

### Preservation Measures for Katskhi and Ubisa Monasteries Sub-Project

## **Environmental Review for the Preservation Measures for Katskhi Monastery**

#### **Environmental Screening and Classification**

Katskhi Savior Cathedral is located in West Georgia, Imereti Region, Chiatura municipality, near the town of Chiatura. It is located 190 km west from Tbilisi. The site is accessible from Tbilisi-Chiatura or Tbilisi-Zestaponi Highways.

Katskhi Savior Cathedral is built in X-XI centuries by Rati Baghvashi, the national leader of Argveti. Later the adjacent structure was built to this Cathedral with Shirimi and limestone quadras. The Cathedral is a domed premise, built with the square limestone blocks. Today it has almost original shape. The north-west round part and the church tower are damaged and the part of the gate wall is ruined. In 1980-ies, while repair works, the interior walls were covered with facing, the Cathedral coverage was changed.

Environmental Review for the Ubisa Monastery restoration has been prepared as separate document. Consequently, this Environmental Review is prepared for the civil works for preservation measures for Katshkhi Cathedral.

#### Restoration of buildings of Katskhi Cathedral complex foresees:

#### **Cathedral**:

- Installation of non-reusable scaffolds inside the cathedral, to be dismantled on the completion of the works;
- Removal of the internal modern plaster of the church & further processing with lime mortar;
- The local crack-repairs with lime in the interior and facades;
- Replacement of the unfit vent windows in the cathedral with new windows to be made of dried oak:
- Replacement of the old exterior and interior doors (5 items) with new wood-metal doors;
- Partial rearrangement of the stone floor;
- Restoration of the wall arch in the northern exterior of the cathedral with travertine;
- Replacement of the concrete pavement around the Cathedral with the natural stone tiles;
- Reinforcement of the foundation of the outside wall of the north-east part of the ambulatory;

#### Church Belfry:

- Removal of existing timber bell frame and installation of a new one;
- Paving the belvedere floor with odd-shaped flooring slabs;
- Replacement of the surface coarse on the West façade with lime stones;
- Installation of the travertine cornice on 1<sup>st</sup> floor; plastering walls and ceiling with lime mortar; paving floor with Georgian brick; Laying roofing tiles; Installation of the wood railing:
- Replacement of the concrete floor with limestone slabs on the ground floor of the belfry;
- Replacement of the old doors with new wood-metal doors;
- Replacement of the window with new one;
- Replacement of the bell tower metal stairs with the timber one;
- Reinforcement of the foundation of the bell tower.

#### Fortified wall around the Cathedral:

- Stripping off plants covering the south-western part of the wall;
- Rearrangement & restoration of some parts of the walls;
- Crowing the top of the wall with roofing tiles.

- Installation of the new metal-wood gate;

Cathedral site improvement:

- Replacement of the iron roofing with tiles on the auxiliary building;
- Installation of the benches/seats on courtyard terrace and correction of terraces walls;
- Ordering the grave stones.

The restoration design will be submitted for approval to the Patriarchy Architectural and Arts council and to the National Agency for Cultural Heritage Preservation of Georgia before announcing of the tender.

Permit for Works on Cultural Heritage Monument will be issued by the National Agency for Cultural Heritage Preservation of Georgia after signing contracts with contractor.

#### (A) IMPACT IDENTIFICATION

Has the subproject a tangible impact on the environment?	The SP has a minor negative environmental impact and is expected to have tangible long term positive impact on the social environment.
What are the significant beneficial and adverse environmental effects of the subproject?	SP is expected to have positive long term social impact through rehabilitation and conservation of Katskhi Cathedral Cultural Heritage site.
	Conservation works will preserve the monument from further damage, natural disasters and severe weather.
	The main risk associated with the implementation of this SP is damage to the authenticity, historic and aesthetic value, and structural integrity of Katskhi Cathedral. Other negative environmental and social impacts are likely to be short term and typical to medium scale rehabilitation works in modified landscape: noise, dust, vibration, and emissions from the operation of construction machinery; generation of construction waste; disruption of traffic and pedestrian access.
	Increased tourist flows may have indirect negative environmental impacts: waste generation, vandalism, etc.
	In operation phase proper management of generated solid waste and waste water should be ensured to reduce impact on the environment.
May the subproject have any significant impact on the local communities and other	No new land take and resettlement are expected.
affected people?	The long term social impact will be beneficial (growth of tourist flow, attraction of private sector investment in

tourism infrastructure (hotels, restaurants, shopping, entertainment, etc.).
Negative impacts are short term and limited to the construction site. They are related to the possible disturbance described above.

