

Executive Summary

BFL has been categorized as a Category B project, as the potential adverse environmental and social impacts on population within the Protected Areas or those living around who depend on the PA for their livelihoods or environmentally important areas are site-specific, reversible and can be readily mitigated. Therefore, to ensure that all BFL funded projects and programs are environmentally and socially sustainable as well as in line with BFL's policies and guidelines, an Environmental and Social Management Plan (ESMP) involving stakeholder participation and timely public disclosure is required.

An Environmental and Social Management Plan (ESMP) for Jomotsangkha Wildlife Sanctuary, describes mitigation measures/good practices at activity level which are required as per the screening protocol. All the screened activities which has potential risks to environment and social management have to prepare ESMP which include environment management and mitigation plans during pre-activity, activity implementation and closing phases. Hence, it contains description of the detailed actions including communities, roles, communication and reporting and monitoring processes required as part of the implementation. In order to ensure that the issues of all stakeholders are taken into account, it includes a stakeholder engagement plan. The plan includes identification of stakeholders, method of engagement, timing and logistics. It is a requirement for all parks and biological corridors to keep record, reporting, review, auditing and update ESMP yearly as per the planned activities.

The activities that required ESMPs for the year 2025 under Jomotsangkha Wildlife Sanctuary are:

1. Restoration to enhance the quality and resilience of lowland grasslands at Sath Pokharii
2. Improvement of waterhole at Tshoden
3. Mineral lick management at Layshingri and Borla under Langchenphu Gewog

བོད་ལྗང་བཅུ་དོན།

འབྲུག་རྒྱལ་ཡོངས་སློབ་ཀའི་ཚེ་སློག་མ་དུལ་འདི་མཐའ་འཁོར་གནས་སྤངས་དང་མི་ཕྱེད་འོས་འབབ་ཅན་གྱི་ལས་འགུལ་གྱི་དབྱེ་ཁག་ ཁ་བ་(Category B) རང་ལུ་རྒྱུ་དེ་ཡོད་པ་ཡིན། དེ་ཡང་ལས་འགུལ་འདི་ལས་བརྟེན་ཏེ་སྤྲུང་སྦྱོར་ས་ཁོངས་རང་སྤྱོད་མིའི་མི་སེར་དང་ ཡང་ན་ སྤྲུང་སྦྱོར་ས་ཁོངས་ཀྱི་མཐའ་སྐོར་ཏེ་འཚོ་བ་སྤྲུང་སྦྱོར་ས་ཁོངས་ལུ་བརྟེན་སྤྱོད་མིའི་མི་སེར་ ཡང་ན་ གལ་ཅན་གྱི་མཐའ་སྐོར་གནས་སྤངས་ཀྱི་ས་ཁོངས་ཚུ་ལུ་གཞོན་པ་འབྱུང་ནིའི་ཉེན་ ཁ་ཡོད་པ་ད་ གལ་སྲིད་གཞོན་པ་འབྱུང་པ་ཅེན་ གཞོན་ཉེན་ཚུ་དམིགས་གསལ་ས་གནས་ནང་རྒྱུང་མ་ཅིག་འབྱུང་ནི་དང་ གཞོན་ཉེན་མར་ཕབ་རྒྱབ་ནི་དང་ ཅ་མེད་ཡང་གཏང་རྒྱུགས་པ་ཡིན།

དེ་འབད་མ་ལས་ འབྲུག་རྒྱལ་ཡོངས་སློབ་ཀའི་ཚེ་སློག་མ་དུལ་ཚོག་ལུ་ རྒྱབ་སྐྱོར་འབད་ཡོད་པའི་ལས་འགུལ་དང་ལས་ལྷན་ཚུ་ མཐའ་འཁོར་གནས་ སྤངས་དང་ མི་སྡེ་གཉིས་ལུ་ཡུན་བརྟེན་གྱི་ཕན་པ་ཡོད་པ་བཟོ་བ་གི་མ་ཚད་ འབྲུག་རྒྱལ་ཡོངས་སློབ་ཀའི་ཚེ་སློག་མ་དུལ་གྱི་སྲིད་བྱས་ལམ་སྟོན་དང་འབྲེལ་ ཐབས་ལུ་ མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་འདི་དགོ་པ་ད་ མི་དམངས་གོས་བསྟུན་དང་ ཏུས་དང་ཏུས་ལུ་མི་དམངས་ལུ་གསལ་ བ་བཤད་ནི་འདི་དགོ་པ་ཡིན།

རང་བཞིན་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ སློབ་ཀ་དང་སློག་ཆགས་རྒྱན་ལམ་ཚུ་ནང་ལས་སྤྲོ་ཚུ་འབད་བའི་སྐབས་ ཐབས་ལམ་ དང་བཟང་སྤྱོད་ཚུ་གསལ་སྟོན་འབད་མ་ཡིན་པ་ད་ འདི་ཡང་ལས་སྤྱིའི་གདམ་སེལ་ལམ་ལུགས་དང་འབྲེལ་ཏེ་ཡིན། གདམ་སེལ་འབད་ཡོད་པའི་ལས་སྤྲོ་གི་ རང་ལས་ མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་ལུ་གཞོན་ཉེན་ཡོད་པའི་ལས་སྤྲོ་གི་དོན་ལུ་ མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་ གཞི་བཟོ་དགོ། འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ ལས་སྤྲོ་འགོ་མ་བཅུགས་པའི་ཉེ་མ་གཞི་བཅུགས་འབད་བའི་སྐབས་དང་མཇུག་བསྟུན་པ་ལུ་ མཐའ་འཁོར་ གནས་སྤངས་འཛིན་སྐྱོང་དང་གཞོན་ཉེན་མར་ཕབ་ཀྱི་ཐབས་ལམ་ཚུ་བཅུགས་དགོ་པ་ཡིན།

དེ་འབད་མ་ལས་འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ ལས་སྤྲོ་མི་སྡེ་ལུ་འགན། བརྒྱུད་དང་སྤྱོད་ལུ་ དེ་ལས་སྤྲོ་རྟོག་ལམ་ལུགས་ཚུ་གི་སྐོར་ལས་འགུལ་བཤད་ ཁ་གསལ་ཚུད་དགོ་པ་ཡིན། འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ལུ་ གལ་གཏོགས་འབད་དགོ་པའི་ཁེ་གུད་ཡོད་མི་ཚུ་གི་ཉོག་པའུ་ཚུ་ཚུད་དགོ་པའི་ཁར་ ཁེ་ གུད་ཡོད་པའི་མི་ཚུ་གི་དོན་ལུ་གལ་གཏོགས་འཆར་གཞི་དགོ། གལ་གཏོགས་འཆར་གཞི་འདི་ནང་ ཁེ་གུད་ཡོད་མི་དོས་འཛིན་འབད་ནི་དང་གལ་གཏོགས་ འབད་ནིའི་ལམ་ལུགས་ དེ་ལས་གལ་གཏོགས་ཀྱི་ཏུས་ཚོད་དང་བཅའ་སྲིག་ཚུ་ཚུད་དགོ་པ་ཡིན། སློབ་ཀ་དང་སློག་ཆགས་རྒྱན་ལམ་ཡིན་ཚད་ཚུ་གི་མཆར་ གཞི་ལས་སྤྲོ་དང་འབྲེལ་ཏེ་ དུན་ཐོ་དང་སྤྱོད་ལུ་ བསྐྱར་ཞིབ། ཚེས་དབུང་འབད་ནི། དེ་ལས་ མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་ འདི་ལོ་བསྟར་བཞིན་ཏུ་ཏུས་མཐུན་བཟོ་དགོ་པ་ཡིན།

རྩོམ་གཏང་ཁ་རི་དུགས་སྤྲུང་སྦྱོར་ས་ཁོངས་ཀྱི་དོན་ལུ་སྤྱི་ལོ་ ༢༠༢༥ རང་མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་དགོ་པ་ཡོད་ པའི་ལས་སྤྲོ་ཚུ་ཡང་།

- ༡༽ སེམ་པོ་ཁེ་རི་ལུ་ མཐའ་སའི་རྩ་ཐང་ཉམས་བཅོས་དང་ སྤྲུང་ཚད་ཡར་དྲགས་གཏང་ནི།
- ༢༽ མཚོ་བདུན་ལུ་ རྒྱ་རྒྱུ་ལེགས་བཅོས་འབད་ནི་དང་།
- ༣༽ ལང་ཅན་ལུ་རྒྱུ་ལོག་འོག་གི་ ལ་ཤིང་རི་དང་ བོར་ལ་ལུ་ རྒྱ་ལུའི་ས་ཁོངས་འཛིན་སྐྱོང་འབད་ནི།

