



## Cambodia Agricultural Value Chain Program

2014 Annual Work Plan

Final submission, February 2014, National Steering Committee recommendations included

### ***Continuation, continuous adjustments and first impacts***

*CAVAC is confident that the Program is on track. The activities planned for 2014 will be a natural continuation of the work implemented during 2013, with the constant adjustments that are a feature of CAVAC's approach. While 2013 showed initial signs of impact, especially within the irrigation component, it is in 2014 that CAVAC is expected to be able to capture and quantify the results of the first adopters across more markets. This will also allow the program to validate earlier assumptions relating to the total impact that can be expected over the life of the Program.*

## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
<b>2</b>	<b>Program Description .....</b>	<b>1</b>
2.1	Government Priorities .....	1
2.2	Government Consultations for the 2014 AWP .....	2
2.3	Key Elements of CAVAC's Methodology .....	3
2.4	Continuation and Continuous Adjustments .....	3
2.5	Systemic Change and More Direct Impact .....	4
2.6	Timeline for 2014 Implementation .....	9
<b>3</b>	<b>Key Activities for 2014 .....</b>	<b>9</b>
3.1	Component 1: Agribusiness Development and Extension .....	9
3.2	Component 2: Irrigation and Water Management .....	17
3.3	Component 3: Research .....	23
3.4	Component 4: Business Enabling Environment .....	23
3.5	Cross-cutting Issues .....	24
<b>4</b>	<b>Program Management .....</b>	<b>25</b>
4.1	Staffing .....	26
4.2	Stakeholder Collaboration .....	26
4.3	Procurement .....	27
<b>5</b>	<b>Annual Work Plan Budget – 2014 .....</b>	<b>27</b>
	<b>Annex 1: Implementation Process and Procedures .....</b>	<b>33</b>
	<b>Annex 2: CAVAC Organisational Structure .....</b>	<b>35</b>
	<b>Annex 3: Guidelines for Policy Support Facility .....</b>	<b>36</b>
	<b>Annex 4: Monitoring Sheet .....</b>	<b>38</b>

## List of Tables, Figures and Boxes

Table 1: Summary of AWP decisions .....	7
Table 2: Timeline for 2014 Implementation .....	9
Table 3: List of 2013 activities led by PDAs .....	10
Table 4: 2014 CAVAC-led activities in agribusiness and extension.....	16
Table 5: CAVAC's Irrigation Scheme Status .....	21
Table 6: Annual Work Plan Budget .....	28
Figure 1: Impact on beneficiaries .....	5
Figure 2: Process and Procedures.....	33
Box 1: Different Roles, One Goal .....	2
Box 2: CAVAC's Support Markets .....	3

## Abbreviations and Acronyms

ACIAR	Australian Centre for International Agricultural Research
AWP	Annual Work Plan
BEE	Business Enabling Environment
CARDI	Cambodian Agricultural Research and Development Institute
CAVAC	Cambodia Agricultural Value Chain Program
DFAT	Department of Foreign Affairs and Trade
DTL	Deputy Team Leader
EMS	Environmental Management System
FCRMA	Federation of Cambodian Rice Miller Associations
FWUC	Farmer Water User Community
GDA	General Directorate of Agriculture
KAP	Knowledge, Attitude and Practice
MAFF	Ministry of Agriculture, Forestry and Fisheries
MOWRAM	Ministry of Water Resources and Meteorology
M&E	Monitoring and Evaluation
NSC	National Steering Committee
O&M	Operation and Maintenance
PCC	Provincial Coordination Committee
PDA	Provincial Department of Agriculture
PDWRAM	Provincial Department of Water Resources and Meteorology
PWS	Private Water Seller
RGC	Royal Government of Cambodia
SAW	Strategy for Agriculture and Water
SIF	Supplementary Investment Fund
TAF	The Asia Foundation
USAID	United States Agency for International Development
US\$	United States Dollar



## 1 INTRODUCTION

The Cambodia Agricultural Value Chain Program (CAVAC) Annual Work Plan (AWP) 2014 is presented for the 12-month period from 1 January 2014 – 31 December 2014.

This AWP was developed in collaboration with key counterparts and stakeholders.

The following plan details a short analysis of progress to date and a direction and description of the major activities planned for 2014.

The AWP 2014 and its accompanying annexes are provided to the National Steering Committee (NSC) for information, review and approval.

### **Amendments after the NSC Meeting held on 13 February 2014**

- CAVAC will provide support to the Provincial Departments of Agriculture (PDAs) by including start-up capital for agricultural cooperatives.
- CAVAC will work with partners to look at options for supporting training in advanced financial management in capacity building activities for agricultural cooperatives.
- CAVAC will provide support to the Provincial Departments of Water Resources and Meteorology (PDWRAMs) in Farmer Water User Community (FWUC) monitoring.
- The CAVAC Irrigation and Water Resource Management team will work to ensure that construction work at Wat Thmey meets the required work plan schedule targets.

## 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 and Extension; Irrigation and Water Management; Research; and Business Enabling Environment. Responsibility for the implementation of the Program is shared between the Team Leader and Cardno Emerging Markets (Australia) Pty Ltd (the Operational Contractor) under the direction of the Australian Aid Program and the Royal Government of Cambodia (RGC).

This AWP 2014 report is based on the assumption that a 1.5-year extension will be granted, bringing the Program end date to the 31 December 2015.

### 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 RGC, to increase yields in paddy production and promote the export of rice, will continue to be at the heart of CAVAC's activities in 2014. The Policy Paper focuses on: improved access to irrigation; better inputs including seed; innovation; better farmer knowledge; and support to export. These areas will remain the focus of CAVAC throughout the coming year.

In 2012 and 2013, the Program directly funded priority activities under the Policy Paper. These are executed by the PDAs in the three target provinces of CAVAC and the General Directorate of Agriculture (GDA). CAVAC proposes to continue to support government priorities through the PDAs and GDA in 2014.

## 2.2 Government Consultations for the 2014 AWP

Consultation workshops were conducted once with the Department of Foreign Affairs and Trade (DFAT) and the two Deputy Team Leaders (DTLs) and the other time with the DTL from the Ministry of Agriculture, Forestry and Fisheries (MAFF) and the PDA Directors. The following recommendations and conclusions were made:

The Deputy Team Leader from MAFF advised higher emphasis should be placed on outcomes and recommended that CAVAC and the PDAs conduct assessments on this basis. It was recommended for the PDAs to assess yields, crop intensity, farmers' participation in agribusiness and agricultural cooperatives' performance. The Deputy Team Leader committed to assisting the PDAs with data collection requirements.

It was also advised that the PDA Directors should adjust their portfolio of activities in line with MAFF's five-year strategic plan. This will include: support to farmer organisations; support to infrastructure; promotion of contract farming; support to paddy collection from farmers and capacity building on agribusiness. It was recommended that the support to farmer field schools be reduced, at least in areas where farmer field schools had been conducted previously. The strategy also advises farmers to focus on a combination of rice, vegetables, livestock and fish.

PDA Kampot explained that data on some of the indicators was already collected and shared. It was suggested to capture not only the impact on farmers who have directly benefited from activities but also on farmers who were influenced by those farmers' who have benefited. The Director stressed the importance of irrigation side canals and asked CAVAC to consider extending these canals to at least 1 km and where feasible longer to ensure all farmers in the irrigated area received a benefit from CAVAC irrigation schemes.

PDA Takeo has also collected some impact data and suggested using data collected in 2011 as a baseline. The Director requested support for further development of resource materials and shared concerns that some of the needed support to cooperatives was not always easily funded under CAVAC's procurement requirements.

PDA Kampong Thom proposed a meeting between CAVAC's supported rice exporters and the PDA to facilitate linkages. The Deputy Director shared experiences and made suggestions around the *Ten Varieties Policy* of the RGC. He also shared feedback on the provincial public private dialogue meetings and suggested that more focus in terms of the topics covered would have been welcome. It was recommended that linking events should be repeated and requested the list of model farmers whom CAVAC had trained, allowing for further support by the PDA.

### Box 1: Different Roles, One Goal

The Policy Paper on the Promotion of Paddy Production and Rice Export has become the common roadmap for the RGC and CAVAC activities. Within this framework, it was agreed that the Provincial Departments of Agriculture (PDAs) would take the lead in a number of provincial priorities including the establishment of cooperatives and activities related to the introduction of improved varieties and related farming techniques, and CAVAC take the lead in other activities, especially those related to agribusiness.

In the meeting it was requested the present budget ceiling of US\$150,000 per province per year to be increased to US\$200,000.

A meeting chaired by the Co-Chair of the National Steering Committee from the Ministry of Water Resources and Meteorology (MOWRAM) with representatives from the PDWRAMs of the three target provinces was held on 26 November 2013. During the meeting, CAVAC's ongoing irrigation activities were discussed and its irrigation investment plan for 2014 was agreed.

## 2.3 Key Elements of CAVAC's Methodology

As the main selection and design criteria for 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 as highlighted at Box 2.

The focus on poverty and the pre-condition to be fair and neutral further shapes the design and implementation of CAVAC activities. It also forms the basis for applying principles related to cross-cutting issues such as the environment, gender and disability across all activities. When working with the private sector CAVAC is careful to avoid negative side effects such as unfair competition within the market.

As explained more extensively in previous 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 Program focuses on improving Cambodian farmer support systems where sustainability of the farmer support systems is a prerequisite;
- > Investments are judged using value-for-money criteria;
- > Activities can only take place while avoiding or limiting negative impacts on people, on markets and on the environment; and
- > Gender and disability inclusiveness criteria are integrated in the designs of all CAVAC activities.

More information on the way CAVAC's works can be found at: [www.cavackh.org](http://www.cavackh.org).

### Box 2: CAVAC's Support Markets

#### **Agribusiness**

Seed  
Fertiliser  
Pesticides  
Model farmers  
Wider market systems  
Media  
Rice export  
PDA led activities  
GDA led activities

#### **Irrigation**

New schemes  
Ownership of existing canals

#### **Business Enabling Environment**

Government as improvers  
Civil / private sector as improvers

#### **Non paddy markets**

Vegetables

## 2.4 Continuation and Continuous Adjustments

The activities outlined in the 2014 AWP are cognisant of the direction taken in previous years of implementation. CAVAC has been shaped by the operational plan that translated the Program Design Document (PDD) into the AWP of 2010. The last three years of implementation have produced many lessons that CAVAC has utilised for more effective program implementation, including where and how



it is feasible for CAVAC to provide support, the quality and efficiency of Program interventions; and expected outcomes. This AWP will describe the ongoing adjustments CAVAC is making and how these shape planned activities for 2014.

