



Royal Government of Cambodia

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**Policy Paper
On
The Promotion of Paddy Production
and Rice Export**



**Approved by the Council of Ministers
Phnom Penh, 25 July 2010**

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Preface

In the face of the 2008-2009 global economic and financial crisis, Samdech Akka Moha Sena Padei Techo **HUN SEN**, Prime Minister of the Kingdom of Cambodia, timely masterminded and lead the implementation of key policy measures to tackle and mitigate the impacts of the crisis on the Cambodia economy and people's livelihoods. The basic philosophy of his leadership is to *“control the economic pulse of the nation, ensure sound and favorable macro economic conditions and, more importantly, ensure the normalcy of people's livelihoods, simply speaking is to ensure that the Cambodian people must have enough rice to eat”*.

Based on this brilliant and realistic strategic principle, Cambodia has managed to protect her sovereignty and territorial integrity against foreign invasion, while *Samdech Techo Prime Minister has successfully guided the economy, like other Asian economies, through the most difficult period of the crisis. Cambodia has managed to maintain the stability of the financial sector as well as macro-economic and social stability, especially the normalcy of the people's livelihoods*. Moreover, thanks to robust growth of agriculture and rural economy, the majority of the Cambodian people, who are predominantly farmers, are expected to benefit from the growth and their livelihoods will be improved even further.

Indeed, as a wise, inspiring and brilliant Statesman, Samdech Akka Moha Sena Padei Techo **HUN SEN**, has always kept the *“nation's pulse”* under control. His unique leadership skills are again and again manifested in his long-term vision for national development, coupled with pragmatic, realistic and flexible policies and strategies aimed at achieving the targets set out in this vision, full understanding of potentials and opportunities for successful implementation and clear-cut projection. He has ensured effective and efficient leadership to tackle the challenges and mitigate eventual risks arising from the implementation, by especially mobilizing the people from all walks of life and displaying creative implementation of the policies.

Having witnessed that rice fields are drying up during the dry season due to insufficient rainfalls, Samdech Akka Moha Sena Padei Techo **HUN SEN** identified this as an enormous unexploited potential. With a statesman's sharp view, the potential long hidden under some daunting challenges has been unlocked and transformed into very rare and enormous opportunity for development. Samdech Akka Moha Sen Padei Techo **HUN SEN**, Prime Minister of the Kingdom of Cambodia, has announced his ambitious vision of transforming Cambodia into a major exporter of *“Rice – White Gold”* in the near future. At the 15th Royal Government – Private Sector Forum held on 27th April 2010, Samdech Techo Prime Minister instructed the Supreme National Economic Council led by **Dr. Aun Porn Moniroth** to draft a **“Policy Paper on the Promotion of Paddy Production and Rice Export ”** within one month.

On 29th May, 2010, the Supreme National Economic Council submitted as scheduled the draft policy paper to Samdech Techo Prime Minister. On 31st May, 2010, Samdech Techo Prime Minister ordered the Committee on Economic and Financial Policies to call an urgent meeting to collect inputs from all concerned ministries and agencies, and fine-tune the paper to make it more comprehensive and ensure full participation from all related ministries and agencies.

The Committee on Economic and Financial Policies met on 16th June 2010 to discuss and provide recommendations and inputs to the draft policy paper. Afterward, the the Council of Ministers, chaired by Samdech Akka Moha Sena Padei Techo **HUN SEN**, reviewed and approved the draft “**Policy Paper on the Promotion of Paddy Production and Rice Export**” during its plenary cabinet meeting on 25th June 2010.

The “**Policy Paper on the Promotion of Paddy Production and Rice Export**” aims at promoting agriculture development at a new pace and in a new scale that broaden and strengthen the foundation of economic growth, while accelerating poverty reduction and improving the people’s livelihoods.

Indeed, the main and sole purpose of this policy paper is to increase paddy production and rice export. This is the first important step towards the promotion of the production and export of other agricultural products. The Royal Government expects that the success of the “**Policy Paper on the Promotion of Paddy Production and Rice Export**” will give a strong political message that encourages and paves the way for the promotion of other agricultural products such as rubber, cashew nuts, soybeans... and not to mention other agricultural sub-sectors such as aquaculture etc. All of this is already embedded in the long-term, sharp and brilliant vision of Samdech Akka Moha Sena Padei Techo **HUN SEN** for economic development.

In this sense, full participation from all ministries and agencies of the Royal Government, as well as other-stakeholders, including the private sector and development partners especially the farmers themselves in the successful implementation of this policy, as instructed and laid out by Samdech Akka Moha Sena Padei Techo **HUN SEN**, Prime Minister of the Kingdom of Cambodia during the plenary cabinet meeting on 25th June 2010, will be vital for the progress and prosperity of the Kingdom of Cambodia.

Phnom Penh, 15th July, 2010

Keat Chhon

Deputy Prime Minister, Minister of Economy and Finance
Chairman of the Committee on Economic and Financial Policies

Policy Document on Promotion of Paddy Rice Production and Export of Milled Rice

I- Introduction

1. The Royal Government of Cambodia (RGC) has made a strong commitment to ensure further implementation of *the Rectangular Strategy-Phase II*, after successfully leading the Cambodian economy out of the most difficult time of recent global financial crisis and economic downturn. To this end, the RGC decides to embark on promoting the development of agriculture sector, with a new pace and scale, aiming at further strengthening the foundation for economic growth, accelerating poverty reduction, as well as improving the living standards of the Cambodian people.

2. In realizing the vision of agriculture development, the RGC has adopted a three-pronged strategy—*productivity enhancement, diversification and agricultural commercialization* (from subsistence to commercial agriculture)—through implementing a package of interrelated measures: (1) infrastructure building and enhancement (roads, irrigations, energy/electricity and ITC) (2) improvement in the provision of extension services and agricultural inputs (3) land management reform (4) finance (5) marketing (6) farmer organization and (7) institutional building and coordination. In the current context, agricultural commercialization has become more dynamic in lights of global economic changes due to increasing food demand and prices. This trend has some implications and revives the impetus of paddy rice and other crops production in Cambodia, which has the potential for further higher growth.

3. Cambodia has a big potential in paddy rice production to increase its milled rice export in the future. To guide its vision for the preparation of economic development policy, the RGC has an ambition to turn Cambodia into a key «**rice - white gold**» exporting country in the international market. Paddy rice production

could reach 7.3 million tons in 2010-2011, after a remarkable rebound over the past decade. With the estimated domestic consumption of approximately 3.14 million tons of paddy rice, the provision for seeds and taking into account the harvest loss, the statistics shows a surplus of 3.32 millions which can be processed into milled rice for export. But, so far, the official statistics in 2009 recorded only 13,000 tons of milled rice or 20,000 tons of paddy rice export, although Cambodia has actually exported much more milled rice. This truly reflects Cambodia's potential to increase the official export of milled rice, instead of informal export of unprocessed paddy rice, which results in the loss of considerable value added for the national economy. Moreover, as a result of increasing investments in the construction of irrigation systems, paddy rice farming, expansion of cultivated land and intensification, as well as the increasing paddy rice yield (caused by improved water, seeds and fertilizers supply and growing techniques), the RGC expects that rice production will rebound further, allowing Cambodia to increase the surplus of paddy rice, which will be processed into milled rice for export. In this regard, Cambodia must build a robust, high quality and reliable rice milling industry.

4. At the same time, Cambodia has a unique opportunity to expand its milled rice market niche in the global markets. The global milled rice trade has been estimated to reach 31 million tons in 2010, in which Thailand and Vietnam will remain the biggest source of milled rice export, and Cambodia and Myanmar are expected to become new leading milled rice-exporting countries in the near future. Since the world is now facing the challenges of population growth, climate change, and changing economic structure together with the improved living standard of people in many developing countries, the consumption of rice is expected to rise, driving higher demand for milled rice in the global markets. Moreover, there are not many milled rice-exporting countries, and most of them are in Asia, especially Southeast Asia, and there are more and more countries such as the Philippines, Malaysia and Indonesia having become rice-importing countries. Therefore, this potential in global milled rice market will provide such good opportunity for Cambodian farmers.