Bhutan for Life

Environmental and Social Management Plan for Jomotsangkha Wildlife Sanctuary (2025)

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 increases 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 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 the 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 regulations

This ESMP is developed by following the guidelines as outlined 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 with both the RGoB's Regulations on the Environmental Clearance of Projects and with the procedures and mitigation measures prescribed in this ESMF. In case the WWF's SIPP requirements are more extensive, stricter, or detailed than the RGoB legislation and policies, the former will apply to all

project activities. Concerning 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 who 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 landowners or formal users to receive compensation in such cases. Second, the WWF's SIPP requires 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

Jomotsangkha Wildlife Sanctuary (previously known as Khaling Wildlife Sanctuary) was notified in 1974 and gazetted in 1993. The sanctuary has an area of 362.49 sq km, making it the second smallest naturally protected area of Bhutan. It is in the southeastern part of Bhutan under the Samdrup Jongkhar district. In 2014, KWS was renamed as Jomotsangkha Wildlife Sanctuary (JWS).

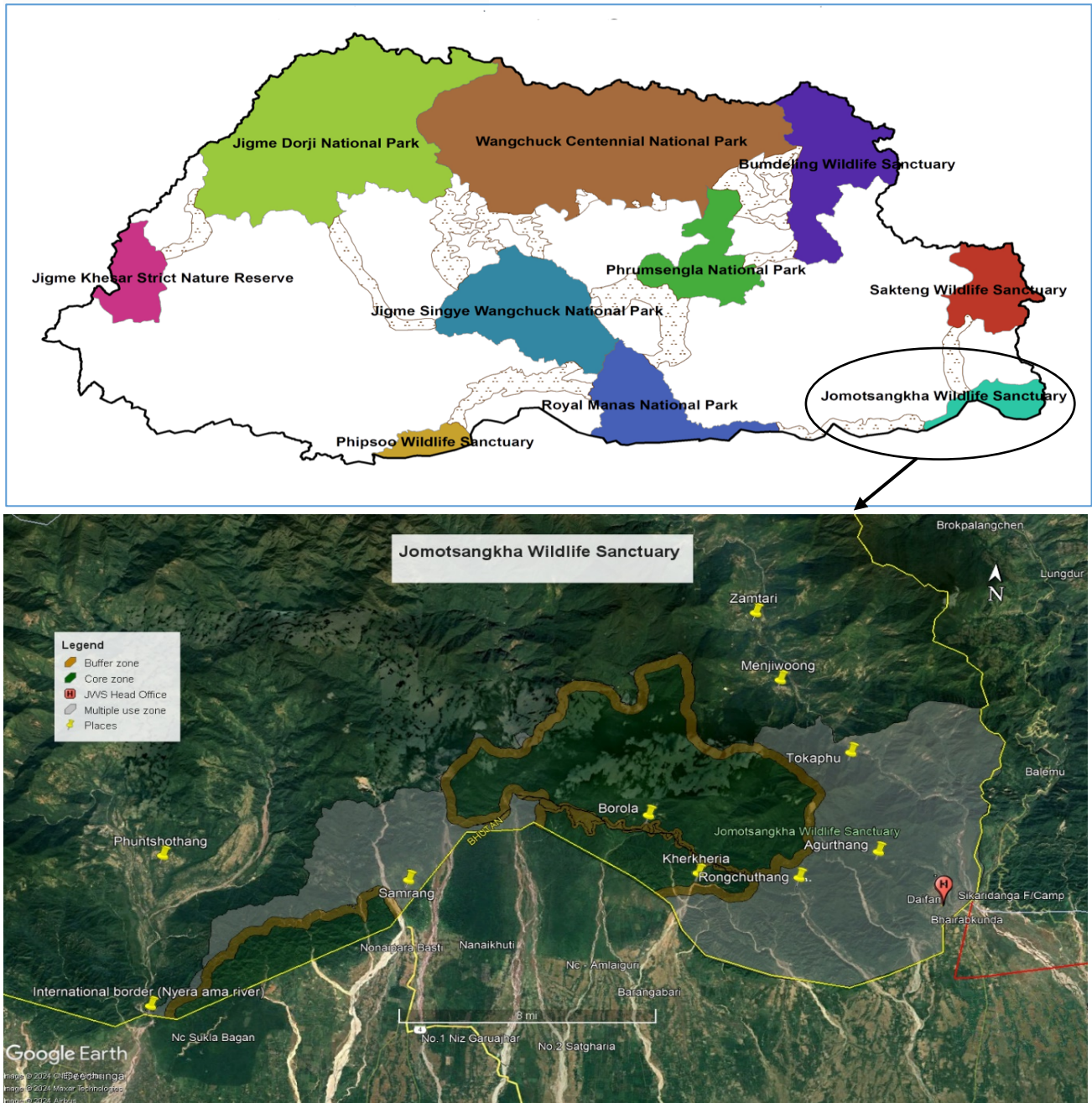


Figure 1. Location of Jomotsangkha Wildlife Sanctuary

1. Geological and Topographical Conditions:

- ✓ The sanctuary is situated in the southeastern part of Bhutan under the Samdrup Jongkhar district, bordering Assam and the Arunachal Pradesh state of India.
- ✓ It encompasses a diverse range of terrain, including dense forests, hills, and river valleys.
- ✓ The topography is characterized by rugged terrain with elevations ranging from 175 meters to over 2200 meters above sea level.
- ✓ The sanctuary is part of the Eastern Himalayas biodiversity hotspot, known for its rich geological and topographical diversity.
- ✓ Sandy soils are found mostly in the plains, loamy soils along the hills, and across the valleys, there are clay deposits from which the wild animals get their natural mineral licks.

2. Climatic Conditions:

- ✓ The climate in Jomotsangkha Wildlife Sanctuary varies with altitude.
- ✓ In the low-lying areas, the climate is subtropical with hot and humid summers and mild winters.
- ✓ At higher altitudes, the climate becomes cooler, with temperatures dropping significantly, especially during the winter months.
- ✓ The sanctuary receives a significant amount of rainfall, particularly during the monsoon season from June to September.

3. Hydrological Conditions:

- ✓ The sanctuary is home to numerous rivers and streams, which serve as vital water sources for both wildlife and local communities. There are 14 different sizes of perennial water bodies that flow through the sanctuary.
- ✓ These water bodies support a rich aquatic ecosystem and provide habitat for various species of fish and other aquatic organisms.
- ✓ The rivers also play a crucial role in regulating the hydrological cycle and maintaining the overall ecological balance of the sanctuary.

4. Flora and Fauna:

- ✓ Jomotsangkha Wildlife Sanctuary boasts a remarkable diversity of flora and fauna.
- ✓ The sanctuary is home to several species of plants (more than 696 species), including various types of tropical and subtropical vegetation.
- ✓ It is renowned for its rich biodiversity, with a wide range of mammal (over 41 species), bird (326 species), reptile (more than 42 species), and amphibian species (more than 32 species).
- ✓ Notable species include the Bengal tiger, Asian elephant, clouded leopard, Himalayan black bear, and several species of primates.
- ✓ It is home to critically endangered species, viz. Chinese Pangolin and Lady Slipper orchid. Out of 11 cat species found in the country, 7 species are recorded in the Sanctuary. There are four types of hornbills of Bhutan (Great Hornbill, Oriental Pied Hornbill, Rufous-necked Hornbill, and Wreathed Hornbill) with active nesting sites.
- ✓ The sanctuary also supports a diverse array of bird species, including many endemic and migratory birds.





Figure 1. Species diversity in Jomotsangkha Wildlife Sanctuary

5. Socio-economic Conditions:

- ✓ The sanctuary is inhabited by indigenous communities who have traditionally relied on its resources for their livelihoods.
- ✓ These communities engage in activities such as agriculture, livestock, and fishing, which are closely intertwined with the sanctuary's ecosystems.
- ✓ Efforts are being made to promote sustainable development practices that balance the needs of both wildlife conservation and local livelihoods.
- ✓ Eco-tourism is emerging as a potential source of income for local communities, offering opportunities for guided wildlife tours and nature-based experiences while contributing to conservation efforts.

