CRITICAL ECOSYSTEM PARTNERSHIP FUND

CEPF Final Project Completion Report

Organization Legal Name:	Conservation International Foundation
Project Title:	Mainstreaming Natural Resource Management for Fisheries in the Cambodian Mekong Basin
Grant Number:	65946
CEPF Region:	Indo-Burma II
Strategic Direction:	6 Engage key actors in mainstreaming biodiversity, communities and livelihoods into development planning in the priority corridors
Grant Amount:	$249,987.00
Project Dates:	July 01, 2016 - January 31, 2019
Date of Report:	March 30, 2019

Implementation Partners

List each partner and explain how they were involved in the project

The project's implementation partners were Fisheries Administration (FiA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF), Ministry of Environment (MoE), WorldFish, Oxfam, IUCN, WWF, WCS, Forum Syd, NTFP-EP, FACT, CEPA, VSO, and VSG. These partners provided facilitation, technical and financial support. For instance, FiA and WorldFish co-convened the final Mainstreaming NRM Workshop, while WWF and WCS provided technical support through presenting relevant case studies on fisheries conservation. In various workshops, Oxfam provided financial support by funding the attendance of their invited participants and sharing administrative costs.

Conservation Impacts

Summarize the overall impact of your project, describing how your project has contributed to the implementation of the CEPF ecosystem profile

1. The facilitated discussions resulted in a cross-institutional collaborative approach to address issues and find solutions for sustainable fisheries management, as well as improving coordination in the sector between government and communities. Some of the topics discussed focused on hydropower projects (e.g. Lower Sesan II), and means of gathering and sharing the latest information on project concerns related to fisheries impacts, and highlighting other concerns in a safe space that could be communicated to the Royal Government of Cambodian through Fisheries

Administration and the Technical Working Group on Fisheries (TFGF). Techniques and best practices for community fisheries management were also shared across these groups, bringing in approaches like savings groups, community patrolling, and other proven approaches being implemented by Conservation International (CI), FACT, WCS and others.
2. The project has had a positive impact on the behaviour of fishery-related government stakeholders. For instance, instead of depending on financial support from the project/the workshop organizer, the FiA sent a letter to relevant partners to raise funds to support their provincial officials to join the 3rd Mainstreaming NRM Workshop.
3. The workshop series outreach component was very successful particularly the support and collaboration received from a range of fishery sector organizations including WorldFish, Oxfam, IUCN, WWF, WCS, NTFP-EP, FACT, who variably assisted co-convening and co-financing the NRM workshops.
4. A series of trainings related to MIDAS, a decision support tool and system were provided to discuss the complexity of relationships between hydrology, sediment flows, and fisheries migration—aiming to determine what happens under various agricultural production and fisheries production scenarios. Seeing the relationships mapped on a computer screen helped with these discussions. And results from simulation models of fisheries impacts from various hydropower scenarios were also shared with MoE, FiA, WCS, FACT, and others to discuss potential desired futures for more sustainable hydropower project designs.
5. Representation of fisheries management needs, and ability to share more grassroots level perceptions at higher level policy including at the Technical Working Group on Fisheries, and also being able to integrate TWGF representative needs and perspectives into the design for the community fisheries database, as well as refine training materials used in communities related to NRM.
6. The project helped develop an understanding of trade-offs and decision support for resource use conflicts.
7. The project had a positive impact on conservation management planning by introducing tools and raising awareness of some of the important considerations in planning for both biodiversity conservation and livelihoods, with communities, government and civil society stakeholders.
8. Six Cambodian NRM professionals (Chea Seila, Nut Savat, Tam Sreykol, Gnim Sodavy, Ly Po, Chhuoy Kalyan) were contracted during the project to undertake activities and write reports as either primary or supporting authors.

Planned Long-term Impacts - 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
1. Systematic use of decision-support tools by government and civil society actors to assess the impacts of basin development proposals on water, fisheries, biodiversity, agriculture and other land-use and to evaluate other ecosystem service trade-offs affected by these proposals.	Once we determined that decision support tool institutionalization would not occur in the short term, we focused on familiarizing stakeholders with using decision support tools in decision-making. MIDAS is one of many decision support tools being used and developed in the region. The projects MIDAS training increased government and NGO understanding of these tools. The training helped: people see the differences between the tools; the tools limitations; understand the tools use in decision-making; and how to interpret outputs. By showing that decision support

