

## **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 Jigme Singye Wangchuck National Park (JSWNP) 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 JSWNP are:

1. Improvement of Waterholes and Salt Licks at Tingtibi and Nabji
2. Invasive plant species removal and enrichment plantation (fodder grass) at Langthel
3. Construction of new water source at JSWNP Head Office
4. Maintenance of Taksha Park Range Office and Staff quarters.

## བཞོན་ཁྱབ་བསྟན་དོན།

འབྲུག་རྒྱལ་ཡོངས་སློབ་ཀྱི་ཆེ་སློག་མ་དངུལ་འདི་མཐའ་འཁོར་གནས་སྟངས་དང་མི་ཕྱེ་འོས་འབབ་ཅན་གྱི་ལས་འགུལ་གྱི་དབྱེ་ཁག་ ཁ་པ་(Category B) ནང་ལྷ་ཚྭ་དེ་ཡོད་པ་ཡིན། དེ་ཡང་ལས་འགུལ་འདི་ལས་བརྟེན་ཏེ་སྤྱད་སྟོབ་ས་ཁོངས་ནང་སྤྱད་མིའི་མི་སེར་དང་ ཡང་ན་ སྤྱད་སྟོབ་ས་ཁོངས་ཀྱི་མཐའ་སྐོར་ཏེ་འཆོ་བ་སྤྱད་སྟོབ་ས་ཁོངས་ལྷ་བརྟེན་སྤྱད་མིའི་མི་སེར་ ཡང་ན་ གལ་ཅན་གྱི་མཐའ་སྐོར་གནས་སྟངས་ཀྱི་ས་ཁོངས་ཚུ་ལྷ་གཞོན་པ་འབྱུང་ནིའི་ཉེན་ཁ་ཡོད་པ་ད་ གལ་སྲིད་གཞོན་པ་འབྱུང་པ་ཅིན་ གཞོན་ཉེན་ཚུ་དམིགས་བསལ་ས་གནས་ནང་རྒྱུ་མ་ཅིག་འབྱུང་ནི་དང་ གཞོན་ཉེན་མར་པལ་རྒྱབ་ནི་དང་ཚུ་མེད་ཡང་གཏང་ཚུགས་པ་ཡིན།

དེ་འབད་མ་ལས་ འབྲུག་རྒྱལ་ཡོངས་སློབ་ཀྱི་ཆེ་སློག་མ་དངུལ་ཐོག་ལྷ་ རྒྱབ་སྐྱོར་འབད་ཡོད་པའི་ལས་འགུལ་དང་ལས་ལྷ་ཚུ་ མཐའ་འཁོར་གནས་སྟངས་དང་ མི་ཕྱེ་གཉིས་ལྷ་ལུན་བརྟེན་གྱི་པན་པ་ཡོད་པ་བཟོ་བ་གི་མ་ཚད་ འབྲུག་རྒྱལ་ཡོངས་སློབ་ཀྱི་ཆེ་སློག་མ་དངུལ་གྱི་སྤྱད་སྟོབ་ས་ལྷ་ཚུ་དང་འབྲེལ་ཐབས་ལྷ་ མཐའ་འཁོར་གནས་སྟངས་དང་མི་ཕྱེ་འཛིན་སྐྱོང་འཆར་གཞི་འདི་དགོས་ད་ མི་དམངས་གོས་བསྟན་དང་ ཏུས་དང་ཏུས་སྤྱི་མི་དམངས་ལྷ་གསལ་བསྟུགས་འབད་དགོས་ཡིན།

རང་བཞིན་གནས་སྟངས་དང་མི་ཕྱེ་འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ སློབ་ཀྱི་དང་སློག་ཆགས་རྒྱན་ལམ་ཚུ་ནང་ལས་ལྷ་ཚུ་འབད་བའི་སྐབས་ ཐབས་ལམ་དང་བཟང་སྤྱོད་ཚུ་གསལ་སྟོན་འབད་མ་ཡིན་པ་ད་ འདི་ཡང་ལས་ལྷ་ཚུ་འདྲམ་སེལ་ལམ་ལུགས་དང་འབྲེལ་ཏེ་ཡིན། གདམ་སེལ་འབད་ཡོད་པའི་ལས་ལྷ་གི་ནང་ལས་ མཐའ་འཁོར་གནས་སྟངས་དང་མི་ཕྱེ་ལྷ་གཞོན་ཉེན་ཡོད་པའི་ལས་ལྷ་ཚུ་གི་དོན་ལྷ་ མཐའ་འཁོར་གནས་སྟངས་དང་མི་ཕྱེ་འཛིན་སྐྱོང་འཆར་གཞི་བཟོ་དགོ། འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ ལས་ལྷ་འགོ་མ་བཅུགས་པའི་ཏེ་མ་གཞི་བཅུགས་འབད་བའི་སྐབས་དང་མཐུག་བསྟུལ་ད་ལྷ་ མཐའ་འཁོར་གནས་སྟངས་འཛིན་སྐྱོང་དང་གཞོན་ཉེན་མར་པལ་གྱི་ཐབས་ལམ་ཚུ་བཅུགས་དགོས་ཡིན།