The Sanctuary manages Phuntshothang, Pemathang, Samrang, Martshalla under Samdrupcholing Dungkhag and Langchenphug, Serthig, and Lauri under Jomotsangkha Dungkhag. As can be seen in Figure 1, the Sanctuary is bordered by Assam to the south, Dewathang gewog to the west, Sakteng Wildlife Sanctuary to the north, and Arunachal Pradesh to the east. It lies between 26° 48.26' 60" (northing), 91°42.92' 08" E (easting). The altitude of the sanctuary ranges from 130 masl to 2228 masl, consisting of Sub-tropical Forest, Cool Broadleaved Forest, Warm Broadleaved Forest, and narrow grasslands spreading along the southern flood plains.

The details of the households in and around the vicinity of the Sanctuary are given in the Table below:

Table 1: Household details

| Sl. No. | Name of Dungkhag | Name of Gewog | HHs | Chiwog |
|---------|------------------|---------------|-----|--------|
| 1 | Jomotsangkha | Langchenphu | 284 | 5 |
| 2 | | Lauri | 545 | 5 |
| 3 | | Serthi | 373 | 5 |
| 4 | Samdrupcholing | Pemathang | 301 | 5 |
| 5 | | Phuntshothang | 725 | 6 |
| 6 | | Samrang | 52 | 5 |
| 7 | | Martshall | 621 | 5 |

3. Planned activities in Year 2024

3.1 Restoration to enhance the quality and resilience of lowland grasslands

- **Budget:** Nu. 4,00,000
- **Timeline:** October-December 2025 and March-June 2026
- **Location:** Sath Pokhari (26°53'6.88"N, 91°48'23.41"E)

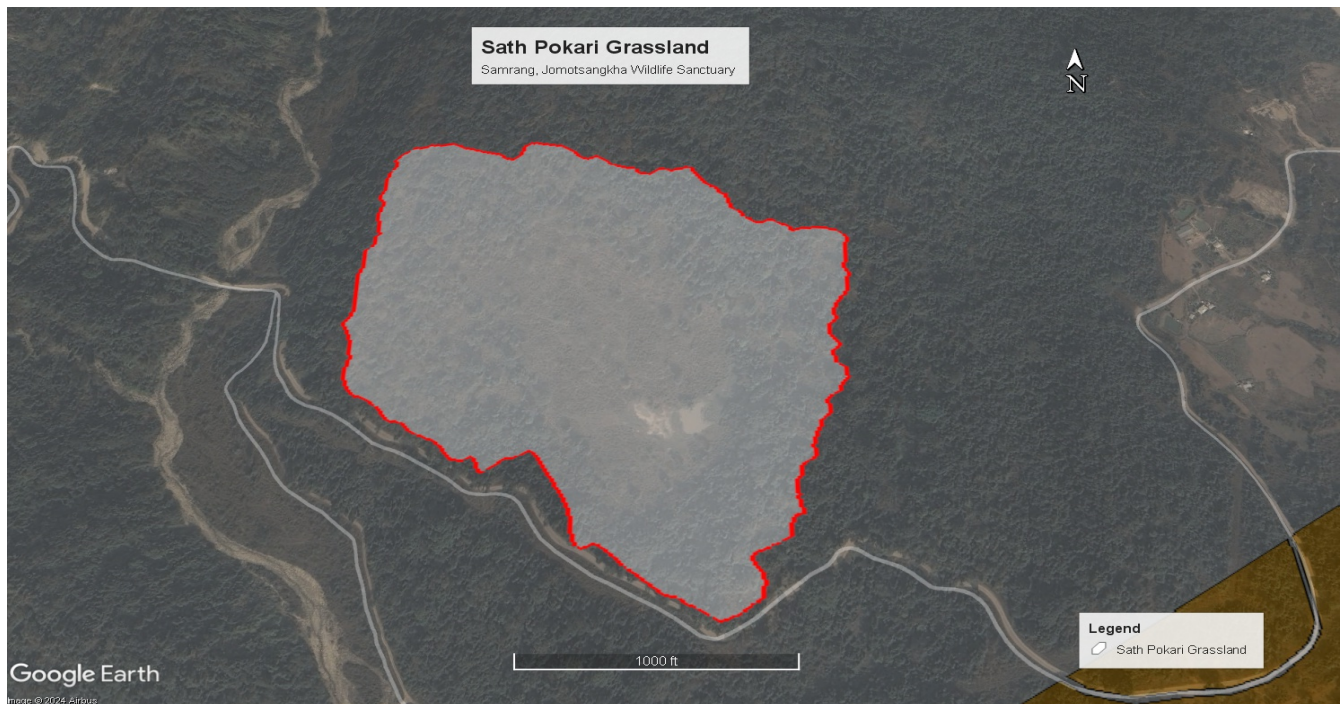


Figure 2. Sath Pokhari Grassland management site

The project entails the meticulous management of lowland grasslands within the jurisdiction of Jomotsangkha Wildlife Sanctuary (JWS). This initiative focuses on the management of grasslands across the Tshoduen area, spanning approximately 12 hectares (30 acres). It falls in the multiple use zone positioned adjacent to buffer and core zones; these grasslands serve as vital extensions of pristine habitats, crucial for maintaining biodiversity.

The proposed lowland grassland management activity site is situated in the Tshoduen area, approximately 3 kilometers away from Samrang. This location was chosen due to its proximity to core zones within the Jomotsangkha Wildlife Sanctuary (JWS), facilitating accessibility for conservation efforts. The terrain of the site features gentle slopes, conducive to supporting wild herbivores, although it currently suffers from encroachment by unpalatable vegetation and plant species.

Presently, the site is covered with unpalatable plants and invasive tree species, diminishing the quality of the grassland. This degradation highlights the urgent need for intervention to restore habitat integrity and enhance grazing areas for wildlife.

The project comprises two distinct phases aimed at rejuvenating the grasslands. Initially, the focus lies on eradicating unpalatable and invasive species, which impede the growth of desirable grasses. This phase involves thorough removal and clearing of unpalatable species to enhance the future growth of indigenous grass species. Subsequently, the implementation of sustainable grassland management practices will involve the strategic sowing of palatable local grass seeds, fostering the recovery of the ecosystem.

Operational activities will involve the deployment of machinery and 10 daytime workers from Tshoduen and Samrang, located 1 and 3 kilometers away, respectively. Given the short commuting distance, logistical arrangements such as accommodations are not necessary since they will commute from home to work site. Additionally, the absence of construction materials and water requirements simplifies operational logistics.

There are approximately 7 households located in the vicinity of the activity site, approximately 1 kilometer away.

Potential environmental impacts

The activity of improvement of lowland grassland includes the removal of unpalatable species, for which the impacts are:

- Change in vegetation by removal of unpalatable plants,
- Risk of forest fires,
- Disturbance to the natural habitat, such as elephants' habitat, while using machinery such as tractors for clearing the thick bushes.

Potential social impacts

There are minimal social impacts as the activity is for habitat management and the site is located away from the settlement, i.e. nearest settlement (1-2 km away). The potential risk for the workers includes risk from wildlife attacks and while handling of field equipments. Additionally, there is risk for the workers while carrying out prescribed burning.



