

**Environmental Impact Assessment  
and  
Environmental Management Plan**

**26 March 2020**

**CEPF Grant 110327**

**Sansom Mlup Prey Organization**

*Wildlife-friendly community irrigation ponds for climate resilience, habitat and  
collective management in Cambodia*

**Kulen Promtep Wildlife Sanctuary, Preah Vihear Province, Cambodia**

## Grant Summary

1. Sansom Mlup Prey Organization
2. Wildlife-friendly community irrigation ponds for climate resilience, habitat and collective management in Cambodia
3. CEPF - 110327
4. USD \$180,000
5. 06/01/2020 – 05/31/2022
6. Cambodia
7. This project will pilot linkages between climate resilience for farmers and wildlife by creating and collectively managing "wildlife-friendly community irrigation ponds" in community zones of the Kulen Promtep Wildlife Sanctuary (KPWS). Two villages in the wildlife sanctuary have been selected for their importance to biodiversity and the existing community experience involving the co-benefits of wildlife-friendly, organic agriculture and high-value ecotourism linked to critically endangered species visible from the village.

With support, input and consultation from stakeholders and partners, the project will excavate two wildlife-friendly community irrigation ponds. The pond locations will be accessible to farmers with adjacent farmland, and each of these “clusters” will be responsible for collectively managing the water resource according to an agreed conservation plan. The conservation agreements will outline the cooperative management principles for the water resource, guide the use of ponds outside of the rainy season, and will ensure the clusters’ wildlife-friendly water resource management and adherence to Ibis Rice conservation principles.

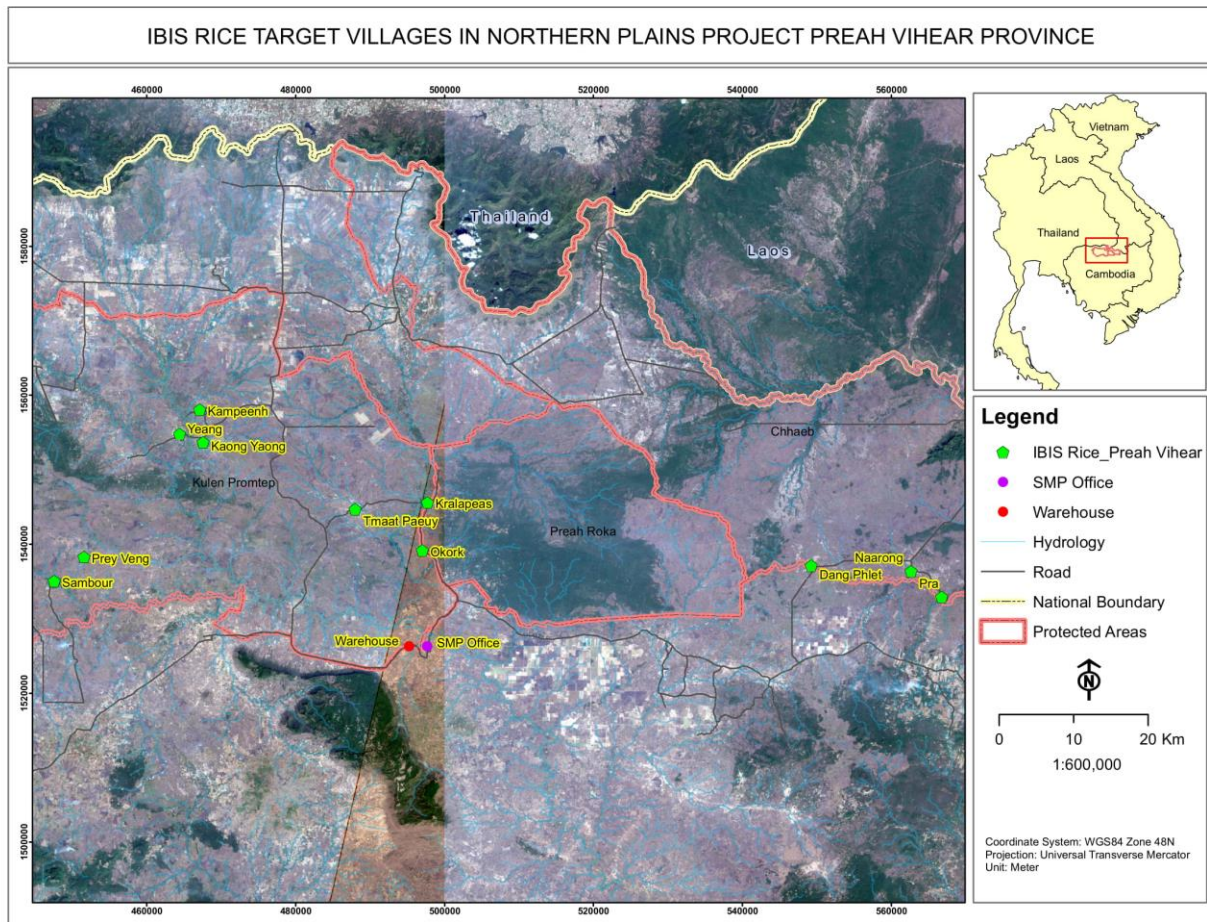
The project aims to increase water availability for Ibis Rice farmers, increasing yields and income from rice while contributing to the sustainability and climate resilience of farmers. Moreover, the ponds will increase availability of aquatic foraging habitat for endangered water birds, increasing nest success and leading to larger populations while enhancing wildlife viewing opportunities for ecotourists, maintaining or increasing ecotourism revenue for these communities. Finally, the project hopes to develop a culture of collective responsibility and provide a model for wildlife-friendly collective management of water resources in community zones of protected areas. If successful, this model can be promoted and brought to scale through the work of management authorities at relevant state ministries and departments.