5. Realizing this opportunity, the Royal Government has introduced a series of measures, in cooperation with farmers, rice millers and traders as well as development partners, to address the many challenges involving the high cost of rice processing, transportation, export processing and clearance, the creation of funds to support and develop agriculture and the provision of further fiscal incentives provided to this sector. These measures were not consistent and systematic, and when implemented, they were not sufficiently effective and the results were incomplete. Thus, the Royal Government realizes the need to further refine the rice policy in promoting this work using the value chain approach. The Royal Government has chosen milled rice as a priority export item and will pay attention to this policy, based on the following rationales of strategic importance:

First, to diversify Cambodia's sources of growth by increasing paddy rice production and milled rice export in order to complement growth in garment and other sectors. In the future, the rice sector could become an important pillar to further promote Cambodia's economic growth while the garment sector is facing stiffer competition.

Second, the rice sector could have a big potential comparable to that of garment sector in terms of gross export value and values added generated throughout the supply chain including employment. If rice export reaches 3 million tons, the total export value would amount to USD 2.1 billion (approximately 20% of the GDP) or equivalent to about USD 600 million (approximately 5% of the GDP) in value added contributing to the national economy. If we can solve the problems of rice export in the same way as we have promoted the garment sector, we will be able to retain substantial value added in the country and the gains will directly contribute to economic growth through employment for more than 70% of people living in rural areas, increased income, particularly poverty reduction and improved living condition of farmers and most Cambodian people engaging in rural economic activities. Moreover, the sector could provide a mechanism for equitable redistribution of economic gains, and have spillover effects on broader economic activities, that will lead to a complete change in the image of Cambodia's rural economy.

Third, the milled rice export promotion is the first step to promote export of other agricultural produces such as rubber and other crops. However, in the current context, we should sharpen this policy to address one issue at a time to ensure that set measures are effective and efficient and not to overstretch the capacity and financial resources of the ministries and agencies responsible for the implementation of this policy. The Royal Government of Cambodia has greater ambition. But we believe that working on too many products at the same time will overstretch our limited resources and capacity and make them less effective and efficient. At the same time, the success of the implementation of rice export policy will send a strong political message, encouraging and paving the ways for the promotion of the export of other agricultural crops.

6. In this context, the Royal Government will lay out vision, strategy and concrete policy measures to be implemented immediately, while indicate a medium to long term direction to promote milled rice export both in terms of quantity and branding of Cambodian milled rice in the global market and set up institutional arrangements with clear responsibility assigned to ministries/institutions of the Royal Government to implement rigorously this important policy.

II- Vision and Strategy for Promotion of Paddy Rice Production and Export of Milled Rice

7. The vision of the Royal Government is to transform Cambodia into a «rice basket» and key milled rice-exporting country in the global market. In this connection, the Royal Government has set the year 2015 as the target year to: (1) Reach paddy rice surplus of more than 4 million tons and achieve milled rice export of at least 1 million ton; and (2) Ensure Cambodian rice to be internationally recognized. In implementing this initiative, the Royal Government will adhere to the following key principles:

- Adopt market principles by encouraging competition to effectively increase export, while ensuring the interest of farmers is protected, increasing their income, reducing poverty among them, and improving food security based on a stronger social safety net.

- Encourage and support participation of farmers and their organizations to protect their interests by creating an enabling environment for increased production and supply of high-quality rice, including raising farmers' bargaining power on price negotiation.
- Promote cooperation and partnership between the Royal Government and the development partners, civil society and private sector such as rice producers, rice millers, traders and transporters in implementing the policy to promote rice production and export.
- Enhance efficiency in coordination between ministries/agencies of the Royal Government in order to improve the effectiveness and efficiency for all kinds of public service delivery related to rice production and export promotion.
- Promote domestic capacity building to export rice directly from Cambodia by encouraging every company to open up its office to buy and process rice in the country, and export it officially, while adhering to principals of fair, just and loyal competition and meeting Cambodia's existing tax and other obligations.

8. The Royal Government will implement the strategy to promote paddy rice production and export based on two important approaches:

First, for the short and immediate term, promoting paddy rice production to meet market demand and promote export of milled rice by shifting from the informal export of paddy rice to a formal export of milled rice. These measures include: (1) continue to invest in and expand the irrigation facilities, promote the use of water, seed, fertilizers and appropriate technologies, and provide micro credit to rice producers; (2) encourage private sector participation to invest in paddy rice processing and export of milled rice, especially by solving the issue of shortages of credit for buying and processing paddy rice, as well as trade credit by recapitalizing state-owned financial institutions and by providing incentives to commercial banks to increase loan portfolio for agriculture, including through the development of credit guarantee schemes and risk-sharing facility and (3) coordinate and fast track rice export through improvement in procedures for export and transport facilitation and elimination of informal fees.

Second, for the medium and long term, to focus on enhancing competitiveness in rice export through promotion of production technology, management of soil fertility, management of water, seed and fertilizers, organization of farmer associations, rice processing quality, physical infrastructure including roads, railways, seaports, electrical energy, land use and management, short- and long term credit as well as the trade facilitation and exploring market opportunities.

III- Market Situation and Other Challenges

9. In general, the developments in global milled rice market together with Cambodia's sound macroeconomic stability and open investment and trade policy have created a an overarching environment favorable to the supply chain and milled rice export. However, Cambodia is facing a number of key challenges and obstacles in the supply chain, especially in the management of agricultural land, cultivation techniques and other inputs, the lack of infrastructure, finance and institution etc. Some of the challenges can be easily addressed which results in immediate outcomes, but some other challenges require more time and substantial investment. (See detailed analysis in Appendix 1).

3.1. Regional and Global Milled Rice Market Situation

10. The global milled rice trade in 2010 has been estimated at around 31.3 million tons, compared to 29.7 million tons in 2009. However, the demand for the import of medium and low-quality milled rice has been on the increase in Asia, due to the weather problems in the Philippines, crops failure and reduced subsidy on fertilizers in Indonesia, as well as the requirement by some countries in the region to fill in reserve stock. It is estimated that milled rice trade in Asia may reach 14.5 million tons in 2010, and at the same time, the milled rice price may increase and fluctuate. Overall, the regional and global milled rice trade has high growth potential for the medium and long term, but there are some down-side risks, due to factors such as changes in prices resulted from changing economic and political landscape in every country across the globe. The potential for increasing milled rice trade could be attributed to factors such as population and economic growth and globalization that imply changes in lifestyle and taste in rice consumption. However,

the global milled rice markets are protected and highly subsidized because of its political sensitivity and paddy rice growing tradition being important in the context of national religion and food security. Nevertheless, such developments provide an opportunity for Cambodia's milled rice export into the global markets.

3.2. Challenges

A. Issues affecting paddy rice production

11. The surplus of paddy rice for export remains limited. If Cambodia wishes to export milled rice from 3 to 4 million tons per year, we have to produce paddy rice at least 10 to 11 million tons. This requires us to address a number of challenges constraining productivity such as land management, irrigation system, research and extension services, intensification, and organization of farmers etc.

B. Issues affecting rice processing and trade

12. The paddy rice prices that Cambodian farmers receive is 35%-40% lower than the prices that Thai and Vietnamese farmers have enjoyed, which is the main competitiveness of export but it is lost as soon as milled rice reach the ports due to informal fees, high transport and processing costs. In fact, exporting unprocessed rice is a significant loss of value added for the economy. If the processing could be retained in the country, Cambodia can make a lot of gains in terms of broken rice, husk and bran that could help other economic activities such as cooking oil production, aquaculture and animal husbandry in addition to the benefits arising from job creation and income generation that are related to this economic activity. If there is more investment in modern rice milling facilities, Cambodia can produce more high-quality milled rice for the growing international markets and gain international recognition about Cambodian milled rice standard. In this context, the Royal Government is facing a number of critical impediments to be addressed in order to improve the value added in Cambodia's rice value chain such as high cost of energy and transport and high cost of and difficult access to credits.

C. Issues affecting milled rice export facilitation

13. Export facilitation, both hard and soft, has not been smooth and consistent, that is the major obstacle to the promotion of Cambodian milled rice export, in which the hard system includes transport infrastructure, seaports, warehouses and the soft system includes trade facilitation, supporting institutions, quality standards, Sanitation and Phyto-sanitation Standard (SPS) etc. The crucial issues that need to be solved include: the institutional support which remains weak and rice quality is not recognized internationally, and the seaport infrastructure is limited.

D. Issues related to market opportunity

14. Milled rice is a protected market with complicated mechanisms according to different terms and requirements by each importing country. At the same time, milled rice export is new for Cambodia, and the experience and knowledge is still limited, that requires us to strengthen Cambodia's ability to access those markets.

