



# **Terminal Evaluation Report of Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts (IRAS project)**

***Project ID:000076176 / ATLAS Award ID 60492***

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**Project title**

Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts

**Project ID**

Project ID:000076176 / ATLAS Award ID 60492

**Evaluation Time frame**

August – October 2015

Report dated 30<sup>th</sup> October 2015

**Region and countries included**

South East Asia

Lao PDR

**Implementing Partners**

- National Agriculture and Forestry Research Institute (NAFRI) – (overall responsible) of the Ministry of Agriculture and Forestry (MAF)
- Department of Disaster Management and Climate Change (DDMCC) of the Ministry of Natural resources and Environment (MoNRE)
- Department of Land Planning and Development (DLPD) of MoNRE
- Department of Agriculture Extension and Cooperatives (DAEC) of MAF
- National Disaster Management Office (NDMO) of Ministry of Labor and Social Welfare (MLSW)

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- Scheduling of meeting including to the field sites
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## Executive summary

### Project summary table

Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts				
			Funding at endorsement (million USD)	Funding at completion (million USD)
UNDP project ID	76176	GEF funding	4,445,450	4,445,450
Country	Lao PDR			
Region	SE Asia	Government	378,320	378,320
Focal Area	Climate Change Adaptation (CCA)	Other (parallel funding)	7,340,228	7,340,228
FA Objectives (OP/SP)	Food insecurity minimized and flood/drought vulnerability reduced			
Executing agency	UNDP	Total project cost	12,163,998	12,163,998
		ProDoc Signature (date of project start)		10 May 2011
Other partners involved	NAFRI, DDMCC, DLDP, DAEC, NDMO	Operational Closing Date:	Proposed April 2014 extended to (no cost extension) October 2015	Actual October 2015

### Project description

The people of Lao PDR are particularly vulnerable to climate change because 80% of livelihoods are associated with agriculture. UNDP has the lead role in the UN system for Climate Change initiatives and IRAS was created to be a **pioneering project** in Lao PDR on climate change adaptation development processes.

Four main factors influencing the resilience to climate change were identified during the planning of IRAS project in 2010: (1) inadequate resource, data and information base; (2) limitations in systematic, institutional and individual capacity; (3) absence of tested and verified agriculture/rural adaptation technologies and practices (on-farm and off-farm) related to climate change; and (4) slow dissemination of appropriate coping mechanisms and adaptation practices.

Accordingly, the project has sought to promote the creation of resilience in the agricultural sector Lao PDR by improving the knowledge base on climate change and strengthening agriculture and rural sector policies (outcome 1), developing institutional capacities for systematic adaptation planning (outcome 2) and introducing adaptive agricultural practices together with alternative livelihood

options for poor rural communities (outcome 3). In addition, adaptation monitoring and learning has been initiated as a long-term process to facilitate replication and ongoing development of adaptation planning and practices (outcome 4).

The IRAS project has been implemented by the Ministry of Agriculture and Forestry (MAF) through the National Agriculture and Forestry Research Institute (NAFRI). Direct partnerships and contractual arrangements have been established with Department of National Disaster Management and Climate Change (DNDMCC), Department of Land Planning and Development (DLPD) in the Ministry of Natural Resources and Environment (MONRE), Department of Agriculture Extension and Cooperatives (DAEC) and National Disaster Management Office (NDMO) in the Ministry of Labor and Social Welfare (MLSW), as well as two provincial authorities and four district authorities. Project activities have covered 34 villages distributed in 4 target districts, where Village Heads and village committees as well as selected farmers have volunteered to develop plans and perform trials.

## Evaluation rating table

The evaluation ratings are presented below based on following the definitions;

<b><i>Ratings for Outcomes, Effectiveness, Efficiency, M&amp;E, I&amp;E Execution</i></b>	<b><i>Sustainability ratings:</i></b>	<b><i>Relevance ratings</i></b>
6: Highly Satisfactory (HS): no shortcomings 5: Satisfactory (S): minor shortcomings 4: Moderately Satisfactory (MS) 3: Moderately Unsatisfactory (MU): significant shortcomings 2: Unsatisfactory (U): major problems 1: Highly Unsatisfactory (HU): severe problems	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML): moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1.. Not relevant (NR)  <b><i>Impact Ratings:</i></b> 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
<b><i>Additional ratings where relevant:</i></b> Not Applicable (N/A) Unable to Assess (U/A)		

The rating made by the Terminal Evaluation Team;

Monitoring and Evaluation	Rating	Reasons for rating
M&E design at entry	(S)	A manual was developed and used the basis for M&E. Baselines studies were undertaken for the target areas. The manual should have elaborated on procedures for internal evaluations.
M&E Plan Implementation	(S)	The implementation focus was on collection of data to be able to verify progress in relation to targets set (PIR). Documented evaluations of field activities and evaluation of value of training programmes were never systematically completed. The results of evaluations are the most important parts of a M&E system.
Overall quality of M&E	(S)	This scoring is a result of the combination of the sub-scorings
IA& EA Execution	Rating	Reasons for rating
Quality of UNDP Implementation	(S)	UNDP has to follow NIM procedures for management of this kind of projects. UNDP's recruitment of IRAS experts have not been timely. There has been a frequent turnover of staff at UNDP, Environmental unit, which has meant needs of learning periods for new staff
Quality of Execution - Executing Agency	(HS)	The first two year period of the project suffered from late recruitments and slow moving project implementation. During the last two years substantial achievements have been made, meaning that most targets have been met
Overall quality of Implementation / Execution	(S)	This scoring is a result of the combination of the sub-scorings
Assessment of Outcome 1	Rating	Reasons for rating
Relevance	(R)	The Outcome is highly relevant
Effectiveness	(S)	The tasks were systematically implemented with some delay in delivery of results to villagers
Efficiency	(S)	Due to administrative and financial procedures, start up and implementations of tasks were slightly late
Overall Project Outcome Rating	(S)	This scoring is a result of the combination of the sub-scorings
Assessment of Outcome 2	Rating	Reasons for rating
Relevance	(R)	The Outcome is highly relevant
Effectiveness	(S)	The various capacity development activities were systematically planned and implemented. If time had permitted some follow up training activities had been useful
Efficiency	(S)	Due to administrative and financial procedures, start up and implementations of tasks were slightly late
Overall Project Outcome Rating	(S)	This scoring is a result of the combination of the sub-scorings

Assessment of Outcome 3	Rating	Reasons for rating
Relevance	(R)	The Outcome is highly relevant
Effectiveness	(S)	An impressive number of techniques have been tried and described in technical guidelines (CCTAMs), Due to time constraints the CCTAMs were finalized late so time did not allow the systematic use and follow up
Efficiency	(S)	Due to administrative and financial procedures, start up and implementations of tasks were late, which was countered by an extension of the project period with a couple of months
Overall Project Outcome Rating	(S)	This scoring is a result of the combination of the sub-scorings
Assessment of Outcome 4	Rating	Reasons for rating
Relevance	(R)	The Outcome is highly relevant
Effectiveness	(S)	Very useful seminars and other events have been arranged. Interaction with other similar projects funded by other donors or NGOs could have been better. An impressive number of products have been produced and distributed.
Efficiency	(S)	Due to administrative and financial procedures, start up and implementations of tasks were slightly late
Overall Project Outcome Rating	(S)	This scoring is a result of the combination of the sub-scorings
Sustainability	Rating	Reasons for scoring
Financial resources:	(ML)	Financial resources are missing to allow the continuation of IRAS initiated activities and use of material produced. Maybe follow on funding/projects will be developed or mechanisms developed for cooperation with other ongoing projects
Socio-political:	(ML)	Top down instructions are the basis for development, where local opportunities and constraints are less used as basis for development.
Institutional framework and governance:	(ML)	The institutional framework is still weak and is still under development or adjustments where coordination in between subsectors is weak or difficult
Environmental :	(ML)	Short term gains are dominating over long term damages. Even if a reasonable legal frame work is in place, the law enforcement is weak
Overall likelihood of sustainability:	(ML)	Above reasons in combination lead to this scoring
Impact	Rating	Reasons for raring



Scoring:	(M)	On local level and based on initiatives by dedicated farmers or government staff impact may be substantial, but in general much more work in terms of awareness raising, education and extension is required
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## Summary of conclusions, recommendations and lessons

Overall the **Frame work for CCA related actions** have been set and IRAS has therefore been the **pioneering project** as intended. The impacts created on the targeted beneficiaries are summarized below will be sustained if IRAS initiatives will find continued uses:

### Government staff and organizations

IRAS has supported Government staff of the implementing partners to **enhanced knowledge through the training** events arranged, through study tours to neighbor countries and through dialogue with visitors from neighbors during their visits to IRAS project sites. Government staffs have **through TOT been equipped with required skills** to extend and explain the content of IRAS developed tools. They have also been exposed to questions and comments by farmers. The Government staffs involved in IRAS activities have now **enhanced knowledge in use of the tools** developed and have **understanding of what villagers want and prioritize** with variations in preconditions depending on location of villages in relation to flood, erosion and drought.

**Vertical and horizontal communication** within ministries and in between has been eye openers useful for future applications in ordinary working situations and within other projects. As a specific example can be mentioned, that the cooperation between researchers at NAFRI research centres and extension staffs of DAEC have been strengthened through the joint efforts to develop and make use of the CCTAMs.

The Lao delegation taking part in **COP 20**, got experiences from acting on CCA issues at the international scheme.

