Bhutan for Life Environmental and Social Management Plan for Sakteng Wildlife Sanctuary (2020)

1. Introduction

(A) Project Background

The Bhutan for Life (BFL) project aims to ensure a robust network of protected areas and biological corridors that secures human well-being, biodiversity conservation and increase climate resilience in Bhutan. The project provides a 14-year financial bridge that allows for immediate improvement in the management of Bhutan's protected areas for climate resilience, and the prompt delivery of mitigation, adaptation and biodiversity gains, while the country gradually ratchets up its own financing resources.

BFL seeks to achieve the following objectives:

- Help Bhutan remain carbon neutral by increasing forest and vegetative cover within the Protected Area System;
- Enhance the socio-economic wellbeing of communities in and in the vicinity of the PAS through climate-informed natural resources management;
- Maintain stable, thriving and diverse populations of key species contributing toward national and global biodiversity goals;
- Strengthen organizational, institutional, and financial capacity for effective management of PAS.

BFL includes five components that reflect these goals, divided into 16 milestones (or outputs) and over 80 detailed activities.

(B) Scope of ESMP

The preparation of this Environmental and Social Management Plan (ESMP) was required in order to manage the environmental and social impacts through and specific mitigation actions required to implement the project in accordance with the requirements of WWF's Social Safeguards Integrated Policies and Procedures (SIPP), the project's Environmental and Social Management Framework (ESMF), and applicable national legislation and regulations.

The ESMP provides an overview of the environmental and social baseline conditions on the routes of the proposed second segment of the project, summarizes the potential impacts associated with the proposed activities and sets out the management measures required to mitigate any potential negative impacts.

This ESMP will be implemented by BFL focal person in each park authority (PA) and biological corridor (BC), and by the contractor to be commissioned by each PA/BC for the project.

(C) Purpose of ESMP

This Site-Specific ESMP is a project-specific source document detailing the environmental and social protection requirements to mitigate and minimize the adverse impacts. The ESMP's primary purpose is to ensure that the environmental requirements and social commitments associated with the project are carried forward into implementation and operational phases of the project and are effectively managed. The specific objectives of this ESMP are as hereunder:

- Minimizing any adverse environmental, social and health impacts resulting from the project activities;
- Conducting all project activities in accordance with the relevant RGoB Laws and WWF's safeguard operational policies and guidelines;

- Preventing environmental degradation as a result of either individual subprojects or their cumulative effects;
- Enhancing the positive environmental and social outcomes of project activities;
- Ensuring that the proposed mitigation measures are feasible and cost-efficient;
- Providing an Action Plan to ensure that the project impact mitigation measures are properly implemented and monitored;
- Ensuring that all stakeholders are engaged in the project activities' preparation and implementation, and their concerns are fully addressed.

(D) Applicable law, policies, and regulation

This ESMP is developed by following the guidelines as set forth in the BFL's ESMF.

Applicable RGoB laws and policies include the Constitution of the Kingdom of Bhutan, 2008; legislation on land and moveable property (Land Act of Bhutan 2007; Land Rules, 2007; The Moveable Cultural Property act of Bhutan, 2005); legislation and regulations on forests and protected areas (National Environment Protection Act, 2007; Forest and Nature Conservation Act of Bhutan, 1995; Forest and Nature Conservation Rules and Regulations of Bhutan, 2017; National Forest Policy, 2011); legislation on water and waste prevention (Water Act of Bhutan, 2011; Waste Prevention and Management Act, 2009); legislative requirements on environmental assessment (Environmental Assessment Act, 2000 and Regulations on the Environmental Clearance of Projects, 2001); and other relevant laws (The Local Government Act of Bhutan, 2009; Livestock Act of Bhutan, 2001; The Biodiversity Act of Bhutan, 2003; The Pesticides Act of Bhutan, 2000; The Penal Code of Bhutan, 2004; National Access and Benefit Sharing (ABS) Policy (Draft), 2014).

WWF's safeguards policies that are relevant to this project are as follows: Policy on Environment and Social Risk Management; Policy on Protection of Natural Habitats; Policy on Involuntary Resettlement; Policy on Indigenous Peoples; Standard on Pest Management; Policy on Accountability and Grievance System; Standard on Physical Cultural Resources; as well as general standards on occupational and community health and safety and on energy efficiency.

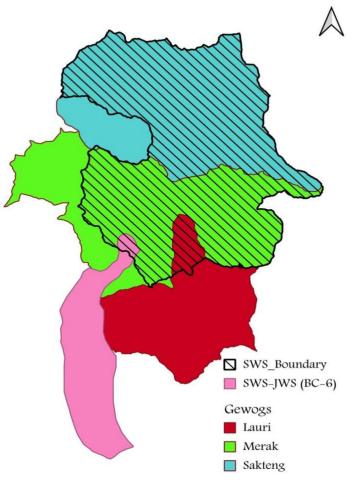
In general, RGoB's laws, policies, and guidelines are in line with the WWF's environmental and social safeguards requirements. However, there are a few differences between the two systems. With regard to environmental impacts, there are no direct contradictions between the RGoB laws and regulations and the WWF's SIPP, but the requirements of the latter are more extensive. All project activities should fully comply both with the RGoB's Regulations on the Environmental Clearance of Projects, and with the procedures and mitigation measures prescribed in this ESMF. In case that the WWF's SIPP requirements are more extensive, strict, or detailed than the RGoB legislation and policies, the former will apply to all project activities.