The portfolio of support markets in which CAVAC is active has not changed during 2013 and is not likely to change over the two remaining years of the Program. The exception to this may be activities within the business enabling environment component. CAVAC is of the opinion that continuing the current portfolio of activities provides good value for money. In all of the support markets there are more potential partners and innovations to work with than CAVAC's current resources can manage. Whilst this is a good position to be in, it does force CAVAC to make choices. From the beginning of the program CAVAC has made adjustments across its portfolio, the nature of these adjustments has changed over time. It was initially important to learn from a wide range of activities and keep options open, but at this stage of implementation choices will be based on optimising the total impact. 2014 will be the final year for portfolio adjustments as CAVAC will use 2015 to finalise activities and capture lessons and impact, and the last year construction contracts are signed for new irrigation schemes.

Over the last year CAVAC has placed a great deal of emphasis on understanding the quality and potential impact of its interventions. The outcomes of this emphasis have led to valuable lessons that form a basis for the adjustments of the 2014 portfolio. To give some examples:

- > CAVAC now better understands how farmers innovate and where opportunities lie to modify the behaviour of farmers to correctly use fertiliser. These lessons have informed the suite of new agreements being developed with a number of fertiliser companies as outlined in section 3.1;
- > CAVAC staff have a better understanding of constraints in irrigation designs and within the operation and maintenance activities leading to better quality and more sustainable schemes;
- > CAVAC staff understand how retailer and model farmer training can be improved and have allocated more personnel to improve these training activities; and
- > CAVAC has found that the decisions of vegetable farmers cannot be explained from a profit perspective. Many factors may contribute to potential growth and those factors are yields, varieties, quality, timing or labour costs. However, their relations with growth and profits are too unclear to construct a theory of change that can guide the program.

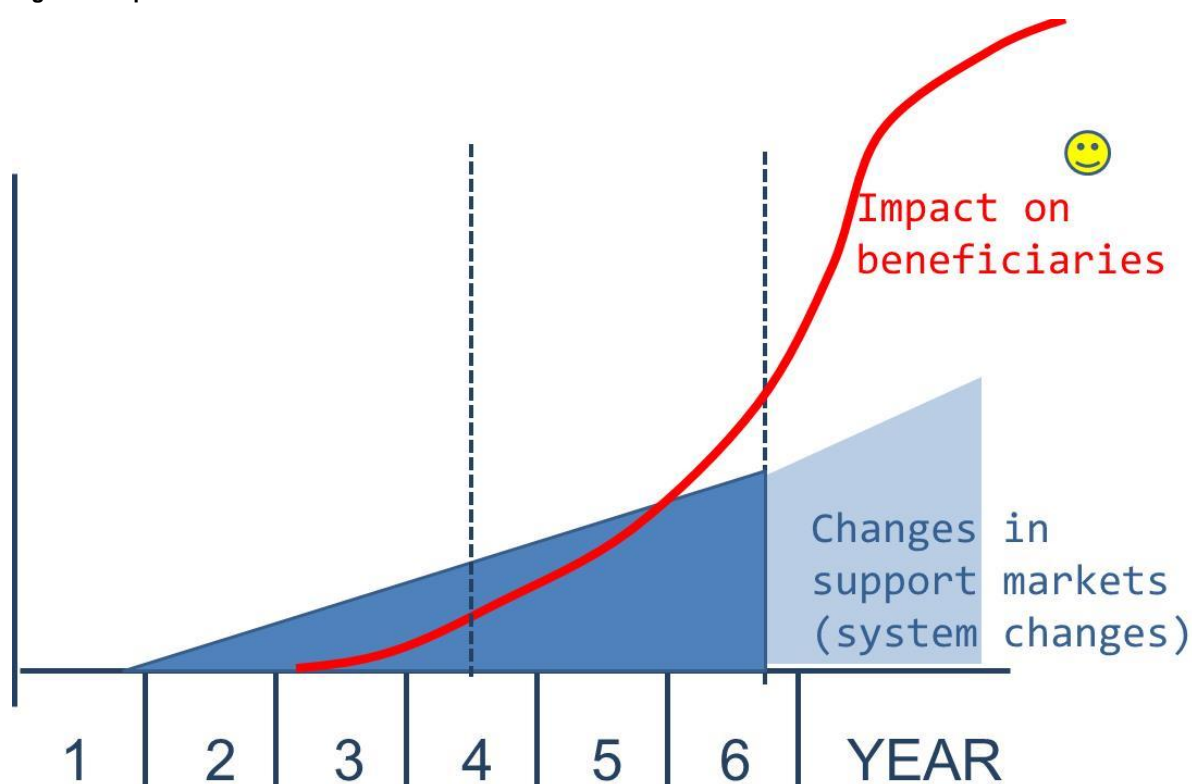
While in some interventions the way forward seems clear, for others CAVAC still needs some answers before it can proceed. An example is the pesticides market where CAVAC is awaiting results of research and the development of a diagnostic tool before it can continue to engage with companies. However, in general, 2014 will further adjust the portfolio to ensure maximum impact based on its existing knowledge of the markets. The theme of the 2013 AWP – continuous learning – will remain important; however this continuous learning is expected to lead to smaller adjustments.

## 2.5 Systemic Change and More Direct Impact

Successful market development programs focus on developing systems that keep delivering benefits to farmers. In these programs, indicators of impact such as outreach, productivity gains or increased income take more time to improve compared to programs where direct service delivery to farmers is

provided. The real impact on beneficiaries is expected to grow years after the program ends as illustrated in Figure 1.

**Figure 1: Impact on beneficiaries**



During the initial stages of measuring impact the best early indicator of long term successes are changes in the support systems. One needs to know what a “successful market” looks like before one can measure its success. CAVAC uses the following philosophy:

In an ideal market, many companies compete to deliver a variety of goods and services to farmers and innovation is self-sustaining. Farmers can choose from a variety of good quality products. These goods and services are continuously updated to reflect changing conditions and new technology.

Because of the many constraints most support markets in countries like Cambodia experience a reality that is very different from an ideal market. Farmers in Cambodia cannot buy modern seed and do not realise the benefits this will provide them. Farmers do not know how to best protect their crops and guess which fertiliser to use and how they should apply it. Farmers normally do not have access to water to irrigate throughout the year. Given this, yields in the wet season are far below the benchmark and the year round potential of the rice sector within Cambodia is seldom met.

Market development programs such as CAVAC can reduce the gap between failing and ideal markets, or at least can start the process by changing some of the inhibitors to success. However, while it is important to understand what the ideal system looks like and what barriers there are to achieving this, Programs such as CAVAC need to strike a balance between more cost effective activities which initiate change within a market and reaching the idealised goal. To do this CAVAC needs to understand the changes within the market in relation to outreach and productivity indicators to understand what changes will make markets better able to deliver and adjust in the future.

The three main guiding questions to assess systemic change are:

- > Will support to farmers continue after CAVAC's activities end?
- > Will support to farmers grow and adjust to changing circumstances after CAVAC's activities end?
- > What will be the outreach and impact potential of the market changes?

The first two questions can only be answered completely years after the interventions end and are therefore not too useful at this stage of implementation. It is however possible to judge the likelihood of successful systemic changes by answering questions like:

- > Do the interventions address underlying constraints or merely fix problems directly?
- > Are improved goods and services starting to be delivered by market players?
- > Are there signs of clear incentives to continue delivering?
- > Are there initial signs that market players intend to continue to innovate?
- > Are there initial signs of copying behaviour of market players that are not supported?

CAVAC's Monitoring and Evaluation (M&E) system is designed to capture these early signs.

The third question: '*What will be the outreach and impact potential of the market changes?*' is more straightforward to understand but only produces useful indicators if they come from systemic change. Out of context these indicators ignore sustainability and reward opportunistic behaviour.

This AWP proposes portfolio decisions for CAVAC in 2014. The table below gives a simplified summary of these decisions and the basis on which they were taken. One should realise that the decisions to continue, increase, end or change interventions are almost by definition based on partial and imperfect information.

