



CEPF Final Project Completion Report

Organization Legal Name	OSMOSE
Project Title	Environmental Education Program in Peck Kanties Floating Village, in the Prek Toal Core Area of the Tonle Sap Biosphere Reserve
CEPF GEM No.	CEPF- 012-2014
Date of Report	31st August 2016
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CEPF Region: Indo- Burma Hotspot

Strategic Direction:

SD4: Empower local communities to engage in conservation and management of priority key biodiversity areas

IP4.1 Raise awareness about biodiversity conservation legislation among target groups at priority sites

Grant Amount: \$19,600

Project Dates: 1 July, 2014 – 31 July, 2016

1. Implementation Partners for this Project (*list each partner and explain how they were involved in the project*)

- The PK primary school director and teachers: OSMOSE partners with school director and teachers for the enrolment of EE students and once every year when the school vacation starts in order to update the student lists. The school director and teachers also involve with OSMOSE for EE adult awareness events in the village.
- The village chief of PK: OSMOSE collaborates with the village chief in promoting EE adult awareness through EE events in term of improving and minimizing environmental impact in the village.
- The Prek Toal conservation team (rangers): OSMOSE partners with local ranger teams to educate EE children about natural resources such as flooded forest, water birds, and conservation etc...

- The Commune Council of Koh Chiveang: OSMOSE also collaborates with the Commune Council in pushing villagers to support and involve in EE protection and participation in EE adult awareness events.
- The Prek Toal Core Area Management Center (PCMC): An informal agreement to partner with OSMOSE for EE to arrange schedule for rangers to join EE outdoor activities (bird watching & flora studies)
- The Department of Education, Youth and Sports (MoEYS) in Battambang province: A formal agreement with OSMOSE to support EE project by pushing public school directors and teachers for a good collaboration with OSMOSE EE project staff.

Conservation Impacts

2. Describe how your project has contributed to the implementation of the CEPF ecosystem profile

The EE project in Peak Kantiel has contributed to the implementation of the CEPF ecosystem profile through:

- Involving more conservation responsibility and participation of a community lying at a key access point to the water bird colonies of Prek Toal Ramsar Site, Tonle Sap Lake.
- Empowering local communities to engage conservation and management of Prek Toal Ramsar Site, one of the key prioritized biodiversity sites.
- Raising specific and locally adapted environmental awareness to children who represent the future keepers and stakeholders of their natural environment.

3. Summarize the overall results/ impact of your project

There were 160 students involved in the project and 268 indoor classes and 49 outdoor activities have been held in PK floating village and Prek Toal Ramsar Site.

There were 2 environmental awareness events for adults (Waste Collecting Day in my village and EE movie show) done with a good collaboration from all partners and stakeholders.

Since EE project has been implemented in PK floating village, the children of the village have gained and improved a lot about environmental awareness or knowledge which are the key objectives of EE project. Moreover, those children would be a very good example for other villagers to follow them in term of minimizing environmental impact in the village to improve their living condition in the near future.

Planned Goal (as stated in the approved proposal)

Threats to the biodiversity of the Prek Toal Core Area of the Tonle Sap are reduced, as a result of increased awareness of environmental issues and biodiversity legislation among the population of Peck Kantiel Village

4. Actual progress toward Goal at completion

The population of the water birds has been increasing and threats to the biodiversity of the Prek Toal Ramsar Site of the Tonle Sap Lake are reduced while the EE project has been implemented well at the project site under the involvement of the local authority, villagers especially with the strong commitment of EE staff in PK floating village. As the result, the environmental awareness of the local communities (villagers and children), leads reduction of threats to the biodiversity of the Prek Toal Ramsar Site (deforestation, illegal fishing and bird poaching are reduced).

Planned Objectives (as stated in the approved proposal)

Objective 1:

The essential physical infrastructure and staff for the delivery of an environmental education program in Peak Kantiel are in place.

Objective 2:

At least 120 children have increased awareness of local environmental issues and the importance of biodiversity.

Objective 3:

The entire Peak Kantiel adult community has increased awareness of local environmental issues and the importance of biodiversity.

5. Actual progress toward Objectives at completion

The team of 4 OSMOSE staff conducted family interview in PK village. The former EE platform was repaired and towed to PK villager together with the purchased equipment and materials needed for EE project. An old wooden boat was repaired and driven to PK.

