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USAID Mekong Adaptation and Resilience to Climate Change

Work Plan Year Three

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USAID Mekong Adaptation and Resilience to Climate Change (USAID Mekong ARCC)

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INTRODUCTION

The USAID Mekong ARCC project is a five- year program (2011-2016) funded by the USAID Regional Development Mission for Asia (RDMA) in Bangkok and implemented by DAI in partnership with the International Centre for Environmental Management (ICEM), World Resources Institute (WRI), International Union for Conservation of Nature (IUCN), World Wildlife Fund (WWF), and Asian Management and Development Institute (AMDI). The project focuses on identifying the environmental, economic and social effects of climate change in the Lower Mekong Basin (LMB), and on assisting highly exposed and vulnerable rural populations in ecologically sensitive areas increase their ability to adapt to climate change impacts on water resources, agricultural and aquatic systems, livestock, ecosystems, and livelihood options.

Flowing from the upper watersheds of Lao to the delta in Vietnam, the LMB connects and provides ecosystem services critical to livelihoods, food security and welfare of the basin's 60 million inhabitants. Yet the connectivity of the basin also links Lao PDR, Thailand, Cambodia and Vietnam to transboundary climate and development threats. USAID Mekong ARCC works in each of the four LMB countries in recognition that each has its own national climate policies and economic and development priorities, and that communities are structured and function differently in each as a reflection of the respective nations' unique laws, history and culture. Lessons and experiences drawn from the national and community level will ultimately feed up to regional actors working at the transboundary level to help ensure they are shared across the Basin.

The impetus for USAID Mekong ARCC stems from the launching of the Lower Mekong Initiative (LMI). Announced by the US Secretary of State and foreign ministers from each of the LMB countries in 2009, the LMI emphasizes close cooperation between the United States and governments of Thailand, Cambodia, Lao PDR, and Vietnam to support regionally sustainable and environmentally responsible growth.

The **primary goal** of USAID Mekong ARCC is: *Increase adaptation capacity and resilience of communities to the negative impacts of climate change.*

Objectives of the project include:

- Increase human and institutional capacity to develop and implement climate change adaptation plans and strategies
- Strengthen policies, tools, methodologies and practices for ecosystem services valuation and climate resiliency
- Demonstrate and scale-up model actions for integrated approaches to climate change adaptation
- Support and sustain regional learning networks to share and replicate best practices

USAID Mekong ARCC is comprised of five major tasks technical tasks in addition to overarching program management. These are:

1. Regional Platform Partner and Knowledge Center;
2. Climate Change Impact and Adaptation Study;
3. Ecosystem and Community-based Adaptation Initiatives;
4. Valuing Ecosystem Services in Economic Planning for the Lower Mekong River Basin, and;
5. Scaling-Up Successful Approaches.

USAID Mekong ARCC is headquartered in Bangkok with project activities carried out in Thailand, Vietnam, Cambodia and Lao PDR.

Approach

The USAID Mekong ARCC program was designed to advance the first generation of climate adaptation programming by identifying and applying methods to incorporate the best available climate science in to community level planning. Like any new frontier, the climate adaptation landscape is filled with experimental methods and models that together seek to clarify *how* people can address tension between the uncertainty of climate science and the need for action. At one end of the spectrum, scientists and researchers are generating downscaled climate models, while at the other end, development practitioners are building awareness of how predicted climate variability might impact community health and livelihoods.

While these approaches provide a jumping off point for adaptation programming, they do not generate a *cohesive and replicable adaptation program design* that incorporates weather and climate information in to community planning to address current vulnerability and future threats from climate change. USAID Mekong ARCC will provide an *Integrated Climate Planning* proof of concept to fill this void, connecting the best climate science with community development (***applied science***) to advance the adaptation program landscape toward a blueprint for adaptation program design.

Prior to reaching this *applied science* phase of the project, the USAID Mekong ARCC project focused resources on the ***scientific research*** phase, which yielded a first-of-a-kind downscaled climate model that illustrates highly threatened and valuable agricultural crops, livestock, and fisheries, and natural systems (ecosystem and biodiversity) assets. The Climate Change Adaptation and Impact Study developed projections of the impacts of climate trends and threats on agricultural production, ecosystems, and livelihoods for two future time slices: 2030¹ and 2050. A major output of the Study is the identification of high priority hotspot zones that are most sensitive and exposed to projected shifts in climate, such as increased temperature, precipitation and salinity inundation.

The climate and zone exposure information generated by the Study is the most detailed of its kind produced to date in the LMB, and could become a seminal body of climate research for decision makers in the region. Turning this leading 'climate adaptation thinking' in to practical

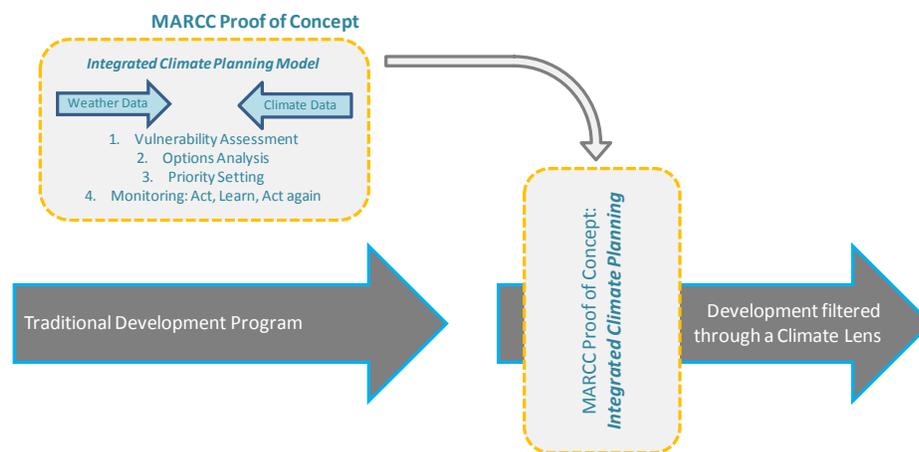
¹ Modeling will be undertaken for the 2050 scenario and serve as a basis for an expert assessment of the 2030 time slice.

on-the-ground ‘climate adaptation doing’ is the next level of value add the USAID Mekong ARCC program will contribute to climate adaptation in the region.

In addition to this assessment of climate impacts, an **analysis of ecosystem services** based on data collected at focal sites identified by the Study will engender increased understanding of the values of natural systems, crops and fisheries, and, potentially, climate change impacts on these assets. Country-specific guidelines will be generated through this analysis so that policymakers and planners can better integrate these values into their national development planning.

As described above, the **applied science** phase of USAID Mekong ARCC seeks to fill the void with a blueprint for a *cohesive* and *replicable adaptation program design* that incorporates weather and climate information in to community planning to address current vulnerability and future threats from climate change. We anticipate the next generation of adaptation programs will begin to converge around a subset of best practice design models, and that once the USAID Mekong ARCC *Integrated Climate Planning* proof of concept is field tested it serves as one of these applicable models. A key feature of the concept is that the *Climate Planning* model is not in and of itself a program, but rather a packaged template that can be overlaid on top of traditional development projects (see graphic below). This feature is critical in that it does not suggest adaptation is fundamentally a new paradigm, but rather, it is a ‘climate lens’ to apply to ongoing community development programming.

