes the construction and management of irrigation system for agricultural production and also effectively manage the existing irrigation system.*
- *The RGC takes strongly in consideration in the responsiveness measures for the natural calamity.*
- *The Ministry of Agriculture, Forestry and Fisheries (MAFF) enhances the productivity through the attempts made for further provision of supporting services such as: research and extension service, marketing development, distribution of seeds as well as other agricultural inputs.*
- *MAFF and concerned institutions, local authorities, national & international communities and all people, especially farmers fully support the development of agriculture.*
- *Laws and the regulations had been properly improved and newly formulated to fulfill and facilitate the implementation in effective manner.*
- *The management of the whole economic development as well as the management of the agricultural sector has been reformed to be in consistent with the movement in economic integration and competition in the region as well as in the world.*
- *The physical infrastructures to support the development activities of the Ministry are improved in better condition.*
- *The policy and strategy formulation and the creation of the development projects is considered to be improved with the focus on the priority activities connected to the budgeting availability to achieve effectively the actual outputs.*
- *The emergency interventions had been considerably made to prevent timely the incidents caused by the natural calamity.*
- *The human resources have been also enhanced the capacity with better working condition that these resulted in the effective works.*

- *The natural resource management, forestry, fisheries, wildlife, land resource has been improved for the sustainability by using the existing laws and regulations, techniques as well as adequate human resources. The success of the mentioned management is due to the strong commitments from the Government, full supports from the concern institutions, local authorities and international communities.*

(2) Constraints and Weakness

- *The problems faced in the production in wet season 2005 due to the drought in mid of the season, from mid-August to mid-September where covered in the middle and southern parts of the country.*
- *Relying on natural factors which are irregularly changed and limited capacity in agricultural irrigation resulted in the imbalance growth of agricultural production from year to year.*
- *Limited investment capital resulted the country relies on foreign assistance for development.*
- *Adjustment of vision, strategy and action plan faces some constraints and is not yet to facilitate and consolidate to actual implementation with effectiveness.*
- *Laws and regulation enforcement faced some difficulties due to the respect of those are limited and recent offenses still taken placed.*
- *Structure of management, discipline and spirit of responsibilities for staff are weak, together with low salary, improper use of trained human resource, and the efficiencies of leadership & capacity to perform the technical works considerably limited.*
- *Reform process, especially administration and civil servant reforms are considerably slow which un-responded to works and developments required.*
- *Agrarian structure in Cambodia at the present are not appropriated to the need for market-oriented production and competition.*
- *Unfortunately, the Bird Flu occurred the 1st outbreak in the country. With lack of experience, at that time, facilities and insufficient budget, the implementation of prevention measures faced difficulties such as no PPE, No vaccines caused the disease outbreak occurred 13 places surrounding Phnom Penh and some provinces.*
- *Insufficiency of an effective monitoring system in agro-inputs management at municipalities and provinces.*
- *Most of private companies are less understanding on law & regulation resulted in failing to request & register for agro-inputs.*
- *Lack of collaboration with local authorities and border competencies leading illegal importation of agro-inputs with no permission from MAFF.*
- *Provincial Departments of Agriculture, Forestry and Fisheries (PDAFF) and agricultural legislation staff has limited capacities in management of activities of agricultural inputs business.*
- *Slow process in the organization of agricultural legislation office at the provinces.*
- *Farmer understanding is limited in the use of agro-inputs and is not compliant with standard. It is observed that most of agricultural inputs supplied are no registration and no instruction for use in Khmer language recognized by MAFF.*
- *Limited capacity for laboratory to analyze the quality of agri-industry production, agri-food and there is no training center for agri-food processing.*

3. Conclusion and recommendation

- *Situation of production in year 2005 faces several difficulties due to natural condition in some places.*
- *Cambodian agriculture is still under changeable influence of natural climate condition. The rehabilitation and development of irrigation infrastructures are needed and considered as priority, but this is not depending only on the irrigation. The promotion on the technical measures shall be considerably made in order to improve agricultural production & development.*
- *Acceptance on the development concept, strategy and implantation measures in the reform of management, leadership and enhancement of the supporting services with the existing available resources used in priority activities for the sustainable development & management.*
- *Human resource that utilized much government and development partner's fund must based on the term of efficient use linking this with administration and civil servant reforms in order to reduce a number of incapable staff resulted in the proper use of the capable staff with better salary and efficient works.*
- *State investment shall be made to the priority areas for research and extension works in order to fast develop. This means that the government would not focus only on investment for physical infrastructure alone, but also consider on the investment for supporting facilities and utilities to research and extension for development, and especially the livelihood for scientist and technicians have to be considered and improved.*