Table 1: Summary of AWP decisions

	Sectors			Analysis and Strategy Summary	Interventions up to 2014	Interventions 2014	Potential Systemic Change	Potential Outreach / Productivity
Rice	Inputs	Seeds	dry season	Farmers predominately use their own or neighbours' paddy as seed. Real quality seeds will increase yields (>10%). CAVAC support (new) seed producers.	Support to wet and dry season seed producers on quality and promotion of new varieties. Some support to GDA on policy.	CAVAC will continue with existing and maybe 1 or 2 new producers or associations while monitoring potential new partners. CAVAC is of the opinion that its human resources should be partly re-allocated to other markets with a more direct value for money. The seed market is consiidered a medium priority.	The seed market is complex. CAVAC was able to stimulate private seed producers to start production and to invest in appropriate varieties. Further adoption of new varieties and change from using paddy to seeds will depend on the demonstration effect of exising producers and on market prices. There is more potential for systemic change in the wet season where variety change is more and more common.	The seed market interventions are not unlikely to reach 5,000 farmers with yield increases potentially around 10 % in the dry seaoson and could lead to a double income in the wet season. A demonstration effect to other farmers could increase this impact many times over time.
			wet season	Most farmers still use traditional varieties that are well adjusted to the circumstances, but do not allow for high yields. CAVAC supports seed producers to produce and introduce modern varieties.				
		Pesticide		Pest and diseases are probabaly the largest addressable constraint in rice farming, especially in the dry season. The market is quite dysfunctional. RGC is moving towards a more open policy towards modern techniques, though only a few large companies are active in Cambodia. CAVAC supports companies with knowledge and information dissemination models.	CAVAC is supporting several companies to disseminate information to farmers (development of an extension strategy, company capacity and retailer training). CAVAC is developing a diagnostic and solution tool as a basis for further interventions.	A high priority market for CAVAC and potenitally the support market with the most significant impact. After the diagnostic tool creation, CAVAC will seek more interested partners.  The safety training with the PDAs also remains high on the agenda. CAVAC will also consider rodent control activities.	The present market for crop protection is quite dysfunctional and seen as a major constraint by all farmers. CAVAC contributed to a major policy change in this market through its support to GDA's development of a Rice Pest Management Manual. Through its R&D and support to companies CAVAC is likely to stimulate major changes in the information flows in this market. It will give a large number of farmers access to solutions that are environmentally significantly less damaging.	Impact is difficult to estimate at this stage, but outreach surpassing 150,000 households is reachable and farmers field losses are not unlikely to be reduced by at least 10%. Effective crop control can make the difference between profit and loss for many farmers. Effective use will also lead to cost reduction, especially in dry season farming.
		Fertiliser		Almost all of CAVAC's targeted farmers use fertiliser. In the dry season the amount used is close to optimal, but yield gains can be made by most farmers with better choice of fertiliser and better application. Improved fertiliser use in the wet season goes hand in hand with the use of improved varieties. CAVAC focuses on farmer knowledge. Quality and availability is not a CAVAC priority.	At the end of 2013 CAVAC is likely to work with 7 or 8 companies to help them change their business model from selling fertiliser only into a client relation model where farmers get information.	This is another high priority market. Providing support to existng partners will absorb siginaficant human resources within CAVAC. CAVAC may add more partners but only if they are highly committed and enough resources are available.	The business model of embedding advice to fertiliser sales is being adopted by the companies we work with. We could reach a significant part of the market. There are clear signs that those farmers that follow retailers' advice have benefitted. At least some of the companies we work with are in contact with mother companies and they are likely to change and update the advice in the future. Other systemic constraints like availability and quality are less of an issue.	Working with 7 companies and their retailers could initially give more than 100,000 farmers access to advice, but if the companies we work with really adopt the approach this could increase to around 1 million. Even if 20% of farmers use the advise, at least another 20% are likely to adopt it in the same or following year. Our data shows that for most farmers a 10% yield increase is achievable.
	Model farmers			Model farmers are the farmers that innovate first and are a model for others to follow. With training and linking activities CAVAC equips the model farmers with tools and capacity to improve their innovative and dissemination actions.	By August 2013 CAVAC trained about 14,000 model farmer households and linked them to sources of knowledge. CAVAC conducted an intensive impact assessment and concluded that sampling and content for wet season model farmer training would benefit from adjustments. The training of dry season farmers was not successful enough to continue, and in 2013 CAVAC began redesigning the approach to dry season innovation through model farmers.	In 2014 CAVAC plans to go ahead with the revised wet season model farming training and if the pilots of a new dry season model farmer program are successful, CAVAC will implement these in the 3 provinces.	To date CAVAC has mainly worked on the capacity of model farmers, but it has also undertaken some activities to give model farmers more access to information through linking events and by inviting companies to model farmer training. In some of the agribusiness activities the companies specifically target model farmers as they realise the benefit of this.  Studies showed that model farmers influenced other farmers, but so far CAVAC has not had much evidence that model farmers' search for advice had changed significantly. This step will be important for the model farmer activities to continue having their impact in the future. For dry season model farmers, CAVAC is rethinking how model farmers innovate and how this can be casted in a system. Private sector action research may be a key element.	CAVAC is likely to have trained 20,000 model farmers by the end of the program and initial assessments show that one model farmer on average influences at least 10 others, though this might not be the case for all issues.  CAVAC's initial impact analysis of the dry season training raised so much doubt that the impact will not be included when reporting program impact.
Media			Commercial media has good potential to reach large numbers of farmers. It is a complex market where producers, broadcasters and advertisers all need to see the commercial benefit and work together. CAVAC works both with companies on demonstrating the feasibility of rural agricultural programs and on getting better market information to allow advertisers and broadcasters to invest.	Support to one production company and to media habit research companies is on track. 2013 is a critical year to see how the market reacts to new market information from media habit research companies.	CAVAC will continue ongoing interventions and depending of the findings at the end 2013 is likely to initiate support to other players.	For rural programs to be viable; producers, broadcasters and advertisers all need to be on board. CAVAC tried to get this collaboration working by creating a working example with a broadcaster. Both broadcasters and advertisers however also need market information to justify and direct their investments. CAVAC is sharing costs with 2 commercial media habit companies to produce this information commercially. If this works, it is genuinely changing market systems. Though all indications are positive, it is really too early to assess system changes.	Media has the potential to reach a large propotion of the rural population. It may be possible to assess how many farmers change practices, but attributing the impact to CAVAC will not be feasible.	

	Sectors		Analysis and Strategy Summary	Interventions up to 2014	Interventions 2014	Potential Systemic Change	Potential Outreach / Productivity
Rice	Export		Cambodia has good potential to export high quality rice, but this requires the whole value chain to support quality. Presently Cambodia has a long way to go in this area. CAVAC sees its comparative advantage in supporting the RGC's export strategy mainly in helping exporters to source quality paddy. 'In house' quality control through contract farming is most likely to work at this stage. CAVAC also has a facility available to co-finance exporters for finding buyers.	Support to one exporter to develop a contract farming model is on track and promising. The support is extended to the production of good local seed varieties. The exporters' support facility has not been called upon by exporters.	CAVAC will continue supporting existing activities and will be open for requests for support from other exporters and local variety seed producers.	Almost all market support functions are absent for rice exporters. The support functions are unlikely to be established at the present level and type of export. It is more likely that the functions are developed inside a few companies first. CAVAC is likely to set an example of in-house (quality) services. Real success will however depend on copying from other exporters. The contract farming model could be the necessary step toward outsourced services.	10,000 farmers are likely to produce export quality rice. When other exporters copy this model, the impact can be many times more.
	BEE	Govt support	Both the national and provincial departments of MAFF have competent staff, but often have limited financial resources to conduct CAVAC like activities. A financial support package is offered to unlock this potential. Priorities are set by the PDAs and GDA.	In 2012 and 2013 CAVAC provided financial support to PDAs and GDA. CAVAC monitors the activities. This is as a contractual obligation, but leaves capturing the impact to the PDAs and GDA.	CAVAC will continue existing support if the interest of PDAs and GDAs remains.	CAVAC does not apply a theory of change to this work. CAVAC monitors activities, but does not assess impact. This is left to the RGC.	
		Public Private Dialogue	The Business Enabling Environment is perceived by many companies as far from conducive. The provincial governments have shown commitment to address the issue in previous engagements. CAVAC will pursue ways to continue and increase dialogue between public and private players as a first step to improve the BEE	After the election, CAVAC and The Asia Foundation are exploring if there are individuals and groups of players who are interested in addressing some of the issues identified in the workshops. CAVAC and The Asia Foundation (TAF) will evaluate proposals and where feasible support those.	Continuation will depend on the outcomes of the engagement with advocacy groups.	Though BEE is likely the main obstacle for agricultural growth, the activities that CAVAC undertakes are at best a first step towards systemic change. No outreach or impact will be measured.	
	Irrigation		Access to water in the dry season remains the main constraint in rice farming. The PDWRAM / CAVAC schemes are likely to be feasible and likely to have good value for money. Over the years CAVAC and the PDWRAMs have an even better understanding what investments are the most feasible. Sustainability however remains an issue that needs much attention and for which there are few clear cut solutions.	CAVAC has initiated construction or rehabilitation of 20 schemes. It continues the construction and the modifications of schemes initiated in previous years.	Depending on NSC approval, CAVAC will initiate at least 4 new schemes and invest in improvements of a few existing schemes. Emphasis also slowly shifts from construction to Operation and Maintenance issues.	Construction of the schemes will lead to direct access to water for farmers. Sustainability will depend on the ability of the farmers to organise themselves, to collect fees and to manage maintenance. Wider systemic change would have a major influence on the likelihood of sustainability, but much of that is beyond CAVAC's scope. The main area of required change is related to the BEE, an area where CAVAC has little influence.	More data available soon.
	Tools		Farmers invest heavily in tools like power tillers and even combined harvesters. There is no clear case for support. A private market for leveling services could work but is unlikely to serve small holders. Efficiencies of irrigation pumps remain an area with the potential to engage.	No activities in 2013. Having assumed that the program would finish in June 2014, CAVAC decided in 2012 to place its resources in other markets with a higher likelihood of success.	No activities are foreseen in 2014	No systemic change	No impact
	Vegetables		The vegetable value chain has great opportunities. Availability of labour and entrepreneurial spirit however seem to hold back further growth. There are no simple fixes; a more integrated approach is needed.	CAVAC supports 2 larger companies to work with several stakeholders like vegetable collectors and input retailers in a number of vegetable clusters.	The support to the 2 companies will absorb most of our human resources in 2014. CAVAC is open to perhaps one more company.	Through 2 companies, CAVAC addresses several constraints simultaneously by working with different type of players who all will hopefully adopt a new business model and different linkages. CAVAC is confident that systemic changes will happen, but finds it hard to predict which ones.	The present 2 programs with the partners are likely to influence 10,000 farmers in terms of quality, profits and volumes. At this stage, it is not appropriate to estimate change beyond this.



## 2.6 Timeline for 2014 Implementation

Table 2: Timeline for 2014 Implementation

Month	Activity
January / February	Start or resume construction of approved irrigation schemes. Submission of the six-monthly report Small internal M&E review
February	Provincial Coordination Committee (PCC) meetings for AWP 2014
April / May	Large internal M&E review
July	Submission of the six-monthly report
August	Provincial and national consultations for AWP 2015 (PCC Meetings) Small internal M&E review
October	Large internal M&E review Submission of AWP 2015
November	NSC Meeting

## 3 KEY ACTIVITIES FOR 2014

### 3.1 Component 1: Agribusiness Development and Extension

In the **Agribusiness Development and Extension component** CAVAC develops product markets that benefit farmers. It does so by prioritising farmers' needs and by finding organisations, public or private, who can deliver these services now and into the future. CAVAC assists these organisations to initiate or improve services to farmers. Extension activities have now been integrated with the Agribusiness component. Where the RGC and a number of NGO's offer genuine extension services, CAVAC focusses on providing farmers access to commercial or embedded advice through public and private providers.

#### 3.1.1 Agribusiness Work on the Priority Areas of PDAs and GDA

During 2012 and 2013 CAVAC funds have supported the PDAs and GDA to implement development priorities of MAFF and the Provincial Government. Activities have been in line with the Policy Paper on the Promotion of Paddy Production and Rice Export and overall this support has been valued by the RGC and beneficiaries.

#### Activities with PDAs

As outlined above, the Directors of the three PDAs have expressed their interest in continuing activities on the current basis of operations and have requested an increase in support. Based on the five-year strategic plan, MAFF has advised to adjust the portfolio towards the latest government priorities.

