

འབྲུག་ཆེ་སློག་མ་དངུལ།

Bhutan for Life

མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེའི་འཛིན་སྐྱོང་འཆར་གཞི།

Environmental and Social Management Plan for

ཕུར་མ་སེང་ལ་རྒྱལ་ཡོངས་གླིང་གཡིག་ཚང 2026།

Phrumshingla National Park for 2026

གོད་ཁྲབ་བཟུང་དོན།

འབྲུག་ཆེ་སློག་མ་དངུལ་འདི་མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེའི་འོས་འབབ་ཅན་གྱི་ལས་འགུལ་གྱི་དབྱེ་ཁག (Category B)

ནང་ལུ་རྒྱུད་དེ་ཡོད་པ་ཡིན། དེ་ཡང་ལས་འགུལ་འདི་ལས་བརྟེན་ཏེ་སྤྱད་སྤོང་སའོངས་ནང་སྤྱོད་མེད་མི་མེར་དང་ ཡང་ན་

སྤྱད་སྤོང་སའོངས་ཀྱི་མཐའ་སྐྱོར་ཏེ་འཛོལ་སྤྱད་སྤོང་སའོངས་ལུ་བརྟེན་སྤྱོད་མེད་མི་མེར་ ཡང་ན་

གཤམ་ཅན་གྱི་མཐའ་སྐྱོར་གནས་སྤངས་ཀྱི་སའོངས་ཚུ་ལུ་གཞོན་པ་འབྱུང་ནིའི་ཉེན་ཁ་ཡོད་པ་དང་ གཤམ་སྤྱོད་གཞོན་པ་འབྱུང་པ་ཅིན་

གཞོན་ཉེན་ཚུ་དམིགས་གསལ་ས་གནས་ནང་རྒྱུ་ཅིག་འབྱུང་ནི་དང་ གཞོན་ཉེན་མར་ཕབ་རྒྱབ་ནི་དང་རྩ་མེད་ཡང་གཏང་ཚུགས་པ་ཡིན།

དེ་འབད་ལས་འབྲུག་ཆེ་སློག་(BFL) མ་དངུལ་ཐོག་ལུ་ རྒྱབ་སྐྱོར་འབད་ཡོད་པའི་ལས་འགུལ་དང་ལས་སྒྲུ་ཚུ་ མཐའ་འཁོར་གནས་སྤངས་དང་

མི་སྡེ་གཉིས་ལུ་ཡུན་བརྟན་གྱི་ཕན་པ་ཡོད་པ་བཟོ་བགྱིམ་ཆོད་ འབྲུག་ཆེ་སློག་མ་དངུལ་གྱི་སྤྱོད་བྱས་ལམ་སྟེན་དང་འབྲེལ་ཐབས་ལུ་

མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་འདི་དགོང་དང་ མི་དམངས་གྲོས་བསྟུན་དང་

དུས་དང་དུས་སུ་མི་དམངས་ལུ་གསལ་བ་བཤད་ནི་འདི་དགོང་ཡིན།

ཕུར་མ་སེང་ལ་རྒྱལ་ཡོངས་གླིང་གཡིག་ཚང་བཞིན་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་གླིང་གཡིག་ཆགས་རྒྱུ་ལམ་ཚུ་ནང་ལས་སྒྲུ་ཚུ་འབད་

བའི་སྐབས་ ཐབས་ལམ་དང་བཟང་སྤྱོད་ཚུ་གསལ་སྟེན་འབད་ཕེ་ཡིན་པ་དང་ འདི་ཡང་ལས་སྒྲུའི་གདམ་སེལ་ལམ་ལུ་གསལ་དང་འབྲེལ་ཏེ་ཡིན།

གདམ་སེལ་འབད་ཡོད་པའི་ལས་སྒྲུ་གི་ནང་ལས་ མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་ལུ་གཞོན་ཉེན་ཡོད་པའི་ལས་སྒྲུ་ཚུ་གི་དོན་ལུ་

མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་བཟོ་དགོ། འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་