### Villagers

The villagers in IRAS target villages have been **exposed to planning exercises** and have new insights into importance of planning and costs for adaptations to climate change. Interested villagers (model farmers) have been provided with opportunities to **test new CCA techniques** for agriculture. Other villagers have observed and in discussions with the model farmers learnt which techniques are feasible and under what conditions. Through IRAS investments in water management, the villagers have **enhanced knowledge of the importance of water management/ harvesting**, and techniques that could be applied.

### Schools

School teachers and school children of selected schools in IRAS target districts have been exposed to and have now some **understanding about CCA issues** through the demonstration sites at the schools and through promotion material displayed explained and still under display.

### Participants in the major seminars and the Lao public

The participants in the major seminars got valuable **overviews of IRAS results** and the Lao public got insights into CCA issues from IRAS produced material during exhibitions and on Lao National TV.

### Weak aspects of IRAS

There was **no systematic internal evaluation process** of strengths and weaknesses of procedures and tools developed, as the focus was more on achieving the targets as according to the log frame.

The selection criteria of target districts and target villages could also have included criteria related to **poverty and food security** to develop insights into how poorer communities deal with CCA issues. The target areas selected mostly belonged to better off districts and villages.

If **less number of carefully selected districts and villages** had been targets for IRAS activities, more time had been available to analyze and evaluate results. Now some stakeholders judged IRAS as an ordinary rural development project.

Due to the administrative procedures for planning, reporting and financing, the **speed in implementation was slow** especially during the first two years.

### Recommendations

IRAS is coming to an end, at a time when the **foundation for CCA has been created** and when both Government staff and villagers have knowledge to build on and tools to use. The time is ripe for scaling out of selected IRAS products. Therefore the following joint actions are proposed for IRAS Government staff and UNDP **not to lose the momentum**;

1. Pay **visits to present, explain and handover IRAS products** to other ongoing major donors, organizations and projects in the green sector including ADB, WB, EU, FAO, IFAD and GoL bilateral partners such as Finland, Japan, Germany, Korea and INGOs as well as to private sector companies in the mining and hydropower sectors.
2. Support NAFRI in its efforts to set up a new **Research Centre linked to CCA** . This centre would play the key role in CCA related research and development not least through the **institutional memory** created by IRAS. To formalize the creation of the centre is therefore a priority.
3. Inform and promote the use of IRAS products through the **Sub Sector Working Group of Agriculture and Rural Development and the Subsector Working Group on Environment and Climate Change**,
4. Explore the possibilities to find **bridging funds** to use for the strengthening of the processes related the above proposed actions.

### **Over next 1 -3 years period**

1. Develop an IRAS follow up project with preferably MAF or possibly MoNRE as Lead agency. The follow up project should have two components
  - 1.1 An **IRAS II component**, using the IRAS log frame as the basis
  - 1.2 A **component on water management development**, which should have some of the most vulnerable areas of poor people in the upland areas as target areas.

### **Lessons learnt**

A project with objective and design as IRAS need to be long lasting, the IRAS project period was **too short**. First steps in awareness raising, education and testing have been taken, but to create sustainability and lasting impacts, longer duration projects are required.

It is important to find ways to **institutionalize results**; this will be achieved if the project design includes gradual adjustments of procedures to fit into the **Lao owned system**.

## Acronyms and Abbreviations

AA	Agriculture Adaptation
AA2CC	Agriculture Adaptation to Climate Change
ACIAR	Australian Centre for International Research in Agriculture
ADB	Asian Development Bank
AEM	Agro Ecosystem Management
AET	Agro-Ecology Team
AKP	Adaptation Knowledge Platform
ALF	Agriculture Livestock and Fishery
ALM	Adaptation Learning Management
APM	Assistant Project Manager
APR	Annual Project Review
ANR	Agriculture and Natural Resources
ASEAN	Association of Southeast Asian Nations
AWP	Annual Work Plan
BCCI	Biological Corridors Conservation Initiative
CC	Climate Change
CCA	Climate Change Adaptation
CCSE	Climate Change Scenario ex
CCTAM	Climate Change Training and Adaptation Modules
CIAT	Centre for International Agriculture Research in the Tropics
CPAP	Country Strategy and Action Plan
CP/CPD	Country Programme Document
CTA	Chief Technical Adviser
CTP	Coordinator Training Programme
DAEC	Department of Agriculture and Extension
DAFO	District Agriculture and Forestry Office (MAF)
DDG	Deputy Director General
DG	Director General
DLDP	Department of Land Use Planning and Development
DNDMCC	Department of National Disaster Management and Climate Change
DLF	Department of Livestock and Fisheries (MAF)
DSW	Department of Social Welfare
DoA	Department of Agriculture (MAF)
DRR	Deputy Resident Representative
EPF	Environment Protection Fund
EU	European Union
EWS	Early Warning System
FAA	Finance and administration Assistant
FAO	Food and Agriculture Organization of the United Nations
GCF	Green Climate Fund
GCM	Global Circulation Models of Climate
GDP	Gross Domestic Product
GEF	Global Environment Fund
GIS	Geographical Information System
GoL	Government of Lao PDR
ICA	Institutional Capacity Assessment

IEC	Information, Education, Communication
IFAD	International Fund for Agricultural Development
INGO	International Non Government Organizations
IP	Implementing Partner
IPRD	Information and Public Relations Division
IRAS	Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change impacts
IRRI	International Rice Research Institute
IT	Information Technology
IUCN	World Conservation Union
IWMI	International Water Management Institute
IWRM	Integrated Water Resource Management
KfW	Kreditanstalt für Wiederaufbau und Entwicklung
LDCF	Least Developed Countries Fund
LFM	Log Frame
LIP	Local Integration Platform (Technical working group on province/district level)
LWU	Lao Women Union
LoA	Letter of Agreement
M&E	Monitoring and Evaluation
MAF	Ministry of Agriculture and Forestry
MDG	Millennium Development Goals
MEA	Multilateral Environmental Agreements
MERA	Monitoring, Evaluation and Reporting Assistant
MLSW	Ministry of Labor and Social Welfare
MPI	Ministry of Planning and Investment
MRC	Mekong River Commission
MTE	Mid Term Evaluation
MoNRE	Ministry of Natural Resources and Environment
NABP	National Agricultural Biodiversity Programme
NAFRI	National Agriculture and Forestry Research Institute (MAF)
NAPA	National Action Plan for Climate Change Adaptation
NC	National Consultant
NDMO	National Disaster Management Office
NGO	Non Government Organization
NGPES	National Growth and Poverty Eradication Strategy
NIM	National Implementation Modality
NPD	National Project Director
NRM	Natural Resources Management
NSEDP	National Socioeconomic Development Plan
NTFP	Non-timber forest product
NUOL	National University of Lao
ODA	Overseas Development Assistance
O+M	Operation and Maintenance
PAFO	Provincial Agriculture and Forestry Office (MAF)
PC	Project Coordinator
PCM	Project Cycle Management
PD	Project Document
PDR	Peoples Democratic Republic
PEI	Poverty and Environment Initiative
PIR	Project Implementation Review
PLUP	Participatory Land Use Planning
PM	Project Manager

PMA	Publication and Media Assistant
PMO	Prime Minister Office
PRA	Participatory Rural Appraisal
PPG	Project Preparation Grant
PPR	Project Progress Reports
PSC	Project Steering Committee
PSU	Project Support Unit
PTF	Project Task Force (Technical working group on national level)
QPR	Quarterly Progress Report
QWP	Quarterly Work Plan
RC	Research Centre
REDD	Reduced Emissions from Deforestation and Degradation
RP	Responsible Party
RR	Resident Representative
RTA	Region Technical Adviser
SEA	South East Asia
SDC	Swiss Agency for Development and Cooperation
SEDP	Socio-economic Development Plan
SSWGCC	Sub Sector Working Group on Climate Change
STA	Senior Technical Advisor
SVK	Savannakhet
TA	Technical Assistant
TABI	The Agro-biodiversity Initiative
TC	Technical Coordinator
TE	Terminal Evaluation
TL	Team Leader
ToR	Terms of Reference
TOT	Training of Trainers
TPR	Tripartite Review
TSC	Technical Service Centre
UNCCD	United Nations Convention on the Control of Desertification
UNDP CO	United Nation Development Programme - Country Office
UXO	Unexploded Ordinance
V2R	From Vulnerability to Resilience
WREA	Water Resources and Environment Administration
WWF	Worldwide Fund for Nature
XBY	Xayabury

## Introduction

### Purpose of the evaluation

This project “*Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts*” (IRAS) is ending by end of October 2015, after a four years implementation period with a six months no cost extension.

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. The evaluation has used the criteria of relevance, effectiveness, efficiency, sustainability and impact as explained in *UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF funded projects*<sup>1</sup>.

The evaluation has aimed at both assessing results and to provide recommendations and future directions for possible continued support to the initiatives implemented (compare ToR in annex 1).

### Scope and Methodology

The evaluation team studied documentation related to the project, conducted site visits and interviewed selected project stakeholders (see annexes). Based on the definition in the UNDP guidance, stakeholders are; “*all those who have been or are likely to be affected by the project or activity, those who have participated in or contributed to the project, and those who in other ways have a stake in the outcomes of the project or activity*”

As the basis for the evaluation, the team prepared a matrix of evaluation questions to secure the comprehensive screening of the project (annex 6).