With regard to social impacts, the primary discrepancies between the RGoB laws and regulations and the WWF's SIPP refer to the status of non-title holders and informal land use, and the commitment to participatory decision-making processes. First, according to the WWF's SIPP, all users of land and natural resources (including people that lack any formal legal ownership title or usage rights) are eligible to some form of assistance or compensation if the project adversely affects their livelihoods. The RGoB laws only recognize the eligibility of land owners or formal users to receive compensation in such cases. Second, the WWF's SIPP require extensive community consultations as part of the development of various safeguards documents and during project activities. RGoB legislation does not include similar requirements. For the purposes of the BFL project, the provisions of the WWF's SIPP shall prevail over the RGoB legislation in all cases of discrepancy.

2. Environmental and Socio-Economic Conditions:

The Sakteng Wildlife Sanctuary (SWS) is located in between the latitudes of 27°09'00"- 27°28'08" North and longitudes of 91°47'04"- 92°07'02" East. It has an area of 740.60 sq. km. It was established in 2003 representing the easternmost temperate and alpine ecosystems of Bhutan. It borders with the Indian State of Arunachal Pradesh in north and east, Phongmey Gewog under Trashigang Dzongkhag in the west and Lauri Gewog, Samdrup Jongkhar in south. The Sanctuary is connected to Jomotshangkha Wildlife Sanctuary (JWS) by a biological corridor in the south forming a part of Bhutan Biological Conservation Complex (B2C2).

SWS covers about 85.2% of Sakteng, 67.3% of Merak Gewog and 9.4% of Lauri Gewog (Figure 1). However, for faster public service delivery and to save administrative cost, SWS management provides forestry services to the remaining villages falling outside the Sanctuary area viz. Sheytami, Drana and Chipling areas (seasonal grazing area of Merak Gewog) and Joenkhar, Bumlock, Murbee and Yongbazor under Sakteng Gewog. In reality, the SWS manages the entire Gewogs of Merak, Sakteng, and a part of Lauri covering a total of 938.02 km2.



Adminstrative Boundary of Sakteng Wildlife Sanctuary

Figure 1 SWS Boundary and BC-6 Connecting SWS

SWS represents eastern Himalayan temperate ecosystem which harbors numbers of globally threatened and endangered species like the Royal Bengal Tiger (*Panthera tigris*), Red Panda (*Ailurus fulgens*), Musk Deer (*Moschus sp.*) Capped Langur (*Trachypithecus pileatu*), Himalayan Black Bear (*Ursus thibetanus laniger*), Himalayan Serow (*Capricornis thar*) etc. Home to diverse flora and fauna, it has a number of outstanding universal values that qualifies SWS as a mixed World Heritage Site and has made to the tentative list of UNESCO world heritage site in 2013.

The Sanctuary can be categorized into three climatic zones – subtropical, temperate and alpine zone. Altitude ranges from 1500-4500m with sub-tropical climate in the low-lying valleys to alpine meadows in the higher mountains. The majority of the SWS fall under temperate zone. The temperate climatic condition is characterized by cold winters and warm summers with occasional heavy rainfall. Area receives highest rainfall during the month of June, July and August with sporadic rainfall throughout late April to early October, especially during late afternoon. Snowfall occurs from mid-October till early April. The Sanctuary harbors numerous streams and alpine lakes forming head waters of major river systems of the country for production of clean hydropower energy for increased revenue generation. Three river systems – Gam-ri, Mera-ama-ri and Jomo-ri originate from the Sanctuary. 100% encounter of pollution sensitive macro-invertebrates like Stonefly, Caddishfly and Mayfly, and overall biotic index of these rivers (3.04) establishes the purity of these rivers.

SWS also has maximum number of Rhododendron species with 41 out of 46 Rhododendron species recorded in the country. In total, 858 plants, 39 mammals, 283 birds, 63 butterflies, 5 reptiles, 3 amphibians, and 2 fish species were recorded in Sanctuary area so far.

"*Brokpas*" the semi-nomadic highlanders with unique culture and traditions are the inhabitants of the Sanctuary. The Sanctuary is home to about 5000 *Brokpas* of Merak and Sakteng largely dependent on livestock rearing as a source of livelihood sustenance. Eighty-three percent of the household income is generated from the livestock husbandry. Of 772 households (HH) in 13 villages under Merak and Sakteng Gewog, 85% (567 HH) depends on livestock farming. Very few people living in the lower areas (below 2500m altitude) depend on subsistence farming.