During 2013 work conducted by the PDAs with CAVAC support included: establishing agricultural cooperatives; management of field demonstrations and field days across a number of varieties and growing conditions to support innovation by local farming communities; and knowledge dissemination and development including field schools, workshops, trainings and studies related to context specific

issues and capacity building of PDA staff. Examples of the range of activities conducted by the PDAs are illustrated in the table below. It is expected that many of these activities will continue in a similar form in 2014.

**Table 3: List of 2013 activities led by PDAs**

No.	Activity	PDA Kampong Thom	PDA Takeo	PDA Kampot
1	Establishing agricultural cooperatives	X	X	X
2	Field demonstrations of early rice varieties		X	
3	Field demonstrations of medium rice varieties	X	X	X
4	Field demonstrations of late rice varieties	X	X	X
5	Rice seed production group establishment	X		
6	Farmer Integrated Pest Management – Farmer Field Schools		X	
7	Rice seed production training and demonstrations	X	X	
8	Pilot project – land leveling	X	X	X
9	Farmers' meetings		X	
10	Pesticide / Fertiliser Law Workshop	X	X	X
11	Cassava study	X		
12	Post-harvest training	X	X	X
13	Agricultural cooperative capacity building	X	X	X
14	Field demonstrations of dry season rice varieties	X		X
15	Durian planting demonstration			X
16	Agricultural cooperative forum	X		X
17	Agricultural cooperative exchange visit			X
18	Model farmers' field visits			X
19	PDA staff capacity building	X	X	X

### Activities with GDA

In 2013, CAVAC signed an agreement with GDA supporting the GDA-led Rice Value Chain Improvement Project. This project consists of eight major activities ranging from field experiments to provincial forums on topics including pest management and post-harvest technology and creating a national dialogue on RGC policies, seed law and regulations. There have, however, been some delays in implementation of this agreement. CAVAC expects the project to continue in 2014. CAVAC will continue to provide additional support to GDA as required. Additional requests to support the development of resource materials in particular have been provided throughout 2013 and support has been provided on a case by case basis.

## CAVAC-Led Activities

The 2014 intervention portfolio is largely a continuation of 2013 activities. Adjustments to this portfolio have been made on the basis of lessons from CAVAC's internal learning system and decisions on a reallocation of resources to produce maximum impact by the end of implementation.

Implementation in 2014 will start by supporting around 30 active interventions representing more than 35 partners, who vary from companies to associations to PDAs. CAVAC's team needs to continue to ensure that these partnerships lead to successful outcomes and sustainable impact.

### 3.1.2 Rice Seed

In order to facilitate the adoption of modern varieties for the wet season, CAVAC has previously supported four associations to conduct field demonstrations and develop marketing strategies. In 2014 CAVAC will continue to work with two of these associations, Champei Agricultural Development Association and Kampot Seed Production Association (Boeung Nimul), to implement the recommendations of these strategies. To do this, the associations need to take more of a leading role in the management of field demonstrations. CAVAC has been facilitating this by linking the two associations with input suppliers and rice millers. The two associations are now working with selected farmers to conduct five demonstrations: one with Champei and four with Boeung Nimul. This support is expected to develop the capacity of the associations to manage and fund field demonstrations without the need for donor support.

CAVAC also intends to resume working with a medium-sized rice seed producer, Mr Sokunthea, on improving rice seed production techniques. The current agreement with Mr Sokunthea's has been put on hold due to some issues that have prevented him from implementing his rice seed production plan.

### 3.1.3 Fertiliser

CAVAC will continue to focus support within the fertiliser sector towards the development of more effective information channels between retailers and farmers. A number of the partnerships developed within this sector have resulted from the group fertiliser training conducted by CAVAC with 12 companies in early 2013. Activities will include:

- > Following more intensive work with large fertiliser companies Ye Tak and Heng Pich Chhay, new agreements have been signed to enable a more focused approach to improving information systems.
  - Ye Tak will have access to backstopping / mentoring support on conducting retailer training and improving the quality of their retailers' field demonstrations.
  - Heng Pich Chhay is planning to remodel its retailer training program based on what staff have learnt from the training provided by CAVAC in early 2013. The training program is likely to be modified to expand the technical content and promote the importance of retailers' improving information provision to farmers.
- > CAVAC has received a request from the Papaya Company to support the development of field demonstration protocols which will increase community participation in demonstrations. This request is based on the principles outlined during the group training provided by CAVAC.
- > Malysan plans to have its trained staff conduct retailer and farmer training and field demonstrations using the knowledge from CAVAC's group training. To ensure the quality of its

activities, Malysan has proposed CAVAC to provide mentoring support to its staff during the implementation of training activities and to provide feedback to improve the company's activities.

- > Anachak has requested support from CAVAC to conduct field experiments to customise fertiliser recommendations based on different soil types in Cambodia using the company's products. The company expects to have more tailored advice for retailers and farmers through this intervention. Based on the results of these experiments, Anachak will produce extension materials on the proper use of fertiliser based on different soil types and disseminate this information to farmers.
- > CAVAC has also been negotiating with fertiliser company Five Stars, who also attended the original training activity, on the possibility of further collaboration.

### 3.1.4 Pesticides

Within Cambodia most farmers use some kind of pesticide on their crops during the dry season and significantly increase the amounts used during the wet season. Better knowledge on using the most appropriate pesticides in a safe and effective way would not only reduce environmental degradation but also improve yields. Currently this knowledge is limited and incomplete among farmers.

Activities for 2014 will include:

- > Continuing support to Nokor Thom to develop four elements of its information dissemination strategy including: (1) capacity building for core technical staff in the proper use of pesticides; (2) development of a monitoring and evaluation (M&E) system; (3) jointly conducting a pesticide market study; and (4) development of a technical database which identifies major pests. This continued support is based upon recommendations from the information dissemination strategy that CAVAC assisted Nokor Thom to develop in late 2012.
- > Continued engagement with MAFF and the PDAs to ensure that training on the safe use of pesticide is aligned with the national legislation on pesticides. CAVAC has been working with the PDAs of the three target provinces to conduct training needs assessments with pesticide retailers to prepare to jointly conduct pesticide retailer training. This training will be based on the *Rice Pest Management Manual* currently being produced by the GDA with CAVAC support. It is expected that the GDA will continue to collaborate and support the PDAs in this training process into the future.
- > CAVAC expects to sign an agreement with An Giang in October 2013 to support the company in pesticide retailer training. Training preparation is expected to be finalised by the end of 2013 with training to start at the beginning of 2014.
- > After completing its first intervention with CAVAC, SPK has indicated an interest for a follow-up intervention but has not yet been able to formulate its priorities. CAVAC is open to further collaboration with the company as long as its priority areas meet the key constraints of the pesticide market as formulated in CAVAC's strategy.
- > CAVAC will continue to make the pesticide research fund available to support research on finding practical solutions for Cambodian farmers to manage pests more effectively. In 2013 CAVAC funded four pesticide research projects which will be completed by the end of 2013 and results will be shared in early 2014.

- > CAVAC is currently investigating the option of developing a specific intervention on rat control. Rats have been identified to be a major pest that causes great loss to many farmers.

### 3.1.5 Rice Export

The export of rice is a renewed focus of the RGC. Several organisations, including the International Finance Corporation, L'Agence Française de Développement, Deutsche Gesellschaft für Internationale Zusammenarbeit and the United States Agency for International Development (USAID), are actively supporting exports or are considering doing so. CAVAC has provided support to two millers for the life of the program. The aim of the interventions is to assist millers to source quality paddy and expand their export market.

- > In 2014, the ongoing intervention with Baitong Kampuchea, Plc. will continue with backstopping assistance. Trained staff will provide advisory assistance to farmers in the Baitong community. The nature of the intervention will be changing from direct training support to Baitong to backstopping. The company's community officers have been trained, but still need assistance from CAVAC to provide advice when unexpected situations in the field arise.
- > On request from Baitong, CAVAC is currently considering a seed purification intervention with the company. This intervention aims to assist Baitong to improve staff capacity in seed purification through on the job training and development of a seed purification manual. This activity aims to help Baitong to purify other local landraces<sup>1</sup> for future export markets. Implementation of this activity is expected to continue throughout 2014 and 2015.
- > CAVAC is currently finalising an agreement with Golden Daun Keo Rice Mill located in Takeo. The focus of the agreement is similar to work conducted already with Baitong, facilitating improved paddy intake through giving farmers who supply the paddy access to better rice seed.
- > The intervention with the Federation of Cambodian Rice Miller Associations (FCRMA) in linking association members to international rice purchasers has progressed slower than expected. Whilst activities have been limited, CAVAC has seen some initial impact. One of the association members has benefitted from trade and buyer visits, which have increased their sale volume.

### 3.1.6 Vegetables

To date CAVAC has signed two large agreements with two multinational vegetable seed companies, East West Seed International and Pacific Seeds. These two agreements have formed the core of CAVAC's vegetable program. As a continuation and expansion of these agreements, the following activities are expected in 2014.

- > Continuing implementation of the agreement with East West. This agreement is a multi-faceted approach in providing new varieties and associated technology to vegetable producers. It focuses on conducting vegetable demonstration plots and technical training on pest and disease management for vegetable collectors and input retailers. This activity has a geographic focus of Kampong Cham and Kandal provinces. An evaluation of the first phase will be conducted in October 2013, which will provide information to adjust activities in the second phase of the activity.

<sup>1</sup> A local cultivar that has been improved by traditional agricultural methods.



- > Continuing implementation of the agreement with Pacific Seeds. This agreement is similar to the intervention with East West with a wider focus across four provinces: Battambang, Siem Reap, Kampong Cham and Kandal. This intervention will start in October 2013 at the beginning of the main growing season for vegetables in the selected focus areas.
- > Work towards an agreement with Pacific Seeds on a 'Unimart' franchised input retailing model. This model will provide a retail unit for farmers based in Battambang province; whilst also including a mobile extension unit providing training and field visits to farmers in-situ. This is based on a model which has been successful in both India and Africa but will be the first trial of its kind within the Cambodian context.

### 3.1.7 Media

CAVAC is aiming to increase the availability of agricultural information to farmers through the effective use of commercial media. CAVAC is supporting both the development of media consumption research and the development of agricultural content for rural Cambodian audiences which will encourage commercial sponsorship from the agricultural sector as well as from other sectors that target the rural population.