#### (B) MITIGATION MEASURES

Were there any alternatives to the sub- project design considered?	Consideration of alternatives was irrelevant for this SP.
What types of mitigation measures are proposed?	To avoid loss of historic value and unintended damage to the CH site, design and methodology of restoration works will be cleared with the Church and the National Agency for Cultural Heritage Preservation.
	Removal of the surface facing in the interior of the Cathedral and belfry will be done with the utmost caution to prevent damage of the ancient travertine masonry underneath. Cutting of earth for underpinning the foundation will be done by hand and will supervised by an archaeologist.
	All other expected negative impacts of the SP can be easily mitigated by demarcation of the places under restoration, proper storage and disposal of construction waste, observance of the established working hours, proper using of personal protective gear. Materials will be obtained from licensed providers; construction waste will be disposed on the nearest municipal landfill or in an alternative location approved by local (municipal) governing bodies in written.
What lessons from the previous similar subprojects have been incorporated into the project design?	The initial design has been amended and specific changes were made. The aim of the amendments was to provide for maximum likeness with the original state.
Have concerned communities been involved and have their interests and knowledge been adequately taken into consideration in subproject preparation?	Chiatura population was informed about the upcoming projects in a meeting held in Chiatura Governor's office in (06.06.2012) and generated positive reaction of the beneficiary community.
	SP specific EMP will be made available for local community and will be discussed in a consultation meeting prior to the commencement of works.

# (D) CATEGORIZATION AND CONCLUSION Based on the screening outcomes, Subproject is classified as environmental Category A B C C Conclusion of the environmental screening: 1. Subproject is declined 2. Subproject is accepted

If accepted, and based on risk assessment, subproject preparation requires:

1. Completion of the Environmental Management Checklist

for Small Construction and Rehabilitation Activities

2. Environmental Review, including development of Environmental Management Plan

#### **Social Screening**

Soc	ial safeguards screening information	Yes	No
1	Is the information related to the affiliation, ownership and land use status of the sub-project site available and verifiable? (The screening cannot be completed until this is available)		<b>~</b>
2	Will the sub-project reduce people's access to their economic resources, such as land, pasture, water, public services, sites of common public use or other resources that they depend on?		~
3	Will the sub-project result in resettlement of individuals or families or require the acquisition of land (public or private, temporarily or permanently) for its development?		~
4	Will the project result in the temporary or permanent loss of crops, fruit trees and household infra-structure (such as ancillary facilities, fence, canal, granaries, outside toilets and kitchens, etc)?		<b>✓</b>

If answer to any above question (except question 1) is "Yes", then OP/BP 4.12 Involuntary Resettlement is applicable and mitigation measures should follow this OP/BP 4.12 and the **Resettlement Policy Framework** 

	Cultural resources safeguard screening information	Yes	No	
5	Will the project require excavation near any historical, archaeological or	✓		
	cultural heritage site?			

If answer to question 5 is "Yes", then **OP/BP 4.11 Physical Cultural Resources** is applicable and possible chance finds must be handled in accordance with OP/BP and relevant procedures provided in the **Environmental and Social Management Framework**.

#### **Environmental Review and Environmental Management Plan**

#### 1. Introduction

#### 1.1. Background Information

The Government of Georgia approved in June 25, 2010 (Government resolution no. 172), the State Strategy on Regional Development of Georgia for 2010-2017, prepared by the Ministry of Regional Development and Infrastructure (MRDI). The main objective of the strategy is to create a favorable environment for regional socio-economic development and improve living standards. These objectives will be attained through a balanced socio-economic development, increased competitiveness and increased socio-economic equalization among the regions.

In order to better utilize the tourism and agriculture potentials that exist in Imereti and reduce internal socio-economic disparities, the Government of Georgia approached the World Bank with the request to provide financial support to the regional development in Imereti. A Regional Development Project II (RDP II) was prepared jointly by the Government of Georgia and the World Bank, and the latter is expected to provide a loan funding for the implementation of RDP II.

