ENVIRONMENT SUSTAINABILITY PLAN

Institutional Development Plan of DUVASU

for

Improving the Academic and Governance System of the University for Enhancing Learning Outcome

Environmental and Social framework

Any human activity does have environmental and social impact however, activities to be financed under the project are not expected to have significant environmental or social impacts accordingly, the proposed project has been classified as Environment Category B in accordance with the World Bank's safeguard policies. This framework has been prepared to meet the World Bank safeguard requirements and Government of India (GoI) environmental procedures. Anticipated impacts can be readily addressed through appropriate mitigation and management measures included in the design and implementation of project-specific activities. Since activities will be primarily located at U.P. Pandit Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya evam Go Anusandhan Sansthan, Mathura, it is imperative that suitable Environmental and Social Management Framework be prepared and practiced throughout the execution of the programme. The objective of the ESMF is to provide a framework for effective management of environmental and social issues which seeks to both enhance environmental and social development benefits of the IDP and mitigate any adverse impacts if any, in line with GoI and World Bank policies and guidelines on management of environmental and social development issues.

Methodology

The ESMF has been developed as a tool to be used in implementing recommendations for addressing environmental and social impacts associated with proposed infrastructure activities to be financed under IDP. Its purpose is to:

(a) Establish clear measures and methodologies for environmental and social assessment, analysis, endorsement and execution of investments to be financed under Project.

(b) Specify proper roles and responsibilities, and delineate necessary reporting procedures, for managing and monitoring environmental and social concerns related to project investments.

(c) Determine training necessities, capacity building and technical back-up needed to successfully implement the provisions of ESMF.

(d) Provide practical information resources for implementing ESMF.

Consultations and Field Visits

This will lead to the preparation of Environmental Management Plans (EMP). It is expected that there are positive impacts associated with proposed investments and there will be negligible negative environmental and social impacts, which could be readily addressed through adequate implementation of an EMP.

Operating Mechanism

Nodal officers for Environment and Social Safeguards (ESS) have been designated to monitor and assess development activities being funded through IDP. Nodal Officers will have access to data generated due to different activities and monitoring mechanisms, right to visit site of developmental activities and assess impact on environment and social structure. Any discrepancy in regards to environmental and social safeguards will be reported to IDP leader /Vice-Chancellor of the University.

Environmental Sustainability Plan (ESP)

1. Name of the AU: U.P. Pandit Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwa Vidyalaya Evam Go Anusandhan Sansthan, Mathura
2. Date of project implementation : July, 2020
3. Name of Nodal Officer: Dr Atul Saxena, Professor & Head, Veterinary Gynecology and Obst.

S. No	Proposed Interventions / Activities	Compliances applicable	Possible Environmental Impacts	Mitigation Measures	Scope for the integration of best practices under environmental Sustainability concerns	Resources Required (budget, technical support etc.)
1.	Renovation of labs	1. National Building Code of India 2005	1. Use of illegally mined or low quality materials will affect the environment and the infrastructure quality. 2. Existing lighting and aeration arrangements is energy intensive 3. Lack of fire safety measures and awareness. 4. Release of dust particles in atmosphere	1. All raw materials should be sourced from authentic and approved vendors, possessing valid permits. 2. Regular and stabilized electricity supply should be ensured. 3. Shadenet to be used at the site of construction. 4. Reputed and law abiding registered Contractors will be selected for such works. It is strictly followed in DUVASU. All construction materials are continuously checked for its quality by Engineer of the University. 5. Provision of standby source for power supply to sensitive and costly equipment is ensured. Proper earthing is done for human and equipment safety.	1. Integrate solar power as part of renovation considering the following parameters viz., sufficient space, ventilation, lighting, etc. 2. Laboratories to be equipped with fire fighting facilities. 3. Fire safety instruction displayed in the form of poster and orientation to all students, staff and non- teaching staff 4. Interior greenery to be provisioned.	1. Fire extinguishers 20 nos (@ Rs.3000 per unit) = Rs. 60000/- 2. Interior greenery maintenance Rs 4000/ year= 80000