A job announcement in the village was held to find EE staff, a man and a woman were identified and recruited as the EE educators while another man was recruited as a boat driver and security guard. Employment contract between OSMOSE and local EE staff in PK were signed before providing them trainings to be able to start their EE activities, and the ongoing monthly capacity building and training were always continued by the Project Manger to improve their teaching performance.

The enrollment of 160 EE students appeared and conducted by EE educators in collaboration with school director and teachers. Those students were divided into 10 different groups for either EE indoor classes or outdoor activities. In reality, there were 268 indoor classes and 49 outdoor activities have been held in PK village and Prek Toal Ramsar Site.

At the same time, two local paddlers for EE project have been identified among the poorest families of the village, and one of them was a former paddler from the previous OSMOSE program in PK village.

There were two adults EE awareness events organized in PK: 1) “Waste Collecting Day in my village” with the participation and collaboration from partners and friends of OSMOSE such as local authorities(village chief, commune chief, policemen and village securities), local rangers, villagers, EE students, lecturers and students from Siem Reap. 2) “Environmental Education movie show” in PK village with participation and collaboration from local authority (village chief and village securities), school director and teachers, EE students and the villagers.

6. Describe the success or challenges of the project toward achieving its goal and objectives

The main success of the project toward achieving its goal and objectives are a good collaboration with the project partners and stakeholders such as local authority, local rangers, local school directors and teachers, villagers and especially the commitment of EE staff at the project site.

Therefore, there were also some challenges of the project toward achieving its goal and objectives such as natural restriction (low water level, storm, too much mud etc...). As the project site is at the floating village of the Tonle Sap Lake, the natural restriction usually occurs seasonally which really affects our EE project both indoor classes and outdoor activities.

In addition, some EE students were supposed to help their families ‘fishing, cutting fish’s head to earn more family income. The water level of Tonle Sap Lake experienced a major change in the water level during the project period (the lowest). This cause PK floating village became very muddy in all parts of the village in the dry season which EE classes could not be implemented as planned.

Moreover, there was a lot forest fire occurred in the last few months of the project period.

7. Were there any unexpected impacts (positive or negative)?

After EE project implementation has been held in PK village for two year periods with the potential attractions of natural resources, the villager chief and villagers have started urging Eco-Tours to their village from OSMOSE with some purposes of generating more incomes through providing services to the visitors. This proposed idea from the community was brought by our PK EE team to discuss with managers and director during Participatory Action Plan (PAP) Workshop 2016.

Project Activities and Deliverables

Objective 1 (as stated in the approved proposal)

The essential physical infrastructure and staff for the delivery of an environmental education program in Peak Kantiel are in place.

8. Describe the deliverables met under Objective 1

The team of 4 OSMOSE staff was at the field work from July 23 to July 25, 2014. Considering the lack of time and budget, the sample was involved with 12 families. Additional questions were asked to both former village chief and new village chief in order to have a global view on the village as well as the community.

The work to fix the platform lasted 8 working days for two-week periods with 5 workers under the daily supervision from our Local Development Manager and Project Site Coordinator. The overall supervision was done by our Project Manager. As the roof was too much damaged, the carpenters had to fix it as well. The stationeries (25 chairs, 2 big tables, 1 desk) were then purchased to furnish the EE platform.

The distance between two floating villages is around 30 Km. Towing the platform from Prek Toal village to PK village usually takes 3 hours, but this time it took 5 hours with postponing 3 times before finding a window of opportunity (the end of the rainy season was quite stormy on the lake). The platform was finally reached at project site in September 2014.

A man and a woman were recruited as local EE educators, and another man as EE boat driver and night guard. The three of them are PK villagers, and the woman is also a former student from the previous OSMOSE program in PK. They signed their contract with OSMOSE on September 01, 2014. Since then, they have been trained on capacity building once a month for 22-month periods. The training and capacity building was given by our Project Manager.

The main topics of the trainings as following:

- Activities planning
- Lesson planning
- The Cooperative Learning Strategy (student center learning strategy)
- Bloom Taxonomy, there are 6 types of teaching strategy: 1) Remembering, 2) Understanding, 3) Applying, 4) Analysis, 5) Evaluation/ assessment, 6) Creation
- Team work
- The use of EE tools and products (EE manual & flashcards, EE flipcharts, EE posters)

Moreover, the EE educators were supposed to attend OSMOSE Ecotourism Guide Practical Training in Prek Toal Ramsar Site in order to learn about flooded forest, bird identification and the conservation etc...