	tools do not present answers, but rather provide options, we have begun to correct a region wide misperception that analytical tools and models provide the single correct answer. The delayed development of MIDAS, and difficulties in verifying model outputs, meant that it could not be systematically used to assess trade-offs. Using funding from elsewhere, CI continues to address the desired impact of increasing the systematic use of trade-off analysis and decision support tools by focusing on institutionalization of the Freshwater Health Index. CI is now recognized in creating and using decision support tools, which we will leverage in future to help government and other partners make better NRM decisions.
2. Biodiversity, livelihoods and community needs are integrated into basin development plans such as dam development, irrigation, agro-industrial investment and fisheries management for the lower Mekong basin, with emphasis on the project's target corridor within Cambodia.	We created a holistic approach for gathering and implementing a range of NRM tools and practices which targeted biodiversity, livelihoods and community needs. By gathering a diverse range of partners and exposing them to a variety of NRM tools and approaches we have enabled them to have a greater interest in, and influence over, future basin development. Community, practitioner and government engagement was a lasting impact of the project. We supported communities to discuss livelihood needs directly with government as well as providing them a platform for suggesting improvements in legislation, strategy and decision making at the highest levels. Project activities also shared best practices and helped communities take ownership of livelihood improvements and local biodiversity conservation. We also engaged in basin development dialogues and with our partners communicated community and biodiversity needs to those involved in basin planning such as the MRC. Involvement of project partners in the TWGs and through the workshop series helped highlight the needs for mainstreaming these issues. Project participants have engaged in the development of a Fisheries Conservation and Management Strategy, the Fisheries Law and the Community-fisheries sub-decree.
3. Improved sustainable use of ecosystem services including flooded forest and fisheries and increased populations of globally threatened species in the Mekong basin of Cambodia.	We discussed sustainable use of flooded forest and fisheries resources with over 40 communities. Conservation planning and fishing actions that can improve sustainability were taught during the workshops, particularly the fish game. We relied on a partner project for evaluating the fishery resources, which reportedly showed an increase in threatened species populations. However, climactic conditions

	were likely to be responsible as the overall fishery also improved, so assigning causation is challenging. Nevertheless, we helped raise awareness of these needs at the community level and helped integrate sustainable use into conservation planning for the future. The fish smoking stoves developed by CI was presented in several of the workshops and officials from the Department of Post-harvest and Quality Control showed an interest in expanding the use of these stoves. Similarly, flooded forest replanting techniques were reviewed across the Sci-Cap network, revealing opportunities to increase overall results from replanting—which is critical given the vast amount of flooded forest that has been lost. Sharing these lessons had far-reaching impacts in increasing the adoption of practices for improved sustainability of resource use, natural resource management, and for basin planning.
4. Reduced conflict in policy and management planning between energy (hydropower) and food security (fisheries and agriculture) needs through use of trade-off tools that can provide balanced solutions.	The project has introduced the potential of the MIDAS tool to over 300 Cambodian's employed either in government or CSO's. This has provided them with the knowledge needed to call upon such tools when making decisions that require trade-offs between energy and food security and thus avoid future conflict. The dialogues that resulted from direct engagement between communities and government also helped highlight existing and potential conflicts and as such, made an important step towards resolving the conflicts by increasing awareness of the issues. The visualizations that were created as a result of the trade-off analysis were used directly to assist conversations regarding the challenges associated with planning for multiple competing resources. Raising this awareness and entering into open discussion between multiple sectors is an important step towards resolving conflicts. Although still in the early stages, the project made progress towards achieving positive impacts in basin development planning by multiple sectors.

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
1. Improved government and civil society understanding of trade-offs in water and fisheries management through the use of decision-support tools, as evidenced by the up-take and institutionalization of decision support tools and use of tool outputs to guide incorporation of recommendations from decision-support	We addressed Strategic Direction 6 by improving government and civil society understanding of fisheries management using a variety of training materials. We used decision support tools to share and interpret trade-off water and fisheries management related information. Meeting this impact was difficult due to the challenges in developing and using decision support tools and local capacity using and understanding them.

tools into at least one policy and at least two planning decisions of national government	We addressed this by providing simplified training and introduced several approaches including MIDAS (http://45.55.215.153/midas/index.php) CI's Freshwater Health Index, Winrock's Westool and the MRCs climate change related trade-off analysis. Pre and post-surveys undertaken as a part of the MIDAS training revealed a greater understanding of the decision support tools and its use in assessing trade-offs. We couldn't incorporate DSS outcomes into policies as targeted legislation was not finalized during the project. Nevertheless, our activities improved dialogue between the FiA and energy and water developers and other government ministries mandated with both policy oversight and water development. The MoE has also included MIDAS data layers into its new centralized GIS data system, which the MoE planning department may use post the life of this project.
2. Improved government and civil society awareness of the importance of natural resource management, ecosystem services, sustainable practices, context-specific differences in application and integration of best-practices into basin development planning, as evidenced by safe-guards for NRM, etc incorporated into at least one policy and two planning decisions of national government.	Policy integration was not possible as relevant policies were not ratified during the project. However, the documents produced, messaging from the workshops and engagement on policy and management strategies, have resulted in safe guards being integrated into future policies, strategies and management approaches. The workshop series improved government and civil society awareness of natural resource management, ecosystem services, sustainability, the challenges of site-based implementation and best practice basin development planning. The high level of engagement and participation in these workshops and feedback from participants has indicated improved awareness. There were no opportunities to incorporate project learnings and outputs into either policy or planning decisions. However, during the last workshop the EU delegates and FiA staff showed an interest in using project outputs in the development of the Strategic Plan for Fisheries Conservation 2019-2028. Also, experience gained by CI staff from the project has provided input into comments on draft revisions to Cambodia's Fisheries Law.
3. Improved coordination and consistency of approach to NRM, etc. between fisheries sector actors as evidenced by uptake and implementation of consistent yet adaptable best-practice approaches by at least 4 NGO actors.	Up to 15 tools developed and applied by NGO partners were introduced and demonstrated to over a hundred participants during the workshops. They are being actively considered for further use many of the wide range of workshop participants from both government and civil society. This exposure to both the tools and their producers will improve the coordination and consistency of fishery management in Cambodia.

