

# Cambodia Agricultural Value Chain Program (CAVAC)

## CAVAC 2012 Annual Work Plan



Second official submission, comments from MAFF, MOWRAM, AusAID and SMG included.

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## Abbreviations and Acronyms

ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
AFD	Agence Française de Développement
AusAID	Australian Agency for International Development
AWP	Annual Work Plan

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CARDI	Cambodian Agricultural Research and Development Institute
CAR	Council for Administrative Reform
CARF	Cambodian Agriculture Research Fund
CAVAC	Cambodia Agricultural Value Chain Program
CDRI	Cambodia Development Research Institute
CIAT	International Centre for Tropical Agriculture
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DTL	Deputy Team Leader
FWUC	Farmer Water User Community
GDA	General Directorate of Agriculture
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IDE	International Development Enterprise
IFC	International Finance Corporation
JICA	Japan International Cooperation Agency
IRRI	International Rice Research Institute
MAFF	Ministry of Agriculture, Forestry and Fisheries
MOWRAM	Ministry of Water Resources and Meteorology
M&E	Monitoring and Evaluation
MSME	Micro Small and Medium Enterprise Program
MTR	Mid-term Review
NSW I&I	New South Wales Industry and Investment
OC	Operational Contractor
O&M	Operation and Maintenance
PDA	Provincial Department of Agriculture
PDD	Program Design Document
PDWRAM	Provincial Department of Water Resources and Meteorology
POC	Priority Operating Cost
RGC	Royal Government of Cambodia
RUA	Royal University of Agriculture
SAW	Strategy for Agriculture and Water
SIF	Supplementary Investment Fund
SPC	Saigon Plant Protection
TAF	The Asia Foundation
TWGAW	Technical Working Group on Agriculture and Water
USAID	United States Agency for International Development

## 1 INTRODUCTION

The Cambodia Agricultural Value Chain Program (CAVAC) Annual Work Plan (AWP) 2012 is presented for the 12-month period from 1 January 2012 – 31 December 2012.

This AWP was developed in collaboration with key counterparts and stakeholders through individual consultation, provincial coordination meetings and a development partners' workshop. The Plan will also be informed by the findings of the Sector Monitoring Group in their mission in October 2011.

The following plan details: a short analysis of progress so far and a direction for 2012; implementation strategies; a description of the major activities planned for 2012; and a summary of expected results.

The AWP 2012, and its accompanying annexes, is provided for the information, review and approval of the National Steering Committee (NSC).

## **2 PROGRAM DESCRIPTION**

CAVAC aims to reduce poverty by increasing farmer incomes in the rice-based farming systems of Cambodia through accelerating the value of agricultural production. The Program is implemented through four components: Agribusiness Development; Water Management; Research and Extension; and, Business Enabling Environment. All components work closely together with staff working across a number of components. Responsibility for the implementation of the Program is shared between the Team Leader, Cardno Emerging Markets (Australia) Pty Ltd (the Operational Contractor) and the Australian Centre for International Agricultural Research (ACIAR) under the direction of AusAID and the Royal Government of Cambodia.

### **2.1 Government priorities**

The *Policy Paper on the Promotion of Paddy Production and Rice Export*, as approved by the Council of Ministers on 25 July 2010, has become a guiding document for the Program. The clear priorities of the Royal Government of Cambodia (RGC) to increase yields in paddy production and promote the export of rice with a package of support will be at the heart of CAVAC's activities in 2012. Improved access to irrigation, better seeds and other inputs, innovation, better farmer knowledge and support to export are the focus of the Policy Paper and will remain the focus of CAVAC throughout the coming year. The Policy Paper is also well aligned with the Strategy for Agriculture and Water (SAW).

During the regional consultancy meetings, the Provincial Departments of Agriculture (PDAs) expressed the need for continued support in the implementation of the Policy.

## 2.2 Key elements of CAVAC's methodology

As the main selection and design criteria for its interventions, CAVAC uses international best practice to achieve maximum *value-for-money* and *sustainability of farmer support systems*. The Program promotes better functioning of support systems such as the seed market, the rice export system or embedded information in the value chain. The list of the support systems in which CAVAC is active is broad (see text box).

The focus on poverty, and the pre-condition to be fair and neutral, further sharpens the design and implementation of the Program. It also forms the basis for applying good practice related to the environment, gender and disability. When working with the private sector, CAVAC is careful to avoid negative side effects and unfair competition.

## 2.3 Program timeline

At present, CAVAC is expected to conclude on 30 June 2014.

As described in the 2009 AWP, CAVAC can be divided in two stages: an initial stage of building-up the Program and developing activities in all selected markets and systems (see Figure 2), and a second stage, after a Mid Term Review (MTR), where resources will be reallocated to those activities with a likelihood of higher impact and outreach.

More specifically, the implementation timeline can be summarised in Figures 1 and 2:

### CAVAC works in the following support systems:

#### **Input markets**

Seeds  
Fertilisers  
Insecticides and herbicides

#### **Agritools**

Pumps  
Levellers

#### **Physical market places**

#### **Knowledge**

Government as source (research)  
Embedded information  
Model farmers  
Associations and traders  
Wider market systems  
Media

#### **Irrigation**

New schemes  
Ownership of existing canals (Supplementary Investment Fund [SIF])  
Government overview role

#### **Business Enabling Environment**

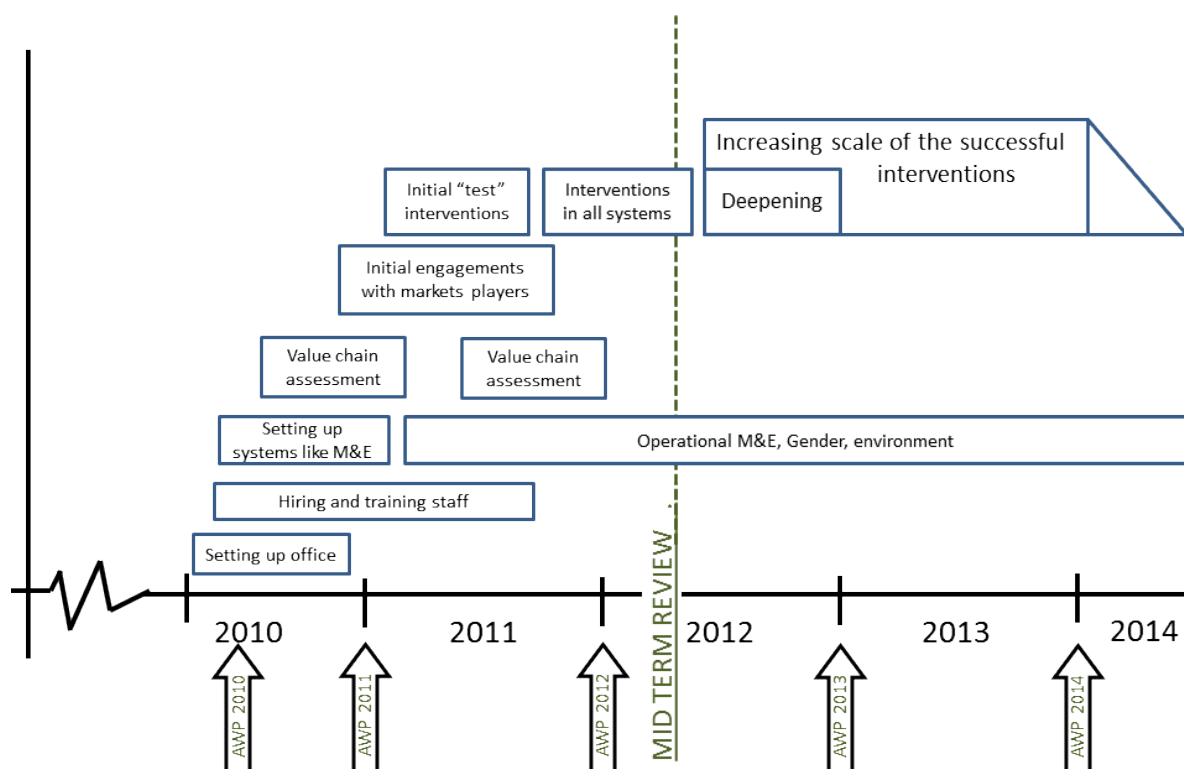
Government as improvers  
Civil / private sector as improvers

#### **Non paddy markets**

Rice export trading and processing  
Vegetable input markets  
Cassava input and processing

**Figure 1: Implementation timeline**

2010 (Pre-March)	Preparation and interim activities
2010 (March to December)	Building up a team and conducting analyses
2011	Initiating activities in all markets and support systems
<b>2012</b>	<b><i>Continuation of initiated activities</i></b> <b><i>Refocus on successes and scale</i></b> <b><i>Moving from provider support to market support</i></b>
2013	Focus on scale
2014 (January to June)	Finalising activities.

**Figure 2: Schematic evolution of CAVAC throughout implementation**

## 2.4 2012 main focuses:

### 2.4.1 Shift from provider support to system support

All CAVAC activities intend to lead to better support and services for small farmers, now and in the future. CAVAC analyses these support and service systems and the opportunities to improve them. In most cases, CAVAC has started to work with individual support providers on their ability to support farmers. This is a good strategy to provide entry into systems, but in many support systems more is needed. This *more* can be an improved enabling environment or wider system services and interaction. An example is the linking event that CAVAC organised with the PDA in Kampot, where sources of knowledge and innovation, both public and private, were linked to the retailers and model farmers who interacted directly with farmers more broadly. Another example is the management of irrigation systems where the initial focus has been on the Farmer Water User Communities (FWUCs), but where a more systemic support to other stakeholders is also planned.

### 2.4.2 Mid Term Review (MTR)

AusAID will commission an MTR of the CAVAC program in March 2012. The MTR will have two aims: recommend and justify further investment in CAVAC; and recommend how the following two and a quarter years can be most optimally used. The external MTR Team will give recommendations to AusAID and the NSC. AusAID and the NSC will instruct CAVAC on modifications required for the Program. Depending on the nature of these modifications, CAVAC will execute the changes as early as possible and/or incorporate changes into the new 2013 AWP.

In preparation for the Review, CAVAC will develop an overview of progress document that will project likely impacts. The document will be availed to the MTR Team two to four weeks before the Review.

As CAVAC cannot anticipate the recommendations of the MTR, the Program submits the 2012 AWP based on the assumption that recommendations by the Review Team fall within the operational

mandates of the Program or that an amendment to the 2012 AWP will be approved by the NSC following the release of findings by the MTR.

### **2.4.3 Continuation of initiated activities**

To date, progress with activities gives CAVAC the confidence that the Program is on track to reach its final aim. The larger research programs and the Cambodian Agricultural Research Fund (CARF) grants have gained momentum and the long term agreements with the Cambodian partners show a clear plan for the coming years. The Extension component is progressing with the model farmer program, the training of retailers and the use of media and information technology. The solid results of the joint irrigation activities, where nine feasible schemes have been constructed with a high value for money, give a blue print for the future. The agribusiness activities also gained momentum with agreements and initial activities with around 15 partners. The 2012 AWP will therefore be a natural continuation of the course set out in the previous years.

Parts of the Program, however, will need further development. Other parts need some adjustments, but no major redirections are deemed necessary. For example, further development is needed in the Business Enabling Environment (BEE) Component and in incorporating gender and disability across all activities. As CAVAC activities take place on the ground, issues and opportunities emerge in relation to BEE, gender and disability.

CAVAC's monitoring and evaluation (M&E) system is in place, but its resilience will be tested now that early signs of impact have emerged.

Some adjustments are needed for CAVAC to retain its core focus on poverty, especially in the fast changing environment of CAVAC provinces. Expanding the rice value chain activities to even poorer areas is one of the examples of this. Adjustments are also needed to ensure that land ownership and management issues are better dealt with early on in the design of subsequent canals. Slight adjustments are also needed to comply with the environmental requirements of CAVAC. This may include a modification of its value chain portfolio. The risk of forest degradation, for example, may lead to the cessation of activities in the cassava value chain.

