Environmental and Social Management Framework

September 2017

India: Himachal Pradesh Skills Development Project

Prepared by the Himachal Pradesh Kaushal Vikas Nigam, Government of Himachal Pradesh for the Asian Development Bank. This is an initial draft available on https://www.adb.org/projects/49108-002/main#project-documents

CURRENCY EQUIVALENTS

(as of 4 September 2017)

Currency unit	−	Indian rupee/s (₹)
₹1.00	=	$0.01567
$1.00	=	₹63.8100

ABBREVIATIONS

ADB	=	Asian Development Bank
CCO	=	chief compliance officer
CLC	=	city livelihood center
CPCB	=	Central Pollution Control Board
dB	=	decibel
DOLE	=	Department of Labor and Employment
DOE	=	Department of Environment
DOHE	=	Department of Higher Education
DOLE	=	Department of Labor and Employment
DOUD	=	Department of Urban Development
DOP	=	Department of Planning
DORD	=	Department of Rural Development
EAC	=	Environmental Appraisal Committee
EIA	=	environmental impact assessment
EMP	=	environmental management Plan
ESMF	=	Environmental and Social Management Framework
GRC	=	grievance redress committee
HPKVN	=	Himachal Pradesh Kaushal Vikas Nigam
HPSDP	=	Himachal Pradesh Skills Development Project
IEE	=	initial environmental examination
ITI	=	industrial training institute
LPG	=	liquefied petroleum gas
MCC	=	model career center
MOEF	=	Ministry of Environment, Forest, and Climate Change
NRRP	=	National Rehabilitation and Resettlement Policy
PAA	=	project approving authority
PIU	=	project implementation unit
PMU	=	project management unit
PWD	=	Public Works Department
RLC	=	rural livelihood center
SPCB	=	State Pollution Control Board
SPS	=	Safeguard Policy Statement
TOR	=	terms of reference
TVET	=	technical and vocational education and training

NOTES

(i) The fiscal year (FY) of the Government of India ends on 31 March. “FY” before a calendar year denotes the year in which the fiscal year ends, e.g., FY2017 ends on 31 March 2017.

(ii) In this report, “$” refers to US dollars.

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I. INTRODUCTION

1. At the request of the Government of India and the Government of Himachal Pradesh, the Asian Development Bank (ADB) will offer $80 million in loan assistance to reinforce the efforts of Himachal Pradesh in modernizing and reforming its technical and vocational education and training (TVET) institutions, and scaling up training capacity. The Department of Planning (DOP), Government of Himachal Pradesh, will be the executing agency for the proposed Himachal Pradesh Skills Development Project (HPSDP). The Himachal Pradesh Kaushal Vikas Nigam (HPKVN); the Department of Technical Education, Vocational and Industrial Training (DOTE); Department of Higher Education (DOHE); and the Public Works Department (PWD) will be the implementing agencies. PWD will be fully responsible for the procurement and supervision of all civil works, i.e. construction of various training facilities as elaborated later.[1]

2. The impact of HPSDP will be a more productive workforce in Himachal Pradesh equipped with market-relevant technical and vocational skills created aligned with the Himachal Pradesh Skills Development Policy (*Him Kaushal*), 2016. The outcome will be improved employment and livelihood opportunities for the youth of Himachal Pradesh. This will be achieved through the following outputs:

(i) Output 1: TVET in Himachal Pradesh improved and aligned to national standards.
(ii) Output 2: Market-aligned skills ecosystem created.
(iii) Output 3: Access to quality training institutes improved.
(iv) Output 4. TVET institutional structure improved.

3. Since output 3 will involve the construction of new training facilities and upgrade of some existing buildings, this detailed environmental and social management framework (ESMF) has been prepared in line with ADB's Safeguard Policy Statement (SPS), 2009, to guide the executing agency and implementing agencies in mainstreaming environmental concerns into the design and implementation phases of HPSDP. This ESMF is structured as follows:

(i) Section II provides a brief description of the types of training facilities—Rehan Women's Polytechnic, city livelihood centers (CLCs), rural livelihood centers (RLCs), a center of excellence (COE) for industry-driven skilling, and model career centers (MCCs)—which will be supported under HPSDP. The design, dimensions, location, usage, and maintenance plans of the identified subprojects are discussed.
(ii) Section III describes the categorization of HPSDP per the safeguard requirements indicated in the SPS for environmental safeguards, involuntary resettlement, and indigenous people. The principles for screening the sites for the subprojects are provided in **Appendix 1**.
(iii) Section IV discusses the environmental and social safeguard policy of India and the Government of Himachal Pradesh.
(iv) Section V describes ADB's safeguards policy principles and processes, as set forth in the SPS.
(v) Section VI presents a comparison between ADB's SPS and India's environment and social safeguards regulatory framework as relevant for the project.
(vi) Section VII describes the environmental assessment process for the subprojects.

[1] All vocational training activities to be funded through private sector training service providers will be managed by HPKVN. DOTE will procure the upgraded training equipment, aligned to NCVT Guidelines 2014, for the selected ITIs. To facilitate coordination, the procurement and management of all the consulting firms and TSPs (for handling different types of vocational training and livelihood development programs) will be managed by HPKVN.

(vii) Section VIII summarizes the anticipated environmental impacts due to infrastructure construction in subprojects.
(viii) Section IX covers social safeguards in the project.
(ix) Section X describes the region of Himachal Pradesh (with indigenous people presence) in terms of exclusion in subprojects' location.
(x) Section XI elaborates on the institutional arrangements required for monitoring the environmental and social safeguards requirements.
(xi) Section XII describes the requirements for safeguard compliance in subproject sites.
(xii) Section XIII describes the grievance redress mechanism to be followed during the project life cycle.
(xiii) Section XIV describes the training requirements for capacity development in the implementing agencies and executing agency.
(xiv) Section XV describes the monitoring and reporting requirements for the project during construction and operation.
(xv) Section XVI focuses on disclosure requirements for the safeguards documents.
(xvi) Section XVII emphasizes the requirements for periodic updating of the ESMF.

A. Description of Proposed Civil Works

4. Under output 3, the project will involve construction of new training facilities and upgrade of some existing buildings to improve the access to TVET facilities across Himachal Pradesh. The new facilities include construction of six CLCs, seven RLCs, one COE, and one polytechnic for women. Eleven existing employment exchanges will be upgraded into MCCs. One new MCC is also planned. The largest of the new constructions—the Women's Polytechnic to be constructed in Rehan in the district of Kangra—will occupy around 15,000 square meters (m^2). On average, the CLCs and RLCs will have three floors, and occupy about 800 m^2 to 900 m^2. The MCCs will also have three to four floors on average, and occupy around 400 m^2 each.

B. Categorization of the Himachal Pradesh Skills Development Project

5. The Government of Himachal Pradesh has assured ADB that the proposed new infrastructure will be built either within premises or on vacant and unencumbered land that it owns. No new land will be acquired, nor will anyone be displaced in anticipation of ADB funding. Sites located within or near environmentally sensitive areas will not be considered. None of the project components will be located within core and buffer zones of national parks, sanctuaries, tiger reserves, and biosphere reserves; or within 100 meters from the boundary of protected monuments of archaeological importance. No wetlands, or reserved or protected forest lands, will be acquired for or used in project-related activity. Since all the training facilities to be constructed or upgraded under HPSDP are meant for educational and training purposes, they will not require any prior environmental clearances according to the environmental rules and regulations of India.[2] Given the relatively small size and routine nature of the proposed civil works, there will be no major environmental impact. Potential effects of construction and refurbishment activities will be site-specific, and can be adequately addressed through appropriate screening and mitigation measures. Any activity expected to generate adverse and irreversible environmental impact will be excluded from the proposed project. Hence, the project is category B for environment.

[2] The Ministry of Environment, Forest, and Climate Change (MOEF), Government of India, issued Office Memorandum (F. No. 19-2/2013-IA- III) dated 9 June 2015, which exempts educational and training institutes from obtaining prior environmental clearance.

6. No new land will be acquired for this project, permanently or temporarily, from a person, household, business establishment, or from a community. Any site that would trigger any involuntary resettlement issue will be excluded. Further, all legal formalities pertaining to land transfer from a Government of Himachal Pradesh department to any of the implementing agencies for construction of the proposed training facilities should be concluded before any construction activity is initiated. The implementing agencies will screen all such transfers from other departments carefully to confirm that they are free of encumbrances before taking possession. Moreover, no construction activity related to HPSDP will restrict any person's land use or access to legally designated parks or protected areas. The refurbishment of existing buildings or construction of new buildings for the project components will not block nor affect any person's assets, access to assets, income sources, or means of livelihoods. Hence, the project is category C for involuntary resettlement.

7. Himachal Pradesh is divided into 12 districts. Of these, the Kinnaur and Lahaul-Spiti districts in their entirety, and Pangi and Bharmour (now *tehsil* Bharmour and sub-*tehsil*, Holi) subdivisions of the Chamba district are designated as scheduled tribal areas of Himachal Pradesh since the proportion of scheduled tribes is 50% or more. These districts are in the extreme north and northeast of Himachal Pradesh, forming a contiguous belt in the far hinterland behind high mountain passes. Given their high altitude, inhospitable terrain, harsh winters, sparse and dispersed population, and poor connectivity (especially during winters and rainy seasons), no civil works (i.e., construction of training facilities) have been planned in the areas of tribal concentration within these districts. All project activities including the civil works and training programs will be in the southern districts of Himachal Pradesh with better climate and connectivity, and where the presence of tribals is insignificant. The training programs will be voluntary. No project-related activity will have any adverse impact on indigenous peoples or impose on their cultural and human rights. The project will not restrict their access to protected areas and use of natural resources. It will also not physically or economically displace indigenous people. The project will not undertake any activity that leads to commercial development of their cultural resources and knowledge. Since the project will not have any impact on Himachal Pradesh's indigenous population, it is category C for indigenous peoples.

8. The proposed project categorization has been reconfirmed by an experienced ADB environment and social safeguards consultant, who has to date visited 15 sites identified by the government.[3] He has taken relevant government staff on site visits, and taught them how to use ADB's safeguards screening checklists (**Appendix 14**). He has conducted workshops on ADB's SPS with the implementing agencies including PWD, which will oversee civil works; and HPKVN, which will play the key role in terms of coordinating with DOTE and DOHE, as well as the support departments, namely, Department of Urban Development (DOUD), Department of Rural Development (DORD), and the Department of Labor and Employment (DOLE), which will run the CLCs, RLCs, and MCCs, respectively. The consultant has assisted the implementing agencies in preparing initial environmental examination (IEE) and environmental management plans (EMPs) for the sites included under advance contracting. He will continue to support the implementing agencies as required. Relevant government staff will also attend the various capacity building workshops including on environment and social safeguards that are organized periodically by ADB's India Resident Mission.

[3] In addition to the environment and social safeguards consultant, other experts including an architect, labor economist, and gender specialist; plus relevant consultants from the firm engaged under the project preparatory technical assistance project, have also visited and screened these sites. ADB. 2015. *Technical Assistance to India for Supporting Skill Development in Himachal Pradesh*. Manila (TA 9060-IND).

II. ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

9. The Government of Himachal Pradesh recognizes that the construction of new training facilities and refurbishment of existing buildings will have some minor and localized environmental impacts. It will avoid, minimize, and mitigate these impacts by adhering to India's national environmental safeguard regulatory frameworks, the state's own safeguard regulations, and the principles and processes laid down in the SPS. This ESMF will guide the long-term implementation of civil works including screening of future subproject sites, preparation of IEEs and EMPs, monitoring contractors' work, and periodic updating of safeguards-related reports. It defines roles, responsibilities, and procedures for screening, minimizing, and mitigating any potential adverse environmental impacts or risks; and screens and removes any activity likely to have a significant environmental impact or risk. This ESMF will thus sensitize the government staff about the need to factor in environmental and social concerns while planning and executing any development project. It will ensure that the safeguards categorization (B for environment, C for involuntary resettlement, and C for indigenous people) will be adhered to in a credible and transparent manner over the life of the HPSDP.

10. This ESMF draws on the Government of India's Environmental (Protection) Act, 1986, and rules and notifications provided therein for environmental protection. In terms of social safeguards, this ESMF is based on the (i) National Rehabilitation and Resettlement Policy (NRRP), 2007; (ii) Right to Fair Compensation in Land Acquisition, Rehabilitation, and Resettlement Act, 2013; and (iii) Forest Rights Act, 2006. These legal instruments provide guidelines and directions for (i) screening of projects, (ii) their categorization into A and B, (iii) scoping their environmental and social impacts, (iv) formulating terms of references (TORs) for environmental assessments, (v) obtaining environmental clearances, and (vi) environmental compliance monitoring during project construction and operation phases. The ESMF draws on best practices from SPS. It also fills in gaps found in the national and state-level environmental safeguards requirements by drawing from SPS policy principles and best practices.

11. The ESMF will assist the executing agency and implementing agencies in identifying and mitigating potential environmental and social impacts early on, and guide them in subproject level safeguards planning and implementation. The ESMF

(i) outlines best practices in safeguard policy implementation that will provide a useful guide for HPSDP;
(ii) provides a categorization system to screen out potential environmental and involuntary resettlement issues, and possible impact on indigenous peoples;
(iii) establishes the principles and processes for screening out subprojects with significant adverse environmental or social impacts;
(iv) examines whether the mitigation of environmental impacts and risks meet the requirements of environmental laws and regulations of the Government of India, Government of Himachal Pradesh, and SPS;
(v) creates awareness among the executing agency, implementing agencies, and supporting departments of the Government of Himachal Pradesh, as well as participating agencies of Himachal Pradesh about the importance of safeguard requirements;
(vi) guides the implementing agencies to conduct meaningful consultations with relevant subproject stakeholders where required;
(vii) guides the safeguard personnel of implementing agencies in preparing and monitoring the implementation of IEEs and EMPs;

(viii) guides HPKVN on how to disclose information related to environmental issues to all stakeholders;
(ix) outlines institutional arrangements for implementing safeguard planning instruments, monitoring and reporting, and for undertaking corrective action plans; and
(x) strengthens institutional capacity for safeguard compliance among implementing agencies, affiliated institutions, Himachal Pradesh agencies, and all associated contractors in the project.

