Bhutan for Life
Environmental and Social Management Plan for Biological Corridor 5_Samdrup Jongkhar (2024)

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 (PAS);
- 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 to manage the environmental and social impacts. Specific mitigation actions will be required to implement the project under 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 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 by 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 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. Regarding environmental impact, there is no direct contradiction between the RGoB laws and regulations and the WWF SIPP, but the requirements of the latter are more extensive. All the project activities should fully comply both with the RGoB Regulations on the Environmental Clearance of Projects and with the procedures and mitigation measures prescribed in this ESMF. In case the WWF's SIPP requirements are more extensive, strict, or detailed than the RGoB legislation and policies, the former will apply to all project activities

Concerning social impacts, the primary discrepancies between the RGOB and regulation of the WWFs SIPP refer to the status of the non-title holder and informal land use and the commitment to the participatory decision-making process

First, according to the WWF's SIPP, all users of land and natural resources (including people who lack any formal legal ownership title or usage rights) are eligible to some form of assistance or compensation if the project adversely affects their livelihoods. The RGoB laws only recognize the eligibility of 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 BFL project, the provisions of the WWF's SIPP shall prevail over the RGoB legislation in all cases of discrepancy

2.Environmental and Socio-Economic Conditions:

The Biological Corridor 5 is located in the South Eastern part of the country and it lies within the administrative jurisdiction of Pema Gatshel and Samdrup Jongkhar Dzongkhags as shown in Figure 1. It covers an area of 203.58 km2 and approximately 48 km in length and the corridor connects the Royal Manas National Park in the west and Jomotshangkha Wildlife Sanctuary in the east. It has an altitudinal variation from 127 to 1183 meters above mean sea level (masl). The main vegetation composition is tropical broad-leaved forest. It covers Norbugang and Choekhorling Gewogs under Pema Gatshel District; and Dewathang, Orong, Phuntshothang Gewogs under Samdrup Jongkhar District.

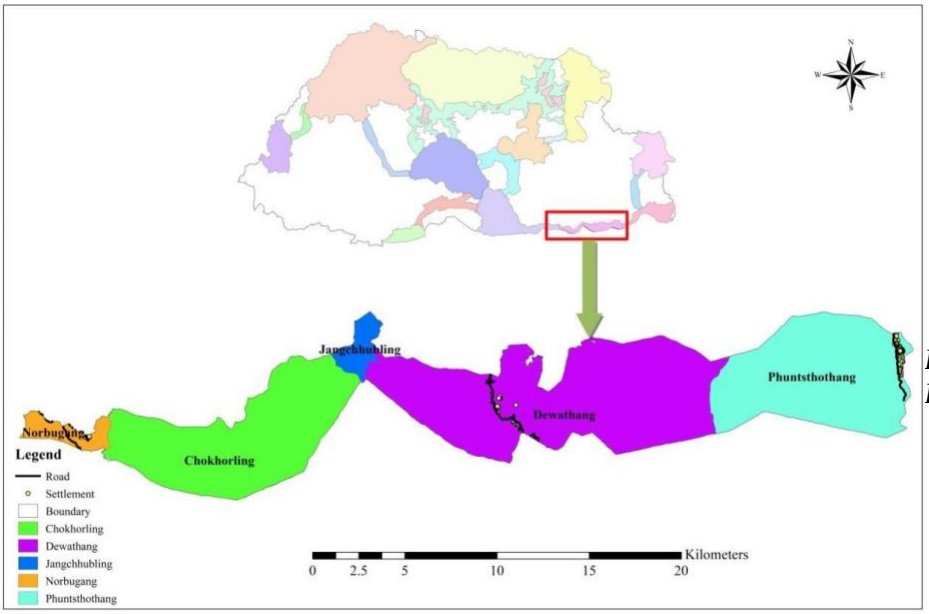


Figure 1 Location of BC5

The general topography for this corridor is moderate to steep slope ranging from zero degrees to more than 35 degrees in which the slope classification was based on the standard adopted for developing Local Forest Management Plans (LFMP) in Bhutan. The slope was classified at an interval of 0 – 25 degrees, 25-35 degrees and more than 35 degrees corresponding to gentle slope, moderately steep slope and steep slope respectively.

Gentle sloped areas were found distributed mostly towards the southern belts and areas adjoining the Indian international border and steep-sloped areas mostly occur along the ridges and at many parts were found inaccessible to people. There are also many wetlands and seasonal ponds making it a very potential habitat for wildlife populations and also forms small catchment areas for the downstream communities. Under Samdrup Jongkhar Division Jurisdiction, it have recorded of species of 25 mammals, 89 birds, 18 herpetofuana and 31 butterflies

This biological corridor has over 95% of the land covered under broad-leaved forests comprising different layers of shrubs (3.07%) and meadows (0.03%). The disturbances due to natural landslides are minimal and only 0.28% of the total corridor area is under landslide affected. The small portion of the land also falls under agriculture (0.81%) and built-up areas (0.02%). The rivers, streams and water bodies contribute to about 0.63% of the total corridor area.