Graphic 1: Climate Planning Design



This thought leadership generated by USAID Mekong ARCC represents the beginning of a second generation of adaptation programming under which *Integrated Climate Planning* (and monitoring) will provide a replicable adaptation program design. In practice, the proof of concept will provide a clear cohesive template for future USAID Adaptation programming. Additionally, regional platforms, such as the Mekong River Commission (MRC), ASEAN, ADB, World Bank, etc. can assist Lower Mekong countries to apply this design to promising community developing projects as a means of accessing international **climate financing**. A pre-feasibility study will be developed to promote replication, scale up and mainstreaming of

successful USAID Mekong ARCC community adaptation approaches. While this proof of concept will not be the only option for LMB countries, it is unique in that it will link cutting edge downscaled climate science information – the most comprehensive and sophisticated to date for the LMB – to community-based adaptation planning and decision making.

Year Two Summary

The second year of the USAID Mekong ARCC program represented a shift from carrying out sound scientific analysis to a focus on interpreting the climate science for communication efforts and for identifying IPs for the project's field activity phase. In November 2012 and March 2013, the team held workshops with participation of actors from across the region to communicate the results from the Climate Change Impact and Adaptation Study for the Lower Mekong Basin (Climate Study), considered to be one of the most comprehensive downscaled climate studies ever carried out in the Mekong River basin. The final workshop held in Bangkok in March, was attended by more than 120 participants working on climate change adaptation from across the four Lower Mekong countries (Laos, Thailand, Cambodia, Vietnam), providing an opportunity for the project to introduce its approach to a large audience and explain how it will add value to climate adaptation in the region. The structure of the workshop followed the approach of the USAID Mekong ARCC project itself, with a focus on Science on day one, where research results were presented in detail, and moving to Action on day two, by exploring different organizational experiences in applying climate change research into decision making. Hans Guttman, the Chief Executive Officer of the Mekong River Commission, provided the key note address of the workshop, signifying the importance of the Study to major actors working to address climate change in the Lower Mekong. A large press event was held at the completion of the workshop, which generated significant media attention from media outlets both from the Lower Mekong countries and internationally that further disseminated and legitimized the results of the Study.

The Climate Study was designed to serve as a model approach. In order to lend credibility to its academic and scientific standards, as well as increase the utility of this research as a key reference for climate change adaptation policy, studies and activities in the region, a peer review process of the draft final report was initiated late in Year Two. Several organizations possessing specific and highly regarded sectoral expertise were identified and requests made for their participation in peer reviewing the Study. Their peer review comments were further supplemented by the addition of written feedback received from panel members from each of the technical sessions during the Final Results Workshop, as well as comments received on the report during a period of public comment and from the USAID Mekong ARCC Contracting Officer's Representative (COR). A scientific editor was engaged to review the Main and Summary Study reports and ensure that that the Study Team adequately addressed peer review and USAID comments. External critiques were addressed by the Study team and revisions

incorporated into the final report, which was thoroughly edited prior to submission to USAID in quarter four.

With the Task 2 Climate Study moving towards completion, the USAID Mekong ARCC team selected – with approval from USAID – sites for field activities, and developed Requests for Proposals (RfPs) covering adaptation initiatives with communities in Thailand, Laos, PDR and Vietnam. Tenders were widely distributed across the region and generated much interest – with 16 proposals received from across three countries (note: approval for field work in Cambodia was not received). A rigorous proposal review process led to the selection of implementing partners (IPs) to be recommended for award to USAID. These organizations proposed community and ecosystem-based adaptation initiatives in Chiang Rai and Sakon Nakhon, Thailand (IUCN), Champasak (WWF) and Khammouan (IUCN) Lao, PDR, and Kien Giang Vietnam (Asian Management and Development Institute and the Vietnam Red Cross). At the close of Year Two, the project team submitted a request for consent to subcontract for IPs to carry out field work beginning in Year Three (See details of field activities in Task 3 Below).

As the USAID Mekong ARCC Climate Study described the impacts on key livelihood sectors of the LMB including agriculture, capture fisheries and aquaculture, livestock, natural systems, and health and rural infrastructure, the USAID Mekong ARCC team recognized that such an analysis generated a wealth of quantitative data that can be incorporated into a complementary assessment of economic impacts – one that assigns dollar values to Values at Risk (VAR). World Resources Institute (WRI) initiated a preliminary VAR analysis to fill this role. The report's assessment will not be based on a detailed consideration of climate scenarios, but on a more tractable approach that considers existing economic values at risk based on the forecasts of the Climate Study, such as changes in the pattern of temperature, rainfall, and flooding in the LMB at a provincial level. The WRI analysis will provide a rough sense of the likely magnitude of economic values at risk implied by the Study data in order to inform the selection of cost-effective adaptation options to reduce that risk.

At the close of Year Two, the WRI team completed the compilation and analysis of spatial data layers on agricultural production and suitability, ecozones, flood risk zones, hydropower, population and public infrastructure. Spatial data layers were reviewed and applied to an analysis of climate change hot spots, coastal inundation zones, and inland flood zones to determine the precise number of hectares and resources at risk for a variety of uses that can then be valued in the study. Compilation and review of relevant literature to inform the "best practices" section of the report has also been completed. This report will be completed in Year Three, but preliminary assessment indicates the following:

- Using this VAR approach, the annual value of infrastructure services, worker productivity, agricultural output, hydroelectric power, and ecosystem services at risk from climate change in the MRB is estimated to be at least \$16 billion per year. In addition, the value of infrastructure assets at risk in areas expected to be inundated more frequently or permanently is estimated to be at least \$18 billion.
- The magnitude of these values at risk in the LMB justify significant investments in adaptation measures such as wetland restoration, eco-resilient cropping techniques, and early warning systems for changes in ecosystems critical for subsistence.

USAID MEKONG ARCC TASKS

In Year Three USAID Mekong ARCC will further its evolution as a first generation Climate Change Adaptation (CCA) program in which it continues learning alongside stakeholders and beneficiaries. As the program transitions from an initial research phase to field implementation, the team will apply key lessons learned in driving cross-sectoral climate adaptation planning to priority ecosystems. The following sections detail the USAID Mekong ARCC tasks in Year 3, each helping inform scalable strategies for the design of future integrated adaptation programs.

Task 1: Regional Knowledge Platform & Knowledge Center

The tasks under USAID Mekong ARCC encompass a spectrum of activities, the results of which require packaging into a variety of documents and resources of value to different target audiences. These tasks, each of which involves multiple steps and events, have differing requirements for the capture and dissemination of knowledge. Documenting and sharing results, successes, lessons and challenges are a key input to the "scaling up" efforts of the project. A variety of tools and techniques are required to do this in order to reach target stakeholders and desired impact.

Develop and disseminate project knowledge products

In Year Three, the project website (<http://mekongarcc.net>) will remain a central repository – with links to social media sites and regional climate change adaptation platforms – for knowledge management and communication products tailored for the project's target audiences.