Figure 3. Grassland management at Kherkheri in Langchenphu gewog (2025)



Figure 4. Grassland management at Nunai under Samrang gewog (2024)

3.3 Improvement of Waterholes

- **Budget:** Nu. 3,50,000
- **Timeline:** October 2025-March 2026
- **Location:** Tshoduen (26°52'21"N, 91°48'59.01"E)

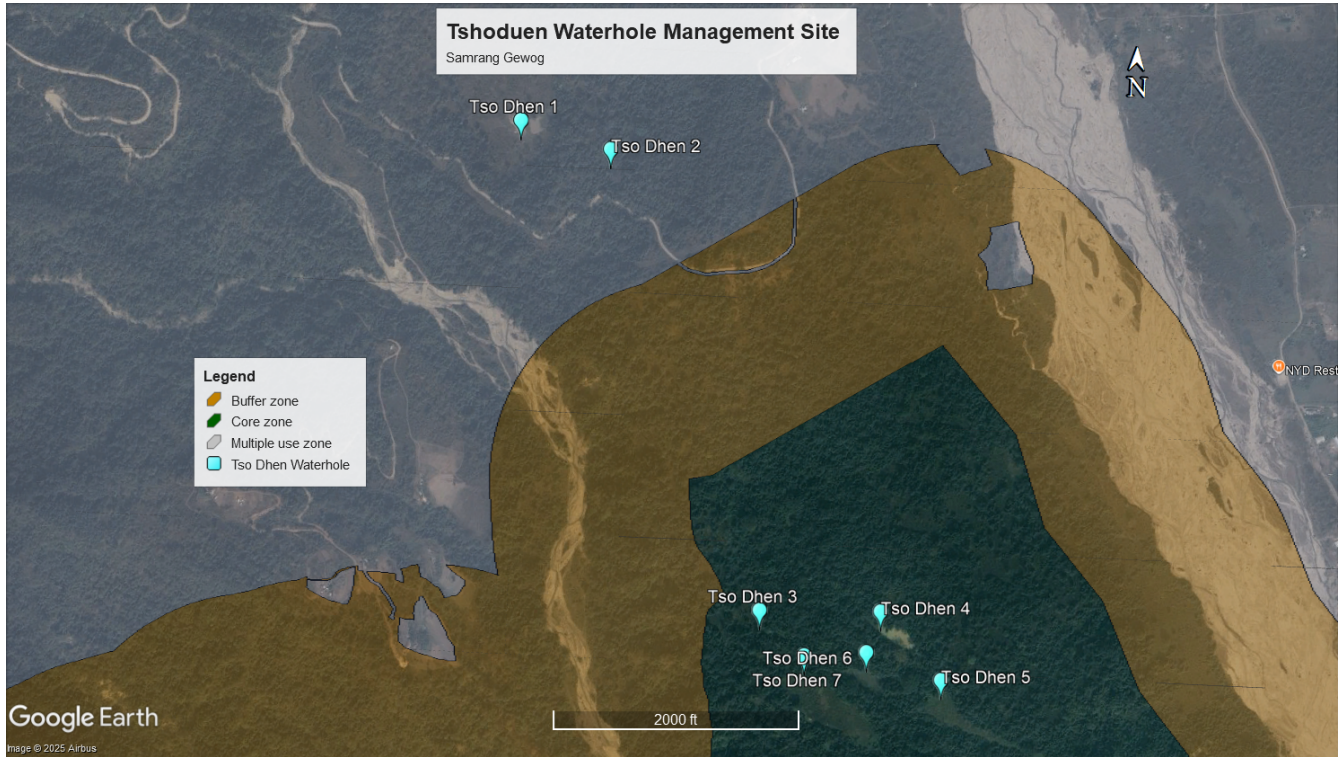


Figure 5. Tshoduen waterhole management site

Water holes are natural or artificial open basins for the storage of water. During monsoon season, due to the presence of continuous recharge of rainwater, availability of drinking water seems to be adequate to wildlife. However, in the winter season, water sources usually dry up and give water scarcity problems for both humans and animals. Wildlife will move in search of water during dry seasons and may come across human habitation, causing human-wildlife conflicts. Improvement of waterholes includes maintenance of existing waterholes, and this includes clearing of trails for the wildlife movement around the waterholes. This activity includes the removal of sediments and debris from the waterholes to make them bigger so that there will be enough water for the animals. Since there are heavy sediment deposits, so machines for clearing the debris shall be used. The existing waterhole has shrunk due to the accumulation of debris and the growth of weeds.



Figure 6. Managed Phakchuthang Waterhole, Langchenphu

The activity site designated for the improvement of waterholes is located 1 kilometer from Tshoduen village, which has 7 households. This site is selected for its strategic importance in wildlife conservation, particularly for elephants and other wild animals. Moreover, the site falls under the multiple use (2 waterholes) and core zone (5 waterholes) categories. The area, measuring 8.81 acres, is characterized by its prime habitat conditions conducive to wildlife, but currently faces issues due to the accumulation of debris and the shrinking of waterholes caused by sediment deposits and weed growth.

The existing waterholes at the site have diminished in size and capacity due to the accumulation of sediments and the growth of invasive weeds, impacting the availability of water for wildlife. The absence of settlements or private properties within the activity area presents a unique opportunity for focused conservation efforts without direct human-wildlife conflict.

The project aims to enhance the waterholes by performing maintenance activities such as clearing trails for wildlife movement, removing sediments, and debris to expand the waterholes, ensuring sufficient water availability for animals. The improvement project will engage 20 local workers from the nearby settlement of Tshoduen and Samrang as day laborers. This approach not only supports the local economy but also benefits the project through the utilization of local knowledge and labor. The project site is in close proximity to Tshoduen village, home to 7 households (1 km away), ensuring minimal disturbance to local communities while still being accessible for conservation activities.

Potential Social Impacts

- Increased poaching as the waterhole site will become a hotspot for animals gathering in one site, thereby increasing the risk of poaching.
- Workers' health and safety
- Waste generation from debris generated during the improvement and from worker

3.3 Mineral Lick Management

- **Budget:** Nu. 1,50,000
- **Timeline:** October 2025-March 2026
- **Location:** Layshingri (26°52'21"N, 91°48'59.01"E) and Borla (26°55'29.46"N, 91°57'14.09"E) under Langchenphu Gewog



Figure 7. Mineral licks at Layshingri and Borla

The management of the mineral lick at Layshingri and Borla, located within Langchenphu Gewog, is crucial for maintaining the health and well-being of wildlife in the area, including species that rely on the mineral-rich soil for essential nutrients. The mineral licks are a vital site for various wildlife species, offering them access to minerals that are deficient in their natural diet, especially during the dry season.

Layshingri and Borla, located in Langchenphu Gewog, is a known wildlife habitat, with mineral licks serving as a crucial resource for animals such as elephants, gaur, and other herbivores. The areas are rich in biodiversity, and the mineral licks are key factors in supporting the health of the wildlife populations in the region. The mineral lick site at Layshingri is also situated near Agurthang, where there are 12 households, making it important to consider the balance between conservation efforts and the potential impact on local communities. Whereas the mineral lick at Borla is located far away from settlement, i.e., approximately 20 km away from Rongchuthang Village (7 households). The mineral licks at Layshingri and Borla have experienced natural erosion, growth of shrubs, and changes in their environment, potentially affecting their accessibility and quality for wildlife. Issues such as increased human activities or changes in the surrounding vegetation could lead to disturbances at the site.

The areas need ongoing management to ensure their continued viability as a mineral source for wildlife, while also mitigating any potential risks to nearby communities. Following sub activities will be carried out:

1. Monitoring and Maintenance of the Mineral Licks:
 - Regular monitoring of the mineral licks is essential to assess their condition and ensure they remain accessible and beneficial to wildlife. This includes checking the erosion levels, ensuring the lick's mineral content remains high.
2. Clearing Vegetation Around the Lick:
 - Vegetation surrounding the mineral licks should be periodically cleared to prevent overgrowth that could obstruct wildlife access. It is essential to ensure that the site remains open and accessible to the animals.
3. Community Engagement and Awareness:
 - Engaging the local community, particularly the 12 households in Agurthang and Rongchuthang, is crucial in ensuring the sustainability of the mineral licks. This includes educating residents about the importance of the mineral lick for wildlife and the need for its preservation.
4. Health and Safety of Workers:
 - Any work related to the maintenance or improvement of the mineral licks, such as clearing vegetation or monitoring the site, will involve workers. Ensuring their health and safety is paramount, especially in a remote location. So, proper safety training, provision of necessary equipment, and emergency response plans will be implemented.



Figure 8. Saltlick management and impacts

Potential Social Impacts:

1. Poaching Risk:

- The mineral lick is situated in Langchenphu Gewog, an area that we monitor regularly, and no poaching incidents have been reported recently. While the likelihood of poaching related to mineral lick management remains low, we will continue to prioritize safety through frequent patrolling and installation of camera trap.

2. Health and Safety of Workers

- Local workers involved in the management of the mineral lick must be provided and made aware of adequate health and safety measures.