IV- Policy Measures

15. In order to achieve the vision of transforming Cambodia into a «rice basket» and a major milled rice exporting country in the world, the Royal Government has launched a «***Policy on paddy rice production and promotion of milled rice export***» on top of the measures adopted so far and ensured the implementation of low hanging policy measures (for implementation in 2010 and 2011) to pave the way for the implementation of medium and long term measures in order to ensure sustainability and progress in processing and exporting Cambodian milled rice. This will also lead to the promotion of the export of other products in general. The earlier-mentioned medium and long term measures constitute a common policy framework to guide implementation in the future.

4.1. Measures related to paddy rice production

A. Quick-win measures

- ***Increase paddy rice productivity by using high yield seed and modern farming techniques***: the practical measures include:

- Facilitate import procedures for rice seeds, fertilizers and agriculture inputs and machinery and continue to provide tax incentives for the import of materials and equipments.
- Provide incentives to local seed producers and distributors through: (1) Ministry of Agriculture, Forestry, and Fishery (MAFF) must determine a number of prioritized rice varieties to be promoted and disseminated by the end of 2010. Furthermore, the Ministry must also prepare a legal framework and mechanisms to promote seed production and distribution by the end of 2010; (2) further strengthen and expand the capacity of the Cambodia Agriculture Research and Development Institute (CARDI), Agricultural Experimentation Station, Agricultural Development Center and Center for Seed Production, Research and Technical Training.
- The Ministry of Agriculture, Forestry and Fisheries must review the framework for agriculture extension, including those implementing projects that are financed by both development partners and the Royal Government in order to lay out necessary measures to ensure consistency and efficiency of this service delivery.
- **Continue to expand irrigation:** The Ministry of Water Resources and Meteorology (MOWRAM) must improve the efficiency of water management on existing water resources and strengthen technical capacity for designing and selecting investment projects, especially learning from experiences of the neighboring countries, where geography and weather condition are similar. The practical measures included:
 - Maximize use of the existing water resources in the system. In the future, attention should be paid to economic efficiency and sustainability of the projects. Invest in small-scale irrigation network to benefit from existing or future large scale irrigation facilities.
 - Encourage NGOs and charitable people to participate in building small-scale irrigation canals.
 - Strengthen institutional capacity of the Ministry of Water Resources and Meteorology (MOWRAM) in the maintenance and management of water user communities.

- **Continue to build and maintain rural roads:** the Ministry of Rural Development (MRD) and relevant ministries must pay more attention to the construction and maintenance of rural roads to connect rice production areas to market.
- **Promote micro-credit for agriculture:** the Ministry of Economy and Finance (MEF) and National Bank of Cambodia (NBC) must review measures to facilitate and encourage commercial banks and other finance institutions to extend more credits to farmers.

B. Medium to longer term measures

- **Improve productivity and crop intensification:**
 - **Enhance water management, which is a key to crops productivity and intensification:** the Ministry of Water Resources and Metrology (MOWRAM) and the Ministry of Agriculture, Forestry and Fishery (MAFF) must develop a *Plan for Water Resource Management* for the next 10-20 years and introduce concrete measures, while focusing on investment in irrigation system and water management as top priorities of the Royal Government.
 - Increase investment to rehabilitate agricultural development stations and centers, and agricultural farms to support research and development, and the transfer technology to support agriculture production.
 - Expand agriculture extension services to commune level.
- **Promote implementation of «the National Policy on Rural Electrification»:** the Ministry of Industry Mine and Energy (MIME) must implement the existing «**National Policy on Rural Electrification**» and design a new project as soon as possible to facilitate electricity transmission and distribution to rural areas for pumping water to fields.
- **Promote and establish Farmer Organization:**
 - The Ministry of Agriculture Forestry and Fishery (MAFF) and relevant agencies must prepare plan to support the establishment of Farmer Organization (Association, Community and farmer Federation and so on)

and strengthen its role in coordinating, resolving production issues, needs and other concerns, as well as strengthen the ownership of farmers.

- The Ministry of Agriculture Forestry and Fishery (MAFF) must strengthen capacity of farmers and agriculture communities in borrowing and effectively utilizing loans from the financial institutions.
- **Promote and encourage the implementation of policy on sustainable use of agriculture land :**
 - The Ministry of Land Management, Urban Planning and Construction (MLMUPC) must give priorities to delivering land titles in the potential rice production areas to ensure security of tenure, reduce disputes and encourage investment in land. The titles can be used as collaterals for receiving loan for seeds, fertilizers and other investment needs.
 - The Ministry of Land Management, Urban Planning and Construction (MLMUPC) must cooperate with the Ministry of Agriculture Forestry and Fishery (MAFF) and agencies concerned to classify land use zone and widely disseminate this information to farmers.
 - The Ministry of Agriculture Forestry and Fishery (MAFF) must cooperate with the Ministry of Land Management, Urban Planning and Construction (MLMUPC) to draft a Law on Agriculture Land Utilization and Management aiming at ensuring sustainable and efficient use of agricultural land.
 - The Ministry of Planning (the National Institute of Statistic, NIS), the Ministry of Agriculture Forestry and Fishery (MAFF) and relevant institutions must conduct national agriculture census once in 10 year. Based on the census results, the Ministry of Agriculture Forestry and Fishery (MAFF) must develop a Land Use Map.
 - The Ministry of Agriculture Forestry and Fishery (MAFF) must draft a Law on Agriculture Community and a sub-degree on contract farming.

4.2. Measures on paddy rice collection and processing

A. Quick-win measures

- **Encourage participation of the private sector in paddy rice processing and milled rice export** by continuing the implementation of

the Investment Law, the Law on Amendment to the Law on Financial Management 2009 and related regulations and by improving the legal framework for investment and other related regulations if necessary;

- **Continue financing for paddy rice collection:** the Ministry of Economy and Finance (MEF) and National Bank of Cambodia (NBC) must prepare and introduce some necessary financial mechanisms to make it easier for the communities, rice millers and exporters to access loans, including from commercial banks and credit facilities that is guaranteed by the government. The policy measures include the following:
 - Recapitalize the Rural Development Bank (RDB) with an additional amount of 7 million USD (from 13 million USD to reach 20 million USD) by the end of 2010 or, at the latest, in early 2011.
 - Double the capital of the Agriculture Development and Support Fund (ADSF) from 18 million USD to 36 million USD, at the latest, in 2011.
 - Develop a Credit Guarantee Scheme to guarantee loans from commercial banks to companies and paddy collectors at the latest in 2011.
 - Cooperate with development partners to set up Risk Sharing Facility, at the latest in 2011. Its objective is to encourage commercial banks to extend loans to agriculture processing activities and small and medium enterprises (SMEs) in general.
- **Provide support and strengthen the Rice Miller Association:** the Royal Government will provide special treatment to the Rice Miller Association in the same way that it has supported the Garment Manufacturer Association in Cambodia (GMAC) in the garment sector and recognize the important role of the association for market access and protection of farmers' benefits and improving rice processing capacity to increase value added for milled rice export.

B. Medium to longer term measures

- **Create new financial instruments and leverage mechanism for financing:** the Ministry of Economy and Finance (MEF) and NBC must develop new financing instruments. At the same time, they must strongly

enforce the Law on Secured Transactions and Law on Financial Leasing to diversify the types of collaterals and the scope of financial operations such as operating lease, finance lease, warehouse receipt system and centralized credit information to reduce fear and risks from commercial banks and micro finances.

- Establish and strengthen farmer organization to develop the «Open Paddy Market» through some activities such as contract farming, weighting, drying and paddy-based collateral services to secure loans for its member, high quality seeds and fertilizers in order to produce rice to meet market demand.
- **Consider to establish *Agriculture Development Bank (ADB)* to support and promote agriculture both in terms of production and processing.**
- **Reduce electricity price and extend coverage areas:** the Ministry of Industry Mine and Energy (MIME) should speed up the diversification of power sources in order to lower the costs and expand the coverage areas to rural areas. The Electricity Authority of Cambodia (EAC) should take measures to ensure effective and rigorous enforcement of existing laws and regulations to make sure that the supply of power is based on economic efficiency and best practices, at an appropriate tariff. Moreover, MIME (Electricité du Cambodge, EDC) should further improve its management.