A key priority during the year is to disseminate the approved Final Climate Study – including Main Report, Summary Report, and Theme Reports – and re-package them into briefs, including, but not limited to: key results, and headline statements, country profiles, priority province profiles, livelihood sector summaries, and summary for private sector. These specific knowledge products will be developed to translate the science of the Study into easy-to-understand language relevant to the needs of target audiences, such as government officials/decision makers, academic/research institutions, implementing partners, private sectors companies involved in agribusiness, and media outlets/journalists. Publications, fact sheets, summaries, graphics, maps, and short briefs will be carefully designed to provide value as project outreach and disseminated via project web tools and at face-to-face events and meetings.

Messaging drawn from the Values at Risk analysis report currently being undertaken by WRI (See Task 4 below) will also serve as a means to communicate the monetary impacts of the climate projections of the USAID Mekong ARCC Climate Study. Also during the course of Year Three, it is anticipated that the reports and vulnerability assessments will be generated through field implementation. These will also be systematically disbursed.

Website knowledge products and information linked to existing platforms

The project will continue employing a systematic outreach process to ensure that USAID Mekong ARCC's web-based materials – news, event announcements, blog posts, and other resources – are syndicated to the broader climate change adaptation community by:

- Sharing and tweeting links to the project website via dedicated USAID Mekong ARCC social media accounts on Facebook, Twitter and Flickr;
- Periodic preparation of USAID Mekong ARCC e-newsletter; and
- Sharing and posting links on the sites of regional adaptation platforms such as SEACHange, weADAPT, APAN, etc.

Strengthen engagement with media

Support generated from increased media attention can play a large role in influencing policies of government and the private sector to better address climate change impacts and community adaptation needs. USAID Mekong ARCC will continue to engage the media to get messages out that convey the importance of action to strengthen community resilience to climate change. The project will develop and maintain relationships with the media through organized press conferences, journalist site visits, and information sessions.

A team of communication consultants will be engaged to develop materials for a media outreach campaign that focuses attention on how government, private sector and project designers and implementers can better address climate change impacts and adaptation needs. Story angles will be explored and communication materials prepared into articles and press packets that best support these stories.

Support national government and regional platform efforts to disseminate climate change adaptation information to relevant regional actors

USAID Mekong ARCC will seek out support and collaboration with regional actors, such as the MRC, ADB, World Bank, and ASEAN as a means to scale project approaches and results in addressing climate change to decision-makers, national governments, and regional implementers. Particular emphasis will be placed on working with selected regional platforms to inculcate climate scenarios and approaches and lessons from community activities into the government planning across the region.

Task 1 Key Results

- Media outlets and journalists provided with understanding of the project and with information required to prepare articles;
- Website populated with Task Two and general program knowledge products, which are ready for download and linked to other web-based platforms;
- Regional platforms, knowledge centers, and other important forums engaged as a means of providing target stakeholders with increased access to USAID Mekong ARCC knowledge products, technical information and lessons and models from implementation;
- Knowledge products and information related to results of the Task Two Study disseminated widely through print, web-based media and face-to-face meetings; and
- Knowledge products and information related to the values-at-risk analysis report disseminated widely to targeted audiences, through print, web-based media, face-to-face meetings.

Task 2: Climate Change Impact and Adaptation Study

A core challenge faced by the climate change adaptation implementation community is a lack of documented best practices to follow -- translating climate science projections into practical community-based decision support tools is a work in progress throughout the adaptation space. To advance these efforts, the USAID Mekong ARCC team spent the first 18 months of the program generating a comprehensive study - the *Climate Change Impact and Adaptation Study for the Lower Mekong Basin* - which applied a mix of statistical climate downscaling, land use suitability, and hydrological models to illustrate projected shifts in LMB ecosystems due to climate change. The study goes a step further to explain *how* shifting ecosystems will impact key income generating sectors such as agriculture, livestock, fisheries, and NTFPs - all critical to LMB livelihoods.

In partnership with regional research centers and universities, the study focused on how shifting temperature and precipitation patterns will likely impact ecosystems in the Lower Mekong Basin, whose shifts will in turn impact key livelihood generating sectors such as agriculture, livestock, fisheries, and NTFPs. Important results of the Study include:

- By 2050 the Lower Mekong Basin (LMB) will experience increasing climate extremes, including higher temperatures, wetter wet seasons, drier dry seasons, and more frequent and intense flood events. The extent and distribution of rainfall and daily maximum temperatures will also differ significantly from the LMB's historical trends.
- Climate extremes – wetter, drier, hotter – will push some traditional agricultural and natural systems across the LMB outside of tolerable temperature and precipitation ranges for productivity or growth. Many species, crops, and natural systems that were once suited to a location will no longer be able to thrive.
- Temperatures across the LMB will increase. The eastern plains of Cambodia and parts of the central highlands of Vietnam could see the most significant shifts of average annual temperature, with increases of as much as 3°C to 5°C possible.
- Annual precipitation is projected to increase across the LMB by anywhere from 3-18% (+35 – +365mm). Significant rainfall increases in Khammouan, Lao PDR (+355mm a year) and Sakon Nakhon, Thailand (+305mm a year) will impact soil moisture while increasing the occurrence of flash floods and erosion.
- Flooding of at least 0.5 meters that currently occurs over 300,000 hectares of the Mekong Delta is projected to cover an additional 50% of the delta, or a total of 1.9 million hectares.
- Drier dry seasons coupled with increasing daily maximum temperatures – from 35°C to 38°C in Gia Lai, Vietnam for example – will lead to heat and water stress on people and cropping systems, while gradually shifting seasonal cycles.

While the main study has been completed and submitted to USAID for approval, efforts remain in Year Three to complete thorough scientific edits of supporting sector reports and to maximize the use of results through broad dissemination.

Undertake final edit of six Study Theme Reports and submit them to USAID

A scientific editor, Shelley Gustaffson, was engaged on a short term contract to review the Main and Summary Study reports and ensure that they were thoroughly edited prior to their submission for approval and that the Study Team adequately addressed peer review and USAID comments. Six 'theme reports' were also prepared by the Study team and are currently being edited by Ms. Gustafson for submission in quarters one and two of FY 14.

Disseminate approved Climate Study and Theme Reports

Following USAID approval of the Study, the project will prepare short communications materials written in popular language that cover important results generated by the analysis in order to reach a non-scientific audience. A list of the materials the project intends to produce in year three can be found in Task 1 above

Draft and submit articles on Study results to peer reviewed journals for publication and dissemination

In order to ensure that results of the Climate Study are ready for uptake by the UN IPCC in their Climate Assessment reports, it's necessary that they move from grey literature and appear in peer reviewed journals. The project will, therefore, focus on developing short articles on worthy scientifically relevant findings of the analysis and target these towards reputable academic and other peer reviewed journals.