- > Over the next year, CAVAC will consider continuing to support Delight Cambodia to produce a television drama that aimed at rural audiences. CAVAC and Delight Cambodia will design further activities on the basis of a workshop that is aimed at attracting potential sponsors to see the prospect of the rural media market that Delight is demonstrating. The workshop will be organised in October 2013 by Delight Cambodia. To ensure the drama quality, an independent research company was invited to conduct a feedback research on the drama and this company will show the findings to the potential sponsors at the workshop event. Currently, Delight Cambodia has secured a contract to broadcast 52 episodes on South East Asia TV, however this broadcast network has limited access to rural Cambodian communities and so further negotiations are expected to continue with other media outlets.
- > CAVAC will continue implementing agreements with two research companies to develop on-going research into media consumption of the rural population. Research conducted by Indochina Research Limited will look at which media outlets are used by the rural population and research conducted by Feedback Research will provide TV ratings, letting advertisers know which TV programs rural audiences are watching at any given time. This will provide the information required by agricultural suppliers and other potential advertisers who seek to understand the rural media consumption and wish to promote their products to Cambodian rural communities. Research is conducted in waves, with an evaluation of each wave used to inform the implementation of the next wave.
- > CAVAC is also planning to seek opportunities to work with radio stations. Radio can be a very accessible means of information dissemination for most people in remote and rural areas. Currently there does not seem to be many quality agricultural programs for farmers within the Cambodian market. CAVAC's analysis into the constraints of this medium shows a lack of knowledge by producers and a lack of committed sponsors.
- > The CAVAC team is also looking to build partnerships with television stations to increase the quality of agricultural programming. It is hoped that a partner who sees the commercial benefits of

producing quality content for the rural Cambodians, which includes information for farmers on improving their farming practices, can be found.

### **3.1.8 Extension**

Within the Agribusiness component, the CAVAC team is also working on a number of activities which have a focus on extension. In 2014 CAVAC will implement six major extension activities including: disseminating and stimulating innovation for dry season rice model farmers; wet season model farmer training; development of a private sector funded call centre; development of private sector funded help desks; upgrading of the Cambodian Agricultural Research and Development Institute (CARDI) website; and provincial linking events.

#### **Model Farmers**

CAVAC will continue to implement its newly developed approach to working with model farmers. The results of a 1200-sample Knowledge, Attitude and Practice (KAP) fertiliser survey highlighted that wet season model farmer training conducted by CAVAC staff was an effective model of capacity building however changes needed to be made. The survey also indicated that dry season training would be better served by a different model of support. On this basis CAVAC has designed two different approaches for these two groups of model farmers. For dry season model farmers, CAVAC has been working to disseminate and stimulate innovation within this farming group. For wet season model farmers, CAVAC is working to improve the training curriculum and methodology.

#### *Disseminating and stimulating innovation for dry season model farmers*

Over the next year CAVAC will continue working to encourage innovation among dry season model farmers and then disseminate innovative practices across this group of farmers to stimulate further uptake. Due to the findings of the KAP fertiliser survey, CAVAC halted dry season model farmer training in mid-2013. CAVAC has conducted a study to understand how innovation occurs among model farmers and found that there were a group of farmers who continued to experiment and adjust farming techniques to get better results. These farmers have been labelled 'super model farmers', and it is these farmers' successful innovations that are then adopted by others to fit with their circumstances. CAVAC has since been collecting innovation stories from these model farmers which will be used to stimulate the process of innovation further allowing farmers to customise solutions to their environment. Methods to stimulate and disseminate innovation as are currently being considered and may take various forms including competitions, networking events, radio programs or booklets.

#### *Wet season model farmer training*

CAVAC plans to continue conducting up to 200 training sessions for wet season model farmers in 2014. The CAVAC team will improve the content of the current training program and will expand the curriculum to cover control of major pests including brown plant hopper, rice blast and several major weeds. CAVAC will also continue to link trained model farmers to other sources of information, including input companies, PDAs and research institutes.

#### **Private sector call centres and help desks**

CAVAC is currently recruiting specialists to develop a diagnostic tool to improve access to quality information on crop protection measures for major pests found in Cambodia. It is expected that this tool could be utilised by companies providing services to farmers through help desks and call centres.

Following several interventions with a private call centre, Asia Master, and PDA run help desks, CAVAC found that the information provided by agents did not generally match callers' requirements. The most sought-after information that farmers need from these services were related to pest control. To correctly identify pests and provide context specific advice, agents need to be able to access expert information quickly and effectively. CAVAC believes that the development of a database is the most efficient solution to this problem.

**CARDI Website:** The CARDI website is potentially a highly effective source of agricultural information in Cambodia. With support from CAVAC, a consultant is working with CARDI to redesign its website to include a research function and to update the content. CAVAC has also assisted the institute in conducting a web-based survey to collect users' suggestions on possible improvements for the website. Once the survey is completed, the data will be analysed and used to design further improvements.

**Linking Events:** CAVAC is considering resuming linking events in 2014. Linking events, bringing together model farmers, input supply companies and government stakeholders, were conducted in 2011 and 2012. In 2013 CAVAC conducted a survey in order to assess the impact of these events. The survey found that 80% of model farmers who attended have contacted at least one of the input supply companies and will continue to contact if they have questions regarding use of their products. CAVAC sees the potential of this event in linking model farmers with sources of agricultural information.

**Table 4: 2014 CAVAC-led activities in agribusiness and extension**

Support Market	Intervention	Ongoing	Additional	Activity Description
Rice seed	Rice seed production associations	2	1	Field demonstrations
	Mr Sokunthea	1		Rice seed production training Market strategy development
Fertiliser	Ye Tak	1		Support in retailer training and retailers' field demonstrations
	Heng Pich Chhay	1		Support in retailer training
	Papaya		1	Field demonstration protocols
	Malysan		1	Support to improve retailer and farmer training and field demonstrations
	Anachak		1	Development of recommendations for fertiliser use
	Five Stars		1	To be determined
Pesticides	Nokor Thom		1	Capacity development for core technical staff M&E system development Pesticide market study Technical database development
	SPK	1		Extension material development support
	An Giang		1	Pesticide retailer training
	GDA	1		Development of a Rice Pest Management Manual
	Retailer training with PDAs	1		Conducting TNAs Developing retailer training materials and methodology Implementing the training

Support Market	Intervention	Ongoing	Additional	Activity Description
	Rat control		1	Rat control
Rice export	Baitong Kampuchea	1	1	Staff capacity development in rice seed production Seed purification
	FCRMA	1		Rice export market visits
	Golden Daun Keo Rice Mill		1	Farmer capacity development Facilitation workshops Market strategy
Vegetable seed	East West Seed International	1		Vegetable demonstrations with farmers Technical training on pest and disease management with vegetable collectors and input retailers
	Pacific Seeds	1		Vegetable demonstrations with farmers Technical training on pest and disease management with vegetable collectors and input retailers
	Advanta (Parent company of Pacific Seeds)		1	Developing a mobile training centre (unimart)
Media	Delight Cambodia	1		A pilot episode produced and shown Sponsorship developed
	TV and / or radio station		1	Media activities
	Indochina Research Limited	1		Media consumption research
	Feedback Research	1		TV rating research
Model farmers	Dry season model farmers	1	1	Stimulating innovation Collecting and disseminating innovation stories
	Wet season model farmers	1		Improving the training content and delivery approach
Wider markets	Private call centre and company help desks	1	4	Developing a pest identifying tool (diagnostic tool) for a database New agreements
	CARDI website	1		Further improvements of the website
	Linking events		1	Conducting linking events

## 3.2 Component 2: Irrigation and Water Management

Under the **Irrigation and Water Management component**, CAVAC works closely with the three target provincial departments to select, design and construct irrigation schemes. To date around 20 schemes have been commissioned with support from the Program. PDWRAMs take the lead in scheme design with local communities ensuring farmer involvement especially in regards to land issues. CAVAC commissions the construction with supervision conducted by both partners. Both the PDWRAMs and CAVAC support farmers in establishing FWUCs and other activities that aim to ensure the sustainability of completed schemes.

### 3.2.1 Progress During 2013

In the 2013 AWP CAVAC requested permission to design and construct eight canals and two Supplementary Investment Fund (SIF) investments. Six of the selected schemes and the two SIF investments have been awarded and construction started whilst two schemes were cancelled as agreement could not be reached with all parties involved. In the past year, two of the unfinished canals from previous annual work plans were also completed.

Coordination meetings chaired by the Co-Chair of the NSC between MOWRAM / PDWRAM, DFAT and CAVAC have been held on the request of MOWRAM to improve the exchange of information between stakeholders while ensuring a smoother implementation of activities. This has resulted in a substantial improvement in working relations. These working relations have also been largely enhanced by the involvement of the newly appointed DTL from MOWRAM.

In Takeo two schemes, So Hang and Tumnub Lok, were completed in August. The Rokar Chhouk canal could not be completed before the arrival of the flood water from the Prek Ambel River, however, completion is expected early in 2014. Two schemes, Canal 11 and Canal 87, were cancelled due to land loss issues as a number of farmers were not willing to contribute land for construction. FWUC training was continued at So Hang, Prey Rumdeng and Rokar Chhouk.

In Kampot, the Spean Touch scheme was completed in August 2013. Schemes started in previous years with completion expected in 2014 include O'Kak, Reservoir 77 and Chamlong Chrey pumping scheme. Progress on the construction of the Hay Saun scheme is slow but expected to be completed by the end of 2013. Construction of FWUC offices was started at four schemes and training of FWUCs continued at Spean Touch and Prey Leu. When training is completed, a landholding survey conducted, operational and maintenance plans are prepared and the construction of the FWUC office is completed, the scheme will be handed over to its respective FWUC.

In Kampong Thom the construction of Secondary Canals 2 and 3 (SC2 and SC3) from the 6 January Canal of the Tang Krasang Reservoir were completed and construction at Secondary Canal 1 (SC1) started. The necessary improvements of the two schemes constructed in 2011, Angko and Thnoat Chum, were studied and detailed designs were prepared. A new scheme along the Stung Sen River, Boeung Leas pumping scheme was also designed with construction expected to start in early 2014.

In 2012 CAVAC concluded that the development of self-reliant FWUCs needed strong support in order to build capacity on technical, financial and organisational management. The capacity building by the provincial departments alone might not be enough. Given this, CAVAC has contracted the Irrigation Service Centre located in Kampong Thom to provide services to the established FWUCs to prepare operation and maintenance (O&M) plans and set up a transparent system for fee collection and expenditures on the O&M of their schemes.