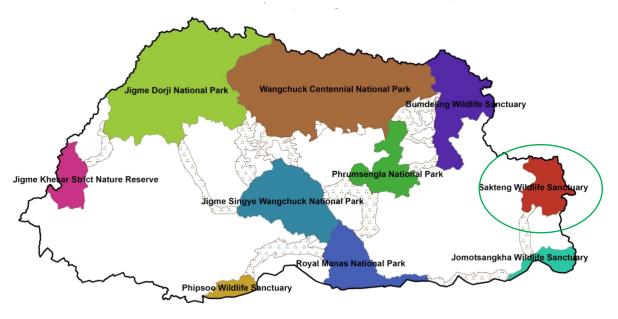


Figure 2 Location of Jomotsangkha Wildlife Sanctuary

3. Planned activities in Year 2020

Activities that are planned in SWS in 2020 include the following:

1. Construction of Takin Translocation Facility at Kektong-brangsa, Radhi, Trashigang.

Under the Royal Command, Department of Forests and Park services has initiated introduction of takins in SWS in the year 2016 until a viable population of takin is established. The takins were translocated from Takin Preserve, Thimphu and Jigme Dorji National Park, Gasa.

Rigorous monitoring of introduced takins indicates that the animals are confronting some difficulties in adapting to their new habitat making random seasonal movement. Hence, it was decided to keep the translocated takins in enclosure until the animal acclimatizes with the new environment instead of releasing them directly in the wild.

The planned implementation date for the activity is December 2019. Total activity budget for the activity is USD 23,469. Accordingly, SWS management have acquired 7 acres of State Reserved Forest Land at Kektong-brangsa area above Tokshimang village for the construction of facility.

The construction of the Takin Translocation Facility was awarded to M/S Thimphu Construction through open competitive bid in accordance to the Procurement Rules and Regulations of Bhutan, 2019, and all other requirement of the work has been fulfilled as per the prevailing rules and regulations of the Country. The contract agreement between the contractor and the SWS management (employer) has been made which includes the Occupational Health and Safety Standards.

As there were no permanent settlement in and around proposed construction site, acquiring of social clearances for the construction was not necessary. However, as local community of Merak practices transhumant grazing pattern, clearance from Merak were acquired after allocating a different grazing place for the community. Furthermore, it was not an issue for the community as the community migrate during summer to the high altitude and towards lower altitude in winter for grazing. The clearance from the Gewogs were obtained. The communities have about 20 households which are scattered around Kektong-brangsa in Merak.

The proposed facility will serve as temporary shelter/enclosure facility for acclimatization of Takin translocated from other parts of the country's wilderness before its introduction to SWS. Approximately 6 acres of forest area will be fenced with minimal disturbance to the surrounding natural environment to provide natural habitat for translocated Takins. The area will be fenced with chain link fencing material and MS angle posts with very minimal environmental impacts. A total number of 9 local workers will be employed for the activities. It was planned that a temporary shelter from locally available materials (tarpaulin, wooden posts) will be made for the duration of the activity which is about 3 months.

The list of raw materials to be used are:

- MS Angle post: 6105.93 kg of 230 vertical posts
- Cement concrete: 22.37 cu.m,
- GI Chain link mesh: 1329.60 sq.m and TMT Steel Bar: 129.53 kg.
- Sand and gravel

As per the contract agreement, the above construction materials shall be purchased from authorized dealers and stored in makeshift store near construction site.

The adverse environmental impacts from the project include the following:

- Construction-related impacts arising from digging, waste and material management at site which was very small in scale.
- Wastes from the workers
- Occupational health and safety
- Community access to grazing by 20 households in Merak community for which clearance was obtained after consultations and allocation of different grazing area was provided to the affected community.

2. Construction of staff quarter

The planned implementation date is from July 2020. The activity includes construction of staff quarter on an area of 162 m₂. The proposed budget is USD 65000. The area is a State Reserve Forest and is a barren land belonging to the Department of Forests, so there is no need to get clearance from the Gewog and the community. However, as the land is within the community, there will be consultations with the community on the information related to the construction activity.

There will be 20 numbers of workers who will work for 18 months for the construction of the activity. They will mainly be local and will be commuting from the nearest community.

For the construction of staff quarter, water sources will be from the existing water source used by the office. There will be machinery used which will be mainly excavator, carpentry machines, transportation vehicles, mixers for concrete.

Therefore, the adverse environmental impacts from the project include the following:

- Noise pollution
- Air pollution
- Wastes from construction activities and workers
- Occupational health and safety

3. River Bank Protection

This includes construction of check dams along two rivers in SWS. One location is at Nyashgangrong Merak and another one is Kejirong, Sakteng. The purpose of check dams and protection wall along the two rivers is to protect the settlements along the two rivers. There are 60 households along Nyashgangring in Merak and households in Sakteng along Kejirong river.

The length of the dam and breadth of the dam is about 200 meters on either side of Nyashgangrong, Merak and about 400 meters on either side of Kejurong, Sakteng. There will be 50 workers each in the two sites with total workers of 100. There will be no machinery used but will be carried out manually by stacking the locally available materials which are mainly stone.

The duration of the activity will be for one week and the planned date of implementation is around July 2020. The cost for this activity is USD 2000 for both the sites. There are few human settlements near the rivers. However, there are no natural habitats or fish in the two rivers.