8. 09 March 2020
9. **Status of area to be impacted:** *This section should describe the applicant’s understanding of the site.*

The KPWS covers an area that overlaps with the boundaries of three provinces in the northwestern region of Cambodia, near the borders with neighboring Thailand and Laos. The KPWS portion located in Preah Vihear province is 240,190 ha, of which 94,471 will be designated as community zone. In the project target villages (Tmatboey and Prey Veng) there is a total of 8,200 ha of community zone of which only 2,400 ha is currently used as agricultural land. Of this agricultural

land 1,400 ha is being cultivated under the Ibis Rice scheme. Within both the agricultural land and the non-agricultural land there are incredibly important habitats for critically endangered species.

The two villages selected for implementation are located in Preah Vihear province but in different administrative districts. Tmatbauy village is located in Pring Thum Commune, Chaom Khsant District, Preah Vihear Province. Prey Veng village is located in Srayang Commune, Kuleaen District, Preah Vihear Province. Within the respective villages, the areas that will be impacted are existing farmland in designated community zones of the KPWS.



*The two project villages identified on the map above (Tmaat Paeuy [Tmatbauy] and Prey Veng).*

Since the enactment of Protected Area Law (2008), the Ministry of Environment in collaboration with the Wildlife Conservation Society have been implementing participatory protected area zoning activities to develop four management zones within the protected areas (Core, Conservation Area, Sustainable Use, and Community) together with local communities. The process and zonation plans have now been approved by the Preah Vihear provincial authorities, and has been submitted for ratification by the Ministry of Environment, and subsequent approval by the Council of Ministers.

Within the Community Zone of a protected area, a land use plan is developed for each village. This plan determines areas that can be cultivated for rice, areas of forest which must be protected due to

the services that it provides, and areas of forest that may be cleared in the future for pre-defined community uses.

10. **Approach:** This section will describe proposed actions during the project. Specifically, what do you intend to do and how will you do it?

This project will pilot linkages between climate resilience for farmers and wildlife by creating and collectively managing "wildlife-friendly community irrigation ponds" in community zones of the Kulen Promtep Wildlife Sanctuary (KPWS). Two villages in the wildlife sanctuary have been selected for their importance to biodiversity and the existing community experience involving the co-benefits of wildlife-friendly, organic agriculture and high-value ecotourism linked to critically endangered species visible from the village.

With support from stakeholders and partners, the project will produce a land-use map of the two pilot villages (Tmatboey and Prey Veng) where three irrigation ponds will be located. The project will excavate two irrigation ponds in Tmatboey village and one pond in Prey Veng village. The land-use map will include information such as nest locations, farmers' field boundaries, and other relevant information and will serve as a guide for specific site selection of the respective irrigation ponds. The pond locations will be accessible to farmers with adjacent farmland, and each of these "clusters" will be responsible for collectively managing the water resource according to an agreed conservation plan. Together with the community stakeholders, the project will identify these clusters of farmers that show high potential for cooperative use of a water resource, willingness to excavate ponds on their farmland, complete understanding of the rationale behind the project, and a high commitment to organic and wildlife-friendly agricultural production.

The project will work closely with the target communities and relevant stakeholders including local authorities to introduce them to the project activities and collect community input. Such consultations will contribute to the development of conservation agreements. The conservation agreements will outline the cooperative management principles for the water resource, guide the use of ponds outside of the rainy season, and will ensure the clusters' wildlife-friendly water resource management and adherence to Ibis Rice conservation principles. Conservation agreements for each wildlife-friendly community irrigation ponds will be signed and endorsed by cluster members and approved by the Community Protected Areas Committee (CPA).