12. The application and implementation of the ESMF will therefore

(i) support the integration of environmental and social aspects into decision-making processes at all stages of the project cycle by identifying, avoiding, and/or minimizing adverse environmental and social impacts at an early stage;
(ii) promote sustainable environmental and social outcomes through improved planning, design, and implementation of activities;
(iii) minimize environmental degradation resulting from either individual subprojects or through their indirect, induced, and cumulative effects; and
(iv) ensure compliance with applicable laws and regulations of India, as well as with the requirements of SPS.

13. As noted earlier, the PWD will be responsible for overall planning and implementation of the civil works under the HPSDP. It will ensure that IEEs and EMPs are prepared for all subprojects and that the ESMF is followed during project implementation. The project management consulting (PMC) firm to be engaged under the proposed loan will have experienced environment and social safeguards experts. These experts will assist PWD in preparing and updating IEEs (including EMPs) for all subprojects. The PMC will also assist PWD and HPKVN in preparing semi-annual safeguards monitoring reports as required by ADB.

III. SAFEGUARDS OVERVIEW

A. Environmental Safeguards

14. There might be project-related negative impacts owing to the civil construction of the proposed training facilities. These include direct, cumulative, and induced impacts in the project's area of influence. Each subproject site should therefore be scrutinized in terms of the location and magnitude of its potential environmental impacts, along the lines drawn up by the ADB consultants during project design (**Appendix 14**). Environmental impacts include those related to the natural environment (air, water, and land); human health and safety; and trans-boundary and global environmental aspects. HPKVN will nominate environment and social safeguards officers to ensure that all provisions laid down in the ESMF are followed fully during the planning and implementation stages. In addition, the project management consulting firm to be engaged under the loan will also field an environment and social safeguards specialist to assist HPKVN, PWD, and the other implementing agencies.

B. Legal Requirements (Environmental)

1. Introduction

15. Since most of the civil works subprojects are small, most of the laws, acts, and notifications laid down by the Ministry of Environment, Forest, and Climate Change (MOEF), Government of India, are not applicable. Moreover, since all the facilities are meant for TVET training and educational purposes, they do not require any prior environmental clearance.[4] Hence, none of the subprojects will require prior formal environmental clearance as far as the Government of India's rules and regulations are concerned. However, some minor environmental issues may arise during the construction of the Women's Polytechnic in Rehan, district of Kangra;[5] RLCs; MCCs; and CLCs for which contractors will require no-objection certificates from the Himachal Pradesh State Pollution Control Board (SPCB). This could include permission to establish construction camps, and/or permission to cut trees (from the state forest department) at some of the sites during the construction stage. HPKVN and PWD will ensure that such no-objection certificates and permissions are secured in a timely manner before construction work is initiated.

2. India's Constitutional Provisions

16. Article 48-A of India's Constitution lays down a directive principle noting that the state shall endeavor to protect and improve the natural environment. Article 51-A of the Constitution declares it a fundamental duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures.

3. National Environment Policy, 2006

17. India's National Environmental Policy, 2006 seeks to extend the coverage and fill in gaps by building on earlier policies such as the National Forest Policy, 1988; National Conservation Strategy and Policy Statement on Environment and Development, 1992; and Policy Statement on Abatement of Pollution, 1992. The objectives of the National Environment Policy 2006 are

(i) conservation of critical environmental resources;
(ii) intra-generational equity (livelihood security for the poor);
(iii) inter-generational equity;
(iv) integration of environmental concerns in economic and social development efficiency in environmental resource use;
(v) environmental governance; and
(vi) enhancement of resources for environmental conservation.

4. Laws on Environmental Protection

18. The Government of India has enacted various policy guidelines, acts, and regulations pertaining to the environment. The Environment (Protection) Act, 1986 provides an umbrella legislation for protecting the environment. Per this Act, the responsibility of administering this legislation rests on the MOEF, Central Pollution Control Board (CPCB), and SPCB. The list of applicable Government of India regulations is provided in **Table 1**.

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[4] The MOEF, Government of India, issued an Office Memorandum (F. No. 19-2/2013-IA-III) dated 9 June 2015, exempting educational and training institutes from obtaining prior environmental clearance.

[5] The state forest department has issued a no-objection certificate for the land identified for the Rehan Women's Polytechnic. The land transfer in DOTE's name is ongoing as of 1 February 2017. The consent to establish and consent to operate will be required from SPCB for residential areas (hostels and faculty residential complex) for this Polytechnic.

Table 1: Summary of Applicable Regulations

S. No.	Act / Rules	Purpose	Applicability to HPSDP	Authority
1	Environment Protection Act, 1986	To protect and improve overall environment	Applicable	MOEF, Government of India DOE, Government of Himachal Pradesh, CPCB, SPCB
2	EIA Notification dated 14 September 2006 as amended in 2009 and 2013	To provide environmental clearance to new development activities following an EIA	Not applicable as educational institutes have been exempted from the need to secure environmental clearance	MOEF, state EIA authority
3	Notification for use of fly ash, 2003	Reuse large quantity of fly ash discharged from thermal power plant to minimize land use for disposal	Not applicable, as project is not a linear project (i.e., such as roads, railways, pipelines, etc.)	MOEF
4	Coastal Regulation Zone Notification, 1991, amended in 2011	Protection of fragile coastal belts	Not applicable as Himachal Pradesh is away from coastal regulation zone	State-level Coastal Zone Management Authority, MOEF
5	The Forest (Conservation) Act, 1927; The Forest (Conservation) Act, 1980; The Forest (Conversion) Rules, 1981; The Forest Rights Act, 2006	To check deforestation by restricting conversion of forested areas into nonforested areas	Applicable, as most of the open land in Himachal Pradesh is a declared revenue forest	MOEF, Forest Department, Government of Himachal Pradesh
6	MOEF circular (1998) on linear plantation on roadsides, canals, and railway lines modifying the applicability of provisions of the Forest (Conservation) Act to linear plantation	Protection and planting roadside strip as avenues or strip plantations as these are declared protected forest areas	Not applicable, as the project is not a linear project	MOEF
7	Wild Life Protection Act, 1972	To protect wildlife and preserve national parks and sanctuaries	Not applicable, as none of the project activities will be taken up in protected areas	Chief Conservator Wildlife, Wildlife Wing, Forest Department, Government of Himachal Pradesh
8	Air (Prevention and Control of Pollution) Act, 1981	To control air pollution	Yes, applicable as during construction there will be emissions of air pollutants	SPCB

S. No.	Act / Rules	Purpose	Applicability to HPSDP	Authority
			due to construction activities	
9	Water Prevention and Control of Pollution Act,1974	To control water pollution by controlling discharge of pollutants, as per prescribed standards	Yes, applicable because there will be generation of wastewater and other water-based pollutants during construction and operations Consent required only if residential areas and hostels are proposed in the subprojects (this will be applicable for the Rehan Women Polytechnic. DOTE will obtain the consent from SPCB).	SPCB
10	Noise Pollution (Regulation and Control Act), 1990	Standards for permitted level of noise during the day and night have been promulgated by the MOEF for various land uses	Applicable, as project infrastructure construction activities will generate noise	SPCB
11	Ancient Monuments and Archaeological Sites and Remains Act,1958	Conservation of cultural and historical remains found in India	Not applicable, as the project will not plan to construct any component or subproject within 300 meters of protected monuments	Archaeological Department, Government of India, Indian Heritage Society and Indian National Trust for Art and Culture
12	Public Liability and Insurance Act, 1991	Protection from hazardous materials and accidents	Not applicable, as subprojects construction activities will not entail the use of hazardous materials	SPCB
13	Explosives Act, 1984	Safe transportation, storage, and use of explosive materials	Not applicable, as subproject construction activities will not entail the use of any explosive material	Chief controller of explosives, Nagpur
14	Minor Mineral and Concession Rules	For opening new quarries	Not applicable, as the project is an education sector project	District collector
15	Central Motor Vehicle Act, 1988 and Central Motor Vehicle Rules,1989	To check vehicular air and noise pollution	Applicable, as during subproject construction, there will be use of vehicles and these vehicles need to operate within permissible emission levels	Motor Vehicle Department
16	National Forest Policy, 1952 National Forest Policy (Revised), 1988	To maintain ecological stability through preservation and restoration of biological diversity	Not applicable, as no project activity is planned in forest areas	Forest Department, Government of India and Government of Himachal Pradesh

S. No.	Act / Rules	Purpose	Applicability to HPSDP	Authority
17	The Mining Act	The act prescribes safe and sound mining activities	Not applicable, as the project is not related to mining activities	Department of Mining, Government of Himachal Pradesh
State-Level Regulations and Acts				
18	The Himachal Pradesh Ground Water (Regulation and control of Development and Management) Act, 2005	This act pertains to control of groundwater extraction	This will be applicable if groundwater is used for construction and operation	State Ground Water Board
19	The Himachal Pradesh Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1976	This act pertains to protection and management of cultural and historical remains	Not applicable as no project-related activity will be planned within 300 meters of protected and conserved areas and monuments	Archaeological Department, Government of Himachal Pradesh
20	The Himachal Pradesh Participatory Forest Management Regulation, 2001	There is forest area in Himachal interspersed with open areas	Applicable. A no-objection certificate will be obtained from the Forest Department wherever required	Forest Department, Government of Himachal Pradesh
21	The Himachal Pradesh Non-Biodegradable Garbage (Control) Act, 1995	To control spread of non-biodegradable waste in the state	Applicable during construction and operation	Local municipal authorities
22	The Himachal Pradesh Town and Country Planning Act, 1977	Development of urban and rural areas in a controlled and regulated manner	Applicable	Town and Country Planning Department

CPCB = Central Pollution Control Board; DOE = Department of Environment; DOTE = Department of Technical Education, Vocational & Industrial Training; EIA = environmental impact assessment; HPSDP = Himachal Pradesh Skills Development Project; MOEF = Ministry of Environment, Forests and Climate Change; SPCB = State Pollution Control Board.
Source: Asian Development Bank.

19. A description of these acts and rules is given in **Appendix 2.**

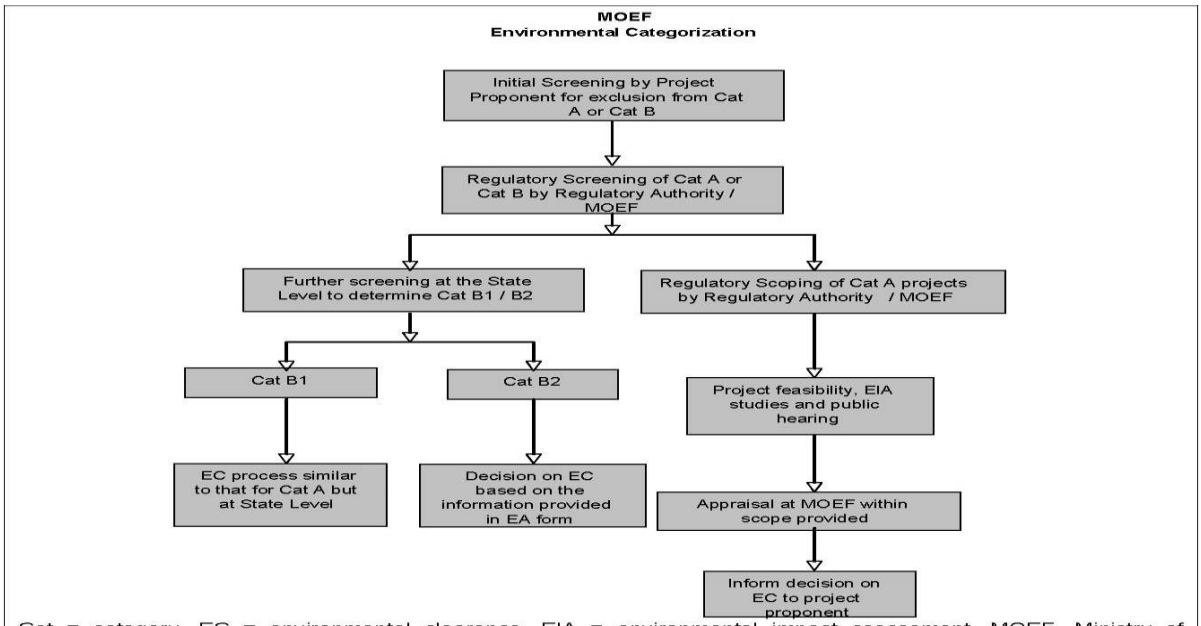
IV. ENVIRONMENTAL ASSESSMENT PROCESS IN INDIA

20. In MOEF's EIA Notification, 2006, a project is classified as either A, B1, or B2. This classification factors in project type, size, and sensitivity of location. The category A projects are those of larger scale in terms of investment, environmental impacts, and interstate and trans-boundary issues. Category B1 are of smaller scale, with projects having local environmental impacts, while category B2 projects have almost no environmental impacts. Further, only those activities listed in the schedule of the EIA Notification require prior environmental clearances. As far as HPSDP is concerned, none of the proposed project activities would come under the provisions of EIA Notification, 2006 as per MOEF's Office Memorandum dated 9 June 2015 (F. No. 19-2/2013-IA-III). All projects falling under category-8 (a) of the schedule have been declared as category B1 or B2 projects. Category A projects are appraised by the environmental appraisal committee (EAC)

and recommended to MOEF for clearance. All category B projects comprising categories B1 and B2 are appraised by state EACs and recommended for clearance to state-level EIA authorities. State EIA authorities and EACs have been constituted by the Department of Environment in each state which, in turn, works under the guidance and instructions of MOEF. Projects falling under categories A and B1 require an EIA. These are processed for environmental clearance at MOEF and state levels, respectively. Category B2 does not require an EIA. However, information must be submitted in a prescribed format (Form 1 and 1A) to the state's Environment Department for review. For MOEF, projects under category B1 may be recategorized as A if certain conditions are violated. The clearance process in India is shown in **Figure 1**.

21. The process of obtaining environmental clearance entails that the concerned parties first submit an application by filling out Form 1 for category A and category B1 projects, along with the proposed TOR for the EIA; and Form 1 and Form 1A for category B2 projects along with a prefeasibility study of the project. After scrutinizing the prefeasibility study, the EAC approves the TOR for the EIA for category A and B1 projects and, if satisfied, clears category B2 projects. After obtaining the TOR from the EAC, the EIA is completed by the project authorities. The draft EIA report is submitted to the SPCB for public hearing. It publishes notifications for public hearing in newspapers. The EIA report is disclosed on the website of SPCB and other prominent offices of the district administration. The public hearing is conducted by the SPCB with the assistance of the district administration at a notified venue after 1 month. All comments and suggestions from the public are noted for incorporation in the project design and EMP. After the public hearing, the project authorities incorporate all comments and suggestions of the public in the draft EIA report, and submit the final EIA report to the EAC for clearance. If the EAC is convinced, then it recommends the project for clearance to MOEF for category A projects, and to the state-level EIA authorities for category B1 projects.