The main source of income for the communities in the area is agricultural farming followed by livestock farming and the number of households in the area are 101.

3 Planned activities in the Year 2024

For BC5 which falls under the jurisdiction of the Divisional Forest Office, Samdrup Jongkhar two activities are proposed for the year 2024.

3.1River protection wall to protect the Divisional Forest Office area

- Budget: Nu. 1.00 M
- Timeline: Oct-March (2024-2025)
- Location: DFO area

The Divisional Forest Office, Samdrup Jongkhar has an area of about 2 acres located at the core of Samdrup Jongkhar thomde adjacent to Dungsumchu. This small seasonal stream originates from Deothang Gewog and runs through the Thomde area.
During the summer season, this steam swells up and causes damages to the properties of Thomde including loss of land by landslides and erosion. The divisional forest office has also lost substantial areas of land to landslides and erosion. Currently, the area is destabilized and if the retaining wall is not constructed the division will lose its large area in the coming years and also may affect some of the staff quarters. As the mitigation measures, a wall of about 10 meters*5 meters using sand, boulders, cement, and aggregates will be constructed. The activity will be implemented by local or foreign workers based on the work order from the Dzongkhag/Thomde tender committee.
To implement this activity about 10 workers will be outsourced by the contractor either from nearby villages or recruit foreign laborers (already in Bhutan under contract period with agreed terms and conditions) if there are no available local workers. They will be using the water and toilets of our division office since the office is located near the proposed area. The construction of the wall will have no disturbance to the residents of the town and commuters as it is located about 200-300m from the town area and the proposed site is well demarcated with a high rise concrete boundary wall. There is no iconic wildlife as the proposed site is near the town and the stream will also have no effect as the sediment generation during construction will be minimal.
The budget allocated for this activity is Nu. 1 million (USD 12195) and the activity will be implemented from Oct 2024 to March 2025. There will be no use of very heavy machinery so it will mainly use small tools such as spades, hoes, and other handy tools.

Fig 2 Location of river bank protection wall

Potential environmental impacts
Some of the negative impacts which is foreseen while implementing this activity are as reflected below;

- Waste generation during construction from workers.
- Disturbance of water quality as a result of construction mainly sediment.
- Workers' health and safety.

4. Environmental and Social Impacts and Mitigation Measures

1. River protection wall to protect the Divisional Forest Office area.

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Costs
Activity 1: Construction of River protection wall				
Waste generation during Construction by workers	Short term Minor	*Pre-construction:* ● Awareness of waste management by the forest officials and contractors to the workers. *During construction:* ● Identification of the different waste types at the project site (soil, food, excess mesh wires, etc.); ● Proper containers/waste bins should be provided at the project site; ● Dumping waste shall be prohibited on fragile slopes, rivers, forests, religious or other culturally sensitive areas or areas where livelihood is derived; ● Collection, transportation and final disposal of all waste should be undertaken regularly (daily); ● The options for reuse/recycling of the generated waste streams should be taken into consideration (e.g. excavated soil, etc.); ● Burning of construction waste should be prohibited. *After construction:* ● All waste shall be removed from the project site.	CFO, BFL focal and ADM	Awareness program and campaign: Nu 10000 (to provide waste bin with label)
Disturbance of water quality as a result of construction	Short term Minor	● Avoid pouring construction materials as well as wastes from workers such as food, plastics etc. into the river; Avoid open defecation in the river.	CFO, BFL focal, and ADM	Included in the activity budget
Worker health and safety	Short term Minor	● Follow the workers' health and safety guidelines; ● Ensure safety gear and first aid kit; ● Ensure that no underage workers or children are engaged; ● Decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers; Workers are employed on the principle of equal opportunity and	CFO, BFL focal, and ADM	

		fair treatment, and there is no discrimination concerning any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, job assignment, termination of employment or retirement, and disciplinary practices; ● A grievance mechanism for workersp (and their organizations, where they exist) to raise workplace concerns.		

5. ESMP Implementation arrangements

The implementation of project activities will be carried out by DFO Samdrup Jongkhar management. The BFL focal under the guidance and advice of the Chief Forestry Officer will further delegate activity to the respective relevant section. The focal person and CFO 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 will be part of the contract signed with the Contractor(s) for the implementation of the planned activity, the wall construction. The Contractor, CFO, and BFL focal are obligated to perform all proposed preventive or mitigation environmental and social measures in this plan and to keep the evidence of any (e.g., letter asking the municipality for disposal of waste, waste bins, records on OHS information session, etc.). The OHS information session should be organized by the contractor in the presence of the CFO to all workers prior start of the project activities.