Based on study of documents (annex 5), site visits (annex 2 and 4), interviews (annex 3) and experiences and judgments of the evaluation team, the project performance has been rated with use of the following scales:

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<sup>1</sup> UNDP Guidance for Conducting Terminal Evaluations

<b>Ratings for Outcomes, Effectiveness, Efficiency, M&amp;E, I&amp;E Execution</b> 6: Highly Satisfactory (HS): no shortcomings 5: Satisfactory (S): minor shortcomings 4: Moderately Satisfactory (MS) 3. Moderately Unsatisfactory (MU): significant shortcomings 2. Unsatisfactory (U): major problems 1. Highly Unsatisfactory (HU): severe problems	<b>Sustainability ratings:</b> 4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML): moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	<b>Relevance ratings</b> 2. Relevant (R) 1.. Not relevant (NR)  <b>Impact Ratings:</b> 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
<b>Additional ratings where relevant:</b> Not Applicable (N/A) Unable to Assess (U/A)		

## Structure of the evaluation report

The structure follows the outline as provided as part of the ToR (annex 1) i.e.

- An executive summary
- A brief description of the project
- Findings
- Project results including the evaluation team's assessment of overall results, relevance, effectiveness, efficiency, country ownership, mainstreaming, sustainability and impact
- Conclusions, recommendations and lessons

## Project description and development content

### Project start and duration

IRAS project was launched mid 2011 and is coming to its formal end by end of October 2015 after a basically four and a half years implementation period.

### Problems that the project sought to address

In its efforts to increase the overall adaptive capacity of the agriculture sector in Lao PDR and to improve the resilience of food production systems, the project<sup>2</sup> applied a four-pronged approach:

- (i) strengthening of the national knowledge and information base on climate change impacts in Lao PDR and their effects on agricultural production and food security as the knowledge and information base is still weak;

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<sup>2</sup> The IRAS Project document



- (ii) (ii) enhancement of the capacity of sector planners and agricultural producers to understand and address climate change related risks and opportunities for local food production as capacity of planners and producers need to be upgraded;
- (iii) (iii) demonstration and promotion of diversified and adaptive agricultural practices and other off farm livelihood alternatives at the community level as rural villagers need injections into how do adjust their traditional practices ; and
- (iv) (iv) adaptation monitoring and learning as a long term process that assures that lessons learnt do benefit the local population, as well as national policies and international climate change adaptation efforts as preconditions for agriculture practices are continuously changing with new opportunities and risks emerging.

## Immediate and development objectives of the project

The objective of the project was to minimize food insecurity resulting from climate change in Lao PDR and reduce the vulnerability of farmers to extreme flooding and drought events. Four outcomes contributed to this objective

## Baseline indicators established

The following base line indicators were established;

On Objective level (food security - flooding /drought)

- Availability of a framework for climate change resilient agriculture in Lao PDR
- Percentage of households in pilot districts actively implementing climate change adaptation measures introduced by the project
- Proposition and value of agricultural assets with increased resilience to climate change as a result of adaptation measures implemented by the project

On Outcome 1 level (increased knowledge)

- Cover -Number and type of stakeholders served by expanded climate and vulnerability information and knowledge base related to agriculture and food security
- Impact-Number of national and provincial level stakeholders using improved climate and vulnerability information in formulation of climate resilient policies and plans
- Sustainability - Resources available to maintain knowledge base after end of the project

On Outcome 2 level (Capacity of sector planners)

- Cover -Number of targeted institutions (agriculture, water management, food security, early warning, poverty alleviation etc.) with increased capacity to reduce risks of and respond to climate change variability

- Impact-Number of targeted agricultural officers, extension workers, farmer cooperatives and TSCs members in target districts having an advanced understanding of key climate change risks and impacts on agricultural production and socio-economic conditions

On Outcome 3 level (Agricultural practices)

- Cover - Number and type of climate risk-reducing farmer level practices identified and trialed to support adaptation of livelihoods and/or resource management
- Cover -% of targeted farming households aware of predicted adverse impacts of climate change and implementing new adaptive practices for agro-ecosystem and landscape management
- Impact- Improvement in farmer yields and water availability due to adaptation measures trialed in more than 50% of targeted communities

On Outcome 4 level (Adaption Monitoring/learning)

- Replicability -Number of lessons learnt codified in a specific KM facility such as the Adaptation knowledge platform for South East Asia or the Global Adaptation Learning Mechanism
- Replicability - Number and type of relevant networks or communities through which lessons learnt are disseminated to enable replication

## Main stakeholders

The main stakeholders at the national level were;

- UNDP
- Ministry of Agriculture and Forestry (MAF)
  - National Agriculture and Forestry Research Institute (NAFRI)
  - Department of Agriculture Extension and Cooperatives (DAEC)
- Ministry of Natural Resources and Environment (MoNRE)
  - Department for Disaster Management and Climate Change (DDMCC)
  - Information and Public Relation Division (IPRD)
  - Department of Land Planning and Development (DLPD)
- Ministry of Labor and Social welfare (MoLSW)
  - Department of Social Welfare (DSW)

The main stakeholders at the Provincial level (Savannakhet and Xayabury) were;

- Provincial Agriculture and Forestry office (PAFO)
- Provincial Natural Resources and Environment Office (PoNRE)
- Provincial Labor and Social Welfare office (PLSWO)

The main stakeholders at the District level ( Outhomphon, Champhone,Phiang and Paklai) were;

- District Agriculture and Forestry office (DAFO)
- District Natural Resources and Environment Office (DoNRE)
- District Labor and Social Welfare office (DLSWO)

Field activities were carried out in cooperation with selected farmers in 34 villages evenly distributed across the 4 target districts. The villages were selected based on their status in relation to drought, flood and soil.

Selected secondary and high schools in the 4 districts were also targets beneficiaries. Other project stakeholders on district levels included Lao Women Union (LWU), Technical Service Centres (TSC).

On the provincial and district levels, Local Integration Platforms (LIP) met regularly to share information and to coordinate activities. The LIPs were chaired by high ranking staff (e.g. DDGs)

## Expected results

The project was designed to promote resilience in the agricultural sector of Lao PDR and to provide assistance in improving the knowledge base on climate change, strengthening agriculture and rural sector policies and developing institutional capacities so that systematic adaptation planning can be carried out. At the same time, appropriate and adaptive agricultural practices needed to be introduced on the ground together with measures to introduce alternative livelihood options for poor rural communities.

The expected results were an initiated and a still continuing process through which the project stakeholders gradually applied knowledge and practices introduced by the project for the improvement the resilience to climate change impacts.

## Findings

### Project design/formulation

#### Analysis of LFA Results Framework

The objective and the four outcomes were logical and complimentary. Most of the target sets were realistic, achievable and in reality achieved.

The targets have to be expressed in measurable values and an overview of to what extent targets set have been met is presented in Annex 7. The ambition level has been set high.. Two targets set were too

ambitious, one related to resources available to maintain the knowledge base, (50% of costs for operation included in sector budgets) and improvements in farmers' yields (25%).

The danger with ambitious targets, is that the project's focus needs to be on achieving the **quantities** and where there is less time for assessing the **quality** of work performed (see further under M&E).

### Assumptions and Risks

The following major risks were listed in the PD on objective level;

- *The CC adaptation process is externally driven meaning that the process will stop when the project comes to the end*
- *CC manifests itself as sudden natural disasters, meaning emergency situations will eliminate development efforts and targets*
- *CC appears outside adaptive flexibility for agriculture, meaning that farmers will give up farming and leave the area*
- *Tangible economic benefits from Agricultural Adaptation (AA) are miniscule for agricultural households meaning that farmers will give up farming and leave the area*
- *Competing economic interests erode the base and options for AA to CC meaning that short term gains will be prioritized causing long term damages*
- *Reduced access to land and water meaning that farmers will give up farming and leave the area*
- *Population growth meaning constraints on availability of natural resources*

On the outcome level risk related to lack of coordination between actors including, slow project start, too complicated M&E etc were mentioned. All these risks are and have been real risks. The possibilities for the project management to counter the risks have not been easy tasks.

It could be noted that there is now a general move of population from rural areas to urban areas in Lao PDR. The decisions to move are not necessarily CC related but generated by better livelihood options through income generation in the urban environment. Often life in rural areas is hard in itself, which makes the farmers/villagers and especially the younger generations interested to explore something better.

### Lessons from other relevant projects into project design

During the project preparation period and through the Project Preparation Grant (PPG) , data and experiences were systematically screened (Ministries, UN agencies, Donors, Projects, NGOs, Mass organizations and individuals with experiences and knowledge from work in the sector in Lao PDR). A series of workshops were also held at national and regional levels to inform about ideas and to gather views.

Decisions on how to design the project and which focal areas to select including geographical areas (districts and villages) were based on this process. This process was solid and very relevant.

### Planned stakeholder participation

The stakeholder participation as planned in the design of the project has been achieved. This has created strengthened horizontal links (between government bodies in Vientiane and between provincial and district bodies respectively) and strengthened vertical links between ministries in Vientiane and its outlets on provincial and district levels. The entry points for interaction has been concrete tasks related to CCA, in terms of, capacity building, development and application of tools (manuals, procedures, technical toolkits)

### Replication approach

Lao PDR has a wide variety of preconditions for CCA, including areas different degrees of drought, flood and erosion problems. Lao PDR has also areas with villages with a wide variety of status of wealth from severe poverty to well off villages.

From the point of view of replicating approaches to CCA, there have accordingly been valuable learning opportunities for IRAS and even more importantly for GoL through work in the selected target districts and villages in different part of Lao PDR.

The inclusion of villages where poverty was more dominant, could have been an asset for learning and later on for replication.

### UNDP comparative advantage

UNDP has the global mandate for actions related to CCA. UNDP has the co-chairing responsibility in the Round Table Process, which aims at securing that international development assistance to Lao PDR is aligned with national development priorities.