	Although due to funding limitations not all of the participants have actively implemented activities that conform to the practices identified and described by the project. However there has been widespread adoption of many of the lessons. And at least six of the project partners have been developing proposals to support implementation of some of these practices. In some cases where funds were already available, practitioners have been adapting their interventions to be more consistent, coordinated and compatible with the practices identified through the project dialogues and outlined in the project documents.
4. Management planning for CFIs and conservation management of at least 6 CFIs includes biodiversity and livelihood considerations, as evidenced by their inclusion and specific reference in community fisheries management plans and/or activities.	Our engagements with the Community Fisheries Development Department (CFDD) saw zoning schemes, including no-take zones and buffer zones added to the conservation management section of CFi plans. Some community fisheries have begun to demarcate zones, including conservation areas, and raise community awareness. CI used the project information to assist 2 CFis (Kampong Prak, O Ta Prok) finalize, and 3 (Prey Kraw, Srey Chuk, Anlong Rieng) implement their plans. In these communities CI, with a focus on biodiversity conservation and livelihood improvements, established mini-trust funds and women's savings groups; and facilitated forest replanting and community patrolling of community protected areas. After CI presented our financing mechanism at the first CEPF funded workshop the IUCN followed suit and established similar mini-trust Funds for 2 CFis at Boeng Chhmar Biosphere Reserve and Kompong Tralach on the Tonle Sap Lake and actively promote biodiversity conservation in CFi management. We also assisted 12 communities develop conservation management plans, either directly or through partners, by emphasizing the need for various conservation actions.
5. Improved management and biodiversity conservation by designation of at least 6x community conservation areas in management plans and/or activities with improvement of fisheries as indicated by improved yields demonstrated by before and after fisheries monitoring.	Through the community workshops and training in the first year of the project, 12 communities were supported to draft conservation management plans that include zoning and consideration of flooded forest protection, species conservation, gear use restrictions, connectivity of conservation zones, and other conservation interventions. In addition, through the engagement with partners and raising awareness, several organizations supporting development of management plans for CFis have integrated key elements of conservation management into their planning process. Including flooded forest protection, zoning schemes that include no-take and buffer zones,

	and the need for gear restrictions. As noted previously, whilst fish yields increased during the project period as measured by fish catch monitoring activities, supported by a parallel project, there are climatic explanations for the increase in fish and so the impact of the conservation activities are not conclusive. CIhas helped five community fisheries (Kompong Prak, O'taprok, Akol, Anlung Raing, Srey Choek) enshrine community conservation areas in their management plans.

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives

Coordination and collaboration of multiple co-conveners and engagement of key stakeholders to become significant project partners in the Mainstreaming NRM Workshop series and other activities was integral to the success of the project and a major contribution towards achieving both its short and long-term impacts. However, the collaborative and cooperative nature of the project was one of our biggest challenges. The success of the project and progress towards achieving its impacts required collaboration with external partners on all activities and meant we were reliant on effective cooperation. This proved to be time consuming and resulted in delays due to combining multi-institutional logistics. Nevertheless, the positive impact that arose from coordinating among fisheries sector stakeholders was extensive and worth overcoming the challenges. Further to this point the prior set up of Sci-Cap as a network of NGOS that had already worked together and had strong connections to FiA and the Inland Fisheries Research and Development Institute (IFREDI) were also important to the project's success.

Some recent restrictions placed on NGOs by the government complicated implementing some project activities. Additionally, the national election took place during the project period and meant it was not possible to convene group meetings, particularly at the subnational level.

The close interest from the EU in this project, and in some of the tools being generated was also an important contributor to the project's success- the EU is the co-chair with FiA for the Technical Working Group on Fisheries, and was able to present this project at meetings, and the chance to share findings and results, increasing their adoption and use beyond initial project partners.