དེ་འབད་མ་ལས་འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ ལས་ལྷ་ མི་ཕྱེ་ ལྷ་འགན། བད་སྤྱོད་དང་སྟན་ལྷ། དེ་ལས་ལྷ་རྟོག་ལམ་ལུགས་ཚུ་གི་སྐོར་ལས་འགྲེལ་བཤད་ཁ་གསལ་ཚུད་དགོས་ཡིན། འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ལྷ་ གལ་གཏོགས་འབད་དགོ་པའི་ཁེ་རྒྱུད་ཡོད་མེ་ཚུ་གི་ཉེན་བཤད་ཚུ་ཚུད་དགོ་པའི་ཁར་ ཁེ་རྒྱུད་ཡོད་པའི་མེ་ཚུ་གི་དོན་ལྷ་གཏོགས་འཆར་གཞི་དགོ། གལ་གཏོགས་འཆར་གཞི་འདི་ནང་ ཁེ་རྒྱུད་ཡོད་མེ་རྩོམ་འཛིན་འབད་ནི་དང་གལ་གཏོགས་འབད་ནིའི་ལམ་ལུགས་ དེ་ལས་གཏོགས་ཀྱི་ཏུས་ཚོད་དང་བཅའ་སྟོན་ཚུ་ཚུད་དགོས་ཡིན། སློབ་ཀྱི་དང་སློག་ཆགས་རྒྱན་ལམ་ལུགས་ཚུ་གི་མཆར་གཞི་ལས་ལྷ་དང་འབྲེལ་ཏེ་ དམ་ཚུ་དང་སྟན་ལྷ། བསྐྱར་ཞིབ། ཚུས་དབྱུང་འབད་ནི། དེ་ལས་ མཐའ་འཁོར་གནས་སྟངས་དང་མི་ཕྱེ་འཛིན་སྐྱོང་འཆར་གཞི་འདི་ལོ་བསྟར་བཞིན་དུ་ཏུས་མཐུན་བཟོ་དགོས་ཡིན།

འཛིགས་མེད་སྤྱི་དབང་ཕྱུག་རྒྱལ་ཡོངས་སློབ་ཀྱི་དོན་ལྷ་ཕྱི་ལོ་ ༢༠༢༥ ནང་མཐའ་འཁོར་གནས་སྟངས་དང་མི་ཕྱེ་འཛིན་སྐྱོང་འཆར་གཞི་དགོས་ཡོད་པའི་ལས་ལྷ་ཚུ་ཡང་།

༡༥ ཉིང་ཏེ་སྤྱད་དང་ བཟའི་ས་གནས་ཚུ་ན་ རྒྱུ་ཚུང་ དང་ ཚུ་ལྷག་སའི་ས་ཁོང་ཚུ་ལུགས་བཅོས་འབད་ནི།

༢༥ ཡང་ཐེལ་ལྷ་ བཅོན་འཛུལ་ཅེ་ཤིང་ འཛིན་སྐྱོང་ དང་ གཟན་རྩེའི་ཤིང་ འཛུགས་སྐྱོང་འབད་ནི།

༣༥ ཆང་ཁ་ཡིག་ཆང་ རྟེ་བ་ལྷ་ འབྱུང་ཚུ་བཟོ་སྟན་འབད་ནི།

༤༥ ཏཱ་ཤ་སློབ་ འཛིན་ ཡིག་ཆང་དང་ ལས་བྱེད་ཚུ་ལྷིམ་ ཉམས་གསོ་ འབད་ནི།

**Bhutan for Life Environmental and Social**  
**Management Plan for Jigme Singye Wangchuck**  
**National Park (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 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 (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:

Centrally located and encompassing a wide altitudinal variation & vegetation, Jigme Singye Wangchuck National Park (JSWNP) is the third largest Protected Area in the Country. The park borders Royal Manas National Park (RMNP) in the south and it is connected to Jigme Dorji National Park (JDNP) and Wangchuck Centennial National Park (WCNP) to the north and Phrumsengla National Park (PNP) to the north east by biological corridors, thus forming a contiguous belt between tropical south and alpine north as shown in Figure 1. Administratively, JSWNP covers 5 districts partially.