Figure 1: Environmental Clearance Process in India



Source: Government of India, Ministry of Environment, Forest, and Climate Change.

V. ASIAN DEVELOPMENT BANK'S ENVIRONMENTAL SAFEGUARD POLICY PRINCIPLES

22. Since the proposed HPSDP is being funded by the ADB, it has to comply with ADB's SPS, in addition to India's own environmental laws and regulations. The environmental safeguards policy principles embodied in SPS aim to avoid adverse impacts on the environment and on affected people or communities; minimize, mitigate, and/or compensate for adverse project impacts, if unavoidable; and help borrowers strengthen their safeguard systems and develop their capacity in managing environmental and social risks. The following principles and processes are laid down in the SPS:

(i) Use a screening process for each project and/or subproject, as early as possible, to determine its potential impacts and appropriate environmental assessment.
(ii) Conduct environmental assessment for each proposed project and/or subproject to identify potential direct, indirect, cumulative, and induced impacts and risks.
(iii) Examine alternatives to the project's location, design, technology, and components, and their potential environmental impacts.
(iv) Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts. Prepare an EMP to address these.
(v) Conduct meaningful consultation early during project preparation. Continue such consultations with relevant stakeholders during implementation in an atmosphere free of intimidation or coercion, gender-inclusive and responsive, and tailored to the needs of disadvantaged or vulnerable groups. Establish a grievance redress mechanism to address complaints and resolve conflicts.
(vi) Disclose the draft environmental assessment including the EMP in a timely, accessible manner before project appraisal, in a form understandable to affected persons and other stakeholders. Disclose the final environmental assessment, EMP, and their updates to all stakeholders.
(vii) Implement the EMP and monitor its effectiveness.
(viii) Do not implement project activities in critical habitats unless

a. there are no measurable adverse impacts on the critical habitat that could impair its ability to function;
b. there is no reduction in the population of any recognized endangered or critically endangered species; and
c. any lesser impacts are mitigated. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area.

(ix) In natural habitat areas, there must be no significant conversion or degradation, unless

a. alternatives are not available;
b. the overall benefits from the project substantially outweigh the environmental costs; and
c. any conversion or degradation is appropriately mitigated. Use a precautionary approach to the use, development, and management of renewable natural resources.

(x) Apply pollution prevention and control technologies and practices consistent with international good practices.

(xi) Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease.

(xii) Conserve physical, cultural resources, and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment.

23. HPSDP is likely to trigger the following environment safeguard policy principles: i, ii, iii, iv, v, vi, vii, ix and x.

VI. COMPATIBILITY BETWEEN INDIA'S NATIONAL ENVIRONMENTAL POLICY AND REGULATORY FRAMEWORK AND ADB'S SAFEGUARDS POLICY STATEMENT

24. The level of compatibility between the SPS and India's environmental policy and regulatory framework is discussed below. Further details are in **Appendix 3**.

(i) India's National Environmental Policy, 2006 is comprehensive and addresses all relevant aspects of environment protection, environmental sustainability, and enforcement. The policy is broadly equivalent to the principles enshrined in ADB's SPS. The Environmental (Protection) Act, 1986 with its rules and notifications have sufficiently transformed the National Environmental Policy into a satisfactory environmental regulatory framework. Other parallel acts, such as the Forest (Conservation) Act, 1980; The Water (Prevention and Control of Pollution) Act, 1974; and The Air (Prevention and Control of Pollution) Act, 1986 also ensure effective implementation of policy principles for minimization of pollution.

(ii) The Government of India's environmental assessment and clearance process is, in principle, consistent with ADB's environmental assessment processes and public disclosure requirements. EIAs for development projects under category A and B1 projects are similar to ADB's screening, categorization, assessment, and clearance and approval systems.

(iii) Owing to the absence of significant environmental impacts under the proposed HPSDP, there will be no need to obtain environmental clearances. However, safeguards documents (e.g., IEE) will be prepared to meet the requirements of the SPS. This will help to mitigate potential environmental risks that might arise during construction and operations. Although local environmental assessment systems applicable to the subprojects are similar to the environmental assessment procedures outlined in SPS, these subprojects would need to follow the ESMF's environmental assessment guidelines for site selection, due diligence, design, consultation, disclosure, and monitoring and evaluation. This will be done to ensure that all subprojects comply with both national and ADB environmental safeguard requirements.

(iv) The implementation of EMP for a subproject will be monitored by the **Safeguards Cell of HPKVN**. Since none of the subprojects are expected to require environmental clearance from the state's EIA authority, they will not be monitored by SPCB or by the state's Directorate of Environment. The only permission to be obtained is for felling of trees in a few potential subproject sites for RLCs, MCCs, CLCs and the Rehan Women Polytechnic. Such permission will be obtained by the project authorities at the preconstruction phase. ADB will conduct a prior review of a sample of EMPs to ensure compliance with the ESMF. Thereafter, it will undertake

postreviews to ensure that the implementing agencies continue to enforce EMPs effectively.

(v) The subprojects under HPSDP will not attract provisions of the EIA Notification, 2006 (with latest amendments), which calls for public hearing as part of the environmental clearance process. However, one advantage of public hearings is that it provides an opportunity for all stakeholders to learn about the project's design, and provide their comments and suggestions. This drawback shall be overcome by following the public consultation and disclosure procedures of ESMF, which encourages consultations with all stakeholders, as required. Such consultations (informal and/or formal) are to be conducted periodically starting from project planning through implementation and monitoring. The views, comments, and suggestions of all stakeholders will be recorded and considered in the project implementation.

(vi) The consideration of reasonable alternatives is an important feature in the EIA process. In the current project, while finalizing the sites for the construction of the different training facilities, ADB's rapid environmental assessment and social safeguards checklists are being used for systematically examining the potential effects of the subprojects. In case there is potential for significant negative impact in any subproject site, then it will be dropped and replaced by another site with a net positive development impact.

(vii) As explained above, subprojects under HPSDP will not be required to conduct an EIA or prepare an EMP according to India's environmental regulations. This implies that some of the potential environmental impacts of the civil works, albeit minor, may remain unattended. However, the SPS takes a much wider view of environmental impacts. It considers the area of influence of the project as the area of study, thereby making it mandatory for the subprojects to screen, categorize, and prepare IEEs and EMPs. With guidance of the ESMF, all the subprojects will consider the area of influence encompassing (i) primary subproject sites; (ii) related facilities that subprojects develop and/or control, such as access roads, borrow pits, and disposal areas; and (iii) "associated" facilities that are not funded as part of the subproject, but whose viability and existence depend exclusively on the subproject and whose goods and services are essential for the successful operation of the subproject.

(viii) India's national and Himachal Pradesh's local environmental regulatory frameworks do not prescribe a due diligence or environmental audit to check whether existing facilities at subproject site(s) could cause environmental risks and impacts. However, the SPS requires an environmental due diligence or audit even in such circumstances. If the subproject does not foresee any major expansion, except refurbishment of existing buildings and facilities, then due diligence or environmental audit constitutes the environmental assessment for the subproject. The current project due diligence is being conducted by visiting the sites and screening these for environmental considerations, and completing the rapid environmental assessment checklists.

VII. ENVIRONMENTAL ASSESSMENT AND APPROVAL PROCESS FOR SUBPROJECTS

A. Screening and Categorization of Potential Environmental Impacts

25. During the identification of sites for the RLCs, MCCs, CLCs, COE, and women's polytechnic, screening will be done following the procedures outlined below. Depending on the nature of environmental impacts, each of the subprojects will be categorized in one of three categories (A, B, or C). Checklists notified by ADB and categorization forms (**Appendix 1**) will be used for screening the sites.

(i) **Category A.** A subproject that is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented, and may affect an area larger than the sites or facilities subject to physical works, are categorized as A. **As discussed above, no category A subproject will be considered under HPSDP.**

(ii) **Category B.** A subproject that is likely to have less adverse, site-specific, and mostly reversible environmental impact than a category A subproject, will be classified as B. **An IEE and an EMP will be required for all category B projects as mandated in the SPS.**

(iii) **Category C.** A subproject that is likely to have minimal or no adverse environmental impact will be categorized as C. **An IEE or EMP will not be required for such projects.**

B. Consultation and Participation

26. The implementing agencies will conduct meaningful consultations with all relevant stakeholders who are directly or indirectly affected. For this purpose, the **Safeguards Cell of HPKVN** will prepare a consultation plan with all stakeholders. The proceedings and outcomes of these consultations will be recorded. For the IEEs, the Safeguards Cell will, with the support of participants, summarize how the consultations were conducted, key topics discussed, and the decisions arrived at. These decisions will be incorporated into the IEEs and EMPs. Photographic records and signatures of participants will be recorded in the IEE reports of subprojects.

27. The **Safeguards Cell of HPKVN** will draft IEEs and EMPs after discussions with all stakeholders. Through this cell, the implementing agencies will inform stakeholders and communities about the subprojects, obtain their views, and hear their comments and complaints. Through periodic consultations with the local community, the Safeguards Cell will engage them in subproject planning, implementation, and monitoring. Consultations will be conducted in an atmosphere that is conducive to the development of the subprojects and beneficial to the community and local population. The implementing agency will ensure that the consultations are free of coercion and intimidation, are gender-inclusive, and tailored to the needs of disadvantaged and vulnerable groups. All relevant stakeholders will be informed in advance about the timing and format of the consultations. This will be done through advertisements in local newspapers and / or written letters to the district magistrates, representatives of relevant departments, heads of the local village councils, representatives of urban local bodies, and NGOs in the vicinity of the subproject sites. During the consultations, information about the subproject, its rationale, scope, benefits, and costs, including potential environmental impacts and mitigations, will be presented by the safeguards experts of the PMU with the support of the safeguards consultants fielded by the PMC firm.

Comments and suggestions of all stakeholders will be noted and their queries will be clarified. The signatures of all participants will be collected. Photographs of the consultations will be taken for the record. The comments and suggestions will be recorded and how these have been addressed will be detailed in the IEE report. During project implementation, safeguards experts will have informal discussions with the locals residing in the vicinity of the subproject sites. They will note the grievances, if any, due to construction. The purpose of consultations is to give factual information about the project to the stakeholders and to clarify misconceptions if any. This process helps in enhancing local ownership and ensures smooth project implementation in the long run.

C. Guidelines for Preparing Initial Environmental Examination Reports

28. The following are the main steps in the formulation of an IEE for a subproject with potential environmental impacts. Site-specific issues will ascertain the scale, sensitivity, and magnitude of the environmental impacts. Any activity listed in the list of prohibited investment activities in **Appendix 4** will be excluded since these will not qualify for ADB support. Similarly, any subproject which is potentially category A will also be excluded. An EMP will be part of the IEE report for each subproject. It will include site specific mitigation measures for the identified impacts. An IEE will provide the following:

(i) An executive summary describing the subproject features, key environmental issues and impacts, environmental management plan budget, and significant findings and recommendations.

(ii) A chapter on policy, legal and administrative framework describing applicable environmental policies, laws, regulations, and ADB's safeguard policies that are likely to be triggered by the subproject. The IEE could cross-refer to the ESMF repeating information on the relevant environmental policies and regulatory framework.

(iii) The implementing agency should consider alternatives to the proposed site, civil works design, and technology in terms of their potential environmental and social impacts, the feasibility of mitigating these impacts, and the capital and recurrent costs. This will ensure that the project design, technology, and / or method of construction ultimately selected will have minimum environmental impact.

(iv) Description of the subproject, e.g., the major components such as refurbishment of existing buildings or the construction of new buildings and facilities.

(v) Relevant environmental and social baseline data will be provided. This will draw on desk reviews, discussions with project personnel, field visits and interviews with people in subproject areas. Additional environmental and social baseline data may be collected from secondary sources. While recording the baseline information, first the direct area of influence (subproject boundaries) and indirect area of influence (normally an area of 10 km radius) will be identified. These zones will be marked on an authenticated map such as the Survey of India topographical sheet or district planning map. Since the subprojects are of small nature and mainly involve localized and reversible impacts, recent baseline data of physical environment components (ambient air quality, water quality, noise levels and soil quality) will be collected from published reports prepared by the State Pollution Control Board, Ministry of Environment and Forests, and the Central Pollution Control Board as relevant. For biological environment, flora data (trees, shrubs grasses and climbers) will be collected during visits. In case any trees have to be cut, a detailed girth wise and species wise list of trees will be prepared. The list of prevailing fauna will be prepared in consultation with locals and from published information. Any endangered species of flora and fauna will also be identified. In the socio-economic environment data on

population (men, women, Schedule Tribe, Schedule caste, and community), education and health facilities, industries, transport and communication facilities, archaeological resources in indirect area of influence will be collected.

(vi) Based on baseline data collected and findings from field visits, the environmental specialist in the Safeguards Cell will identify potential impacts of the subprojects on the physical, biological, socioeconomic, and physical cultural resources within its area of influence. These will be summarized and presented in the IEE. The impacts of the subprojects at the preconstruction, construction, and operations stage will be assessed.

(vii) The potential environmental impacts and risks will be reviewed, keeping in mind all applicable laws and regulations and ADB's environmental safeguard policy. It will be helpful to prepare a matrix as part of the IEE to indicate which laws and regulations, and ADB's environmental safeguard policies are triggered by the potential environmental impacts of the subproject.

(viii) A subproject's environmental impacts and risks will be analyzed in the context of the subproject's area of influence. This includes primary project sites and related facilities, associated facilities, areas, and communities that might be affected by the cumulative impacts of the subprojects. These impacts and risks will also be analyzed by taking into consideration physical area and communities that might be impacted by unplanned but predictable development of the subprojects. These impacts and risks will be analyzed throughout the project cycle. The site specific impacts will be assessed in terms of air emissions from the use of diesel generator sets, waste water generation and disposal, solid waste generation and disposal, and impacts due to traffic movement on account of the construction and operations of the training facility.

