Cambodia Agricultural Value Chain Program (CAVAC)

Manual of Operations
CAVAC Risk Management Plan

May 2010

Funded by the Australian Government

Australian Government
AusAID

ABBREVIATIONS AND ACRONYMS

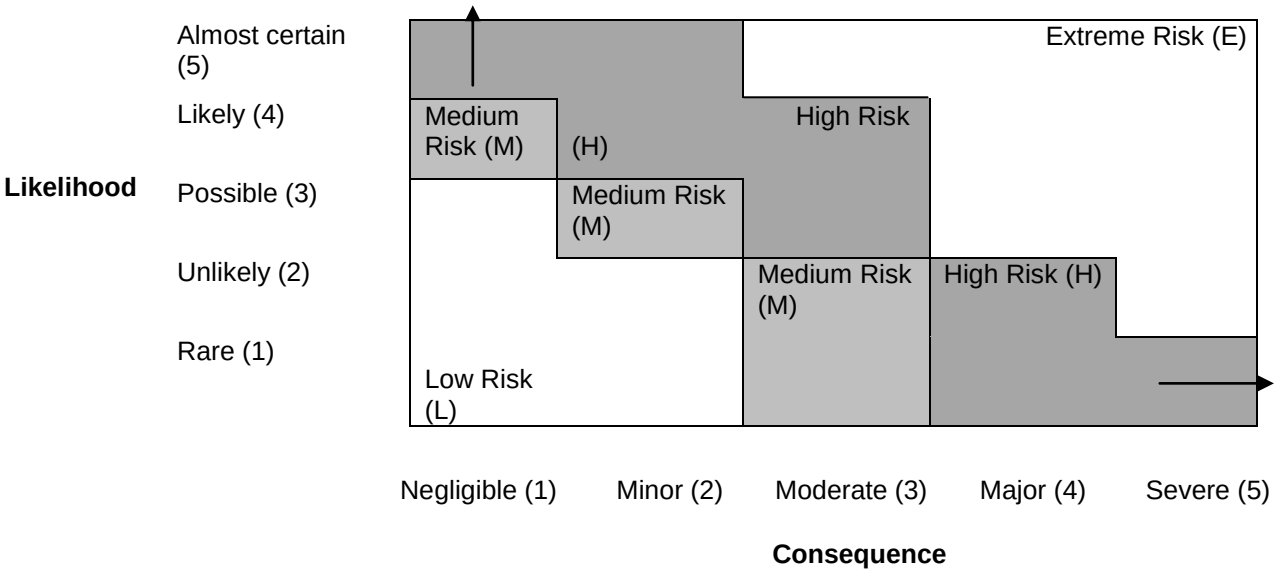
ACIAR	Australian Centre for International Agricultural Research
AusAID	Australian Agency for International Development
BEE	Business Enabling Environment
CARF	Cambodia Agricultural Research Fund
CAVAC	Cambodia Agricultural Value Chain Program
CPF	CAVAC Performance Framework
D&D	Decentralisation and Deconcentration
FFS	Farmer Field School
FMS	Farmer Marketing School
FWUC	Farmer Water User Community
MAFF	Ministry of Agriculture, Forestry and Fisheries
M&E	Monitoring and Evaluation
MOWRAM	Ministry of Water Resources and Meteorology
NSC	National Steering Committee
PDWRAM	Provincial Department of Water Resources and Meteorology
OC	Operational Contractor
PPD	Public Private Dialogue
RGC	Royal Government of Cambodia
R&D	Research and Development
SAW	Strategy for Agriculture and Water
SMG	Sector Monitoring Group
TA	Technical Assistance
VC	Value chain

RISK MATRIX

The risk matrix (see Table 1 below) provides an analysis of the risks associated with CAVAC. The matrix identifies key risk events and their potential adverse impact, assesses the level of risk, and identifies containment measures. The matrix is broken into five components: one for each of the program components (Agribusiness, Irrigation and Water Management, Research and Extension, and Business Enabling Environment), and one for overall management risks. The risks identified against each of the components refer to the major uncertainties that could reduce the intended impact of the program. Management risks are those which affect the ability to manage the program efficiently, and deliver outputs on time and on budget.

To compare risks, a priority ranking mechanism has been used, as outlined in *AusGuideline 6.3 Managing Risk*. A priority listing of risks is a simple instrument for ranking risks and is based on scaling and then combining the likelihood of a risk and the severity of its impact. A risk will be high if the risk is likely to occur or its consequences are large, and will be highest if both are present. Diagram 1 illustrates the method used for calculating the risk ratings of the Program. The Overall Risk level has been used to develop appropriate containment measures, with the focus in particular on higher level risks which have been given specific actions that require control, monitoring, and the appropriate level of management attention.