The adverse impacts of river protection wall are:

- Occupational health and safety (local workers in each) for the duration of 1 week.
- Wastes from workers

4. **Improvement of waterholes:** Waterholes are considered important habitat for wildlife as it provides water to wildlife for drinking especially in winter when all water sources in nearby stream gets dried. The activity involves construction of retaining wall around the outlet of the waterhole to prevent from drying. The location of waterhole is at Tshokha in Thrakthri, Sakteng and is regarded as a sacred lake and was also called as La-Tsho by the local community. Planned date for the activity is on September 2020 to December 2020. The proposed budget is USD 4765.95. There will be 10 to 15 number of local workers escorted by the forestry officials. The nearest community is 1 km from the site and the community has two types of settlements; permanent settlements of 30 households and migratory settlements of 30 households.

To minimize the risk of human wildlife conflict, they will be advised to move in groups after dawn and before dusk.

For this activity, some of the potential environmental and social impacts are following:

- Wastes: soil from excavation activities and waste from digging activities
- Workers' health and safety
- Increased poaching waterholes will become a hotspot for animals gathering in one site thereby increasing the risk of poaching.

Environmental and Social Impacts and Mitigation Measures 1. Construction of Takin translocation facility 4.

Potential	Impact	Proposed mitigation	Responsible	Costs
impact	scale	measures	party	
Activity 1: Cons	truction of T	akin translocation facility		USD 25,223
Construction- related impacts arising from excavation, waste and material management at site which was very small in scale and the wastes from construction was used in filling up the excavated land. The excavation was only for 4 hours to avoid disturbances to the wildlife.	Short term Minor	 During construction: Dumping of waste on the sides of the road, on private land, or in other nondesignated places should be prohibited; Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived; Collection, transportation and final disposal of all waste should be undertaken regularly on a weekly basis; All construction materials should be covered during the transportation to avoid waste dispersion; Burning of construction waste should be prohibited. After construction: All waste shall be removed from the project site. 	BFL focal person in SWS Contractor	Included in the bidding documents from the activity budget
Wastes from the workers	Short term Minor	 An environment-friendly toilet (e.g., pit toilet) and washing facilities should be made available, built with locally available materials; Open defecation in the vicinity of project sites should be prohibited; Throwing waste in water sources should be prohibited; Ensure that camps are located away from existing stream, river, or water sources, and that no discharge from camps is made into nearby water bodies; Proper containers/waste bins should be provided at the project site; Dumping of waste on the sides of the road, on private land, or in other non- 		Included in the bidding documents from the activity budget

Community access to grazing by 20 households in Merak community for which clearance was obtained after consultations and allocation of different grazing area was provided to the affected community.	Short term Minor	 designated places should be prohibited; Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived Allocation of alternative grazing area; Development of community-management plans based on consultation with communities to agree on access to natural resources, grazing, etc. 	BFL focal point in SWS Contractor	Same as above
Workers' health and safety (9 workers who are all local)	Short term Minor	 Comply with the BFL's occupational health and safety guidelines; Ensure regular health screening for the workers pre and during construction activities; Ensure that no underage workers, or children are engaged; Ensure decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers; Ensure that workers are employed on the principle of equal opportunity and fair treatment, and there is no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices; Implement a grievance mechanism for workers (and their organizations, and terms) 	BFL focal point in SWS Contractor	Included in the bidding documents from the activity budget

where they exist) to raise workplace	
concerns	

2. Constr							
Potential	Impact	Proposed mitigation measures	Responsible	Costs			
impact	scale		party				
Activity 1: Cons	truction of st	aff quarters of two units		USD			
Noise	Ch ant tang	To minimize the noise disturbence for	BFL focal	65000			
	Short term Minor	To minimize the noise disturbance for		To be			
disturbance: Possible noise	Minor	the workers, the following mitigation measures need to be undertaken:	person in SWS	incorporate d in the			
disturbance as			SwS Contractor	bidding			
1		Noise level control should be norformed before the stortup of	Contractor	document			
a result of outdoor		performed before the startup of		from the			
equipment		construction activities;		activity			
usage such as		• The construction work should not be		cost			
excavators,		permitted during the nights, the		COSt			
slab casting		operations on site shall be restricted to the hours 7am-7pm;					
carpentry		-					
machineries,		• Vehicles that are excessively noisy shall not be operated until corrective					
mixers for		measures have been taken and					
concrete, and		fitness are carried out (contractor to					
transportation		check the fitness certificates of the					
vehicles		vehicles);					
driving around		• Earplugs and protecting devices					
the		shall be provided to workers on site.					
construction		1					
site. The site is							
within the							
community							
Air pollution	Short term	Pre-construction: requirements to limit	BFL focal	To be			
from dusts	Minor	emissions should be included in the	person in	incorporate			
from		bidding documents, as a precondition for	SWS	d in the			
transportation		the contractor's selection	Contractor	bidding document			
trucks and construction		During construction.		from the			
activities such		During construction:		activity			
as concrete		• Construction site, transportation routes and materials handling sites		cost			
mixing, slab		should be water-sprayed on dry and		COSt			
cutting.		windy days;					
cutting.		 Construction materials should be 					
		stored in appropriate and covered					
		places to minimize dust;					
		 Before allowing vehicles on site, 					
		fitness and emission test of the					
		vehicle shall be performed;					
		• Vehicle loads likely to emit dust					
		need to be covered;					
		• Ensure usage of protective masks for					
		the workers if dust appears;					