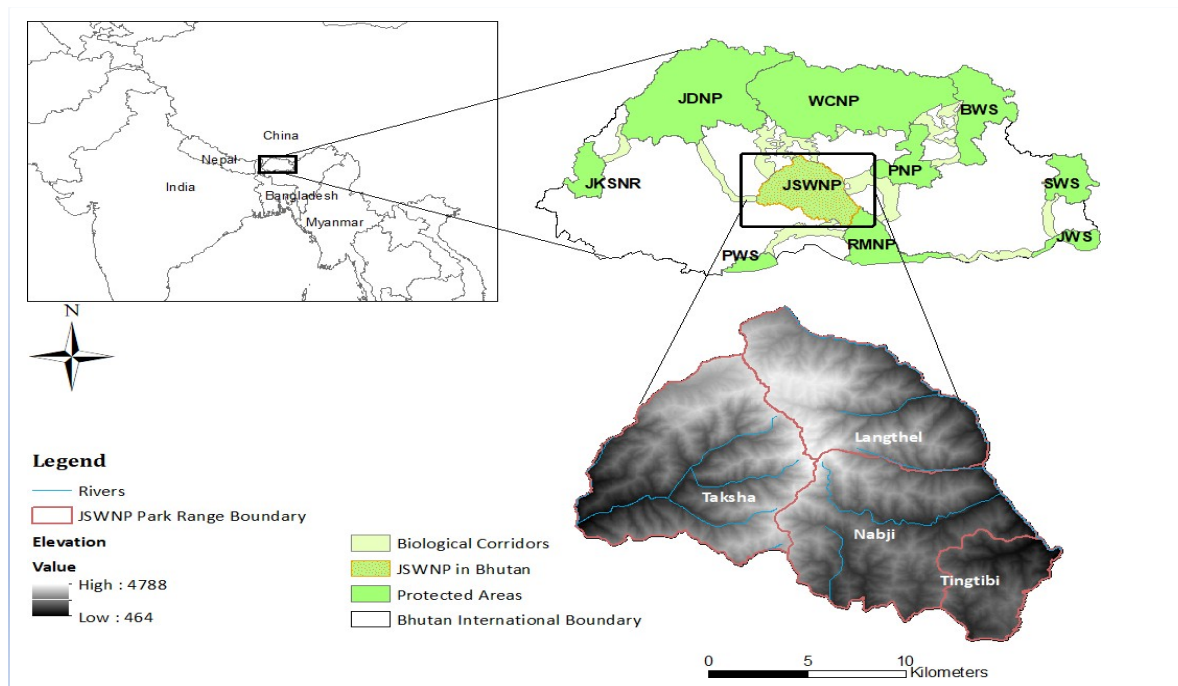


Figure 1 Location of JSWNP

The 1730 sq.km national park was gazetted in 1995 with objective of securing ecological connectivity and managing & conserving the natural & cultural heritages of Central Bhutan. JSWNP best represents the middle Himalayan ecosystem & contains several ecological biomes ranging from sub-tropical to alpine meadow. The biologically diverse park has recorded the presence of 39 mammals, 270 birds, 139 species of butterflies, 16 fishes, and we are yet to establish the baseline for herpeto fauna, fungal diversity and diversity of orchids and herbal plants.

Amongst the mammals, the species includes some of the Asia's most charismatic species including the Royal Bengal tiger, golden langur, musk deer, clouded leopard, golden cat, marbled cat, red panda, gaur etc. Birds of conservation significance include Rufous-necked Hornbill, Satyr tragopan and Himalayan Monal. JSWNP also harbors 50% of the population of 'Critically Endangered' White-bellied Heron.

Over 4000 people reside in the national parks 561 households spread over 5 geogs partially in five districts adapting to various climatic conditions and vegetation covers.

### *Hydrology:*

The eastern boundary of the park, from Trongsa to Tingtibi is defined by Mangde Chhu river, whereas Punatshang Chhu touches the mid-western part of the park in Taksha. Nika Chhu river drains the Chendebji valley in the northern part of the park by joining the Mangde Chhu river. Numerous other streams and rivulets originate from the snow-fed alpine lakes in Black.

Mountain area, and melting snow and monsoon rain contribute to the water volume. This network of small perennial and annual tributaries flow down the steep slopes, often as waterfalls, and along valleys to become tributaries of the larger rivers. The distinct rainy and dry seasons results in wide seasonal variations in the river flows, with large volumes of sediment-laden water flowing during the monsoon and low volume during the dry, winter season.

The local communities also rely on the water from these rivers for domestic and for irrigation, and contributing to the water withdrawal from the rivers.

There are several major hydropower plants being constructed along rivers of Punatshang Chhu (Kamechu-Taksha), Mangde Chhu (Langthel), and the Nika Chhu, which fall on the border of the national park.

### *Socio-economic condition of the local communities:*

There is a diversity of communities residing inside the national park, including some of Bhutan's first settlers; the Oleps community in Rukha village in Athang geog and the Monpa communities in Jangbi, Wangling, and Phumzur villages in Langthel geog, and the Reti community under Jigmechoeling geog, Sarpang Dzongkhag. The latter village has only 7 Monpa households, but are an important part of Monpa community. In total, there are more than 4000 people in 561 households that live inside the national park as shown in the table below:

**Table 1 Communities in JSWNP**

<b>Geog</b>	<b>Dzongkhag</b>	<b>Total Households</b>	<b>Population</b>
Athang	Wangdi Phodrang	121	1152
Korphu	Trongsa	207	1522
Langthel	Trongsa	74	711
Tangsibji	Trongsa	76	777
Trong	Zhemgang	83	817
<b>Total</b>		<b>561</b>	<b>4979</b>

The three villages of Korphu, Nabji, and Nimshong from Korphu *geog* have the highest number of households, whereas the villages in Athang *geog* are smaller and scattered. Overall, Korphu, Trong, and Tangsibji *geogs* have a smaller number but larger sized villages, whereas Langthel and Athang *geogs* have several scattered villages. The people from these villages depend on the natural resources in the national park for their livelihoods.