4.3. Measures on Logistics

A. Quick-win measures

- **Enhance trade facilitation, reduce informal fees and eliminate illegal check points:** The Ministry of Economy and Finance (General Department of Customs and Excise), the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Commerce (General Department of CAMCONTROL) and relevant agencies shall develop a specific strategy to achieve this objective by defining clear procedures at different steps in processing exports including inspection, document requirements, fees and time required to process export applications as well as a clear and publicly transparent division of responsibilities among export regulating ministries/agencies. They should

consider milled rice export as a top priority in order to reduce to a minimum informal payments and time required to export by extending “special treatment” to rice export in the same way that the garment sector has enjoyed.

- **Implement a single-stop service for export processing:** Ministry of Economy and Finance (General Department of Customs and Excise), Ministry of Agriculture, Forestry and Fisheries and Ministry of Commerce (General Department of CAMCONTROL) and relevant agencies shall set up a Single Stop Service for export processing and issuing certificates such as those on SPS and fumigation, grading and quality, and quantity and weight, and customs declaration.
- **Address grading and quality standards in compliance with internationally-recognized standards:** The Ministry of Agriculture, Forestry and Fisheries, the Ministry of Commerce and the Ministry of Industry, Mines and Energy shall create an independent certifying body or encourage well-known international independent certifying institutions to issue certificates on grading and quality as required by importing countries. The Ministry of Industry, Mines and Energy through the Cambodia Standard Institute shall cooperate with the Ministry of Commerce and the Ministry of Agriculture, Forestry and Fisheries to define grading and standards of Cambodian milled rice and work with the private sector to enforce those standards in the milled rice market, as well as to seek technical capacity to achieve those required standards.
- **Encourage the construction of Phnom Penh Port and bonded warehouse:** In order to diversify and identify potential rice export markets, taking into account the geographic locations of rice production, transport modalities and export destinations, the Royal Government will promote the use of Phnom Penh Port as an exit point, using feeder ships to load and transfer shipments into mother ships in a third country including Preah Sihanoukville Port. Moreover, the Royal Government will encourage the construction of bonded warehouses in Cambodia to facilitate transportation and distribution.

B. Medium to Longer-term Measures

- **Formulate strategic and legal framework with a special focus on sanitary and phyto-sanitary standards:**
 - Develop new legislations and regulations which are lacking and amend the existing legal framework and regulations.
 - Draft a Law on Sanitary and Phyto-Sanitary Standards and related sub-decrees and prakas, and enforce laws and regulations as well as strengthen capacity of officials in charge of this matter.
 - **Establish and strengthen a sound sanitary and phyto-sanitary certification system:** To improve food security in Cambodia and promote rice export, the Ministry of Industry, Mines and Energy, the Ministry of Agriculture, Forestry and Fisheries, the Ministry of Commerce and the Ministry of Health shall define a common sanitary and phyto-sanitary strategy with clear division of responsibilities. The ministries in charge shall strengthen human resource capacity and technical capability of existing laboratories to conduct tests and inspection, as well as enforce sanitary and phyto-sanitary measures. MAFF, MIME and MOC shall study the grading and quality requirements of different rice markets to propose options to address the issue of sanitation and phyto-sanitation certification, including the possibility of establishing an independent institution with participation from private sector.
 - Strengthen the capacity and infrastructure for SPS inspection at MAFF and other concerned ministries/agencies through establishment of referral laboratories which are equipped with the state-of-the-art technology, establish a branch network of laboratories in different provinces of Cambodia and at border check points, and build capacity of concerned staff to facilitate quick inspection and issue SPS certificates which are internationally recognized.
- **Invest in necessary infrastructure to reduce the costs of export:** The Ministry of Public Works and Transport and other concerned ministries/agencies shall prepare plan of actions to reduce infrastructure-related costs of export including costs related to transportation, port handling, storage, port operations and other service charges by assessing the possibility of investing in infrastructure, transportation and port handling facility.

Investment perspectives shall be discussed in dialogue and cooperation with bilateral and multilateral partners and/or the private sector to seek additional funds to complement the existing Royal Government's investment fund.

- **Speed up the rehabilitation and operationalization of the railway system (Poipet-Phnom Penh and Phnom Penh-Preah Sihanouk Province):** Shipping rice and other goods would be cheaper using the railway system, as it reduces informal fees and time. The Ministry of Public Works and Transport especially the Concession Management Committee for the Restructuring of Royal Railway Cambodia (CMC) shall accelerate the rehabilitation and development work by collaborating with the concessionaire to enable the earliest start of the railways operation.
- **Consider the establishment of *the Export-Import Bank (Exim Bank)* to support the export of rice and other produces.**
 - **Consider the establishment of *the Cambodia Development Bank (CDB)* to support the development of other physical infrastructure in order to boost economic growth and improve competitiveness of the Cambodian economy.**

4.4. Measures related to Marketing

A. Quick-win measures

- **Explore export opportunities in regional and global markets:** The Ministry of Commerce shall carry out a comprehensive study on Cambodia's potential markets for milled rice, and disseminate the results to wider stakeholders. In the meantime, the Ministry of Commerce shall lead delegations, consisting of representatives from concerned ministries/agencies and rice export companies, to negotiate the sale to the Philippines, explore opportunities to export milled rice to Malaysia, Indonesia, Brunei, and other potential importing countries in Europe.
- **Establish a *Rice Market Intelligence Unit*:** The Ministry of Commerce, the Ministry of Agriculture, Forestry and Fisheries and the private sector shall collaborate and consider options for establishing *a Rice Market Intelligence Unit*, which includes the current MAFF and MOC's mechanisms,

or a joint government-private sector arrangement or a separate private sector mechanism, in order to establish a body to provide information and analysis on regional and global rice markets.

- **Develop arrangements for information sharing with stakeholders in domestic market:** Concerned ministries/agencies shall disseminate market information, and use the information to prepare a monitoring toolkit covering the process of production, processing, export and trade. This will facilitate and support rice millers and farmer organizations with extension services and contract farming as well as the introduction of proactive and timely response measures.

B. Medium to longer-term measures

- **Prepare a Strategic Penetration Plan and Cambodia's position to compete in regional and global markets:** Cambodia should clearly define its strategic objectives to position itself in the international markets. The Ministry of Commerce shall lead this task by exploring new markets and disseminating market information to rice producers and exporters including capacity building. Moreover, the Ministry of Commerce in cooperation with the Ministry of Foreign Affairs and International Cooperation shall carry out negotiations of bilateral agreements with potential rice importing countries. In this spirit, the Royal Government will further commit to realizing the initiative of establishing *the Association of Rice Exporting Countries (AREC)*.

V- Risk Management

15. The Royal Government is well aware of the risks that could impair or undermine the effectiveness of these measures during implementation. Thus, this document will suggest safeguard measures and guidance to deal with the anticipated risks.

Fist, paddy rice production is largely subject to weather conditions and climate change as well as the unpredictability of Mekong River's water level in the dry season. Investment in irrigation system remains limited, and the stock of water, distribution and irrigation are also subject to the climate factor. Therefore, unpredictable change in climate could directly impact paddy rice production in

Cambodia. Knowledge about the types, features, scale and frequency of the calamities can help us to prepare ourselves to better cope with the eventual catastrophes, and the attention should be given to implement mitigation and adaptation strategy to reduce adverse impact and adapt to climate change.

Second, higher oil prices will have direct affect on production, processing, and transportation of rice. As a result, Cambodia's competitiveness could be undermined since Cambodia's energy sector depends on imported petroleum. Thus, focus should be on managing investments in the energy sector and the efficiency of EDC operations. In the future, Cambodia will diversify its energy sources to reduce the cost of energy and heavy reliance on petroleum products. In the context of high oil prices, the Royal Government will take necessary actions, such as those implemented, to reduce the direct impacts on farmers and rice processing industry.

Third, the milled rice market is highly protected. Policy changes in milled rice-importing countries could have direct impact on the demand for import and prices. The Royal Government will strengthen its diplomacy to foster good relations with milled rice-importing countries aiming to reduce the risk.

Fourth, the opening up of the milled rice markets to promote export would cause an increase in domestic prices, and the traditional mechanism of food stocking will become weak threatening national food security. Speculation in the milled rice market, through stockpiling to manipulate prices, can affect the living conditions of farmers and food security. In this regard, assessment of domestic and international market situation is very crucial for planning production, import of inputs and export including the regulation of prices. The Royal Government will be vigilant and take necessary actions to safeguard national food security and maintain price stability.