Task 2 Key Results

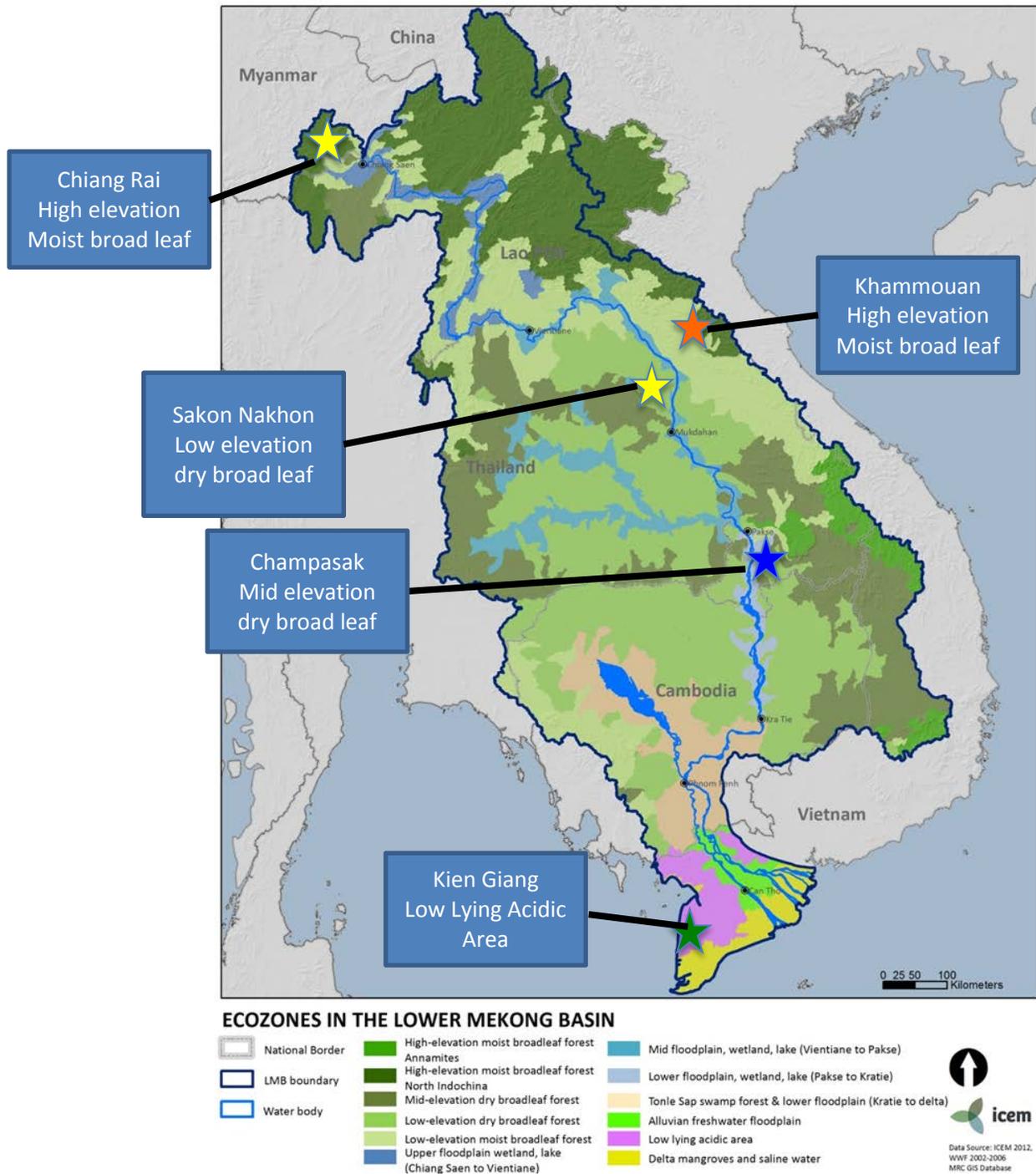
- Climate Study approved and six 'Theme' reports submitted and approved by USAID
- Results of the study are developed in knowledge products (as identified in Task One) and widely shared in order to increase knowledge and understanding of climate impacts in the LMB and inform policy and business dialogue and implementer approaches; and
- Results of study appear in peer reviewed journal and are, therefore, ready for uptake by the UN IPCC for their Climate Assessment report.

Task 3: Ecosystem and Community-based Adaptation Initiatives

Ecosystem and Community-based Adaptation initiatives will test *how* scientific information can be translated and used at the community level. Implementing partners will be required to integrate weather and climate information into community development plans to address current vulnerability and future threats from climate change. This will be accomplished through participatory visioning exercises that link historical and current weather patterns with the future climate scenarios projected by the Climate Study.

As the program enters the field activity phase, it will focus translating the key messages from the Climate Study into community planning tools to provide a practical evidence base for community adaptation decision making. Field sites have the objective of capturing best practices from Ecosystem and Community-based adaptation approaches in a variety of LMB ecosystems as shown in the map below. The team anticipates that the strategies and results generated will help showcase biodiversity, livelihoods, and social co-benefits within the context of a changing climate.

Map 1: Ecosystems covered by Ecosystem and Community-based Adaptation Initiatives



Select organizations to undertake climate planning with communities in focal provinces

Following AID approval of award recommendations, final negotiations will take place with Implementing Partners on subcontracts which will be finalized and signed in early 2014.

Work with implementing partners on preparatory plans necessary to undertake community initiatives

A round of preparatory meetings will take place between USAID Mekong ARCC project staff and IPs to clarify technical expectations and USAID requirements under a subcontract. These meetings will focus on the USAID Mekong ARCC approach to generating results across three components – Climate Planning, Activity Implementation, and Monitoring and Evaluation – as well as USAID and DAI regulations and requirements as related to administration and finance, communications, and monitoring and evaluation.

IPs will then be responsible for developing work plans that detail how field activities will be undertaken to meet these project deliverables and desired outcomes. Work plans will also clarify how these activities will be integrated into the IP's existing work in the community.

Monitoring plans will be developed to capture data necessary to track results on IP performance in meeting work plan objectives and deliverables. Additionally, IPs will develop systems to work with communities in monitoring village level plans that are nested within the customary community development planning process. This could include annual review of the community vulnerability profile, tracking impacts of adaptation activities, and capturing changes to key assets (crops, livestock, fish) brought on by alternations to the environment as a result of temperature and rainfall shifts, flood, drought, etc. USAID Mekong ARCC will work with implementing partners to develop a protocol for collecting baseline data of sufficient quantity and quality to develop an economic benefit-cost analysis (BCA), as well as data on childhood malnutrition rates, and ecosystem services values.

Draft or refine existing vulnerability assessments to analyze impacts of climate change on community development and inform adaptation options

IPs will be tasked with conducting vulnerability assessments (VA) that clearly identify perceived problems and devise preliminary suggestions as to how they may be resolved. The IP will review the assessment with the community to ensure that the underlying causes and conditions leading to vulnerabilities are clearly identified, and to expand on the options to solve problems in the USAID Mekong ARCC context (through changes in crops and cropping systems, etc.).

At the outset of field activities, IPs must complete a Community Profile (using new or existing data) to provide needed baseline information at the local level. Information collected will likely complement the vulnerability analysis developed by IPs.