Achieving several of the projects short- and long-term impacts required the development of new legislation and procedures. Whilst the legislation that we aimed to influence had started being developed prior to the project proposal, by the projects end it had yet to be completed and ratified. Hence, although we were able to join important meetings and contribute to the direction of both legislation and relevant basin and management planning processes through the project, as no legislation was passed during the project period it was not possible to achieve these impacts within the project period. Nevertheless, both in terms of developing a cooperative community of practitioners and, coordinating their message to government, we were successful at making inroads to our intended impacts. Further, the increased awareness of trade-offs and their role in decisions-making, as well as the increased awareness at the community level were also successes of the project. The high level of community participation in trade-off decision discussion, natural resource management opportunities and benefits, and subnational and national dialogues and discussion, supported several of our desired impacts. Through these successes we were able to mainstream community concerns and natural resource management into the on-going process of national policy development, planning and decision making.

Early in the project, through direct communications with stakeholders and through observation of the impact of other decision support tools, we became aware that the capacity of the majority of stakeholders to make use of trade-off decision support tools without significant training and education was limited. We therefore chose to engage directly with stakeholders using trade-off analysis results as well as familiarizing target communities and practitioners on the benefits of trade-off analysis for decision making. At the same time, we also provided training and education to various stakeholders in the use of visualizations and socialized the use of decision-support tools.
In addition, through the project, we helped develop trade-off analysis for basin development, and use them to engage directly in basin development discussions. Whilst the integration of the complete analysis results into the decision support tool was delayed, direct discussion of trade-off analysis results informed basin development management and planning discussions. We used the results of analysis to engage with both government and communities. And they were used by the FiA to inform inter-ministerial discussions on hydropower and agriculture development. The potential to develop legislation for the creation of improved safe-guards for hydropower development was proposed and discussed with relevant ministries. Furthermore, effects of deforestation to the aquatic ecosystem and the potential for agriculture conflicts were discussed and opportunities were elaborated for reducing deforestation, for more sustainable alternatives for agriculture development and agro-chemical use that would help minimize these conflicts.

Were there any unexpected impacts (positive or negative)?

An unanticipated positive impact was that the breadth of knowledge yielded by the project increased the profile of SciCap and CI within the EU as co-chair of the Technical Working Group for Fisheries as well as the FiA. The former project lead and current CI staff were asked to be help design the EU's 90 million Euro project on capture fisheries. This included shaping the overall problem assessment related to fisheries, and how to align wild fisheries and aquaculture agendas, as well as site visits to CI community fisheries and review of CEPF products, resulting in unique access for CI into the formulation of a large program slated to start later in 2019. Additionally, staff working on the CEPF project provided support in drafting the FiA's 5-year National Management Plan for Fisheries Conservation, and the 10-year Strategic Plan for Fisheries Conservation and Management. CI will likely benefit from future funding on community fisheries work, expanding the lessons learned and using outputs from this Sci-Cap CEPF funded project. Another unanticipated impact was that Sci-Cap has largely been absorbed into CI as we retained a key staff member. So even though the lead has left CI, capacity building and training elements from the project can continue given the complementarity with CI's program in country and on Tonle Sap lake.

Project Components and Products/Deliverables

Describe the results from each product/deliverable:

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
1	Component 1. Expand use of decision-support tools developed with MacArthur funding ensuring biodiversity and ecosystem services are included in decision-making and providing civil society with tools to evaluate and offer alternative development scenarios	1.1	Decision support tool adapted to create new scenarios of basin development: a) Certain future of Sesan 2 dam, b) Impact of 'All Cambodia dams scenario' in agriculture/fisheries c) No more Cambodia dams scenario.	To be consistent with the Mekong River Commission Council Study five basin development scenarios were added to the MIDAS decision support tool as a part of the MIMES model. These scenarios were: 1) Baseline; 2) Definite future dams; 3) Definite future dams plus migration barriers; 4) Definite future dams plus climate change; 5) Definite future dams plus migration barriers and climate change. Whilst these scenarios departed from the three listed in the deliverable, they were a more relevant and expansive than those proposed.
1	Component 1. Expand use of decision-support tools developed with MacArthur funding ensuring biodiversity and ecosystem services are included in decision-making and providing civil society with tools to evaluate and offer alternative development scenarios	1.2	New trade-off scenario analysis outputs produced for 4 new scenarios: water vs fishery trade-off in the Mekong; agric vs fishery trade-offs; irrigation impacts to TSL/Mekong floodplain; water (dams)-fishery/agriculture/forest trade-offs	Five trade-off scenarios were produced for use in the MIDAS tool: 1) Sustainability of Fisheries - Explore fisheries around Cambodia and identify key areas of sustainability threats; 2) Agriculture and Land Use Changes - View Historic Land Use and trends in agricultural land uses; 3) Conflicting Land Use Needs - Explore Tradeoffs in land use needs; 4) Rural Population Expansion Impacts - See how population changes affect livelihood, energy access, GDP, etc; 5) Exploring Overfishing around the Tonle Sap Great Lake - Conservation on fish species, managing fishing practices, etc. These scenarios were developed in consultation with the Cambodian government and NGO participants during training workshop and the outputs are a result of thousands of model runs. However, due to difficulties in validating the model the outputs the first scenario only, have been added to the tool. During the project period the model developers, Boston University, unsuccessfully sought additional funding to continue the validation process. CI will continue to work with BU to try and