Sub-project (SP) for Preservation measures for Katskhi and Ubisa Monasteries is a part of the RDP II and shall be prepared, reviewed, approved, and implemented in agreement with the requirements of the Georgian legislation and the World Bank policies applicable to the RDP II.

#### 1.2. Institutional Framework

The Municipal Development Fund of Georgia (hereinafter: the MDF) is a legal entity of public law, the objective of which is to support strengthening institutional and financial capacity of local government units, investing financial resources in local infrastructure and services and improving on sustainable basis the primary economic and social services for the local population (communities). MDF is designated as an implementing entity for the RDP and is responsible for its day-to-day management, including application of the environmental and social safeguard policies.

MDF prepares and submits to the World Bank for approval the SP Appraisal Reports (SARs), with safeguards documents attached. These may include, as case may be, an Environmental Review (ER) along with an Environmental Management Plan (EMP), an EMP prepared using the Environmental Management Checklist for Small Construction and Rehabilitation Activities, and a Resettlement Action Plan (RAP).

#### 1.3. Legislation and Regulations

According to the law of Georgia on Permit on Environmental Impact (2008) the SP does not require preparation of EIA and obtaining of Permit on Environmental Impact.

The SP triggers to the OP/BP 4.01 Environmental Assessment and OP/BP 4.11 Physical Cultural Resources safeguard policies of the World Bank.

According to the above mentioned safeguard policies and the Environmental Management Framework adopted for the current program, the SP has been classified as B (+) category and requires preparation of Environmental Review (ER) and environmental Management Plan (EMP).

The restoration design will be submitted for approval to the Patriarchy Architectural and Arts council and to the National Agency for Cultural Heritage Preservation of Georgia before announcing of the tender.

Permit for Works on Cultural Heritage Monument will be issued by the National Agency for Cultural Heritage Preservation of Georgia after signing contracts with contractor.

#### 2. Subproject description

ER for the Ubisa Monastery restoration has been prepared as separate document. Consequently, this Environmental Review is prepared for the civil works for preservation measures for Katshkhi Cathedral.

#### Restoration of buildings of Katskhi Cathedral complex foresees:

#### Cathedral:

- Installation of non-reusable scaffolds inside the cathedral, to be dismantled on the completion of the works;
- Removal of the surface facing of the dome, apses and portal in the interior & further processing with lime mortar;
- The local crack-repairs with lime in the interior and facades;
- Replacement of the unfit vent windows in the cathedral with new windows to be made of dried oak;
- Replacement of the old exterior and interior doors (5 items) with new wood-metal doors;
- Partial rearrangement of the stone floor;
- Restoration of the wall arch in the northern exterior of the cathedral with travertine;
- Replacement of the concrete pavement around the Cathedral with the natural stone tiles;
- Reinforcement of the foundation of the outside wall of the north-east part of the ambulatory;

#### **Church Belfry:**

- Removal of existing timber bell frame and installation of a new one;
- Paving the belvedere floor with odd-shaped flooring slabs;
- Replacement of the surface coarse on the West façade with lime stones;
- Installation of the travertine cornice on 1<sup>st</sup> floor; plastering walls and ceiling with lime mortar; paving floor with Georgian brick; Laying roofing tiles; Installation of the wood railing;
- Replacement of the concrete floor with limestone slabs on the ground floor of the belfry;
- Replacement of the old doors with new wood-metal doors;
- Replacement of the window with new one;
- Replacement of the bell tower metal stairs with the timber one;
- Reinforcement of the foundation of the bell tower.

#### Regarding the fortified wall around the Cathedral:

- Stripping off plants covering the south-western part of the wall;
- Rearrangement & restoration of some parts of the walls;
- Crowing the top of the wall with roofing tiles.

- Installation of the new Metal-Wood Gate;

Cathedral site improvement:

- Replacement of the iron roofing with tiles on the auxiliary building;
- Installation of the benches/seats on courtyard terrace and correction of terraces walls:
- Ordering the grave stones.

#### 3. Baseline Environmental Conditions

Katskhi Savior Cathedral is located in West Georgia, Imereti Region, Chiatura municipality, near the town of Chiatura. It is located 190 km west from Tbilisi. The site is accessible from Tbilisi-Chiatura or Tbilisi-Zestaponi Highways.