(ix) When a subproject involves the use and/or reuse of existing facilities and infrastructure, the environmental specialist will perform an environmental audit or due diligence exercise to determine the existence of any environmental risks or impacts. If the subproject does not foresee any new major expansion, but only refurbishment of existing buildings and facilities, the audit or the due diligence report will constitute the environmental assessment of the subproject.

(x) The IEE will be used to elaborate on the consultation process undertaken. It will disclose relevant subproject information to all stakeholders concerned. It will summarize comments and concerns received from stakeholders, how these are being addressed, and how special attention is being paid to addressing the needs and concerns of vulnerable groups, including women and the poor. It will also outline how further consultations with stakeholders will be conducted during subproject implementation.

(xi) The IEE will outline the GRM for each subproject with potential environmental impacts. The mechanism or framework will detail ex officio members of the GRM, the guidelines for hearing complaints, the process of GRM, timeframe for hearing public grievances, decision making, and budget.

(xii) A detailed format for EMP is included in **Appendix 6**. The EMP will specify mitigation measure for all the identified environmental impacts. Most of the mitigation measures such as dust suppression and reinforcement of slopes will be borne by the contractors as part of the engineering cost. However, the cost of some activities such as monitoring of air, water, and noise levels during each season, compensatory planting of trees and shrubs and their maintenance, will be paid to the contractors under the bills of quantity (BoQ) items identified in the EMP budget for the construction phase. Similar, a BoQ list will be prepared for the operations phase. In order to implement all mitigation measures, the EMP will

be included in the civil works contract documents. The environmental safeguard expert of the PMU and PMC will ensure that EMP is included in the civil works contract documents

(xiii) A short summary and conclusion will be drawn from the assessment with key recommendations. The outline of an IEE report is given in **Appendix 7**.

D. Guidelines for Preparing Environmental Management Plans

29. Having identified potentially adverse environmental impacts, the next step is the preparation of appropriate measures to eliminate, reduce, or offset these. This is done through the formulation of an EMP, which is an integral part of any IEE. An EMP provides the link between predicted impacts and mitigation measures put in place to address them. The SPS, 2009 mandates that a detailed EMP is essential for category A projects. **Since HPSDP is a category B project, a simplified EMP would suffice**. While there are no standard formats for EMPs, its format should fit into the subproject's requirements. EMPs will be prepared considering the comments and recommendations from all subproject stakeholders. In preparing an EMP, the following key areas will be addressed by the executing and/or implementing agency **(Appendix 6).**

30. An EMP clearly indicates different phases of a subproject's physical activities. Each phase includes proposed mitigation measures against adverse environmental impacts and risks, institutional arrangements to deliver them, capacity development and training measures, implementation schedule, cost estimates, environmental monitoring indicators, and reporting requirements. The EMP will define expected and measurable outcomes and will include performance indicators or targets that can be tracked over a period of time. Feasible and cost-effective measures to minimize environmental risks will be specified for each of the impacts identified during project preparation. The EMP will also provide details on the conditions under which these mitigation measures will be implemented.

31. The EMP will include an environmental performance monitoring system. It will ensure that the proposed mitigation measures will have the intended results, and will comply with national environmental standards and SPS. The monitoring program will have the following components:

(i) monitoring indicators for evaluating the performance of each mitigation measure;
(ii) monitoring mechanisms and methodologies;
(iii) monitoring frequency;
(iv) monitoring locations;
(v) safeguard compliance reporting; and
(vi) budget.

32. The EMPs will also provide the following types of information:

(i) **Guidelines.** These are the types of information required for monitoring the effectiveness of mitigation measures, and methods on how to obtain this information and provide feedback.

(ii) **Institutional arrangements.** The EMP will clearly state the institutions responsible for implementing mitigation measures and monitoring their performance. Often, more than one agency will conduct the monitoring of subproject activities. To this end, a mechanism for institutional coordination will be established. Each agency will be notified of its specific terms of reference.

(iii) **Implementation schedules.** The timing, frequency, and duration in following various mitigation measures will be linked to the overall implementation schedule of the subproject.

(iv) **Reporting procedures.** Feedback mechanisms to inform relevant agencies and institutions on the progress and effectiveness of mitigation measures will be specified in the EMP.

(v) **Cost estimates and sources of fund.** Implementation of mitigation measures outlined in the EMP will involve an initial investment cost as well as recurrent costs. The EMP should include cost estimates for each mitigating measure and identify sources of funding.

(vi) **Other specifications in EMP.** To avoid illegal extraction of resources required for construction, the EMPs of subprojects will include clauses to ensure that sand, clay, stone dust, and timber are obtained from authorized locations and sources that are licensed by relevant Government of India and/or Himachal Pradesh authorities. All building construction and refurbishment will adhere to current building and other applicable Codes of Practice issued by the Bureau of Indian Standards for the country and the state. Reference to these standards will be included in the contract documents. Necessary codes shall be followed for building design. An indicative list is given in **Table 2**.

Table 2: National Building Code of India, 2005

IS: 6313	Part I – Code of practice for anti-termite measures in buildings: IS: 6313 (Part I), 1971 Part II – Constructional measures: IS: 6313 (Part II), 1971 Part III – Pre-construction chemical treatment measures: IS: 6313 (Part III), 1971 Treatment for existing buildings
IS: 3792-1978	Guide for heat insulation of nonindustrial buildings (first revision)
IS: 1634-1973	Code of practice for design and construction of wood stairs in houses (first version)
IS: 4838	Part I – Anthropometrics dimensions for school children: IS: 4838 (Part I), 1969 Part II – Age group 5–11 years: IS: 4838 (Part II), 1969 Age group 12–16 years
IS: 4963-1968	Recommendations for buildings and facilities for the physically handicapped

Source: Asian Development Bank.

33. All necessary permissions and no-objection certificates, including those required from the Fire Department, local municipal authorities, and *panchayats* (village councils), will be obtained before the start of operations. In addition, the contractors will address the following issues under the EMP:

(i) electromagnetic radiation: issues such as location of telecommunication towers, and consequences of permitting such towers to be built atop college buildings or other buildings near high-tension cables etc.;
(ii) handling, transportation, and use of asbestos (**Appendix 8**);
(iii) noise pollution during construction activities;
(iv) preservation of culturally significant buildings;
(v) ecological issues at construction sites;
(vi) transport and access to construction sites;
(vii) appearance of buildings and sites (aesthetics);
(viii) flood water protection provisions;
(ix) designing appropriate landscaping;

(x) energy conservation and efficiency;
(xi) waste disposal, salvage, reuse, and recycling of materials;
(xii) avoidance of hazardous materials;
(xiii) safety, security, and fire; and
(xiv) energy-efficient lighting options.

VIII. ANTICIPATED ENVIRONMENTAL IMPACTS IN THE PROPOSED PROJECT

34. The construction of the proposed training facilities could cause the following minor environmental impacts:

(i) **Site clearance and preparation.** Sites for the refurbishment of existing buildings do not pose any environmental risks as these are already in use. In the case of new sites, there can be risks such as blockage of drains and waterways during site clearance. Improperly disposed vegetation could also spread invasive species, thus causing environmental degradation. Felling of trees also has an environmental impact. Pools of stagnant water could cause health risks by creating vector populations. Site clearance could also lead to or aggravate soil erosion, especially during the rainy season.

(ii) **Soil erosion and water contamination.** Gravel and soil brought for construction purposes can be washed off to nearby streams, agriculture fields, orchards, rivers, or low-lying areas if it is not properly stored or exposed to natural elements. On-site storm water congestion can impede ongoing activities and construction work. Improper placement of training laboratories and sanitation facilities could cause groundwater and drinking water contamination. If not properly treated, wastewater, which is generated during construction and from labor camps, will also contaminate drinking water sources.

(iii) **Noise generation.** Construction activities will generate noise due to loading and transporting materials, and construction equipment operation. This may also cause disturbance to the residents living close to construction sites. In case of construction within the premises of ITIs or colleges, there may be disturbance to the trainees and students.

(iv) **Dust generation.** Demolition of buildings and transportation and storage of new building materials generate dust. Loading and transportation of debris will also increase dust levels. Dust pollution poses a health hazard to students, workers, and residents in the vicinity.

(v) **Transport.** Transportation of building materials to and from the site will create noise, dust, and disturbances, and, if not adequately managed, could cause injury to children and damage neighboring properties.

(vi) **Exposure of construction workers to occupational hazards.** Construction workers will be exposed to occupational hazards if proper safety procedures are not followed. Some training activities can also cause occupational hazards, especially those related to the use of sharp objects, hazardous liquids and compounds, and noise generation equipment.

(vii) **Lack of drainage, soil erosion, sedimentation, and health hazards.** If improperly handled, gravel, sand, and soil brought to construction sites might be washed off to nearby streams, agricultural fields, and low-lying areas. This can cause sedimentation, thus blocking natural water flows and degrading habitats.

(viii) **Contamination of groundwater and surface water.** If not properly channeled into disposal pits or other suitable areas, wastewater can contaminate drinking water sources through runoff. This risk is particularly high when wastewater comes from

college laboratories and toilets.

(ix) **Waste generation.** Any construction will generate construction debris, which unless disposed of appropriately and in a timely manner, will pollute adjoining areas, including potentially sensitive sites and residential areas. The lack of proper construction waste disposal could also block natural drainage systems and create breeding grounds for mosquitoes and waterborne diseases. The functioning of laboratories can pose a risk, as they would increase quantities of hazardous and organic waste. However, the estimated quantities will be very low since any hazardous material will be used only for training purposes. The lack of appropriate mechanisms to dispose hazardous and toxic waste could lead to the contamination of soil and water resources.

(x) **Transport.** Heavy vehicle movement could cause accidents, dust, and noise pollution. One of the main sources of accidents and pollution could be open trucks with sand, gravel, and cement.

(xi) **Resource extraction.** The refurbishment and construction of new facilities and buildings will generate demand for materials such as sand, clay, and timber, thus creating a burden on natural resources in the subproject area. Sand mining near rivers and streams and extraction of gravel from burrow pits and quarries could create adverse environmental impacts.

(xii) **Damage to aesthetics of site and/or area.** Refurbishment and construction of new buildings and facilities might have an impact on aesthetics and scenic characteristics of colleges and their environs. However, this will be temporary and limited to the construction phase. At new sites, the risk of damage might be high, especially if new structures are not consistent with the existing college architectural characteristics.

(xiii) **Poor sanitary conditions.** Inadequate and nonfunctional washing and toilet facilities expose students to health risks. Shortage of clean drinking water will result in dehydration. At new construction sites, water-stressed conditions will be accentuated, unless the sites are planned in such a way that clean water shortages do not occur.

(xiv) **Lack of adherence to set standards.** A few of the old buildings that will be refurbished may not meet occupational safety and health standards. The necessary occupational safety and health standards will have to be adhered to during operations.

(xv) **Lack of maintenance in developed infrastructure.** The lack of adequate funds to maintain buildings and facilities could lead to their rapid deterioration.

(xvi) **Asbestos handling and usage.** Handling of asbestos during the demolition phase, and use, handling, and transport during construction may result to adverse impacts on the health of workers. For this, necessary protective measures need to be followed (**Appendix 8**).

35. Short-term construction-related impacts and safeguard risks of proposed subprojects, as outlined above, can be prevented or mitigated by adopting standard operational procedures and good construction management practices. This will require the availability of sufficient funds and their proper management.

IX. SOCIAL SAFEGUARDS

A. Exclusion of Subprojects with Potential Involuntary Resettlement Impacts

36. To determine whether a subproject has potential involuntary resettlement impacts, HPKVN and other implementing agencies will screen the subproject area to find out if there was, is, or will be

involuntary resettlement impacts. The screening will exclude any activity that might trigger resettlement impacts. The concerned implementing agency will conduct due diligence to determine whether a subproject will trigger any resettlement impacts.

37. A proposed subproject is assigned one of the three categories, depending on the significance of its potential involuntary resettlement impacts:

(i) **Category A**. A proposed subproject is classified as category A if it is likely to have significant involuntary resettlement impacts. The involuntary resettlement impacts are considered significant, i.e., if 200 or more persons will experience major impacts, which are defined as one, being physically displaced from housing; or two, losing 10% or more of their productive and income-generating assets. The project would need to prepare a resettlement plan for all the subprojects. **As discussed above, any subproject that is category A in terms of involuntary resettlement will be excluded from HPSDP.**

(ii) **Category B**. A proposed subproject is classified as category B if it includes involuntary resettlement impacts that are not deemed significant or major but nonetheless may need to be addressed through a resettlement plan **Subprojects that are category B in terms of involuntary resettlement will also be excluded from HPSDP.**

(iii) **Category C**. A proposed subproject is classified as category C if it is unlikely to have any involuntary resettlement impact. Once the status of the subproject is established, no further action will be required. **The prescreening process laid down in the ESMF will be ensure that only subprojects that are category C in terms of involuntary resettlement will be considered under HPSDP.**

B. Involuntary Resettlement: Due Diligence

38. The involuntary resettlement due diligence will focus on the following:

(i) **Ownership of land that will be used for the subproject.** The subproject will fall under category A or B if any of the subprojects acquire private, commercial, common, or traditional land. The subproject will not be considered for funding under the project if it falls under category A or B.

(ii) **Types of land tenure.** Titled; leased (short-, medium-, and long-term); tenanted; customary or communal; nontitled (informal settler, squatter, encroacher); and occupied land with government permission for temporary use. If any of the above types of land tenure is found on existing or new land acquired by the subproject, then the subproject will be deemed to have involuntary resettlement impacts and will fall under category A or B. Thus, the subproject will not be considered for funding under the project.

(iii) **Encumbrances attached to land.** The implementing agency should ascertain whether any involuntary resettlement will occur, in case any encumbrance is found. If yes, the subproject will be excluded from ADB financing.

(iv) **Transfer of government land.** If new land is required for the subproject, the date the transfer of the land happened, or will happen, needs to be noted in the due

diligence report.

(v) **Land obtained in anticipation of subprojects.** In case any transfer of land will take place in anticipation of the subproject, the implementing agency should ascertain whether the land falls into any one of the land tenure classifications outlined in (i), (ii), and (iii). If the tenure is affected, then the subproject will be excluded from ADB financing.

(vi) **Temporary impacts.** Should refurbishment or construction of the subproject buildings have any temporary impact on the livelihood and source of income of households, and on access to legally designated parks, protected areas, and common land, then such land should be removed from the ADB financial assistance.