The UNDP Country Programme 2012 – 2015<sup>3</sup> and the UNDAF action plan<sup>4</sup> were developed in close consultation with GoL. There are important links between the UNDP programme on Ensuring Sustainable Natural Resources and Environmental Management and Adaptation to Climate Change and corresponding sections in the NSEDP 2011 – 2015<sup>5</sup> and NSEDP 2016 – 2020 (draft).

Under the Sustainable Natural Resources Programme, UNDP has assisted GoL to strengthening the capacities to formulate and implement strategies and plans related to natural resources management and DRM, and IRAS has been one of the projects under this umbrella.

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<sup>3</sup> UNDP CPD 2012 - 2015

<sup>4</sup> UNDAF Action plan 2012 – 2015 Lao PDR

<sup>5</sup> The 7th National Socio Economic Development Plan 2011 - 2015

IRAS has therefore had easy access to information flow, events of relevance and units and individuals with CCA related skills on the global and the regional scene. This has also been an advantage for the access to funding through GEF/LDCF and for from now on the potential to access the Green Climate Fund (GCF)<sup>6</sup> for scaling out of IRAS activities.

The use of UNDP ALM website and UNDP Country Office website for uploading of IRAS products has provided a platform for information sharing and sharing of the progress of the project activities on the international scene.

### **Linkages between project and other interventions within the sector in Lao PDR**

IRAS has through capacity development training events for Government staff, study tours, seminars, and information on websites spread knowledge about the projects, its objective, outcomes and ongoing activities. These efforts have themselves been invitations to cooperation between IRAS and other related Lao based projects.

IRAS has however not to any major extent had time to actively initiated and developed cooperation with other projects and has not an overview of how other projects and organizations have used tools and material created (further see also recommendations). One important reason for this is time constraints within IRAS for achievement of targets set.

But it is evident from screening of the list of participants<sup>7</sup> in the 2 major IRAS arranged seminars, where besides project linked staff from national and local levels, only very few outside projects linked staff took part (some NGOs and research bodies).

For example a special workshop with major ongoing projects in the sector, could have been the targeted with the aim to find more sustainable uses of IRAS developed products (WB, ADB, EU, FAO, kfW, SDC, Finland, Luxembourg as well as private sector). Most of this category of projects are running for long periods, have funding for and are looking for tools and materials to apply or to apply after modifications.

One weak link in between projects in this connection has been the Sub Sector Working Group on Climate Change SSWGCC), which has not been the means of communication it has aimed to be so far.

However, there are a few examples of that other projects are applying IRAS created products. Caritas project has used the Risk Disaster Management Manual in their support project V2R (from Vulnerability to Resilience) in the Province of Xaysomboun. In this case direct cooperation between Caritas and MLSW has been the entry point. The cooperation between Lao PDR and the Korea supported Integrated Rural Development Project based on participatory approaches is another example, in this case through DAEC.

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<sup>6</sup> Engaging with the Green Climate fund

<sup>7</sup> List of participants from the Seminars on Adaptation to Climate Change 2014 and 2015

## Management arrangements

As a UNDP/GEF funded project, the UNDP procedures for financial management were a precondition for project implementation (NIM)<sup>8</sup> (i.e. rules for release and management of funds from UNDP to the project).

For the implementation of the technical parts of the project, the GoL procedures both in horizontal and vertical communication were the preconditions (e.g. formal letters from PM to implementing partners to start activities).

## Project implementation

### Adaptive management

Early during the project, it was realized that project period was too short to cover 5 districts as originally planned, meaning that the number of districts was reduced to 4. Later on it was realized that there was a need to extend the lifetime of the project to allow use of one additional agriculture cycle for technical trials. Formally the project was from the beginning approved for implementation through April 2015, but was therefore later on extended through October 2015 - but with no extra funding.

Midterm, the adaptive management was based on the recommendations of the MTR<sup>9</sup> which was carried out in December 2013. Below is a summary of the recommendations with comments related to action taken<sup>10</sup>;

MTR - Recommendation number	Action taken and comments
1 Prepare a strategic work plan for Jan 2014 – Dec 2015 that focuses on the key outputs that have an impact on demonstrating and replicating feasible adaptation priorities and technologies, in conjunction with CCTAM implementation and demonstrations of integrated farming and small scale irrigation efficiencies.	Done and implemented
2 Undertake an Annual Work Plan for each district that sets out the agreed concept proposals to be developed, the timetables for approval and implementation, and any technical assistance that may be required. PSU staff should work with the LIPs to select local concept proposals at the beginning of each year in order to improve project efficiencies.	Done and implemented, but time was not sufficient to fine-tune this approach as it was introduced late during the project.
3 Develop a CCTAM for smallholder agricultural water management, including related practices for conservation agriculture in drought areas, water use efficiency measures and farm pond management	Done and very valuable

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<sup>8</sup> NIM Rules LOA/MOU 2012

<sup>9</sup> Mid Term Review Evaluation of IRAS 2013

<sup>10</sup> Management Response to MTR 2014

4 Assess and enhance the institutional capacity of the project area TSCs and related extension teams to implement the CCTAMs in the project areas.	Done, however the TSCs are very weak in terms of human capacity and funding
5 Direct the newly-appointed Training Coordinator to focus on specific capacity gaps associated with the key outputs that the project is interested in sustaining	Done and functioning within the IRAS target areas
6 Identify and assess the implications of the district climate scenarios for the Land Use Plans, the Disaster Management Plans and the application of CCTAMs.	Initiated but complicated to apply without extra inputs from other sources of funding.
7 Design the agro-ecosystem management sub-component to complement the site demonstrations in Component 3, and to integrate the planning processes (land use, disaster management, CCTAMs) with ecosystem-based village/catchment area interventions.	Done and this is very important as use of integrated farming systems is a mean to reduce the vulnerability
8 Coordinate the project M&E system with the knowledge and learning activities under Component 4 to identify the relevant lessons from the site demonstration and experiences, and to assess the specific knowledge development and socioeconomic benefits.	Initiated, but with lack of time to complete
9 Mainstream the Climate Change Information System and the CCTAMs into the regular government programs and services, and on demonstrating and documenting the benefits of investing in climate resilient agriculture.	The Climate Change Information System and the CCTAMs have been distributed to PAFOs and DAFOs all over Lao PDR with request to apply – but the lack of resources within GoL makes progress limited. TOTs have been performed in all districts of the target provinces.
10 Prepare a management plan for the proposed Climate Change Information System to be part of a larger climate early warning system in Lao PDR	Not done – agreed as outside the scope of the project and linked to the recommendations of MTR to reduce the number of activities
11 Initiate management agreements and arrangements for community ponds at schools to establish and clarify roles and responsibilities to fully utilize and maintain the sites	Completed and very important
12 As part of the exit strategy and integration with MAF operations, appoint a senior technical coordinator from MAF to assist the PM, APM and STA and to assume responsibility for the exit strategy and sustainability of the project outputs	Not possible due to restrictions by GoL on assignments of staff to new positions
13 Increase the level of engineering quality assurance for rehabilitation and construction of small-scale community irrigation systems and ensure that user group arrangements are established	Have been undertaken and is very important to ensure the sustainability
14 Increase monitoring and oversight of RP activities and outputs to ensure the outputs (climate smart planning procedures,	Steps have been taken – but time has been lacking to complete



CCTAMs, etc.) are fully institutionalized in the government systems	
15 Enhance the inception phase procedures and guidelines for GEF and LDCF projects to ensure that well-defined implementation strategies are established.	Beyond the scope of IRAS

It can be concluded that the MTR foresaw some of the problems IRAS had, to on time prepare for use of experiences gained after end of the project period, and the recommendations helped IRAS to initiate actions<sup>11</sup> to improve the chances for sustaining use of the valuable project results.

### Partnership arrangements

For the systematic process of implementation a Project Steering Committee (PSC) was established and chaired by Vice Minister of MAF, **The PSC had annual meetings** to discuss progress made and to take related decisions.

The implementing partners NAFRI and UNDP held **monthly meetings** to discuss and agree on ongoing implementation issues, during which UNDP provided guidance and oversight.

On provincial and district levels IRAS project team and UNDP had quarterly meeting with the Local Integration Platforms (**LIP quarterly meetings** to secure the systematic information sharing and decision making.

In the **regular monthly meetings at each Ministry in Vientiane and at the Provincial and District levels** (chaired by the Minister, the Provincial and District Governors respectively) any IRAS related issue of importance was discussed based on need. These meetings are important parts of the **institutionalized procedures** of Lao PDR in which besides GoL internal matters, important ongoing project activities are presented and discussed.

The GEF focal point in GoL was also continuously informed about the project and progress made.

To conclude; The project partnership arrangements was solidly anchored into the Lao and UNDP system partly through the application of ordinary procedures for meetings/information sharing and further strengthened by the project designed mechanisms for cooperation, information sharing and decision making.

In between formal meetings, **informal contacts** were made to clarify, discuss and agree on solutions for the efficient project implementation.

### Feedback from M&E activities used for adaptive management

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<sup>11</sup> Strategic Work Plan for 2014 – 2015 (2015)

As mentioned above systematic screening of IRAS and its performance was undertaken during the MTR. The recommendations from the MTR have been used for adjustments in project operations. This procedure was also stated in the M&E manual<sup>12</sup>, which was developed for the project (October 2011), based on the UNDP procedures for project implementation

The main focus of project operations was otherwise to secure that the expected results and agreed targets were achieved.

## Project Finance

In the table below the actual project funding is displayed.