Waste: generation of waste as a result of construction activities (plastics and construction materials)	Short term Minor	 Restriction of the vehicle speed within the construction sites; Perform regular maintenance of the vehicles and construction machinery in order to reduce the leakages of motor oils, emissions and dispersion of pollution; Burning of debris from ground clearance not permitted. Identification of the different waste types at the project site (soil, cement, food, plastics etc.); Proper containers/waste bins should be provided at the project site; Dumping of wastes on the sides of the road, on private land, or in other non-designated places should be prohibited; Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived; Collection, transportation and final disposal of all waste should be undertaken regularly on a weekly basis; Possible hazardous waste (motor oils, vehicle fuels, etc.) should be sub-contracted to transport and finally dispose; All construction materials should be covered during the transportation to avoid waste dispersion; The options for reuse/recycling of the generated waste streams should be taking into consideration (e.g. excavated soil, etc.); Burning of construction waste should be prohibited. 	BFL focal person in SWS Contractor	Waste manageme nt after constructio n: USD: 300
Workers' health and safety	Short term Minor	 project site. Comply with the BFL's occupational health and safety guidelines; Ensure regular health screening for the workers pre and during construction activities; 	BFL focal person in SWS Contractor	To be incorporate d in the bidding document from the

	embankmen	Deeneneitte	Cost, USD	
Potential	Impact	Proposed mitigation measures	Responsible	Cost: USD
impact	scale		party	3000
Workers'	Short term	• Comply with the workers' health and	BFL focal	200 USD
health and	Minor	safety guidelines of BFL;	person	(Safety gears
safety		• Ensure safety gears such as boots,	(SWS)	for workers)
		gloves etc;		
		• Ensure that no underage workers, or		
		children are engaged.		
		• Ensure decent work conditions,		
		including an appropriate salary,		
		working hours, accommodation and		
		food for workers shall be provided to		
		the operator;		
		• Ensure that the worker is employed on		
		the principle of equal opportunity and		
		fair treatment, and there is no		
		discrimination with respect to any		
		aspects of the employment		
		relationship, such as recruitment and		
		hiring, compensation (including wages		
		and benefits), working conditions and		
		terms of employment, termination of		
		employment and disciplinary		
		practices;		
		• Implement a grievance mechanism for		
		the operator.		

3. River embankment

Wastes from workers	Short term Minor	<i>Pre-construction:</i>Awareness about wastes and	BFL focal person	To be incorporated
		management in the activity area by the forest officials to the workers.	(SWS)	in the activity budget
		During construction:		
		 Identification of the different waste types at the project site (soil, food, excess mesh wires etc.); Proper containers/waste bins should be 		
		 provided at the project site; Dumping waste shall be prohibited on fragile slopes, rivers, forests, religious or other culturally sensitive areas or 		
		 areas where livelihood is derived; Collection, transportation and final disposal of all waste should be undertaken regularly (daily); 		
		• The options for reuse/recycling of the generated waste streams should be taking into consideration (e.g. excavated soil, etc.);		
		• Burning of construction waste should be prohibited.		
		<i>After construction:</i>All waste shall be removed from the project site.		

4.	Waterhole restoration by replacing the old pipes with new ones in the existing	;
water	ole	

Potential	Impact	Proposed mitigation	Responsible	Costs
impact	scale	measures	party	
Activity: Water he	ole restoration			US\$4765.95
Waste: soil from excavation activities and waste from digging activities	Short term Minor	 Proper containers/waste bins should be provided at the project site; Dumping of waste in the waterholes, in the protected areas or in other non- designated places should be strictly prohibited. Dumping of waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived; Collection, transportation and final disposal of all waste should be collected 	BFL focal point in [SWS]	Included in the activity budget

		 on a daily basis and not left in the protected areas. Burning of wastes should be prohibited.
Workers' health and safety	Short term Minor	 Follow the workers' health and safety guidelines as attached to the ESMP. Ensure first aid kits and safety gears to the workers. Ensure that no underage workers, or children are engaged Decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers workers are employed on the principle of equal opportunity and fair treatment, and there is no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices. A grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns should be in place.
Increased poaching	Short term Minor	 Waterholes restoration is in the existing area. Increased patrolling of park authorities should be BFL focal point in [SWS]

			carried out during and after the waterhole restoration.		
Human-wildlife conflict	Short term Minor	•	Moving in groups	BFL focal point in [SWS]	Included in the activity budget

5. ESMP Implementation Arrangements

The implementation of project activities will be carried out by the BFL focal person in SWS. The focal person will be responsible for compliance with all procedures outlined in this ESMP, as well as compliance with any requirements to obtain clearances, permits, approvals, or consent documents from relevant authorities and stakeholders.

This ESMP should be part of the contract that the PA will sign with the Contractor(s) for implementation of the planned activities in SWS in 2020. However, for the construction of the Takin Translocation Facility, there was no ESMP prepared prior to its implementation as the activity started in 2019. The ESMP was prepared during the activity for which the contractor needs to comply with the ESMP. The Contractor is obligated to perform all proposed preventive or mitigation environmental and social measures in this plan and to keep the evidence of any documents related to applying these measures (e.g., letter asking the municipality for disposal of inert waste, records on OHS information session performed for all workers before start of activities, all developed EHS plans, etc.). An OHS information session should be organized by the Contractor for all workers prior start the project activities and prior any specific tasks with high health risks.