4. Environmental and Social Impacts and Mitigation Measures

Table 1. Restoration to enhance the quality and resilience of lowland grasslands

| Potential impact | Impact scale | Proposed mitigation measures | Responsible party | Costs (1USD=Nu.85.44) |
|--|---------------------|---|-------------------------------------|---|
| <i>Activity 1: Restoration to enhance the quality and resilience of lowland grasslands</i> | | | | USD 4,821.3 |
| Change in vegetation: Removal of unpalatable plants (Guidelines for Habitat Management in Bhutan) | Long term Minor | <ul style="list-style-type: none"> • Ensure that no damage is caused to local vegetation - major trees or plants that are supposed to be cut shall be clearly marked, and only marked trees will be cut; • Only native species will be planted • No trees should be removed unnecessarily | BFL focal person and site in charge | To be incorporated in the activity budget |
| Risk of forest fire | Short term Minor | <ul style="list-style-type: none"> • Burning of trees and other plants should be avoided, and if necessary, burning should be carried out in a controlled manner, avoiding dry and windy times of the day. • Control burning is to be carried out by making a fire line. • Workers will be equipped with safety gears and guided on prescribed burning | Activity focal | To be incorporated in the activity budget |
| Disturbance to the natural habitat, such as elephants, while using the machinery, such as excavators and tractors for clearing the thick bushes. | Short term Minor | <ul style="list-style-type: none"> • Avoid working when the herd is in the habitat site, • Avoid using heavy machinery, • Avoid soil excavation and noise disturbance to minimize impact on natural habitats | Activity focal | NA |

| | | | | |
|---|---------------------|---|------------------------|----|
| Risk is for the workers from wildlife attacks and while handling the field equipment. | Short term Minor | <ul style="list-style-type: none"> • Field staffs will be armed for the safety of the workers • Workers will be made aware and equipped with safety gears (Gloves and gumboots) | Activity and BFL focal | NA |
|---|---------------------|---|------------------------|----|

Table 2. Improvement of the waterhole

| Potential impact | Impac | Proposed mitigation measures | Responsible party | Costs (1USD=Nu.82.94) |
|--|---------------------|--|-------------------------------------|--|
| Activity 3: Improvement of waterhole | | | | USD 4096.44 |
| Increased poaching as the waterhole site will become a hotspot for animals gathering in one site thereby increasing the risk of poaching | Long term Major | <ul style="list-style-type: none"> • Increase the frequency of patrolling during and after waterhole construction • Install camera traps in the around and along the way leading to waterhole • Create awareness on the importance of maintaining waterhole and wildlife towards socio-economical and ecological prospect and Forest laws and regulation to the community | BFL focal person | Included in regular patrolling, will used SMART patrolling funds |
| Workers' health and safety | Short term Minor | <ul style="list-style-type: none"> -Comply with the workers' health and safety guidelines of BFL. - Ensure safety gears and first aid kits to the workers while working. -Ensure that no underage operator or children are engaged. -Ensure decent work conditions, wages, working hours, and food -The trained Ranger with weapon will escort workers o ensure the safety of workers from wildlife attacks, only blank round will be allowed to deter the wildlife only. | BFL focal person and site in charge | To be incorporated in activity budget |

| | | | | |
|---|---------------------|--|------------------------------|---------------------------------------|
| Waste: soil from excavation activities and wastes while debris are removed from the habitat sites | Short term Minor | <p style="text-align: center;">During management</p> <ul style="list-style-type: none"> • Proper containers/waste bins should be provided at the project site; • Dumping of waste in the waterholes, on the sides of the road, on private land, 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 carried out on a daily basis and not left in the protected areas <p style="text-align: center;">After management</p> <ul style="list-style-type: none"> • After the construction of waterholes and saltlicks, all wastes (non-degradable) should be brought back and dumped in a proper designated area. | BFL focal and site in charge | To be incorporated in activity budget |
|---|---------------------|--|------------------------------|---------------------------------------|

Table 5. Mineral Lick maintenance

| Potential impact | Impact scale | Proposed mitigation measures | Responsible party | Costs (1USD=Nu.82.94) |
|--|--------------------|---|-------------------|--------------------------------|
| <i>Activity 3: Mineral lick maintenance</i> | | | | USD 1755.6 |
| Increased poaching as the waterhole site will become a hotspot for animals gathering in one site thereby increasing the risk of poaching | Long term Major | -Increase the frequency of patrolling during and after waterhole construction | BFL focal person | Included in regular patrolling |

| | | | | |
|----------------------------|---------------------|---|-------------------------------------|---------------------------------------|
| Workers' health and safety | Short term Minor | <ul style="list-style-type: none"> - Comply with the workers' health and safety guidelines of BFL. - Ensure safety gear and first aid kits are provided to the workers while working. - Ensure that no underage operators or children are engaged. - Ensure decent work conditions, including an appropriate salary, working hours, and food for workers. | BFL focal person and site in charge | To be incorporated in activity budget |
|----------------------------|---------------------|---|-------------------------------------|---------------------------------------|

5. ESMP Implementation Arrangements

The implementation of project activities will be carried out by the BFL focal person in JWS. 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 JWS in 2025. 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 before starting the project activities and before any specific tasks with high health risks.

Non-compliances should be recorded, and the Report on any non-compliances should be reported to the ESS Officer immediately, and the ESS consultants will report it to the PCU (M&E Officer). Every 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 safeguard requirements.

6. ESMP Monitoring Arrangements

The BFL focal person in JWS 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.

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

Table 7. Monitoring of all the activities under this ESMP

| Sl. No | Activities | Monitoring team | Timeline | | Location | Means of Verification |
|--------|---|-------------------|--|----------|-----------------------------|--|
| | | | Start | End | | |
| 1 | Restoration to enhance the quality and resilience of lowland grasslands | Field focal | Monthly monitoring of the maintenance works Start date: January 2026 End Date: June 2026 | | Sath Pokhari, Samrang Gewog | Physically and through the field completion report by implementing the range offices |
| | | ESS focal/BFL-PCU | April 2026 | May 2026 | | Field visit and reports |

| Sl. No | Activities | Monitoring team | Timeline | | Location | Means of Verification |
|--------|------------------------------|-------------------|---|----------|--------------|--|
| | | | Start | End | | |
| 2 | Improvement of the waterhole | Field focal | Monthly monitoring of the maintenance works Start date: December 2025 End Date: June 2026 | | Rongchuthang | Physically and through the field completion report by implementing the range offices |
| | | ESS focal/BFL-PCU | April 2026 | May 2026 | | Field visit and reports |

| Sl. No | Activities | Monitoring team | Timeline | | Location | Means of Verification |
|--------|--------------------------|-------------------|---|----------|--------------|--|
| | | | Start | End | | |
| 3 | Mineral lick maintenance | Field focal | Monthly monitoring of the maintenance works Start date: December 2025 End Date: June 2026 | | Rongchuthang | Physically and through the field completion report by implementing range offices |
| | | ESS focal/BFL-PCU | April 2026 | May 2026 | | Field visit and reports |

7. Capacity Need and Budget

Activities under this ESMP will be implemented by the implementing staff of the Jomotsangkha range office in collaboration with the BFL focal person. The budget for each of the activities is:

Table 8. Total Budget of activities under this ESMP

| Sl. No | Activity | Amount (Nu.) | Budget for ESS mitigation |
|--------------|----------------------------------|-----------------|--|
| 1 | Restoration of lowland grassland | 4,00,000 | Mitigation cost will be met from activity cost |
| 2 | Improvement of Waterhole | 3,50,000 | |
| 3 | Mineral lick maintenance | 1,50,000 | |
| Total | | 9,00,000 | |

8. Consultation and Disclosure Mechanisms

The full English version of this ESMP, as well as an executive summary in Bhutanese, shall be disclosed on the website of MoENR and WWF-US GCF Accredited Entity. Hard copies of the ESMP should also be available at the PA Management Office and at the PCU Office. The copies of ESMP will be shared with relevant local elected leaders for compliance. Community groups shall visit the project sites and share their concerns, and it will be reported in the BFL focal monitoring reports. Any consultation meeting minutes shall be maintained for reference.

Agenda: The local leader and communities have been consulted for this activity, and consent for carrying out the activity. During the consultation, we have discussed the objective of the project, concerns of the local people, and we have presented on the potential impacts and also discussed the mitigation measures that will be taken.

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 the ESS officer within one week after the completion of the consultation. The ESS officer 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.

9. Stakeholder Engagement Plan

The local community that resides in the vicinity of the planned BFL activities in JWS will be engaged throughout the implementation of these activities. A focused section of local people will be informed to work in the management activities, and this is not to disclose the location of active wildlife sites in the park and prevent poaching activities in the future. Community groups shall visit the project sites and share their concerns, and it will be reported in the BFL focal monitoring reports. Any consultation meeting minutes shall be maintained for reference. The community will be timely made aware of any activity carried out at the project site, and the ownership for future management will be given to the community.