### **3.2.2 2014 Work Program**

As CAVAC nears the end of the Program, the irrigation team has focused on ensuring appropriate selection of schemes to fit the implementation timeframe. 2014 will be the last year under the current program that new schemes will be selected for construction. The contractual requirements for the construction of irrigation schemes mean that all work will need to be completed by the end of June 2015. The proposed schemes for implementation in 2014 are selected based on the same criteria as previous years. The newly proposed schemes and improvements of earlier schemes have all avoided land losses by making use of existing canal alignments, and the avoidance of digging deep canals by lifting the water through pumping and concrete lining for rectangular canals. This has, in some cases, resulted in an increase to unit construction costs per hectare but will lower the costs for O&M over the life of the scheme. The schemes that were completed over the last three years will be further improved and developed in close collaboration with the established FWUCs and the



PDWRAMs. Table 5 below provides an overview of the total number of irrigation schemes to be completed by the Program and their respective stages of development.

In addition to the construction of a number of new schemes, CAVAC will continue to implement irrigation works under the SIF. The SIF is a grant initiative that provides support to existing FWUCs to improve their irrigation systems on a cost-sharing basis. In 2012 and 2013, two schemes in Takeo received support through this funding scheme. In the other provinces, no application has been received from any FWUC yet; however CAVAC will continue to promote this initiative in Kampot and Kampong Thom.

At all schemes a FWUC office will be constructed to enable FWUC members to organise meetings, store all administrative and financial documents, and serve as meeting points for information sharing. In parallel, FWUCs are established and receive training in the O&M of their schemes. Training is provided by the staff of the PDWRAMs or in some cases also by contractors recruited by the Program. CAVAC monitors the progress of the training program for each FWUC and examines the needs for follow-up training after each FWUC is trained.

It has been concluded that the first FWUCs to have undergone training need additional support in:

- > development of a maintenance plans;
- > development of an operational plan;
- > collection of the irrigation service fees (ISF);
- > administering of fee collection and expenditures on scheme maintenance; and
- > farming practices to increase agricultural outputs.

Based on the results of the performance assessment of FWUCs, additional training and support will be developed in collaboration with the respective PDWRAM of each target province. Once a FWUC is capable to operate and manage a scheme, an official hand over including documentation of the scheme and its associated assets will be prepared and the FWUC will be able to act as an independent entity able to enter in agreements with external service providers for the delivery of services related to O&M, agricultural extension and scheme improvements.

Many FWUCs fail to take on O&M responsibilities after the completion of training due to lack of resources and limitations of the technical assistance provided. At some schemes other stakeholders have taken over part of the role of the FWUCs. Private water sellers (PWSs) are one of those key stakeholders that have the potential to provide services to the water users and be involved in maintenance of the scheme through private investments. The involvement of PWSs in the irrigation sector is largely unregulated. There is no legal framework and agreements are sometimes made only verbally. Providing these services has therefore been a high risk for those involved. If PWSs are able to collect all the ISF, a reasonable return on investments can be made. The affordability and willingness of farmers to pay these fees depend on many factors but mainly on yields and the paddy price. CAVAC has initiated research to understand how and under which conditions PWSs can improve the sustainability of irrigation schemes. Based on the outcomes of this research, a dialogue with stakeholders will be organised on the involvement of the private sector in the O&M of irrigation infrastructure to ensure sustainability.

In 2014, CAVAC will continue to collaborate with the Asian Development Bank (DFAT co-funded) *Water Resource Management Sector Development Program*. Cross learning will be beneficial in the

fields of O&M, maintenance fund procedures and gender mainstreaming. CAVAC will also continue to assist the PDWRAMs in building their staff capacity through on-the-job training, exchange visits and other activities as requested by the PDWRAMs.

Table 5: CAVAC's Irrigation Scheme Status

No	Scheme Name	Province / District	Survey and Design	Construction of Main Canal	Construction of Secondary Canals	FWUC Establishment and Initial Training	FWUC Follow Up Activities	FWUC Registration at PDWRAM	Scheme Handing Over to FWUC
	<b>2010 and 2011</b>	<b>Kampot</b>							
1	Prey Tonle	Banteay Meas	√	√	√	√	√ / ○	√	○
2	O'Kak	Banteay Meas	√	√	√ / ○	√	√ / ○	√	○
3	Sbov Andeth	Banteay Meas	√	√	√ / ○	√	√ / ○	√	○
4	Thnoat	Banteay Meas	√	√	√ / ○	√	√ / ○	√	○
	<b>2012</b>								
5	Spean Touch	Kampong Trach	√	√	√ / ○	√	√ / ○	√	○
6	Prey Leu	Kampong Trach	√	√	√ / ○	√	√ / ○	√	○
	<b>2013</b>								
7	Hay Saun	Banteay Meas	√	√ / ○	○	○	○	○	○
8	Reservoir 77	Chum Kiri	√	√ / ○	○	○	○	○	○
9	Chamlong Chrey	Banteay Meas	√	√ / ○	○	○	○	○	○
	<b>2014</b>								
10	Hay Saun extension	Banteay Meas	√	○	○	○	○	○	○
	<b>2010 and 2011</b>	<b>Takeo</b>							
1	Krapum Chhuk	Koh Andeth	√	√	√	√	√ / ○	√	○
2	Kveng Tayi	Koh Andeth	√	√	√	√	√ / ○	√	○
3	Tumnub Lok	Koh Andeth	√	√	√	√	√ / ○	√	○
	<b>2012</b>								
4	Prey Rumdeng	Kirivong	√	√	√ / ○	√	√ / ○	√	○
5	So Hang	Borey Chulsar	√	√	√ / ○	√	√ / ○	√	○

No	Scheme Name	Province / District	Survey and Design	Construction of Main Canal	Construction of Secondary Canals	FWUC Establishment and Initial Training	FWUC Follow Up Activities	FWUC Registration at PDWRAM	Scheme Handing Over to FWUC
	<b>2013</b>								
6	Rokar Chhuk	Prey Kabas	√	√ / ○	○	○	○	○	○
	<b>2014</b>								
7	Wat Thmey	Prey Kabas	√	○	○	○	○	○	○
	<b>2011 and 2012</b>	<b>Kampong Thom</b>							
1	Angko	Kampong Svay	√	√	√ / ○	√	√ / ○	√	○
2	Thnoat Chum	Baray	√	√	√ / ○	√	√ / ○	√	○
	<b>2013</b>								
3	Canal 6 January (SC2)	Santuk	√	√ / ○	√ / ○	√ / ○	√ / ○	○	○
4	Canal 6 January (SC3)	Santuk	√	√ / ○	√ / ○	√ / ○	√ / ○	○	○
5	Canal 6 January (SC1)	Santuk	√	√ / ○	√ / ○	√ / ○	√ / ○	○	○
	<b>2014</b>								
6	Boeung Leas	Stung Sen	√	○	○	○	○	○	○
7	Angko improvement	Kampong Svay	√	○	○	○	○	○	○
8	Thnoat Chum improvement	Baray	√	○	○	○	○	○	○

√ = Activity completed before 2014

√ / ○ = Activity started before 2014 and to be continued in 2014

○ = Planned activity for 2014

### 3.3 Component 3: Research

The large research projects previously implemented in collaboration with CAVAC have been directly managed by the Australian Centre for International Agricultural Research (ACIAR) since the beginning of 2013. However, in 2013 CAVAC has initiated a small research fund to support targeted action research. Proposals were requested for research in the area of gender and agricultural development and pesticide use. Ten research projects have been awarded with results to be disseminated at a workshop held in early 2014.

Depending on the success of the first 10 projects, CAVAC intends to continue with the action research fund into 2014. Topics for research will be determined on the basis of knowledge gaps identified by CAVAC.

### 3.4 Component 4: Business Enabling Environment

The **Business Enabling Environment (BEE) component** has been available to provide the RGC with support in improving the enabling environment for farmers and agribusinesses. The support to the RGC is demand driven and can include support to the Strategy for Agriculture and Water (SAW), the rice export policy, and other relevant policies of the RGC. The component also explores the opportunities for a better public private dialogue between stakeholders.

Within the BEE component, the following activities are expected to take place in 2014:

#### 3.4.1 Improved research and understanding of the enabling environment surrounding key value chains

Though CAVAC will keep up to date with new laws and sub degrees passed by the RGC, specific research into policy changes will not be a priority in 2014.

#### 3.4.2 Increased opportunity for public private dialogue around key enabling environment issues

In 2012 CAVAC, in collaboration with The Asia Foundation (TAF), organised three large public private dialogue workshops in each of the three target provinces. Based on the lessons learned from these workshops, a number of follow-up activities designed to create a culture of dialogue between the private and public sectors at the provincial level were developed for implementation in late 2013. This will include a number of meetings where select issues are further analysed and roadmaps for solutions are drawn. At the end of 2013, community driven proposals will be submitted for funding approval. Based on these submissions, implementation of approved activities will continue into 2014.

In addition, a number of GDA and PDA priorities that CAVAC has been supporting in 2013 have led to workshops and forums where the public and private sectors have met to discuss various topics including the ten rice varieties policy of MAFF, seed law and regulation, seed production and certification, laws on the management of fertiliser and pesticides and post-harvest technology.

#### 3.4.3 Strengthened industry representative organisations

CAVAC will continue to offer support to an industry representative organisation based in Battambang, the FCRMA, in international rice market development. Whilst interest has been limited thus far, CAVAC hopes further opportunities to collaborate through this agreement will be identified in 2014.



### 3.4.4 Policy Support Funding Facility utilised to progress activities

Since the beginning of CAVAC, the Policy Support Funding Facility has been used to fund a few projects including the Cambodian Irrigation Scheme Information System, the Rice Value Chain Improvement Project and the Agricultural Census. In 2012 and 2013 CAVAC has been supporting PDA and GDA priorities in other ways as outlined in section 3.1.1 above. In 2014 this funding facility will remain for policy support requirements as they arise.

## 3.5 Cross-cutting Issues

### 3.5.1 Gender and Disability

In 2014, CAVAC will continue to address gender and disability issues by integrating gender and disability inclusiveness into all activities across all components as guided by the Program's Gender and Disability Strategy.

CAVAC's gender mainstreaming work starts with the screening of each new intervention to ensure its effectiveness by taking into account social aspects such as gender and disability. The screening process has led to adjustments in activity design to ensure increased participation by women. Examples of these adjustments include: changing the times and venues of retailer training to accommodate female retailers' availability and putting a business case together for fertiliser companies to make management aware of the importance of engaging female retailers in their information services. CAVAC has also conducted backstopping studies to verify whether men and women gain equal benefits from each intervention.