Co-financing (type/source)	UNDP own financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Total (mill. US\$)	
	<i>Planned</i>	<i>Actual</i>	<i>Planned</i>	<i>Actual</i>	<i>Planned</i>	<i>Actual</i>	<i>Planned</i>	<i>Actual</i>
<b>Grants</b>	4,445,450	4,445,450			7,340,228	Not possible to verify	12,163,998	4,445,450
<b>Loans/Concessions</b>								
<b>In-kind support</b>			378,320	378,320				378,320
<b>Other</b>	0	0	0	0	0	0	0	0
<b>Totals</b>	4,445,450		378,320	378,320	7,340,228	Not possible to verify	12,163,998	Not possible to verify

An anticipated co-funding through partner agencies of USD 7,340,228 was earmarked in the project budget as allocations from the following 6 other projects;

Project	Amount USD
1. Developing multi-scale climate change adaptation strategies for farming communities in Cambodia, Lao PDR, Bangladesh and India (2010 – 2014) – ACIAR	381,026
2. Developing improved farming and marketing systems in rain-fed regions of southern Lao PDR (2009 – 2013) - ACIAR	1,227,443
3. Northern Uplands Rice Farming System Research Project 2008 – 2012) SDC	746,500
4. Rice Productivity Improvement Project (2009 – 2011) – World Bank	2,410,000
5. Poverty and Environment Initiative (PEI) – NDMO	1,900,000
6. Capacity Development on Disaster Risk Management, NDMO - UNDP	675, 259
<b>Total</b>	<b>7,340,228</b>

<sup>12</sup> M&E Manual for IRAS 2011

The intention was that activities of the 6 projects should be possible to link to activities under IRAS project outcomes for use/further development and also that interaction between IRAS and the other projects should be initiated.

IRAS systematically screened and applied relevant results and products of the other projects but there are no evidences in the project records, verifying products identified, linked activities or related spending.

In reality the funding could have be labeled parallel funding to better clarify relations between projects. Parallel funding is however accepted as co-funding, if it has contributed to the achievements of results of a project.

In the PD, it is also stated that “ *As part of the project implementation strategy project management will be pro-actively engaged to source further co-finance during the implementation period*”. The PMU prepared two project proposals (EU and the Arabic Development Fund), but none of them were successful, meaning that no additional co-funding could be added.

The UNDP/GEF/LDCF inputs are carefully accounted for<sup>13</sup> and audited by independent audit companies<sup>14</sup> on annual basis (the audit of expenditures for 2015, will take place after the end of the project). The Audits have only minor remarks on use of fund and this is the result of the strict rules for fund management at UNDP through the NIM.

The Lao in kind support<sup>15</sup> is accounted for as salaries to a list of named government staff during the project period (79% of Lao contribution) and of costs for office rent at National, Provincial and District levels as well as costs of electricity and water supply at National and provincial levels (21 %)

### **Monitoring and evaluation design at entry and implementation**

The M&E system was created through a process, starting with the development of a manual (completed in October 2011), followed by establishment of the base line situations in the project areas<sup>16</sup> (completed in July 2012) and thereafter implementation. The resulting M&E system is a tradeoff between the energy and resources needed for implementation of project activities and the energy and resources required for M&E activities i.e. the more time spent on M&E – the less time is left for implementation.

The implementation of M&E aimed at cover the following three main steps (compare the M&E manual);

1. **Monitoring** “Is the project doing the right things?”
2. **Evaluation** “Is the project doing the thing right?”

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<sup>13</sup> Cumulative Financial Report from 2011 to 30 June 2015 (2015)

<sup>14</sup> Audit of IRAS for 2014 (2015)

<sup>15</sup> In kind contribution by Government to IRAS during the period April 2011 –October 2014

<sup>16</sup> Baseline survey reports – Savannakhet and Xayabury (2012)

### 3. Learning and knowledge management – link up with step 2

For the implementation a number of templates were created and especially the Project Implementation Review (PIR)<sup>17</sup> became important as a requirement of a UNDP/GEF project. Through the PIR (latest report June 2015) it can now be seen how IRAS step by step has moved towards the completion of the targets set. This all relates to the first step in the M&E system. The system to collect and to report progress has been systematic and useful.

Related to evaluation, two special studies<sup>18</sup> have been performed analyzing the economic benefits created for the villages/farmers. These studies show how modifications in farming techniques can increase yields and incomes and are valuable “do the right thing” in relation to economic benefits. An important factor in this kind of analysis is to what extent and how funding is available for farmers to be able to continue to invest and thereby replacing IRAS provided inputs.

It would have been very useful if more time had been allocated to systematically screen and analyze what has been successful and what is now expanding “on its own” and what is less successful and why and to feed this into the third step Learning and knowledge management (Outcome 4) and also to reflect on how the results could be used after the ending of the project.

For training and study tours the participants had to complete evaluation forms, indicating their views and suggestions on the event. Similarly systematic analysis of these forms with the systematic conclusions and feeding back into Learning and Knowledge Management would have been valuable.

In terms of at project end link back to the baseline studies and draw conclusions about changes, time constraints have not made this possible.

At the end of IRAS, the risk is now that the system will not be used any longer, as the MPA and the MERA experts are no longer present (IRAS funded) and as no Government staffs so far are assigned to maintain the system - it is an IRAS project system product which has not but institutionalized, but could be and applied at NAFRI.

Monitoring and Evaluation	Rating	Reasons for rating
M&E design at entry	(S)	A manual was developed and used the basis for M&E. Baselines studies were undertaken for the target areas. The manual should have elaborated on procedures for internal evaluations.

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<sup>17</sup> Project Implementation Review (June 2015)

<sup>18</sup> Cost- benefit analysis of IRAS (Power Point) and Assessing Profitability in CCA Investments – case study (2015)

M&E Plan Implementation	(S)	The implementation focus was on collection of data to be able to verify progress in relation to targets set (PIR). Documented evaluations of field activities and evaluation of value of training programmes were never systematically completed. The results of evaluations are the most important parts of a M&E system.
Overall quality of M&E	(S)	This scoring is a result of the combination of the sub-scorings

### UNDP and Implementing Partner implementation/execution - coordination and operational issues

UNDP has throughout the life of the project maintained frequent contacts with IRAS, both formal and informal, through regularly scheduled meetings, participation on the Project Steering Committee (PSC) meetings, provision of feedback on plans and reports and through keeping IRAS informed about any event or development within UNDP related to IRAS.

There has been quite frequent change of Head of the UNDP Environmental Unit, with demands on new head to learn and to be updated about projects including IRAS on project events, progress made and problems encountered. Longer periods of assignment, would have been valuable for IRAS.

The Execution Agency (NAFRI/IRAS) has had less turn over in staffing and has been able to systematically undertake planned activities, which has led to the successful completion of most activities planned.

Overall the quality of implementation is commendable and within a limited time, IRAS has produced substantial results.

IA& EA Execution	Rating	Reasons for rating
Quality of UNDP Implementation	(S)	UNDP has to follow NIM procedures for management of this kind of projects. UNDP's recruitment of IRAS experts have not been timely. There has been a frequent turnover of staff at UNDP, Environmental Unit, which has meant needs of learning periods for new staff.
Quality of Execution - Executing Agency	(HS)	The first two year period of the project suffered from late recruitments and slow moving project implementation. During the last two years substantial achievements have been made, meaning that most targets have been met

Overall quality of Implementation / Execution	(S)	This scoring is a result of the combination of the sub-scorings
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## Project Results

### Overall results including relevance, effectiveness and efficiency

#### *On Objective level (food security - flooding /drought)*

The project has developed **a framework for climate change resilient agriculture** in Lao PDR, for which now a number of tools (material, manuals and procedures) are available and where the implementing partners have defined roles and responsibilities. It has basically been implemented in 4 steps – partly parallel in between IPs but through a coordinated process

1. Awareness and promotion
2. Land use planning
3. Disaster preparedness planning
4. Piloting and extension

For continued use and development of the framework, there is a need of a **Lead agency**, which has staff and financial resources. At all levels of the Government, the **lack of funding** has been stated as the main reason for difficulties to apply results beyond the ending of IRAS.

The most suitable lead agency would be NAFRI and its CC Research Centre, but if so funding needs to be identified. If a follow on project cannot be launched within the nearest couple of months, **bridging funding** needs to be identified. If there is a time gap, the present momentum created may get lost.

The future use of government driven planning tools (PLUPs, CCSs, CBDRMPs) will depend on Government funding or ongoing projects, which are ready to adapt IRAS products and provide funding.

On village and farm levels, some IRAS interventions will be used beyond the ending of the project, others will be discontinued, based on assessment of the feasibility by the villagers. Among the most **successful interventions** are various **water management/harvesting techniques** (Irrigation, reservoirs, dams, containers) and linked to them **agricultural techniques for which regular and controlled water supply is required** (vegetables, fish frogs). The access to markets is in this connection an important sustainability factor.

Other successful technical interventions are the introduction of more **high yielding rice varieties** and **mechanized sowing techniques**, even if for the sake of biodiversity, there are now risks that traditional rice varieties will be abandoned. It should be noted that the same rice variety should not be grown in the same field more than 2 – 3 years, as the yields thereafter will start to drop.

When promising techniques are scaled out, the basis for their introduction should be the responsibilities of the farmers to **invest and cover costs on their own**. The ability of farmers to invest also depend on their economic status. The well off are obviously able to invest more (and take more risks) than poorer farmers. The access to **suitable credit options** have therefore also to be considered (interest rates, amortization terms).