		2. The Noise Pollution (Regulation and Control) Rules 2000)	5. Laboratory renovation works will create noise pollution.	Usage of equipment within the allowed threshold of noise standards prescribed for residential/ institutional complexes Work related to noise to be done during semester breaks and university holidays. Obstacles to be erected at the size of construction to reduce noise.		
		Hazardous Wastes Management and Handling Rules (1989 and Amendment Rules, 2000 & 2003)	Disposal of laboratory waste (chemicals) in to open gutter may contaminate the soil, ground water, etc	1. Hazardous waste should be disposed only after treatment 2. Dedicated pipelines and collection chambers for hazardous and non- hazardous wastes emanating from the laboratories		
2.	Renovation of building for IDP and Incubation Center	1.Preservation of Trees Acts	1. Site clearance for construction involves cutting / felling of trees	1. Construction should be done without cutting/ felling of trees. 2. If tree felling is unavoidable, compensatory plantation of trees will be done in equal or more number near the same site or suitable alternate site.	Yes. Greening of campus, green building certification	University often make tree plantation drive. It will be further strengthened to reduce pollution.
		1. National Building Code of India 2005	1. Use of illegally mined or low quality materials will affect the environment and the infrastructure quality. 2. Existing lighting and aeration arrangements is energy intensive 3. Lack of fire safety	1. All raw materials should be sourced from authentic and approved vendors, possessing valid permits. 2. Reputed and law abiding registered Contractors will be allotted for such works. It is strictly followed in DUVASU. All	1. Integrate solar panels as part of renovation considering the following parameters viz., sufficient space, ventilation, lighting, etc. 2. The building will be equipped with rain water harvesting structure which can meet the	1. Fire extinguishers 6 nos (@ Rs. 3000 per unit) = Rs. 18000/- 2. Interior greenery maintenance Rs

			measures and awareness. 4. Release of dust particles in atmosphere 5. Disaster proof construction 6. Safety measures 7. Construction operations	construction materials are continuously checked for its quality by the Engineer of the University. 2. Regular and stabilized electricity supply should be ensured. Provision of standby source for power supply to sensitive and costly equipment is ensured. Proper earthing is done for human and equipment safety. 3. The National Building Code (NBC) to set up of minimum provisions, designed to protect the safety of the public with regard to structural sufficiency, fire hazards and health aspects of buildings 3. All buildings will be equipped with fire safety equipment. Shadenet to be used at the site of construction. 7. Fire safety instruction displayed in the form of poster and orientation to all students, staff and non- teaching 8. Operations like mixing raw material should be done in areas where people's movement is less and workers should use masks. 9. Construction equipment that emits noise should not be used in residential areas during night.	water requirement of the facility at least for non-drinking purposes 3. Interior greenery to be provisioned in the designed and quotation document.	2000/ year= 40000

				10. The workers should be provided with gloves, masks, helmets etc. 11. Use of child labour should be avoided. 12. Any chance finds should be deposited with District Collector. 13. The project does not fund for any land acquisition		
		2. The Noise Pollution (Regulation and Control) Rules 2000)	5. New construction works will create noise pollution.	1. Civil contract should provide for only usage of equipment within the allowed threshold of noise standards prescribed for residential/institutional/ hospital complexes	1. Work related to noise to be done during semester breaks and university holidays. 2. Obstacles to be erected at the size of construction to reduce noise.	
		Municipal Solid Wastes (Management and Handling) Rules, 2000	Disposal of debris	1. Debris should be put to alternate use such as land filling in consultation with municipal corporations	Construction of Compost pit for food and agri waste. Recycling /reuse of debris for construction of roads, pathway etc	
		Energy Conservation Building Code (Energy Conservation Act 2001):	AU that have load of 100 kW or a contract demand of 120 kVA and above[1]	1. AU that have Air conditions with a load more than 100 kW follow ECBS minimum energy standards 2. Regular and stabilized electricity supply (220-230 volts) preferably green and captive should be ensured. 3. Provision of standby sources for power supply to sensitive and costly equipment 4. Ground all sources of power supply for human and	• Provision of Automated Mains Failure to avoid load fluctuation and fire hazards	

				equipment safety		
		Ground water Acts	Drilling of bore well	Permission required to drill bore well, water quality test, recharge ground water level	rainwater harvesting structure	
3	E-waste of laboratory related equipments/ instruments	E- Waste (management and Handling) Rules, 2011	E-Waste (unwanted, non-working or obsolete) generated at AU is to be managed in a manner which shall protect health and environment against any adverse effects, which may result from hazardous substance contained in such wastes.	1. E – waste should be channelized through collection centre or dealer of authorized producer or dismantler or recycler or through the designated take back service provider of the producer to authorized dismantler or recycler 2. Shall maintain records of e-waste generated by them in Form-2 and make such records available for scrutiny by the concerned State Pollution Control Board; 3. Shall ensure that such end-of-life electrical and electronic equipment are not admixed with e-waste containing radioactive material as covered under the provisions of the Atomic Energy Act, 1962 (33 of 1962) and rules made there under; E- waste collection centres and contact list is availablestandards 2. Regular and stabilized electricity supply (220-230 volts) preferably green and captive should be ensured.	1. Separation of E-waste at sources by putting different types of bins. 2. Composting of the biodegradable packaging materials	

				3. Provision of standby sources for power supply to sensitive and costly equipment 4. Ground all sources of power supply for human and equipment safety		