Within the irrigation component, CAVAC will work closely with PDWRAMs to continue to promote equal gender representation in the water user community by ensuring that capable women are given equal opportunities to be elected through all levels of a FWUC. CAVAC staff have consulted with FWUC committee members and farmers to encourage equal participation within each functioning FWUC.

Part of CAVAC's gender inclusiveness work in 2014 will focus on collecting intervention-based impact stories in which women are role models. These stories will be disseminated to draw attention to the importance of women's participation within the agricultural sector for both development practitioners and the private sector.

To further increase knowledge regarding the role gender plays in the agricultural sector in Cambodia, CAVAC initiated the 'Gender and Agricultural Development Research' fund in mid-2013. The research fund appealed to a wide range of entities who are currently undertaking research across various agricultural sub-fields. Six proposals have been awarded with results of the research to be shared with the wider community in early 2014.

### 3.5.2 Environment

As an Australian Government funded program in Cambodia, CAVAC operates under both the Australian and Cambodian environmental laws and policies. The environmental safeguarding framework for CAVAC is set by the DFAT guideline on its environmental management system and the Cambodian environmental protection law.

All interventions will be subject to initial environmental screening questions, with some requiring Environmental Impact Assessments (EIAs) and the development of Environmental Management Plans (EMPs). EIAs have been conducted for all irrigation scheme rehabilitation interventions.

To ensure that the process of integrating environmental aspects into each CAVAC's intervention is effective, an Environmental Management System (EMS) has been developed. The EMS database has been developed to store all environment-related information for all interventions. The EMS enables CAVAC to effectively manage environmental impact during the implementation process.

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

CAVAC's M&E system has been audited by a group of recognised M&E experts of the Donor Committee for Enterprise Development. The audit showed that CAVAC had a solid and reliable system in place. The system is capable of producing credible impact data and allows for information from the M&E system to be used in management decision making. A copy of the audit and more information on the M&E system can be found on CAVAC's website.

In 2014 many interventions will have reached the stage where early adopters can be assessed. This will not only be time intensive, but will give the CAVAC M&E team the opportunity to test the practicalities of the system and make adjustments to the operational details as required.

In 2014 CAVAC will also start preparing completion reports for those interventions that will come to an end.

## **4 PROGRAM MANAGEMENT**

CAVAC's management approach and operational systems have been continually reviewed and improved across the life of the Program. At the current phase of the Program it is expected that there will not be significant modifications to the systems and processes which support implementation. The team will, however, continue to monitor and review systems with bi-annual audits on the administrative, finance, IT and procurement systems to be completed throughout 2014.

Changes to the management structures within the Program will continue to develop during 2014. As staff become more comfortable with the provincial focus implemented within the irrigation team and the unit structure within the agri-business team, and as staff capacity increases to meet these new responsibilities, it is expected that further administrative responsibilities will be passed to national staff members. This will mean that managers are able to provide more focus on effective design of activities, implementation, monitoring and increasing capacity of staff to perform higher level tasks.

CAVAC will continue to refine and administer the new contracting systems put in place during the previous years of implementation. Output based contracts and their required monitoring arrangements remain the focus for working with government partners both in the provinces and at a national level. It is expected that the grant facilities used to engage private sector partners working in agriculture and community stakeholders in the irrigation component will increase the breadth and depth of partners successfully working with the Program in 2014. The research grants trialled in 2013 will also continue to provide opportunities for local organisations working to increase the knowledge and capacity of those working in agriculture across Cambodia.

It is hoped that communication materials, including the reworked website, and the increased reporting channels developed between CAVAC and government partners during 2013 (especially with counterparts working in irrigation and water management) will continue to foster successful cooperation between both CAVAC and the RGC, and with the wider development community. This is particularly important at this time of implementation as discussions relating to the future of the Program and communicating the impact of CAVAC activities become more of a focus.

#### **4.1 Staffing**

CAVAC has made a significant investment in both internal and external training for staff. This investment has been able to develop a largely inexperienced team into a well-functioning and efficient workforce with an evolving management structure. Whilst formal training opportunities will continue for those for whom technical skills are required, CAVAC will continue to seek less-formal training opportunities which are more relevant for CAVAC staff working in the specialised area of market development. Training opportunities in 2013 which allowed staff to learn from and interact with others working in similar programs have been particularly important for staff development. This not only creates a network of practitioners who can actively learn from each other but it also provides the opportunity for some staff to develop skills which may lead them to develop their expertise in the international market. CAVAC will continue to work with the participants of the M4P learning symposium held in Bangkok in 2013 to progress other learning events as well as continue to foster relationships with other Programs such as the Market Development Facility and Katalyst.

#### **4.2 Stakeholder Collaboration**

Whilst the NSC and PCC have played an important facilitative role for CAVAC and the RGC counterparts (MOWRAM and MAFF), during 2013 CAVAC worked to create additional levels of coordination to ensure a more productive relationship. The change in Terms of Reference and additional support provided to the position of Deputy Team Leader has been important in creating closer ties between CAVAC and the two Ministries at a national level. These changes have enabled the DTLs to accompany CAVAC staff to meetings with national and provincial counterparts and more easily facilitate a solution to issues faced by the partners. Issues in the working relationship between the PDWRAMs and MOWRAM have also led to three monthly stakeholder meetings between MOWRAM, DFAT and CAVAC with representation from PDWRAMs as required. This has become a useful mechanism for communication on irrigation related issues as such it is hoped that meetings will continue in 2014.

At the provincial level, CAVAC has found that allocating specific CAVAC staff to work closely with provincial counterparts on the PDA led Rice Policy activities and with PDWRAMs on the funding of FWUC establishment processes has led to a greater level of understanding between CAVAC and our government partners and more opportunities to exchange experiences. CAVAC also continues to support capacity building for provincial counterparts. Some examples of capacity building activities undertaken in 2013 include: study tours for PDA Kampot to China and for PDA Kampong Thom and PDA Takeo to Thailand and specific capacity building based on needs for PDA Kampot on Project Cycle Management and for PDA Kampong Thom on rice seed production techniques. Over the next year, CAVAC will continue this collaboration and support.

CAVAC has continued to interact with development partners both within Cambodia and within the wider development community. The CAVAC team has been involved in both non-formal and formal learning events including inviting partners working in Cambodia such as USAID, the Asian Development Bank and World Bank to field trips or office based discussions, continued collaboration with organisations such as ACIAR to ensure complementarity of activities and formal learning events with other market development programs.

TAF has been a main partner in the BEE activities in 2013. The current contract, which supports the development of proposals from community groups to address an issue which an impact on the business enabling environment for Cambodian communities, will be assessed in December and continuing funding provided into 2014 if proposals show promise.

### 4.3 Procurement

As in previous years of implementation, procurement activities for 2014 will be outlined in the CAVAC Procurement Plan which will provide details of the procurement expected for all work-plan related expenditure approved by the NSC. This will include publicly advertised tenders for construction works, requests for expressions of interest for consultants advertised either nationally or internationally, partnership agreements, competitive quotations, or through grants, depending on the nature and scale of the activity and as guided by the requirements in the CAVAC Procurement Manual and Commonwealth Procurement Rules.

The quality of the construction contractors continues to be an issue impacting the irrigation component. A process of pre-qualification of construction firms eligible to submit tenders for the 2013 schemes has helped somewhat to strengthen the process, however delays in construction and expectations around the quality of works remained a problem during 2013. For the work to be completed in 2014, CAVAC has worked with contractors to ensure workplans are realistic and achievable and has outlined the bonus and penalty clauses in CAVAC contracts as an incentive to timely completion of schemes. CAVAC has also included a system of assessment and approval for construction supervisors as part of the procurement process to ensure effective communication between CAVAC and the firm at site on a daily basis.

## 5 ANNUAL WORK PLAN BUDGET – 2014

The following Table is the AWP budget for 2014. The total budgeted expenditure equals **US\$8,289,593** which is to be funded by the CAVAC Imprest Account.

Table 6: Annual Work Plan Budget<sup>2</sup>

Component breakdown		Description	Interventions and activities 2014	Budget (USD)
Component 1: Agribusiness				\$1,905,000
1.1	Critical constraints to strategic value chains identified and developed for business action.	Completed		\$0
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. CAVAC to organise a number of linking events and will encourage companies to improve communication within their network.	<u>Rice seed market:</u>	\$1,080,000
			Cont. support to seed producer	
			Support to seed associations	
			Support seed producer trainings	
			"Deepening" intervention	
			<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	
1.3	Enhanced farmer services embedded within agribusiness practices.		Support to retailers	
		<u>Media:</u>		

<sup>2</sup> Note: Budget figures to be provided in the next AWP Draft submission

Component breakdown		Description	Interventions and activities 2014	Budget (USD)
			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>Vegetables:</u>	
			Cont. support seed retailers	
			<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 opportunities have been found.		\$0
1.6	Government led rice policy activities	Activities led by the three PDAs	Continuation of activities as related to the Policy Paper on the Promotion of Paddy Production and Rice Export.	\$600,000
		Activities led by the GDA	Completion of current contract and GDA priorities as required	\$200,000
		GDA materials production and dissemination	Support to materials production and information dissemination of GDA technical material as required.	\$25,000



Component breakdown		Description	Interventions and activities 2014	Budget (USD)
<b>Component 2: Irrigation and Water Management</b>				<b>\$5,584,593</b>
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 in the detailed design of schemes.	Extensive collaboration and subcontracting with all 3 PDWRAMs including survey and design and construction supervision.	\$123,000
2.2	Improved capacity of FWUCs to efficiently and effectively operate and maintain their irrigation systems.	CAVAC and PDWRAMs will support FWUCs and other players to improve likelihood of the sustainability of schemes.	Training and other support to FWUCS and other players in the O&M market.	\$700,000
			Research/studies looking at O&M issues in Cambodia.	
			Supplementary Investment Fund will have a new round.	\$100,000
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.	Finalising assessments of final schemes as required.	\$4,661,593
			Construction of new schemes.	
2.4	Improved models of water management adopted in rain fed areas.	Completed		\$0