The major sources of livelihoods for the communities in the national park are agriculture and livestock rearing, with some income from sale of non-wood forest products. Some households also engage in labour-based wage earning, especially in the RGOB sectors. These are mostly in villages closer to towns and infrastructure projects sites, where jobs are available. Casual labour is highest in Langthel, Korphu, and Athang *geogs*, whereas trade-based cash income is highest in Trong *geog*.

### 3. Planned activities in Year 2025-26

Activities that are planned in JSWNP in 2025-26 include the following:

#### 1. Improvement of Waterholes and Salt Licks in JSWNP

- *Budget: Nu. 200,000/-*
- *Timeline: October-December, 2025*
- *Place: Tingtibi and Nabji Park Ranges*

Improving waterholes and mineral licks is a vital component of effective wildlife and habitat management. The benefits of maintaining waterholes and mineral licks in the wild supports the health of wildlife by providing necessary minerals, and reduces human-wildlife conflict by fulfilling their mineral needs and essential water sources within their natural habitats. About 5 waterholes will be improved by removing debris, silt and excess vegetation to ensure clean and accessible water; create varying depths in waterholes to accommodate different species; and use water retention techniques, such as constructing check dams or laying plastic sheets to collect and store water during the rainy season. Additionally, surrounding vegetation will be cleared and maintain the trails leading to waterholes.

The activity will be conducted within the timeline involving 10 workers from the local communities for 15 days. The workers will be accommodated in camps that will be environment friendly and adequate safety from wildlife and available water source nearby. Solid waste generation such as bottles and plastics generated will be disposed appropriately in coordination with work coordinator.

The following are the adverse impacts foreseen during the implementation of this activity:

- generation of waste (debris and sediments)
- noise disturbance, disturbance to the ground



- risk of poaching of wildlife
- occupational health and safety of the workers

## **2. Invasive plant species removal and enrichment plantation (fodder grass)**

- *Budget:* Nu. 500,000/-
- *Timeline:* April-June, 2026
- *Place:* Jangbi, Langthel Park Range

The activity involves removal of invasive plant species (*Ageratina adenophora* commonly known as Crofton weed) with the enrichment plantation of improved fodder grass are crucial steps in restoring ecosystems and supporting biodiversity. The activity will be carried out in an area of about 2 hectares and will have positive outcomes such as nutritious fodder for herbivores, increased native plant diversity, enhanced resilience, and improved ecosystem services. Invasive species will be removed by uprooting to minimize their regeneration. The uprooted plants will be composted to enhance soil quality, supporting the growth of desirable species. The activity will be conducted with approximately 5 workers (JSWNP staffs along with local communities). The workers will be accommodated in camps that will be environment friendly and adequate safety with available water sources. Solid waste such as bottles and plastics generated will be disposed appropriately in coordination with work coordinator.

The following are the adverse impacts foreseen during the implementation of this activity:

- generation of waste (debris and sediments)
- noise disturbance
- disturbance to the ground
- risk of poaching of wildlife
- occupational health and safety of the workers

## **3. Construction of new water source at JSWNP Head Office:**

- *Budget:* Nu. 790,133.75/-
- *Timeline:* October-December, 2025
- *Place:* Tshangkha, Trongsa

Providing a reliable water source supports the staff working there and access to clean water is essential for maintaining health and productivity. A reliable water source at the head office facilitates administrative and operational tasks, such as cleaning facilities and maintaining equipment, which are essential for the effective management of the sanctuary. The activity will mainly involve Construction of water reservoir tank, wall 7

and laying of 1.4 km HDPE pipe in Tshangkha. There will be about 10-15 workers and will be hosted within construction area in the temporal huts made of the CGI sheet with toilet and waste bin made attached to the huts and water source from the campus. The waste generated will be disposed in proper places with close coordination with the work coordinator. The activity is expected to generate noise and air; however, safety gears will be provided to the workers and no work shall be done in the odd hours of the night. Solid waste such as bottles and plastics generated will be disposed appropriately in coordination with work coordinator. The sewage sludge from kitchen and toilet are probable to be produced from the laborers working with the project during the activity implementation. This will be addressed by installing temporary toilets in the camp site at appropriate distance from the water source. Similarly, kitchen waste will also be disposed away from the stream. Other non-degradable (plastic) waste will be managed by disposing with the garbage-in and garbage-out policy. Contractors will be briefed on Occupational Health and Safety (OHS) during the work assignment process.