Each IP will be encouraged to apply the VA methodology they are most familiar with, provided the analysis itself includes critical thinking and clear sections on the following thematic elements:

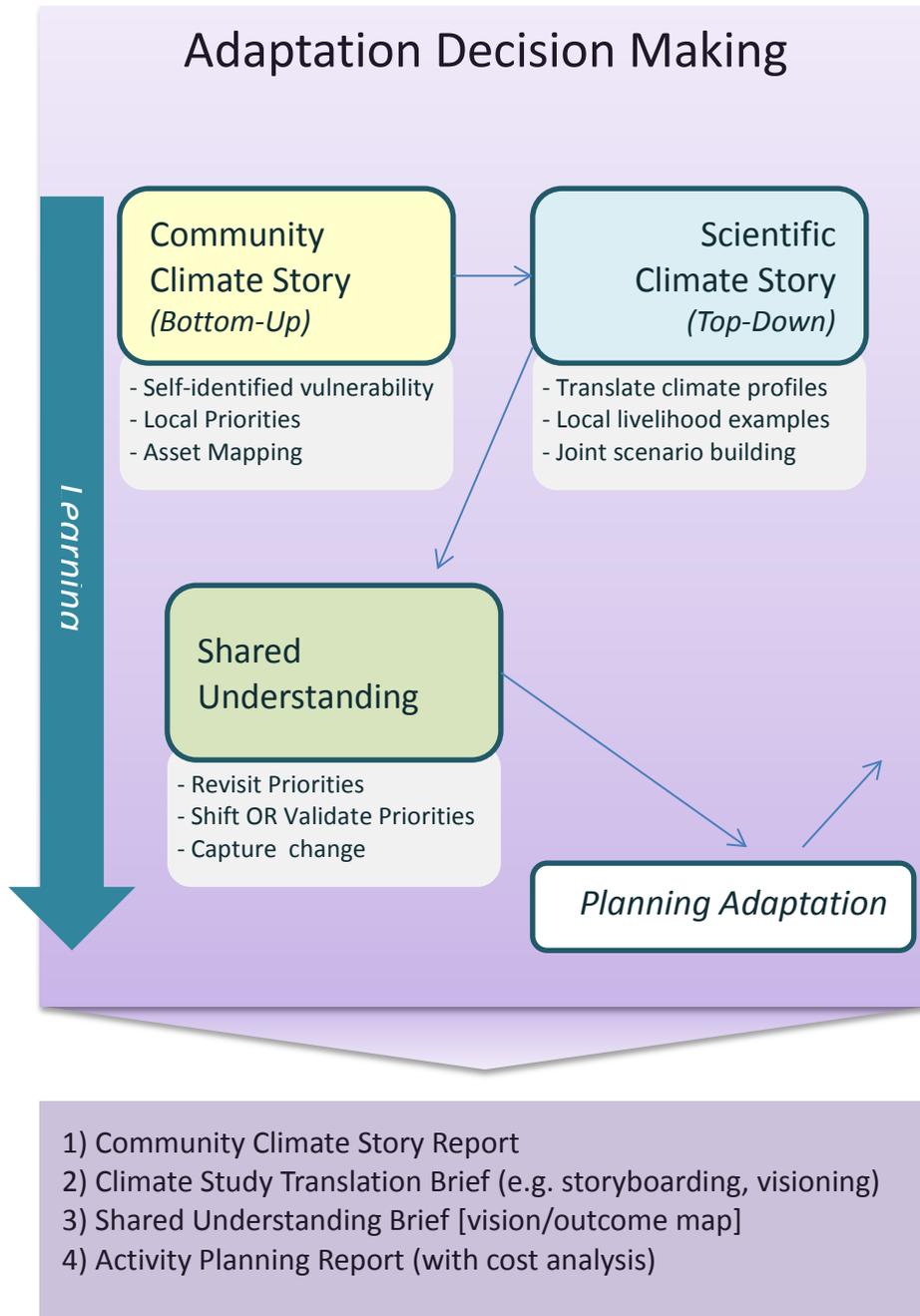
- Projected Climate Impact at the community level (using the USAID Mekong ARCC Study)
- Livelihoods vulnerabilities
- Ecosystem vulnerabilities
- Disaster risks

- Gender considerations

Set priorities for enhancing the climate resilience of community development plans

IPs will work to actively bring together community adaptation measures with pertinent information from the USAID Mekong ARCC Climate Impact Study. To do so, field teams will use the framework in Graphic 2 and described below as a guide to implementation.

Graphic 2: Adaptation Decision Making



1. Community Climate Story (Bottom-Up) – This step will capture qualitative information while seeking to understand the local ‘climate story’, or what current level of knowledge on climate change exists in a community. The exercise will include identifying climate hazards (weather events such as floods/droughts, etc.) and other slow onset changes (shift in seasonality, decline in rice yields, etc.) that the community is experiencing. It will also seek to understand *if* and *how* the community uses **weather information** (like seasonal calendars or temperature/rainfall data) in its planning processes, and how it informs decision making. Further, IPs should collect existing community development plans that outline priority initiatives created by local leaders. Information gathered will be used as a **baseline** for capacity building and priority setting activities.

2. Scientific Climate Story (Top-Down) – Following the initial stocktaking exercise, this step is intended to add a scientific lens to community level planning. IPs should use the municipal climate profiles included in the Climate Impact Study (and RFP) and present examples of how projected changes in climate will impact the livelihoods, ecosystems, and disaster risk of the community. Through storyboarding and visioning exercises, IPs should help translate the USAID Mekong ARCC Climate Impact Study into a practical scenario building tool that helps local leaders envision how projected changes will impact community assets and priorities. A suggested best practice to follow is finding ways to **link present** climate threats/impacts **with future** projections through scenario planning methods.

We encourage IPs to be creative in messaging and visioning exercises, documenting them along the way – best practices learned in the process will be communicated to the broader development community, and importantly help prove the concept that climate science can influence local adaptation decision making.

3. Shared Understanding – This step will revisit the documentation from step 1 (Community Climate Story), and facilitate a priority setting exercise with the community. IPs should identify if the scenario planning from step 2 (Scientific Climate Story) helped to **a) validate existing community priorities**, if they **b) contributed to shifting those priorities**, or if **c) new priorities arose** during the process. IPs should also note whether communities will initiate (or deepen) the use of weather data (temperature, precipitation, etc.) to monitor local level impacts on livelihoods, for example, or to mitigate risks from extreme weather events such as floods or droughts.

Note that it is critical for the IP to understand local planning and decision making processes, as success in ‘adaptation planning’ will largely be a qualitative measure of how local decision making processes are being informed by weather and climate information at the close of the project.

4. Planning Adaptation Initiatives – This final decision-making step should include collaborative selection of adaptation activities to implement in the field. This activity must also include a rough costing exercise to map out costs and likely benefits of the activity, which will feed in to a broader benefit-cost analysis effort. These data sets will feed in to the USAID Mekong ARCC program’s efforts to illustrate simple benefit-cost

calculations that showcase how adaptation funding impacts various areas such as livelihoods, health, and/or ecosystem services.

Task 3 Key Results

1. Implementation partners awarded subcontracts to test the Climate Planning approach with communities in focal areas identified by the Climate Study;
2. Work plan and monitoring plans developed;
3. Vulnerability analysis completed for each village;
4. Adaptation decision-making process completed in which weather trends and climate projections are incorporated into activity plans that engage community members in strategies to enhance their livelihood resilience and better manage emerging stresses resulting from climate change.