The Katskhi Nativity of the Savior Monastery is a medieval monastery in Georgia. It was built at the behest of the Baguashi family in the period of 1010–1014. 30 years later from three sides it was surrounded by the entrance. The church is surrounded by a pentagonal wall (restored in 1937), which contains a free-standing bell tower in its eastern corner, which also serves as gates. This monastery is one of the most original and outstanding monuments of Georgian architecture. The similar architectural forms cannot be found in any other place in Georgia. The Cathedral is a domed premise, built with the square limestone blocks. Today it has almost original shape. The north-west round part and the church tower are damaged and the part of the gate wall is ruined. In 1980ies, while repair works, the interior walls were covered with facing, the Cathedral coverage was changed.

Katskhi Monastery is located in the eastern part of the southern slope of Racha Mountain Range, in the gorge of river Katskhura (right tributary of the river Kvirila), at 650 m altitude above sea level.

#### 4. Analysis of Potential Impacts

#### 4.1. Construction Phase

#### 4.1.1. Social Impacts

- **General set of social issues.** No significant social issues are associated with implementation and operation of this SP.
- Resettlement Issues. SP does not imply private land acquisition and no permanent impacts are envisaged on private or leased agricultural lands and private assets or businesses.
- Positive impact related to Job opportunities for construction workers. Limited and temporary during construction and limited during operation.
- Health issues related to noise, emissions, and vibration. Limited and temporary.
- **Traffic Disruption**. Local traffic can be impacted limited and temporary by transport activities related to the SP.
- **Safety and Access.** There will be reduced access to areas adjacent to rehabilitation and potential hazards to vehicles and pedestrians during rehabilitation downtime.

#### 4.1.2. Impacts on the physical Cultural Property

The main risk associated with the implementation of this SP is damage to the authenticity, historic and aesthetic value, and structural integrity of Katskhi Cathedral. Restoration will be undertaken on the surface coating layers of the exterior and interior walls, external ladder

and door or the tower building. Therefore, the risk of negative impacts on the structural integrity and historical value of the Monastery complex is moderate. There is likelihood of encountering chance finds. In such cases works will be taken on hold immediately, the Ministry of Culture and Monument Protection will be informed in writing, and activity will resume upon formal permission from the National Agency for Cultural Heritage Preservation.

Conservation works will preserve the monument from further damage, natural disasters and severe weather.

#### 4.1.3. Environmental Impacts

Improper handling, storage, use and disposal of construction materials and wastes could pose a risk of water and soil contamination at the construction site and storage site. The later impact is less probable.

#### **Soil Pollution**

Potential pollutants from a project of this nature include the following (this list is not exhaustive): dismantled stones, concrete, wood materials, gravel, cement and concrete residue, lime mortar.

#### **Water Pollution**

Water pollution may result from a variety of sources, including the following:

- Silt suspended in runoff waters ("construction water")
- Washing of vehicles or equipment

#### Air Pollution and Noise

Air pollution and noise will be caused by dismantling works of existed structures and processing of the stones, transportation of materials and waste.

#### **Construction Related Wastes**

The following types of construction waste are anticipated to be produced from these activities:

- Inert materials (removed concrete and stones, rock, wood);
- Packaging materials.

#### **Transport related impacts**

- Noise & Vibration Impacts
- Traffic congestion (nuisance)
- Air pollution
- Mud on roads
- Refuelling, maintenance and vehicle cleaning and related risks of soil and water contamination.

#### **Vegetation and Landscape**

The SP design does not envisage any substantial changes of landscape. Potential impact on vegetation is minimal, although the SP design envisages.

#### 4.2. Operation Phase

Increased number of visitors after the site rehabilitation may possibly result in the increased volume of waste and noise. Positive social impact will be related to the increasing of the tourist infrastructure that will have positive effect on the local population, in terms of employment.

#### 5. Environmental Management Plan

This Environmental Management Plan (EMP) has been prepared to ensure that negative environmental impacts associated with this SP are minimized.