The following are the adverse impacts foreseen during the implementation of this activity:

- Waste generated from construction site
- Noise and dust pollution
- occupational health and safety of the workers and office goers
- disturbance to the office during Construction work
- Need no objection letter from Community for sharing water

#### **4. Maintenance of Taksha Park Range and Staff quarter:**

- *Budget: Nu. 1,560,000/-*
- *Timeline: October 2025- March 2026*
- *Place: Norbugang (Taksha)*

Enhancing the office is crucial for improving protected area management and ensuring efficient public service delivery to the communities of the Gewogs. The range provides service to Athang gewog of Wangdue Phodrang and Sergithang gewog of Tsirang dzongkhag. Maintenance of floor, ceiling and toilets in Office and staff quarter. Repair of wooden window and door frames. Repair of walls, re-electrification of structure are planned to be carried out as part of this activity. The maintenance will be carried out by awarding the contract through open tender within the allocated time with approximately 10 workers. The workers will be hosted within the Range Campus in the temporal huts made of the CGI sheet with toilet and waste bin made attached to the huts and water

source as same from the office water source. The waste generated will be disposed in proper places with close coordination with the work coordinator. The activity is expected to generate noise and air; however, safety gears will be provided to the workers and no work shall be done in the odd hours of the night. Contractors will be briefed on Occupational Health and Safety (OHS) during the work assignment process.

The following are the adverse impacts foreseen during the implementation of this activity:

- Waste generated from construction site
- Noise and dust pollution
- occupational health and safety of the workers and office goers
- disturbance to the office during maintenance work

#### 4. Environmental and Social Impacts and Mitigation Measures

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Costs (Million Nu.)
<b>Activity 1: Improvement of Waterholes and Salt Licks in JSWNP</b>				
Generation of waste (debris and sediments),	Short term Minor	<ul style="list-style-type: none"> <li>Ensure proper sanitation of the working area through appropriate disposal of the debris generated from the pruning activity.</li> <li>Dumping waste shall be prohibited on fragile slopes, forests, and other sensitive areas.</li> <li>Collection, transportation and final disposal of all waste will be undertaken regularly.</li> </ul>	BFL focal [JSWNP]/Activity team leader	Cost will be met from the activity budget
Noise disturbance	Short term Minor	<ul style="list-style-type: none"> <li>Activity to be conducted using tools and machineries generating minimal noise disturbance to the environment.</li> </ul>	Activity team leader	No budget required

Risk of poaching of wildlife	Short term Minor	<ul style="list-style-type: none"> <li>• Conduct regular monitoring of the area through Patrolling and other means.</li> </ul>	Site In-charge	Cost will be met from the patrolling budget.
Occupational health and safety of the workers.	Short term Minor	<ul style="list-style-type: none"> <li>• Follow the workers' health and safety guidelines as attached to the ESMP.</li> <li>• Ensure that the activity is carried out by trained forestry personnel.</li> <li>• Ensure safety gears and first aid kits for the workers</li> </ul>	Activity team leader	Cost will be met from the activity budget

<b>Activity 2: Invasive plant species removal and enrichment plantation (fodder grass)</b>				
Generation of waste (debris and sediments),	Short term Minor	<ul style="list-style-type: none"> <li>• Ensure proper sanitation of the working area through appropriate disposal of the debris generated from the activity.</li> <li>• Dumping waste shall be prohibited on fragile slopes, forests, and other sensitive areas.</li> <li>• Collection, transportation and final disposal of all waste will be undertaken regularly.</li> </ul>	Activity focal	Cost will be met from the activity budget
Noise Disturbance	Short term Minor	<ul style="list-style-type: none"> <li>• Ensure the activity is carried out with minimal noise disturbance.</li> </ul>	Activity focal	No budget required
Risk of poaching of wildlife	Short term Minor	<ul style="list-style-type: none"> <li>• Carry out regular monitoring of the site through patrolling activities.</li> </ul>	Activity focal	Cost will be met from patrolling budget.
Disturbance to the ground	Short term Minor	<ul style="list-style-type: none"> <li>• Ensure minimal disturbance to soil on steep slopes.</li> <li>• Carry out proper rehabilitation where vegetation cover is removed.</li> </ul>	Activity focal	Cost will be met from the activity budget
Occupational health and safety of the workers.		<ul style="list-style-type: none"> <li>• Follow the workers' health and safety guidelines as attached to the ESMP.</li> <li>• Ensure that the activity is carried out by</li> </ul>	Activity focal	Cost will be met from the activity budget

		<p>trained forestry personnel.</p> <p>Ensure safety gears and first aid kits for the workers.</p>		
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<b>Activity 3: Construction of new water source at JSWNP Head Office</b>				
Waste generated from construction site	Short term Minor	<p>Pre-construction:</p> <ul style="list-style-type: none"> <li>requirements for appropriate waste management should be included in the bidding documents, as a precondition for the contractor's selection.</li> </ul> <p>During construction:</p> <ul style="list-style-type: none"> <li>Identification of the different waste types at the project site (soil, concrete, food, etc.);</li> <li>Proper containers/waste bins should be provided at the project site;</li> <li>Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited.</li> <li>Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is</li> </ul>	<p>BFL focal person in [JSWNP]</p> <p>Activity focal Contractor</p>	To be included in the activity budget