Task 4: Valuing Ecosystem Services for the Lower Mekong River Basin

The majority of the communities in the LMB earn much of their livelihood from fishing and farming, and as such their economies are directly dependent on the services provided by terrestrial and aquatic ecosystems. However, government policies often either underestimate or fail to value the economic contribution that ecosystem services provide for the overall health of an economy. USAID Mekong ARCC is pursuing efforts to internalize the true values of ecosystem services as economic assets in development planning. Under the guidance of WRI, Task 4 work began in Year Two on the Values at Risk economic analysis to help quantify the likely economic impacts of climate change in the LMB demonstrated by the Climate Study. Year 3 will see the wrapping up of this effort; completed first drafts of a set of four country-specific guidelines for valuing ecosystem services; and provision of support to IPs in data collection for benefit-cost analysis of adaptation options.

Complete values at risk analysis, report, and summary for decision makers

As mentioned above, in September 2013 WRI's team completed the first draft of the VAR report for economic resources affected by climate change in the LMB. The VAR framework provides a more tractable, and more reliable approach for understanding the economic consequences of climate change in any one particular region because it seeks to quantify the existing economic value of resources at risk rather than projecting into the future exactly how the value of that resource will change across multiple climate models.

Using this VAR approach, WRI estimated the annual value of infrastructure services, worker productivity, agricultural output, hydroelectric power, and ecosystem services at risk from climate change in the Lower MRB to be at least \$16 billion per year. In addition, WRI estimated the value of infrastructure assets at risk in areas expected to be inundated more frequently or permanently to be at least \$18 billion.

Comments were provided to WRI on the draft report from the DAI team and WRI staff. The second version of the VAR report will be published in second quarter of Year Three after these comments are addressed and incorporated. In addition, a concise "Summary for Decision Makers" will be prepared to make the VAR

analysis more accessible to non-economists. Finally, the results of the VAR analysis will be presented in Bangkok at a suitable venue in order to reach target audiences and the media.

Draft a set of four country-specific guidelines for valuing ecosystem services

The core of the Task 4 team's efforts is to prepare a set of four country-specific ecosystem service valuation guidelines to help Lower MRB governments incorporate such values into decision-making. Work began on this task in Year Two with preparation of an annotated outline, literature review, review of best practices, and compilation of ecosystem valuation examples from each country.

In Year three, completed first drafts of each country's guidelines will be generated and ready for external review. To this end, the work will proceed in a regular and sustained manner throughout FY 2014 with draft sections of the final reports being prepared and circulated for review roughly every two months. The introduction and section containing the typology of ecosystem service values considered and examples for each country will be prepared by the end of the second quarter of Year Three. The next sections on appropriate policy settings for ecosystem service valuation with country-specific examples will be ready by the end of the third quarter. A concise step-by-step valuation approach with country-specific examples will also be prepared by the end of June. The executive summaries and recommendations will be prepared by the end of the fourth quarter, and at that point the final first drafts will be compiled and made ready for internal and external review. Final publication and presentation of the guidelines will take place in Year Four.

Task 4 Key Results

1. Values at risk analysis and summary for decision makers completed;
2. First draft of a set of four country-specific guidelines for valuing ecosystem services;

Task 5: Scaling-up successful approaches

Leveraging and scale-up allows for the broadening and deepening of the effects from adaptation activities in the LMB by generating increased buy-in from regional stakeholders, raising the visibility of the project, creating a positive feedback loop for information sharing and knowledge transfer, and increasing the prospects for long-term funding available to specific activities. In Year Three, USAID Mekong ARCC will begin to focus on both "Horizontally" driven scaling, in which the "scale up pathway" is that other NGOs or local agencies learn about the project and actively invest in good practices or activities demonstrated by them, and "Vertically" driven scaling, in which national-level investment or policy change is the primary driver.

Support climate change initiatives of regional platform institutions

The project will continue to actively seek out opportunities for collaboration to share results, lessons and scale impact from the Climate Study, implementation of the community adaptation initiatives, as well as other areas of the project. In addition to continuing to build relationships with the MRC, ADB, World Bank,

etc., additional emphasis in Year Three will be placed in developing linkages with ASEAN, which USAID has identified as a prospect for collaboration.

Collect and disseminate good practices, lessons and technical methods for scale-up to adaptation implementers, governments and regional platforms

In Year Three WRI will undertake a review of each IP project proposal and work plan in order to develop an interview protocol to track key “scale-up factors” (some likely common to them; others unique to each project). IPs would then be interviewed at the beginning of their work – with other interviews taking place at the mid-point, and close to the end of implementation. The objective will be to promote replication, scaling up and mainstreaming of successful adaptation approaches demonstrated through the Task 3 field activities.

Initiate development of pre-feasibility report for target countries

In Year Three WRI will initiate an analysis of climate finance opportunities for each of the target countries. A desk review will be completed covering the key international and bilateral adaptation finance sources. This would feed into the final pre-feasibility report (to be completed in Year Five) that will identify promising scale-up pathways for each demonstration project, map them to relevant finance opportunities, and make recommendations for key actors in each country on how to take action in obtaining finance for new adaptation initiatives that would scale up good practices from USAID Mekong ARCC Ecosystem and Community-based Adaptation Initiatives and other similar projects in the LMB.

Task 5 Key Results

1. Support provided to regional platforms to strengthen their outcomes and scale impact of USAID Mekong ARCC results;
2. Approach of each field adaptation initiative reviewed, a protocol to track key “scale-up factors” developed and initial interviews undertaken;
3. Desk review completed covering key international and bilateral adaptation finance sources

MANAGEMENT APPROACH

We will manage USAID Mekong ARCC based on four principles:

- Define clear roles and responsibilities for a streamlined technical assistance and management team.
- Adapt to changing conditions in the field by applying systems and tools that allow us to assess our progress rapidly for results and identify when and how to make mid-course corrections.
- Leverage collaboration with local partners where possible to cement local ownership and capacity building while providing cost-effective solutions to implementation challenges
- Communicate effectively and regularly the lessons learned and best practices with our local counterparts, USAID, and other stakeholders.

Staffing and Office Management

- DAI will continue to phase in technical assistance as required to support each major task, and use a core team to provide overarching technical leadership, management, and coordination. Some important staff changes were made in FY2013. First DAI hired an M&E Specialist in the first quarter of 2013 to replace the outgoing M&E Specialist. A Field Coordinator was recruited in September of 2013 to work closely with the COP and Task 3 Subcontractors to monitor and oversee field implementation activities. Finally, due to a family emergency, the DCOP was unable to return to post after a scheduled R&R in August. With USAID approval, DAI decided to create an Operations Manager position rather than replace the DCOP. Subsequently, DAI recruited and hired an Operations Manager who mobilized in November of 2013. Graphic 3 demonstrates our revised organizational structure.

Office Locations and Coordination of Activities between Offices

As noted above, we will maintain one main office in Bangkok. We have determined not to establish field offices in Laos or Vietnam. DAI will manage Task 3 activities from the Bangkok office with frequent travel by the Field Coordinator, COP or other required staff to implementing partner sites.