#### *On Outcome 1 level (increased knowledge)*

The project has together with its implementing partners developed and introduced tools for planning and management. Linked to the tools the knowledge among the implementing partners has increased. The most important tools and resulting products are;

#### Land zoning

In cooperation with MoNRE/DLDP, the already developed and officially endorsed tool for PLUP<sup>19</sup> has through IRAS been expanded from 8 categories of land to 11 through adding **land vulnerable to flooding, drought and erosion**. Based on this modified PLUP procedure, land use plans ( more correct - climate risk responsive land zoning) have been prepared for the 34 target villages of IRAS in cooperation between IRAS, Government and villages. The villagers confirm the importance of and value of PLUP, and specially point at that village boundaries now are clear. Before, several villages faced difficult boundary disputes, which now have been eliminated.

The same modified PLUP procedure has since then been applied in UNDP funded projects in some villages in Saravanh and Xekong provinces.

The modified PLUP tool needs now official recognition by the Government through full integration of the 3 added variables within the ordinary procedures, through a by the Government endorsed modified manual (now described as an addendum in the 34 plans prepared. DLDP also intends to based on the identification of disaster risk areas, issue certificates to the farmers, whose lands are vulnerable to disasters.

The cost for preparation of a village PLUP is of the order 10,000,000 Kip and it has to be borne by the government or by a development project. The plan preparation for a village is spread over a four months period, with involvement of National, Provincial and District staff besides villagers from the target villages and neighbor villages. This indicates that a widespread use is unlikely without the support from other projects.

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<sup>19</sup> PLUPs for IRAS Target villages (Lao language) - 2014

As use of land changes over time (new roads, new constructions, new dams etc) – the plans should also be updated regularly (may be with 5 years intervals). If all villages in a district are covered, district land zoning maps could be prepared – which would be useful for prioritizing of land use on the district level.

### District Disaster Risk Management

**Vulnerability Scenarios**<sup>20</sup> for the four target districts have been prepared and include the possible situations year 2040 and 2070. The maps could become important basis for strategic district planning exercises which would aim at prioritizing investments to mitigate potential risks.

Use of the maps and linked investments will depend on funding, where involvement of government staff from the national level are required. Skills required are available at NAFRI and MoNRE and the tool could be applied in other districts all over Lao PDR based on data available in Vientiane.

### Community Based Disaster Risk Management

Based on a manual<sup>21</sup> developed by DDMCC with IRAS support, plans for disaster management<sup>22</sup> has been prepared in cooperation between the Government and villagers for 22 villages of the 34 IRAS target villages. These plans are covering the period 2015 - 2020 and include budget for by the villagers prioritized CCA activities and could be valuable starting points for discussions between other ongoing projects and villagers on what to do to help the villagers in disaster management. (as an example compare Caritas in Xaysomboun province)

The villagers had good ownerships of the preparation of the plans, but as the plans later on were compiled and printed in Vientiane, and maybe not even distributed to the villages concerned, it is not likely that villages now will have the confidence to claim the plans are their plans and initiate use of the plan without the support through the relevant government bodies.

### Other outcome interventions

To stimulate and promote use of these tools the new **Research Centre on CCA at NAFRI with own resources**, would be essential, as NAFRI present resources are thinly spread. Advanced steps towards the creation of the research centre have been taken and a proposal is now waiting formal endorsement from MAF (name of the centre, mandate and terms of reference including staffing). The assets from the IRAS project such as a vehicle, computers and printers will through NAFRI be transferred to the centre, which will make the centre operational from the start. Further support will have however be needed to ensure its sustainability.

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<sup>20</sup> Scenarios of vulnerability – Flood and drought maps for District Planning (2014)

<sup>21</sup> Training Manual on Community Based Disaster Risk Management (Lao Language) –( 2014)

<sup>22</sup> Village Disaster Management investment Plans for 2015 – 2020 (Lao language) –( 2015)



Similarly IRAS equipment on provincial and district levels will be handed over to the IPs to strengthen their abilities to promote the use of IRAS produced results.

To be able to efficiently support the use and expansion of by IRAS developed tools and procedures, funding is required, which would allow engagement of resource persons, reproduction of material and operation costs such as fuel, maintenance of vehicles and DSA for Government staff and resource persons.

### Impact on beneficiaries

- The Government staffs involved in this exercises have now enhanced knowledge in use of the tools developed and have understanding of what villagers want and prioritize with the variations in preconditions depending on location of villages in relation to flood, erosion and drought.
- Vertical and horizontal communications within ministries and in between have been eye openers useful for future applications in ordinary working situations and within other projects.
- The villagers exposed to the planning exercises have new insights into importance of planning and costs for adaptation to climate change.

Assessment of Outcome 1	Rating	Reasons for rating
Relevance	(R)	The Outcome is highly relevant
Effectiveness	(S)	The tasks were systematically implemented with some delay in delivery of results to villagers
Efficiency	(S)	Due to administrative and financial procedures, start up and implementations of tasks were slightly late
Overall Project Outcome Rating	(S)	This scoring is a result of the combination of the sub-scorings

### *On Outcome 2 level (Capacity of sector planners)*

Through IRAS, various training events and study tours<sup>23</sup> have been organized for staff of MAF, MoNRE, MLSW at national, provincial and district levels to increase the awareness and capacity of staff to address climate change in terms of flooding, drought and erosion and their potential impacts on livelihood development and food security.

Through the development and application of the tools as mentioned under outcome 1, the engaged staff have got concrete experiences of issues dealt with and feedback reactions of the villagers. So beside the more theoretical parts - the applications of the tools on local levels have given the staff practical exposures through “learning by doing”.

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<sup>23</sup> PIR 2015

Another important part of capacity building has been the TOT of district and TSC staff as well as community leaders for them to be able to further use and spread knowledge related to CCA. IRAS has not only provided TOT training within the target districts but to staff from all districts in Xayabury and Savannakhet.

As an example of use of IRAS results outside IRAS target areas can be mentioned that the Korea supported Rural Development Project in Lao PDR is studying IRAS TOT procedures and the CCTAMs for development of their own tailor made training material. This is an indication of the possibilities to expand use of IRAS tools and methods to other projects.

It is now essential to find ways to maintain the capacity developed and further expand the capacity through initiatives by the Government bodies to, stimulate other projects and donors to support follow on projects.

#### Impact on beneficiaries

- IRAS has helped Government staff of the implementing partners to enhanced knowledge through the training events arranged, through study tours to neighbor countries and through dialogue with visitors from neighbor during their visits to IRAS project sites. They have also been exposed to reactions and questions from the village level.

Assessment of Outcome 2	Rating	Reasons for rating
Relevance	(R)	The Outcome is highly relevant
Effectiveness	(S)	The various capacity development activities were systematically planned and implemented. If time had permitted some follow up training activities had been useful
Efficiency	(S)	Due to administrative and financial procedures, start up and implementations of tasks were slightly late
Overall Project Outcome Rating	(S)	This scoring is a result of the combination of the sub-scorings

#### *On Outcome 3 level (Agricultural practices)*

The selection of target districts and target villages had as its basis flood, drought and erosion occurrences. This meant that poverty eradication and food security were not primary selection criteria, which in the case of Savannakhet led to the selection of quite well of districts and villages.

The entry point for stimulating villagers to apply CCA related agricultural techniques have been the design of trials, testing and investments in 34 villages. Through IRAS seven CCTAMs<sup>24</sup> covering 7 technical themes have been developed.

To secure that focus is not only on one technique or one crop, training has been provided on Agro-Ecosystems Management<sup>25</sup>. Training also include training on agro-forestry and gender<sup>26</sup>, to makes sure that interests and possible different demands of men and women are recognized.

For each theme there is a methodology outline, a training plan and detailed descriptions of 6 – 8 practical technologies for on farm and off farm practices (as well as for use as education material in schools). Besides hardcopies copies, the 7 packages are also available on CD.

The packages have been developed in cooperation between NAFRI Research Centres, DAEC and IRAS recruited experts (mostly Lao nationals) and are produced in Lao language with pictures and other illustration materials gathered in Lao PDR – meaning that the **packages are Lao owned**.

The technical themes (copies of packages printed mentioned) are;

1. Agro forestry (500)
2. Small livestock (500)
3. Aquaculture (500)
4. Vegetables and fruits (500)
5. Safeguarding land (500)
6. Off-farm income generation (500 )
7. Water management (70 copies as no further funding remained)

Trials with use of the content of selected technologies of the themes have been ongoing during two years (i.e. before the CCTAMs were printed) in cooperation between interested farmers (model farmers) and IRAS, where IRAS has provided the required inputs/investments and training.

The packages have been distributed to all PAFO and Districts in Lao PDR. Further use is very much dependent on interest and funding available for promotion and training. Through a follow on project this could be achieved, but in the meanwhile already ongoing other projects (annex 8) funded by other donors and organizations should be made aware of and introduced to the CCTAMs for their own trials and assessments.

As piloting only has taken place during 1 – 2 vegetation cycles, IRAS has had no time to systematically evaluate trials, to draw conclusions and propose possible modifications etc. This is essential and should

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<sup>24</sup> 7 CCTAM packages (Lao Language) (2015)

<sup>25</sup> Sustainable Agro-Ecosystem Management for Adaptation to Climate Change (2013)

<sup>26</sup> Agro-forestry and Gender Manual (Lao language) (2012)

be part of a follow on project. At this stage it is therefore not possible to systematically conclude to what extent improvements in yields and water availability have been achieved. It would be as important to document reasons for both successes and failures and how to modify and improve such techniques to avoid repetition of failures.