After site selection and determining the physical specifications of the irrigation ponds, the ponds will be excavated either by hand or using light machinery and the project will explore options for developing beneficial habitat to enhance the ecological value of the ponds. To encourage the use of cover crops and other agricultural diversification before and after rice production, and to prevent livestock intrusion into the fields and ponds, the project will construct fencing around the fields where the wildlife-friendly community irrigation ponds are located.

Following local custom, the project will support ceremonies to be held at the groundbreaking events for the excavation of the wildlife-friendly community irrigation ponds. Groundbreaking events will include village and community leaders, authorities and other stakeholders, and will be used as an opportunity to inform and distribute project grievance mechanisms and other informational materials. Informational materials will also be distributed to relevant stakeholders in meetings, consultations, and other work in the community.

Throughout the pilot, SMP will deliver trainings to community participants on water harvesting and crop management including the use of cover crops. These trainings will help to strengthen adherence

to the conservation agreement and share applicable knowledge and practices related to the sustainable use of the water resource. For purposes of monitoring and evaluation, the project will also document the pilot project process and results by evaluating Ibis Rice yields by comparing figures before and after the installation of ponds, conducting interviews with project participants, documenting input from consultations, installing camera traps, and other documentation including maps and photos.

This pilot project will explore this innovation within the very successful Ibis Rice model using existing (a) staff and community networks and infrastructure, (b) technical agroecology partners, (c) organic certification services and market access from private sector partner Ibis Rice Conservation Co., Ltd., and (d) ecotourism benefits offered by Sam Veasna Conservation Tours, Ltd.

By demonstrating the importance of identifying important habitat within the community zone of a protected area and developing resilient, high-value agricultural practices that maintains biodiversity this pilot project intends to serve as an example of best practice for community zones' natural resource management across KPWS and adjacent wildlife sanctuaries. Moreover, it could potentially act as a pilot model for future local development plans within the commune investment planning (CIP) system that has recently been further expanded by the Royal Government of Cambodia. (In 2019 local administrations were told by the Ministry of Interior that each commune and council administration will receive an annual budget of \$120,000 to address their constituents' needs). Working with partners this project will inform the development of management plans for community zones.

11. **Anticipated impact:** this section will describe the impact and how this impact has been determined.

The project anticipates that any environmental impact would result from the excavation process itself. This could potentially include effects to the health of the soil, such as loss of fertility, compaction and erosion. Excavation could also potentially affect the health of the root systems and rhizosphere of nearby trees both within and on the margins of the farmland, as many rice fields in the community are intercropped amongst native trees.

If the ponds are successful in attracting wildlife, such as critically endangered bird species, it could lead to an increased potential for human-wildlife conflict if birds and people are coming into closer contact with one another in and around the irrigation ponds.

12. **Mitigation measures:** Describe measures that will be taken to mitigate negative impacts.

To mitigate any potential negative effects to the health and structure of the soil, excavation will take place entirely by hand or with existing light machinery (such as hand rototillers). No heavy machinery or equipment will be used in the excavation process thus mitigating the chances of soil compaction, and major disrupting effects to the root systems of any nearby trees.

In addition to this, the project in collaboration with community participants will establish criteria for site selection that will likely include conditions such as the prohibition against clearing trees to make way for irrigation ponds. Moreover, the project intends to explore options for developing beneficial habitat to enhance the ecological value of the ponds. This may include the planting of hedges, herbaceous plants, or trees and shrubs along the margins of excavated areas to help stabilize the soil and prevent erosion and provide additional habitat.

To improve the overall health and fertility of soil in the surrounding farmland, the project will deliver practical trainings and assist with demonstration trials on the use of cover cropping and sustainable rice production.

A major component of the project is the development and adherence to a conservation agreement that will guide the use and management of the wildlife-friendly community irrigation ponds. Any such agreement will most definitely include principles already defined by the Ibis Rice scheme in which farmers must agree to conditions such as no hunting, no forest clearance, and no use of agricultural inputs.

Adding to this agreement will be the installation of camera traps around the ponds that will be used to monitor wildlife. It is expected that the presence of cameras will help enforce adherence to wildlife-friendly principles by farmers and other community members.

13. **Actions to ensure health and safety:** *Describe actions that will be taken to ensure the health and safety of workers as well as the site. Include a description of waste management and/or disposal.*

SMP will encourage and, if necessary, provide proper safety equipment and tools for hired workers who will excavate the irrigation ponds. SMP will also help to provide drinking water so workers stay hydrated while working in the heat. SMP will also provide trash bags and will help to clean and properly dispose of any trash and debris left by workers at the project site.

14. **Monitoring and Evaluation:** *This section aims to outline what steps the proponent will take to monitor and evaluate the impact of the proposed intervention.*

For purposes of monitoring and evaluation, the project will document the pilot project process, results, and impacts through various mechanisms, both internally and externally. This will include evaluating rice yields, conducting interviews with project participants, documenting input from consultations and workshops, installing camera traps, and other documentation including maps, photos of the implementation process and results, and camera traps to monitor wildlife.