Considering diverse rationales, we have decided not to buy a new boat, but to fix the old one. Because the loss of flooded forest is one of the main threats on the ecosystem of the Tonle Sap Lake, OSMOSE showed the local community the effectiveness of existing wooden boat recycling instead of buying a new one.

Objective 2 (as stated in the approved proposal)

At least 120 children have increased awareness of local environmental issues and the importance of biodiversity.

9. Describe the deliverables met under Objective 2

The enrollment period started in November 2014 and last updated in July 2016, there were 160 students, 80% of the total students could attend after the EE project started, and 10 different groups were set up instead of 8 based on the safety reasons (number of children on the boat). Noticeably, EE student lists were needed to review and update for new academic year 2016-2017 (new students enrolled especially grade 1 students).

268 EE indoor classes have been held by EE educators (74%) comparing to 360 planned EE indoor classes. Some main reasons occurred differently; low water level in May and there were no EE classes in June, school vacation for 2 months (September & October), and new academic year in November which EE educators normally needed time to review and update student lists.

49 EE outdoor activities, bird watching, waste collection and flora studies, have been organized by EE educators (63%) comparing to 80 planned EE outdoor activities. Some main reasons also happened differently; low water level in May and June, and village waterways and channels in the reserve were blocked by the water-hyacinth in August. In addition, only two outdoor activities have been organized each month with a local ranger since January. The main reason is a schedule issue: The rangers are not always available to join OSMOSE EE outdoor activities.

Objective 3 (as stated in the approved proposal)

The adults in the entire PK village have increased awareness of local environmental issues and the importance of biodiversity.

10. Describe the deliverables met under Objective 3

Following the planned objective 3, 2 women from the poorest families in the village have been identified and recruited as the paddlers for EE activities, one of them is a former paddler from the previous OSMOSE program in PK village. World Environmental Day & World Migratory Bird Day events were not organized in the village because the water level was usually very low in this period, so the boats could hardly move, and people had to walk one hour to find water source from PK village. Instead, OSMOSE team organized the event called "Waste Collecting Day in my village". Moreover, "Short Environmental Education movie" was showed at PK floating village. The two events were well organized with the participation and collaboration from partners and friends of OSMOSE such as local authorities, local rangers, villagers, EE students, lecturers and students from Siem Reap, etc... These events remained a successful achievement under both good cooperation with local authorities, villagers and OSMOSE friends from Siem Reap.

To evaluate the impact of EE project implementation in PK village, a survey report on the level of awareness of biodiversity conservation legislation was broadly conducted to the villagers. In return, the outcome of this survey indicated that environmental awareness was spread

throughout the village under noticeable aspects of minimizing environmental impacts especially waste management inside the their village.

11. If you did not complete any activity or deliverable, how did this affect the overall impact of the project?

The constraints to the EE project implementation in the last few months of the project period faced was all about the low water level which caused some difficulties to implement EE activities in April and May 2016, and we could not implement the rest of EE activities in June 2016. Based on the mutual understanding and agreement between OSMOSE and CEPF/IUCN, we decided to extend the grant contract one month, so OSMOSE finally did all activities or deliverable as per approved proposal.

Therefore, the number of EE classes (indoor and outdoor) was not sufficient as planned due to the weather restriction, storm in the wet season, and too low level of the lake in the dry season. Moreover, the water ways and channel sometimes got blocked by the water- hyacinth in the dry season.

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

For EE project in PK village, EE educators were basically based on EE manual & EE flash cards, EE posters (Flora and Fauna of Tonle Sap Lake), bird book (Cambodian bird book), EE flipcharts for their teaching both EE indoor classes and EE outdoor activities. EE educators always prepared their lesson plan before teaching EE students through various teaching techniques depending on each EE lesson. However, monthly capacity building training for EE educators still plays a very important role to strengthen their teaching performance for a better improvement.

CEPF Global Monitoring Data

Respond to the questions and complete the tables below. If a question is not relevant to your project, please make an entry of 0 (zero) or n/a (not applicable).

13. Did your organization complete the CEPF Civil Society Tracking Tool (CSTT) at the beginning and end of your project? Yes

We will submit the final CSTT tool to the RIT.