### Impact on beneficiaries

- Cooperation channels between researchers at NAFRI research centres and extension staff of DAEC have been opened up and strengthened.
- Government staffs have through TOT been equipped with required skills to extend and explain the content. They have also been exposed to questions and comments by farmers.
- Interested villagers (model farmers) in IRAS target villages have been provided with opportunities to test new techniques for agriculture. Other villagers have observed and in discussions with the model farmers learnt which techniques are feasible and under what conditions.
- Through IRAS investments in water management, the villagers have enhanced knowledge of importance of water harvesting, and techniques that could be applied

Assessment of Outcome 3	Rating	Reasons for rating
Relevance	(R)	The Outcome is highly relevant
Effectiveness	(S)	An impressive number of techniques have been tried and described in technical guidelines (CCTAMs), Due to time constraints the CCTAMs were finalized late so time did not allow the systematic use and follow up
Efficiency	(S)	Due to administrative and financial procedures, start up and implementations of tasks were late, which was countered by an extension of the project period with a couple of months
Overall Project Outcome Rating	(S)	This scoring is a result of the combination of the sub-scorings

### *On Outcome 4 level (Adaption Monitoring/learning)*

An IRAS website has been developed in cooperation with NAFRI's IT section - <http://www.nafri.org.la/iras/> . Through the website IRAS results and other information related to climate use are accessible. IRAS has also provided UNDP ALM ( <http://www.undp-alm.org/projects> ) and UNDP Lao Country website with project related information. The IRAS website at NAFRI, will after ending of IRAS be maintained by NAFRI IT section.

A series of study tours have been arranged including visits to and from neighbor countries<sup>27</sup> during which experiences have been compared through south to south dialogue.

A very important IRAS intervention has been to provide selected schools in all target districts with both demonstration areas for agriculture techniques linked to the CCTAMs and with awareness, education and awareness raising material. To reach the young generation with messages and lessons for consideration is of great importance. The promotion material (posters, videos etc.) could find valuable uses in schools all over the country including in urban areas. Interaction with Ministry of Education and education supporting projects could be interesting to explore. As an example, one of the international schools in Vientiane is now displaying some of the IRAS produced posters.

Two major seminars have been arranged (2014 and 2015) during which IRAS activities have been presented with focus on the implementing partners from Ministries in Vientiane and from Provincial and District levels. Research bodies in Country and in the region, Education institutions and to some extent Donors and INGOs took also part. (compare lists of participants).

On the international scheme, IRAS sponsored a delegation for taking part in COP 20 in Peru, where also the Lao delegation actively took part in presentations and discussions.

Material produced with IRAS support including posters, booklets, calendars, USBs, and other promotion materials<sup>28</sup> etc., which has been distributed including during workshops and training events arranged by IRAS.

IRAS has also produced videos on CCA and on more specific activities in some of IRAS target villages. The videos are accessible on the website and have been shown on Lao National TV several times. IRAS has also had booths with CCA promoting material displayed during some festivals.

In terms of feedback on all efforts made, it would have been useful to have some overviews on planned future uses.

#### Impact on beneficiaries

- Many individuals have visited IRAS web site
- School teachers and school children have been exposed to and have now better understanding about CCA issues through the demonstration sites at the schools and through promotion material displayed and still under display.
- The Lao delegation taking part in COP 20, got experiences of acting on CCA issues the international scheme
- The participants in the major seminars got valuable overviews of IRAS ongoing work and results

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<sup>27</sup> PIR 2015

<sup>28</sup> Posters, Videos, Booklets etc presented to the TE team (Lao Language)

- The Lao public got an insight into CCA issues on IRAS produced material during exhibitions and in Lao TV

Assessment of Outcome 4	Rating	Reasons for rating
Relevance	(R)	The Outcome is highly relevant
Effectiveness	(S)	Very useful seminars and other events have been arranged. Interaction with other similar projects funded by other donors or NGOs could have been better. An impressive number of products have been produced and distributed.
Efficiency	(S)	Due to administrative and financial procedures, start up and implementations of tasks were slightly late
Overall Project Outcome Rating	(S)	This scoring is a result of the combination of the sub-scorings

## Country ownership

IRAS products including material and in country training events have all been designed and performed in **Lao language** with IRAS recruited **Lao consultants/expert in cooperation with Government staff**. The CCTAMs illustrations are all from Lao villages and environment, which makes them from a Lao user point of view reliable and convincing.

The IRAS project has its basis in the Lao National Adaptation Programme of Action (NAPA)<sup>29</sup> (2009), in which current and future climate related risks were analysis and priorities for action were set.

Based on Basic Country Agreement between GoL and UNDP, the project implementation procedures at the national level followed UNDP design (NIM), including procedures for planning, reporting and use of fund. These procedures are not the same as what GoL use in ordinary management. As GEF/LDCF funding for IRAS is accessed through indirect funding, the uses of UNDP procedures are obligatory. For this reason it has not been possible to institutionalize the IRAS management procedures.

If the project had been set up and implemented through direct funding under Lao ownership, the institutionalization had been an achievement of the project. So far these arrangements are not in place, but would have meant that the funding had been deposited into the Environmental Protection Fund (EPF) managed by MoNRE.

## Mainstreaming

<sup>29</sup> The National Adaptation Programme on Action (NAPA) – (2009)

From the UNDP perspective, IRAS is mainstreamed with UNDP priorities as expressed in UNDP Country Programme for Lao PDR 2011 – 2015, UNDAF Action plan 2012 – 2015 Lao PDR, UNDP Strategic Plan 2014 - 2017<sup>30</sup>. It should however be noted that IRAS links to poverty eradication and food security could have been stronger, e.g. through the selection of project target areas where poverty is more dominant.

From GoL perspective, IRAS is mainstreamed with the Strategy on Climate Change<sup>31</sup> dated 2010, with NAPA, with the Strategic vision for Agriculture and Natural Resources until 2020<sup>32</sup>, with the NAFRI Research Strategy<sup>33</sup> with the five Year Socio – Economic Plan for 2011 – 2015 and the NSEDP 2016-2020 (so far in draft form only)

In terms of links between IRAS and other projects ongoing in Lao PDR in the green sector with funding from donors and NGOs (see annex 8) the connections are weaker. Many such projects offer interesting opportunities for information and experience sharing. Most of them have elements of CCA, sometimes explicitly expressed, sometimes not specifically mentioned but still strongly related (increased food security, improved health, improved farming systems, sustainable management of forest resources etc.)

UNDP itself have five other projects ongoing and one in the pipeline – where more interaction would have been beneficial for both IRAS and the other projects. Information and experience exchange between IRAS and other UNDP funded projects seem accordingly to be limited, more to inform each other (monthly meetings) than to more actively cooperate.

In reality most projects implemented through donor support have limited cooperation with “across project boundaries”. The energy and focus are spent on completing own targets.

## Sustainability

During interviews, all Government partners stated that lack of fund will prevent them from on their own continue to develop, use and extend use of knowledge and products developed.

On village levels successful interventions will however spread in the villages and to surrounding areas as farmers will observe and evaluate on their own, including thereafter making investments with their own funds. Lack of appropriate funding from banks and through micro funding sometimes would be obstacles for the use of some of the IRAS developed techniques.

Systematic extension of experiences from model farmers to other farmers and villages are not likely to happen – as funding is lacking.

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<sup>30</sup> UNDP strategic Plan for 2014 - 2017

<sup>31</sup> Strategy on Climate Change of the Lao PDR (2010)

<sup>32</sup> Strategic Vision of Agriculture and Natural Resources until 2020 (2010)

<sup>33</sup> NAFRI Research Strategy (2011)

Overtime strengthened farmers organizations could have an important role in promotion and extension of products including from IRAS, but in the IRAS case, time and resources did not allow to explore these options.

On the socio political scene, the government is continuing to promote implementation of the **Sam Sang policy**<sup>34</sup>, meaning that the villagers are the implementers, the districts support and monitor and the provinces translate National level policies and strategies into local policies and strategies. At the same time the government continues its efforts to consolidate villages, which in some cases mean resettlements of small villages. For the design of follow on interventions, this process should be recognized and used, including taking into consideration that needs and interests of men and women and of different ethnic groups will vary. As several local farming systems with subsistence farming as a basis are composed to be resilient to variations in climate – it is very important to recognize the values of such systems in the process of CCA.

the government's institutional framework and governance is still weak. One reason being still ongoing discussions on distribution of responsibilities between the partners in the sector and still reorganization may continue. This means a wait and see situation, where officers in charge and with knowledge could expect to be transferred to other positions.

The TSCs are generally weak and lack resources for being the intended outreach from District levels to villagers.

Even if laws and regulations, which regulate how to proceed in land and resource management, are in place, law enforcement is still very weak, meaning e.g. the use of land is changed without proper screening and approval and degradation of forest areas continues. This means that risks for disasters continue to rise as a result of inappropriate use of resources and land through e.g. construction of infrastructure in areas sensitive to CC (flood, drought, erosion) deforestation.

Sustainability	Rating	Reasons for scoring
Financial resources:	(ML)	Financial resources are missing to allow the continuation of IRAS initiated activities and use of material produced. Maybe follow on funding/projects will be developed or mechanisms developed for cooperation with other ongoing projects
Socio-political:	(ML)	Top down instructions are the basis for development, where local opportunities and constraints are less used as basis for development.

<sup>34</sup> Resolution of the Politburo (No 03/CPP) Units (2012)



Institutional framework and governance:	(ML)	The institutional framework is still weak and is still under development or adjustments where coordination in between subsectors is weak or difficult
Environmental :	(ML)	Short term gains are dominating over long term damages. Even if a reasonable legal frame work is in place, the law enforcement is weak
Overall likelihood of sustainability:	(ML)	Above reasons in combination lead to this scoring

## Impact

The efforts of IRAS should be seen **as first steps** in a very long process. The project interventions have raised awareness on all levels i.e. national, province, district and village levels through training, study tours, seminars, production and use of material.