		<p>derived;</p> <ul style="list-style-type: none"> <li>• Collection, transportation and final disposal of all waste should be undertaken regularly [weekly]</li> <li>• All construction materials should be covered during the transportation to avoid waste dispersion;</li> <li>• The options for reuse/recycling of the generated waste should be taking into consideration (e.g., excavated soil, etc.).</li> <li>• Burning of construction waste should be prohibited.</li> </ul> <p>After construction:</p> <ul style="list-style-type: none"> <li>• All waste shall be removed from the project site.</li> </ul>		
Noise and dust pollution	Short term Minor	<ul style="list-style-type: none"> <li>• Ensure the activity is carried out with minimal noise disturbance.</li> </ul>	<p>BFL focalperson in [JSWNP]</p> <p>Activity Focal</p> <p>Contractor</p>	Cost will be met from the activitybudget



Occupational health and safety of the workers and office goers	Short term Minor	<ul style="list-style-type: none"> <li>• Follow the workers' health and safety guidelines as attached to the ESMP.</li> <li>• Ensure that no underage workers, or children are engaged</li> <li>• Decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers</li> <li>• 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.</li> <li>• A grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns should be in place.</li> </ul>	<p>BFL focalperson in [JSWNP]</p> <p>Activity Focal</p> <p>Contractor</p>	Cost will be met from the activitybudget
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Disturbance to the office during maintenance work	Short term Minor	<ul style="list-style-type: none"> <li>No significant disturbance to office work since the construction site is at the water source far from the office area.</li> <li>Monitoring of work to be scheduled such that regular office duties are not disrupted.</li> </ul>	BFL focalperson in [JSWNP]  Activity Focal  Contractor	No budget required
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<b>Activity 4: Maintenance of Taksha Park Range and Staff quarter</b>				
Waste generated from construction site	Short term Minor	Pre-construction: <ul style="list-style-type: none"> <li>requirements for appropriate waste management should be included in the bidding documents, as a precondition for the contractor's selection.</li> </ul> During construction: <ul style="list-style-type: none"> <li>Identification of the different waste types at the project site (soil, concrete, food, etc.).</li> <li>Proper containers/waste bins should be provided at the project site.</li> <li>Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited.</li> <li>Dumping waste shall be prohibited on fragile</li> </ul>	BFL focalperson in [JSWNP]  Taksha Park Ranger  Contractor	To be included in the activity budget

		<p>slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived.</p> <ul style="list-style-type: none"> <li>• Collection, transportation and final disposal of all waste should be undertaken regularly [weekly].</li> <li>• All construction materials should be covered during the transportation to avoid waste dispersion.</li> <li>• The options for reuse/recycling of the generated waste should be taking into consideration (e.g., excavated soil, etc.).</li> <li>• Burning of construction waste should be prohibited.</li> </ul> <p>After construction:</p> <ul style="list-style-type: none"> <li>• All waste shall be removed from the project site.</li> </ul>		
Noise and dust pollution	Short term Minor	<ul style="list-style-type: none"> <li>• Ensure the activity is carried out with minimal noise disturbance.</li> </ul>	<p>BFL focalperson in [JSWNP]</p> <p>Taksha Park Ranger</p> <p>Contractor</p>	No budget required

Occupational health and safety of the workers and office goers	Short term Minor	<ul style="list-style-type: none"> <li>Follow the workers' health and safety guidelines as attached to the ESMP.</li> <li>Ensure that no underage workers, or children are engaged.</li> <li>Decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers.</li> <li>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.</li> <li>A grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns should be in place.</li> </ul>	Taksha Park Ranger  Contractor	To be included in the activity budget
Disturbance to the office	Short term minor	<ul style="list-style-type: none"> <li>Office work to be conducted from other space while maintenance work is being conducted</li> </ul>	Taksha Park Ranger	No additional budget required.

during maintenance work		such that the day-to-day duties of the staff are not disrupted.		
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## 5. ESMP Implementation Arrangements

The implementation of project activities will be carried out by the BFL focal person in JSWNP in coordination with the respective Range In charge. 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) (including community contractors) for implementation of the planned activities in JSWNP 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 prior start the project activities and prior any specific tasks with high health risks.

The JSWNP'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 safeguard's requirements.

## 6. ESMP Monitoring Arrangements

The BFL focal person in JSWNP 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.

JSWNP's PA is also fully responsible for the compliance of all external contractors and service

providers working in the JSWNP with the safeguard's requirements outlined in the ESMP.

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

Sl No.	Activity	Responsible	Timeline	Place	Means of Verification
1	Improvement of Waterholes and Salt Licks in JSWNP	JSWNP Focal	December 2025	Tingtibi and Nabji Park Range	Monitoring reports
		ESS Focal	Virtual Monitoring Dec 2025		
2	Invasive plant species removal and enrichment plantation (fodder grass)	JSWNP Focal	June 2026	Jangbi, Trongsa	Monitoring reports
		ESS Focal	Virtual Monitoring		
3	Construction of new water source at JSWNP Head Office:	JSWNP Focal	Dec, 2025	Tshangkha, Trongsa	Monitoring reports
		ESS Focal	Jan-June, 2026		
4	Maintenance of Taksha Park Range and Staff quarter:	JSWNP Focal	Jan-2026 Mar- 2026	Norbugang, Tsirang	Monitoring reports
		ESS Focal	April-Jun-2026		

### Activity 1: Improvement of Waterholes and Salt Licks in JSWNP

Monitoring by Implementing Entity:

- The Activity Focal and BFL Focal at JSWNP will monitor the activity during the implementation of the intervention.