Fifth, the gains from this policy may not be shared directly with farmers; the benefit could be captured by middlemen, exporters and suppliers of agricultural inputs. The Royal Government adopts a market principle with fair and just competition ensuring participation by all concerned parties. Since farmers have limited capacity, the Royal Government will try its best to help train them and ensure their concerns being addressed in a participatory approach.

Sixth, paddy rice development areas can have high use of chemical fertilizers and pesticides and destruction of forest and flooded forest to expand cultivation land that could affect the ecological system. Thus, the Royal Government will pay high attention and take appropriate actions preserve the ecosystem and strike a balance between development and environmental conservation, aiming at ensuring sustainable development.

Seventh, implementation could be difficult and complicated due to ineffective coordination and unclear responsibility among implementing ministries/agencies. To

address this risk, the Royal Government will try to improve the coordination process with clear-cut division of responsibilities including measures to monitor and sanction any wrongdoings that may occur.

VI- Institutional Mechanism to Implement Policy on the Promotion of Paddy Rice Production and the Export of Milled Rice

16. To ensure effectiveness and efficiency in implementing this policy, the Royal Government decides to set out the following coordination and monitoring mechanism:

- Committee on Economic and Financial Policies shall be responsible for monitoring, evaluation and coordination at the policy level to ensure the consistency and efficiency of this policy measures with other economic policies.
- Agricultural Produce Export Promotion Committee led by the Ministry of Agriculture, Forestry and Fisheries, and the Ministry of Commerce are in charge of overall coordination and serve as a secretariat to the Prime Minister in implementing Policy on the Promotion of Paddy Rice Production and the Export of Milled Rice.
- The Ministry of Economy and Finance and the National Bank of Cambodia shall be responsible for addressing issues related to the establishment of financial institutions as well as issues related to financing, according to the spirit of this policy document.
- Concerned ministries/institutions shall implement their functions in accordance to their assigned responsibility stipulated in the above policy measures and institutional arrangements, and shall report the progress and propose modified or additional measures to the Prime Minister for decision and guidance as required.

VII- Conclusion

17. Though the current global milled rice market is highly protected, Cambodia is blessed with opportunity to export milled rice in the future thank to the increase in domestic paddy rice production and the potential in the world milled rice trade. So far, the performance of agriculture is outstanding especially in terms of productivity improvement and diversification, due to steadfast efforts of the Royal Government and all stakeholders including the participation of farmers.

18. In fact, high growth in agricultural sector will benefit most Cambodian people who are farmers with their living standard improved. Thus, the Royal Government is committed to promoting paddy rice production and removing all

constraints to milled rice export from Cambodia. Indeed, the success of this policy will depend on actual implementation; and the task is complex and hard to achieve, yet it really requires cooperation, coordination and strong commitment especially by way of improving the leadership and management of all concerned ministries/agencies and stakeholders.

19. The Royal Government is strongly convinced that all ministries/agencies of the Royal Government and other stakeholders, including the private sector and development partners, and particularly Cambodian farmers across the country, will join hands in pursuing this mission to bring about development, progress, and prosperity to the Kingdom of Cambodia.

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Annex I: Regional/Global Milled Rice Market and Challenges

I - Regional and Global Milled Rice Market

1. In spite of turbulences, the volume of international milled rice trade is estimated to reach 31.3 million tons in 2010, a slight increase from 29.7 million tons in 2009. Demand for low and medium grade milled rice in Asia will grow this year as the Philippines faced severe weather condition, Indonesian government cut down subsidies on fertilizers and Asian governments bump up their rice reserves. Milled rice trade volume may reach 14.5 million tons in Asia. Demand in Africa is projected to decrease while Latin America may see a slight increase, especially in Brazil. The price is projected to be volatile and go up.

2. In general, most milled rice producing countries also import milled rice. In this regard, the increase of milled rice trade volume is mainly caused by two factors, that is the change in production caused by climate change and/or changes in economic structure, and supply shortage caused by population and economic growth. China and Indonesia are big milled rice producers in Asia but they also import milled rice as population and economic growth in both countries have driven the demand up. Currently, India is a major producer and exporter of milled rice, however, changes in production structure driven by high growth, increase in households' wealth and population boom might transform this country into a milled rice importer.

3. Some countries do not produce milled rice but changes in preference/taste can also create milled rice demand, especially European countries as the annual demand is estimated at one million tons. Milled rice can be also exported to the Middle East such as Iran, Iraq, and Saudi Arabia and so forth. As the trend of oil price is generally going up, milled rice demand in these oil-dominated economies will increase accordingly. Africa also represents a significant share of global milled rice demand. Assistance from the international community will accelerate growth in this region. As a result, the demand of milled rice will go up. In short, as long as growth continue, the global milled rice demand will rise, particularly in Asia where drives the global growth.

4. Southeast Asia countries, in particular Thailand, Vietnam and Myanmar are the largest milled rice exporters. The US ranks third in the global milled rice exporters, followed by Pakistan and India. With the surplus of 3.5 million tons of paddy rice (equivalent to 2 million tons of milled rice), Cambodia can be among the top five milled rice exporters in the world. Moreover, as Cambodia's milled rice export represent less than 10% of the global market share, its emerging presence will not affect the global price. More importantly, the room for production expansion in Thailand and Vietnam is very limited and they cannot cope with the rising global demand therefore, Cambodia can grab this opportunity to fill the global demand-supply gap.

5. However, factors ranging from high political sensitivity, the need to preserve traditional paddy rice cultivation method and assurance of national food security have made global milled rice market heavily protected and subsidized. The volume of global milled rice trade is way below the actual demand. Tariff, quota and special treatment measures have been used in the global milled rice market. Taiwan set a quota of 8% of domestic consumption. Columbia, Costa Rica, Indonesia, Morocco, Thailand and Venezuela use both tariff and quota measures. China set a quota of four million tons per year and impose 1% inbound tariff.

6. In some ASEAN countries such as Indonesia, Malaysia, the Philippines, Vietnam and Cambodia, milled rice is categorized as a highly sensitive product. Indonesia imposes the maximum inbound tariff of 430 rupiahs per kg; Malaysia exempts all tariffs but license must be acquired prior to import; Thailand may impose a maximum tariff of 3 baths per kg and charge 5% under the framework of CEPT (Common External Trade Policy); and Vietnam maintains its maximum tariff between 40% to 50% (for brown rice) however, under the CEPT framework, it charged 15% in 2004 and 5% in 2005. Cambodia did not include milled rice in the list of tariff exemption under " Early Harvest Program" with China.

II - Challenges

II.1. Paddy Rice Production

7. Paddy rice surplus is still limited. Should Cambodia wants to export 3 to 4 million tons of milled rice, Cambodia must boost its paddy rice production to at least 10 to 11 million tons per year. To attain this objective, the following issues must be addressed:

A. **Low productivity** - the paddy rice yield is relatively low compared to the neighboring countries with similar weather and soil condition. In 2006, the average yield in Cambodia was 2.6 tons/hectare while Thailand, Laos and Vietnam achieved 2.8 tons, 3.5 tons and 4.9 tons respectively. As the room for expansion of rice field is very limited, especially for late-maturing paddy rice, we must improve productivity on the existing cultivated areas, i.e. through intensification approach. Quick and simple measures cannot ensure high yield for the long term, therefore we must focus on reform and investment, both from the public and private sector.

B. **Land issue** - In general, we have observed the following issues: lands are generally underutilized; crops do not suit the soil conditions; and arable areas are used for other purposes or left unused. We can improve the efficiency of land utilization by creating zoning for agriculture, industry, tourism, residential areas, and sanctuary. Furthermore, crop mapping can also boost rice production as investors can rely on the information to make informed decision. Moreover, only around 10% of farmers have land title certificates. Aside from legal assurance of ownership, the certificate can be used as collateral to borrow money from micro-finance institutions. Land titling will also motivate farmers to invest more on their lands.

C. **Rice intensification** - Most Cambodian farmers cultivate paddy rice once per year in rainy season, while farmers in Vietnam's delta region cultivate 3.5 times. As the room for expansion of paddy rice field is very limited, we must increase the frequency of rice cultivation per year to boost the production. To achieve this target, the Royal Government will encourage more investment on irrigation systems to support the expansion of early-maturing paddy rice field.