ལས་སྒྲུ་འགོ་མ་བཟུགས་པའི་ཉེ་མ་གཞི་བཟུགས་འབད་བའི་སྐབས་དང་མཇུག་བསྟུན་པ་ལུ་

མཐའ་འཁོར་གནས་སྤངས་འཛིན་སྐྱོང་དང་གཞོན་ཉེན་མར་ཕབ་ཀྱི་ཐབས་ལམ་ཚུ་བཟུགས་དགོང་ཡིན།

དེ་འབད་ལས་འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ ལས་སྒྲུ། མི་སྡེ། ལཱ་འགན། བད་སྤྱོད་དང་སྤྱོད་ཚུ།

དེ་ལས་ལྷོ་རྒྱ་ལམ་ལུ་གསལ་ཚུ་གི་སྐོར་ལས་འབྲེལ་བཤད་ཁ་གསལ་ཚུ་དགོང་ཡིན། འཛིན་སྐྱོང་འཆར་གཞི་འདི་ནང་ལུ་

ཁྲུ་གཏོགས་འབད་དགོ་པའི་ཁྲུ་ཡོད་མི་ཚུ་གི་ཉེན་ཁ་ཚུ་དགོ་པའི་ཁྲུ་ ཁྲུ་ཡོད་པའི་མི་ཚུ་གི་དོན་ལུ་ཁྲུ་གཏོགས་འཆར་གཞི་དགོ།

ཁྲུ་གཏོགས་འཆར་གཞི་འདི་ནང་ ཁྲུ་ཡོད་མི་དོས་འཛིན་འབད་ནི་དང་ཁྲུ་གཏོགས་འབད་ནིའི་ལམ་ལུ་གསལ་

དེ་ལས་ཁྲུ་གཏོགས་ཀྱི་དུས་ཚོད་དང་བཟུང་སྤྱོད་ཚུ་དགོང་ཡིན། གླིང་གཡིག་ཆགས་རྒྱུ་ལམ་ཡིན་ཆོད་ཚུ་གི་མཆར་གཞི་ལས་སྒྲུ་དང་འབྲེལ་ཏེ་

བཟོ་ཐོང་དང་སྤྱོད་ཚུ། བསྐྱར་ཞིབ། ཕྱིས་དཔྱད་འབད་ནི། དེ་ལས་

མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་འདི་ལོ་བསྟར་བཞིན་དུ་སྤྱོད་བཟོ་དགོང་ཡིན།

ཕུར་མ་སེང་ལ་རྒྱལ་ཡོངས་གླིང་གཡིག་ཚང་ཀྱི་ལོ་ 2026 ནང་མཐའ་འཁོར་གནས་སྤངས་དང་མི་སྡེ་འཛིན་སྐྱོང་འཆར་གཞི་དགོང་ཡོད་པའི་ལས་སྒྲུ་ཚུ་ཡང་།

1) ལམ་པའིན་རྩ་སྤང་ལེགས་བཅོས་ཀྱི་ལཱ།

2) ཕ་སྤྱོད་གླིང་ཡིག་ཚང་ཉམས་བཅོས་ལཱ།

Executive Summary

BFL has been categorized as a Category B project, as the potential adverse environmental and social impacts on the 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 Phrumshingla National Park describes mitigation measures/good practices at the activity level which are required as per the screening protocol. All the screened activities that have potential risks to environment and social management have to prepare an 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 2026 under Phrumshingla National Park are as follows:

1. Improvement of Alpine Meadow
2. Maintenance of Phawan Range Office-New Proposal

1. Introduction

(A) Project Background

The Bhutan for Life (BFL) project aims to ensure a robust network of protected areas and biological corridors that secure human well-being, and 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 well-being 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 the BFL focal person and the field focals in each Protected Areas(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 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 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:

(a) Geological and topographical conditions

Phrumsengla National Park (PNP) was known as Thrumshingla National Park (TNP) ever since it was notified in 1993 with an area of 768 km². In 2000, the area was extended towards the north with the inclusion of large tracks of suitable tiger habitats. The park was renamed as PNP in 2014 and the total area was revised to 906 km² with the development of a new zonation guide line, 2020. However, the physical features were not altered for a prime reason to signify and interlink the conservation paradigm with inherited local communities' culture. PNP has been implementing conservation activities for the last one and a half decades. The conservation is based on the ten year periodic conservation management plan (2019-2029).