Monitoring by ESS consultant:

- Field visits by ESS consultants – at least once during the intervention (Oct-Dec 2025);
- Reports by ESS consultants to the PCU (M&E officer) – within two weeks after the field visit and for semi-annual reporting

Quarterly reports by PCU (M&E officer) to Secretariat

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

### **Activity 2: Invasive plant species removal and enrichment plantation (fodder grass)**

Monitoring by Implementing Entity:

- The Activity Focal and BFL Focal at JSWNP will monitor the activity during the implementation of the intervention.

Monitoring by ESS consultant:

- Field visits by ESS consultants – at least once during the intervention (Apr-Jun, 2026);
- Reports by ESS consultants to the PCU (M&E officer) – within two weeks after the field visit and for semi-annual reporting

Quarterly reports by PCU (M&E officer) to Secretariat

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

### **Activity 3: Construction of new water source at JSWNP Head Office:**

Monitoring by Implementing Entity:

- The Activity focal and BFL Focal at JSWNP will monitor the activity during the implementation of the intervention and after completion.

Monitoring by ESS consultant:

- Field visits by ESS consultants – at least once during the intervention (Oct-Dec, 2025);
- Reports by ESS consultants to the PCU (M&E officer) – within two weeks after the field visit and for semi-annual reporting

Quarterly reports by PCU (M&E officer) to Secretariat

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

### **Activity 4: Maintenance of Taksha Park Range and Staff quarter:**

Monitoring by Implementing Entity:

- The Taksha Park Ranger and BFL Focal at JSWNP will monitor the activity during the implementation of the intervention and after completion.

Monitoring by ESS consultant:

- Field visits by ESS consultants – at least once during the intervention (Oct 2025- March 2026);
- Reports by ESS consultants to the PCU (M&E officer) – within two weeks after the field visit and for semi-annual reporting

Quarterly reports by PCU (M&E officer) to Secretariat



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

## 7. Capacity Need and Budget

Activities under this ESMP will be implemented by the BFL focal person, Range In charges, supervising engineer, and a contractor that will employ workers as mentioned in the contract agreement.

- The budget for each of the activities is as follows:

SI No.	Activity	Activity Budget (Nu.)	Cost of ESS Mitigation
1	Improvement of Waterholes and Salt Licks in JSWNP	200,000/-	To be met from activity budget
2	Invasive plant species removal and enrichment plantation (fodder grass)	500,000/-	To be met from activity budget
3	Construction of new water source at JSWNP Head Office:	790,133.75/-	To be met from activity budget
4	Maintenance of Taksha Park Range and Staff quarter:	1,560,000/-	To be met from activity budget

## 8. Consultation and Disclosure Mechanisms

This ESMP has been prepared in a participatory manner, and a community consultation will be carried out before implementing the activity to consult the local communities regarding the planned project activities, solicit their opinions, and enable them to question proposed mitigation measures where ever necessary. The ESMP will be disclosed to all relevant stakeholders via media outlets and notifications through local leaders.

## 9. Stakeholder engagement plan

The relevant stakeholders involved in the activities will be informed prior to the implementation activity and engaged where ever necessary during the implementation period.

## 10. Grievance Redressal Mechanisms

This ESMP and its mitigation measures are required to be disclosed to communities for 30 days prior to 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-performances of project obligation 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 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](mailto: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/caseregister/file-complaint>.

## Annexure

### **BFL: Suggested Occupational Health and Safety**

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)<sup>1</sup> 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 Labor Act 2007, and in compliance to Sl. No. 21 of Regulation on Occupational Health, Safety and Welfare 2012.

### **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 climatic conditions, 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. 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 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, lightening, or carrying of matches, lighters or smoking materials shall be prohibited within and around the construction sites.
- ☐ 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.
- ☐ Facilities shall be equipped 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.
- ☐ Fire exits should be identified and marked in Dzongkha and English- all workers should be made aware of the fire exits.

### ***Lavatories and Showers***

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

### ***Potable Water Supply***

- ☐ Adequate supplies of clean 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 provision of clean eating areas where workers are not exposed to the hazardous or noxious substances.

### ***Lighting***

- ☐ Workplace should receive adequate natural light and if required supplemented with artificial illumination to promote worker's safety and enable safe equipment operation.
- ☐ Emergency lighting of adequate intensity should be provided in case of failure of the powerline.

### ***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 need to be provided where ever necessary, if there is risk of falling of overhead object.
- ☐ 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 a cupboard shall be not more than 200m from any working place.
- ☐ First aid kits include all equipment outlined in Annex 1 to these Guidelines.
- ☐ Each first aid box or a cupboard shall be distinctly marked "FIRST AID"

### ***Air Supply***

- ☐ Workplace should have adequate ventilation for fresh air

## **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 90 dB(A) for a duration of more than 8 hours per day without wearing ear plugs/ear muffs.
- Exposures to impulsive or impact noise shall not exceed 140dB(A).
- For every 3 dB(A) increase in sound levels from the permissible limit of noise, the 'allowed' exposure period or duration should be reduced by 50 percent.
- Where it is not practicable to reduce the noise, the employer must limit the duration of time persons employed or working in the workplace are exposed to the noise so that such persons are not exposed to excessive noise.
- 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***

In any workplace where persons are at work in any process or operation which involves exposure to vibration which may constitute a risk to their health, it shall be the duty of the employer to provide, so far as is reasonably practicable, effective means to reduce the vibration.