List any vulnerable, endangered, or critically endangered species conserved due to your project none

Hectares Under Improved Management

Project Results	Hectares*	Comments
14. Did your project strengthen the management of an existing protected area?	21,342ha	Prek Toal Core Area
15. Did your project create a new protected area or expand an existing protected area?	n/a	List the name of each protected area, the date of proclamation, and the type of proclamation (e.g., legal declaration, community agreement, stewardship agreement)
16. Did your project strengthen the management of a key biodiversity area named in the CEPF Ecosystem Profile (hectares may be the same as questions above)	21,342ha	Prek Toal
17. Did your project improve the management of a production landscape for biodiversity conservation	n/a	List the name or describe the location of the production landscape

* Include total hectares from project inception to completion

18. In relation to the two questions above on protected areas, did your project complete a Management Effectiveness Tracking Tool (METT), or facilitate the completion of a METT by protected area authorities? If so, complete the table below. (Note that there will often be more than one METT for an individual protected area.)

OSMOSE did not complete a Management Effectiveness Tracking Tool (METT), or facilitate the completion of a METT.

Protected area	Date of METT	Composite METT Score	Date of METT	Composite METT Score	Date of METT	Composite METT Score
n/a						
n/a						
n/a						
n/a						

19. List the name of any corridor (named in the Ecosystem Profile) in which you worked and how you contributed to its improved management, if applicable.

Priority corridor: Tonle Sap Lake and Inundation Zone

The enhancement of the environmental awareness to the community in PK Village, Prek Toal Ramsar Site, Tonle Sap Lake and minimization of environmental impact to the lake. Community approach to the conservation of Prek Toal species through Environmental awareness.

Direct Beneficiaries: Training and Education

<i>Did your project provide training or education for . . .</i>	Male	Female	Total	Brief Description
20. Adults for community leadership or resource management positions	7	0	7	Village chief and village security guards
21. Adults for livelihoods or increased income	2	3	5	2 paddlers women, 1 educator women, 1 educator man 1 boat driver and security guard man
22. School-aged children	84	76	160	Primary school students
23. Other				

24. List the name and approximate population size of any “community” that benefited from the project.

Peak Kantiel Village, Koh Chiveang Commune, Ek Phnom District, Batambang Province, Cambodia. About 200 families = around 1,000 people

25. Socioeconomic Benefits to Target Communities

Based on the list of communities above, write the name of the communities in the left column below. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes

Community Name	Community Characteristics							Nature of Socioeconomic Benefit													
	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists / nomadic peoples	Recent migrants	Urban communities	Communities falling below the poverty line	Other	Increased income due to:				Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices	More secure access to water resources	Improved tenure in land or other natural resource due to titling, reduction of colonization, etc.	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure sources of energy	Increased access to public services, such as education, health, or credit	Improved use of traditional knowledge for environmental management	More participatory decision-making due to strengthened civil society and governance	Other
									Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services									
Peak Kantiel Community		x	x		x		x		x	x	x	x	x			x	x	x	x		

If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit:

Lessons Learned

26. 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 projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community

- The planned preparation phase was too short for this EE new project which was only restarted with this grant. In reality, it took 4 months different. We should plan for a longer preparation phase at least 4 months.
- Planned preparation of outdoor activities falls into wrong expectation with real situation of bird disperse on the lake which needs to be more accurate for next work plan.
- Public school is closed during this period, and all activities are getting stuck because of the low water level.
- The families of the students are moving so far from each other to find the suitable places close to the water source.

27. Project Design Process (*aspects of the project design that contributed to its success/shortcomings*)

- Good cooperation with partners and stakeholders (DoEYS in Battambang, PCMC, local authority, villagers, school director and teachers)
- Proper activities planning
- Proper budget planning and activity planning of the project
- Involvement of local people in the project implementation (local staff)
- Capacity Building Trainings for local staff and staff monitoring

28. Project Implementation (*aspects of the project execution that contributed to its success/shortcomings*)

- Signed agreement with DoEYS in Battambang province.
- Set up and achieved the EE monthly work plan for indoor classes and outdoor activities.
- Provided more capacity building trainings to EE local staff
- Anticipated and followed up work plan of our local EE staff
- Materials support for EE project activities
- Flexibility to adapt to the change at the project site
- Integrated the EE project activities in community level and involved the local community in the project implementation (villages, local teachers and local rangers etc...)

29. Describe any other lessons learned relevant to the conservation community

- Outdoor activities (Flora studies and bird watching) cannot be accessible in the low water season
- Availability of local rangers could not fulfill to all the need of EE outdoor activities.