The purpose of establishment of the park was to conserve the temperate ecosystem of the central region in Bhutan's Protected Area (PA) landscape. The park was fully operationalized in 2000 with joint funding support from Royal Government of Bhutan (RGoB) and World Wildlife Bhutan Program. PNP is a 'linchpin' of Bhutan's Biological Corridor Complex (B2C2) landscape. The park is connected to Jigme Singye Wangchuck National Park (JSWNP), Royal Manas National Park (RMNP), Bumdeling Wildlife Sanctuary (BWS) and Wangchuck Centennial National Park (WCNP) through a string of Biological Corridors (Figure 1). Heterogeneous geomorphology and wide range of elevation contribute to the formation of special habitats for wildlife in PNP. The elevation ranges from 900 masl (sub-tropical broad-leaved forest) to about 4500 masl (Alpine meadows) (Figure 2 a). Of this, the major portion, >78% of the total area is above 2500 masl. Slope classes are evenly distributed in terms of area coverage (Figure 2 b).

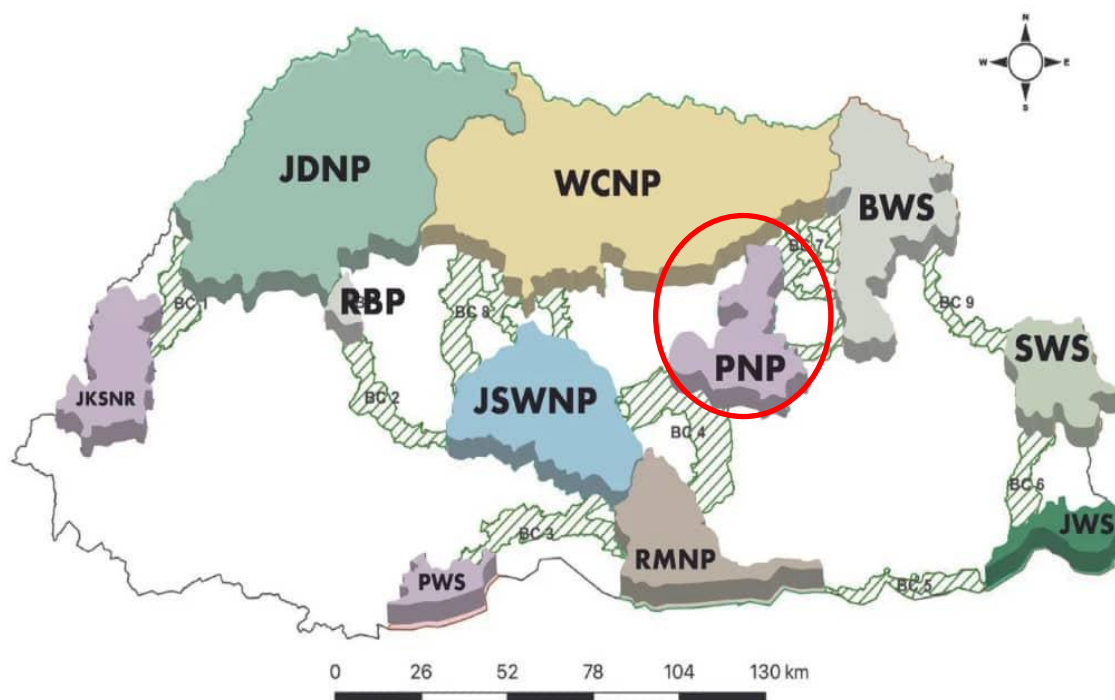


Figure 1: Location of Phrumsengla National Park

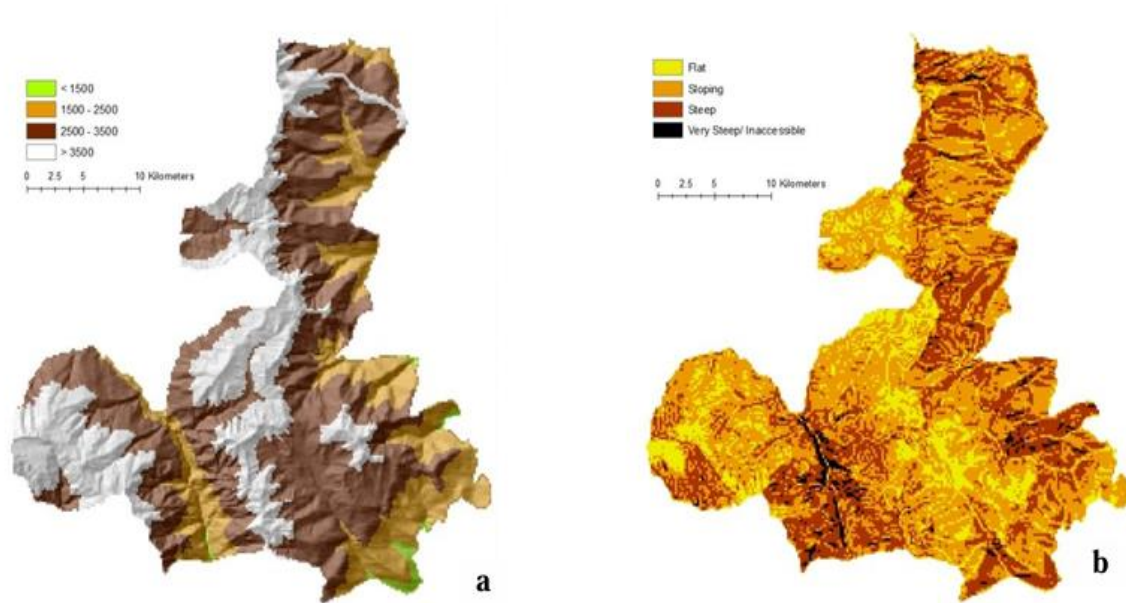


Figure 2: a. Elevation and b. Slope class

(b) Climatic conditions

With wide variation of altitudinal ranges, Phrumsengla National Park experiences a wide range of temperatures as well. The northern part of the park has -21°C minimum and 13°C maximum temperatures and in the south-eastern has a low of 8°C and a high of 28°C . The annual average rainfall in the northern part is 700 mm and the lower elevation receives up to 1500 mm.

(c) Hydrological conditions

Despite being the smallest national park, PNP serves as a vital watershed area for two major river systems, Kuri Chu to its left flank and Chamkhar Chu to its right flank. Apart from that there are numerous springs and tributaries that feed the major river systems. The rich biodiversity of the park itself is a good indication of intact natural resources like water resources.