(vii) **Legacy Issues.** During the due diligence of subproject site ownership, legacy issues will also be examined. Any site having significant legacy issues will be excluded for ADB financial assistance.

X. EXCLUSION OF SUBPROJECTS WITH IMPACTS ON INDIGENOUS PEOPLE

39. The Kinnaur and Lahaul-Spiti districts in their entirety, and Pangi and Bharmour (now *tehsil* Bharmour and sub-*tehsil* Holi) subdivisions of the Chamba district constitute the scheduled tribe areas of Himachal Pradesh, since the proportion of scheduled tribes is 50% or more. These districts are in the extreme north and northeast, forming a contiguous belt in the far hinterland behind high mountain passes. They are very remote with an average altitude of 3,281 meters above sea level. During winter months, they often get cut off from the rest of the state. Owing to difficult living conditions, these districts are very sparsely populated. The per unit cost of infrastructure activity in such areas would be prohibitive.

40. The district of Kinnaur is located between 31^0-05'-55" and 32^0-05'-20" north latitude, and between 77^0-45'-00" and 79^0-00'-50" east longitude. Lahaul-Spiti is situated between north latitude 31^0-41'-39" and 32^0-59'-57" and east longitude 76^0-40'-29" and 78^0-41'-39". The Pangi subdivision of Chamba district falls between north latitude 32^0-33' and 33^0-19', and between east longitude 76^0-15' and 77^0-21'. The Bharmour subdivision of this district is situated approximately between the north latitude 32^0-11' and 32^0-41', and between east longitude 76^0-22' and 76^0-53'. Snow glaciers, high altitudes and highly rugged terrain, crisscrossed by fast flowing rivers and their tributaries, are the peculiar features of the tribal areas.

41. No project-related building and infrastructure development will be in the vicinity of the scheduled tribe settlements, nor on land they claim as their traditional or ancestral land. Subproject activities will not affect their identity, dignity, human rights, ancestral lands, cultural and belief systems, sacred places, indigenous knowledge, and livelihoods in an adverse manner. **The HPSDP will not therefore trigger indigenous peoples' safeguards policy principles listed in the SPS**.

42. The implementing agencies will use the following screening and categorization system to ascertain whether scheduled tribes are present in the physical area of the subproject and on the acquired land these tribes claim as their ancestral or traditional land:

(i) **Category A**. A proposed subproject is classified as category A if it is likely to have significant impacts on scheduled tribes. Significance of impacts is determined by assessing the magnitude of the subproject's impact on their (a) customary rights of use and access to land and natural resources; (b) socioeconomic conditions; (c)

level of cultural and communal integrity; (d) health, education, livelihood, and social security status; (e) level of their vulnerability; and (f) impacts on the recognition of their indigenous knowledge. In this case, an indigenous peoples' plan containing strategies and mitigation measures would need to be developed. **All subprojects that are category A in terms of impact on indigenous people will be excluded from HPSDP.**

(ii) **Category B**. A subproject is classified as B if it is likely to have limited impacts on the criteria listed above. In such a case, an indigenous peoples' plan would need to be developed to promote inclusive strategies and mitigate any risks to the livelihoods, and social and cultural standing of indigenous peoples **All subprojects that are category B in terms of impact on indigenous people, will also be excluded from HPSDP.**

(iii) **Category C.** A proposed subproject is classified as category C if it is not expected to have impacts on scheduled tribes. Only such projects will be eligible for inclusion under the project. The prescreening process laid down in the ESMF will ensure that only subprojects that are category C in terms of impact on indigenous people are considered under HPSDP.

XI. INSTITUTIONAL CAPACITY TO ADDRESS ENVIRONMENTAL SAFEGUARD IMPACTS AND RISKS AT THE STATE LEVEL

A. Executing and Implementing Agencies

43. The Department of Planning of the Government of Himachal Pradesh will be the executing agency for the project responsible for overall implementation. The implementing agencies are HPKVN, DOTE, PWD, and DOHE. The PWD will be responsible for overall planning and implementation of the civil works under the HPSDP. PWD will ensure that IEEs and EMPs are prepared for all subprojects, and that the ESMF is followed during project implementation. The project management consulting (PMC) firm to be engaged under the proposed loan will have experienced environment and social safeguards specialists. The PMC will assist PWD in preparing IEEs and EMPs for all sub-projects. Other support departments including DOUD, DORD, and the DOLE, which will run the training, livelihood development, and counselling programs at CLCs, RLCs, and MCCs, respectively, will also follow the ESMF to exclude subprojects that category A for environment, and categories A and B for involuntary resettlement and indigenous peoples. The institutional arrangement is shown schematically on the following page.

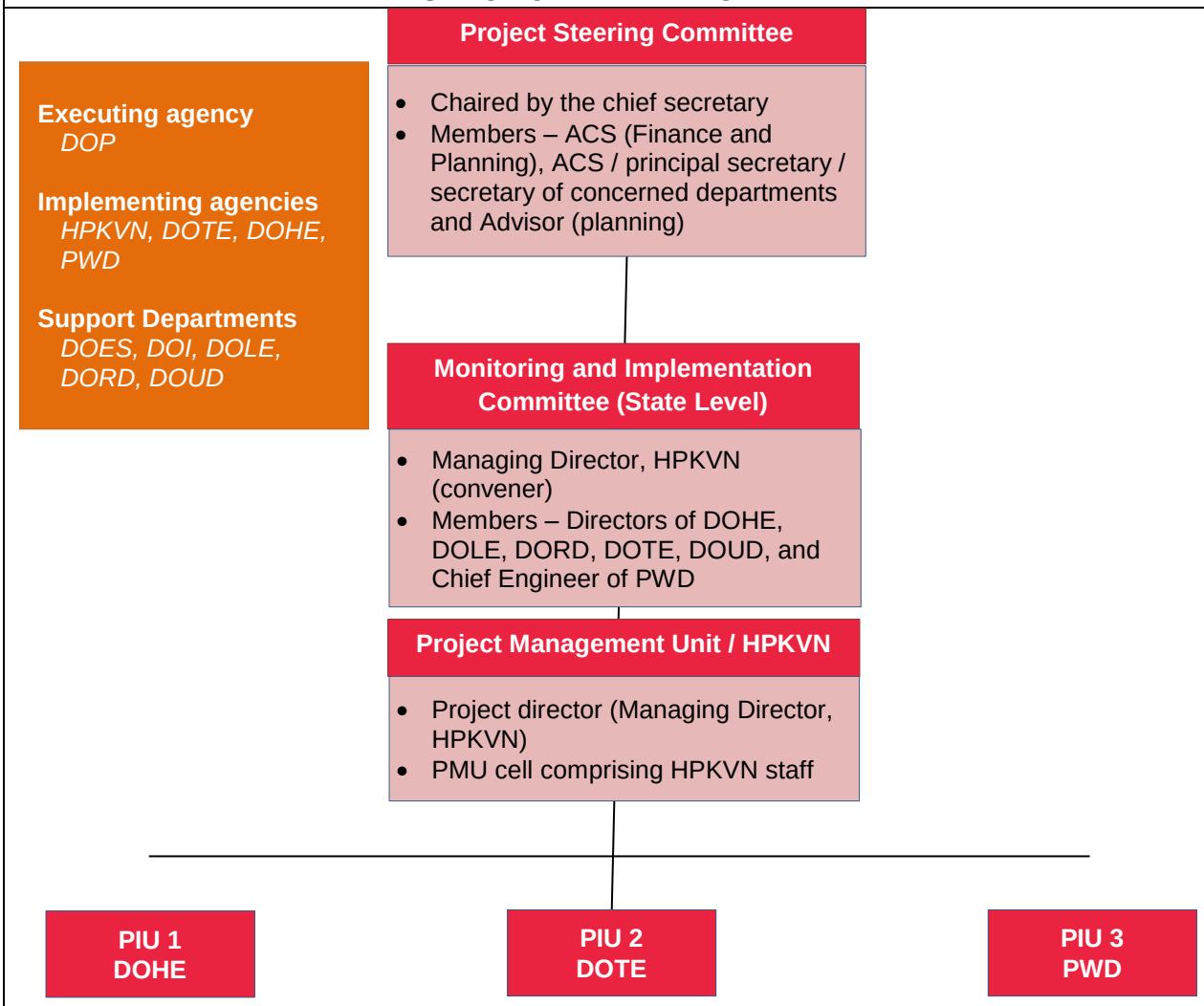
B. Safeguards Cell at Himachal Pradesh Kaushal Vikas Nigam

44. Since HPKVN will take the lead in bringing about convergence among multiple implementing agencies and support departments, it is recommended that a Safeguards Cell be established here. HPKVN will engage qualified environment and social safeguards officers who will coordinate with the other implementing agencies (including PWD) and help to implement relevant provisions of the ESMF.[6] All other implementing agencies and state line agencies participating in HPSDP will receive advice on safeguard policy issues and safeguard compliance from this cell. The Safeguards Cell will be responsible for the following:

[6] Officers with the required expertise in handling environment and social safeguards, from other GOHP departments, may also be posted in HPKVN as required.

(i) undertaking safeguards screening of new subproject sites using ADB's guidelines;
(ii) preparing checklists, IEEs, and EMPs as mandated in the ESMF;
(iii) periodic monitoring and reporting of safeguard compliance;
(iv) coordinating with PWD to ensure that environmental requirements and EMPs are included in subproject contract documents;
(v) coordinating with PWD to ensure that contractors adhere to the mitigation measures listed in subproject EMPs; and
(vi) organizing safeguard awareness training workshops to build the capacity of project stakeholders (see **Appendix 9** for the TOR).

INSTITUTIONAL ARRANGEMENT



ACS = additional chief secretary, DOES = Department of Economics and Statistics, DOHE = Department of Higher Education, DOI = Department of Industries, DOLE = Department of Labor and Employment, DOP = Department of Planning, DOTE = Department of Technical Education, Vocational and Industrial Training, DORD = Department of Rural Development, DOUD = Department of Urban Development, HPKVN = Himachal Pradesh Kaushal Vikas Nigam, PIU = project implementation unit, PMU = project management unit, PWD = Public Works Department.

XII. SAFEGUARDS COMPLIANCES AT SUBPROJECT SITES

45. Senior officials of the concerned implementing agency (i.e., the site-in-charge) at the subproject site will be responsible for overseeing construction work and ensuring that these works comply with safeguard requirements, as outlined in the ESMF. The site-in-charge will designate an official as the safeguards focal person, who will have direct contact with the Safeguards Cell of HPKVN for all safeguards issues. This designate officer will coordinate with district and state-level offices, and will be instrumental in obtaining permits, licenses, and other clearances for subproject activities that trigger environmental impacts. The safeguard official's key role is to ensure that all new construction activities and refurbishment of buildings and ITI institutes comply with the ESMF in a timely and satisfactory manner.

46. Based on the safeguard application to subproject activities and the training received on safeguard policies, the subproject sites will develop construction-related safeguard courses. These courses will be developed in consultation with the safeguards cell. The safeguards cell at HPKVN will work with safeguard officials at the construction sites to complete an environmental management supervision compliance table, which will systematically record the monitoring of EMP implementation. The information from this table will be used for the preparation of a semiannual monitoring report for submission to ADB.

XIII. GRIEVANCE REDRESS MECHANISM[7]

47. Considering that the subprojects of HPSDP will not generate any major environmental or social impacts, it is expected that grievances, if any, will be relatively minor. Nevertheless, a transparent and responsive grievance redress mechanism will be established to allow any person or persons to raise grievances if any pertaining to the environmental, social, or other relevant dimensions of the HPSDP.

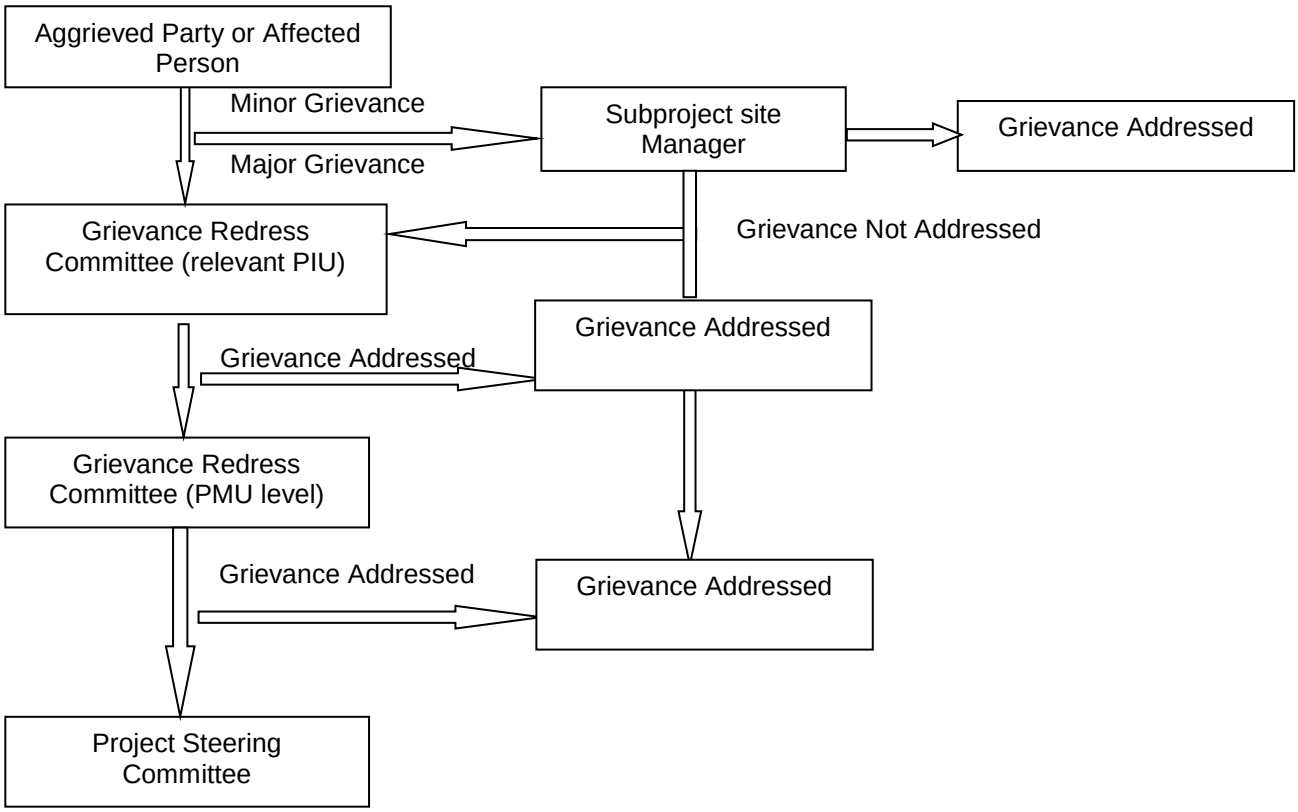
48. At the subproject sites where construction of the training facilities takes place, any affected person(s) will have the opportunity to complain to the contractor or local representative of PWD or of the relevant implementing agency which owns the site. A complaint register and complaint forms will be made available at the site office of each contractor, with a display board indicating availability of such facility. Complaints received (written or oral communication) will be registered in the complaint register assigning complaint number with date of receipt and nature of grievance. The field office will examine the complaint and take corrective action. The action taken will be documented in the complaint register, and the complaint will be closed if it is satisfactorily addressed, and the complainant will be informed through e-mail or over telephone. In case the grievance referred does not fall under the purview of the project, the same will be intimated to the complainant. If the local subproject level officials are not able to resolve the complaint satisfactorily within 10 days, then the matter will be brought to the notice of the chief engineer of PWD in that zone and the director of the relevant PIU. The PIU will keep consolidated records of all complaints related to HPSDP received at various levels in the zone. If the matter cannot be resolved at the PIU level within a month, then it will be referred to the state-wide grievance redress committee (GRC) established at HPKVN (the PMU) for receiving and

[7] GRM is an integral part of any project supported by ADB. It is a bottom-up, multitiered structure starting from the subproject level to the division, and district levels, and finally to the state level. The Himachal Pradesh State Pollution Control Board is the nodal agency for dealing with grievances and complaints regarding environmental safeguard compliance within the state.

redressing grievances and complaints that may arise owing to any of the subprojects and activities of HPSDP across the state.