10. Grievance Redressal Mechanisms

This ESMP and its mitigation measures are required to be disclosed to communities for 30 days before the start of implementation of activities. In addition, the BFL focal point is responsible for making local communities aware of the grievance mechanisms: the BFL-specific grievance mechanism, WWF's Grievance Mechanism, and the GCF Independent Review Mechanism.

BFL-specific Grievance Mechanism

A grievance redressal mechanism (GRM) is in place to address any grievances arising from the implementation of BFL activities, on resources, non-performance of project obligations including safeguards, violation of law and/or corruption, project governance and implementation, fair access and benefit sharing, stakeholder engagement, labor-related issues and incidents, gender related issues, and others. If the stakeholders have any grievances related to the BLF project, they can report their grievances via letter, phone call, or verbally to nearby gewog or forest offices. The report can also be sent to the BFL PCU office or WWF office. The

specific brochure for the GRM is attached in the annexure for any grievance related to the implementation of the project activities.

WWF Grievance Mechanism

A grievance can be filed with the Project Complaints Officer (PCO), a WWF staff member fully independent from the Project Team, who is responsible for the WWF Grievance Mechanism and who can be reached at:

Email: SafeguardsComplaint@wwfus.org

Mailing address:

Project Complaints Officer

Safeguards Complaints,

World Wildlife Fund

1250 24th Street NW

Washington, DC 20037

Stakeholders may also submit a complaint online through an independent third-party platform at <https://secure.ethicspoint.com/domain/media/en/gui/59041/index.html>.

GCF Independent Review Mechanism

The Independent Review Mechanism (IRM) provides recourse to those affected or who may be affected by GCF projects. Complainants can find information on filing a complaint and proceed to file a complaint on the GCF IRM website: <https://irm.greenclimate.fund/case-register/file-complaint>.

Annexure 1: BFL: Suggested Occupational Health and Safety Standards

Employers and supervisors are obliged to implement all reasonable precautions to protect the health and safety of workers. Implementing entities should hire contractors that have the technical capability to manage the occupational health and safety issues of their workers, extending the application of the hazard management activities through formal procurement agreements.

This section provides guidance and examples of reasonable precautions to implement in managing principal risks to occupational health and safety. It is based on the IFC's Environmental, Health, and Safety Guidelines (April 30, 2007) and the Occupational Health and Safety Guidelines of Bhutan's Construction Development Corporation Ltd., which relies on the national Regulation on Occupational Health, Safety and Welfare 2012, Regulation on Working Conditions 2012 and Labour Act 2007, and in compliance to Sl. No. 21 of Regulation on Occupational Health, Safety and Welfare 2012.

1. General Facility Design and Operation

Integrity of Workplace Structures

Permanent and recurrent places of work should be designed and equipped to protect occupational health and safety:

- Surfaces, structures, and installations should be easy to clean and maintain, and not allow for accumulation of hazardous compounds.
- Buildings should be structurally safe, provide appropriate protection against the climate, and have acceptable light and noise conditions.
- Fire-resistant, noise-absorbing materials should, to the extent feasible, be used for cladding on ceilings and walls.
- Floors should be level, even, and non-skid.
- Heavy oscillating, rotating, or alternating equipment should be located in dedicated buildings or structurally isolated sections.

Severe Weather and Facility Shutdown

- Workplace structures should be designed and constructed to withstand the expected elements for the region and have an area designated for safe refuge (e.g., in case of earthquake).

Workspace and Exit

- The space provided for each worker, and in total, should be adequate for safe execution of all activities, including transport and interim storage of materials and products.

Fire Precautions

The workplace should be designed to prevent the start of fires through the implementation of fire codes applicable to industrial settings. Other essential measures include:

- The workplace shall be provided with adequate means of protection and escape in case of fire.
- The workplace shall be provided with an adequate number of relevant fire extinguishers.
- Workers shall wear shoes without iron or steel nails or any other exposed ferrous

materials which is likely to cause sparks by friction.

- Smoking, lighting, or carrying of matches, lighters, or smoking materials shall be prohibited.
- All other precautions, as are reasonably practicable, shall be taken to prevent initiation of ignition from all other possible sources such as open flames, frictional sparks, overheated surfaces of machinery or plant, chemical or physical, chemical reaction, and radiant heat.
- At every workplace, adequate provision of water supply for firefighting shall be provided and maintained.
- Equipping facilities with firefighting equipment (e.g., fire extinguishing bottle). The equipment should be maintained in good working order and be readily accessible. It should be adequate for the dimensions and use of the premises, equipment installed, physical and chemical properties of substances present, and the maximum number of people present.
- Manual firefighting equipment shall be easily accessible and simple to use.
- Fire extinguishers and emergency alarm systems that are both audible and visible should be in place.

Lavatories and Showers

- Adequate lavatory facilities (toilets and washing areas) should be provided for the number of people expected to work in the facility (at least one for every 20 workers). Toilet facilities should also be provided with adequate supplies of hot and cold running water and soap.

Potable Water Supply

- Adequate supplies of potable drinking water should be provided to workers at the work site.

Clean Eating Area

- Where there is potential for exposure to substances poisonous by ingestion, suitable arrangements are to be made for the provision of clean eating areas where workers are not exposed to the hazardous or noxious substances.

Lighting

- Workplaces should, to the degree feasible, receive natural light and be supplemented with sufficient artificial illumination to promote workers' safety and health, and enable safe equipment operation. Supplemental 'task lighting' may be required where specific visual acuity requirements should be met.
- Emergency lighting of adequate intensity should be installed upon failure of the principal artificial light source to ensure safe shut-down, evacuation, etc.

Safe Access

- Passageways for pedestrians and vehicles within and outside buildings should be segregated and provide for easy, safe, and appropriate access.
- Equipment and installations requiring servicing, inspection, and/or cleaning should have unobstructed, unrestricted, and ready access.
- Covers should, if feasible, be installed to protect against falling items.

- Measures to prevent unauthorized access to dangerous areas should be in place.

First Aid

- The employer should ensure that qualified first-aid can be provided at all times. A sufficient number of first aid boxes or cupboards shall be provided and maintained so as to be readily available during all working hours, provided that the distance of the nearest first aid box or cupboard shall be not more than 200m from any working place.
- First aid kits include all equipment outlined in Annex 1 to these Guidelines.
- Remote sites should have written emergency procedures in place for dealing with cases of trauma or serious illness up to the point at which patient care can be transferred to an appropriate medical facility.

Work Uniform

- The contractor shall provide a working uniform to each worker.
- All workers shall be required to attend the duty in proper uniform unless otherwise instructed by the Contractor.

Air Supply

- Sufficient fresh air should be supplied for indoor and confined workspaces. Factors to be considered in ventilation design include physical activity, substances in use, and process related emissions. Air distribution systems should be designed so as not to expose workers to draughts.
- Re-circulation of contaminated air is not acceptable. Heating, ventilation and air conditioning (HVAC) systems should be equipped, maintained and operated so as to prevent growth and spreading of disease agents (e.g. Legionella pneumophila) or breeding of vectors (e.g. mosquitoes and flies) of public health concern.

2. Information Provision on Occupational Health and Safety (OHS)

- The Contractor is responsible to hold an information session to familiarize all workers with the OHS procedures specified in these guidelines, in order to ensure they are apprised of the basic site rules of work at / on the site and of personal protection and preventing injury to fellow workers.
- The information session should consist of basic hazard awareness, site-specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate. Any site-specific hazard or color coding in use should be thoroughly reviewed as part of orientation training.

3. Physical Hazards

- Physical hazards represent potential for accident or injury or illness due to repetitive exposure to mechanical action or work activity.

Rotating and Moving Equipment

Injury or death can occur from being trapped, entangled, or struck by machinery parts due to unexpected starting of equipment or unobvious movement during operations.

Recommended protective measures include:

- Designing machines to eliminate trap hazards and ensuring that extremities are

kept out of harm's way under normal operating conditions. Examples of proper design considerations include two-hand operated machines to prevent amputations or the availability of emergency stops dedicated to the machine and placed in strategic locations.