Diagram 1: Analysing and Ranking Risk Levels:



The scales used to analyse and rank the risk levels are:

Likelihood

5 - Almost certain - expected to occur in most circumstances

4- Likely - will probably occur in most circumstances

3- Possible - might occur at some time

2- Unlikely - could occur at some time

1- Rare – may occur only in exceptional circumstances

Consequences

5- Severe - would stop achievement of functional goals and objectives

4- Major - would threaten goals and objectives; requires close management

3- Moderate - would necessitate significant adjustment to the overall function

2- Minor – would threaten an element of the function

1- Negligible - routine procedures sufficient to deal with the consequences

Overall Risk Level

E- Extreme risk - most likely to occur and prevent achievement of objectives, causing unacceptable cost overruns or schedule slippage.

H- High risk - could substantially delay the activity schedule or significantly affect technical performance or costs, and requires a plan to handle.

M- Medium risk - requires identification and control of all contributing factors by monitoring conditions and reassessment at activity milestones.

L- Low risk - normal control and monitoring measures sufficient.

Table 1: Risk Matrix

Agribusiness Development					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
Suspicion, poor collaboration, and limited information limits CAVAC's capacity to analyse the VC to develop interventions.	Technically and financially feasible program opportunities cannot be identified.	1	3	M	Invest sufficient time and resources in initial research and understanding. Invest in the selection and training of staff.
Failure to fully engage with the agribusiness sector and attract competent private sector partners for development initiatives.	Improved linkages between farmers and agribusiness not established; Limited improvement in value-added activity.	2	3	M	Use initial VC analyses to identify agribusinesses ('lead firms') that have a genuine interest in participating; Ensure initial activities and agribusinesses are sufficiently well-resourced to successfully apply the new technologies and approaches being promoted; Ensure that some staff have a background of working in the private sector; Explain issues and negotiate carefully with partners; Execute agreements only when agreed outcomes are clearly understood; Provide regular information to build trust and confidence; Ensure that several major R&D activities directly address key industry issues, and involve end-users from identification of the issue through to implementation of the solution.
Agribusiness not sufficiently motivated to form long-term relationships with farmers as a basis for VC development that sees equitable sharing of benefits.	Limited development of long-term partnerships as a basis for VC development and value-added activity.	1	3	M	Carefully select proposals based on an adequate understanding of needs; Clearly negotiate and agree obligations of all parties from the outset; Facilitate partnerships between VC actors; providing incentives in the form of TA and additional training support where required; Exposure to successful examples elsewhere; Base interventions on realistic incentives;

Agribusiness Development					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
					Adopt a flexible approach so that activities can be progressively refined.
Insufficient financial incentives for traders to embed technical or information services for farmers. .	Potential to develop traders as an alternative approach for transferring information on improved technologies to farmers not realised.	1	2	L	Focus on traders in delivering major inputs and outputs (eg. fertiliser) where extension 'messages' are clear and there is sufficient total value involved to carry the activity; Strengthen existing structures where traders are already undertaking activities; Support traders with technical materials.
Other donor programs have a negative influence on sustainability by offering non-market based subsidisation in target provinces.	Agribusiness and farmers undertake opportunistic behaviour, focusing on short term gains over long term, more sustainable options	3	5	E	Share lessons learned and the benefits of market based approach broadly; Actively participate in donor / partner coordination.
Changing rules and regulations affect supported markets.	Impacted sector or market support is no longer viable.	2	2	L	Support PPD; Work with partners to advocate for transparent change and review of potential negative consequences.

Water Management					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
Other donor programs have a negative influence on sustainability by offering non-market based subsidisation in target provinces.	Agribusiness and farmers undertake opportunistic behaviour, focusing on short term gains over long term more sustainable options	3	5	E	Share lessons learned and the benefits of market based approach broadly; Actively participate in donor / partner coordination.
Communities and government agencies are insufficiently resourced to establish and sustain the management of improved systems.	Reduced crop yields and farmer incomes; Low service charge recoveries; Ineffective FWUCs.	2	4	H	Work only on schemes where there is strong commitment to forming a functional FWUC; Work intensively with the FWUC to build O&M capacity; Use performance-based incentives; Only rehabilitate with functional FWUC already in place. Establish strong market linkages.
Poor capacity and overly ambitious rehabilitation targets result in poor quality designs by MOWRAM and PDWRAM	Unable to complete feasibility and designs to desired standard; Schemes unable to operate at full capacity, or in a reliable and sustainable manner.	2	4	H	Engage local/ regional consultants and the private sector to assist and improve designs if required; Work intensively with the MOWRAM engineers to build design capacity; Do not start any construction until quality control mechanisms are in place; Ensure MAFF is involved at feasibility study stage so that social/ production/ agronomic aspects of design are taken into account.
Inadequate RGC budget allocated for O&M, leading to poorly maintained irrigation schemes.	Schemes unable to be operated at full capacity or in a reliable and sustainable manner.	2	3	M	Adopt high design and construction standards for all rehabilitation works; Investigate contribution towards cost of O&M from the CIP; Do smaller schemes where O&M lies with FWUCs or the private sector.
O&M budgets misappropriated by FWUCs.	Loss of faith; Budget unavailable to support O&M.	3	3	H	Provide advance training and capacity-building for FWUC executive; Adopt commune D&D financial management and oversight processes;