While the present human resources of CAVAC and the capacity of its partners allow implementation of the present portfolio of activities, it will not allow for significant expansion.

If the NSC approves expansion of staff and budget for increased irrigation activities, CAVAC first will need to discuss with the provincial Directors about the scope and their ability to expand activities.

### **2.4.4 Guiding principles**

As explained more extensively in the 2010 and 2011 AWP, CAVAC intends to continue applying its operating principles as follows:

- The main aim of the Program is poverty reduction, through improved rice based farming.
- The Program is guided by the priorities of the RGC.
- The focus is on improving Cambodian farmer support systems where sustainability of the farmer support system is a prerequisite.
- Investments are judged with the value-for-money criteria.
- Activities can only take place while avoiding or limiting negative impacts – on people, on markets and on the environment.



- Gender and disability are to be well integrated in all activities.

## 2.5 Consultations

With the majority of activities taking place in the provinces, CAVAC's interaction with the RGC has shifted from planning with MAFF and MOWRAM in Phnom Penh to coordinating with Provincial Departments of Agriculture (PDAs) and Provincial Departments of Water Resources and Meteorology (PDWRAMs) in the target provinces. The first step in drafting the 2012 AWP was therefore a round of consultations with the PDA and PDWRAM Directors and the Chairs of the Provincial Coordination Committees (PCCs) together with a joint meeting with all Directors and the Deputy Team Leaders (DTLs) to synchronise inputs.

### Summary of consultations with PDWRAMs:

Five issues were consistent throughout consultations with PDWRAMs in Kampot, Kampong Thom and Takeo.

- In 2011, the PDWRAMs and CAVAC selected irrigation canals for irrigation. Canals have the advantage of high value for money returns and high likelihood of water fee collection. The PDWRAM Directors expressed a renewed interest from the Ministry to invest in gravity based irrigation schemes rehabilitation in 2012.
- All Directors requested more clarity on the overall volume of work to allow for better planning in 2011 and 2012. CAVAC explained that the existing human resources were sufficient for an overall volume of work similar to 2011 and expressed concerns that a significant increase in the work undertaken would be too risky with the present human resource constraints.
- Clarity was requested in the size of investments in the following years. CAVAC agreed to include its best possible projection to the 2012 AWP, while realising that the MTR will make further recommendations on this.
- There is a continued need for capacity support.
- A number of lessons from the 2010 / 2011 construction cycle were discussed:
  - Gaps in time between completion of canals and opening the canals should be kept to a minimum.
  - Deleting some features of the initial design to reduce costs, like the construction of drains, should be done with more care.
  - Land issues have to be addressed better and earlier with informed consent to loss of land.
  - Construction has to start as early as possible, preferably in January or February, to prevent problems associated with an early wet season.

### Summary of consultations with PDAs:

2011 was clearly a year of getting to know each other, a year to get expectations right. The PDWRAMs and CAVAC had agreed early on who would take the lead in what activity and how collaboration could and should take place. These types of agreements were never made between the PDAs and CAVAC. During the consultations, both parties went through a detailed list of activities and agreements on who would take the lead in each activity respecting the capacity, resources, priorities

and responsibilities of each party. It was also agreed that a number of activities would be jointly undertaken.

PDAs' priorities were largely based on the RGC's priorities related to the Paddy Production and Rice Export Policy. In 2011, CAVAC supported some of the activities financially under the Policy Support Funding Facility. All PDAs suggested a continuation and expansion of these activities augmented by some additional priorities.

Most of the proposed activities fit well in CAVAC's approach to develop sustainable systems. This included creation of associations, training on rice production, training of retailers on safe use of pesticides, capacity building of the RGC and introduction of new varieties. It was recommended by the DTL of MAFF that CAVAC integrate these activities in its AWP under the specific components.

In line with the Paddy Production and Rice Export Policy, the PDAs also suggested direct support to farmers through farmer field schools, farmer marketing schools and post-harvest management training. It was discussed that, because of its temporary nature, CAVAC can support capacity improvements in the RGC agricultural systems like the governments extension system, but should not take over the role of the government in executing or financing these activities. It was agreed that CAVAC will request the NSC to consider the direct financing of these activities.

The PDA in Kampot expressed interest in an integrated farming pilot that is likely to be supported by the on-farm water management research program or could be supported as action research.

The integrated nature of CAVAC was highlighted in discussions of the role of PDAs in the irrigation scheme selection. The need for PDA expertise in the feasibility studies was made clear.

The environmental impact of the expanding cassava sector was the subject of a discussion with the PDA in Kampong Thom. It was agreed that further studies would be undertaken before a final decision was made.

#### **Summary of comments from MAFF and MOWRAM.**

MOWRAM has given a number of comments that have been reflected in chapter 3.2. It also recommended to provide further support to CSIS to bridge the gap between funding sources.

MAFF expressed concerns about the involvement of MAFF experts in activities with companies and requested better communication on this issue.

#### **Summary of key recommendations from the Sector Monitoring Group, October 2011.**

(This Summary is not exclusive, for details please see the technical report.)

- Consider extension for one additional year and expansion of irrigation activities
- Extend the contracts immediately for one year from June 2012 to avoid discontinuity.
- Encourage the TWGA to assist MAFF in formulating policy related proposals to be funded by CAVAC.
- No major changes in poverty focus are recommended.
- Activities in the vegetables value chain should be allowed to cross the present provincial borders if useful.
- Agribusiness should not be limiting its activities strictly to the 3 provinces, but take a more national character.

- Several recommendations were made related to the integration of Research activities in CAVAC and of extension activities with government systems.
- ACIAR is requested to conduct an assessment of expected impact from all research activities.
- The SMG encourages CAVAC to speed up progress with environment, gender and disability.

### Summary of consultations with development partners

CAVAC invited a number of development organisations with similar target groups and visions to share intentions for 2012 and investigate potential for cross learning and collaboration. In general the group confirmed that CAVAC has the right focus. The scope for direct collaboration is expected to be highest on Business Enabling issues by jointly supporting RGC policy related requests, as well as in extension where many of the development partners are active and where there is good potential for learning. The group found extensive common interest in Extension and other channels to get information to farmers. More cross learning is intended. Experience with associations and cooperatives are also an area where cross learning is expected. The group supported the shift to working closer with the provincial departments.

## 2.6 Timeline for 2012 implementation

**Table 1: Timeline for 2012 Implementation**

Month	Activity
January/February	Start construction of approved irrigation schemes. Submission of six-monthly reports. Submission of background paper for MTR Recruitment of additional staff if approved.
February	Provincial Coordination Committee meetings for AWP 2012
March	Mid Term Review
March / April	NSC to discuss outcomes of MTR and recommend adjustments.
August	Provincial and national consultations for AWP 2013 PCC Meetings Initial selection of irrigation schemes for 2013 construction.
October	Submission of AWP 2013
November	NSC Meeting

## 2.7 Resource allocation in 2012, 2013 and 2014.

It is likely that the spending in agribusiness and in M&E is to increase in 2013 and 2014. The support to PDAs is expected to remain at the level of 2012.

As most of the research commitments are until the end of the program it is likely that the present level of spending on research and extension will be maintained over the coming years.

With a clearer mandate (canals versus reservoirs), it is also likely that investments in irrigation can increase from between 2.5 to 3 million in 2013. With the present program ending in June 2014 however it is not feasible to commission significant construction in 2014.

If the June 2014 end date is maintained, the program is likely to underspend the Imprest Account budget.

In order to commission construction in 2014 and to spend the allocated budget, a no-cost extension of 6 to 12 months would be required.

The directors of the PDWRAMs requested a clear vision of investments over the next years. As explained above, a budget of 2 to 3 million USD would be available for 2013 and 2014. This could be translated into an indicative budget of around 1 million USD a year per province. The main constraint however would remain the availability of human resources, both in CAVAC and in the PDWRAMs, to design and execute the investments with high quality and avoid unacceptable risks.

### 3 KEY ACTIVITIES FOR 2012

#### 3.1 Component 1: Agribusiness Development

This component aims to ensure that agribusiness contributes to the strengthening of selected value chains and equitably shares benefits. Throughout 2012, CAVAC will ensure:

**Critical constraints to strategic value chains are identified and developed for business action.**

**Agribusiness partnerships are supported to innovatively address constraints.**

**Enhanced farmer services are embedded within agribusiness practices.**

**Improved availability and communication of market information between value chain stakeholders.**

##### 3.1.1 2012 Work Program

CAVAC conducted value chain analyses in 2010 and 2011 for paddy production, rice export, vegetable production and cassava production. CAVAC will undertake a special analysis for a poor rice producing area in Kampong Thom due for completion in late 2011. The strategies for the rice and vegetable value chains are attached. Work on cassava is on hold awaiting the outcome of a PDA-led investigation on environmental impacts. The rice value chain strategy in the poor area of Kampong Thom is not yet complete at the time of writing.

In the first six months of 2011, the Agribusiness Development Component focused on developing new partnerships and interventions in all support markets. Good progress was made and almost all support markets have active agreements. All agreements are soundly grounded addressing the constraints as identified in the original CAVAC strategies.

2012 will begin with support to around 15 companies and associations. CAVAC's capacity has to be fully applied to bring these partnerships to a good end, to add a few more partnerships and to initiate the deepening as discussed in section 2.4.1.

As described in section 2.5, CAVAC has agreed with the PDAs on their specific roles and responsibilities. This will be reflected in the next overview.

#### **An overview of current activities/interventions to extend to 2012**

##### **Rice Seed**

##### Agreement with Mr Iv Vanna on establishing a rice seed production company

In 2012, CAVAC will continue to work with Mr Iv Vanna on the implementation of the business plan which is currently being drafted. To increase rice seed production, additional investment will be required. CAVAC will provide minimal investment support but will play a more significant role in facilitation of the investment process.

Rice seed producers of the scale of Mr Iv Vanna are rare but are important for the dissemination of in-demand varieties. It is estimated that at least 50 per cent of existing demand for quality dry season rice seed is not being currently met. Producers with a vision of expansion, such as Mr Iv Vanna, are rare with not more than two or three throughout the target provinces. CAVAC will aim to establish

similar interventions in 2012 with other large rice seed producers to ensure improved access to good quality rice seed.

Agreements with four associations (Champej, Boeng Nimul, Sre Cherng, and Kvek Meanrith Associations) to conduct rice seed trials for improved wet season varieties

In the wet season, commercial trade in rice seed is limited; retention of own seeds and seed exchange play a much more important role. However, the potential of promoting better varieties is large. Yields are highly dependent on the variety. The most in-demand varieties are fragrant varieties with export potential. Some of the ten export varieties fall within this category. Currently, CAVAC is working with four associations to demonstrate, and create demand for, a high potential wet season variety (Phka Romduol). CAVAC will expand this activity in 2012 to include more associations, where possible, and will link the associations to potential buyers, such as millers and paddy traders.

As initiated in 2011, CAVAC will continue to work with small scale rice seed producers to improve the quality of their seed production by providing related training to members of the rice seed associations.

All PDAs will also be financially supported by CAVAC to support rice seed production.

### **Pesticide Market**

The careful position of the RGC regarding the application of pesticides has, in recent years, been overtaken by the reality whereby most farmers use a form of pesticide in the dry season, and more and more in the wet season. Better knowledge on safely using the appropriate pesticides would not only reduce the environmental degradation, but also improve yields. This knowledge is scant and incomplete amongst farmers. Secondly, the availability of low quality pesticides is recognised by all actors as a significant problem.

CAVAC's initial agreement with Saigon Plant Protection Pty (SPC) has not materialised as the company was uncertain of the consequences of exposure.

In 2011, CAVAC supported the internal capacity of Nokor Thom to advise their retailers and expects that the agreement will be extended to improving the capacity of its retailers further in 2012.