### ***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-charging 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 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 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
- Conducting detailed identification and marking of all buried electrical wiring prior to any excavation work
- Every person who is working on an electric supply line or apparatus or both shall be provided with tools and devices such as gloves, rubber shoes, and safety belts, ladders, earthing devices, helmets, line testers, hand lines whichever is relevant for protecting him/her from mechanical and electrical injury.

### ***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 prior to 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.

### ***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 work station.

### ***Working Environment Temperature***

Exposure to hot or cold working conditions in indoor or outdoor environments can result in temperature stress-related injury or death. 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 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 advance 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.

### ***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:

- Use of mechanical assists to eliminate or reduce exertions required to lift materials, hold tools and work objects, and requiring multi-person lifts if weights exceed thresholds (adult man- 50kg, adult female-25kg)
- 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 fixed anchorpoint 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 work station 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 that are exposed to dust should also be provided with eye protection glasses and face mask. Workers that are exposed to noise should be provided with ear plugs. Workers that need to work in the dark should be provided with hand and cap lamps.

Workers are instructed regarding safety equipment as follows:

- Always wear complete set of protective wear.
- Do not wear loose clothing, such as overhang shirt, jackets, mufflers etc.
- Tuck shirt and jacket well.
- Secure helmet with belt under the chin.
- Tuck the bottom sleeves of trouser inside safety boot.
- Dress with 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 worksite safe and free if the accommodation is reasonably far from the worksite.
- The living facilities are built using adequate materials, kept in good repair and kept clean and free from waste and 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 and is regularly monitored.
- 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

## ***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 waste collection are provided and emptied on a regular basis.

## ***6. Rooms/dormitories facilities***

- Rooms/dormitories are kept in good condition. They 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.
- Separate sleeping areas are provided for men and women.
- A separate bed is provided for every worker and use of double deck bunks is minimized.
- Workers are provided with comfortable mattresses. Workers may be expected to use their own pillows and bed linens.
- Adequate facilities for the storage of personal belongings are provided.
- Separate storages for work clothes and PPE and depending on condition, drying/airing areas are provided.

## ***7. 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 and shower facilities are conveniently located and easily accessible.
- Toilet facilities are environmentally friendly (e.g., pit toilet) and sewage is not disposed into the worksite.
- Open defecation in the vicinity of project sites should be prohibited.
- An adequate number of hand wash basins and showers/bathrooms facilities are provided.

#### ***8. 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.

<https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=ls62x8l>.

#### **Annex 1. Contents of first aid box or cup-boards**

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

1. Small sterilized dressings (12)
2. Medium size 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 (5gms) 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 II- BFL specific GRM Brochure

### 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

**JIGME SINGYE WANGCHUCK NATIONAL PARK**

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**

Jigme Rangdrel  
17270718  
jrangdrel@moenr.gov.bt  
JSWNP Head Office, Tshangkha, Trongsa Dzongkhag

**LANGTHEL PARK RANGE OFFICE**

Choki Dorji  
17601485  
dorjichoki123@gmail.com  
Langthel Range Office, Langthel Gewog, Trongsa Dzongkhag

**NABJI PARK RANGE OFFICE**

Sangay Lhajay  
17495934  
slhajay74@gmail.com  
Nabji Range Office, Korphu Gewog, Trongsa Dzongkhag

**TINGTIBI PARK RANGE OFFICE**

Phuntshok  
17807151  
jphuntshokphuntshok@gmail.com  
Tingtibi Range Office, Trong Gewog, Zhemgang Dzongkhag

**TAKSHA PARK RANGE OFFICE**

Ngawang Tenzin  
17116964/77222675  
wangjiigszin82@gmail.com  
Taksha Range Office, Taksha, Wangdue Dzongkhag

**ATHANG GUARD POST**

Tashi Tenzin  
17366521  
tashitenzinttt@gmail.com  
Athang Guard Post, Athang Gewog, Wangdue Dzongkhag

**CHENDEBJI GUARD POST**

Dhana Pati Dahal  
17531578/77284495  
dpatidahal@gmail.com  
Chendebeji Guard Post, Tangsibji Gewog, Trongsa Dzongkhag

**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 YOU ARE NOT COMFORTABLE FILING YOUR COMPLAINTS AT PROTECTED AREA OFFICES, YOU MAY ALSO FILE YOUR COMPLAINTS AT THE NEAREST FOLLOWING GEWOG OFFICES:**

- Langthel Gewog – 17737437
- Trong Gewog – 17856759
- Jigmecholing Gewog – 17792388
- Tangsibji Gewog – 17745929
- Athang Gewog – 77467048
- Korphu Gewog – 17538006

**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](mailto: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.