The contractor is required:

- 1. To obtain construction materials only from licensed providers;
- 2. If contractor wishes to open quarries or extract material from river bed (rather than purchasing these materials from other providers), then the contractor must obtain licenses for inert material extraction;
- 3. If contractor wishes to operate own concrete plant (rather than purchasing these materials from other providers), then the contractor must prepare technical report on inventory of atmospheric air pollution stationary source and agree with the Ministry of Environment and Natural Resources Protection (MoENRP);
- 4. Construction waste must be disposed on the nearest municipal landfill or in an alternative location approved by local (municipal) governing bodies in written. The records of waste disposal will be maintained as proof for proper management as designed.

Copies of extraction licenses (if applicable), agreed technical report on inventory of atmospheric air pollution for operating concrete plants (if applicable), and waste disposal agreement must be submitted to the MDF prior to the commencement of works.

A number of restrictions and mitigation measures are to be taken into account during the construction process:

- 1. Application of the heavy machinery and equipment is prohibited; The machinery should move only along the preliminarily agreed route; The maximum allowed speed will be restricted; The frequency of movement of the machinery will be restricted;
- 2. Any construction or municipal wastes produced during restoration works should remove from the site frequently, site shall be kept clean and tidy;
- 3. After completion of the rehabilitation works scaffolding should be removed and disposed in written agreement with local municipality administration.
- 4. Removal of surface facing in the interior of the Cathedral and belfry will be done with the utmost caution to prevent damage of the ancient travertine masonry underneath.
- 5. Cutting of earth for underpinning the foundation will be done by hand and will supervised by an archaeologist.

**6.** In course of restoration activities, in case of observing any suspicious object, the rehabilitation works will be suspended and will restart only upon issuance of the permit by the National Agency for Cultural Heritage Preservation.

#### **Noise**

The following measures will be implemented for noise reducing:

- The maximum speed should be restricted to the safety level during the pass of the trucks:
- Proper technical control and maintenance practices of the machinery should be applied;
- Activities should be limited to daylight working hours;
- No-load operations of the vehicles and heavy machinery are not allowed. Proper mufflers will be used on machinery.

#### **Pollution Prevention Measures:**

- Contractor is required to organize and cover material storage areas. The material storage sites should be protected from washing out during heavy rain falls and flooding through covering by impermeable materials.
- Wet cement and/or concrete will not be allowed to enter any watercourse, pond or ditch.
- No fuel, lubricants and solvents storage or re-fuelling of vehicles or equipment will be allowed near the cultural heritage site;

#### **Waste Handling**

- Construction waste shall be removed frequently from the SP site and site shall be kept clean and tidy. Temporary storage area of the construction waste should be enclosed and protect from the washing out.
- Construction waste must be disposed on the nearest municipal landfill or in an alternative location approved by local (municipal) governing bodies in written. The records of waste disposal will be maintained as proof for proper management as designed.
- Municipal waste (rubbish, plastic or glass bottles, glasses, waste food, etc.) should be placed into plastic containers and removed from the site every day.
- Burning of waste on construction site is forbidden.

#### **Dust and emissions**

- During demolition works destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site;
- The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust;
- Materials and waste will be covered/ wetted down while transportation to reduce dust;
- The construction site will be watered if deemed necessary in dry conditions or where significant quantities of dust are being or are likely to be produced;

- Protective equipment will be provided to workers as necessary;
- There will be no open burning of construction / waste material at the site;
- There will be no excessive idling of construction vehicles at sites.

#### Mitigation measures for Site safety access

The contractor will ensure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to:

- Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards;
- Alternate safe pavement will be provided for visitors.
- Construction site and all trenches should be fenced and properly secured to prevent unauthorized access (especially of children);
- Appropriate lighting and well defined safety signs should be provided;
- Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement.

#### **5.2 Operation Phase**

- For proper management of the increased volume of waste generated due to the increased number of visitors additional containers shall be placed and penalty sanctions against littering on the site shall apply.
- The traffic will increase in adjacent area of CH sites, which will result in the increased level of local emissions and noise as well as traffic safety issues. Within the SP for "Integrated Revitalization of Cultural Heritage Site of Katskhi Monastery", which is also included into the RDP II work program, arrangement of the parking area for cars and buses is envisaged.