Water management is the key to productivity improvement as Cambodia is prone to drought and flood. We will learn from the Vietnam's delta region and promote the use of economically efficient water management methods that are appropriate for Cambodia.

D. Farmer organizations - Over the past, the support for the agriculture sector was largely based on supply side, and little attention was given to the demand and the role of farmers. Most farmers are good listeners and work hard but lack of adequate technical knowledge, technologies and financial resources. They are not experienced in dealing with the markets. Farmers' needs are complicated and multi-faceted, ranging from capacity building to transfer of technologies, production inputs and credit to market access. Assistance provided to individual farmer is costly and inefficient in the areas of credit, production inputs and market information. Assistance provided to the community will be more systematic, cost-effective and more efficient. For example, farmers can cope with drought much better if they jointly own water pumping machines or irrigation systems within a framework of a farmer community.

II.2. Paddy Rice Processing and Trade in Milled Rice

8. The price of Cambodian paddy rice is 30% to 40% cheaper than its neighbors Thailand and Vietnam. This low profit margin is a competitive advantage but unofficial fees, high transportation costs and high processing costs make this less significant. Exporting paddy rice is a lost. If processed domestically, some by-products such as broken rice, husk and bran can be used as important inputs for aquaculture and animal breeding that enable farmers to earn extra income. With more investment in modern rice mill facilities, Cambodia can increase its production of quality milled rice for the growing international market and boost the reputation and international recognition of the Cambodian milled rice standards. In this connection, the Royal Government must address the following issues to increase domestic value-added:

A. **High electricity price** - electricity represents 25% of the total processing costs. This fades Cambodia's competitive advantage and the situation can be worse taking into account high and volatile oil price. High energy price is an obstacle to the expansion of the irrigation systems. In the low land Mekong plain, petroleum products are used to pump water into irrigation canals. Therefore, high energy prices limit the ability of farmers to plant two paddy crops a year and to increase yields. For instance, urban dwellers pay 18 - 20 cents per kWh, while those living in the rural areas are forced to pay up to 30 - 90 cents, compared to 10 cents in Vietnam. Unreliable supply and high electricity price force rice mills to use their own diesel generators which cost them 12.60 dollars or 2.2% per ton of rice, compared to 23.38 dollars or 4.1% per ton if electricity is used instead.

B. **High transportation cost** - poor transport infrastructures such as roads, railways, warehouses, and handling equipment increase rice price. To transport one ton of rice on 100-km road, Cambodian farmers must spend 15 dollars, while this costs only 4 dollars and 7.5 dollars in Thailand and Vietnam respectively. Moreover, the number of handling equipment and port-nearby warehouses are not adequate, a major challenge for rice export especially during rainy season.

C. **Lack of access to and high cost of credit** - Lack of access to and high cost of credit decrease domestic value-added and hinder milled rice export. Limited access to credit, both for working capital and investment outlays, represents an obstacle for rice millers to stockpile paddy rice and modernize their processing machineries. However, given the sound and vibrant banking system and a large amount of available credit lines, the capital and the costs of financing should not be a problem. The problem is that bank intermediaries do not clearly understand the risks and the expected returns from agriculture investments, as the majority of bankers believe that agriculture is a high risk and low return sector. Moreover, lack of borrowers' financial information and

records make it more difficult for the banks to assess the repayment capacity and the status of the borrowers.

11.3. Facilitation of Paddy Rice Export

9. Even though Cambodia has a vast potential for expanding paddy rice production due to small domestic markets, milled rice export can either be considered both as an opportunity and a challenge, as our export facilitation system, both soft and hard components, remain inconsistent and fragmented. Hard components consist of transport infrastructures, ports, rural roads, warehouses and so forth. Soft components include trade facilitation, institutional support, quality standards, sanitary and phyto-sanitary measures, and so forth. The following issues related to export must be addressed :

A. **Weak institutional support** - In spite of the Royal Government's effort to promote milled rice export, institutional support remain weak and fragmented, especially the coordination between government ministries and agencies, such as the Directorate General of Customs and Excise of the Ministry of Economy and Finance, the CAMCONTROL of the Ministry of Commerce and Committee for the Promotion of Agricultural Export of the Ministry of Agriculture, Forestry and Fishery. While each government bodies are tasked to inspect export procedures, the private sector, i.e. exporters are required to deal with duplication among these bodies, pay informal fees, spend a lot of time, and more importantly, this unpredictability poses an important risk to exporters in terms of timely fulfilling their contractual obligations with their foreign partners. In general, both official and unofficial fees and the costs of transporting rice from rice mills to ports are high, and unofficial fees could represent 50% of the total transportation costs. Moreover, port charges and delays in customs clearance, as well as official and informal fees even drive the price up. This prompts exporters and traders to explore other cheaper options such as unofficial export of paddy rice through cross-border trade which resulted in diminution of domestic value-added to the national economy.

B. Lack of international recognition of quality and standards -

Currently, quality and safety standards are not required for the domestic markets. But for some export markets require strict standards, thus it is difficult for the Cambodian milled rice to meet those standards. Moreover, Cambodian milled rice exporters face two main barriers that constitute the features of the international trade: (1) tighter sanitary and phytosanitary measures, and (2) the practice of “fair trade” by some multinational companies. Quality regulation and quality control measures of the Royal Government of Cambodia and the private sector have not been effectively enforced to ensure high quality standards of the agricultural products meet the demand of the international markets. Licensing and Cambodian quality standard testing responsibility lies with the Ministry of Agriculture Fisheries and Forestry, the Ministry of Industry Mine and Energy and the Ministry of Commerce’s CAMCONTROL. However, in reality, good cooperation among these ministries is required to ensure the quality and safety of Cambodian agricultural products designed for export. Moreover, to improve their competitive advantage, rice millers must improve their technologies in stockpiling and packaging of milled rice for export, so that rice quality and classification meet the conditions of the buyers and the SPS requirements.

C. Limited port infrastructure – The lack of handling equipment in Sihanoukville Port is a constraint to the export of large quantity of milled rice. Only vessels with depth less than 8 to 8.5 meters can dock at the Sihanoukville Port, as the waterway is shallow and rocky. The maximum allowable load of vessels docking in the port is ten thousand tons and cannot just ship milled rice to Southeast Asia or Africa. The Ho Chi Minh Port allows vessels with load capacity up to thirty thousand tons in docking station and sixty thousand tons in transfer zone.

II.4. Market

10. Milled rice market is heavily protected and import procedures vary from one country to another. As Cambodia is a new player in milled rice market, it must face a

steep learning curve and improve its export capacity to penetrate the international market.

Annex II: Policy Measures for Promotion of Paddy Rice Production and Milled Rice Export

Types of Measure	Issues to be addressed	Policy Measures	Responsible Institutions
Rice Production			
Quick-win Measures	<i>Increase productivity by using high yield seed and modern farming techniques</i>	-Facilitate import clearance procedures for rice seeds, fertilizers, agricultural inputs and machinery -Continue providing tax incentives to encourage imports of materials and equipment	-Ministry of Economy and Finance -Ministry of Agriculture, Forestry and Fisheries
		-Provide incentives to local seed producers and distributors 1. determine the number of prioritized rice varieties to be promoted and disseminated by the end of 2010 2. prepare legal framework and mechanism to promote seed production and distribution by the end of 2010 3. further strengthen and expand the capacity of the CARDI, Agricultural Experiment Station, Agricultural Development Center and Center for Seed Production, Research and Technical Training. 4. review the framework of agriculture extension	-Ministry of Agriculture, Forestry and Fisheries

	<i>Continue to expand irrigation</i>	- Make full use of the existing water resources -Select investment projects that are economically viable -Invest in small scale irrigation system to get water from existing dams and major canals to farms	-Ministry of Water Resources and Meteorology
		-Encourage NGOs and charitable person to build small scale irrigation canals	- Ministry of Water Resources and Meteorology -Relevant ministries and institutions
		- Strengthen institutional capacity for maintenance and management of water user community	- Ministry of Water Resources and Meteorology
	<i>Continue to build and maintain rural roads</i>	-Further focus on constructing and maintaining rural roads connecting rice production areas to markets	-Ministry of Rural Development -Relevant Ministries and Institutions
	<i>Promote micro-credit for agriculture</i>	- Review measures to facilitate and encourage commercial banks and other finance institutions to provide more credits to farmers	-Ministry of Economy and Finance - National Bank of Cambodia
Medium to Longer Term Measures	<i>Improve productivity and crop intensification</i>	-Prepare Plan for water resources management for 10-20 years and introduce concrete measures -Determine investment in irrigation and water management systems as priority for the government	- Ministry of Water Resources and Meteorology -Ministry of Agriculture, Forestry and Fisheries

