

Executive Summary

Introduction

Pakistan Institute of Development Economics (PIDE), intends to construct its campus, in H-11/2 sector, Islamabad.

The objective of the project is to facilitate the establishment of a permanent campus of PIDE at Islamabad to create a conducive environment for running academic programs, initiate enhanced research in the field of economics and finance while modernizing the teaching standards.

The campus currently is located within the premises of Quaid-e- Azam University. However, as the institute is growing and is looking to cater for more students and research staff, PIDE intends to construct its purpose-built campus in H-11/2.

Policy Legal and Administrative Framework

The proposed project has been assessed in compliance with the existing legal framework on environment of the federal capital as regulated by Pak. EPA.

- Pakistan Environmental Protection Act, 1997
- Pakistan Environmental Protection Agency (Review of IEE and EIA Regulations), 2000
- National Environmental Quality Standards (NEQS), 2000

Pakistan Institute of Development Economics being the project proponent will ensure that the construction and operational stages are kept in compliance with the Initial Environmental Examination report and that the Environmental Management Plan will be implemented effectively.

Project Description

The project site is located at H-11/2 sector Islamabad on A.K Brohi Road adjacent to Counter Terrorism Force Headquarter (HQ). The constituted land area measures 17.55 Acres (762,000 Sq. ft.).

PIDE H-11/2 Campus will have multi-storied buildings containing Academic Block, Administration Block, Library, Auditorium, Student and Staff Hostels comprising of one Basement Floor, Ground Floor & 7-8 Upper Floors.

The covered area of the campus is 1,064,143 square feet. The covered area includes the dean office, the main academic block for 12 Departments, examination halls followed by admission and eight research blocks and research division. There is also a CPEC research center and an ICT division which includes offices and server room. Moreover, an on-campus library and documentation division will also be constructed.

Miscellaneous campus facilities include hostels, mosque, cafeteria, guest house, daycare, dispensary, staff accommodation and parking are also included onsite.



The cost of the project is 3.519 Billion for a period of 2 years in which the project is expected to be fully completed.

Existing Baseline Environment

Topography of Islamabad

Amongst the foothills of Himalayan Mountain ranges lies the Margalla hills which surround Islamabad. Islamabad has mixed topographical locality which includes plateau features including hill like terrain in the north as well as plain like land features in the south.

The capital and the adjoining city of Rawalpindi stand side by side and are commonly referred to as the Twin Cities.

Geology and soil texture

The planned capital area of 350 square miles is a composite of natural terraces and meadows which surround the city. The southern portion is an undulating plain. It is drained by the Korang River on which the Rawal Dam forms a lake holding about 50,000 acre-feet of water.

The soil of the project area is composed of clay/silt formed of alluvial deposits laid by the past and present river system in varying thickness.

Air Quality:

A major anthropogenic source of air pollution in the project area is the high traffic on Kashmir Highway.

Ecological Environment

Flora

The vegetation of Islamabad is a representative of Dry Subtropical Scrub Forest which is dominated by *Acacia modesta* (Phulai), *Ziziphus mauritiana* (Ber); *Ziziphus nummularia* (Mullah), etc. Other associates existing in varying proportions include *Prosopis cineraria* (Jand), *Melia azadirachta* (Dharek); *Morus alba* (Mulberry-Shahtoot); *Dalbergia sissoo* (Tahli-Shisham); *Acacia nilotica* (Kiker). In the undergrowth *Cannabis sativa* (Bhang), *Calotropis procera* (Desi Ak), *Parthenium hysterophorous* (Gandi Booti) and *Ocimum bacilicum* (Niazbo) are predominant.

Presently, the project site has eighteen trees and is covered with wild shrubs and grass. Out of these eighteen trees 1 is Kikar (*Acacia karoo*), 6 are Shisham (*Dalbergia sissoo*), 9 are Mulberries (*Morus*), 1 malabar nut (*Justicia Adhatoda*) and 1 silver oak tree (*Grevillea robusta*). All 18 trees have diameter less than 10".

Fauna

In its original form, the Dry Subtropical Scrub Forest constituted the habitat of wild fauna consisting of a host of animals and birds. As the disturbance increased to a maximum level with complete inhabitation, wildlife abundance and diversity decreased to a minimum degree. Mammals commonly found in the project area are Rat, Wild boar and Porcupine, birds include Quail, House Sparrow and House Crow and reptiles common in the area are Monitor Lizard, and Spin tailed lizard.



Socioeconomic and Cultural Environment

Public Consultation

The public consultation involved meetings held with local stakeholders which included the adjoining institutions including National Police Foundation, CTF headquarters, National University of Science and Technology and International Islamic University. Local residential population in this area is negligible since the area contains educational and administration institutes. However, their reservations were included in the process of systematic consultation. All these intuitions were located within 1 Km of the project site.