Non-compliances will be recorded and reported to the PCU (ESS Officer). Every non-compliance will be closed with appropriate measure/s and the evidence will be kept. The disbursement of project funds to the contractor will be done only upon compliance with the safeguard's requirements.

6. ESMP Monitoring Arrangements

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

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

Sl No	**Activities**	**Monitoring team**	**Timeline**		**Location**	**Means of Verification**
			Start	Complete		
1	River protection wall to protect the Divisional Forest Office area.	Field focal	Oct 2024	March 2025	Divisional Forest Office area	Site visit/report
		ESS focal	Dec 15, 2024	Dec 30, 2024		

Construction of river protection wall

- Monitoring by implementing entities:
  - At least weekly field visits
  - Monthly reports prepared by implementing entities and submitted to ESS officer
- Monitoring by ESS officer:
  - Monitoring of the work through field reports from IAs after completion of the work.
  - Quarterly reports by ESS officer 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)

7.Capacity Need and Budget.

The activity under this ESMP, construction of the wall will be tender by Samdrup Jongkhar district or Thromde to contractors. The budget for each of the activities is as follows:

Sl No	**Activities**	**Budget (Million) Nu.**	**Budget for ESS mitigation (Nu) Million**
1	River protection wall to protect the Divisional Forest Office area	1 million	10000

A separate budget of Nu 10000 is needed to cover the implementation of the ESMP mitigation measures.

8. Consultation and Disclosure Mechanisms

The full English version of this ESMP, as well as an executive summary in Bhutanese, shall be disclosed on the websites of BFL, DoFPS, MoENR,WWF, and Bhutan Program. Hard copies of the ESMP should also be available at the PA Management Office and the PCU Office. The copies of ESMP will be shared with relevant local elected leaders for compliance. This ESMP has been prepared in a participatory manner with Gewog administration, sections head, and the Range Officer.

9.Stakeholder Engagement Plan

The Samdrup Jongkhar Thomde official will be engaged throughout the construction of the river bank protection wall as it is thomde site. All the technical guidance such as engineering estimates and others such as the tendering process will be done by Thromde officials.

Stakeholders shall visit the project sites and share their concerns on the activities. Any consultation meeting minutes shall be maintained for reference.

- Consultation dates for the river bank protection at Samdrup Jongkhar is as follows:
    - Dates: 15 July, 2024
    - Agenda: information on river bank protection (ESS requirements and GRM process will also be explained during the meeting)
    - Place: Division Forest Office

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:

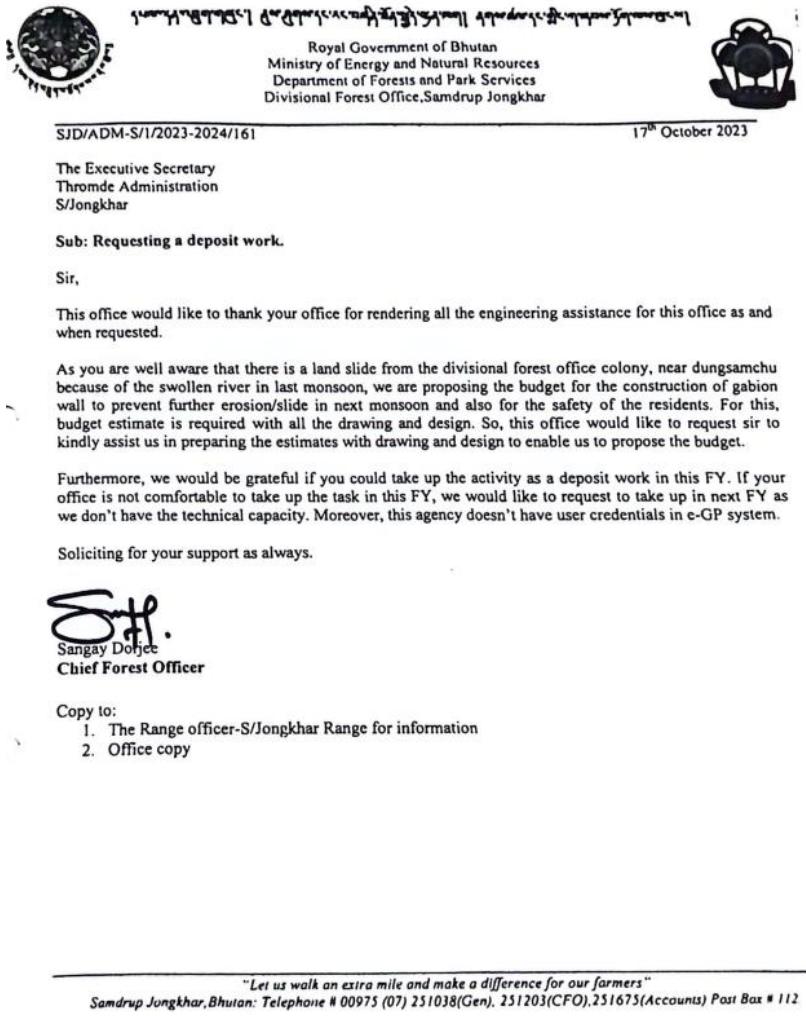
Email: SafeguardsComplaint@wwfus.org
Mailing address:
Project Complaints Officer
Safeguards Complaints,
World Wildlife Fund
1250 24th Street NW
Washington, DC 20037