The efforts are helped by the intensified worldwide debates on CCA with spill over into Laos.

The systematic application of IRAS products is however not in place, where availability of fund is one reason both for the continued use within project target areas but even more so for expansion into other areas (districts, villages). Material produced may now be kept in drawers and forgotten, not least when officers and Village Heads are replaced by others, who have not been exposed to IRAS training and material. NAFRI and the New Research Centre will have key responsibilities for keeping the knowledge and linked material alive.

Impact	Rating	Reasons for rating
Scoring:	(M)	On local level and based on initiatives by dedicated farmers or government staff impact may be substantial, but in general much more work in terms of awareness raising, education and extension is required

## Conclusions, Recommendations and Lessons Learned

IRAS was a strategically important project, as it was launched and implemented during a period when effects of climate change became more and more obvious all over the world including in Lao PDR. Accordingly IRAS initiated a number of steps to concretize actions for the creation of resilience. These included;

- Capacity building of government staff and farmers,

- Development of links between different actors within Government to jointly and in complementary ways cooperate as well as
- Trying out practical solutions on the ground in cooperation with farmers, to demonstrate improved tools and technique
- Dissemination of results through materials describing techniques, posters, booklets, videos
- Study tours and seminars to inform, share experiences and network both within Lao PDR but also in the region for south to south cooperation

All these actions are important steps for finding and implementing solutions for resilience linked to climate change.

But the actions are **only first steps**. Awareness and knowledge about CC is still low, not least on village levels. Techniques tried and described need to be evaluated and modified based on feedback from the field. Material produced including manuals need to be upgraded and improved based on practical experiences and networking need to be further developed and strengthened.

If the project now is closed without further actions, there are risks that the **platform created will erode**. It is evident that Government on its own, has too limited resources to make active use of the results.

The links between CCA and poverty eradication including food security and improved nutrition were not so obvious. E.g. the target districts in Savannakhet were located in the lowlands, where farmers are relatively well off.

## Recommended actions to follow up or reinforce initial benefits from the project

### Recommendation 1: Build on the momentum created

IRAS is coming to an end, at a time when the foundation for CCA has been created and when both Government staff and villagers have knowledge to build on and tools to use. The time is ripe for scaling up of selected IRAS products.

As it is obvious that **GoL lacks funding to build on the momentum created**, the result will without reinforcement be that the momentum gradually could erode. As there are frequent transfers of staff in GoL system and even on village levels as Heads of villages are rotated, the knowledge will not necessarily be passed on and the tools developed may be forgotten.

The following actions are proposed **not to lose the momentum:**

### **Immediately**

- i. There are many large scale projects ongoing in the sector with obvious links to what IRAS has produced. Such projects are financed by ADB, WB, EU, UN system and bilateral partners including Finland, Japan, Germany, Korea. A number of INGOs are also engaged including Helvetas, SNV, Care International, Caritas, WWF, partly through funding from donors as mentioned. Similarly there are Hydropower Plants, Mining Companies and other Private agriculture/forest Sector companies that could make use of IRAS results in their efforts to assist villages to sustain their livelihoods in sometimes new locations.

Similarly promotion material of IRAS could be used by schools in both rural and urban areas through cooperation with Ministry of Education and projects providing support in the education sector.

Even if IRAS results can be found on websites etc. this is not enough to make such projects sufficiently well informed about what IRAS has produced and which could be used for scaling out of IRAS results.

**Accordingly visits to present, explain and handover IRAS products, could lead to use of IRAS results in ongoing project** with funding already secured and with involvement of proper channels in GoL. This task is an important follow up action for NAFRI with its staff linked to IRAS in coordination with IRAS linked staff among the implementing partners.

### **Over the next 1 -3 year period**

- i. Develop an IRAS follow up project preferably with MAF or possibly MoNRE as Lead Agency. Important elements of the project should be:

#### **A component on how to enhance use of IRAS results with a similar structure to IRAS**

- a. Continue and scale out capacity development to further develop awareness and knowledge among concerned parties with expansion to new vulnerable geographic areas
- b. Continue to support further strengthen cooperation and networking between partners
- c. Evaluate technical trials made to be able to modify and improve with expansions into market and rural financing issues
- d. Revise/improve/complete material produced (CCTAMs, extended PLUP, Disaster management manual and other information material in close cooperation between researchers, extension staff and other government staff
- e. Support the scaling up of use of IRAS products (as they are now or after modifications – if needed)

## **A component on water management development**

Water is a key for the creation of resilience in the agriculture and rural development sector. Flooding is a result of heavy rains, where deforestation makes effects stronger causing damages and loss of lives in especially rural areas. Heavy rains are also causing erosion damages.

Even worse are the effects of drought, where periods without rain are now becoming longer leading to lack of water for both agricultural practices and in some places drinking in Lao PDR. **The most vulnerable areas are the areas of the poor people are in the upland areas**. So if a new project should link CCA with food security, nutrition and poverty alleviation, its focus of the water management components should be on upland areas in the parts of Laos where CC creates most damage. A new project should therefore in cooperation with local government staff and villagers;

- a) Identify areas which are sensitive for flood and/or drought in the uplands
- b) Develop mitigation plans for drought prone areas including investments in water harvesting (irrigation, ponds, tanks, jumbo jars etc.) with funding required

Develop mitigation plans for areas in danger of flooding including early warning systems for flood, action procedures for affected areas including funding required

Recommendation 2: **Maintain the knowledge base created and stimulate use of the tools on hand**

An important role of NAFRI and its likely new **research Centre on CCA will therefore be to use any means to maintain the knowledge base created and stimulate use of the tools on hand**. With the limited funding including the likely limited NAFRI staff and researchers assigned to the centre, this is however far from enough for the scaling up of use of IRAS products, where it is not least important that CCTAM described techniques reach more farmers. Presently MAF in cooperation with NAFRI are considering an appropriate name the research centre, more importantly what should be the mandate and the roles and responsibilities of the centre. This centre would play the key role in CC related research and development through the by IRAS created **institutional memory** during coming years and to formalize its creation is therefore a priority.

**Recommendation 3: Utilize the Sector and Sub-sector Working Group Mechanism for coordination and information sharing**

Through the **Sector working group of Agriculture and Rural development and the Subsector working group on Climate Change, Disasters and Environment**, information of IRAS work should be presented be IRAS implementing partners and discussed for possible use among other member bodies/projects

**Recommendation 4: Bridging Funds to support scaling up**

It should be explored if **bridging funds** can be found to use for the strengthening of the processes related proposed activity 1 – 3 above, to secure that the momentum created through IRAS is maintained

The main weak aspects of IRAS were;

1. It was known that the project only would have a maximum four years for implementation (which in reality became four and a half year period – due to the 6 month no cost extension to extend the project through one more agriculture cycle). The progress in implementation was from the beginning slow but steady due to time required to learn and understand UNDP NIM procedures.
2. To create **stronger links between UNDP goals to eradicate poverty through improved food security and nutrition and CCA**, the selection of target districts especially in Savannakhet could have been different. Lack of water management in the upland areas is a key constraint for poverty eradication and food security, and it had been a useful learning process for IRAS and GoL to be exposed to these conditions.
3. The project **M&E had its focus on collecting of data, to enable the reporting into PIR** about progress made in relation to targets set. The evaluation part was weak including at the end of the project to linking back to the baseline studies. There were obvious reasons for this, which both included the finalization and distributions of tools (including the CCTAMs). More time should have been allocated for assessing, documenting and adjusting tools developed based on findings. An important element in this process would also have been to take the first steps in moving from promotion to interaction.
4. In the design of the project **assessment of progress towards sustainability and impact** should be built into the M&E system through an **internal evaluation process** outlined in the M&E manual.
5. Through **internal evaluations**, a natural part had been to develop solutions for after the end of the project, including the searching for funding and partners to hand over continuing and expanding project activities. Now it became the role of external evaluations (MTR and TE) to identify these weaknesses.
6. If IRAS had been focused on carefully selected **less number districts and villages** to secure variations in preconditions (flood, drought erosion, poverty), more time would have been available to cover evaluation aspects.

### Lessons learnt

IRAS was set up and agreed upon as a 4 year project. This is the praxis, as most funding channels have difficulties to agree on longer periods of funding. However already at the time of development of the project, it should have been recognized that the project period is **too short**. It is time consuming to set up a project following all formalities required from both donor and government sides and to be able to draw conclusions as this kind of project is very much linked to agriculture practices, with considerable variations in preconditions between areas and years.

As has been mentioned above basically the project has completed all activities as stipulated in the log frame, but obviously these achievements were late during the project period leading to lack of time to

evaluate and modify techniques, procedures introduced and to repeat training events. Accordingly it should have been foreseen that an extension was required leading to a follow on project elaboration midway through the project. If it was realized that an extension was not possible, **the exit strategy should have included identifying other ongoing projects**, which could have taken over IRAS developed procedures and tools to secure a more sustainable use and impact of IRAS initiatives.

IRAS was planned and implemented following UNDP procedures. GoL has its own procedures to follow related to assigning staff, selection of target areas, assigning working tasks, allocating funds etc. Project implementation under **Lao ownership** would have reduced length of planning, reporting etc, and also more importantly left behind project result procedures to follow in the continued use of project results.

## **Annexes**

Annex 1 ToR

Annex 2 Itinerary

Annex 3 List of interviewed

Annex 4 Summary of field visits

Annex 5 List of documents reviewed

Annex 6 Evaluation Question Matrix with Questionnaire used

Annex 7 Project Log frame – what was accomplished

Annex 8 Projects in the Green sector in Lao PDR

Annex 9 Evaluation Consultant Agreement Form

See separate file