(d) Flora and fauna

PNP with a wide range of elevation range from sub-tropical broadleaved to the alpine ecosystem holds high conservation value and significance for about 1000 species of plants with over 161 species of trees, 274 shrubs and 316 herbs. The park is a significant repository of floral diversity (TNP, 2008) more than 154 species have been identified for having medicinal values, 21 species as endemic to Bhutan, and two species endemism to PNP (*Rubus sengorensis* and *Lobelia nubigena*). The park is home to one globally threatened species (Vulnerable) *Rhododendron dalhousiae* var. *rhabdotun* and endangered species at local context or in Bhutan; *Podocarpus neriifolius* (Dorji, Y.; 2010). The park is fundamentally significant for conservation of its large tracts of old East Himalayan Silver Fir Forest and extensive cover of pristine cool broadleaved forests in the central region of the country. Maximum area of PNP consists of fir forest with 267.16 km² followed by mixed conifer and broadleaf forests with 256.47 km² and 238.25km² respectively. Meadows and scrub with 27.43 km² and 48.33 km²

also significantly contribute to several forms of life in the park. Therefore, PNP is a prime refuge for many threatened flora and fauna thriving across varied vegetation zones in the central region of the country's protected area landscape.

More than 70 species of mammals, about 364 species of birds, and some 55 species of butterflies are recorded in the park. Most recently (August, 2020), the park has recorded a national butterfly (Ludlow's Bhutan Swallowtail, *Bhutanitis ludlow*) for the first time. A camera trap picture of a male tiger was captured for the first time in Bhutan on 22nd May 2000 from the PNP in Peeme'. Other than the tiger, there are several globally significant species as per IUCN Red List of Threatened Species, 2019.