The SWS's Supervising Engineer needs to monitor the implementation of proposed measures by the Contractor and Contractor's subcontractors with visual checking, reviewing the records of evidence that the measures have been applied and ask the Contractor to apply the measures as soon as possible. Non-compliances should be recorded and the Report on any non-compliances should be reported to the ESS consultants immediately, and the ESS consultants will report it to the PCU (M&E Officer). Each non-compliance should be closed with appropriate measure/s and the evidence should be kept.

Disbursement of project funds to the PA will be contingent upon their full compliance with the safeguards requirements.

6. ESMP Monitoring Arrangements

The BFL focal person in SWS will closely monitor the implementation of all planned activities and the required mitigation measures, and ensure that they fully comply with this ESMP and with the terms and conditions included in the environment clearances issued by RGoB's national authorities.

SWS's PA is also fully responsible for the compliance of all external contractors and service providers working in the SWS with the safeguards requirements outlined in the ESMP.

The monitoring of activities under this ESMP will be carried out in the following manner:

- 1. Construction activities of Takin Translocation Facility
- Monitoring by implementing entities:
 - At least weekly field visits

Dates	Location	Report
December 2019,	SWS	Site development and
February 2020,		inspection, consultations,

April 2020, May 2020 June 2020	supervision and monitoring the progress of construction
June 2020	activities, advise on safety measures of workers and wastes management.

• Monthly reports prepared by implementing entities and submitted to ESS consultants

Dates	Location	Report
December, 2019	SWS	Progress Report
March, 2020	SWS	Progress Report.
June, 2020	SWS	Completion report

• Monitoring by ESS consultants:

• At least quarterly field visits by ESS consultants

Dates	Location	Report
December, 2019	SWS	Progress Report
June, 2020	SWS	Completion report

• Quarterly reports by ESS consultants to the PCU (M&E officer)

Da	ntes	Location	Report
De	ecember, 2019	PCU	Annual progress report
Jur	ne, 2020	PCU	Annual progress report

• Annual <u>Report by PCU (M&E officer) to Secretariat</u>

[Dates	Location	Report
	15 July, 2020	BFL	Semi-Annual progress report

• Annual reports of the Secretariat to WWF US (as part of mid-year and final APRs)

Dates	Location	Report
30 July, 2020	WWF	Annual progress report

2. Construction of staff quarters

- Monitoring by implementing entities:
 - At least weekly field visit

Dates	Location	Report
July, 2020	SWS	Site inspection and Consultations
August - December 2020 January - June 2021	SWS	Implementation, supervise and monitor the progress of construction activities, advise on safety measures of workers and wastes management.
June, 2021	SWS	Completion

• Reports by the implementing entities submitted to ESS consultants within a week after each field visit

Dates	Location	Report
August - December 2020	SWS	Progress Report
January - May, 2021		

June 2021 SWS Completion report

- Monitoring by ESS consultants:
 - At least quarterly field visits by ESS consultants

Dates	Location	Report
October, 2020	SWS	Progress Report
January, 2021	SWS	Progress Report
May, 2021	SWS	Completion report

• Quarterly reports by ESS consultants to the PCU (M&E officer)

Dates	Location	Report
December, 2020	PCU	Progress Report
March, 2020	PCU	Progress Report
June, 2020	PCU	Progress Report

• Bi-annual reports by PCU (M&E officer) to Secretariat

Dates	Location	Report
15 January, 2020	BFL	Annual progress report
15 July, 2020	BFL	Semi-Annual progress report

• Bi-annual reports of the Secretariat to WWF US (as part of mid-year and final APRs)

Dates	Location	Report
31 January, 2020	WWF	Annual progress report
31 July, 2020	WWF	Semi-Annual progress report

3. River Bank protection

- Monitoring by implementing entities:
 - At least weekly field visit

Dates	Location	Report
July, 2020	SWS	Site inspection and Consultations
September - November 2020	SWS	Implementation and Monitoring

• Reports by the implementing entities submitted to ESS consultants within a week after each field visit

Dates	Location	Report
July, 2020	SWS	Progress Report
August - November, 2020	SWS	Monitoring and progress Report
November, 2020	SWS	Completion report

- Monitoring by ESS consultants:
 - At least quarterly field visits by ESS consultants

Dates	Location	Report
September, 2020	SWS	Site development and inspection

• Quarterly reports by ESS consultants to the PCU (M&E officer)

Dates	Location	Report
October, 2019	PCU	Progress report
December, 2020	PCU	Annual report

• Bi-annual reports by PCU (M&E officer) to Secretariat

Dates	Location	Report
15 January, 2021	BFL	Annual progress report

• Bi-annual reports of the Secretariat to WWF US (as part of mid-year and final APRs)

Dates	Location	Report
31 January, 2021	WWF	Annual progress report

4. Improvement of waterholes

• Field visits at least twice - during the intervention and then monthly as part of the "SMART patrolling" activity (please adapt based on field conditions, and also based on the availability of SMART patrolling activities).