CAVAC will engage with MAFF and the PDAs to ensure that the training is aligned with the national legislation on pesticides. Additionally, commercial partners will be sought actively to work on implementation of the training and quality assurance systems in the distribution networks.

CAVAC will also support and collaborate with the PDAs on retailer training on safe use of pesticides.

### **Fertiliser Market**

CAVAC has an agreement with Ye-Tak, a large fertiliser distributor, to provide retailer training to fertiliser retailers and to improve the internal quality systems to assist Ye-Tak to rid low quality fertilisers from its distribution network.

In 2012, the fertiliser retailer training will be completed and the focus will shift to the implementation of the recommendations of the quality assessment. Additionally, CAVAC will seek to develop new partners in the fertiliser market to further increase the availability of and information on good quality fertilisers. There has already been interest from other fertiliser companies which will facilitate this.

The fertiliser input market is potentially the first market where CAVAC could demonstrate how cooperation with companies can have market-wide impacts by adoption of the initial intervention by other companies.

## **Agritool Market**

Pumps: Studies showed that pump efficiency and associated irrigation costs can be significantly improved by selecting better units and by operating them better. Demonstrations of this by CAVAC have raised interest with both pump producers and retailers. CAVAC will continue a three component approach in 2012 where: 1) local pump manufacturers will be assisted in producing better pumps; 2) awareness is raised among farmers on the benefit of better pumps; and, 3) the knowledge of retailers is raised in how best to advise farmers.

Land levelling: Levelling can improve paddy yields by 10 to 20 per cent. After an initial assessment, CAVAC chose to await the outcomes of the new on-farm water use research project and further investigations into the effect on poverty reduction before deciding if investments would be justified.

## **Vegetables**

CAVAC's vegetable value chain strategy realises that the number of commercial farmers is small in the three provinces and that these low numbers only justify limited support when applying the value for money principle. Partners that provide leverage are limited and are mainly to be found in the supply of seeds.

CAVAC was not successful in identifying suitable local partners in vegetable seed production and has decided to develop a general offer to the market by piloting vegetable seed retailer training and involving the vegetable seed sector in networking at the training.

Training was provided to vegetable seed retailers in 2011 in Kampot and Takeo. Capacity building in the training methodology will be offered in 2012 as an intervention to the vegetable seed companies currently active in the market.

As supplementary irrigation can extend the growing period of vegetables and thereby increase the production of Cambodian vegetables, CAVAC will assess this as a second activity in the vegetable value chain.

## **Rice Export Market**

The export of rice is a renewed focus of the RGC. Several organisations, such as the International Finance Corporation (IFC), Agence Française de Développement (AFD), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the United States Agency for International Development (USAID), are actively supporting export or are considering to do so.

CAVAC initiated support to two millers in 2011. These activities will continue in 2012. Rice export is also one of the markets where the Program will attempt to go beyond simply the enterprise support (see 2.4.1).

- CAVAC will continue the support to 'Golden Rice' in 2012 with the implementation of the feasibility study on a collateral management system initiated in 2011.
- Activities with Baitong are likely to start before the end of 2011. These will include CAVAC's support in providing training to Baitong's extension workers of their green communities on improved extension methodologies to ensure Baitong can source more paddy from the communities.

**Media**

Consumers in western countries and modern cities are overwhelmed with information from modern media. Media also has the potential to reach millions of farmers in Cambodia in an effective and sustainable way. The experience of CAVAC staff, combined with the advice of an external expert in January 2011, has set out a path to explore how modern media can fulfil this promise. Cost and risk may be relatively high, but so is the potential impact. CAVAC will continue to explore opportunities such as those described below:

- CAVAC has an agreement with the production house, 'Delight Cambodia', to train its staff to produce better quality programs. A pilot episode will also be produced under this agreement. This intervention is further supported by two pieces of research. Together, it is expected that this will generate increased interest by the advertisers and production houses in servicing the rural population with more targeted programming.

The research currently being contracted out includes:

- Media habit research of the rural population to establish the size of the potential media market of the rural population and to establish how the rural population consumes media.
- Quality assessment of current agricultural programs to enable improved programming in the future to attain higher consumer satisfaction levels.

The PDAs and CAVAC agreed to further evaluate the possibility of supporting sustainable media in the provinces.

**Rice Associations**

The PDAs in Takeo and Kampot will take the lead in establishing and promoting a few associations in the rice value chain. Realising that successes have been, at best, mixed in the past, it was agreed to add a strong monitoring and learning element to this support. The PDA in Kampong Thom will first analyse interest before considering such support.



### 3.1.2 Expected Achievements

Table 2 lists the deliverables for this Component in 2012.

**Table 2: List of related deliverables in 2012**

Support Market	Intervention	Ongoing	Additional	Deliverables (indicative)
Critical constraints Research				1) Value chain Study in poor rice growing area.
Rice Seed	Large scale rice seed producer (Mr Vanna)	1	1	1) Minor Investment in Equipment made following successful Investment from third parties based on the Business Model and Rice Seed Production Plan 2) New Intervention initialized and ongoing probably focusing on quality of rice seed
	Small Seed Producers	1		1) Training methodology fully developed and implemented with wet season seed production
	Introduction of improved Varieties	4		1) Associations supported with Variety Demonstrations support to associations deepened with rice seed trade linkages if appropriate
Insecticides	Nokor Thom	1	1	1) Existing intervention further supported with TA, (TA Report) 2) New Intervention plan and agreement with new company.
	Pesticide Retailer training		1	1) With PDA'(s) develop training content and deliver training
Fertilizers	Yi-Tak	1	1	1) Quality assurance recommendations incorporated into Yi-Tak systems. 2) Agreement with one more company.
Pumps	Small scale pump producers	1	1	1) A developed information package on pumps 2) Marketing/Publicity campaign delivered 3) Signed New Agreement(s)
Media	Delight Cambodia	1	1	1) Pilot TV program produced 2) Sponsorship report 3) New signed agreement(s)
Rice Export	Golden Rice Company Ltd		1	1) Completed Feasibility study of a warehouse receipt system
	Baitong Rice Seed Production Agreement		1	1) Capacity Development. 2) Rice Seed Production Report from Baitong
	Support to Federation of Rice Millers		1	3) Rice Export Market Visit.
Cooperatives	Capacity development of Cooperatives		2	1) Agreement signed between Cooperative and the PDA 2) Capacity Development.
Vegetable Seed	Continued Support to Vegetable Seed Retailers	1		1) Capacity Development.
Rice in Ultra Poor Area in Kampong Thom	Income improvement intervention(s)		1-2	1) Agreement(s)

## 3.2 Component 2: Water Management

The Water Management Component aims to achieve a sustainable increase in the area and yield of irrigated crops. Throughout 2012, CAVAC will ensure:

**Improved capacity of MOWRAM and PDWRAM to participate in designing, developing, operating and maintaining irrigation schemes.**

**Improved capacity of FWUCs to efficiently and effectively operate and maintain their irrigation systems.**

**Selected irrigation schemes are rehabilitated and transferred to effective FWUCs.**

**Improved models of water management are adopted in rain-fed areas.**

**Increased use of hydrological data in the planning and management of irrigation systems.**

### 3.2.1 2012 Work Program

2011 was a successful year for CAVAC's irrigation activities. CAVAC and the PDWRAMs managed the design and construction of seven schemes and the extension of an eighth. All schemes are likely to be operational for the dry season. Completion is at the time of writing around 80%.

The PDWRAMs and CAVAC have been working on the establishment and capacity of the FWUCs and on strategies for wider canal ownership. CAVAC finished a water availability study in Takeo and initiated a pilot on cost sharing of investments in irrigation. The agreed roles and responsibilities between the PDWRAMs and CAVAC were successful.

2011 also shows that there is still need for improvements as mentioned in section 2.4.3. Overall however, CAVAC, the PDWRAMs and MOWRAM should be able to produce similar results with similar activities with more emphasis on land issues (including informed consent to land loss), ownership and timing of activities in 2012.

In the 2012 AWP consultation round, the PDWRAM Directors conveyed a strong interest from the RGC to rehabilitate selected reservoir schemes together with canals. While there are potentially benefits for poor farmers in more remote areas from this work, there is also the likelihood that gravity schemes give significantly less value for money and that farmers are less likely to conduct maintenance.

CAVAC has to operate in the common ground between both the RGC priorities and the Australian Government priorities and where these requests may not meet, the issue has to be referred to the NSC.

As no clear agreement that addresses both interests could be met early on, CAVAC and the Directors agreed on a mixed portfolio of schemes that could be examined. Table 1 presents an initial assessment of both canals and reservoir schemes with government priorities as well as AusAID's criteria of value-for-money, sustainability and no unsolved land issues.

CAVAC will support at maximum another 500 schemes to be entered into the CSIS system of MOWRAM to bridge the still existing gap between previous funding and the expected funding from ADB.

Table 3: Initial Assessment of Rehabilitation of Canal and Reservoir Schemes

Scheme	Type	RGC Priority	Additional area under cultivation, ha	Total cost, USD x 1000	\$/ha	Value for money	Land issues	Ownership	Comments
<b>Canals - Takeo</b>									
Prey Rumdeng	Canal ± 10K	Yes	Before: 1 crop 2000ha After: 3 crops 2000ha 2 crops 1000ha	500	166	High	Minor	OK	Extension of Thnoat canal
So Hang	Canal ±10K	Yes	Before: 1 crop 1800ha 2 crops 200ha After: 2 crops 2000ha	300	150	High	Minor	OK	In flooded area therefore 2 crops possible
<b>Canals – Kampot</b>									
Spean Toch	Canal ± 6K	Yes	Before: 1 crop 1200ha 1 crop 40ha 1 crop 300ha After: 2 crops 1500ha	350	233	High	Minor	OK	
Prey Lein (or similar Chong Angko)	Canal ± 7K	Yes	Before: Mainly 1 crop After: 2 or 3 crops	300					
<b>Canals – Kampong Thom</b>									
Tonle Chum	Canal	Yes	Before: Mainly 1 crop 2500ha After: 2 or 3 crops 2500ha	500	200	High	PDWRAM will inform on this.	OK	Long system with reliable water from 1st January Canal
<b>Reservoirs</b>									
O'Svay	Res	Yes	Before: 1 crop 1000ha After: 1 crop 1775ha 1 crop 600ha	1400	788	Low	Maybe	Low	Small reservoir but spring fed Limited dry season irrigation
Sen Peream	Res	Yes	Before: 1 crop 300ha 1 crop 150ha 1 crop 200ha After: 2 crops 415ha	500	2000	Low	Minor	Medium	Expensive but sustainability looks reasonable
Kansatv (alternative)	Res	Yes	Before: 1 crop 750ha	850	340	Medium	Medium	Low	Limited dry

Scheme	Type	RGC Priority	Additional area under cultivation, ha	Total cost, USD x 1000	\$/ha	Value for money	Land issues	Ownership	Comments
option)			1 crop 200ha After: 1 crop 2500ha 1 crop 400ha						season irrigation
Reservoir 77 (Ta Koch as an alternative)	Res	Yes	Before: Mainly 1 crop 2500ha After: 2 or 3 crops 2500ha	300-400					

Lack of maintenance due to lack of funds remains one of the main reasons why irrigation schemes in Cambodia deteriorate and why investments become unsustainable. In 2011, CAVAC undertook an inventory and produced a strategy on how to improve ownership of irrigation schemes and how to increase the likelihood of sustainability. Implementation of this strategy is a high priority in CAVAC's work in 2012, though it realises that there are no simple solutions and it will remain a work in progress for the years to come.

An experiment to use demand-led strategies to select schemes with a high likelihood of sustainability produced a number of small investments where the active local actors co-invest. This Supplementary Investment Scheme Fund (SIF) is likely to produce at least two co-investments in Takeo with a total CAVAC investment of less than USD 100,000. CAVAC will engage with all three Directors to discuss expansion of this model in 2012.