Water Management					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
					External monitoring by the Program; Availability of future funding dependant on prior performance; Willingness to withdraw support if misappropriation occurs.

.

Research and Extension					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
Other donor programs have a negative influence on sustainability by offering non-market based subsidisation in target provinces.	Agribusiness and farmers undertake opportunistic behaviour, focusing on short term gains over long term, more sustainable options	3	5	E	Share lessons learned and the benefits of market based approach broadly; Actively participate in donor / partner coordination.
Research not sufficiently market-driven and focused on the requirements of the end-user.	Failure to generate farmer and market-relevant results; Limited or no potential for productivity gains.	2	4	H	Consult with farmers, extension workers and agribusiness in identifying priority research needs; Adopt a formal and thorough review process prior to approval; Utilise Action Research approaches such as participatory trials wherever possible; Utilise farmer field days and demonstrations while research is in progress; Conduct preliminary 'roll-out' activities to pilot-test promising technologies; Consider the use of performance-based incentive systems.
Research organisations not effectively partnering with extension services to identify real needs and adapt and apply results.	Research and extension services remain compartmentalised; Research results not effectively disseminated to end-users in a usable form.	5	5	E	Specify the nature and timing of dissemination activities in the research contract; Work with a variety of extension delivery mechanisms; Support development of improved mechanisms for linking research and extension providers; Support development of improved dissemination and training materials.
Key research organisations insufficiently resourced to sustain rice-based farming systems research.	Failure to retain research staff and loss of long term research capacity.	4	3	H	Expand the capacity of the broader research institutions such as universities and the private sector (CARF); Provide input into SAW policy development activities on long-term mechanisms for funding research.
Poor cooperation between Cambodian research organisations.	Duplication of effort and inefficient use of limited research resources.	2	2	L	Promote collaborative arrangements for R&D activities with appropriate management arrangements specified.

Research and Extension					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
Farmers unwilling to adopt new technologies/ approaches due to perceived risk. .	Low adoption; Limited impact on farmers' incomes.	2	4	H	Ensure a proper needs assessment has been undertaken prior to undertaking research and intervention; Fully involve farmers (and extension workers) in prioritising research needs, and in the conduct of research activities; Carefully demonstrate improved practices through FFSs and FMSs; Develop more reliable irrigation capacity; Develop improved market linkages.
Government extension services insufficiently resourced to operate effectively.	Outreach to farmers severely constrained, affecting adoption.	5	1	H	Build capacity of MAFF and other extension providers (i.e. work with multi channel extension systems); Promote multiple extension providers (government as well as NGOs and private sector); Develop an enhanced role for traders and mass media in providing farmers with information; Provide support for development of improved extension materials.
Agribusiness and NGO groups have limited interest or capacity in participating directly in extension activities.	Opportunity to get a grass-roots market-orientation into extension activities is lost.	2	2	L	Identify and engage with agribusinesses and NGO groups that have interest and capacity to undertake extension services, focusing on those that are already working in the area.
Activities are skewed to male needs and preferences.	Limited relevance to and adoption by women as a key target group.	2	2	L	Undertake separate assessment of men's and women's training needs; Remove constraints for female participation; Enhance the involvement of women in all key management and decision-making structures;