				secure these funds in future fundraising efforts.
1	Component 1. Expand use of decision-support tools developed with MacArthur funding ensuring biodiversity and ecosystem services are included in decision-making and providing civil society with tools to evaluate and offer alternative development scenarios	1.3	Institutionalization of decision support tool with at least 2 of IFReDI(FiA), MoE, MoWRAM, Open Development and Centre for Khmer Studies.	Despite the training delivered in using the MIDAS decision support tool (see deliverable 1.4) we can't claim that it has been institutionalized in any of the target organizations. The main obstacle towards this was the delayed development of this complex tool. Ideally a final version would have been available earlier for partners to have extensively tested. Our ability to validate model outputs was limited. This was a Catch-22 situation. Validating model outputs requires both local knowledge and MIDAS tool expertise. Yet people with the requisite local knowledge, lacked knowledge of MIDAS. This was difficult to provide, as the tool was not fully developed - due to a lack of people with local knowledge who could validate the tool. Although not a predictive model, many of the outputs, e.g., upstream development eliminating migratory fish from the system, are politically sensitive and unlikely to be officially endorsed. However, numerous people were trained, and their positive feedback showed that the decision support approach was valued by NGOs and some government agencies, and there is potential for future development. Indeed, the Centre for Khmer Studies is developing an Urban Development and Innovation Program which will likely incorporate the MIDAS tool.
1	Component 1. Expand use of decision-support tools developed with MacArthur funding ensuring biodiversity and ecosystem services are included in decision-making and providing civil society with tools to evaluate and offer alternative development scenarios	1.4	1.4 Technical staff from at least 2 of the political targets and 5 of the civil society targets trained in manipulation of the decision-support tool.	In collaboration with activities funded via The MacArthur Foundation around 140 Cambodian's from both government agencies and NGO's were trained in manipulation of the MIDAS decision support tool. 30 staff from three political targets (FiA, MoE, FA, Apsara authority) received training whilst 16 staff from civil society organizations (WWF, WorldFish, FFI, SDC, NTFP-EP, WCS, FACT, NGOF, LI, Forum Syd, CEPA, Centre for Khmer Studies). Overall, we held four training workshops. Advanced training was provided to 10 Fisheries Administration staff and 8 Ministry of Environment staff in January 2019
1	Component 1. Expand use of	1.5	Decision makers/key	Nine decision makers/key stakeholders attended the MIDAS launch and subsequent training (see deliverable

	decision-support tools developed with MacArthur funding ensuring biodiversity and ecosystem services are included in decision-making and providing civil society with tools to evaluate and offer alternative development scenarios		stakeholders from at least 2 of the political targets and 5 of the civil society targets trained in interpretation and use for development planning of the decision-support tool scenario outputs.	1.4). Fisheries Administration: Deputy Director General; Director, Department of Aquaculture Development; Deputy Director, Department of Fisheries Affairs; Chief of Community Fisheries, Community Fisheries Development Department Ministry of Environment: Deputy Director General, General Department of Local Community; Department Director, General Department of Administration for Nature Conservation and Protection; Chief of Bureau, Department of EIA. Tonle Sap Authority: Deputy Director Ministry of Economy and Finance: Economist, General Department of Planning.
1	Component 1. Expand use of decision-support tools developed with MacArthur funding ensuring biodiversity and ecosystem services are included in decision-making and providing civil society with tools to evaluate and offer alternative development scenarios	1.6	Trade-off scenarios translated to accessible presentations: 2-4 poster presentations, 2 powerpoint presentations, 1 package of checklists, questionnaires , maps and images using simplified demonstration examples of basin development decisions.	As we were unable to validate all of the trade-off scenarios for the reasons provided for deliverable 1.2. We developed more detailed presentations on the completed MIDAS tool components. These along with other materials produced for the project (checklists, questionnaires etc) have been uploaded as this deliverable (Checklists & Posters.rar).
1	Component 1. Expand use of decision-support tools developed with MacArthur funding ensuring biodiversity and ecosystem services are included in	1.7	Working group – Terms of reference and members list for the technical working group, Meeting minutes from	Six meetings were held under the project (3 March 17; 8 May 17; 7 July 17; 29 Aug 17; 27 Nov 17; 1 Dec 17) two more than planned for in the proposal. The Terms of Reference has been uploaded to the CEPF website (TWGF_SubgroupCE_ToRs_2017.11.15.docx).