		-Increase investment to rehabilitate agricultural development stations and centers, and agricultural farms to support research and development, and the transfer technology to support agriculture production.	- Ministry of Water Resources and Meteorology
		- Expand agriculture extension services to commune level	- Ministry of Agriculture, Forestry and Fisheries - Relevant Ministries and Institutions
	<i>Promote implementation of the National Policy on Rural Electrification</i>	- implement the existing National Policy on Rural Electrification - design a new project as soon as possible to facilitate electricity transmission and distribution to rural areas for pumping water to irrigate agricultural crops	- Ministry of Industry, Mines and Energy - Relevant Ministries and Institutions
	<i>Promote and establish Farmer Organization</i>	- prepare plan to support the establishment of Farmer Organization - strengthen its role in coordination, resolving production issues, needs and other concerns, as well as strengthen the ownership of farmers	- Ministry of Agriculture, Forestry and Fisheries - Relevant Ministries and Institutions
		- strengthen capacity of farmers and agriculture communities in borrowing and effectively utilizing loans from the financial institutions	- Ministry of Agriculture, Forestry and Fisheries - Relevant Ministries and Institutions
	<i>Promote and encourage the implementation of</i>	- give high priority to delivering land titles in potential rice production areas	- Ministry of Land Management, Urban Planning and Construction

	<i>policy on sustainable use of agriculture land</i>	- prepare land use zoning and widely disseminate this information to farmers	- Ministry of Land Management, Urban Planning and Construction - Ministry of Agriculture, Forestry and Fisheries - Relevant Ministries and Institutions
		- draft a Law on Agriculture Land Use and Management aiming at ensuring sustainable and efficient use of agricultural land	- Ministry of Agriculture, Forestry and Fisheries - Ministry of Land Management, Urban Planning and Construction
		- conduct national agriculture census once in 10 year. Based on the census results, develop a Land Use Map	- Ministry of Planning (National Institute of Statistics) - Ministry of Agriculture, Forestry and Fisheries - Relevant Ministries and Institutions
		- draft a Law on Agriculture Community and a sub-degree on contract farming	- Ministry of Agriculture, Forestry and Fisheries
Paddy rice collection and processing			
Quick-win Measures	<i>Encourage participation of the private sector in paddy rice processing and milled rice export</i>	- continue the implementation of the Investment Law, the Law on Amendment to the Law on Financial Management 2009 and related regulations - improve the legal framework for	- Council for the Development of Cambodia (CDC) - Ministry of Economy and Finance

		investment and other related regulations if necessary	- Relevant Ministries and Institutions
	<i>Continue financing for paddy rice collection</i>	- recapitalize RDB with an additional amount of 7 million by the end of 2010 or, at the latest, in early 2011	- Ministry of Economy and Finance
		- Double the capital of ADSF from 18 million USD to 36 million USD, at the latest, in 2011	- Ministry of Economy and Finance
		- develop a Credit Guarantee Scheme to guarantee loans from commercial banks to companies and paddy rice collectors at the latest in 2011	- Ministry of Economy and Finance - National Bank of Cambodia
		- set up Risk Sharing Facility to encourage commercial banks to extend loans to agriculture processing activities and small and medium enterprises (SMEs) in general, at the latest in 2011	- Ministry of Economy and Finance
		<i>Provide support and strengthen the Rice Miller Association</i>	- provide special treatment to the Rice Miller Association in the same way that it has supported GMAC
Medium and Long Term Measures	<i>Create new financial instruments and leverage mechanism for financing</i>	- develop new financing instruments - strengthen the implementation of laws on secured transaction and financial leasing - establish centralized credit information to reduce fear and risks for commercial banks and micro finance institutions.	- Ministry of Economy and Finance - Ministry of Commerce - National Bank of Cambodia
		- consider to establish the Agriculture Development Bank (ADB) to support and promote agriculture both in terms of production and processing	- Ministry of Finance and Economy - National Bank of Cambodia

	<i>Develop “Open Paddy Rice Market”</i>	- develop the «Open Paddy Rice Market», which consist of some activities such as contract farming, weighting, drying and paddy-based collateral services to secure loans for its member, high quality seeds and fertilizers in order to produce rice to meet market demand	- Ministry of Agriculture, Forestry and Fisheries - Relevant Ministries and Institutions
	<i>Reduce electricity price and extend coverage areas</i>	- speed up the diversification of power sources in order to lower the costs and expand the coverage areas to rural areas	- Ministry of Industry, Mines and Energy
		- take measures to ensure effective and rigorous enforcement of existing laws and regulations to make sure that the supply of power is based on economic efficiency and best practices, at an appropriate tariff	- Electricity Authority of Cambodia (EAC)
		- EDC should further improve its management	- Ministry of Industry, Mines and Energy (EDC)
<i>Logistic System</i>			
Quick-win measures	<i>Enhance trade facilitation, reduce informal fees and eliminate illegal check points</i>	-develop a specific strategy to achieve this objective by defining clear procedures at different steps in processing exports including inspection, document requirements, fees and time required to process export applications - clear and publicly transparent division of responsibilities among export regulating ministries/agencies - consider rice export as a top priority in order to reduce to a minimum informal payments and time required to export by extending “special treatment” to rice	- Ministry of Economy and Finance (General Department of Customs and Excise) - Ministry of Agriculture, Forestry and Fisheries - Ministry of Commerce (General Department of Camcontrol) - Relevant Ministries, Institutions and Authorities

		export in the same way that the garment sector has enjoyed	
	<i>Implement single-stop service for export processing</i>	- set up a Single Stop Service for export processing and issuing certificates such as those on SPS and fumigation, grading and quality, and quantity and weight, and customs declaration	- Ministry of Economy and Finance (General Department of Customs and Excise) - Ministry of Commerce (General Department of Camcontrol) - Ministry of Industry, Mines and Energy (Institute of Standardization) - Relevant ministries and institutions
	<i>Address grading and quality standards in compliance with internationally-recognized standards</i>	- create an independent certifying body or encourage well-known international independent certifying institutions to issue certificates on grading and quality as required by importing countries	- Ministry of Industry, Mines and Energy (Institute of Standardization) - Ministry of Agriculture, Forestry and Fisheries - Ministry of Commerce
		- define grading and standards of Cambodian rice and work with the private sector to enforce those standards in the rice market - seek technical capacity to achieve those required standards	- Ministry of Industry, Mines and Energy (Institute of Standardization) - Ministry of Agriculture, Forestry and Fisheries - Ministry of Commerce - Private Sector

	<i>Encouraging the construction of Phnom Penh Port and bonded warehouse</i>	<ul style="list-style-type: none"> - strengthen the capacity and promote the use of Phnom Penh Port as an exit point - encourage the construction of bonded warehouses in Cambodia to facilitate transportation and distribution 	<ul style="list-style-type: none"> - Ministry of Public Works and Transportation - Ministry of Economy and Finance
Medium to Longer-term Measures	<i>Formulating strategic and legal framework with a special focus on sanitary and phyto-sanitary (SPS) standards</i>	<ul style="list-style-type: none"> - develop new legislations and regulations which are lacking and amend the existing legal framework and regulations 	<ul style="list-style-type: none"> - Farmers' Products Export Promotion Committee - Relevant Ministries and Institutions
		<ul style="list-style-type: none"> - draft a Law on SPS and related sub-decrees and prakas, and enforce laws and regulations as well as strengthen capacity of officials in charge of this matter - establish and strengthen a sound SPS certification system - strengthen the enforcement laws and regulations - define a common SPS strategy with clear division of responsibilities - strengthen human resource capacity and technical capability of existing laboratories to conduct tests and inspection, as well as enforce SPS measures 	<ul style="list-style-type: none"> - Ministry of Agriculture, Forestry and Fisheries - Ministry of Commerce - Ministry of Health - Ministry of Industry, Mines and Energy
		<ul style="list-style-type: none"> - Strengthen the capacity and infrastructure for SPS inspection 	<ul style="list-style-type: none"> - Ministry of Agriculture, Forestry and Fisheries - Relevant Ministries and Institutions
	<i>Invest in necessary infrastructure to reduce the costs of export</i>	<ul style="list-style-type: none"> - prepare plan of actions to reduce infrastructure-related costs of export - discuss the concepts of investment projects with bilateral and multilateral partners and/or the private sector to seek 	<ul style="list-style-type: none"> - Ministry of Public Works and Transport - Relevant Ministries and Institutions