Sustainability / Replication

30. Summarize the success or challenges in ensuring the project will be sustained or replicated

The key success of EE project implementation in PK village began after having a clear project design with good project implementation counting from making official administrative agreement with all stakeholders along with a strong support and involvement from the villagers, then this project came to the local process of recruitment as well as required materials for this project implementation before the students enrollment which was finalized by dividing into 10 different groups by EE educators.

The next step for EE classes in PK is to officially integrate them into public school hours, and to train the public school teachers in PK about EE as a pilot project with the support of MoEYS.

31. Summarize any unplanned activities that are likely to result in increased sustainability or replicability

After being OSMOSE EE educators, our two EE educators were encouraged by villagers and the school director to be contract teachers for a local public school in PK village. Having this good opportunity, EE project seems easier to carry out its project in term of having a good cooperation directly between EE educators and school director to schedule their EE teaching hours, student control and especially this could help them with a stable financial support from EE project and salary from their school. Moreover, when OSMOSE integrates EE classes into public school hour, this EE project will reach its sustainability.

Safeguards

32. 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

- This project triggered the safeguard on Indigenous Peoples, as it includes engagement with ethnic minority peoples. As a result, we produced a Social Assessment, which noted that there were unlikely to be any negative impacts as a result of project implementation, explained how we would monitor this, and explained how we would establish and manage a grievance mechanism. At the close of the project, no grievances had been received.
- The boat traffic in the village is a hot issue which most of local people themselves drive too fast causing accidents in the village and on the lake. The noise pollution is another growing environmental issue caused primarily by anthropogenic sources, and can lead to a large variety of serious health effects including sleep deprivation, decreased cardiovascular health, social behavior change, and noise induced hearing loss. As a local NGO implementing its EE project in this village, OSMOSE does not have any authorities to control the above issues. Therefore, we have tried our best to minimize these impacts through EE project to the community.

Some required actions related the above issues, OSMOSE EE platform is always parked at the beginning or the end of the village to prevent the disturbance from the boat engine. Furthermore, OSMOSE EE boat driver and paddlers are also advised carefully on safety when driving kids for EE indoor and outdoor activities which would be a good sample to all villagers (drive lowly & carefully).

Significantly, OSMOSE met with village chief, the waterway police and village security guards to speak on these issues in order to find some good solutions to improve, but they said that it was not so easy to change the people's habit. Noticeably, OSMOSE also met some involved EE families (families whose their

children joined OSMOSE Environmental Education classes) to advise them about those environmental negative issues.

- Unexpectedly, the water level of Tonle Sap Lake is less than a normal year (3 to 4 m). This change is an external factor that has been impacting life on the Tonle Sap, and OSMOSE program activities especially for EE project in PK as a consequence access difficulties affecting EE project in PK (always faced difficulties to conduct any EE activity from April to June), fish decline affecting bird population and the poorest families. This situation is predicted to worsen in the future due to global climate change and dam construction on the Mekong River.

Some required actions related this issue, as OSMOSE EE wooden boat could not be used for project implementation at the project site, EE educators rented a fiber glass boat in the village instead to continue EE activities as normal even it could be done insufficiently. The rest of the action should be taken by the government and other relevant stakeholders.

- Forest fire has consumed more than 5,000 hectares (1/3 of Prek Toal protected area in Battambang province) killing many reptiles and also destroying the breeding sites of multiple endangered species.

The forest fire began in the early April and spread into the area until June destroying 30 per cent of the protected forest. The forest fire affects the local community's livelihoods; it is not only the habitat of the water birds and other wildlife, but it is also important breeding sites of the fish.

Wildlife Conservation Society (WCS) and PCMC (staff & rangers) together with the local community found it difficult to stop this fire by using some local found water pump. Meanwhile, the experts from ASEAN nations were set to discuss the region's fire concerns later this month at a meeting organized by the Thai Royal Forestry Department and the Korean Forest Service.

Additional Comments/Recommendations

- 33. Use this space to provide any further comments or recommendations in relation to your project or CEPF**
None

Additional Funding

- 34. 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**

Donor	Type of Funding*	Amount	Notes
OSMOSE	A	7,400 US\$	In-Kind contributions of OSMOSE to support the direct costs of this project

* Categorize the type of funding as:

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)*

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.

Please include your full contact details below:

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Annexes

(submitted separately)

- 1) Students list and groups**
- 2) EE tools and materials**
- 3) Photos that illustrate project activities**