In collaboration with the PDWRAM in Takeo and with MOWRAM, CAVAC commissioned a study that combined a water availability assessment with a land use assessment, producing a database that allowed the PDWRAM to better assess the feasibility of investments early on. CAVAC advocated for similar studies in the other two provinces, but the initial interest has been limited, maybe because the PDWRAM do not see it as a core role. A study has been added to the work plan conditionally based on the interest of the PDWRAMs.

Reducing the cost of pumping for both the dry season and the supplementary irrigation in the wet season will remain a priority in 2012. Section 3.1.1., further explains activities related to pumping efficiency.

Good lessons were learned related to land issues (including informed consent for land loss). For many of the seven canals, some farmers had to give up land and in some case chose to move their houses. In some cases, the RGC has legal rights to solve issues unilaterally, but in the spirit of the joint nature of CAVAC, it was agreed that construction would only happen if farmers voluntarily gave up part of their land because of the overall benefit of access to irrigation or because of internal compensation in the communities. Both husbands and wives are requested to confirm their consent by putting finger prints on paper.

As in 2011, the responsibility of assessing and solving land issues remains with the commune councils. In 2012, the PDWRAMs and the PCCs will take more active roles early on.

To execute and monitor the process better, the following additional steps will be taken. Before all agreements are requested, a demarcation of the actual size of the canals will be set out with poles or

flags to allow farmers to assess the impact on their land better. Technical issues will be earlier considered as part of the design. CAVAC will seek external monitoring of all issues before the contracts for construction will be awarded. The external independent person will conduct a second check to assure no issues have been overlooked and all agreements are made voluntarily and are fair.

CAVAC and its stakeholders need to realise that no system is fool-proof; farmers may change their minds, or unforeseen issues can arise. With the additional measures, CAVAC is confident however that it can minimise the likelihood of complications.

The full commitment of the commune councils, district, provincial and national officials, has shown to be effective in 2011. If unforeseen issues arise in 2012, again the government is expected to find a reasonable solution. The solution of last resort will remain the suspension or ending of construction.

At the beginning of 2012, CAVAC can pick the first fruits of the on-farm water management research program that was initiated in 2011. Results of a literature review and an assessment of water use will be available and could be used to better assess the feasibility and design options for schemes in 2012 and beyond. As in 2011, CAVAC will support the PDWRAMs in the further development of its capacities on a demand basis.

The new Asian Development Bank (ADB) and AusAID-funded Cambodian Water Resource Management Sector Development Program is likely to start at the beginning of 2012. Where cross learning will be beneficial, synchronising will be essential to optimise the use of the limited resources in Kampong Thom where both programs operate. Initial agreements have been reached, but close collaboration will be necessary in 2012 and beyond.

The main development initiatives from other donors that touch on CAVAC's mandate are JICA's continued support to irrigation. Initial indications are that AFD will also again become an active player in irrigation. Chinese investments are unlikely to affect CAVAC's work in 2012 as they are more focussing on major hydropower dams. The Cambodia Development Resource Institute (CDRI) will remain an important source of knowledge on the social and economic aspects around irrigation.

New, wider or deeper canals, will increase the likelihood of children's accidents. CAVAC initiated investigations in 2011 into a form of awareness-raising in communities which could reduce the likelihood of accidents. If feasible, CAVAC will support these awareness activities in 2012.

### **3.2.2 Expected Achievements**

By the end of 2012, CAVAC expects the construction or rehabilitation of up to six irrigation schemes in the three provinces. Depending on the approved investments, the area under dry season irrigation will increase to up to 7,000 ha reaching more than 4,000 households.

Furthermore, the Program aims to:

- Implement measures recommended in the Ownership Strategy.
- Deliver at least two co-investments with FWUCs through the SIF.
- Improve capacity of the nine FWUCs established during 2011.
- Establish and build capacity of new FWUCs at the 2012 irrigation schemes.
- Increase availability of improved pump units and the accompanying improved advice and information.

### 3.3 Component 3: Research and Extension

The Research and Extension Component, implemented by ACIAR, aims to increase farmer and service provider capacity and alleviate key value chain constraints. Throughout 2012, CAVAC will ensure:

Priority research and extension activities address constraints in selected value chains.

Enhanced capacity of formal and informal extension providers to transfer improved technologies and information to farmers.

Partnership programs linking researchers, extensionists, farmers and agribusiness are developed and implemented.

Budgetary support to CARDI is provided.

#### 3.3.1 2012 Work Program

Besides the four points mentioned above, CAVAC's agricultural Research and Extension (R&E) is fully integrated as an agricultural resource for the other three components. As such, a great deal of R&E's work is integrated in those other three components' work plans.

The RGC is the main provider of extension services. CAVAC can and will help where possible with increasing the capacity of the RGC to deliver extension services. It will also work with providers of information to supplement the government extension services.

Four research projects will continue in 2012. A new round of CARF funds will be awarded in the first part of 2012, followed by a new request for proposals in November 2012. The last round of proposals led to twelve grants being awarded. Where and when researchable issues arise that may require quick investment for appropriate research results, Action Research Funds are available through the R&E Component. The CAVAC team will sanction such research when and where needed to fulfil the 2012 AWP.

CAVAC has undertaken eight interventions to improve the capacity of the information providers. These interventions have a mix of providers including model farmers, input suppliers, research institutes, and larger companies. It is likely that FWUCs will also be targeted once they become operational. Interventions are related to the capacity of the provider, the development of the material, the interaction with farmers, and the link to permanent sources of information.

Specifically, each of the three PDAs, with CAVAC's close collaboration, will have trained over 1,700 model farmer households using gender sensitive training methodologies as part of Whole Family Training by the end of 2011. These three-hour focused trainings use lively participatory teaching techniques and have had measurable impacts on changes in knowledge and practices of the farmer communities. These will be continuously monitored and further refined in 2012. For the better model farmers that could mature into village extension workers, CAVAC will consider conducting two-day training sessions for model farmer households in 2012.

The Cambodian Journal of Agriculture will be supported as one of the few media that allow Cambodian researchers to publish. CAVAC has made initial investigation in ways to increase the likelihood of future sustainability. In some other counties similar journals are being supported by advertisements. In 2012 CAVAC will further follow this lead.

New programs that facilitate linkages will focus on how expert knowledge in research institutes, in PDAs and in other government institutions, can best be accessed by information providers. CAVAC has developed a strategy to ensure knowledge centres can better interact with the extension providers. CAVAC is working with two mobile telephone call centres whose business model is to provide quality information. Help Desks were developed that will allow CARDI/GDA/MAFF to standardise knowledge to be more readily available for extension workers, retailers and other companies to use. CAVAC tested one linking event in 2011 where retailers and model farmers could meet peers and other sources of information such as PDAs, larger companies and research institutes. During 2012, other more refined linkage events are scheduled. Personal contact and exchange of phone numbers are important. It is expected that at the end of these linking events, sources of information and providers of information communicate better. If farmers have questions they can go to information providers like model farmers or retailers who not only have better knowledge through our training, but who also know where to go for answers if they do not have the answer themselves.

The first linking event showed that model farmers, retailers and both public and private sources of information are interested to exchange ideas. CAVAC's assessment however showed that these events should be more efficient in reaching this goal

The budgetary support to CARDI has been conditional on CARDI having a long term sustainability strategy. CARDI agreed to communicate this at the end of 2010 and 2011 for their 2010 and 2011 support. CAVAC will examine how CARDI is implementing this strategy and make payments conditional on this in 2012.

CAVAC will support PDAs with the further implementation of the Paddy Production and Rice Export Policy by supporting the introduction of new varieties by demonstration plots.

As in 2011, CAVAC will support the capacity building of PDAs on a demand and usefulness basis. Capacity support to district or commune level officials will also be considered.

In Kampot, CAVAC will support the PDA with an integrated farming action research initiative in close collaboration with the on-farm water management research project.

All PDAs requested continued support of the Paddy Production and Rice Export Policy for integrated pest management farmer field school training, post-harvest management training and farmer marketing school trainings. As these are seen as subsidising direct delivery of support, it is not well aligned with CAVAC's approach. CAVAC will seek advice on this from the NSC.

### 3.3.2 Expected Achievements

Table 4 lists the research deliverables for this Component in 2012.

**Table 4: List of research deliverables in 2012**

Research Type	Major Stakeholders	Deliverables by the end of 2012
Rice Germplasm Project	International Rice Research Institute (IRRI), CARDI, GDA	<ol style="list-style-type: none"> <li>1. Continued multi-location testing of those selected germplasm from 2010 wet season advanced;</li> <li>2. Marker assisted selection of those above selected materials for quality at the now revitalised CARDI MAS laboratory begun (this was not fulfilled in 2011).</li> <li>3. Continued advanced variety trials conducted within growers' fields using participatory selection.</li> <li>4. Continued testing of lines for drought and submergence tolerance.</li> </ol>
Rice Establishment Project	Led by New South Wales Industry and Investment (NSW I&I) and implemented locally by CARDI, RUA, GDA and the PDAs	<ol style="list-style-type: none"> <li>1. Demonstrating and utilising agrotols/machinery built/imported and provided to research and grower communities through an integrated crop establishment system</li> <li>2. Follow the protocols for an integrated crop establishment nine-season experiment with multi-locations among the three CAVAC focal provinces</li> <li>3. Drum seeders upscaled in areas where soil conditions are appropriate for their use.</li> <li>4. Implement plans for private sector educated in land levelling including laser levelling for improved rice productivity.</li> <li>5. Continued training on the Cambodian Land and Environment Atlas and Resource (CLEAR) with version 2 released in 2012 with new spatial databases acquired from RGC and various other sources</li> <li>6. Using CARDI soil testing lab upgraded for soil and water quality testing.</li> </ol>
Horticulture Value Chain Project	Led by NSW I&I	<ol style="list-style-type: none"> <li>1. The value chains for tomato, chilli and leafy vegetables completed.</li> <li>2. Trials for low cost postharvest technologies implemented then upscaled to vegetable growing communities.</li> <li>3. Field demonstrations of improved vegetable production strategically placed within grower training and field days.</li> <li>4. Cambodia's first National Vegetable Conference convened including all the partners in the value chain.</li> <li>5. Extension resources prepared for use by CAVAC among model vegetable growers and other service providers.</li> <li>6. Significant training of service providers conducted.</li> </ol>
On Farm Water Management Project	Led by Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO)	<ol style="list-style-type: none"> <li>1. Benchmark trials of on farm water management completed for three study areas providing updated recommendations on interventions for CAVAC.</li> <li>2. 'Case Studies of Success' training materials available for use by CAVAC extension partners/service providers.</li> <li>3. Climate data collected and deposited in CLEAR.</li> </ol>
CARF-6 (mostly ended in 2011)	GDA, RUA, CARDI, NGOs	<ol style="list-style-type: none"> <li>1. Improved on-farm rice storage and rice establishment technologies available.</li> <li>2. Improved waxy maize varieties released.</li> </ol>
CARF-7	GDA, RUA, CARDI, NGOs	<ol style="list-style-type: none"> <li>1. Data on mango fruit fly allowing mango export to China or Japan. <i>Part of obtaining international certification is the requirement to know the</i></li> </ol>



Research Type	Major Stakeholders	Deliverables by the end of 2012
		<i>number of fruit fly species in a country.</i> 2. Precise knowledge of BPH disseminated for better control by growers. 3. Simple tools for on-farm water management disseminated to growers.
CARF-8	GDA, RUA and NGOs	1. Improved forages disseminated amongst private cattle farms in Kampot and Takeo. 2. Alley cropped woody species identified and saplings disseminated to grower communities. 3. Durian fungal disease studied and preventive methods tested. 4. Cambodia sampled for nematode populations and data available for nematode control in high value crops.
CARF-9	GDA, RUA, CARDI, NGOs, private agribusinesses	12 proposals were approved and implemented. Please see the 6-monthly progress review for details
CARF-10	GDA, RUA, CARDI, NGOs, private agribusinesses	1. 11-15 proposals approved and implemented in 2012 with greater emphasis on Public-Private Partnerships and alignment with CAVAC 2. CARF Coordinator to proactively monitor the results and quality of these projects as well as CARF 7, 8 and 9.
Demand-driven Research	Based on demand	1. Small research grants made available when there is a demand for such research results with immediate effects. CAVAC team to make the selection for these small grants.