		<p>additional funds</p> <ul style="list-style-type: none"> - Speeding up the rehabilitation and operationalization of the railway system (Poipet-Phnom Penh and Phnom Penh-Sihanoukville) - accelerate the rehabilitation and development work by collaborating with the concessionaire to enable the earliest start of the railways operation 	<ul style="list-style-type: none"> - Ministry of Public Works and Transport () - License Holder Companies
	<i>Make financing easy for export</i>	<ul style="list-style-type: none"> - consider the establishment of the Export-Import Bank (Exim Bank) to support the export of milled rice and other produces 	<ul style="list-style-type: none"> - Ministry of Economy and Finance - National Bank of Cambodia
	<i>Make financing easy for infrastructure development</i>	<ul style="list-style-type: none"> - consider the establishment of the Cambodia Development Bank (CDB) to support the development of other physical infrastructure in order to boost economic growth and improve competitiveness of the Cambodian economy 	<ul style="list-style-type: none"> - Ministry of Economy and Finance - National Bank of Cambodia
Marketing Measures			
Quick-win measures	<i>Explore export opportunities in regional and global markets</i>	<ul style="list-style-type: none"> - comprehensive study on Cambodia's potential markets for rice - disseminate the results to wider stakeholders - lead delegations consisting of the representatives of relevant ministries and milled rice exporting companies to negotiate the sale of milled rice to the Philippines, explore opportunities to export milled rice to Malaysia, Indonesia, Brunei, 	<ul style="list-style-type: none"> - Ministry of Commerce - Ministry of Foreign Affairs and International Cooperation - Relevant Entities

		and other potential importing countries in Europe	
	<i>Establishing a Rice Market Intelligence Unit</i>	- consider options for establishing a Rice Market Intelligence Unit to provide information and analysis on regional and global rice markets	- Ministry of Commerce - Ministry of Agriculture, Forestry and Fisheries - Private Sector
	<i>Develop arrangements for information sharing with stakeholders in domestic market</i>	- disseminate market information - use the information to prepare a monitoring toolkit covering the process of production, processing, export and trade	- Ministry of Commerce - Ministry of Agriculture, Forestry and Fisheries - Ministry of Water Resources and Meteorology - Ministry of Rural Development
Medium to longer-term measures	<i>Prepare a Strategic Penetration Plan and Cambodia's position to compete in regional and global markets</i>	- define its strategic objectives to position Cambodia in the international markets - lead this task by exploring new markets and disseminating market information to rice producers and exporters - carry out negotiations of bilateral agreements with potential rice importing countries - realizing the initiative of establishing the Association of Rice Exporting Countries (AREC)	- Ministry of Commerce - Ministry of Foreign Affairs and International Cooperation - Relevant Ministries and Institutions

Appendix III: Projection of Cambodia Paddy Rice production to 2015

Post-harvest assumption:

- Paddy to rice conversion ratio is 64%
- Seed and post-harvest loss: 13% of total production
- Per capita rice consumption: 143 kg
- Population growth rate: 1.5 %

Production assumption:

- **Cultivated Area for wet season paddy rice:** Total arable land for wet season paddy rice is estimated to be 2.4 hectares in 2009 of which cultivated area (plowed and planted) was 93.5% and 4% of them was double cropping (twice per year round). We assume that cultivated areas could be maintained around 93% and will reach 95% in 2015. The cultivated area is subject to weather conditions and response of farmers, we assume that double-cropping area will increase gradually from 4.2% to 5% in 2015 due to increase in investment in irrigation system.
- **Cultivated Area for dry season paddy rice:** Cultivated area of dry season paddy rice has expanded to 385,000 hectares in 2009. With efforts to invest in irrigation system, land for dry season rice could be further expanded to 480,000 hectares by 2015. Contraction in cultivated area in 2010 is attributed to demolition of water reservoirs within the Tonle Sap area.
- **Increase in yields:** With reference to historical data of the last ten years, yield of wet and dry season paddy rice grew annually an average of 4.42% and 7.28% respectively. In the future, growth rate of both yields will be diminishing. We assume that wet season paddy rice yield will make annual increase at 3% and reach its peak at 3 tons per hectare, while dry season paddy rice yield will increase at 7.28% and reach its peak at 5.5 tons per hectare.
- **Production loss:** Based on a decade-long data, average annual loss of wet season paddy rice and dry season paddy rice is assumed to be at 10% and 5% respectively due to weather conditions and destruction by grass hoppers.

Projection of Paddy Rice Production in Cambodia 2010-2015

	2008	2009	2010	2011	2012	2013	2014	2015
Cultivated Area of wet season paddy rice (Million Hectare)	2.26	2.33	2.34	2.35	2.36	2.37	2.38	2.39
<i>-Average yield (ton/hectare)</i>	2.54	2.62	2.70	2.78	2.86	2.95	3.04	3.04
Cultivated Area of dry season paddy rice (Million Hectare)	0.36	0.39	0.38	0.38	0.41	0.42	0.45	0.48
<i>-Average yield (ton/hectare)</i>	4.03	4.13	4.43	4.75	5.10	5.47	5.50	5.55
Production loss (Million Metric Ton)	0.01	0.12	0.72	0.75	0.78	0.81	0.85	0.86
Total production (Million Metric Ton)	7.18	7.59	7.30	7.62	8.09	8.44	8.85	9.08
Seed and Post-harvest loss (Million Metric Ton)	0.93	1.00	0.95	0.99	1.05	1.10	1.15	1.18
Population (Million)	13.78	13.84	14.05	14.26	14.47	14.69	14.91	15.13
Domestic consumption (Million Metric ton)	3.08	3.09	3.14	3.19	3.23	3.28	3.33	3.38
Paddy rice for export (Million Metric ton)	3.16	3.51	3.32	3.44	3.80	4.06	4.37	4.51
Milled rice for export (Million Metric ton)	2.03	2.25	2.06	2.20	2.43	2.60	2.80	2.89

Annex IV: Ten Largest Milled Rice Importers and Exporters

<i>Nº</i>	<i>Largest Producers (Million Metric tons)</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
1	China (Import)	193.4	197.2	200.4
2	India	148.8	131.3	151.0
3	Indonesia (Import)	60.3	64.3	64.9
4	Vietnam	38.7	38.9	38.8
5	Myanmar	30.5	31.0	32.0
6	Thailand	31.7	29.8	31.6
7	The Philippines (Import)	17.1	16.0	17.4
8	Brazil (Import)	12.1	12.6	11.5
9	Japan (Import)	11.0	10.6	10.7
10	Pakistan	10.4	10.0	10.1
The World's Total		686.1	679.9	710.4

<i>Nº</i>	<i>Largest Importer (Million Metric tons)</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
1	The Philippines	2.3	1.8	2.5
2	Nigeria	2.0	1.8	1.8
3	Iran	1.0	1.4	1.2
4	Iraq	0.8	1.1	1.2
5	Europe	1.3	1.0	1.1
6	Saudi Arabia	1.0	1.0	0.9
7	Malaysia	1.0	0.9	0.9
8	Ivory Coast	0.9	0.9	0.9
9	Senegal	0.9	0.9	0.8
10	South Africa	0.8	0.9	1.0
The World's Total		30.1	29.7	31.3

<i>Nº</i>	<i>Largest Exporter (Million Metric tons)</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
1	Thailand	10.0	8.5	8.8
2	Vietnam	4.7	6.0	6.0
3	United States	3.3	3.0	3.3
4	Pakistan	2.8	2.9	3.4
5	India	3.5	2.5	2.2
6	Myanmar	0.2	1.1	1.3
7	Uruguay	0.8	0.8	0.7
8	Egypt	0.5	0.5	0.6
9	Argentina	0.3	0.5	0.5
10	Guyana	0.2	0.3	0.3
World		30.1	29.7	31.3

Source: Rice Market Monitor Volume XIII, Issue 1, April 2009, The Food and Agriculture Organization (FAO)