1. Tiger *Panthera tigris* (Endangered)
2. Red Panda *Ailurus fulgens* (Endangered)
3. Musk Deer *Moschus chrysogaster* (Endangered)
4. Wild Dog *Cuon alpinus* (Endangered)
5. Takin *Budorcas taxicolor* (Vulnerable)
6. Himalayan Black Bear *Ursus thibetanus laniger* (Vulnerable)
7. Asian Small-clawed Otter *Aonyx cinereus* (Vulnerable)
8. Clouded Leopard *Neofelis nebulosa* (Vulnerable)
9. Asiatic Golden Cat *Catapuma temminckii* (Near Threatened)

Attributed by a wide range of elevation and diverse vegetation, the park has a rich diversity of birds. Of more than 364 avian species recorded, three are vulnerable, six near-threatened and eight are restricted range species. Significant avifauna species of conservation interest for Phrumsengla National Park are Chestnut-breasted partridge (*Arborophila mandelli*), Rufous necked hornbill (*Aceros nipalensis*) and beautiful nuthatch (*Sitta formosa*) listed vulnerable under IUCN list. PNP also records herpetofauna, fish and butterfly species. There are 3 species of amphibians, 12 species of reptiles, 4 species of lizards, and 7 species of fish.



Figure 1: a. *Panthera tigris* and b. *Bhutanitis ludlow* (National butterfly)

(e) Socio-economic conditions

The park has about 6,000 inhabitants from 1,165 households living in 32 villages. Administratively, PNP spread across ten Gewogs viz Chumey, Ura and Tang Gewogs of Bumthang Dzongkhag, Saleng and Tsamang Gewogs under Mongar Dzongkhag, Jarey, Metsho and Gangzur gewogs under Lhuentse Dzongkhag, and Shingkar and Nangkhore gewogs under Zhemgang Dzongkhag. Two villages enclaved inside the park are Sengor village (29 households), Saleng gewog and Bhim-Tharpaling (4 households), Chumey gewog under Mongar and Bumthang Dzongkhag respectively. These people are agro-pastoralists and mainly depend on forests for grazing their cattle. Over 75 percent of the park area is under registered grazing grounds and most of the park residents rely mainly on livestock products for their livelihood.

Planned activities in Year 2026-2027

Activity 1: Improvement of Alpine meadows.

- **Budget:** Nu. 250,000/-
- **Timeline:** September-October 2026
- **Location:** Khamkrang, Chungphel, Bumthang GPS (27.380011°N 90.799842°E)
Phombay, Chungphel, Bumthang GPS (25.3961°N, 90.787125°E)
Khandropang, Ura, Bumthang GPS (27.4365861°N, 90.9092861°E)

Alpine meadow forms an integral part of wildlife habitats as well as livestock grazing grounds. Currently, Phrumsengla National Park has a total of four herders who depend on livestock for their livelihood, three in the Khandropang area and one in Kamkhrang. The current activity site is used as pasture/grazing land by local herders. The activity is aimed at managing the alpine meadow habitat by removing/cutting unpalatable plant species (trees, scrubs & herbs) overtaking the alpine meadows.



Figure 3: Alpine Meadow Improvement carried out in Zhubung, Bhim



Figure 4: Chainsaw Operators

The activity amounts to Nu. 250,000/- (Two hundred and Fifty Thousand) must be executed from September to October (Q3-Q4), 2026. The proposed site is at Khamkrang and Phombay at Chungphel under Chumey Gewog and Khandropang under Ura Gewog, covering an area of approximately 10 hectares. The land allocated for this activity is currently used by the residents of the park for their livestock grazing in the summer with an active cow hut built in the area.

Moreover, this area is also used by iconic wild animals like the Tiger, Sambar deer, Monal pheasant and many more. It is also identified as an important habitat for tigers, where the tigers are seen to migrate along with the yaks. Generally, most of the surrounding areas have gentle slopes (3-30 degrees) with stable topography and good alpine vegetation cover. The encroaching vegetation is reducing the grazing land and habitat for both livestock and wildlife species.