Preparation of Regular Progress and Planning Reports

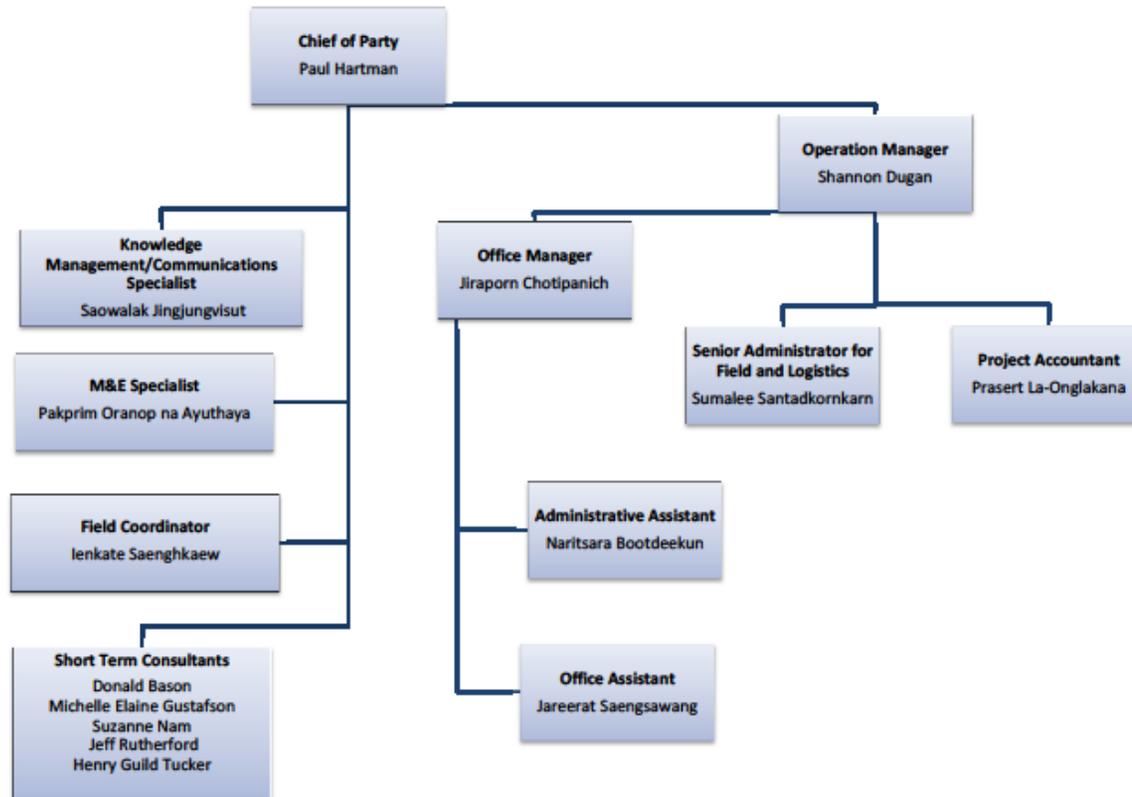
Thematic reporting, such as success stories, content for the RKP, and external communications to be used for RDMA public events, will be developed by the USAID Mekong ARCC Communications/KM Specialist and overseen by Mr. Hartman, in close consultation with the COR. All external communications and outreach materials will be submitted to USAID COR for approval prior to publication. Written materials and other media will continue to adhere to the USAID-approved branding and marking plan and the project Knowledge Management and Communications Strategy.

Communication and Coordination

Mr. Hartman will continue to serve as the USAID Mekong ARCC point of contact with USAID, other U.S. Government partners, and the donor community at large. Following USAID/Asia protocols, Mr. Hartman will visit and continue to establish formal relationships with each of the missions and national government counterparts. With COTR approval, USAID Mekong ARCC will distribute project reports to these contacts and ensure that each mission and the Embassy in Vientiane are up to date on project activities in their respective countries.

Graphic 3: USAID Mekong ARCC Org Chart—Year Three

Mekong ARCC Project Organization Chart



Revised October 30, 2013

Monitoring and Evaluation

In Year Two USAID Mekong ARCC developed the M&E guidelines for implementing partners, baseline survey templates to monitor the project and field activities under Task 3, and templates for M&E planning and indicator tracking. For Year 3, project activities for M&E include:

- Baseline data collection and reporting
- Assisting IPs to set up the M&E system for each adaptation initiative
- Routine monitoring of field activities
- Conducting a data quality assessment

Baseline data collection and reporting

USAID Mekong ARCC will seek inputs from the IPs on the baseline survey templates, consisting of the community profile and the climate change and livelihood awareness survey, and revise them accordingly. Both templates serve two purposes, a) to set the performance indicator baselines and b) to understand the overall community vulnerability profile. The IPs are responsible for deciding how to collect the data and conducting data collection. The USAID Mekong ARCC team will work with the IPs to supervise baseline data collection and ensure data quality; for example, through checking the data against the source document for data coming from secondary sources. At the beginning of the field projects, IPs will produce a baseline report for each participating community and USAID Mekong ARCC will combine all the reports into one synthesis report.

Assisting IPs to set up the M&E system for each adaptation initiative

Prior to initiating field activities, USAID Mekong ARCC will train the IPs on its M&E system through the kick-off meeting and individual orientation meetings. Through the process, the M&E Manual for Implementing Partners will be introduced to IPs for use as a resource, enabling them to fulfill USAID Mekong ARCC M&E requirements throughout the project's life. An assessment of each IP's M&E system will be undertaken in order to assist IPs in integrating USAID Mekong ARCC M&E into their system.

After the IPs have conducted the vulnerability assessment and developed the USAID Mekong ARCC performance indicator baselines, they will set targets of the performance indicators. The program team will help them to develop a project results framework and identify project-specific indicators which, at a minimum, will cover community-specific adaptive capacity. They will then collect baselines and establish targets of the project-level indicators. Monitoring plans will be developed to capture data necessary to track results on IP performance in meeting work plan objectives and deliverables. IPs will be responsible for setting up a filing system for collating and storing information.

Routine monitoring of field activities

In collaboration with the Task 3 Manager and Field Coordinator, the USAID Mekong ARCC M&E Specialist will use a monitoring template to track the IPs' progress and regularly check with them on project progress. Field visits will be conducted to obtain field information, collect success stories, and ensure data quality. On a quarterly basis, IPs will submit to USAID Mekong ARCC progress reports which will provide progress against targets and assessments of why targets were or were not met.

Conducting data quality assessments

Field visits will also determine whether data reported accurately reflect field activities. At the end of Year Three, USAID Mekong ARCC will conduct a data quality assessment with all IPs, in compliance with USAID's ADS 200 series.

M&E Key Results

1. IPs trained on the M&E system of USAID Mekong ARCC;
2. The baseline data collection of USAID Mekong ARCC performance indicators conducted and the baseline report produced;
3. IPs' results frameworks, field-specific indicators and M&E plans developed;
4. Field success stories produced; and
5. A data quality assessment conducted at the end of the year.