By the end of 2012, CAVAC will have upscaled all channels of information that were trialled in 2011. However, still the emphasis will be on continued trial and learning in 2012, allowing for the outreach numbers to be greatly increased after the MTR. Table 4 lists the number of interventions related to knowledge in 2012.

**Table 5: Number of interventions related to knowledge in 2012**

Knowledge channel	Initiated or Continued in 2012
Village extension workers / model farmers	1
Input suppliers	1
Large companies	1
FWUCs	1
NGO with permanent funding	1
A channel related to the vegetable sector (retailers)	1
CARDI, GDA, and PDA	1
Call Centres (jointly with Agribusiness)	1

### 3.4 Component 4: Business Enabling Environment

The Business Enabling Environment Component aims to improve the business enabling environment in Cambodia to facilitate the development of selected value chains. Throughout 2012, CAVAC will ensure:

**Improved research and understanding of the enabling environment surrounding key value chains.**

**Increased opportunity for public private dialogue around key enabling environment issues.**

**Strengthened industry representative organisations.**

**Increased use of Public Private Partnership investment model.**

**Policy Support Funding Facility utilised to progress activities.**

#### 3.4.1 2012 Work Program

The smallest component of CAVAC used a range of tools to improve the overall enabling environment. Enabling environment issues are complex with often many players and conflicting incentives. Of the whole CAVAC portfolio, enabling environment issues are probably the least straight forward and need most time while ambitions also need to be realistic.

CAVAC supports three mechanisms that improve the enabling environment: 1) support the government to improve regulations and their execution; 2) collaboration with private and development partners to address constraints; and, 3) stimulation of dialogue mechanisms.

- 1) The support to the government is channelled through support to the Technical Working Group on Agriculture and Water (TWGAW) Secretariat as described further below and through the Policy Support Funding Facility.

Experience with the Policy Support Funding Facility has been mixed. The Facility supported MAFF Departments and PDAs with the implementation of the Paddy Production and Rice Export Policy and MOWRAM with the CISIS database of irrigation schemes. A range of other proposals have been stranded as procedures and the aim of the facility was not clear enough.

#### Policy facility

The CAVAC Policy Facility is designed to support activities nominated by MAFF, MOWRAM or AusAID which support key shared development objectives. This may include activities which are not contained in the formal CAVAC Work Plan. Applications for funding will go through an approval process involving either the full National Steering Committee or its Executive Committee.

Consideration will be given to a proposal's relevance to SAW priorities, the Paddy production and Rice Export Policy and CAVAC objectives, capacity development, and the degree to which they complement core RGC activities.

More details can be found in Attachment 5.

For 2012, CAVAC proposes a new guideline for the policy facility with a clearer focus to support policy research. (see attachment 5)

- 2) CAVAC's direct activities to address enabling environment issues with private and development partners went through a useful learning stage in 2011, where CAVAC rethought its role and ambition and reprioritised the issues of focus. CAVAC found little ambition with private companies to directly address constraints and talks with development partners have not yet led to clear agreements to address major issues.

New sub-decrees and regulations on the other hand are changing the landscape in which agricultural production is taking place quickly. Consequences of the new regulations need analysing and monitoring, not only for agriculture in general, but also for specific CAVAC interventions.

2012 will therefore be a year of understanding and analysing issues, while remaining open to opportunities to intervene with private or developing partners or to create awareness. Main issues for CAVAC analyses will include:

- The draft law on Associations and Non-Governmental Organisations that will potentially have consequences for CAVAC's support to associations and FWUCs and possibly also training or other events.
- The draft Sub-Decree on Water Licensing which may have consequences on larger water sellers, FWUCs, smaller groups of farmers that irrigate or small farmers that use supplementary irrigation.
- The new Sub-Decree on River Basin Management which may question CAVAC's approach toward voluntarily availing land for irrigation further.
- The Law on the Regime of the Press and the Sub-decree on Establishment of Press and Quick Reaction Unit could influence the present intentions in support of sustainable media, both new and traditional.
- Registration procedures as described in the Circular on the Implementation of Sub-Decree No 69 on Standard Agricultural Input Management still seem to prohibit a number of input companies from formally entering the market or scaling up activities.
- National and international laws on Intellectual Property which may influence CAVAC's activities in the seed market and the export market.
- Cambodia's careful position towards pesticides is being challenged by actual practices. Regulation and application recommendations may be considered to reduce the environmental consequences and farmers' risk.

CAVAC's partnership with the Asia Foundation (TAF) to stimulate public private dialogue in the provinces and to test a public-private-partnership investment model focussing on market places gathered serious interest from provincial governments to engage. However, so far there has been little commitment from the private sector. Events organised in the second part of 2011, where government-led dialogue was supported, could form the basis for expansion in 2012 if found successful.

As in 2011, CAVAC will support the TWGAW in the following ways:

- Supporting a SAW roadmap exercise to develop improved approaches to joint RGC/DP planning, financing, implementation and monitoring and evaluation of the SAW.

- Supporting the costs of up to four TWGAW meetings per year.
- Providing POC support for the Secretariat's TWGAW and SAW coordination work.

#### **3.4.2 Expected Achievements**

- For at least five of the above main issues, CAVAC will prepare dialogue papers or share analyses and monitoring results with the RGC and the wider development community.
- Through the Policy Support Facility, CAVAC will support MAFF and MOWRAM in specific requests, once approved by the NSC.

### **3.5 Cross-cutting Issues**

#### **Gender and Disability**

Understanding gender equality and incorporating this into all of CAVAC's interventions has been a cornerstone of CAVAC's design and will continue to be so throughout the implementation in 2012.

CAVAC's Gender Strategy and the gender research that was conducted in 2011 give direction on how CAVAC addresses gender; not as a stand-alone activity, but as integrated in all activities.

To date, CAVAC has mainly applied the do-no-harm check, but since July 2011, with the arrival of a full time Gender Specialist, CAVAC is more actively screening all activities to ascertain how better knowledge on gender, poverty levels, disability or other characteristics of targeted farmers can improve the effectiveness of CAVAC's support systems. For example, so far CAVAC ensured gender balance of model farmers (husbands and wives) in its model farmer household trainings. But how do the men and women communicate with the farmers? Does the transfer of information go by social networks that are based on gender?

By the start of 2012, CAVAC will have a Gender Priority and Implementation Plan. The Plan will be based on screening and will specify the indicators that will be added to the M&E system.

Rather than only looking at men and women and how they benefit from the interventions, CAVAC tries to break down the concept of farmers to types of farmers: men, women, poor, less poor, able bodied or with a disability, literate or illiterate etc. Though a starting point is often poverty levels and gender, this approach can easily integrate disability issues.

Initial experience with a gender and disability checklist has been positive and CAVAC plans to continue using this list in 2012.

The Disability Action Counsel advised that there are a large number of groups of people with a disability at the village level. These should be consulted when working on irrigation schemes.

#### **Environment**

The environment is a critical cross-cutting issue which has implications for the entire CAVAC program. Programs such as CAVAC have a significant responsibility to ensure its activities are managed in an environmentally responsible way, and comply with an increasing body of regulation.

CAVAC takes this responsibility very seriously, and works to ensure compliance with both Cambodian and Australian environmental laws and policies in the implementation of the program. In practical terms, this means all activities will be subject to an initial screening process, and some then go on to full Environmental Impact Assessments and the development of Environmental Management Plans. Non-compliant activities are either modified, or where compliance cannot be reasonably achieved, CAVAC will not proceed with those activities.

It is important to recognise that activities may have either positive or negative impacts, or a combination of both. CAVAC is currently assessing the program with both of these things in mind. While possible negative impacts are assessed and managed, some CAVAC activities have significant positive impacts, such as the reduction of negative impacts associated with the misuse of pesticides and fertilisers. CAVAC is also contributing to climate change adaptation and disaster risk reduction in various ways including the promotion of drought and submergence tolerant seed varieties. Water availability studies and irrigation works both address the need for a more regular and reliable long term water supply in the face of less reliable weather patterns.

One area where environmental considerations have a particularly significant impact is in the irrigation work undertaken by CAVAC. The activities for 2012 will be subject to feasibility studies, cost benefit analysis, and environmental assessment. Some environmental issues are specific to individual interventions, and others are far broader. Two broader issues are land ownership and/or occupation, and water safety. In 2012, CAVAC, in conjunction with MOWRAM and the relevant PDWRAMs, and with the assistance and advice of a specialist, will ensure land issues are carefully addressed, and will implement water safety programs for communities close to its irrigation works.

CAVAC will continue to seek to identify a suitable Environmental Specialist to join its full time staff, and will engage other specialists from time to time as required.

AusAID is in the process of preparing revised environmental guidelines, and CAVAC is revising its own environmental guidelines to ensure they reflect the new requirements. This will be practically implemented in the latter part of 2011 and in 2012.

### **Monitoring and Evaluation (M&E)**

CAVAC's M&E system is up and running. All key elements have been developed and tested and so far there has been no indication that major changes are needed in 2012.

Impact logics and monitoring plans are in place for ongoing interventions. With the assistance of the international M&E Manager, a detailed monitoring plan will be available at the beginning of 2012.

The success of the MTR will partly depend on the M&E systems, and in the first months of 2012, CAVAC will complete a stock taking of initial changes, mainly at the support provider level.

A study that will have taken place in November 2011 will have further clarified how indirect impacts of CAVAC's activities on the very poor can be assessed.

Cross cutting issues will be further integrated in the M&E system.

An international M&E conference in January will be the first time CAVAC will contribute to the development of a solid international M&E system.

#### **3.5.1 Expected Achievements**

- The Gender and Disability Strategies will guide all CAVAC activities. Both will be mainstreamed in all activities. In addition to this, one to two dedicated interventions are planned.
- CAVAC's Environmental Strategy that is updated in 2011 will be fully implemented.
- M&E will be an integral part of all CAVAC activities. All experts will be involved.

## 4 PROGRAM MANAGEMENT

The CAVAC Management Team has successfully implemented a range of program management systems. Given the complex nature of the CAVAC management model, the key to successful implementation has been flexibility and cooperation. Contractual and reporting obligations have been met, with additional reports delivered including a Monthly Progress Report to Co-Deputy Team Leaders and AusAID, and a Monthly Summary Note to PCCs. It is planned to continue this additional reporting during 2012.

### 4.1 Staffing

CAVAC has recruited a team of international and national experts with backgrounds in extension, agricultural knowledge, business knowledge, organisational knowledge, irrigation and policy.

CAVAC staffing is now at almost full capacity with all positions filled except for the M&E Officer and an Assistant, currently under consideration, and the Environmental Specialist.

As previously noted, CAVAC has in general engaged well-educated Cambodian experts with little working experience, and as foreshadowed, a significant investment in both internal and external training has been made. It is intended to continue to invest in staff development and training during 2012.

CAVAC has recruited a Gender Specialist, and is currently looking to engage an Environmental Specialist to assist the program in meeting important environmental requirements in accordance with the laws and policies of both the RGC and Australian Government. Both positions will ensure that CAVAC is well placed to address these critical cross-cutting issues through its further technical implementation in 2012. The Program has also engaged a translator to ensure accessibility to CAVAC reports and other materials.

CAVAC has worked with counterparts to develop a Priority Operating Cost (POC) proposal which is currently being signed by all partners in anticipation of lodgement with the Council for Administrative Reform (CAR) shortly. This scheme identifies a range of specific positions within both MAFF and MOWRAM to work closely with CAVAC, and to develop an even higher degree of cooperation between CAVAC partners. It is expected that this scheme will be fully operational by late 2011, and effectively maintained until June 2012.