Figure 5: Khamkrang



Figure 6: Phombay (left) and Khandropang (right)

The activity is to be carried out from September to October 2026, when the cattle are away from the grazing land before the groundwater freezes. Approximately 12 workers will be engaged and the workers will use herder's camps (at Khamkrang and Phombay) while executing the activity and water resources will be harnessed from the campsite itself. In the case of khandropang, workers will use their personal homes. While carrying out the activity, it will be ensured that no accidental damage is caused to local vegetation; major trees that are supposed to be cut shall be clearly marked, and only marked trees will be cut in an environmentally sustainable way. Burning of trees and other plants should be avoided.

Some of the potential environmental and social impacts are the following:

- Waste from workers.
- Noise and emissions from the chainsaw.
- Occupational health and safety of the workers.

Activity 2: Maintenance of Phawan Range Office

- **Budget:** Nu. 1,500,000/-
- **Timeline:** July 2026-June 2027
- **Location:** Phawan, Tsenkhar Gewog, Lhuentse **GPS(27.380011°N 90.799842°E)**

The Phawan Range Office and its staff quarters are in urgent need of repair because the wooden roof supports are rotten and infested with termites. This has become a serious safety risk for the staff living and working there. To ensure a long-term, sustainable solution, the old wooden trusses will be replaced with durable metal trusses, and the plywood ceiling will be replaced. The work will be allotted through a competitive bidding process via the eGP system rather than awarding it to a community contract.

Since the activity is the maintenance of existing structures, no disturbance to the surrounding land is required. The terrain of the activity site and the surroundings is stable, with gentle to flat slope terrain, and the surrounding topography has no adverse effect on the proposed activities. The activity is to be carried out from July 2026 to June 2027. During the maintenance period, a room in the staff quarter will be used as a temporary office to provide regular service delivery. A maximum of 6 will be employed who will commute from their homes to the work site. As a mitigation measure, the trusses affected by termites will be burnt to prevent further spreading of the termites to other structures. A proper burning site will be identified within the office boundary and the ashes will be covered with soil.

Some of the potential environmental and social impacts are the following:

- Old trusses and Planks.
- Waste from workers.
- The proposed activity involves worker safety. Therefore, occupational health and safety mitigation measures need to be in place.

4. Mitigation Measures for Environmental and Social Impacts

The following ESS and GESI mitigation measures are as per the approved ESS forms shared in the link ([Links for List of Approved ESS forms for Year 8 BFL implementation](#))

Potential impact	Impact scale	Proposed mitigation measures	Responsible Party	Costs (million)
Activity 1: Improvement of Alpine meadows (Khamkrang, Chumey)				Nu. 0.25 M
Cutting down of trees and plants that are encroaching on the Alpine meadows negatively affects the ecosystem of the Alpine meadows (e.g., grazing areas are diminished)	Long term minor	- To avoid accidental cutting down of trees, a preliminary assessment shall be conducted and mark the trees that should be left uncut. - The official in-charge to strictly monitor the activity. The alpine habitat management works will be implemented as per the Bhutan's <i>Standard Operating Procedure for the Use of Prescribed Burns in High-Altitude Rangeland Areas</i>. The SOP was developed to standardize the technical and operational protocols for using prescribed burns to manage rangelands, thereby supporting both wildlife habitats and domestic livestock grazing.	NCS Section, Ura Range, PNP management BFL focal	The cost will be met from the activity budget
Occupational Health and Safety- <i>Workers health and safety</i>	Short-term minor	- Comply with the workers' health and safety guidelines - The helmet, safety goggles, hand gloves & gumboots shall be provided. - Ensure that no underage workers, or children are engaged. - Ensure that workers are employed on the principle of equal opportunity and fair treatment - Implement a grievance redressal mechanism for workers (and their organizations, where they exist) to raise workplace concerns and maintain a proper registry.		
Waste: generation of waste as a result of improvement work as the workers have to stay in the	Short term minor	- Proper waste collection point shall be made within the project site, wherever convenient and all waste shall be removed from the project site after completing the improvement works. - Identification of the different waste types at the project site (degradable and non-degradable); take the non-degradable waste		