Dates	Location	Report
September, 2020	SWS	Implementation of the activity
October - November, 2020	SWS	Monitoring
December, 2020	SWS	Completion

• Reports by the implementing entities submitted to ESS consultants weekly during the intervention and then monthly after the intervention completion

Dates	Location	Report
September, 2020	PCU, Thimphu	Implementation Report
October - November, 2020	PCU, Thimphu	Monthly Monitoring Report
December, 2020	PCU, Thimphu	Completion Report

- Monitoring by ESS consultants:
 - Field visits by ESS consultants at least once during the intervention;

Dates	Location	Report
September, 2020	SWS	Monitoring

• Reports by ESS consultants to the PCU (M&E officer) – within two weeks after the field visit and for semi-annual reporting

Dates	Location	Report
October, 2020	PCU	Progress report
December, 2020	PCU	Annual Progress Report

• Bi-annual reports by PCU (M&E officer) to Secretariat

Dates	Location	Report
15 January, 2021	BFL	Annual Progress Report

• Bi-annual reports of the Secretariat to WWF US (as part of mid-year and final APRs)

Dates	Location	Report
31 January, 2021	BFL	Annual Progress Report

7. Capacity Need and Budget

Activities under this ESMP will be implemented by the BFL focal person, supervising engineer, and a contractor that will employ workers as mentioned in the contract agreement. The budget for each of the activities is:

1. Takin translocation facility: USD 25,223

- 2. Construction of staff quarters: USD 65,000
- 3. River bank protection wall: USD 3,000
- 4. Improvement of waterholes: USD 4,765.95

A separate budget of USD 600 will cover the implementation of the ESMP mitigation measures.

8. Consultation and Disclosure Mechanisms

This ESMP has been prepared in a participatory manner, and a community consultation was carried out on 19 August, 2019 to inform local communities regarding the planned project activities mainly on the Takin translocation facility, staff quarter constructions, river embankment and improvement of waterholes to solicit their opinions, and enable them to question proposed mitigation measures.

The main issues that were raised during the consultation meeting include the following:

- The concerns during the consultation for the Takin Translocation Facility on 19 August, 2019 was raised by the community from Radhi who are not under the administrative jurisdiction of SWS. The concerns were about the area of the grazing for the herders getting smaller. The herders are mainly transhumant as explained in the above section. For this, another land was allocated for grazing.
- For construction of staff quarters, since it was a State Reserve Forests and belonged to the Department of Forests, there were no issues. However, the clearance from the Gewog Administration was required.
- For the river bank protection wall, the request came from the Gewog Administration Office.
- For the improvement of waterholes, the request came from the Gewog Administration Office to protect the lake which is used as a waterhole.

The information of the consultation meeting are attached to this ESMP, along with a full list of participants (disaggregated by gender and age). The minutes of meeting were not recorded. Henceforth, minutes of all meetings will be recorded by the focal and shall be attached as per the requirement of the ESMP

The full English version of this ESMP, as well as an executive summary in Bhutanese, shall be disclosed on the website of MoAF, BFL and WWF, Bhutan Program. Hard copies of the ESMP should also be available at the PA Management Office and at the PCU Office.

9. Stakeholder Engagement Plan

The local community that resides in the vicinity of the planned BFL activities in SWS will be engaged throughout the implementation of these activities.

- For all construction activities (construction of offices and riverbank protection)-one consultation meeting has to be organized during the intervention period, and subsequent consultations have to be held annually (these can be combined with consultations for other BFL or non-BFL activities).
 - a. Consultation for the Takin Translocation Facility:
 - Date: 19 August, 2019
 - Agenda: Gewog clearance
 - Location: Radhi, Merak
 - b. Consultations for staff quarter constructions
 - Date: 5, July, 2020
 - Agenda: Gewog clearance/ information related to the construction to the community around the project site

- Location: SWS
- c. River embankment:
 - Date: 10 July, 2020
 - Agenda: River bank protection
 - Location: Merak and Sakteng
- d. Improvement of waterholes:
 - Date: 9/July/2020
 - Agenda: Support for waterhole (lake) restoration as attached in Annex 5
 - Location: Tshokha in Thrakthri, Sakteng
- For activities that have no direct impact on communities (improvement of lowland grassland and waterhole rehabilitation)-consultation meetings have to be organized once a year (can be combined with consultations for other BFL or non-BFL activities).

The BFL focal person has to submit the official minutes of consultation meetings (along with a list of participants, disaggregated by gender and age) to ESS consultants within one week after the completion of the consultation. The ESS consultants will submit the consultation reports to the PCU (M&E officer) one week after their receipt. The PCU (M&E officer) will report to the Secretariat on a semi-annual basis.

Annex 1. Forestry clearance for Takin Enclosure Facility



September 16, 2019

Sub: Forestry Clearance for construction of Takin enclosure

The Forestry Clearance is issued from State Reserved Forest Land for the construction of Takin enclosure measuring 6 acres at Ketong Brangsa, Radhi Geog, under Trashigang Dzongkhag in favour of Sakkteng Wildlife Sanctuary.

The proposed activity does not fall in any prohibited/protected/restricted areas. The proposed area contains no trees/poles as per enumeration list attached.