Business Enabling Environment					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
'Subjective' interpretation and enforcement of policy and regulations leading to corrupt and anti-competitive market behaviour. .	Confidence of the private sector to invest in VC improvements severely undermined.	4	4	E	Active dissemination of information on policies, laws and regulations; Establishment of PPD mechanisms; Align with major government policy initiatives (e.g. SAW) to the maximum extent possible; Contribute to the reform process through the proposed AusAID-funded Agriculture & Water Policy Facility.
Other donor programs have a negative influence on sustainability by offering non-market based subsidisation in target provinces.	Agribusiness and farmers undertake opportunistic behaviour, focusing on short term gains over long term, more sustainable options	3	5	E	Share lessons learned and the benefits of market based approach broadly; Actively participate in donor / partner coordination.
Government unwilling to act on outcome of PPD to address key BEE issues; or on recommendations arising from policy studies and trials designed to underpin development of target VCs.	Chance for reform is lost; Growth potential of target subsectors constrained.	3	4	E	Expose key government officials to the role (and results) of PPD in other countries to reduce the 'threat factor'; Undertake policy analysis to indicate 'what-if' scenarios to government relating to nuisance taxes, export levies etc; Involve key government decision-makers in all policy studies and trials; Undertake a cautious approach to change, working with reform-minded individuals; Narrow the agenda to ensure that some early 'wins' are gained – for government as well as the private sector. Align with major government policy initiatives (e.g. SAW) to the maximum extent possible.
Insufficient interest from industry in developing or supporting business associations/ advocacy agents.	Poor communication from industry to government on their needs; Limited industry capacity for self-organisation and self-development.	3	2	M	Focus on the most progressive and non-political examples, and get them up and going as demonstrations of the potential role of industry associations; Develop a real advocacy role (eg through PPD), and therefore vested interest in supporting.

Business Enabling Environment					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
					Expose key decision-makers to the role of industry organisations in other countries.
Implementation of CAVAC becomes disconnected from ongoing evolution of the SAW. .	Disconnect occurs between govt policy and CAVAC, and opportunities to influence the SAW, framework and scale-up and sustain the benefits of CAVAC are lost.	2	2	L	Ongoing engagement with MAFF and MOWRAM to monitor development of, and alignment with the SAW; Adopt a flexible programmatic approach; Use the Policy Support Facility to support further development of the SAW.

Management Risks					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
Conflicting and changing directions from the NSC.	The program can not establish the most effective course, leading to suboptimal implementation results.	3	5	E	SMG provides overall program direction provided; Deliver induction briefing and training for new counterpart and AusAID staff working on the program.
Insufficient flexibility and approval of activities. .	The benefits of the program model are not fully realised due to a lack of familiarity with the approach; CAVAC does not achieve potential benefits.	3	5	E	Develop a work plan that allows enough flexibility to support interventions; Ensure that the NSC understands the benefits of the approach.
Effective working relationship not established between the AusAID appointed Team Leader, Cardno and ACIAR.	Disconnect between ACIAR activities and the rest of the program (TL and Cardno), leading to suboptimal implementation results.	1	3	M	Co-locate OC and ACIAR personnel in the same offices; Develop clearly specified communication and coordination protocols; Integrate program management and intervention activities; Ensure appropriate oversight from the Post, ACIAR, Cardno and the TL; SMG provides external scrutiny.
Suboptimal coordination achieved across Program components.	Reduced synergies and impact.	2	3	M	Introduce a matrix management structure with interventions occurring across all components; SMG provides external scrutiny.
Failure to achieve sufficient buy-in from local government (Province, district and commune).	Government support not available for farmer extension and irrigation development activities; and limited opportunity to develop PPD and address BEE issues.	1	3	M	Establish Provincial Coordination Offices and Provincial Coordinating Committees in all target provinces; Ensure maximum orientation of activities to provincial and sub-provincial levels; Fully involve local government in planning, implementing and monitoring activities.
Inadequate consideration and integration of key cross-cutting issues, including gender, sustainability,	Reduced effectiveness of program and delivery of long-term impact.	3	3	H	Develop key policies and strategies to guide implementation of all activities;

Management Risks					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
environment and anti-corruption.					Enhance the involvement of women in all key management and decision-making structures; Emphasise the importance of environmental preservation in CAVAC extension materials; Enhance local ownership by national staff and partners.

Procurement Risks					
Risk Event	**Potential adverse impact**	**Likelihood**	**Consequence**	**Overall Risk**	**Containment measures (risk treatment)**
Program funds are used to fund informal fees and payments. .	Otherwise sound procurement is disrupted and /or invalidated Perceptions of broader program procurement is damaged	2	3	M	Provide appropriate staff training to all staff to ensure processes and procedures are clearly understood; Dealings with goods and services providers to be rotated to avoid long term commercial relationships between individuals.
The exercise of inappropriate political influence.	Procurement invalidated, activities distorted, and results compromised.	1	4	H	Carry out procurement and fiduciary risk assessments to establish the degree of risk and appropriate mitigation strategies.
Undeclared conflicts of interest.	Integrity of procurement processes fundamentally compromised	1	4	H	Provide clear guidelines and declarations of interest required in all major procurement processes.
Program procurement procedures not are adhered to.	Procurement activities fundamentally compromised.	2	4	H	Engage an international procurement expert and local procurement officer full time on CAVAC to manage all procurement processes; Incorporate and finds from the fiduciary and procurement risk assessment into procurement procedures; Detail clear procurement processes and procedures in the procurement manual.