project site during the implementation of the work, especially in Khamkrang and Phombay.		back to the Chungphel village for proper disposal at the designated dumping site. Dumping waste shall be prohibited in the project site. ● Ensure that camps are located away from existing streams, rivers, or water sources and that no discharge from camps is made into nearby water bodies.		
Activity 2: Maintenance of Phawan Range Office				Nu. 1.5 M
Waste: generation of waste as a result of maintenance activities	Short term minor	● Proper containers/waste bins will be provided at the project site; ● All waste shall be removed from the project site after completion of the project and disposed of in the designated waste disposal site in Tshenkhar Gewog. ● The termite attacked trusses shall be burned by identifying a proper burning site within the office boundary and the ashes shall be covered with soil.	Phawan Range Officer, PNP management BFL focal	To be included in the bidding document
Workers' health and safety	Short term minor	● Comply with the worker's health and safety guidelines (wearing PPE) ● First Aid kits (provide a list) shall be made available at the site. ● Ensure that no underage workers or children are engaged ● Ensure that workers are employed on the principle of equal opportunity and fair treatment ● Implement a grievance redressal mechanism for workers (and their organizations, where they exist) to raise workplace concerns and maintain a proper registry. ● The OHS signboard will be installed on the Project site.		The cost will be met from the activity budget

3. ESMP Implementation Arrangements

The implementation of project activities will be carried out by the BFL focal person and the concerned Range Officer (RO) of the PNP. The focal and the concerned RO 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 the implementation of the planned activities in PNP in 2026-2027. **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 disposal of inert waste, records on OHS information session performed for all workers before starting of activities, all developed OHS plans, etc.). **An OHS information session should be organized by the Contractor for all workers prior to the start of the project activities and any specific tasks with high health risks.**

The PNP's Supervising Engineer needs to monitor the implementation of proposed measures by the Contractor and the Contractor's subcontractors with visual checking, reviewing the records of evidence that the measures have been applied, and asking 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 officer immediately, and the ESS officer 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 requirements.

4. ESMP Monitoring Arrangements

The BFL focal person in PNP 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.

PNP's PA is also fully responsible for the compliance of all external contractors and service providers working in the PNP with the safeguard requirements outlined in the ESMP. The monitoring of activities under this ESMP will be carried out in the following manner:

SI#	Activities	Monitoring team	Timeline		Location	Means of Verification
			Start	Complete		
1	Improvement of Alpine meadow	Field Focal (NCS)	Sept.2026	Oct.2026	Khamkrang, Phombay and Khandropang	Completion report & Field visit report
		ESS focal	Sept. 2026	Oct.2026		
2	Maintenance of Phawan Range Office	Field focal (Phawan Range)	July 2026	June 2027	Phawan, Autsho, Lhuentse	Completion report
		ESS focal	October 2026	June 2027		

Activity 1: Alpine meadow improvement (habitat management):

- Monitoring by implementing entities (NCS Section with Ura Range):
 - Field visits at least twice—during the intervention and within three months after the intervention
 - Reports by the implementing entities submitted to BFL focal officer after each field visit
- Monitoring by BFL focal officer:
 - Field visits by BFL focal officers – monitor virtually and through field reports submitted to by the implementing entities.
 - Reports by BFL focal officer to the PCU (M&E officer) – after each field visit and within three months after the intervention
- Reports by PCU (M&E officer) to Secretariat – within two weeks after receipt of ESS officer’ report
- Bi-annual reports of the Secretariat to WWF US (as part of mid-year and final APRs)

Activity 2: Maintenance of Phawan Range Office.

- Monitoring by implementing entities:
 - Daily monitoring by the concerned Range Officer
 - Monthly reports prepared by implementing entities and submitted to concerned BFL focal officer.
- Monitoring by BFL focal officer:
 - At least once during the implementation by implementing entities
 - Quarterly reports by BFL focal to the PCU (M&E officer)
- 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)

5. Capacity Need and Budget

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

- *The budget for each of the activities is: (last section)*

Sl.No.	Activity	Budget
1	Improvement of alpine meadow:	Nu. 250,000/-
2	Maintenance of Phawan Range Office.	Nu. 1,500,000/-

No separate budget for ESS mitigation is proposed. ESS mitigation measures will be met from the respective activity costs.