The project specific issues and its potential impacts on the local and regional environment were discussed with the above-mentioned stakeholders. In these meetings, the stakeholders were informed about the salient features of the project, its location and related activities. The stakeholders involved in the process were supportive of the construction of the educational institute in the area as it would be a contributor in the development of the sector H-11/2 and may also open new business avenues for the local community including the establishment of shops and markets.

People also emphasized the use of protective and safety equipment during the construction phase to avoid accidents and noise as the area is also surrounded by other institutes of national importance.

Impact and Mitigation Measures

Initial Environmental Examination of the proposed project has identified potential impacts that are likely to arise during the operational phase of the proposed project. To minimize the effects of adverse impacts of the proposed project, the IEE has recommended mitigation measures.

Physical Environment

Impacts: The soil-related issues include soil erosion, slope stability and soil contamination. Operational machinery and vehicles will release exhaust emissions, containing carbon monoxide (CO), carbon dioxide (CO₂), Sulphur dioxide (SO₂), oxides of nitrogen (NO_x), and particulate matter (PM). These emissions affect the ambient air quality in the vicinity of the project site. Furthermore, activities such as demolishing, excavation, and leveling, filling and vehicular movement on unpaved tracks may also cause dust emissions.

Mitigations: To control soil erosion, slope stability and soil contamination excavated slopes will not be left untreated/unattended for a long duration. Vehicles and equipment will not be repaired at the project site. If unavoidable, impervious sheathing will be used to avoid soil and water contamination. Domestic solid waste will be disposed of in a manner that does not cause soil contamination. Operational machinery and vehicles will be kept in good operating condition in order to minimize the exhaust emissions in accordance with NEQS. Fugitive dust emission will be minimized by spraying water on the soil, where required and appropriate. The mitigation measures recommended forestalling soil contamination will also prevent surface water and groundwater contamination. The mitigation measures to forestall any surface or groundwater contamination will ensure that the downstream water



resources are not contaminated. All preventive measures will be adopted to control the spill-over of chemicals and other effluents on the ground to protect soil fauna and ensure microbial activity according to the NEQS.

Ecological Environment

Impacts: The site preparation and construction activities may necessitate removal of the natural vegetation.

The project site is located in a semi-urban area of Islamabad, which provides minor to moderate habitat for wildlife. The loss of natural vegetation and other project activities will potentially have adverse impacts on the local fauna and habitats of the area as well. Smoke, chemicals, dust particles, and noise generated by heavy machinery are a scaring factor for wildlife. Rodents, hedgehogs, porcupines would lose their abode.

Mitigation: Endeavors will be made to compensate for the loss of vegetation through a plantation of trees and ornamental plants. A plantation plan for PIDE H-11/2 Campus Project has been prepared. A record will be maintained for any tree cutting. The construction crew will be provided with LPG as cooking (and heating, if required) fuel. Use of fuelwood will not be allowed at the contractor camp.

Socio-Economic Environment

Impact: During the construction phase, problems such as noise pollution, dust pollution, heavy traffic, land surface vibrations would arise in the project vicinity. Since the project site is located in the area which has a number of influential security, security of the premises of those intuitions would be one of the major issues during construction phase.

Mitigation:

Noise and air pollution are projected to majorly be caused by the construction machinery and vehicles. However, since the area does not have any adjoining residential colonies hence the major transportation of construction material can be carried out during the night time so that daytime traffic congestion could be avoided.

The recyclable waste from the project site such as cardboard, drums, broken/used parts, etc. will be sold to recycling contractors, or where appropriate to reuse/recycle it. The hazardous waste will be kept separate and handled according to the nature of the waste. While storing, hazardous waste will be marked. Recycling of the waste would limit the ecological, socio-economic impacts and pressure on the environment.

Environmental Management Plan (EMP)

An Environmental Management Plan has been prepared which defines the institutional arrangements required for its implementation. It also provides the implementation mechanism for the recommended mitigation measures identified during the IEE study.

The Environmental Management Plan provides a delivery mechanism to address the adverse environmental impact of the project during its execution, to enhance project benefits, and to introduce standards of good practice to be adopted for all project works. An Environmental Monitoring Plan for the constructional phase of the PIDE H-11/2 Campus Project has been prepared, which will ensure the proper implementation



of the EMP. The cost of EMP for the constructional phase of the project is 3.260 Million Rupees.

Conclusion and Recommendations

On the basis of the overall impact assessment, more specifically, nature and magnitude of the residual environmental impacts identified during present IEE, it is concluded that PIDE H-11/2 Campus Project is likely to cause environmental impacts during its construction phase. However, these impacts can be mitigated provided the proposed activities are carried out as mentioned in the report.

There are no remaining issues that warrant further investigation. This IEE is considered adequate for the environmental and social justification of the project.