Component breakdown		Description	Interventions and activities 2014	Budget (USD)
2.5	Increase use of hydrological data in the planning and management of irrigation systems.	Completed		\$0
<b>Component 3: Research and Information Systems</b>				<b>\$50,000</b>
3.1	Priority research and extension activities address constraints in selected value chains.	Four large research studies are no longer under CAVAC's scope of work		\$0
		Action Research fund	Round two of research grants provided to local organisations in areas of interest for CAVAC.	\$50,000
3.2	Enhanced capacity of formal and informal extension providers to transfer improved technologies and information to farmers.	Included in 1.2		\$0
3.3	Partnership program linking researchers, extensionists, farmers and agribusinesses developed and implemented.	Included in 1.2		\$0
3.4	Budgetary support to CARDI.	No longer under CAVAC's scope of work		\$0
<b>Component 4: Business Enabling Environment</b>				<b>\$350,000</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.	\$0
4.2	Increased opportunity for public private dialogue around key enabling environment issues.	Activities with both RGC and the private sector to increase understanding and wider discussion around enabling environment issues	Seminars, workshops , studies, study tours and other activities which promote the understanding of enabling environment issues within Cambodia.	\$100,000
4.3	Strengthened industry representative organisations.	Activities may emerge from other activities.		\$0

Component breakdown		Description	Interventions and activities 2014	Budget (USD)
4.4	Increased use of Public Private Partnership investment model.	Integrated with 2.2 and 2.3.		\$0
	Policy Support Funding Facility	This facility will support activities initiated by MAFF / MOWRAM / DFAT with approval from the Executive Group of the NSC.	RGC initiatives supported	\$250,000
<b>Cross Component Activities</b>				<b>\$400,000</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.	\$0
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.	\$0
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.	\$175,000
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.	\$200,000
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	\$25,000
<b>Total</b>				<b>\$8,289,593</b>

## ANNEX 1: IMPLEMENTATION PROCESS AND PROCEDURES

The CAVAC Program Design Document acknowledged that most agricultural constraints had a multidisciplinary character, for example: irrigation schemes would 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 require 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 2 shows the different internal procedures which will ensure that CAVAC's activities remain in line with the approved AWP.

### Market Strategies

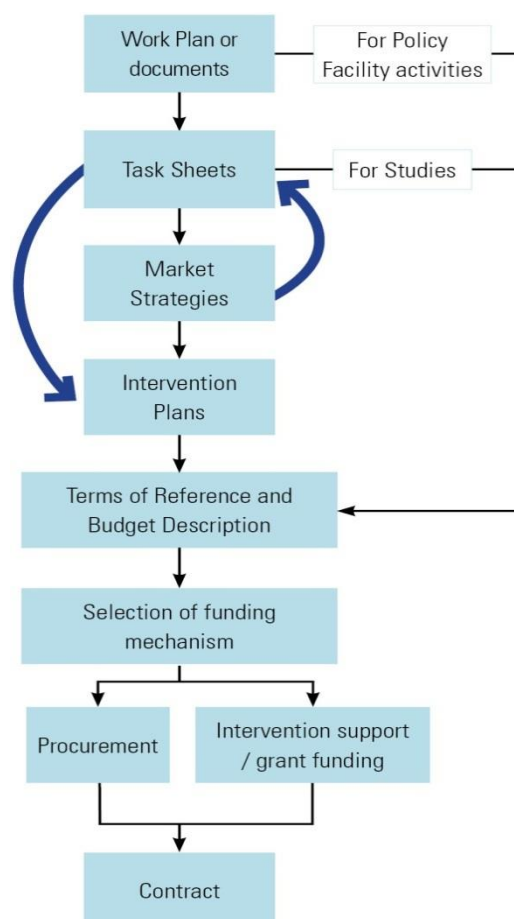
Market strategies are central in determining which activities CAVAC will undertake and which activities the Program should not support. For each market (such as dry season rice, rice for export, wet season rice, vegetables and cassava), CAVAC will first establish a market development strategy. Influenced 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 on 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.

### 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

Figure 2: Process and Procedures



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.

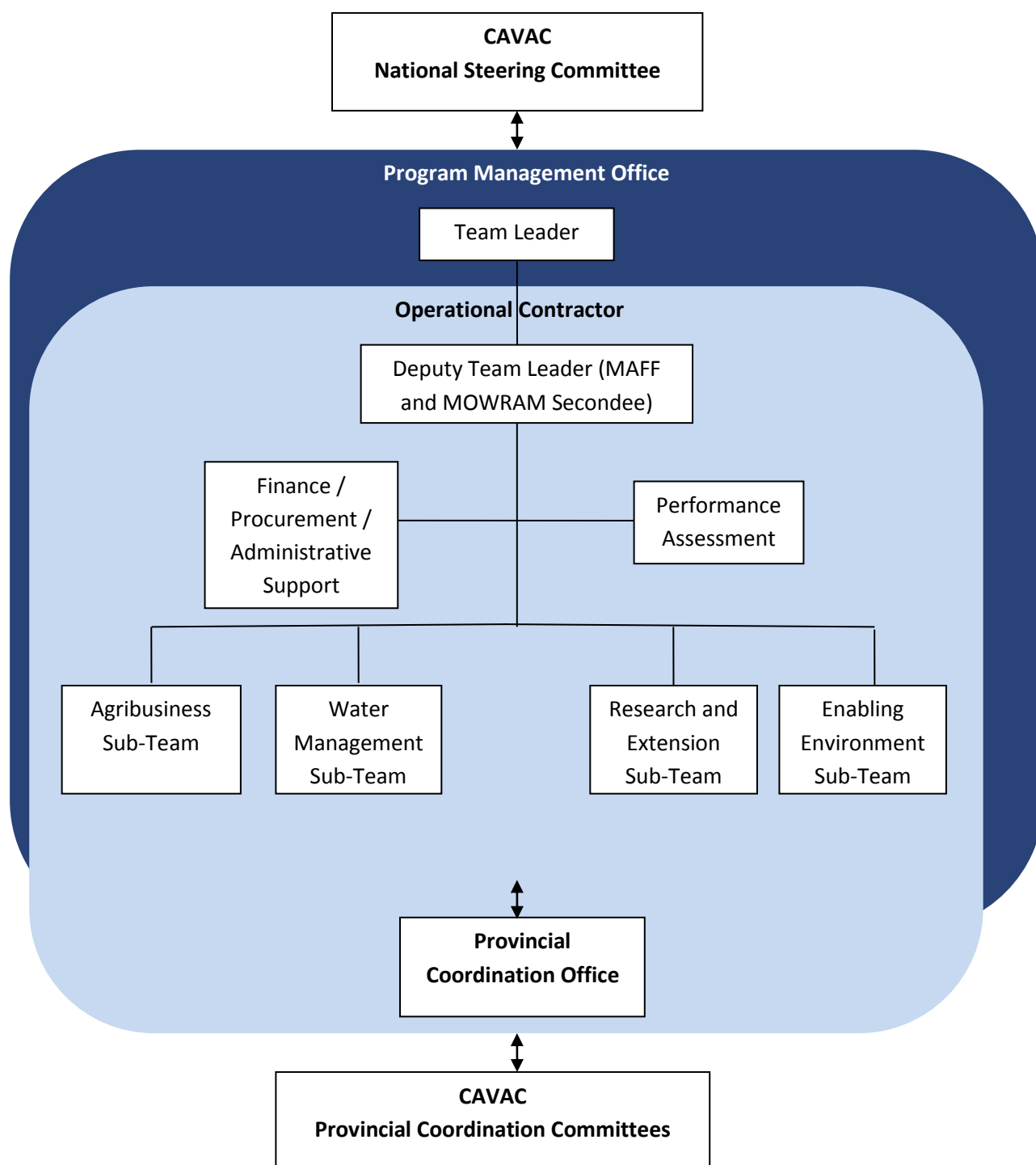
### **Impact Logics and Monitoring Plans**

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 sectors. 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 (Program Design Document, Pages 37, 40 and 41)

## ANNEX 2: CAVAC ORGANISATIONAL STRUCTURE





## ANNEX 3: GUIDELINES FOR POLICY SUPPORT FACILITY

### Introduction

Funding activities nominated by NSC members (DFAT or the RGC) 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 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 DFAT, 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 DFAT 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 / DFAT priorities;
- > relevance to CAVAC objectives;
- > capacity development; and
- > 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 DFAT 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 DFAT's joint priorities); and
- > 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 DFAT; 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 representatives from one or more of MAFF, MOWRAM or DFAT 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; and
- > date and signature.

## ANNEX 4: MONITORING SHEET

	1-Apr	Targets	% achieved	1-Jul	Targets	% achieved	1-Oct	Targets	% achieved	31-Dec	Targets	% achieved
Agribusiness and Extension												
PDA-led activities (Non-cumulative targets)												
Number of paddy field demonstrations		Details to follow			Details to follow			Details to follow			Details to follow	
Early wet season												
Wet season												
Dry season												
Number of paddy field days conducted												
Rice seed production group establishment												
Rice seed production training and demonstrations												
Laser-land levelling												
Cooperatives established and supported												
Post-harvest activities in rice												
Farmers' meetings												
Extension methodology related activities												
Vegetable related activities												
Other activities if any												
GDA-led activities (Non-cumulative targets)												
Rive value chain improvement project												
Other activities if any												
CAVAC-led activities (Cumulative targets)												
Rice seed												
Medium seed producers supported		1			1			1			1	
Associations supported		2			2			2			2	

	1-Apr	Targets	% achieved	1-Jul	Targets	% achieved	1-Oct	Targets	% achieved	31-Dec	Targets	% achieved
Pesticides												
Pesticide companies supported		3			3			3			3	
Pesticide retailer training provided					5			10			15	
Fertiliser												
Fertiliser companies supported		3			5			5			5	
Rice export												
Partners supported		3			3			3			3	
Vegetable seed												
Vegetable seed companies supported		2			2						2	
Vegetable demonstrations conducted					25			35			50	
Pest and disease management training provided					4			8			12	
Media												
Media companies supported		1			2			2			2	
Research companies supported		2			2			2			2	
Extension activities started related to:												
Model farmer training											200	
Leading to farmers being supported											2000	
Sources of information supported					1							
Linking activities conducted								3				
<b>Irrigation and Water Management</b>												
2011, 2012, and 2013 irrigation schemes finalised												
Leading to farmer households having access												
Leading to hectares able to irrigate												
2014 irrigation schemes constructed											6	

	1-Apr	Targets	% achieved	1-Jul	Targets	% achieved	1-Oct	Targets	% achieved	31-Dec	Targets	% achieved
FWUCs established for 2013 and 2014 irrigation schemes											11	
<b>Research</b>												
Action research funded											5	
<b>Business Enabling Environment</b>												
Public-Private Dialogue activities / events conducted					3							