6. Consultation and Disclosure Mechanisms

The full English version of this ESMP, as well as an executive summary in the national language , shall be disclosed on the website of MoNER, BFL, DoFPS and WWF. Hard copies

of the ESMP should also be available at the PA Management Office and at the PCU Office and shall be shared with the respective Gewog Administration.

7. Stakeholder Engagement Plan

The proposed activities for PNP under the BFL-funded project for years 8 and 9 (2026 and 2027) are all outside the settlements, possibly it may not have any adverse environmental and social impacts. In case, if any consultations happen to be carried out during implementation due to any unforeseen consequences, the field focal person, Phawan Range Officer and NCS section head, under the supervision of PNP management shall submit the official minutes of consultation meetings (along with a list of participants, disaggregated by gender and age) to ESS focal 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.

8. Grievance Redressal Mechanisms

This ESMP and its mitigation measures are required to be disclosed to communities for 30 days prior to the 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 procedure for submitting complaints is mentioned in the BFL GRM brochure attached in the annexure.

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>

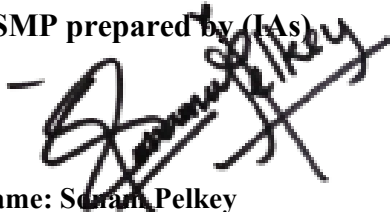
9. Certification of Mitigation Measures and Approvals for ESMPs

This section serves to clarify that the Environmental and Social Management Plan (ESMP) and its associated mitigation measures are fully compliant with the BFL Environmental and Social Management Framework (ESMF) and have undergone the intensive review and approval process.

All the mitigation measures, environmental and social management prescriptions, and good practices outlined in this ESMP are based on the following approved documentation:

1. **Screening and Scoping Tools (SST):** The identification of potential impacts and subsequent mitigation measures are derived from the approved SST submitted to the PCU by IAs and approved by ESS & GESI experts in a WWF-US AE team.
2. **Site-specific template and endorsement from implementing agencies (IAs):** all mitigation actions are formulated as per the approved SST, ensuring they are mitigation prescriptions that are site-specific and relevant to the planned activities and are further endorsed from IAs for implementation.
3. This ESMP is hereby certified for implementation. All parties involved in the execution of the project activities are obligated to perform all proposed preventive and mitigation measures as detailed in the plan, and compliance with these measures is the prerequisite for the disbursement of project funds.

ESMP prepared by (IAs)

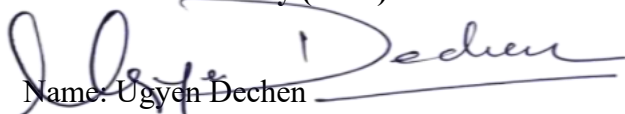


Name: Susan Pelkey

Title: Forestry Officer

Date: 5/5/2026

ESMP Reviewed by (PCU):

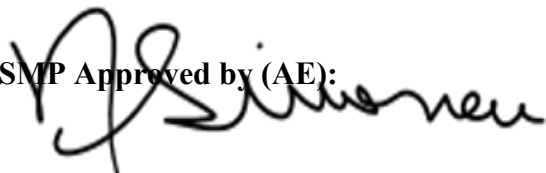


Name: Ugyen Dechen

Title: Project Officer

Date: 29th June 2026

ESMP Approved by (AE):



Signed:

Name: Nathalie Simoneau

Title: Senior Director – Gender, Social Inclusion & Safeguards

Date: June 29, 2026

Annexure I:BFL: 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)¹ 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.)

• 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 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, 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 systems.

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

- Workplaces 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 wherever necessary, if there is risk of falling of overhead objects.
- 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

- **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.
- **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 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 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.

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

Standards for workers' accommodation

a. 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.

b. Drainage

- The site is adequately drained.

c. Heating, air conditioning, ventilation and light

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

d. 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

e. 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.

f. 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.

g. 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 of 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.

h. 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.

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- Brochure for BFL GRM for Phrumsengla National Park