- Where a machine or equipment has an exposed moving part or exposed pinch point that may endanger the safety of any worker, the machine or equipment should be equipped with and protected by a guard or other device that prevents access to the moving part or pinch point. Guards should be designed and installed in conformance with appropriate machine safety standards.

Noise

- No worker should be exposed to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection. In addition, no unprotected ear should be exposed to a peak sound pressure level (instantaneous) of more than 140 dB(C).
- The use of hearing protection should be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110dB(A). Hearing protective devices provided should be capable of reducing sound levels at the ear to at least 85 dB(A).
- Although hearing protection is preferred for any period of noise exposure in excess of 85 dB(A), an equivalent level of protection can be obtained, but less easily managed, by limiting the duration of noise exposure. For every 3 dB(A) increase in sound levels, the 'allowed' exposure period or duration should be reduced by 50 percent.
- Prior to the issuance of hearing protective devices as the final control mechanism, use of acoustic insulating materials, isolation of the noise source, and other engineering controls should be investigated and implemented, where feasible.
- Periodic medical hearing checks should be performed on workers exposed to high noise levels.

Vibration

Exposure to hand-arm vibration from equipment such as hand and power tools, or whole-body vibrations from surfaces on which the worker stands or sits, should be controlled through the choice of equipment, the installation of vibration-dampening pads or devices, and limiting the duration of exposure.

Electrical

Exposed or faulty electrical devices, such as circuit breakers, panels, cables, cords and hand tools, can pose a serious risk to workers. Overhead wires can be struck by metal devices, such as poles or ladders, and by vehicles with metal booms. Vehicles or grounded metal objects brought into close proximity with overhead wires can result in arcing between the wires and the object, without actual contact. Recommended actions include:

- Marking all energized electrical devices and lines with warning signs
- Locking out (de-energizing and leaving open with a controlled locking device) and tagging-out (warning sign placed on the lock) devices during service or maintenance
- Checking all electrical cords, cables, and hand power tools for frayed or exposed cords and following manufacturer recommendations for the maximum permitted

operating voltage of the portable hand tools

- Double insulating/grounding all electrical equipment used in environments that are, or may become, wet; using equipment with ground fault interrupter (GFI) protected circuits
- Protecting power cords and extension cords against damage from traffic by shielding or suspending them above traffic areas
- Appropriate labeling of service rooms housing high voltage equipment ('electrical hazard') and where entry is controlled or prohibited
- Establishing "No Approach" zones around or under high voltage power lines
- Rubber-tired construction or other vehicles that come into direct contact with, or arcing between, high voltage wires may need to be taken out of service for periods of 48 hours and have the tires replaced to prevent catastrophic tire and wheel assembly failure, potentially causing serious injury or death
- Conducting detailed identification and marking of all buried electrical wiring before any excavation work

Eye Hazards

Solid particles from a wide variety of industrial operations, and/or a liquid chemical spray may strike a worker in the eye, causing an eye injury or permanent blindness. Recommended measures include:

- Use of machine guards or splash shields and/or face and eye protection devices, such as safety glasses with side shields, goggles, and/or a full-face shield. Frequent checks of these types of equipment before use to ensure mechanical integrity is also good practice.
- Where machine or work fragments could present a hazard to transient workers or passers-by, extra area guarding or proximity restricting systems should be implemented, or PPE required for transients and visitors.
- Provisions should be made for persons who have to wear prescription glasses either through the use of over glasses or prescription hardened glasses.

Welding / Hot Work

Welding creates an extremely bright and intense light that may seriously injure a worker's eyesight. In extreme cases, blindness may result. Additionally, welding may produce noxious fumes to which prolonged exposure can cause serious chronic diseases. Recommended measures include:

- Provision of proper eye protection such as welder goggles and/or a full-face eye shield for all personnel involved in, or assisting, welding operations. Additional methods may include the use of welding barrier screens around the specific workstation (a solid piece of light metal, canvas, or plywood designed to block welding light from others). Devices to extract and remove noxious fumes at the source may also be required.

Working Environment Temperature

Exposure to hot or cold working conditions in indoor or outdoor environments can result in temperature stress-related injury or death. The use of personal protective equipment (PPE) to protect against other occupational hazards can accentuate and aggravate heat-related illnesses. Extreme temperatures in permanent work environments should be avoided through the implementation of engineering controls and ventilation. Where this is not possible, such as during short-term outdoor work, temperature-related stress management procedures should be implemented, which include:

- Monitoring weather forecasts for outdoor work to provide warning of extreme weather and scheduling work accordingly
- Providing temporary shelters to protect against the elements during working activities or for use as rest areas
- Use of protective clothing
- Providing easy access to adequate hydration, such as drinking water or electrolyte drinks, and avoiding consumption of alcoholic beverages

Ergonomics, Repetitive Motion, Manual Handling

Injuries due to ergonomic factors, such as repetitive motion, overexertion, and manual handling, take prolonged and repeated exposures to develop and typically require periods of weeks to months for recovery. These OHS problems should be minimized or eliminated to maintain a productive workplace. Controls may include:

- Facility and workstation design with 5th to 95th percentile operational and maintenance workers in mind
- Use of mechanical assists to eliminate or reduce exertions required to lift materials, hold tools and work objects, and require multi-person lifts if weights exceed thresholds
- Selecting and designing tools that reduce force requirements and holding times, and improve postures
- Incorporating rest and stretch breaks into work processes, and conducting job rotation
- Implementing quality control and maintenance programs that reduce unnecessary forces and exertions

Working at Heights

Fall prevention and protection measures should be implemented whenever a worker is exposed to the hazard of falling more than two meters, into operating machinery, into water or other liquid, into hazardous substances, or through an opening in a work surface. Fall prevention/protection measures may also be warranted on a case-specific basis when there are risks of falling from lesser heights. Fall prevention may include:

- Installation of guardrails with mid-rails and toe boards at the edge of any fall hazard area
- Proper use of ladders and scaffolds by trained workers
- Use of fall prevention devices, including safety belt and lanyard travel limiting devices to prevent access to fall hazard area, or fall protection devices such as full body harnesses used in conjunction with shock absorbing lanyards or self-retracting inertial fall arrest devices attached to a fixed anchor point or horizontal life-lines
- Appropriate training in use, serviceability, and integrity of the necessary PPE
- Inclusion of rescue and/or recovery plans, and equipment to respond to workers after an arrested fall

Illumination

Work area light intensity should be adequate for the general purpose of the location and type of activity, and should be supplemented with dedicated workstation illumination, as needed. Controls should include:

- Use of energy-efficient light sources with minimum heat emission
- Undertaking measures to eliminate glare/reflections and flickering of lights
- Taking precautions to minimize and control optical radiation, including direct sunlight.
- Exposure to high intensity UV and IR radiation and high intensity visible light

should also be controlled

- Controlling laser hazards in accordance with equipment specifications, certifications, and recognized safety standards. The lowest feasible class Laser should be applied to minimize risks.

4. Personal safety equipment for workers

All workers are equipped with the following personal safety equipment: helmet, gloves, ordinary boots, and reflective vest.

Workers who are exposed to dust should also be provided with eye protection glasses and a face mask. Workers who are exposed to noise should be provided with earplugs. Workers who need to work in the dark should be provided with hand and cap lamps. Workers are instructed regarding safety equipment as follows:

- Always wear a complete set of protective wear.
- Do not wear loose clothing, such as an overhang shirt, jackets, mufflers, etc.
- Tuck shirt and jacket well.
- Secure helmet with belt under the chin.
- Tuck the bottom sleeves of trousers inside the safety boot.
- Dress with a reflector

5. Standards for workers' accommodation

1. General living facilities

- The location of the facilities is designed to avoid flooding or other natural hazards
- The living facilities are located within a reasonable distance from the worksite.
- Transport is provided to the worksite safely and free.
- The living facilities are built using adequate materials, kept in good repair, and kept clean and free from rubbish and other refuse.

2. Drainage

- The site is adequately drained.

3. Heating, air conditioning, ventilation, and light

- Living facilities are provided with adequate heating, ventilation, and light systems, including emergency lighting.

4. Water

- Workers have easy access to a supply of clean/ potable water in adequate quantities.
- The quality of the water complies with national/local requirements or WHO standards.
- Tanks used for the storage of drinking water are constructed and covered to prevent water stored therein from becoming polluted or contaminated.
- The quality of the drinking water is regularly monitored.