49. This GRC at HPKVN will headed by the managing director, HPKVN, and senior representative of PWD and other implementing agencies as relevant.[8] The concerned officers will review the grievances in detail, and try to address them promptly in line with the rules and regulations of the Government of Himachal Pradesh. The process should be gender-sensitive, transparent, and fair. Each complaint will be recorded and acknowledged by the GRC. In case the grievances cannot be resolved by the GRC within a reasonable time period of one month, then the complaint will be submitted for the review of the project steering committee comprising the Chief Secretary, GOHP (Chairman), Additional Chief Secretary / Principal Secretary Department of Planning and Finance, and Secretaries of PWD, DOLE, DOUD, DOTE, Advisor, Planning, and Managing Director, HPKVN). The response time for the resolution of complaint by the steering committee will be one month. If the matter cannot be resolved satisfactorily by the GRC and / or steering committee, then the aggrieved person or party can take the matter to a court of law. It should be noted that the aggrieved person or party can approach court of law any time during process of resolution of complaint at any stage if they are not satisfied with the GRM process of the project.

Figure 2: Project Grievance Redress Mechanism



PIU = project implementation unit, PMU = project management unit.
Source: Asian Development Bank.

[8] The HPKVN website will include a link where affected person(s) can register their complaints online. A telephone number will also be on the website of HPKVN and the subproject sites, so that the general public can register their complaint with the PIU or PMU office.

XIV. CAPACITY BUILDING AND TRAINING FOR SAFEGUARD COMPLIANCE

50. As a part of the capacity building during project implementation, training programs will be conducted at HPKVN on environmental and social safeguard policies, and on how to prepare safeguard planning and monitoring instruments and implement them. At the subproject site, training will focus on awareness about safeguard requirements among the staff who will be involved in activities related to construction and/or renovation of buildings. During project supervision missions, ADB will assess environmental compliance of subprojects and recommend safeguard strengthening exercises, if required. ADB will also support the strengthening of the application of environmental safeguard policy principles to subprojects, safeguard compliance, and monitoring of EMP implementation.

XV. MONITORING AND REPORTING

51. The DOP (executing agency) will ensure through HPKVN and other implementing agencies that environmental safeguard impacts and risks are adequately addressed. Periodic monitoring by the Safeguards Cell of HPKVN and designated PWD focal persons at the subproject level will ensure adherence to the required safeguards during implementation. With ADB's assistance, PWD and HPKVN will develop a mechanism to reduce safeguard risks through credible results verification mechanism built into the project. The Safeguards Cell of HPKVN will have the following functions:

(i) Establish and maintain procedures to monitor the progress of implementation of safeguard implementation plans. In the project, the key safeguard implementation plan will be the EMP for each subproject.
(ii) Assist implementing agencies in verifying the subproject's compliance with safeguards measures and its progress toward intended outcomes.
(iii) Document and disclose monitoring results and identify necessary corrective and preventive actions in biannual monitoring reports.
(iv) Submit monitoring reports on safeguard measures, as agreed, to ADB (**Appendix 5**).
(v) Follow up on these actions to ensure progress toward the desired outcomes.
(vi) Prepare site inspection schedules for the safeguard team to check the compliance with safeguard measures. For site inspection, proper documentation will be done and the contractor will be instructed to comply with the inadequacies noted. This compliance will be followed up by the designated site safeguards person. A minimum of one inspection per month will be carried out by the environmental specialist of the HPKVN Safeguards Cell in every construction site.

52. Based on environmental data and information generated by due diligence and environmental screening exercises at the subproject level, the Safeguards cell will identify key environmental monitoring indicators. These indicators will be used by the implementing agencies to monitor safeguard compliance of refurbishment and construction activities biannually. The findings will be presented in a report and transmitted to the Safeguards Cell, which will prepare the biannual consolidated Safeguard Monitoring Report of HPSDP consisting of environmental checklists, EMPs, and monitoring reports and will be sent to ADB for review. The monitoring data of each subproject will be fed into the safeguards database maintained at HPKVN. This data will be the basis for verifying results and compliance pertaining to environmental safeguard application. During project review missions, ADB will monitor safeguard compliance of selected subprojects and work with program authorities to develop action plans for additional corrective measures if required.

XVI. DISCLOSURE OF SAFEGUARD DOCUMENTS

53. The ESMF of the project will be disclosed to the public and made available for public review at DOP and HPKVN, affiliated institutions, and subproject sites or offices. Both the draft and final ESMF will be uploaded on the websites of ADB, HPKVN, and Government of Himachal Pradesh. A summary of the ESMF will be translated into Hindi and will be made available for stakeholders, and posted at subproject sites before the commencement of any subproject activity.

54. Subproject-specific safeguard planning documents, e.g., IEEs, EMPs, mitigation plans, and corrective action plans, will be disclosed to other stakeholders. Environmental safeguard monitoring reports of subprojects will also be disclosed to all stakeholders, and copies will be made available at subproject offices and the HPKVN office. These will also be uploaded onto ADB's website. In addition, summaries of these reports will be translated into Hindi and made available in a timely manner and in accessible places. All these documents will be sent to ADB for review. DOP through HPKVN will review the following documents and then submit for disclosure on ADB's website:

(i) draft IEE (including the draft EMP);
(ii) final IEE with EMP;
(iii) new or updated IEE with corrective action plans, if applicable; and
(iv) semiannual Monitoring Report (**Appendix 5**).

XVII. ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK UPDATE

55. The DOP, through HPKVN, will update the ESMF on its website as required. For example, when there are changes in India's or Himachal Pradesh's environmental policies and regulations, or revisions in ADB's SPS, or some major learning during project implementation, these should be reflected in the ESMF. The Safeguards Cell in HPKVN will be responsible for revising and/or updating the ESMF. Any revision to and updates of the ESMF will be done in concurrence with ADB.

APPENDIX 1: CHECKLIST FOR SCREENING THE SITES FROM ENVIRONMENT, INVOLUNTARY RESETTLEMENT, AND INDIGENOUS PEOPLE IMPACT CATEGORIZATION

A. Environment Categorization

Date: _____

A. Instructions

(i) The project team completes and submits the form to the Environment and Safeguards Division (RSES) for endorsement by RSES Director, and for approval by the chief compliance officer (CCO). OM F1/OP on *Safeguard Review Procedures* (paras. 4–7) provides the requirements on environment categorization.

(ii) The classification of a project is a continuing process. If there is a change in the project components and/or site that may result in category change, the Sector Division submits a new form and requests for recategorization and endorsement by the RSES director and CCO. The old form is attached for reference.

(iii) In addition, the project team may propose in the comments section that the project is highly complex and sensitive (HCS), for approval by the CCO. HCS projects are a subset of category A projects that ADB deems to be highly risky or contentious, or involve serious and multidimensional and generally interrelated potential social and/or environmental impacts.

B. Project Data

Country/Project No./Project Title : _____

_____

Department/Division : _____

Processing Stage ; _____

Modality : _____

[ ] Project Loan [ ] Program Loan [ ] Financial Intermediary [ ] General Corporate Finance
[ ] Sector Loan [ ] MFF [ ] Emergency Assistance [ ] Grant
[ ] Other financing modalities:

C. Environment Category **(please tick one category based on the set of criteria in OMF1 (paras. 6–7)**

[ ] New [ ] Recategorization [ ] Previous Category

Category A ☐	Category B ☐	Category C ☐	**Category FI** ☐

D. Basis for Categorization/Recategorization (please attach supporting documents):

[ ] REA Checklist
[ ] Project and/or Site Description
[ ] Other: _____

E. Comments

Project Team Comments	RSES Comments

F. Approval

Proposed by:	**Endorsed by**:	
Project Team Leader, {Department/Division} Date:	Director, RSES Date:	
Endorsed by:	**Approved by**:	☐ Highly Complex and Sensitive Project
Director, {Division} Date:	Chief Compliance Officer Date:	

B. Rapid Environmental Assessment Checklist

Instructions:

(i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (RSES) for endorsement by director, RSES and for approval by the Chief Compliance Officer.

(ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title:

Sector Division:

Screening Questions	Yes	No	Remarks
A. Project Location **Is the project area adjacent to or within any of the following areas:**			
▪ Underground utilities			
▪ Cultural heritage site			
▪ Protected area			
▪ Wetland			
▪ Mangrove			
▪ Estuarine			
▪ Buffer zone of protected area			
▪ Special area for protecting biodiversity			
▪ Bay			
B. Potential Environmental Impacts **Will the project cause:**			
▪ Encroachment on historical/cultural areas?			
▪ Encroachment on precious ecology (e.g., sensitive or protected areas)?			
▪ Impacts on the sustainability of associated sanitation and solid waste disposal systems?			
▪ Dislocation or involuntary resettlement of people?			
▪ Disproportionate impacts on the poor, women and children, Indigenous Peoples, or other vulnerable groups?			
▪ Accident risks associated with increased vehicular traffic, leading to loss of life?			
▪ Increased noise and air pollution resulting from increased traffic volume?			
▪ Occupational and community health and safety risks?			

Screening Questions	Yes	No	Remarks
▪ Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?			
▪ Generation of dust in sensitive areas during construction?			
▪ Requirements for disposal of fill, excavation, and/or spoil materials?			
▪ Noise and vibration due to blasting and other civil works?			
▪ Long-term impacts on groundwater flows as result of needing to drain the project site prior to construction?			
▪ Long-term impacts on local hydrology as a result of building hard surfaces in or near the building?			
▪ Large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?			
▪ Social conflicts if workers from other regions or countries are hired?			
▪ Risks to community safety caused by fire, electric shock, or failure of the buildings safety features during operation?			
▪ Risks to community health and safety caused by management and disposal of waste?			
• Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?			

C. Checklist for Preliminary Climate Risk Screening

Country/Project Title:
Sector:
Subsector:
Division/Department:

Screening Questions		Score	Remarks
Location and Design of Project	Is the location and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather related events such as floods, droughts, storms, landslides?		
	Would the project design (e.g., the clearance for bridges) need to consider any hydrometeorological parameters (e.g., sea level, peak river flow, reliable water level, peak wind speed etc.)?		
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g., prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydrometeorological parameters likely affect the selection of project inputs over the life of project outputs (e.g., construction material)?		
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s)?		
Performance of Project Outputs	Would weather or climate conditions and related extreme events likely affect the performance (e.g., annual power production) of project output(s) (e.g., hydropower generation facilities) throughout their design life time?		

Note: If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting or routing of project, the selection of construction material and/or scheduling, and performance and/or maintenance cost or scheduling of project outputs.

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses that score 0 when added will classify the project as low-risk. If adding all responses will result to a score of 1–4, and no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses or a 2 in any single response), will be categorized as a high-risk project.

Result of Initial Screening (Low, Medium, High): _____

Other Comments: _____
_____

Prepared by: _____

D. Involuntary Resettlement Impact Categorization

Date: _____

A. Instructions

(i) The project team completes and submits the form to the Environment and Safeguards Division (RSES) for endorsement by director, RSES, and for approval by the chief compliance officer (CCO).
(ii) The classification of a project is a continuing process. If there is a change in the project components or/and site that may result in category change, the Sector Division submits a new form and requests for recategorization, and endorsement by RSES Director and by the CCO. The old form is attached for reference.
(iii) In addition, the project team may propose in the comments section that the project is highly complex and sensitive (HCS), for approval by the CCO. HCS projects are a subset of category A projects that ADB deems to be highly risky or contentious or involve serious and multidimensional and generally interrelated potential social and/or environmental impacts.