### 4.2 Stakeholder Collaboration

Collaboration between RGC, AusAID and CAVAC has been practically achieved through the NSC and by the Executive Committee of the NSC. Collaboration in the provinces has improved significantly with the creation of the provincial offices and the establishment of the PCCs. Successful PCC meetings have led to higher levels of engagement both in the planning and implementation of CAVAC activities, and in the preparation of the Annual Work Plan. In 2012 collaboration will continue through these important national and provincial mechanisms.

The proposed CAVAC POC scheme is expected to provide another formal mechanism which reflects the existing structures, but will also provide material support to counterparts. It will also facilitate effective collaboration at both the national and provincial levels.

At the provincial level CAVAC has funded Rice Policy activities in each province through the Policy Support Facility, and has worked closely with PDWRAMs on the funding of FWUC establishment process, which was also funded by CAVAC. These collaborations have been instrumental in

developing closer day to day relationships, which will be further developed in 2012 with practical and operational support.

In addition to funding specific activities, CAVAC has assisted counterparts in providing technical equipment, computer and internet access, and in assisting with transport for various CAVAC related activities, and this support will continue through the period of this AWP.

CAVAC maintains constructive relations with many other development partners including Micro Small and Medium Enterprise Program (MSME), International Development Enterprise (IDE), SNV, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), International Finance Centre (IFC), IDA and Oxfam where sharing information and experiences is the main aim. Sharing experience and joint activities are most likely to happen around extension activities or in relation to the Rice Export policy, but no concrete ideas have yet emerged.

The relation with the World Bank is based on the special studies conducted by the World Bank under the AusAID-funded trust fund for technical support of the Development Policy Operation for Smallholder Agriculture and Social Protection. Studies on fertilizer and seeds have given CAVAC better insights and influenced CAVACs strategies. Interactions with the ADB are expected to be intensified with the new Cambodia Water Resource Management Sector Development Program that will share Kampong Thom as a focal province. This could be in the area of research or capacity building activities.

CDRI has been a valuable source of information in irrigation, a relationship that is expected to continue and CDRI and CAVAC plan to conduct a joint seminar in September 2012..

The Asia Foundation has co-invested in a study in 2010/2011 and is likely to be a main partner in the BEE activities in 2012.

New programs of CIDA and AFD in vegetable farming and rice export are likely to be added to the list in 2012.

### **4.3 Provincial Coordination Committees and Provincial Offices**

Provincial Coordinators are an important component of the successful implementation of CAVAC. Offices in each of the three CAVAC provinces are instrumental in the important work of supporting CAVAC activities in the provinces and also in working with provincial counterparts. These offices have enabled CAVAC to build closer relationships with PDAs and PDWRAMs in each province. It is anticipated that there will be increased activity in, and through, the provincial offices in 2012, and CAVAC will monitor resource requirements to ensure they continue to operate effectively.

PCC meetings have provided good opportunities to discuss and plan CAVAC activities, and also to address various concerns. As a result, greater understanding and better collaboration has developed between CAVAC partners. The PCCs have been instrumental in the implementation of provincial activities and have engaged in a collaborative process in the preparation of the 2012 AWP. 2012 will see further cooperation through CAVAC's provincial offices, and a commitment to maintaining and developing these important working relationships.

### **4.4 Procurement**

As in 2011, it is anticipated that during 2012, expenditure will occur by tender, competitive quotation, or by grant, depending on the nature and scale of the activity.



A Procurement Plan for 2012 activities will be established and all work-plan related expenditure will be made from the Imprest Account, and will be based on a number of approvals, primarily, the approval of the National Steering Committee. It will also be subject to internal CAVAC approvals. Work plan related tasks and relevant documents such as Terms of Reference will be approved by the Team Leader, and on the basis of those approvals, expenditure from the account will be authorised by the General Manager.

The procurement team comprising of an international Procurement Manager together with a national Procurement Officer manage all CAVAC procurement. The Procurement Manual, which sets out in detail the processes and procedures relating to all CAVAC procurement, has been prepared and is continually updated. An update, at the time of writing, has been submitted to AusAID for approval.

Further changes and decisions regarding procurement will be made following the outcomes and recommendations from the Procurement Risk Assessment and Fiduciary Risk Assessment.

During 2011, pro-forma agreements and mechanisms were introduced and used for the grant funding schemes and it is expected that the number of grants will increase substantially in 2012.

#### **4.5 Risk Management**

An updated Risk Management Plan is attached at annex 8

### **5 ANNUAL WORK PLAN BUDGET – 2012**

Following is the AWP budget for 2012. The total budgeted expenditure equals **US\$7,051,188.00**. This total includes activities to be funded by ACIAR (**\$1,642,688**) as well as those to be funded under the CAVAC Imprest Account (**\$5,408,500.00**).

Two items can highly influence the actual spending. The investment costs in irrigation will only be known with more accuracy once the final selection of schemes has been done and once the detailed designs have been finalized. The US\$ 1,000,000 support for an agricultural census is added to the budget in case the RGC undertakes this activity and this contribution is indeed requested.

## Annual Work Plan Budget - 2012

Component breakdown		Description	Interventions and activities 2012	Budget (USD)
Component 1: Agribusiness				\$890,000.00
1.1	Critical constraints to strategic value chains identified and developed for business action.	All initial VCs have been analysed. Further research to develop business action will be done on a need basis.	Small need based research to develop for business action.	\$5,000.00
1.2	Agribusiness partnerships supported to innovatively address constraints.	Improve input markets in rice and vegetables; tools in rice; improve availability of efficient and affordable pump units. All companies will be encouraged to add extension activities. Activities will also be addressed in 3.2. CAVAC to organise a number of linking events and will encourage companies to improve communication within their network.	<u>Rice seed market:</u>	\$895,000.00
1.3	Enhanced farmer services embedded within agribusiness practices.		Cont. support to seed producer	
			Support to Seed associations	
			Support seed producer trainings	
			"Deepening" intervention related to quality	
			<u>inputs</u>	
			Cont. support to input providers	
			Joint training with PDAs	
			Support to more companies if licences approved	
			<u>Pumps:</u>	
			Cont. support to producers	
			Events with retailers	
			Awareness campaign	
			Support to retailers	

Component breakdown		Description	Interventions and activities 2012	Budget (USD)
			<u>Media:</u> Cont. support to media company General offer to market based on Studies results Support one / two more media companies	
1.4	Improved availability and communication of market information between value chain stakeholders.		<u>Rice Export promotion:</u> Cont. support to exporter (warehouse sys) Support to exporter (contract farming) Support to an additional company/ies. <u>Cooperatives:</u> Support through PDAs <u>Vegetables:</u> Cont. support seed retailers Irrigation support, funded under other component <u>Rice in KPT, ultra poor farmers:</u> One or two interventions	
1.5	Participatory planning and construction of key infrastructure to address value chain bottlenecks.	On hold until good opportunities have been found.		\$ -
<b>Component 2: Irrigation and Water Management</b>				<b>\$2,655,500.00</b>

Component breakdown		Description	Interventions and activities 2012	Budget (USD)
2.1	Improved capacity of MOWRAM and PDWRAM to participate in design and develop, operate and maintain irrigation schemes.	Intense collaboration with MOWRAM and PDWRAMs in the construction of schemes and outsourcing in the detailed design of another group of schemes. Involvement in the water availability studies	Extensive collaboration and subcontracting with all 3 PDWRAMs. Support to PDWRAMs in training as per chapter 7.2.	\$123,000.00
			PDWRAMs survey and design of 2013 schemes	
			Support to maximum 500 entries in the CSIS system	\$37,500.00
2.2	Improved capacity of FWUCs to efficiently and effectively operate and maintain their irrigation systems.	Based on the position paper on ownership, CAVAC and PDWRAMs will support FWUCs and other players to improve likelihood of sustainability.	9 FWUCs of 2010, 2011 canals and FWUCS of 2012 schemes receive training and further support. Other players also receive support.	\$295,000.00
			SIF old round, additional funds - work to start in Jan (also approximately another 50K from 2011 budget)	
			Supplementary Investment Fund will have a new round.	
			Longitudinal socio economic survey	
2.3	Selected systems rehabilitated and transferred to effective FWUCs.	Depending on the decision of the NSC in 2011, CAVAC will tender schemes and commence construction in 2012. On top of that, one or two FWUCs will receive co-funding for improvements.	Remaining construction of 2011 schemes to be finalised	\$2,050,000.00
			Assessment of 2013 schemes	
			PDRAM construction supervision of 2012 schemes	

Component breakdown		Description	Interventions and activities 2012	Budget (USD)
			Construction of new schemes	
			Water safety (Swim Safe, etc.),	
2.4	Improved models of water management adopted in rain fed areas.	The on-farm water management research will continue in 2012.	First lessons from the research will be incorporated in CAVAC activities.	\$ -
2.5	Increase use of hydrological data in the planning and management of irrigation systems.	One water availability study was finalised in 2011. A new one could be undertaken if requested by PDWRAMs.	One water availability study to be undertaken if required.	\$150,000.00
<b>Component 3: Research and Extension</b>				<b>\$1,642,688.00</b>
3.1	Priority research and extension activities address constraints in selected value chains.	4 large research studies are ongoing focussing on vegetables and rice and considering input markets and agritools and on farm water use. CARF activities will be ongoing.	Details are given in the AWP main text.	\$1,298,188.00
			For CARF-10 will have awarded a number of research grants.	
		Small additional research may be commissioned, if needed.		
3.2	Enhanced capacity of formal and informal extension providers to transfer improved technologies and information to farmers.	CAVAC has collected and further developed materials for extension. In 2012, the Program will adjust the form to the needs of the extension provider. It will support extension providers in the following categories: model farmer households, input suppliers, large companies, media, FWUCs and NGOs.	8 interventions that support a range of extension service providers have continued, leading to improved capacity of the providers to reach farmers.	\$ 230,000.00

Component breakdown		Description	Interventions and activities 2012	Budget (USD)
3.3	Partnership program linking researchers, extensionists, farmers and agribusinesses developed and implemented.	The extension providers from 3.2 will be linked to sources of knowledge, either directly or via linkage events.	Extension providers from 3.2 will have access to sources of knowledge	\$33,500.00
3.4	Budgetary support to CARDI.	Payment to CARDI conditional to an agreement reached and development of a strategic resource plan for the next 5 years.	Operational support to CARDI including the Cambodian Journal of Agriculture	\$81,000.00
<b>Component 4: Business Enabling Environment</b>				<b>\$1,443,000.00</b>
4.1	Improved research and understanding of the enabling environment surrounding key value chains.	CAVAC will assess impacts of a number of new regulations for agriculture and specifically CAVAC activities.	Issue studies to be undertaken and where possible activities will be initiated.	\$100,000.00
4.2	Increased opportunity for public private dialogue around key enabling environment issues.	Activities with TAF where provincial government-led dialogue is initiated	Continued activities from 2011	\$123,000.00
			Follow up activities if first round successful.	
4.3	Strengthened industry representative organisations.	Activities may emerge from other activities.		\$ -
4.4	Increased use of Public Private Partnership investment model.	Integrated with 1.5 and 2.3.		\$ -
4.5	Policy Support Funding Facility	This facility will support activities initiated by MAFF / MOWRAM / AusAID with approval from the Executive Group of the NSC.	Support to a national Agricultural census, if requested	\$1,000,000.00
			RGC initiatives supported.	\$150,000.00
			PDA requested support for conducting farmer field schools and post harvesting schools.	\$50,000.00

Component breakdown		Description	Interventions and activities 2012	Budget (USD)
<b>Cross Component Activities</b>				<b>\$420,000.00</b>
5.1 /5.2	Gender and Disability	The gender and disability strategies will guide activities. Both will be mainstreamed in all activities. On top of this one or two dedicated interventions are likely.	Gender and disability are mainstreamed in all activities.	\$ -
5.3	Environment and Disaster Risk Reduction	Revised Environmental Strategy will be implemented in 2011 and continued in 2012.	All interventions will have been screened for environmental impacts. Management plans prepared and activities implemented and monitored.	\$ -
5.4	M&E	M&E will be an integral part of the work activities of CAVAC. All experts will be involved.	All interventions will have impact logics and monitoring plans. Cross cutting issues will be integrated.	\$150,000.00
5.5	Training/seminars/capacity development support	CAVAC will prepare a training needs assessment and training plan for its staff and government counterparts.	CAVAC and RGC staff better able to implement activities.	\$250,000.00
5.6	Equipment	Support to MAFF, MOWRAM, PDA and PDWRAM for office equipment and communication	RGC partners to be better able to execute their CAVAC related activities	\$20,000
<b>Total Budgeted Expenditure (including ACIAR funded activities):</b>				<b>\$7, 051,188.00</b>
<b>Total Budget ACIAR:</b>				<b>\$1,642,688.00</b>
<b>Total Budget CAVAC Imprest Account Expenditure:</b>				<b>\$5,408,500.00</b>
The above includes some carryover funding from 2011.				