Annex 1 – USAID Mekong ARCC Log Frame

T	A	S	TASKS, ACTIVITIES, SUBACTIVITIES	Year Three												RESOURCE	OUTPUT
				Q1			Q2			Q3			Q4				
				O	N	D	J	F	M	A	M	J	J	A	S		
1	Regional Platform Partner and Knowledge Center																
1	1		Develop and disseminate project knowledge products														
1	1	1	Develop and disseminate a variety of knowledge products on results of the climate study												DAI, STTA	Headlines of Study, Country/Province/Livelihood Sector profiles, Key Findings, Summary for private sector, technical papers/briefs	
1	1	2	Document field implementation approach, challenges, successes, and lessons												DAI, IPs	Project Vision document, community site profiles, e-newsletter, adaptation learning summary	
			Develop and disseminate knowledge products on results of the Economic Values at Risk analysis													Key findings, factsheet, headlines	
1	2		Website knowledge products and information linked to existing platforms														

T	A	S	TASKS, ACTIVITIES, SUBACTIVITIES	Year Three												RESOURCE	OUTPUT		
1	2	1	Regularly update project website/social media feeds to syndicate project information and create inbound links															DAI	Regular updates Facebook, Twitter, Flickr, etc. that are linked to the/from the website
1	2	2	Disseminate knowledge products on Climate Study, Community Adaptation Initiatives and Economic Values at Risk Analysis via relevant existing Climate Change web platforms															DAI	Mekong ARCC linked to and sharing news with 10 climate web platforms
1	3		Strengthen engagement with media																
1	3	1	Develop a media outreach campaign and materials on Values at Risk report															DAI	Press event organized, Media advisory and press releases are prepared and sent out to environmental and business journalists.
1	3	3	Target journalist participation in project events and information dissemination on Climate Study, Values at Risk Analysis and Community Adaptation Initiatives															DAI	5 regional journalists briefed on project approaches
1	3	4	Prepare and disseminate packet of project information including fact sheets, press releases, success stories, and other communication products to highlight project initiatives															DAI, STTA	Packets prepared and disseminated before and during Final Climate Workshop
1	3	5	Develop story lines and prepare write-ups to facilitate article placement with local and international media															STTA	5 articles on project Initiatives appear in regional newspapers, internet sites, etc.

T	A	S	TASKS, ACTIVITIES, SUBACTIVITIES	Year Three												RESOURCE	OUTPUT		
1	4		Support national government and regional platform efforts to disseminate climate change adaptation information to relevant regional actors																
1	4	1	Work with platforms to scale Climate Study results and analysis and approach, best practice and lessons from community activities into the planning and project implementation across the region															DAI, ICEM	Co-organize events/presentation of results from Climate Study, Community Adaptation Initiatives to workshops, seminars and meetings of regional platform institutions
2			Climate Change Impact and Adaptation Study																
2	1		Undertake final edit of six Study Theme Report and submit them to USAID															DAI, STTA	Final report approved by USAID
2	2		Disseminate approved Climate Study and Theme Reports															DAI, USAID	Report disseminated directly, through USAID and via regional adaptation web platforms
2	3		Draft and submit articles on Study results to peer reviewed journals for publication and dissemination															DAI, ICEM	1 Article appearing in peer reviewed scientific journal for uptake by IPCC
3			Integrated Community and Ecosystem-based Adaptation Activities																
3	1		Select focal areas for climate planning proof of concept activities															Completed	Completed
3	2		Select organizations to undertake climate planning with communities in focal provinces																

T	A	S	TASKS, ACTIVITIES, SUBACTIVITIES	Year Three												RESOURCE	OUTPUT		
3	2	1	Award contracts to implementing partners selected to carry out climate planning with communities in focal areas															DAI	Contracts Awarded
3	3		Work with implementing partners on preparatory plans necessary to undertake community initiatives																
3	3	1	Undertake initial preparatory meetings with each of the implementing partners in order to clarify Mekong ARCC adaptation approach, USAID requirements and required deliverables															DAI/STTA	Meetings completed with each IP on requirements related to communications, finance and admin, M&E and have general project approach
3	3	2	Conduct Kick off workshop with implementing partners to gain common understanding on approach, common outputs and scientific results															DAI/WRI/STTA	Workshop completed
3	3	3	Development of site work plan, M&E and other activity planning documents															IPs/DAI	Workplan and PMP developed and internally approved for each site
3	3	4	Compile baseline data on community livelihood systems, social structures and gender, key actors and initiatives in the local context, and climate change awareness															IPs	Data collected for indicator tracking and on projects ongoing in community, and current development plans of target communities, and awareness collected
3	4		Draft or refine existing vulnerability assessments to analyze impacts of climate change on community development and inform adaption options															IPs	

T	A	S	TASKS, ACTIVITIES, SUBACTIVITIES	Year Three												RESOURCE	OUTPUT		
3	5	3	Present activity implementation plans to communities for feedback and endorsement															IPs/Community	Notes on community feedback
3	5	4	Finalize adaptation measures implementation plan based on assessment of costs, benefits and sustainability post project.														IPs	Report on Activity Planning containing recommendations for adaptation options to be implemented based on assessment of costs, benefits and sustainability post project	
3	5	6	Final review, comment and approval adaptation implementation plans														DAI		
4			Valuing Ecosystem Services in Economic Planning for the Lower Mekong River Basin																
4	1		Complete values at risk analysis, report, and summary for decision makers																
4	1	1	Respond to and incorporate reviewer comments															Response to comments document	
4	1	2	Prepare final VAR report, technical version														WRI	Final technical report	
4	1	3	Develop a summary for decision makers and communication materials														WRI	Summary for decision makers	

T	A	S	TASKS, ACTIVITIES, SUBACTIVITIES	Year Three												RESOURCE	OUTPUT	
4	1	4	Present results in Bangkok														WRI	Power point presentation
4	2		Draft a set of four country-specific guidelines for valuing ecosystem services															
4	2	1	Complete first draft of introduction and typology with country-specific examples.														WRI	First draft of introduction and typology sections (sections II and III) for each report
4	2	2	Complete first draft of policy settings with country specific examples														WRI	First draft of policy settings section (section IV) for each report
4	2	3	Complete first draft of valuation guidelines														WRI	First draft of valuation guidelines section (section V) for each report
4	2	4	Complete first draft of executive summary and recommendations for keeping the guidelines up to date															First draft of executive summary and recommendations sections (sections I and VI) for each report
4	2	5	Workshop to discuss first complete draft of each country-specific guideline document														WRI	First drafts of country guidelines
5	Scaling-Up Successful Approaches																	
5	1		Support climate change initiatives of regional platform institutions															
5	1	1	Engage regional platforms institutions as a means of scaling impacts of project outcomes														DAI	Results of Climate Study and community engagement approach shared with 2 regional platforms

T	A	S	TASKS, ACTIVITIES, SUBACTIVITIES	Year Three												RESOURCE	OUTPUT		
5	2		Collect and disseminate good practices, lessons and technical methods for scale-up to adaptation implementers, governments and regional platforms																
5	2	1	Review approach of each field adaptation initiative and develop an interview protocol to track key "scale-up factors"															WRI	Review and interview protocol completed
5	2	2	Undertake initial interview of IPs related to approach and tools to be utilized in project implementation															WRI	Initial assessment of IPs completed
5	3		Initiate development of pre-feasibility report for target countries															WRI	
5	3	1	Undertake analysis of climate finance opportunities for each of the countries															WRI	Desk review covering key international and bilateral adaptation finance sources
5	3	1	Identify promising scale-up pathways for each field project and map them to relevant finance opportunities															WRI	Climate financing requirements built into community adaptation initiatives implementation
6	Overarching Program Management and Coordination																		
6	1		Submit regular progress and financial reports to USAID															DAI	
6	1	1	Amended annual workplan submitted															DAI	Workplan