	decision-making and providing civil society with tools to evaluate and offer alternative development scenarios		the 4 meetings annually	
1	Component 1. Expand use of decision-support tools developed with MacArthur funding ensuring biodiversity and ecosystem services are included in decision-making and providing civil society with tools to evaluate and offer alternative development scenarios	1.8	Production of at least 2 science/policy briefs from: 'all dams in Cambodia'; the Energy Nexus and alternative energy sources; Agric-Fishery trade-offs in the TSL and Mekong floodplain; and PES schemes for dams impacting TSL and Mekong forest habitats	Whilst we did not produce any independent policy documents project staff did contribute to three policy documents. The former project director assisted the Fisheries Administration and Oxfam to produce a policy document on Potential Impacts of Water Infrastructure Development on Fish Spawning in Cambodia (https://cambodia.oxfam.org/policy_paper/science-brief-potential-impacts-water-infrastructure-development-fish-spawning-habitat). Project staff were involved in the drafting of "The effects of the Lower Sesan II dam on fisheries and the retrofitting of a fish pass facility" produced by the sub group on dams of the EU sponsored Technical Working Group on Fisheries (Sesan2 Policy Brief FINAL2.pdf). Project staff attended and contributed to the workshop discussions that produced the FishBio USAID policy document "Outcomes of the Workshop "Needs, Techniques, and Risk Assessment: Toward a Vision for Migratory Fish in Cambodia" (https://www.mekongfishnetwork.org/wp-content/uploads/2018/10/Migratory-Fish-Policy-Brief-English-version_final.pdf)
2	Create nationwide understanding of opportunities and challenges to effective NRM, sustainable fisheries and biodiversity mainstreaming. Using surveys to understand differences in community context and adaptive	2.1	A situational analysis of at least 11 fishing communities Cambodia-wide, distilling lessons to share, formally evaluating activities and defining a strategy for effective adaptation, expansion, replication and coordination	We have exceeded our target as the situational analysis has been conducted in 25 communities and a situational analysis report produced (CI-SciCap (2019) Resources Mapping.pdf). The main findings were: all land-based communities are highly dependent on fishing, except communities that own land for agriculture and other livelihood alternatives; all communities are affected to some degree by: water pollution, poor sanitation, challenges to access drinking water in dry season, migration and debt; even though most participants had basic knowledge of NRM and understand its benefits, illegal fishing activities remain prevalent.

	management needs, develop nationwide examples		nationwide.	
2	Create nationwide understanding of opportunities and challenges to effective NRM, sustainable fisheries and biodiversity mainstreaming. Using surveys to understand differences in community context and adaptive management needs, develop nationwide examples	2.2	Production of 4 how to guides in NRM, sustainable fisheries, biodiversity/conservation management, and basin development planning intervention strategy	We produced four guides: 1) How to guide for Natural Resource Management Basin Development Planning in the Lower Mekong Basin (Elliott (2019) Basin Development planning) brings a fresh perspective from global research to the regional planning process; 2) An interactive fishing game used with community fisheries to evaluate and understand their knowledge, perspectives, participation level, and natural resource management needs (CI-Sci-Cap Board game Kh, pdf; CI- Sci-Cap Board game Kh); 3) The "Guide to Inundated Tree Planting: Practical Experience" provides information on flooded forest restoration as derived from CI's experience (Dong (2019) Guide to inundated tree planting); 4) Participatory fisheries conservation in the Stung Treng Ramsar site gives an overview of the successful aspects of two projects undertaken by WorldFish (WorldFish (2019) Participatory fisheries conservation in the Stung Treng Ramsar site.pdf).
2	Create nationwide understanding of opportunities and challenges to effective NRM, sustainable fisheries and biodiversity mainstreaming. Using surveys to understand differences in community context and adaptive management needs, develop nationwide examples	2.3	A synthesis report of engagement mechanisms and key elements of planning for successful involvement of communities in NRM, sustainable fisheries, basin development planning and biodiversity mainstreaming drawn from demonstrations by CI and	The synthesis report on engagement mechanisms describes proven community engagement methods (CI-Sci-Cap Engagement mechanisms synthesis.pdf)

			other CSOs	
2	Create nationwide understanding of opportunities and challenges to effective NRM, sustainable fisheries and biodiversity mainstreaming. Using surveys to understand differences in community context and adaptive management needs, develop nationwide examples	2.4	1 best-practice handbook synthesizing key elements from output 2.1, 2.2 and 2.3	A range of natural resources management practices were presented throughout the project both as outputs for deliverables 2.1, 2.2 and 2.3 and the during the workshops. This included a suite of stand-alone best practice documents. However, we didn't did not synthesizing this information into a single report as there is little to be gained by summarizing the existing best practice documents as they need to be followed in full. A number of the less well developed and documented practices, whilst anecdotally reported as being useful, did not have the evidence base or detail to justify publishing them as best practice. These practices e.g. ecotourism development and fish production improvement, need to be developed and tested further prior to the production of best practice guidelines.
2	Create nationwide understanding of opportunities and challenges to effective NRM, sustainable fisheries and biodiversity mainstreaming. Using surveys to understand differences in community context and adaptive management needs, develop nationwide examples	2.5	Engagement of at least 5 CSOs from the target list identified in component 1, contributing best-practices and case-studies either from their project reports or direct engagements with reporting via meeting records and/or video documentation.	CSO involvement in the project was extensive and significant. Fifteen CSO's contributed case studies and best-practices to the project. This included MOT, DOT, FiA, FACT, WorldFish, Oxfam, CEPA, WWT, IUCN, VSG, VSO, WWF, WCS, CI, NTFP-EP. One of the case studies provided by WorldFish has been adopted as a how to guide whilst a range of partner CSO's provided presentations to the final two project workshops (CI-SciCap (2019) MNRM workshops synthesis report.pdf).
3	Engagement of key actors	3.1	Completion of peer-review	All component 2 outputs have been internally peer reviewed by CI technical staff. Unfortunately, efforts to