This clearance is accorded as per the letter of recommendation and field report of the Range Officer, Radhi vide letter no.RRO/21/2019-2020/240, dated August 28, 2019 and with subsequent approval from his Hon'ble Director vide letter no. DoFPS/FPED/FLCS/4-2/437, dated September 13, 2019 on the following conditions:

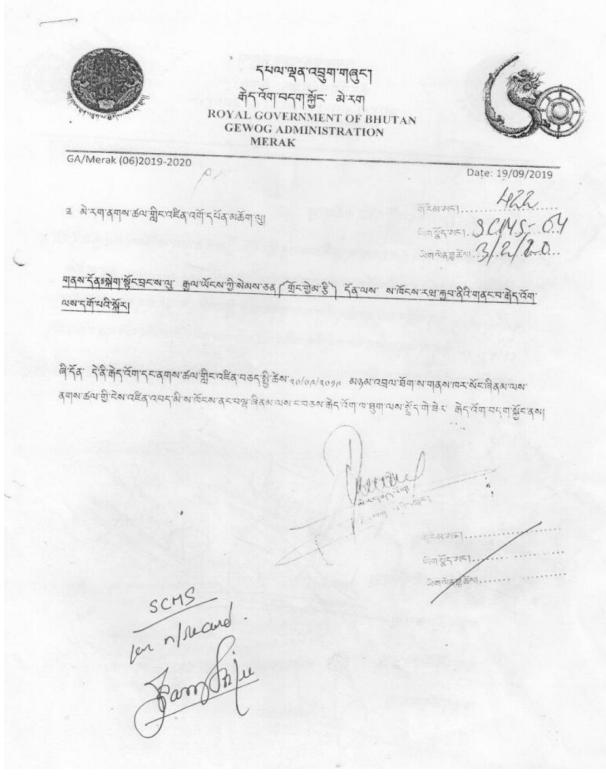
- This forestry clearance is limited to forest perspectives as per the detailed field report.
- 2. This clearance is not transferable.
- 3. The validation of this clearance shall be subject to obtaining other relevant clearances.
- Additional clearance should be sought prior to any deviation in location/size of the area. 4
- This clearance shall not be liable for any dispute arising during the implementation of activity.
- Any damage caused to public/private property shall be borne by the holder of this clearance 6.
- Any waste generated from the activity should be properly disposed as per Waste Prevention & Management Regulation 2012.
- 8. This clearance will not replace/substitute any other clearance required by any other laws.
- Any kind of accidents that might occur during felling of tree/pole and earth cutting shall be the responsibility of the proponent and Department of Forests and park Services shall not be held accountable in any case.
- 10. Any dispute that may arise from this activity shall be the responsibility of the proponent.
- 11. The activity shall have no negative impact on the forests within and surrounding the proposed site. The felling of any trees/poles nearby the enclosure is prohibited. 12. A copy of this FC shall be kept at the site and is made available upon the demand by competent authority
- or by forestry personnel. 13. The clearance shall be revoked without any liability on part of the Government if the holder of this
- clearance violated any of the above terms & conditions.
- 14. This clearance is valid up to September 17, 2020 from date of issue.
- 15. Date of issue September 16, 2019.

(Ten Offg. Chief Forestry Officer

To, The CFO, Sakteng Wildlife Sanctuary. Copy:

- The Dasho Dzongda, Trashigang Dzongkhag Administration for kind information. 1.
 - The Gup, Radhi Geog Administration, for kind information
- The Range Officer, Radhi for necessary monitoring. 3

Annex 2: Community clearance for Takin Enclosure Facility from Merak



Annex 3: Community clearance for Takin Enclosure Facility from Radhi



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Annex 4: Lists of Participants with pictures



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Name list of participants on Bhutan For Life (BFL) public consultation meeting under Joenkhar Park Range

Name list of participants on Bhutan For Life (BFL) public consultation meeting under Joenkhar Park Range

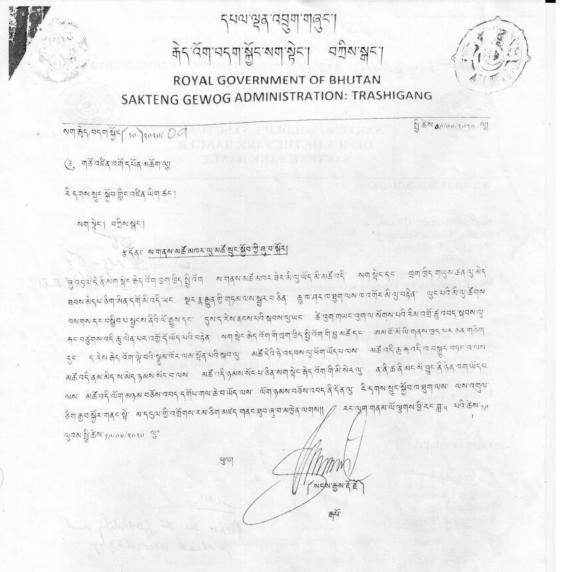
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Name list of participants on Bhutan For Life (BFL) public consultation meeting under Joenkhar Park Range.

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Annex 5: Letter from Gewog Administration for support on improvement of waterhole



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