## Annex 1: Implementation Process and Procedures

The CAVAC PDD acknowledged that most agricultural constraints have a multidisciplinary character, for example: irrigation schemes will not be successful if not based on a solid agricultural analysis; embedded in existing social structures, in a conducive business enabling environment and with effective demand for the products. Sustainable extension must follow the same business incentives as agribusiness and dealing with agribusinesses requires extensive knowledge of farming.

CAVAC is staffed by a team of national and international technical and operational specialists. To apply the team's technical knowledge optimally to each intervention, program management, and as such the AWP, has been divided into tasks that will be executed by multidisciplinary teams. The tasks will be regularly updated. The clear responsibilities within the task force system will allow CAVAC to better serve and collaborate with public and private partners, and make CAVAC more accountable to PDWRAMs, PDAs, MAFF and MOWRAM. The Sector Managers remain the first point of communication for the government partners and have specific responsibilities for maintaining these relations.

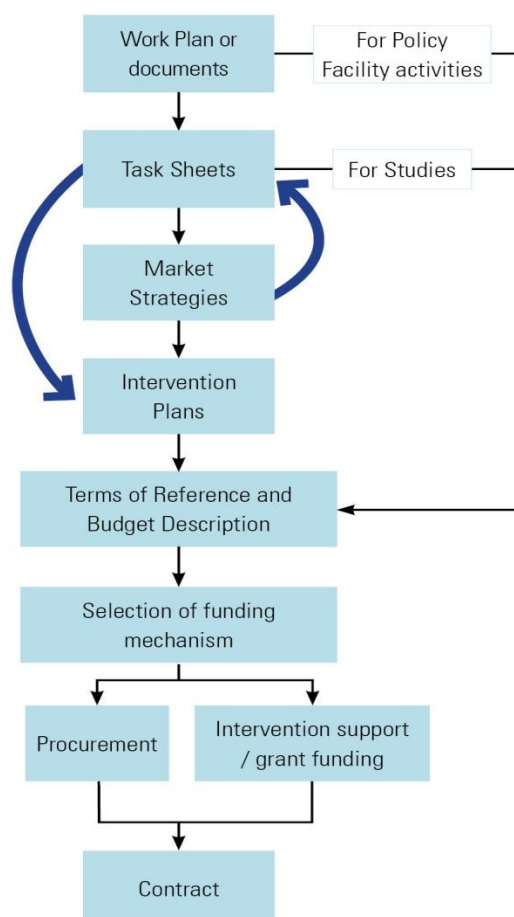
Figure 1 shows the different internal procedures which will ensure that CAVAC's activities remain in line with the approved AWP.

### Market Strategies

Market strategies are central in determining which activities CAVAC will undertake and which activities the Program should not support. For each market (such as dry season rice, rice for export, wet season rice, vegetables and cassava), CAVAC will first establish a market development strategy. Influenced by government strategies, external studies and internal assessments; a market development strategy will determine the key constraints in a value chain or market, and which constraints can and will be addressed. Strategies will focus interventions to the core issues and will avoid supporting interventions that do not address fundamental constraints in the markets. No activities will be undertaken outside of those approved within market development strategies.

At a later stage, market reports will be drafted containing the main developments and impacts in each market.

Figure 3: Process and Procedures





## **Intervention Plans**

Once the market strategies determine what CAVAC should and should not address in each market, CAVAC will engage with public and private institutions and companies to establish where common interests lie and where the Program can support and strengthen these players. Each proposal will be explicitly outlined in an intervention plan that will be approved by both the respective Sector Manager and the Team Leader. CAVAC will only engage with public and private sector partners after intervention plans have been approved. This again ensures all activities are focused to address the fundamental constraints in each market and are fully in line with the approved AWP.

## **Intervention Reports / Activity Closure Reports**

Once interventions come to an end, the Program will produce intervention reports describing the activities. The reports will capture early results and impacts. Later on, higher level impacts will also be added.

## **Impact Logics and Monitoring Plans**

Each intervention or group of interventions will have a unique results chain or impact logic, combined with a monitoring plan. This will allow the Program to follow changes and impacts in a structured way.

## **Contracting**

CAVAC has developed a procurement and grant mechanism that will allow the Program to stimulate private and public sector partners with technical support and investments. The mechanism will ensure program activities comply with contractual and legal obligations. It will allow the Program to engage in a manner that makes it a credible partner to the public and private sector. CAVAC will use both tender and grant mechanisms. The most commonly used grant mechanisms in 2011 will be the Agribusiness Innovation Fund and the Supplementary Irrigation Fund (PDD, Page 41)

## **Annex 2: Value Chain Strategies**

Below is a summary of the key areas where CAVAC will focus its support in the selected value chains. The preparation for the MTR and the recommendations of the MTR are very likely to change strategies in the first months of 2012.

### **Wet Season Rice Production**

- Availability of improved seed varieties
  - adjusted to local taste
  - drought resistant
  - allowing for inputs
  - submergence tolerance
- Supplementary irrigation
- Farmer knowledge

Availability and application of better seed varieties has the highest priority in improving yields in the wet season production. Research on, and development of, improved varieties is part of the longer term strategy. Introduction of existing better varieties and improving the availability has a high priority. CAVAC works with the PDAs on demonstration but also with all types of producers. This could reach large number of farmers, though adoption will take time.

A focus on the availability of better and more suitable irrigation pumps will allow more wet season farmers to gain access to irrigation by the end of 2011. Although outreach will be low at the end of 2011, CAVAC expects that, in the longer term, this support could reach a very large number of farmers (possibly up to 50,000-100,000). CAVAC will investigate what the impact of potential improved electrification in the targeted provinces may have on the type and costs of irrigation with pumps.

Reaching wet season farmers through public extension and retailers will have limitations. The model or lead farmer approach is best placed to give large numbers of farmers a sustainable source of knowledge.

### **All Types of Dry Season and Early Wet Season Rice Production**

The dry season paddy and rice production will receive a continued focus from CAVAC in 2012 in the following areas:

- Irrigation
- Farmer knowledge
- Availability of high quality inputs
- Farming practices and tools
- Alternative channels for export

It is expected that another 4,000 to 5,000 farmers might be reached with irrigation interventions and several thousand with the other activities. These numbers are expected to increase to 50,000 to 100,000 by the end of CAVAC. Improving pumping and the potentially improved electrification will also be relevant for the dry season rice cultivators.

The expected results will be discussed in the specific components below.

### **Rice production in unfavourable areas with high poverty levels**

This strategy is expected to be available before the start of 2012.

### **Vegetables**

CAVAC works in four clusters in Takeo and Kampot, predominantly focusing on the availability of good quality inputs and improved farmer knowledge. This should lead to more, cheaper and better quality vegetables that can compete with products from Thailand and Vietnam. It could benefit between 1,000 and 2,000 farmers initially, but with the potential to grow more broadly.

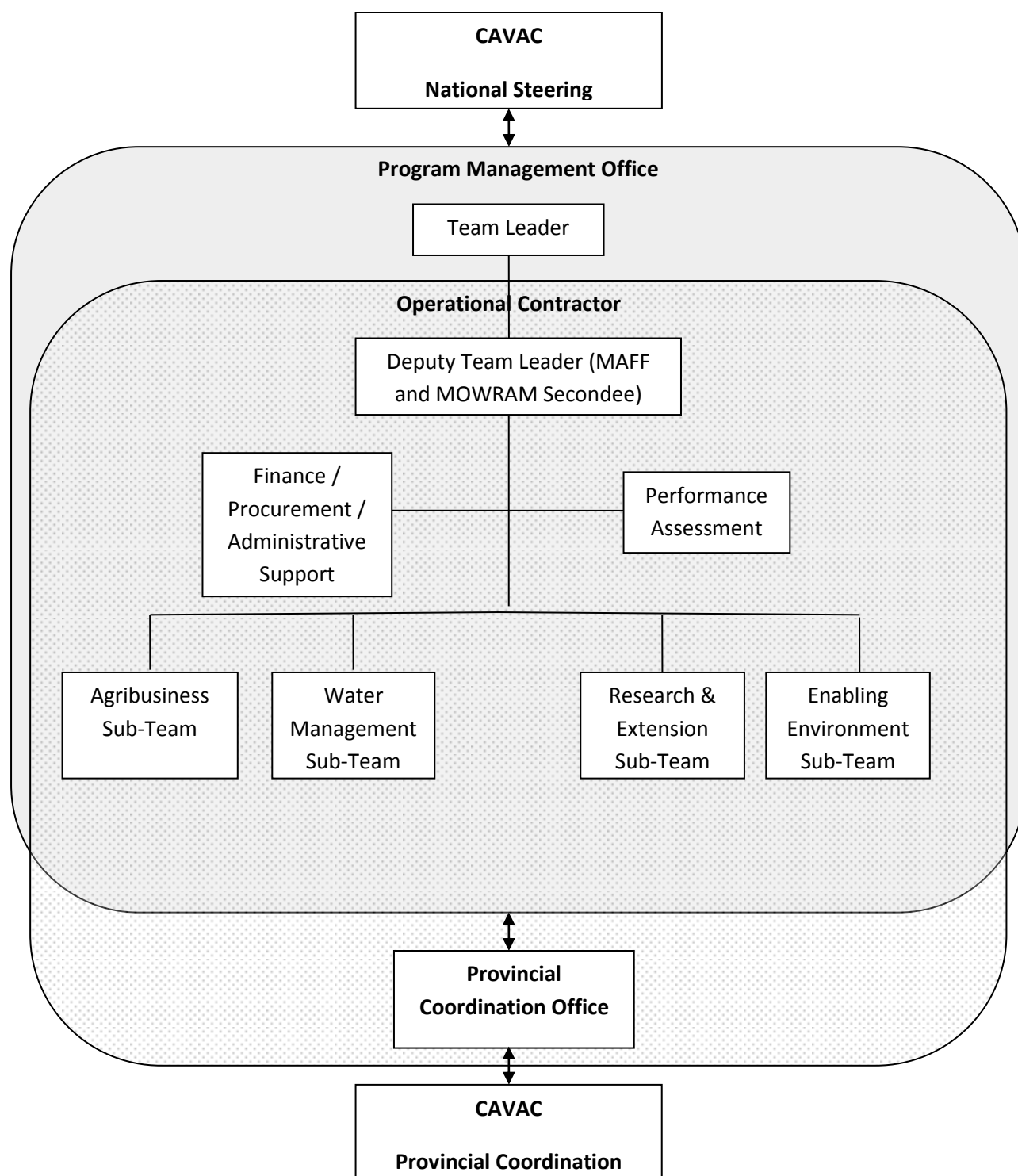
In 2012, CAVAC will focus on:

- Farmer knowledge
- Availability of better seeds
- Improved access to irrigation.

### **Cassava**

Support to the cassava sector is put on hold as concerns on forest degradation due to cassava production are high.