	(members of the NGO network and government) and facilitation of networking for both improved livelihood and ecosystem friendly development planning in the fisheries and hydropower sectors through exchange of successful approaches		evaluation of all component 2 outputs and products	engage local stakeholders in undertaking the peer review were unsuccessful due to technical issues and time constraints.
3	Engagement of key actors (members of the NGO network and government) and facilitation of networking for both improved livelihood and ecosystem friendly development planning in the fisheries and hydropower sectors through exchange of successful approaches	3.2	Materials created under component 2 distributed to audiences of at least 5 of civil society target list and 2 of political/ministry target list from component 1 above.	All project outputs have been made available to project partners through a web link to CI's Sharepoint site. The information will remain freely available for one year.
3	Engagement of key actors (members of the NGO network and government)	3.3	Coordinated parallel activities in fisheries management across at least	Throughout the project we have provided technical support to CFDD-FiA. The six co-convened workshops were our primary means of coordinating activities among eleven NGOs (WorldFish, Oxfam, IUCN, WWF, WCS, FACT, CEPA, NTFP-EP, VSG, VSO, Forum Syd), two development partners (EU and SDC) and four government agencies

	and facilitation of networking for both improved livelihood and ecosystem friendly development planning in the fisheries and hydropower sectors through exchange of successful approaches		6 communities and links created or reinforced with at least 5 of the civil society targets through use of the cross-geography/community compatible toolsets developed in component 1	(CFDD-FiA, DFC-FiA, IFReDI-FiA, and MOE). The workshops provided both information dissemination and training opportunities for CSO and government partners and also provided an entry point for the MIDAS tool training described in deliverables 1.4 and 1.5. A description of the workshop series activities and outcomes is provided in CI-Sci-Cap MNRM workshops synthesis report.pdf.
3	Engagement of key actors (members of the NGO network and government) and facilitation of networking for both improved livelihood and ecosystem friendly development planning in the fisheries and hydropower sectors through exchange of successful approaches	3.4	Successful completion of 1 launch workshop, 2 coordination/evaluation workshops, 2 training/mentoring workshops.	Overall, we organized six workshops in the Mainstreaming Natural Resource Management workshop series. A summary is provided in the attached report (CI-Sci-Cap MNRM workshops synthesis report.pdf). The launch workshop was held in Phnom Penh in November 2016. The other five workshops in the series each contained aspects of coordination/evaluation and training/mentoring,
3	Engagement of key actors (members of the NGO network and government) and facilitation of networking for both improved	3.5	Completion of 6 training/mentoring sessions/meetings with 6 of the civil society targets and 2 of the political/minist	The training/mentoring session were combined with the Mainstreaming NRM workshops and decision support tools trainings as described above. As detailed in our previous responses we have engaged with more than the six CSO targets and two ministries.

	livelihood and ecosystem friendly development planning in the fisheries and hydropower sectors through exchange of successful approaches		ry targets – 8 new audiences trained in the use, adaptation and interpretation of outputs from component 2.	

Please describe and submit any tools, products, or methodologies that resulted from this project or contributed to the results.