B. Project Data

Country/Project No./Project Title : _____

_____

Department/division : _____

Processing Stage ; _____

Modality : _____

[ ] Project Loan [ ] Program Loan [ ] Financial Intermediary [ ] General Corporate Finance
[ ] Sector Loan [ ] MFF [ ] Emergency Assistance [ ] Grant
[ ] Other financing modalities:

C. Involuntary Resettlement Category

[ ] New [ ] Recategorization [ ] Previous Category

☐ Category A	☐ Category B	☐ Category C	☐ Category FI

D. Comments

Project Team Comments:	RSES Comments:

E. Approval

Proposed by:	**Reviewed by**:	
Project Team Leader, {Department/Division} Date:	Social Safeguard Specialist, RSDD/RSES Date: **Endorsed by**:	
Social Development Specialist, {Department/Division} Date:	Director, RSES Date:	
Endorsed by:	**Approved by**:	☐ Highly Complex and Sensitive Project
Director, {Division} Date:	Chief Compliance Officer Date:	

E. Involuntary Resettlement Impact Categorization Checklist

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
Involuntary Acquisition of Land				
1. Will there be land acquisition?				
2. Is the site for land acquisition known?				
3. Is the ownership status and current usage of land to be acquired known?				
4. Will easement be utilized within an existing Right of Way (ROW)?				
5. Will there be loss of shelter and residential land due to land acquisition?				
6. Will there be loss of agricultural and other productive assets due to land acquisition?				
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?				
8. Will there be loss of businesses or enterprises due to land acquisition?				
9. Will there be loss of income sources and means of livelihoods due to land acquisition?				
Involuntary restrictions on land use or on access to legally designated parks and protected areas				
10. Will people lose access to natural resources, communal facilities and services?				
11. If land use is changed, will it have an adverse impact on social and economic activities?				
12. Will access to land and resources owned communally or by the state be restricted?				
Information on Displaced Persons:				
Any estimate of the likely number of persons that will be displaced by the project? [ ] No [ ] Yes If yes, approximately how many? _____				
Are any of them poor, female heads of households, or vulnerable to poverty risks? [ ] No [ ] Yes				
Are any displaced persons from indigenous or ethnic minority groups? [ ] No [ ] Yes				

Note: The project team may attach additional information on the project, as necessary.

F. Indigenous Peoples Impact Categorization

Date: _____

A. Instructions

(i) The project team completes and submits the form to the Environment and Safeguards Division (RSES) for endorsement by director, RSES, and for approval by the chief compliance officer (CCO).

(ii) The classification of a project is a continuing process. If there is a change in the project components or/and site that may result in category change, the sector division submits a new form and requests for recategorization, and endorsement by the director, RSES and CCO. The old form is attached for reference.

(iii) The project team indicates if the project requires broad community support (BCS) of Indigenous Peoples communities. BCS is required when project activities involve (a) commercial development of the cultural resources and knowledge of indigenous peoples, (b) physical displacement from traditional or customary lands; and (c) commercial development of natural resources within customary lands under use that would impact the livelihoods or the cultural, ceremonial, or spiritual use that define the identity and community of indigenous peoples.

(iv) In addition, the project team may propose in the comments section that the project is highly complex and sensitive (HCS), for approval by the CCO. HCS projects are a subset of category A projects that ADB deems to be highly risky or contentious or involve serious and multidimensional and generally interrelated potential social and/or environmental impacts.

B. Project Data

Country/Project No./Project Title : _____

_____

Department/ Division : _____

Processing Stage : _____

Modality : _____

[ ] Project Loan [ ] Program Loan [ ] Financial Intermediary [ ] General Corporate Finance

[ ] Sector Loan [ ] MFF [ ] Emergency Assistance [ ] Grant

[ ] Other financing modalities:

C. Indigenous Peoples Category

[ ] New [ ] Recategorization [ ] Previous Category

[ ] Category A	**[ ]** Category B	**[ ]** Category C	[ ] Category FI

D. Project requires the broad community support of affected Indigenous Peoples communities. **[ ]** Yes **[ ]** No

E. Comments

Project Team Comments:	RSES Comments:

F. Approval

Proposed by:	**Reviewed by**:	
Project Team Leader, {Department/Division} Date:	Social Safeguard Specialist, RSDD/RSES Date: **Endorsed by**:	
Social Development Specialist, {Department/Division} Date: **Endorsed by**:	Director, RSES Date :	
	Approved by:	☐ Highly Complex and Sensitive Project
Director, {Division} Date:	Chief Compliance Officer Date :	

G. Indigenous Peoples Impact Screening Checklist

KEY CONCERNS (Please provide elaboration on the remarks column)	**YES**	**NO**	**NOT KNOWN**	**Remarks**
A. Indigenous Peoples Identification				
1. Are there sociocultural groups present in or use the project area who may be considered as "tribes" (hill tribes, scheduled tribes, tribal peoples); "minorities" (ethnic or national minorities); or "indigenous communities" in the project area?				
2. Are there national or local laws or policies as well as anthropological researches or studies that consider these groups present in or using the project area as belonging to "ethnic minorities", scheduled tribes, tribal peoples, national minorities, or cultural communities?				
3. Do such groups self-identify as being part of a distinct social and cultural group?				
4. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?				
5. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?				
6. Do such groups speak a distinct language or dialect?				
7. Have such groups been historically, socially and economically marginalized, disempowered, excluded, and/or discriminated against?				
8. Are such groups represented as "Indigenous Peoples," or as "ethnic minorities" or "scheduled tribes," or "tribal populations" in any formal decision-making body at the national or local levels?				
B. Identification of Potential Impacts				
9. Will the project directly or indirectly benefit or target Indigenous Peoples?				
10. Will the project directly or indirectly affect Indigenous Peoples' traditional sociocultural and belief practices? (e.g., child rearing, health, education, arts, and governance)				
11. Will the project affect the livelihood systems of Indigenous Peoples? (e.g., food production system, natural resource management, crafts and trade, employment status)				

KEY CONCERNS (Please provide elaboration on the remarks column)	**YES**	**NO**	**NOT KNOWN**	**Remarks**
12. Will the project be in an area (land or territory) occupied, owned, or used by Indigenous Peoples, and/or claimed as ancestral domain?				
C. Identification of Special Requirements *Will the project activities include:*				
13. Commercial development of the cultural resources and knowledge of Indigenous Peoples?				
14. Physical displacement from traditional or customary lands?				
15. Commercial development of natural resources (such as minerals, hydrocarbons, forests, water, hunting or fishing grounds) within customary lands under use that would impact the livelihoods or the cultural, ceremonial, spiritual uses that define the identity and community of Indigenous Peoples?				
16. Establishing legal recognition of rights to lands and territories that are traditionally owned or customarily used, occupied or claimed by indigenous peoples?				
17. Acquisition of lands that are traditionally owned or customarily used, occupied, or claimed by indigenous peoples?				

D. Anticipated Project Impacts on Indigenous Peoples

Project Component / Activity / Output	**Anticipated Positive Effect**	**Anticipated Negative Effect**
1.		
2.		
3.		
4.		
5.		

Note: The project team may attach additional information on the project, as necessary.

APPENDIX 2: DESCRIPTION OF ACTS AND RULES

A. Environmental

(i) **The Forest (Conservation) Act, 1980.** The Forest (Conservation) Act, 1980 pertains to cases of diversion of forest area and felling of trees. Depending on the size of the tract to be cleared, government clearances are applied at the following levels: (a) if the forest area to be cleared or diverted exceeds 20 hectares (ha) (or 10 ha in hilly area), then prior permission of the central government (Ministry of Environment, Forest, and Climate Change [MOEF]) is required; (b) if the forest area to be cleared or diverted is between 5 to 20 ha, the Regional Office of Chief Conservator of Forests (MOEF) is empowered to approve; (c) if the forest area to be cleared or diverted is below or equal to 5 ha, the state government (State Forest Department) can give permission; and (d) if the area to be clear-felled has a forest density of more than 40%, permission to undertake any work is needed from the central government, irrespective of the area to be cleared. Restrictions and clearance procedure proposed in the Forest (Conservation) Act applies wholly to natural forest areas, even in cases where the protected or designated forest area does not have any vegetation cover.

(ii) **The Environment (Protection) Act, 1986 and the Environmental Impact Assessment Notification, 2006.** The Environmental (Protection) Act, 1986 is the umbrella legislation that provides for the protection of the environment in the country through Environment (Protection) Rules, which have since been formulated. The Environmental Impact Assessment Notification, 2006 and the Amendment thereto (22 August 2013) have been notified under the Environmental (Protection) Act, 1986. The Environmental Impact Assessment (EIA) Notification has been introduced to ensure that projects receive prior environmental clearance.

(iii) **The Wildlife (Protection) Act, 1972.** The Wildlife Protection Act has allowed the government to establish several national parks and sanctuaries over the past 25 years, and to protect and conserve flora and fauna. If activities related to any given project are taken up in protected areas, then prior clearance is needed from the State Wild Life Board and the National Board for Wild Life (within the MOEF).

(iv) **The Water and Air (Prevention and Control of Pollution) Act.** The Water (Prevention and Control of Pollution) Act, 1974 resulted in the establishment of the Central Pollution Control Board (CPCB) and Himachal Pradesh State Pollution Control Board (SPCB) whose responsibilities include managing water quality and effluent standards, as well as monitoring water quality, prosecuting offenders, and issuing licenses for construction and operation of certain facilities. The SPCB is empowered to set air quality standards and monitor and prosecute offenders under The Air (Prevention and Control of Pollution) Act, 1981. Additionally, as per the Gazette notification dated 10 April 1997, SPCB is also empowered for public hearing of all projects.

(v) **The Motor Vehicles Act, 1988.** In 1988, the Indian Motor Vehicles Act empowered the State Transport Authority to enforce standards for vehicular pollution and prevention control. The authority also checks emission standards of registered vehicles, collects road taxes, and issues licenses. In August 1997, the Pollution under Control Certificate program was launched in an attempt to crackdown on vehicular emissions.

(vi) **The Ancient Monuments and Archaeological Sites and Remains Act, 1958.** According to this act, the area within a radius of 100 meters and 300 meters from the

"protected property" are designated as "protected areas" and "controlled areas," respectively. No development activity (including building, mining, excavation, blasting) is permitted in the "protected area," and development activities likely to damage the protected property are not permitted in the "controlled area" without prior permission of the Archaeological Survey of India if the site is protected by it; or the State Department of Archaeology if the site is protected by the state.

(vii) **Notification for Use of Fly Ash, 2003.** The MOEF issued a Notification under the Environment (Protection) Act, 1986 for the utilization of fly ash in earthworks in roads project within 100 kilometers radius from coal-based power plants. The aim of this act is to minimize impact on agriculture and protection for land used for earthwork.

(viii) **Coastal Regulation Zone Notification, 2011.** The Coastal Regulation Zone, 2011 protects coastal belts and regulates development near the coast for ecological protection and national security.

(ix) **MOEF circular (1998) on linear plantation on roadside, canals and railway lines modifying the applicability of provisions of Forest (Conversation) Act linear plantations.** This circular has been issued to increase forest cover and to protect linear plantations. This circular is effective for states like Rajasthan where forest cover is minimal.

(x) **Noise Pollution (Regulation and Control) Act, 1990.** Under this Act, MOEF has promulgated noise standards for the usage of land during the day and night.

(xi) **Public Liability and Insurance Act, 1991.** This act provides for protection from transportation, handling, and storage of hazardous materials. The occupier has to compensate people who are affected by any mishap or accidents that might happen during handling, transport, and storage.

(xii) **Explosive Act, 1984.** This act has been enacted for safe transportation, handling, storage, and use of explosive materials.

(xiii) **Minor Mineral and Concession Rules.** These rules have been notified for sand mining and for small quarry opening for aggregates.

(xiv) **The Mining Act.** This act has been enacted for safe and sound mining activities and for the restoration of mined areas. The act also aims to regulate mining activities.

(xv) **State-Level Legislation and other Acts**

a. The Himachal Pradesh Ground Water (Regulation and Control of Development and Management) Act, 2005 to regulate groundwater exploitation.
b. The Himachal Pradesh Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1976 to protect and conserve the state-notified cultural and archaeological structures, buildings and remains.
c. The Himachal Pradesh Participatory Forest Management Regulation, 2001, to minimize damage to the forest land as most of the open land is under the protected or reserved forest category.
d. The Himachal Pradesh Non-Biodegradable Garbage (Control) Act, 1995, to control plastic and polythene waste generation in the state.

e. The Himachal Pradesh Town and Country Planning Act, 1977, for regulated development of towns and cities in the state.

(xvi) With respect to hygiene and health, especially during the construction stage, the Factories Act, 1948 and the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 would apply.

(xvii) The provisions of the Hazardous Wastes (Management and Handling) Rules, 1989 and the Chemical Accidents (Emergency Planning, Preparedness, and Response) Rules, 1996 could also apply during construction and operations.

(xviii) The implementation of environmental legislation in India is a state-subject and all laws and acts are enacted by the state government with guidance from MOEF and CPCB.

B. Social

1. The HPKVN and other implementing agencies have no legal responsibility to legislate and implement social safeguard policy instruments laid out by the Government of India. The Ministry of Rural Development, respective state governments, and Ministry of Tribal Affairs are responsible for implementing these legislations. However, HPSDP will have social implications that all the implementing agencies must pay attention to and ensure that all project activities comply with legal requirements.

(i) **National Rehabilitation and Resettlement Policy, 2007.** The National Rehabilitation and Resettlement Policy (NRRP) provides broad guidelines and executive instructions and is applicable to all projects. The NRRP focuses on providing basic rehabilitation measures for populations involuntarily displaced by projects and requires that projects must address rehabilitation and resettlement issues comprehensively. Another bill that focuses on the rehabilitation and resettlement of affected persons, the National Rehabilitation and Resettlement Bill, 2007, has been tabled in Parliament. However, this bill is yet to be adopted.

(ii) **The Right to Fair Compensation in Land Acquisition, Rehabilitation and Resettlement Act, 2013.** The act governs land acquisition and compensation. The Act describes the process to be adopted in notifying the land required for public purposes or for a company. It also includes procedures for enquiry, hearing of objections, and the fixing of compensation. The Act prescribes a 2-year time limit from the date of declaration within which the process has to be completed. The previous Land Acquisition Act has been revised and this new Act has been introduced to better compensate project affected persons. The Act aligns its provisions to the goals and objectives of the NRRP, 2007.

(iii) **Other Relevant Social Legislations.** The following are the other relevant social legislations: Scheduled Caste and Scheduled Tribes (Prevention of Atrocities Act), 1989; Provisions of the Panchayat (Extension to Scheduled Areas) Act, 1996; The Constitution (Eighty-Ninth Amendment) Act, 2003; The Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

(iv) **The Himachal Pradesh Land (Preservation) Act, 1978.** This act has been promulgated to conserve subsoil water and prevent soil erosion. The Government of Himachal Pradesh is empowered to stop cultivation, tree cutting, quarrying, etc. for prevention of soil erosion and water conservation.