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.

Annex: Engagement of stakeholders in implementing the river bank protection wall



Royal Government of Bhutan
Ministry of Energy and Natural Resources
Department of Forests and Park Services
Divisional Forest Office,Samdrup Jongkhar

SJD/ADM-S/1/2023-2024/161 — 17th October 2023

The Executive Secretary
Thromde Administration
S/Jongkhar

Sub: Requesting a deposit work.

Sir,

This office would like to thank your office for rendering all the engineering assistance for this office as and when requested.

As you are well aware that there is a land slide from the divisional forest office colony, near dungsamchu because of the swollen river in last monsoon, we are proposing the budget for the construction of gabion wall to prevent further erosion/slide in next monsoon and also for the safety of the residents. For this, budget estimate is required with all the drawing and design. So, this office would like to request sir to kindly assist us in preparing the estimates with drawing and design to enable us to propose the budget.

Furthermore, we would be grateful if you could take up the activity as a deposit work in this FY. If your office is not comfortable to take up the task in this FY, we would like to request to take up in next FY as we don't have the technical capacity. Moreover, this agency doesn't have user credentials in e-GP system.

Soliciting for your support as always.

Sangay Dorjee
Chief Forest Officer

Copy to:
1. The Range officer-S/Jongkhar Range for information
2. Office copy

"Let us walk an extra mile and make a difference for our farmers"
Samdrup Jongkhar,Bhutan: Telephone # 00975 (07) 251038(Gen). 251203(CFO).251675(Accounts) Post Box # 112

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 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 stall 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 cupboard shall be distinctly marked "FIRST AID"

Air Supply

- The workplace should have adequate ventilation for fresh air

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

2. 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.
3. 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 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.

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.

8. Sanitary and toilet facilities

- Sanitary and toilet facilities are constructed from materials that are easily cleanable.
- Sanitary and toilet facilities are cleaned frequently and kept in working condition.
- Toilets, showers/bathrooms and other sanitary facilities are designed to provide workers with adequate privacy including ceiling to floor partitions and lockable doors.
- Separate sanitary and toilet facilities are provided for men and women.
- Toilet 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

9. Cooking and laundry facilities

Cooking and laundry facilities should 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 - 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

GREEN CLIMATE FUND

WWF

THE GRIEVANCE REDRESSAL MECHANISM FOR BHUTAN FOR LIFE

BCS
DIVISIONAL FOREST OFFICE, PEMA GATSHEL

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

Phuntsho Norbu
17984452
pnorbu@moenr.gov.bt
Khar, Pema Gatshel

NGANGLAM RANGE OFFICE

Sonam Zangpo
17832192
szangpo@pemagatshel.gov.bt
Nganglam Dungkhag, Nganglam

CHOKHORLING BEAT OFFICE

Darjay Wangchuk
17680643
darjeywangchuk1972@gmail.com
Chokhorling, Nganglam

SAMDRUP JONGKHAR RANGE OFFICE

Ugyen Wangchuk
17659827
ugswangss@gmail.com
Samdrup Jongkhar Range Office, Territorial Division

DEWATHANG BEAT OFFICE

Kunzang Norbu
17285688
knorbu12xl@gmail.com
Dewathang Beat Office, Samdrup Jongkhar

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)

Norbu Yangdon
17987200
norbuyangdon@moenr.gov.bt
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:

1. Norbugang Gewog – 17317500
2. Orong Gewog - 17838808

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 entitity at:
SafeguardsComplaint@wwfus.org
Project Complaints Officer, Safeguards Complaints, World Wildlife Fund 1250 24th Street NW Washington, DC 20037

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

- Sending it by mail or email at irm@gcfund.org
- Sending a voice or video recording
- Filling out the online complaints form available at:

https://gcf.i3ight.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.