A large component of the monitoring will involve input and perceptions gathered from community members interviewed before and after the pilot project implementation. The project plans to share all monitoring and evaluation and documentation of the process with relevant stakeholders, especially local Commune Councils, Community Protected Area (CPA) committees, the Provincial Department of Environment, and the Local Communities Department at the Ministry of Environment.

15. **Permission of the landowner:** *Please verify permission of the landowner to undertake actions on the site, and verify that you have the required permits to undertake this work.*

PLEASE SEE SECTION BELOW – Selections for site location will be decided in consultation with community members and other relevant stakeholders.

16. **Consultation:** *This section aims to outline the range of informed consultations that the grantee has had both with experts to optimize the potential for success, and with stakeholders, particularly local communities, who are potentially affected by the proposed actions. Include dates of consultations.*

The initial activities of the implementation of this pilot project will involve participatory meetings and consultations with the communities where the project has proposed to excavate irrigation ponds. These consultations will be used to gather input about the implementation of the project and to determine the criteria for selecting the sites where the ponds will be located. These consultations will also help to provide input for the development of a conservation plan that will guide the management and determine the guidelines for the use of the irrigation ponds.

The pond locations will be accessible to farmers with adjacent farmland, and each of these “clusters” will be responsible for collectively managing the water resource according to an agreed conservation plan. Together with the community stakeholders, the project will identify these clusters of farmers that show high potential for cooperative use of a water resource, willingness to excavate ponds on their farmland, complete understanding and agreement with the rationale behind the project, and a high commitment to organic and wildlife-friendly agricultural production.

The project will work closely with the target communities and relevant stakeholders including local authorities to introduce them to the project activities and collect community input. Such consultations will contribute to the development of conservation agreements. The conservation agreements will outline the cooperative management principles for the water resource, guide the use of ponds outside of the rainy season, and will ensure the clusters’ wildlife-friendly water resource management and adherence to Ibis Rice conservation principles. Conservation agreements for each wildlife-friendly community irrigation ponds will be signed and endorsed by cluster members and approved by the Community Protected Areas Committee (CPA).

17. **Disclosure:** *CEPF requires that safeguard documents are disclosed to affected local communities and stakeholders prior to project implementation. Please describe efforts to disclose this impact assessment and environmental management plan and provide dates.*

The project will fully explain and provide the grievance mechanism prior to implementation of the project, at the beginning of the project consultations, and during specific phases of the project progress, including at the groundbreaking ceremonies of the pilot ponds.

Prior disclosures will take place during the months of April, May, and June 2020.

18. **Grievance mechanism:**

- Sansom Mlup Prey Organization (SMP) – Keo Socheat, Executive Director, [socheat@smpcambodia.org](mailto:socheat@smpcambodia.org), Tel: 086 55 00 27 / 011 98 45 44
- CEPF Regional Implementation Team:  
**Organization:** International Union for Conservation of Nature, Asia Regional Office  
**Phone:** +66 2 662 4029  
**Email:** [CEPF-Indoburma@iucn.org](mailto:CEPF-Indoburma@iucn.org)  
**Mailing Address:** 63 Sukhumvit Soi 39, Wattana, Bangkok 10110, Thailand
- The email of the CEPF Executive Director: [cepfexecutive@conservation.org](mailto:cepfexecutive@conservation.org)

- The project has planned for appropriate grievance mechanisms in the project activities and has budgeted for these activities and materials. Notification of the grievance mechanisms will take a few different forms and will use Khmer language. Firstly, these will include outdoor signboards with the required information in the to be installed at the location of each pond.

At both villages where the pilot project will operate, SMP has helped support the formation of Village Marketing Network (VMN) groups and Community Protected Area (CPA) committees. These groups usually meet at the group leaders' house. In addition to the outdoor signboards, posters and letterboxes with the required information will be printed and placed in visible locations at these meeting points for convenient access existing community management entities. Posters and letterboxes will also be installed at the two respective Commune Halls that house the offices and administrative services of local government authorities of the villages.

Additionally, the project will fully explain the grievance mechanism verbally at the beginning of the project implementation and during specific phases of the project progress, including at the groundbreaking ceremonies of the pilot ponds

- “We will share all grievances – and a proposed response – with the Regional Implementation Team and the CEPF Grant Director within 15 days. If the claimant is not satisfied following the response, they may submit the grievance directly to the CEPF Executive Director at [cepfexecutive@conservation.org](mailto:cepfexecutive@conservation.org) or by surface mail. If the claimant is not satisfied with the response from the CEPF Executive Director, they may submit the grievance to the World Bank at the local World Bank office.”