#### 6. Monitoring

MDF carries overall responsibility for monitoring of the implementation of the environmental mitigation measures. A consulting firm hired for supervision of works will tracking environmental and social compliance of works undertaken under this SP. Field monitoring checklist will be filled out and photo material attached on monthly basis. Narrative reporting on the implementation of EMP will be provided on quarterly basis as part of the general progress reporting of MDF. MDF will also be expected to obtain from contractors and keep on file all permits, licenses, and agreement letters which contractors are required have according to the Georgian law for extracting material, operating asphalt/concrete plants, disposing various types of waste, etc.

#### 7. Costs of Implementation

Costs of implementing the proposed individual mitigation measures are small and difficult to single out from the costs of construction operations. Nonetheless, it is recommended that Bill of Quantities presented in the tender documentation carries a line item for the disposal of waste and excess materials. Other costs of adherence to good environmental practice and compliance with this EMP are expected to be integrated into the pricing of various construction activities.

#### 8. MONITORING MANAGEMENT PLAN

Activity	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Who (Is responsible for monitoring?)
			CONSTRUCTION PH	ASE		
Supply with construction materials	Purchase of construction materials from the officially registered suppliers	In the supplier's office or warehouse	Verification of documents	During conclusion of the supply contracts	To ensure technical reliability and safety of infrastructure	MDF, Construction supervisor
Transportation of construction materials and waste  Movement of construction machinery	Technical condition of vehicles and machinery  Confinement and protection of truck loads with lining  Respect of the established hours and routes of transportation	Construction site	Inspection	Unannounced inspections during work hours and beyond	Limit pollution of soil and air from emissions; Limit nuisance to local communities from noise and vibration; Minimize traffic disruption.	MDF,  Construction supervisor,  Traffic Police
Earthworks	Temporary storage of excavated material in the pre-defined and agreed upon locations;  Backfilling of the excavated material and/or its disposal to the formally designated locations;	Construction site	Inspection	In the course of earth works	Prevent pollution of the construction site and its surroundings with construction waste;  Prevent damage and loss of physical cultural resources	MDF, Construction supervisor NACHP

Activity	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why  (Is the parameter being monitored?)	Who (Is responsible for monitoring?)
	In case of chance finds immediate suspension of works, notification of the Ministry of Culture and Monument Protection, and resumption of works exclusively upon formal consent of the Ministry.					
Sourcing of inert material	Purchase of material from the existing suppliers if feasible;  Obtaining of extraction license by the works contract and strict compliance with the license conditions;  Terracing of the borrow area, backfilling to the exploited areas of the borrow site, and landscape harmonization;  Excavation of river gravel and sand from outside of the water stream, arrangement of protective barriers of gravel between excavation area and the	Borrowing areas	Inspection of documents Inspection of works	In the course of material extraction	Limiting erosion of slopes and degradation of ecosystems and landscapes; Limiting erosion of river banks, water pollution with suspended particles and disruption of aquatic life.	MDF, Construction supervisor

Activity	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How  (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Who (Is responsible for monitoring?)
	water stream, and no entry of machinery into the water stream.					
Generation of construction waste	Temporary storage of construction waste in especially allocated areas;  Timely disposal of waste to the formally designated locations	Construction site; Waste disposal site	Inspection	Periodically during construction and upon complaints	Prevent pollution of the construction site and nearby area with solid waste	MDF, Construction supervisor
Traffic disruption and limitation of pedestrian access	Installation of traffic limitation/diversion signage; Storage of construction materials and temporary placement of construction waste in a way preventing congestion of access roads	At and around the construction site	Inspection	In the course of construction works	Prevent traffic accidents;  Limit nuisance to local residents	MDF, Construction supervisor
Clearance of Site on Completion	Clear up all working areas both within and outside the SP site and accesses, removal of all surplus soil and materials temporary sheds, fencing, filling of all holes and restoration of the surface of the ground as near as practicable to its original condition	At and around the construction site	Inspection	After works completion	Landscape protection	MDF, Construction supervisor

Activity	What  (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Who (Is responsible for monitoring?)
Workers' health and safety	Provision of uniforms and safety gear to workers;  Informing of workers and personnel on the personal safety rules and instructions for operating machinery/equipment, and strict compliance with these rules/instructions	Construction site	Inspection	Unannounced inspections in the course of work	Limit occurrence of on-the- job accidents and emergencies	MDF, Construction supervisor

Attachment 1. Pictures of the Katskhi Cathedral

