

## Bhutan Trust Fund for Environmental Conservation (Implementation Completion Report)

### Section I: Project Information

<b>Project Title:</b>	Building Socio-ecological Resilience: An adaptation to Progressive Climate Change in Sakteng Wildlife Sanctuary
<b>Grant Number:</b>	MB186Y17
<b>Grantee:</b>	Sakteng Wildlife Sanctuary, Department of Forests and Park Services
<b>Project period:</b>	7/1/2017 to 6/30/2019

### Section II: Project Accomplishment

**Project Goal:** To Build Socio-Ecological Resilience to Reduce the Climate Change Impact on Community and Species in Sakteng Wildlife Sanctuary.

Output	Achievement against the outputs (Explain and indicate the tangible results against each output)	Achievement of outcomes(Explain how the collective achievements of output/s have contributed to the accomplishment of the outcome/s)
<b>Project Outcome I : : Assessment of biological resources and development of ecological information base</b>		
Output 1.1 : Relevant protocols and survey methods completed for developing community based adaptation measures, ecosystem based adaptation measures, solid waste management strategy for SWS	Survey conducted as per the protocol developed	

<p>Output 1.2: Climate-related vulnerabilities, risks and threats to communities of SWS documented from 200 house holds (HH).</p>	<p>PRA conducted and report produced</p>	<p>Baseline information for climate vulnerability assessment developed for future study</p>
<p>Output 1.3: Vulnerability assessment of ecosystems for SWS completed in terrestrial (5 forest type) and aquatic biodiversity ( 2 major river)</p>	<p>Water analysis equipment purchased and report produced</p>	
<p><b>Project Outcome 2: Institutional support to related sectors/agencies</b></p>		
<p>Output 2.1: Capacity of the local leaders (15) and staffs (10) to respond to future disasters and coping mechanisms built and (2) WUA groups established.</p>	<p>Two water user association (WUA) created each at Merak and Saktien. The degraded water sources were fenced and plantation were carried out and bylaws were established. The climate change adaptation workshop was also conducted at Merak and Saktien gewogs.</p>	<p>Water source protection carried out and water user associations were formed to ensure the future sustainability of the drinking water.</p>
<p><b>Project Outcome 3: Development of management plans for protected areas/protected area conservation/biodiversity conservation</b></p>		
<p>Output 3.1: <i>A comprehensive local forest management plan (LFMP) developed for buffer and multiple use zone in SWS, alternative for fuel wood based cooking distributed to 4 schools and 1 monastery in SWS.</i></p>	<p>21 numbers electric/pressure cookers were distributed to institutes like schools, monastic body at Merak, Saktien and Phongmey gewogs to reduce the pressure of firewood in SWS. In order to ensure the sustainability of timber in future the detailed survey was carried out and plan was also produced.</p>	<p>Sustainable timber harvesting plan developed for SWS to ensure the timber sustainability. The electric cooker has also helped to reduce the demand of firewood coming from the respective institutes in and around SWS.</p>
<p><b>Project Outcome 4: Public awareness and environmental education</b></p>		

<p>Output 4.1: Solid wastes along the trails and villages controlled, public awareness conducted and waste management action plan developed for SWS.</p>	<p>Nine numbers of garbage disposal pits constructed in SWS and total of 198 waste bins distributed to schools, monastic body, local people and other institutes in and around SWS. SWS has also supported the student from Dungsze Central School to undergo waste craft training at Samdrup Jongkhar Initiatives in Dewathang.</p>	<p>Awareness on waste management created in Merak, Sakten and Phongmey gewogs. SWS has also developed waste management action plan for future implementation.</p>
<p><b>Project Outcome 5: Training of professionals in ecology, natural resources management,</b> Output 5.1: The project report printed (55) and distributed to all the relevant stakeholders</p>	<p>The survey reports and plan were printed and distributed to the relevant stakeholders. Total of 442 copies were printed. 19 numbers of staff from SWS has also visited ICIMOD Nepal to learn the climate smart initiatives at Nepal for the similar replication in SWS.</p>	<p>SWS staffs were trained at ICIMOD Nepal which has helped the project to develop good report and given exposure to new innovations and skills to mitigate climate change impact in the protected area.</p>

**Section III: Project Beneficiaries**

List of beneficiaries as indicated in the project document	Explain how the project has benefited
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Community	<p>Adoption of the indigenous measure for climate change will enable the community to cope with the impacts of the climate in the local areas. Such strategies will include the adoption of efficient management practices such as the planting of early maturing crops, adoption of hardy varieties of crops and selective keeping of livestock to ensure the productivity. Also the protection of drinking water sources through formation of Water User Association and coming up with intervention like plantation and fencing in the communities would ensure a continuous supply of water for the generation to come. The adaptation measures developed using local knowledge would be the basis for local-level decision-making for the rural communities.</p>
Local leaders and gewog extension staff	<p>The project has built the capacities of the local leader and gewog extension staffs through climate change adaptation workshop. Workshop has given them the awareness on climate change, indicators and adaptation measures. The workshop has also given us a platform to know some of the cross sectoral works that we have to carry out together to build the socio-ecological resilience and develop adaptation measures to reduce the impact of climate change.</p>
Protecte area manager, planner and policy makers	<p>The plans and report from the project will provide protected area managers, planner and policy makers with optimum vigor to prioritize the conservation and climate change issues, and to gain general public empathy towards biodiversity conservation. It will also serve as a device to source fund to implement all the recommendations from the project to improve the community livelihood in the face of changing climate.</p>

**Section IV: Sustainability**

**Explain how the sustainability of the project has been ensured**

Winning the trust and support of local stakeholders through providing ecological services and livelihood opportunities is central in achieving the conservation objectives of the protected areas.

The local stakeholders were involved right at the design stage to ensure the social sustainability. The project has built the capacity of the implementers through training at ICNMOD in Nepal and Climate change adaptation workshop for local leaders and community. This has given them the confidence in the field of planning, analysis, monitoring and evaluation to maintain the human capital sustainability. SWS has developed action plan like waste management plan and sustainable timber harvesting plan to monitor and evaluate the proper management of solid waste and to ensure the sustainability of timber for the times to come. The clear TOR and bylaws were also developed between various stakeholders and park management for water user associations (WUA) to implement the activities and ensure the sustainability.

#### Section V: Major factors affecting the project implementation

Factors	Description
Deviation from proposed plan (Activity/budget)	Initially, the waste management component has activities like construction of pit, distribution of waste bin, mass cleaning campaign and waste awareness but does not contain specific activity on building the capacity of human resource in terms of waste management. Later, we realize the importance of capacity building and we have requested for the re-appropriation of fund (Nu. 15000) from BTTEC management which was approved. Through this, SWS has supported Dungle Central School at Phongmey to undergo a training on waste craft at Samdrup Jongkhar Initiatives at Dewathang. After their training, the team from the school was asked to replicate the similar training at the various schools and institutes in SWS. This has in fact helped us to manage the waste by converting waste into a useful product and taught the people how to convert waste into money.
Delay in fund approval and disbursement process from BTTEC	
Delay in fund release from DPA	
Change in policy if any	
Any other	

**Section VI: Fund Utilization Status**

Total approved budget	Total budget disbursed from BTFEC	Total budget utilized	Total budget balance
7013250	7013250	7013250	0

**Section VII: Recommendation to BTFEC**

SWS would like to recommend if BTFEC management could accept two project focal ( Project manager and other as alternative/last Project manager) so that the implementation of the project is not affected incase of staff transfer/leave.

**Submitted by:**

a) Name: Sakieng Wildlife Sanctuary

b) Date: 14/06/2019

c) Signature:

  
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