1. **Worldfish produced a case study describing their experiences in participatory fisheries conservation in the Stung Treng Ramsar site (WorldFish (2019) Participatory fisheries conservation in the Stung Treng Ramsar site.pdf);**
2. **An interactive fishing game used with community fisheries to evaluate and understand their knowledge, perspectives, participation level, and natural resource management needs – Board Game (CI-SciCap (2019) Fishing Board Game in Khmer.pdf)**
3. **Fishing board game rules in Khmer (CI-SciCap (2019) Fishing Board Game Rules Khmer.pdf)**
4. **Fishing board game rules in English (CI-SciCap (2019) Fishing Board Game Rules English);**
5. **MNRM workshop #6 presentations 2 of 2 (WS-6-2.zip)**
6. **MNRM workshop #6 presentations 1 of 2 (WS-6-1.zip)**
7. **MNRM workshop #5 presentations (WS-5.zip)**
8. **MNRM workshop #4 presentations (WS-4.zip)**
9. **MNRM workshop #2 presentations (WS-2.zip)**
10. **The "Guide to Inundated Tree Planting: Practical Experience" provides information on flooded forest restoration as derived from CI's experience (Dong (2019) Guide to inundated tree planting);**
11. **How to guide for Natural Resource Management Basin Development Planning in the Lower Mekong Basin (Elliott (2019) Basin Development planning)**
12. **A package of presentations from the workshop series (MNRM workshop presentations.zip);**
13. **The effects of the Lower Sesan II dam on fisheries and the retrofitting of a fish pass facility produced by the Sub group on dams of the EU sponsored Technical Working Group on Fisheries (Sesan2 Policy Brief FINAL2.pdf);**
14. **MNRM workshop series synthesis report provides a summary of the proceedings and outcomes of the projects six information and training workshops along with best practice guidelines for establishing community ecotourism and improving the quality of processed fish products (CI-SciCap (2019) MNRM workshops synthesis report.pdf);**
15. **The trade-offs and decision support presentation package is a collection of posters, presentations and other materials that can be used to present and explain various aspects of the project (Checklists & Posters.rar);**

16. **Terms of Reference for the Conservation and Economic Sub-Group of Technical Working Group on Fisheries which met six times during the course of the project (TWGF_SubgroupCE_ToRs_2017.11.15.docx);**
17. **The synthesis report on engagement mechanisms describes proven community engagement methods (CI-SciCap (2019) Engagement mechanisms synthesis);**
18. **Resilience mechanisms describes activities such as activities such as replanting, sustainable fish farming, solar power and crop diversification used by fishing communities to both climate and environmental change (CI-SciCap (2019) Resilience Mechanisms);**
19. **Sustainable fish production options describe potential methods for increasing the quality of fish products and finding market outlets. And guidance on creating village savings groups (CI-SciCap (2019) Sustainable production options);**
20. **Communication Channels within Communities Fisheries in Cambodia - a field survey of 25 community fisheries examining the communication channels villagers use to access information, the type of information received, and how it is disseminated (CI-SciCap (2019) Fishing communities communications);**
21. **Interactive Community Resources Mapping - the natural resources of 22 community fisheries in Cambodia were mapped, proving an understanding of physical geography, resources, and community potential (CI-SciCap (2019) Resources Mapping.pdf);**
22. **Situational Analysis - A description of engagement mechanisms and key elements of planning for successful involvement of communities in NRM, sustainable fisheries, basin development planning and biodiversity mainstreaming drawn from demonstrations by CI and other CSOs (CI-Sci-Cap (2019) Situational Analysis.pdf).**

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building.

Consider lessons that would inform:

- Project Design Process *(aspects of the project design that contributed to its success/shortcomings)*
- Project Implementation *(aspects of the project execution that contributed to its success/shortcomings)*
- Describe any other lessons learned relevant to the conservation community

NA

Sustainability / Replication

Summarize the success or challenges in ensuring the project will be sustained or replicated, including any unplanned activities that are likely to result in increased sustainability or replicability.

NA

Safeguards

If not listed as a separate Project Component and described above, summarize the implementation of any required action related to social, environmental, or pest management safeguards

Not applicable

Additional Comments/Recommendations

Use this space to provide any further comments or recommendations in relation to your project or CEPF

NA

Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of CEPF investment

Total additional funding (US$)
$1,700,000.00

Type of funding
Please provide a breakdown of additional funding (counterpart funding and in-kind) by source, categorizing each contribution into one of the following categories:

A *Project Co-Financing (other donors or your organization contribute to the direct costs of this project)*
B *Grantee and Partner Leveraging (other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project)*
C *Regional/Portfolio Leveraging (other donors make large investments in a region because of CEPF investment* or successes related to this project)

A.
CI received US$1,700,000 from MacArthur Foundation for a three-year grant (2015-2018) to support implementation of field activities, and translation of science outputs to policy for the Cambodian Mekong Basin including the Tonle Sap Lake.

The MacArthur funding included support to the Tonle Sap Scape team who integrated parallel activities at the CI project sites with this project. The CI Tonle Sap Scape team also supported the projects consultants and project manager to develop lessons learned and other project materials. CI's office manager supported the arrangements of meetings and workshops. This funding also supported the projects former principal investigator to implement the project and the Greater Mekong Director to facilitate the government discussions, deliver messaging of project outputs at national workshops and participation in working groups convened by this project.
CI also sub-granted Boston University US$ 150 000 from MacArthur Foundation, for the development of MIMES/MIDAS platform and Tonle Sap Lake development scenarios.

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

1. Please include your full contact details (Name, Organization, Mailing address, Telephone number, E-mail address) below

Dr Nicholas J Souter, Conservation International, Room 311 Oliphant Building, The University of Adelaide, Adelaide South Australia, nsouter@conservation.org. (Project Manager from November 2018-March 2019)