5. Wastewater and solid waste

- Wastewater, sewage, food, and any other waste materials are adequately discharged in compliance with national and/or international standards and without causing any significant impacts on camp residents, the environment, or surrounding communities.
- Specific containers for rubbish collection are provided and emptied regularly.
- Pest extermination, vector control, and disinfection are undertaken throughout the living facilities at least once.

6. Rooms/dormitories facilities

- Rooms/dormitories are kept in good condition.
- Rooms/dormitories are aired and cleaned at regular intervals.
- Rooms/dormitories are built with easily cleanable flooring material.

- Rooms/dormitories and sanitary facilities are located in the same buildings.
- Residents are provided with enough space.
- The number of workers sharing the same room/dormitory is minimized.
- Doors and windows are lockable and provided with mosquito screens when necessary.
- Mobile partitions or curtains are provided.
- Adequate number of furniture such as tables, chair, mirror, and lamps are provided for all workers.
- Separate sleeping areas are provided for men and women.

7. Bed arrangements and storage facilities

- A separate bed is provided for every worker.
- The practice of “hot-bedding” is prohibited.
- There is a minimum space of 1 meter between beds.
- The use of double-deck bunks is minimized.
- If double-deck bunks are in use, there is enough clear space between the lower and upper bunks of the bed.
- Workers are provided with comfortable mattresses. Workers may be expected to use their pillows and bed linens.
- Workers wash bed linen frequently and apply adequate repellents and disinfectants (where conditions warrant).
- Adequate facilities for the storage of personal belongings are provided.
- Separate storage for work clothes and PPE, and, depending on condition, drying/airing areas are provided.

8. Sanitary and toilet facilities

- Sanitary and toilet facilities are constructed from materials that are easily cleanable.
- Sanitary and toilet facilities are cleaned frequently and kept in working condition.
- Toilets, showers/bathrooms, and other sanitary facilities are designed to provide workers with adequate privacy, including ceiling-to-floor partitions and lockable doors.
- Separate sanitary and toilet facilities are provided for men and women.
- Toilet facilities are conveniently located and easily accessible.
- Toilet facilities are environmentally friendly (e.g., pit toilet), and sewage is not disposed of into the work site.
- Open defecation in the vicinity of project sites should be prohibited.
- An adequate number of hand-wash basins and showers/bathroom facilities are provided.
- Shower facilities are provided with water heating facilities.

9. Cooking and laundry facilities

Cooking and laundry facilities should be available for workers at the worksite or in close vicinity to it. These facilities should be kept in clean and sanitary conditions.

10. Leisure, social, and telecommunications facilities

- Basic social collective spaces should be available to workers.
- Workers are provided with dedicated places for religious observance, as appropriate.
- The employer provides workers with local SIM cards that can be used for communication on their cell phones.

Contents of first aid box or cupboards

The first aid boxes or cup-boards shall be distinctively marked with a white cross on a green background and shall contain the following equipment:

1. Small sterilized dressings (12)
2. Medium-sized sterilized dressings (6)
3. Large size sterilized dressings (6)
4. Large size sterilized burn dressings (6)
5. (1/2 oz.) Sterilized cotton wool (6 packets)
6. (2oz.) Bottle containing a two per cent alcoholic solution of iodine (1)
7. (2oz.) Bottle containing Betadine (antiseptic solution), having the dose and mode of administration indicated on the label (1)
8. Roll of adhesive plaster (1)
9. A snake bite lancet (1)
10. Torch light (1)
11. Pair of scissors (1)
12. Tablets Aspirin (5 gms) 2 dozen
13. Burn Ointment (2 tubes)
14. Dettol (2 phial, about 2 ozs)
15. Bandages 4 inches wide
16. Bandages 2 inches wide
17. Triangular bandages (2)
18. Packets of safety pins (1)
19. A supply of suitable splint

Annexure 2: Grievance Redressal Mechanism Pamphlet

LOGICAL STEPS FOR GRIEVANCE RESOLUTION PROCESS

Each grievance will be registered with the following information:

- Name of the complainant
- Date of the grievance
- Nature of the grievance and location
- Number of persons involved
- Tracking no.
- Potential solutions

Modes of communication:

WHAT HAPPENS TO YOUR COMPLAINT?

The complaint will be investigated by responsible authorities following the logical steps for grievance resolution process within 12 working days. If further investigation is required, the complainant will be informed accordingly and a final response will be provided after an additional period of 8 working days.

If you did not prefer to remain anonymous, you will be notified regarding the complaint resolution once the investigation is completed.

VISIT US:

Bhutan For Life, Project Coordination Unit, Department of Forests and Park Services, Ministry of Energy and Natural Resources, Royal Government of Bhutan

THE GRIEVANCE REDRESSAL MECHANISM FOR BHUTAN FOR LIFE

JOMOTSANGKHA WILDLIFE SANCTUARY

The goal of the BFL GRM is to channel grievances into an acceptable, institutionalized mechanism for timely resolving conflict that may arise from implementation of BFL project activities.

The GRM seeks to address any grievances related to the implementation of BFL activities such as:

- Loss of community resources
- Non-performance of project obligations including safeguards
- Violations of law and/or corruption
- Project governance and implementation
- Fair access and benefit sharing
- Stakeholder engagement
- Budget allocation
- Labour related issues and incidents
- Gender related issues

HOW TO FILE YOUR COMPLAINT

To file your complaint, please contact any of the designated individuals provided below. You may maintain anonymity if you prefer.

BFL FOCAL OFFICER

- Sonam Tshering
- 17347587
- stshering@moenr.gov.bt
- Jomotsangkha Wildlife Sanctuary, Jomotsangkha, Samdrupjongkhar

SAMDRUPCHOLING PARK RANGE OFFICE

- Tek Bhadur Gurung
- 17678804
- gurutek13@gmail.com
- Samdrupcholing Park Range Office, Jamdrupcholing, Samdrupjongkhar

JOMOTSANGKHA PARK RANGE OFFICE

- Sherub Gyaltsen
- 17735313
- gangkharsherubkinley@gmail.com
- Jomotsangkha Wildlife Sanctuary, Jomotsangkha, Samdrupjongkhar

YOU MAY ALSO CONTACT THE BFL PROJECT COORDINATION UNIT (PCU) OR FUND SECRETARIAT (FS) AT:

BFL FUND SECRETARIAT (FS)

- Kuenzang Tobgay
- 17750414
- kuenzangtobgay@bfl.org.bt
- Bhutan For Life Fund Secretariat, Royal Textile Academy, Thimphu

BFL PROJECT COORDINATION UNIT (PCU)

- Ugyen Dechen
- 17491881
- bflprojectofficer@gmail.com
- BFL Project Coordination Unit, Department of Forests and Park Services, Ministry of Energy and Natural Resources, Taba, Thimphu

IF THE NATIONAL PROCESS OF GRM IS UNABLE TO RESOLVE THE GRIEVANCE, COMPLAINTS MAY ALSO BE FILED WITH WORLD WILDLIFE FUND (WWF).

Write to the WWF GCF Accredited entity at:
 SafeguardsComplaint@wwf.us.org
 Project Complaints Officer, Safeguards Complaints,
 World Wildlife Fund 1250 24th Street NW
 Washington, DC 20037

COMPLAINTS MAY ALSO BE FILED WITH GCF INDEPENDENT REDRESS MECHANISM (IRM) OPTION. COMPLAINT CAN BE FILED BY:

- Sending it by mail or email at irm@gcfund.org
- Sending a voice or video recording
- Filling out the online complaints form available at:
<https://gcf.isight.com/external/case/new/group=Complaint>

A complaint for IRM should generally include:

- Name, address and contact information
- A description of the programme (caused adverse impacts to the complainant)
- A description of how the complainants have been/maybe adversely impacted by the project/programme
- Whether confidentiality is being requested and the reasons for it.

COMPLAINTS MAY ALSO BE FILED WITH THE WWF THIRD PARTY GRIEVANCE REPORTING MECHANISM BY USING ETHICS POINT WEBSITE AT:

<https://secure.ethicspoint.com/domain/media/en/gui/59041/index.html>

This mechanism can receive reports online or by phone in multiple languages.

IF YOU ARE UNSATISFIED WITH THE COMPLAINT RESOLUTION PROCESS, YOU CAN APPEAL TO:

GRM Appeal Committee, Bhutan For Life Project, DoFPS, Thimphu, Bhutan.