## Annex 3: CAVAC Organisational Structure



## Annex 4: CAVAC Staff List

Position	Name	Period of Engagement	Notes
<b>AusAID</b>			
Team Leader	Peter Roggekamp	Full Term of CAVAC	
<b>Cardno (As Per Contract)</b>			
<b>Administration and Finance</b>			
Operational Contractor General Manager	Roger Bednall	Full Term of CAVAC	
Procurement Manager	Trevor Parris	Full Term of CAVAC	
Procurement Officer	Sok Sokha	Full Term of CAVAC	
Finance Officer	Pann Kim Hoeun	Full Term of CAVAC	
Admin Assistant 1	Chhun C. Tate	Full Term of CAVAC	
Admin Assistant 2	Sok Phally	Full Term of CAVAC	Formerly Mom Makara
Office Manager / Program Officer	Lim Chakrya	Full Term of CAVAC	
Finance Officer (provincial)	Ly Visakha	Full Term of CAVAC	
IT Officer	Kim Chanthoeun	Full Term of CAVAC	
Translator	Cheavong Sokearith	Full Term of CAVAC	
Environmental Specialist		Full Term of CAVAC	Interviewed – no suitable candidate found One nomination under consideration
Gender Specialist	Thea Sophy	Full Term of CAVAC	
<b>Provincial Coordinators</b>			
Provincial Team Leader Kam.Thom	Theap Bunthourn	Full Term of CAVAC	
Provincial Team Leader Kampot	Hum Titchetha	Full Term of CAVAC	
Provincial Team Leader Takeo	Keat Pengkun	Full Term of CAVAC	

Position	Name	Period of Engagement	Notes
<b>Agribusiness</b>			
Agribusiness Development Manager	Pieter Ypma	Full Term of CAVAC	
Rice Value Chain Development Specialist	Sovathara Heng	Full Term of CAVAC	
Horticultural Value Chain Development Specialist	Ty Sopheavy	Full Term of CAVAC	
Provincial Agribusiness Coordinator 1	Yong Sopheha	Full Term of CAVAC	Formerly Saint Srey
Provincial Agribusiness Coordinator 2	Ping Sodavy	Full Term of CAVAC	
Provincial Agribusiness Coordinator 3	Ouk Nimul	Full Term of CAVAC	
<b>Irrigation</b>			
Irrigation Water Management Manager	Robert Anscombe	Full Term of CAVAC	
Irrigation and Water Management Specialist	Phai Sok Heng	Full Term of CAVAC	
Irrigation and Water Management Specialist	Nong Phirom	Full Term of CAVAC	
Provincial Irrigation / Water Management Coordinator 1	Khiev Daravy	Full Term of CAVAC	
Provincial Irrigation / Water Management Coordinator 2	Chhim Sophea	Full Term of CAVAC	
Provincial Irrigation / Water Management Coordinator 3	Soeur Sophorn	Full Term of CAVAC	
<b>BEE</b>			
Business Enabling Environment Specialist	Kim Sangha	Full Term of CAVAC	
<b>M&amp;E</b>			
M&E Manager	Gary Woller	Part Time - Full Term of CAVAC	150 days between March 2010 and June 2012
M&E Officer		Full Term of CAVAC	
M&E Assistant 1	Thorn Riguen	Full Term of CAVAC	
M&E Assistant 2		Full Term of CAVAC	



Position	Name	Period of Engagement	Notes
<b>ACIAR</b>			
<b>Research and Extension</b>			
Research and Extension Manager	Dr Craig Meisner	Full Term of CAVAC	
Research and Extension Specialist	Kang Sideth	Full Term of CAVAC	
Regional R&E	Sourn Sophoan	Full Term of CAVAC	
Regional R&E	Pith Lyna	Full Term of CAVAC	
Regional R&E	Keo Chenda	Full Term of CAVAC	
CARF Coordinator	Nin Charya	Full Term of CAVAC	
Agricultural adviser	Kry Vong Socheat	Full Term of CAVAC	
<b>Model Household Trainers (Provinces)</b>			
Takeo	Yong Cady	30/6/12	
Takeo	Sar Panha	30/6/12	
Takeo	Ros Ra	30/6/12	
Kampong Thom	Chhe Putheavy	30/6/12	
Kampong Thom	Sun Vannak	30/6/12	
Kampong Thom	Long Vannara	30/6/12	
Kampot	Bun Phany	30/6/12	
Kampot	Sat Virak	30/6/12	
Kampot	Mak Srey Ny	30/6/12	



## Annex 5: Revised Guidelines for Policy Support Fund Facility

### Introduction

Funding activities nominated by NSC members (AusAID or the Royal Government of Cambodia) may be considered from time to time. The purpose of this facility is to support key shared policy objectives and the ongoing implementation of the Strategy for Agriculture and Water (SAW) and the Policy Paper on Paddy Production and Rice Export.

This scheme provides funding for activities not included in the CAVAC annual work plan, and will be based on separate approvals. The Facility will focus on issues which have relevance to CAVAC, reflect key shared policy priorities, and include a capacity development aspect.

The terms and conditions of funding under this scheme will be flexible, and determined by the NSC on a case by case basis.

### Assessment Process

The process of assessing Policy Facility applications will be as follows:

- Applications may be forwarded to CAVAC by an NSC representative from AusAID, MAFF, MOWRAM, or directly submitted to CAVAC by PDA, PDWRAM and other Stakeholders.
- CAVAC will review the proposal and make a recommendation to the assessment panel.
- Applications may be assessed by either:
  - the full NSC,
  - or, between NSC meetings, by
  - the NSC Executive Committee or their delegated representatives, comprising an AusAID representative, a MAFF representative and a MOWRAM representative.

### Assessment Criteria

Applications for funding under the Policy Facility will be assessed against the degree to which they address the following criteria:

- relevance to SAW/Rice Policy priorities and other RGC/AusAID priorities
- relevance to CAVAC objectives
- capacity development
- while needing to differentiate proposals from the ongoing core roles of the RGC, applications will also be assessed against the degree to which they complement and add value to these core activities

The Policy Facility will **NOT** fund activities which:

- are inconsistent with MAFF and / or MOWRAM policy
- are inconsistent with AusAID or CAVAC policies or objectives

- are associated with the drafting of laws and / or regulations (but may fund policy research to inform the development of laws and / or regulations and the implementation of laws and regulations where they are closely aligned with RGC and AusAID's joint priorities)
- are considered as routine or planned core business of RGC, funded by the national budget

Final approval can only be given if:

- There is agreement from MAFF, MOWRAM and AusAID, or
- Agreement from two of the above, and the third either abstains or fails to respond within seven days.

Approval will not be given if the representative from one or more of MAFF, MOWRAM or AusAID indicate that they do not support the application.

### **Applications**

Applications should include (but are not limited to):

- Name and details of the applicant
- Activity title
- Objectives and intended outcomes
- A detailed activity proposal clearly describing all intended activities
- How the proposal addresses the selection criteria
- Implementation / management processes and procedures
- Risk management plan
- A detailed budget
- Work plan/Activity timeline
- Financial management processes and procedures
- Date and signature

## Annex 6: Irrigation Schemes – Roles and Responsibilities

Tasks	CAVAC	MOWRAM	PDWRAM	COMMENTS
Initial irrigation scheme selection criteria	P	P	P	CAVAC to prepare initially. Discuss and agree
Potential schemes identification	P	P	P	All to submit proposals
Selection of schemes for study	P	P	P	Proposals by PDWRAM. Discuss by all 3, and agreement
Feasibility Study	P	S	S	CAVAC to lead, fully supported by PDWRAM and MOWRAM
EIA/EMP	P	S	S	CAVAC contract
Recommendation for NSC	P			CAVAC to draft and discuss
TOR for survey and detailed design	P			
Contract for survey and design	P			
Topographical survey	S	S	P	
Detailed design	S	S	P	PDWRAM with support from CAVAC as required. Capacity building. Checked by CAVAC, changes discussed and agreed.
Prepare tender and contract documents	P		S	PDWRAM to provide drawings and BoQ
Call for tenders	P		S	With support from PDWRAM as designers at tender briefing
Receive tenders	P			Receipt of tenders and public opening. Registration of bids.
Evaluate tenders	P	P	P	Evaluation committee is: MOWRAM PDWRAM CAVAC Irrigation Manager Independent Specialist CAVAC Procurement Manager
Negotiate contract	P			
Award contract	P			
Construction supervision	P		P	PDWRAM under contract from CAVAC, and CAVAC

Tasks	CAVAC	MOWRAM	PDWRAM	COMMENTS
Contract administration, including payments	P			
Final checks	P			An independent check will be made for claims for the final payment for construction contracts
Handover on Practical Completion	P		P	Handed over to PDWRAM
Administer defects period	P		P	6 months and 5% retention
Establishing organization for O&M	S		P	
Training for organisation	S		P	Capacity building as required for PDWRAM
Monitoring system and organisation performance	S	S	P	

## Annex 7: RGC monitoring sheet. Draft, targets will be added before 2012.

	1 April.	Number	% achieved	1 July.	Number	% achieved	1 October.	Number	% achieved	31 December.	Number	% achieved
<b>Agribusiness</b>												
No of seed producers trained					25						100	
No of associations supported by PDAs		4									10	
No of trials for new varieties conducted by PDAs					10						20	
More details on PDA led activities												
support to private companies and associations in the following markets: input markets in rice input markets in Vegetables rice export <b>finalized</b> for companies 1.Rice seed market ( <i>Mr Vanna &amp; 4 associations, bang Nimul, Srey Chey, Champei and Kvek Meanrith</i> ) 2 Fertilizer market ( <i>HPC &amp; Ye Tak</i> ) 3 Pesticide market ( <i>Nokor Thom &amp; SPC</i> ) 4 Media market ( <i>Asia Master &amp; Delight</i> ) 5 Vegetable seed ( <i>Direct with Retailers</i> ) 6 Agro tools ( <i>Direct with Pump Producers</i> ) 7 Rice export market ( <i>Federation of Millers, Baitang, Golden Rice</i> )  <b>initiated</b> for new companies  1.1.Rice seed market ( <i>1 or 2 more</i> ) 2 Fertilizer market ( <i>1 or 2 more</i> ) 3 Pesticide market ( <i>at least 1 more</i> ) 4 Media market ( <i>at least 1 more</i> ) 5 Vegetable seed ( <i>at least 2 companies</i> ) 6 Agro tools ( <i>at least 2 companies</i> ) 7 Rice export market		2			3			5			8	
		2			4			6			8	

		1 April.	Number	% achieved	1 July.	Number	% achieved	1 October.	Number	% achieved	31 December.	Number	% achieved
<b>Irrigation and Water Management</b>													
Irrigation schemes constructed									7			7	
Leading to farmers having access			Details to follow										
Leading to ha able to irrigate													
	Irrigation schemes prepared			6									
	Water availability studies conducted											1	
	Pump sellers have better pump units on offer		5			6			6			7	
Leading to farmers having better units in 2012													
<b>Research and Extension</b>													
CARF grants awarded		CARF-10 grants received and awarded	6					CARF seminar conducted	1		CARF -11 announced	1	
4 large research programs		Research on schedule	4		Research on schedule	4		Research on schedule	4		Research on schedule	4	
Extension activities started related to:													
Model farmers		MF trained	400		MF trained	800		MF trained	1200		MF trained	1600	
Input suppliers			10			20			30			40	
Associations		Associations identified	5		Need assessment	4		Training tailored	4		trained	3	

	1 April.	Number	% achieved	1 July.	Number	% achieved	1 October.	Number	% achieved	31 December.	Number	% achieved
Leading to farmers being supported											6000	
Sources of information supported					1							
Linking activities conducted		2										
Training activities by PDAs....	To follow											
Human capacity building PDA	2 week workshop by IRRI	1										
<b>Business Enabling Environment</b>												
Policy issues researched		2			4			4			6	
Policy facility activities supported		2			3			4			5	
Provincial events organized		2			3							
<b>Organization Issues</b>												
NSC meetings					1						2	
Provincial coordination meetings		1						2			3	