APPENDIX 3: EQUIVALENCE OF THE GOVERNMENT OF INDIA RULES AND REGULATIONS AND ADB SAFEGUARD POLICY STATEMENT, 2009

Table A3. 1: Equivalence of the Government of India Environmental Rules and Regulations and ADB Safeguard Policy Statement, 2009

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison between Indian Regulatory Framework on Environment and ADB SPS, 2009	Remarks
1. Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment	Yes	The Environmental Impact Assessment Notification, 2006 screens the projects or activities into three categories: A, B1, and B2. This categorization is based on foreseen impacts of projects or activities. For this, an application should be submitted by filling out Form 1, draft TOR for EIA study, and prefeasibility for category A and B1 projects; and Form 1 and Form 1A for B2 projects. Based on these details, the Environmental Appraisal Committee and/or the state EIA authority approves the TORs and confirms the categorization of the project. A state EIA authority has been constituted in each state. Thus, the SPS' environmental safeguards policy principle is congruent with the screening process of the Ministry of Environment, Forest, and Climate Change.	Categorization competence and TOR approval is adequate and matches with ADB's SPS Policy Principle 1.
2. Conduct an environmental assessment for each proposed project to identify potential direct, indirect, cumulative, and induced impacts and risks to physical, biological, socioeconomic, and physical cultural resources in the context of the project's area of influence.	Yes	The appraisal committee at the Ministry of Environment, Forest, and Climate Change for category A projects, and state EIA authority will provide the TOR for environmental assessment. The relevant authority guides project proponents to select qualified experts to carry out necessary fieldwork and consultations. The subprojects in the Himachal Pradesh Skills Development Project will have limited environmental impacts that can be mitigated. Therefore, only IEE reports will be prepared. This is the low threshold of "prescribed" projects. The regulatory system applicable to the project is adequate for this task.	All the subprojects will not attract provisions of EIA Notification as educational and training institutes have been exempted from the environmental clearance process. However, ADB's SPS requires an IEE to be prepared for these category B subprojects. The executing agency and implementing agencies do not have the required environmental safeguards expertise. By forming a Safeguards Cell at HPKVN, the implementing

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison between Indian Regulatory Framework on Environment and ADB SPS, 2009	**Remarks**
			agency will take the lead and outsource the preparation of the IEE to competent agencies or persons, overcoming this weakness. The anticipated adverse environmental impacts of the project are not significant. The executing agency and implementing agencies display a high awareness about potential negative environmental impacts of the project.
3. Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts, then document the rationale for selecting the particular alternative proposed. Also, consider the no-project alternative.	Yes	This principle will be triggered for finalization of locations of rural livelihood centers, model career centers, Rehan Women Polytechnic, and city livelihood centers. The local environmental regulatory framework through the PAA provides sufficient guidelines on examining alternatives to the project location, design, and technology.	Alternatives for site selection will be explored during site selection. This principle is being applied so that subproject sites are not in ecological sensitive areas, or in areas having severe environmental impacts.
4. Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an EMP that includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational	Yes	Refer to Principle 1 above. The environmental regulatory framework provides no environmental assessment requirement for small building construction as compared to ADB's safeguards requirements, although through TOR, PAA provides guidance for IEE and actions to overcome adverse environmental impacts. The project's ESMF will provide sufficient and comprehensive guidance in this regard. The EMP is considered an integral part of IEE and is not submitted separately to PAA for review. IEE includes all action plans to overcome adverse impacts. Under the project, a sample EMP is provided in ESMF (**Appendix 6**).	The ESMF and SPS principle ensures preparation of the IEE report will have mitigation measures (EMP) for preconstruction, construction and operation phases. The EMP implementation will ensure that mitigation measures are adhered to. Capacity building measures such as the creation of the Safeguards Cell at HPKVN and conduct of safeguard training programs will be started before the commencement of project activities.

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison between Indian Regulatory Framework on Environment and ADB SPS, 2009	Remarks
arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators.			
5. Carry out meaningful consultation with affected people and all other stakeholders. Continue consultations during project implementation.	Yes	The environmental regulatory framework provides opportunities for consultation with project affected people and other stakeholders during the public hearing process. However, in the case of the current project, there will be no public hearing because EIA Notification, 2006 is not applicable as educational and training institutes have been exempted from the clearance process. To meet ADB's SPS requirements, consultations are part of IEE formulation. In the present case, the ESMF ensures consultations will be held with all stakeholders during IEE preparation for the subprojects, which will be organized by the Safeguards Cell and the concerned implementing agency in the project. Consultation during implementation of a particular project will be the responsibility of the implementing agencies and executing agency.	There is no institutional vehicle to ensure consultation with all stakeholders at the implementing agencies and executing agency. This needs to be built in into the activities of the executing agency and implementing agencies as part of capacity development. The establishment of the Safeguards Cell and appointment of a designated safeguard officer at each subproject would resolve this capacity deficiency.
6. Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, at an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment and its updates, if any, to	Yes	The environmental regulatory framework directs the PAA to disclose the draft EIA to the public and to seek their views, comments, and recommendations during public hearing. Public hearing meetings are organized by the State Pollution and Control Board. The final EIA report is normally disclosed by the Ministry of Environment, Forest, and Climate Change for category A projects, and by state EIA authority for category B1 projects.	To enable implementing agencies to ensure timely disclosure of safeguard processes and documentation in local languages, it is necessary to build institutional capacity through the establishment of the Safeguards Cell and through training on safeguards. The training should also be extended to a person identified as the focal safeguard person at the subproject sites.

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison between Indian Regulatory Framework on Environment and ADB SPS, 2009	Remarks
affected people and other stakeholders.			In the current case, IEE reports to be prepared will be disclosed on the HPKVN website and on the Himachal Pradesh government website.
7. Implement the EMP and monitor its effectiveness. Document monitoring results, including the development and implementation of corrective actions and disclose monitoring reports.	Yes	Limited scope in the local regulatory framework to monitor the implementation of actions in EIA and the formulation of corrective actions, if required. The project proponents submit EMP compliance as part of environmental clearance compliance and as part of the "Consent to Operate" obtained from the state Pollution Control Board. The ESMF has elaborated on these requirements and provided guidance on this aspect.	EMPs are seldom parts of contract documents in the building permit process. Hence, the probability that contractors would follow good safeguard practices is low. Training and capacity building is needed for the implementation of the EMP, particularly for organizations likely to take up construction works for subprojects; as well as license and permission-providing agencies such as municipalities, *panchayats*, and development authorities.
8. Do not implement project activities in areas of critical habitats. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area. Use a precautionary approach to the use, development, and management of renewable natural resources.	No	The regulatory framework provides for the protection of critical habitats and environmentally sensitive areas. In the case of this project, if new sites are considered, the sites will always be on government land. Hence, no development will be planned in sensitive areas. Projects in environmentally sensitive areas will fall under category A of EIA Notification, 2006 and category A per the SPS.	Not applicable to the project.
9. Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally	Yes	The Environment (Protection) Act, 1986 and rules and notifications provided therein ensure sufficient instructions in this regard. The environmental regulatory framework generally meets the World Bank Group's Environmental, Health, and Safety Guidelines. The	The general recommendation for more training and capacity building for all stakeholders involved is valid for this item.

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison between Indian Regulatory Framework on Environment and ADB SPS, 2009	Remarks
recognized standards such as the World Bank Group's Environmental, Health, and Safety Guidelines. Adopt cleaner production processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gases emissions, waste generation, and release of hazardous materials from their production, transportation, handling, and storage. Avoid the use of hazardous materials. Purchase, use, and manage pesticides based on integrated pest management approaches and reduce reliance on synthetic chemical pesticides.		ESMF will elaborate on these further.	
10. Conserve physical and cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of "chance find"	No	The environmental regulatory framework provides for the conservation of physical cultural resources and to protect such resources. In the current project, the ESMF will ensure that subproject site locations are always on government land and at least 300 meters away from protected archaeological monuments, or heritage sites or buildings. Hence, no development will be planned in a sensitive or "unexplored" area.	Not applicable to the project

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison between Indian Regulatory Framework on Environment and ADB SPS, 2009	Remarks
procedures that include a preapproved management and conservation approach for materials that may be discovered during project implementation.			
11. Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures.	Yes	The local laws (especially Factories Act, 1948) and other rules procedures cover these aspects sufficiently.	Implementation is poor due to lack of proper training, and financial resources. The contractors and associated project team need training on safety of workers and for the procurement of personal protective equipment.

ADB = Asian Development Bank, EIA = environmental impact assessment, EMP = environmental management plan, ESMF = environmental management and social framework, HPKVN = Himachal Pradesh Kaushal Vikas Nigam, IEE = initial environmental examination, PAA = project approving authority, SPS = Safeguard Policy Statement, TOR = terms of reference.
Source: Asian Development Bank.

Table A3.2: Equivalence of the Government of India Involuntary Resettlement Rules and Regulations and ADB Safeguard Policy Statement, 2009

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison Between Indian Regulatory Framework on Involuntary Resettlement and ADB's Involuntary Resettlement Policy Principles	**Remarks**
1. Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, and through a gender analysis, specifically related to resettlement impacts and risks	Yes	The National Policy of Rehabilitation and Resettlement (NPRR) 2007 also defines screening of projects for applicability. The national policy defines a "cut-off" threshold tied to the number of families that need to be displaced for the policy to be triggered (500 families in plains and 250 in hilly regions). ADB's SPS has three categories of impact: A (significant) where 200 or more people experience major impacts; B (not significant) where impacts are not deemed significant (less than 200 persons affected); and C, where no involuntary resettlement impacts are foreseen. Thus, there is some similarity in ADB's SPS and Indian NPRR.	The HPSDP plans all subproject sites on unencumbered government land with no involuntary resettlement requirements. A social expert is planned in the Safeguards Cell to screen the subprojects effectively.
2. Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and	No	There are provisions for consultations, GRM with affected population in NPRR 2007 if triggered. SPS also has consultation requirements.	Not applicable to HPSDP as all subprojects are planned on unencumbered government land. However, the ESMF prepared for the project includes meaningful consultations with stakeholders, and establishment of a GRM.

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison Between Indian Regulatory Framework on Involuntary Resettlement and ADB's Involuntary Resettlement Policy Principles	**Remarks**
children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.			
3. Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land-based where possible, or cash compensation at replacement value for land when the loss of land does not undermine livelihoods; (ii) prompt replacement of assets with access to assets of equal or higher value; (iii) prompt	No	Though NPRR says replacement value in the preamble, it is not clearly mentioned in the body. The SPS is more elaborate on compensation for various categories of affected persons.	Not applicable to the HPSDP project as all subproject sites will be on unencumbered government land.

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison Between Indian Regulatory Framework on Involuntary Resettlement and ADB's Involuntary Resettlement Policy Principles	**Remarks**
compensation at full replacement cost for assets that cannot be restored; and (iv) additional revenues and services through benefit-sharing schemes where possible.			
4. Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.	No	The NPRR has provisions for needed assistance to physically and economically displaced persons. The SPS requires clear-cut entitlement matrix covering all types of assistance and all categories of project-affected families.	Not applicable to the HPSDP.
5. Improve the standards of living of the displaced poor and other vulnerable groups, including	No	The NPRR gives preference to scheduled tribes in land allotment. Additional financial assistance is also defined for them. Their traditional rights to natural resources	Not applicable to the HPSDP.

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison Between Indian Regulatory Framework on Involuntary Resettlement and ADB's Involuntary Resettlement Policy Principles	**Remarks**
women, to at least national minimum standards. In rural areas, provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.		in the area will be recognized. The SPS supports improvements of standards of vulnerable group.	
6. Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter negotiated settlements will maintain the same or better income and livelihood status.	No	The NPRR and land acquisition act have transparent and consistent procedures. The SPS also recommends transparent and consistent procedures.	Not applicable. In the project, no land acquisition is planned for the construction of project-related infrastructure.
7. Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets.	No	The NPRR states that the landless, forest dwellers, tenants, and artisans are more severely affected but no mention is made of specific entitlements for them. No clear-cut guidelines for encroachers and squatters. In ADB-funded projects, nontitle holders (encroachers and squatters, tenants, sharecroppers, etc.) are eligible for compensation.	Not applicable to the HPSDP.
8. Prepare a resettlement plan elaborating on displaced persons' entitlements, income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-	No	The NPRR states that resettlement plan is required where over 500 families are affected in plain areas and 250 or more families are affected in hilly areas. 500 families or about 2,500 persons in the Indian context—which is over 10 times the ADB requirement of 200 persons or more. The ADB policy is more comprehensive.	Not applicable to the HPSDP.

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison Between Indian Regulatory Framework on Involuntary Resettlement and ADB's Involuntary Resettlement Policy Principles	Remarks
bound implementation schedule.			
9. Disclose a draft resettlement plan, including documentation of the consultation process, in a timely manner before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.	No	Both NRRP and SPS have provisions for disclosure of draft resettlement plan.	Not applicable to the HPSDP.
10. Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.	No	Both NPRR and SPS have requirement of inclusion of resettlement cost in the project cost. Major resettlement projects are implemented as standalone projects.	Not applicable to the HPSDP.
11. Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the	No	There is similarity between NPRR and SPS as both require compensation payment before physical displacement.	Not applicable to the HPSDP.

ADB Policy Principle	Triggered by the Project	Comparison	
		Comparison Between Indian Regulatory Framework on Involuntary Resettlement and ADB's Involuntary Resettlement Policy Principles	**Remarks**
resettlement plan under close supervision throughout project implementation.			
12. Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.	No	There is a requirement for a social audit in the NPRR after implementation of resettlement plan. In SPS, a monitoring and evaluation study is taken up in the postimplementation phase. Hence, there is similarity between the two policies.	Not applicable to the HPSDP.

ADB = Asian Development Bank, ESMF = environmental management and social framework, GRM = grievance redress mechanism, HPSDP = Himachal Pradesh Skills Development Project, NPRR = National Policy of Rehabilitation and Resettlement, SPS = Safeguard Policy Statement.
Source: Asian Development Bank.

APPENDIX 4: ADB-PROHIBITED INVESTMENT ACTIVITIES LIST AND EXCLUSION LIST FOR CATEGORY A UNDER ENVIRONMENT AND CATEGORY A AND B UNDER INVOLUNTARY RESETTLEMENT AND INDEGENOUS PEOPLE

1. The following investment activities will not qualify for support from the Asian Development Bank (ADB):

(i) Production or activities involving harmful or exploitative forms of forced labor[1] or child labor.[2]
(ii) Production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international phase-outs or bans, such as (a) pharmaceuticals,[3] pesticides, and herbicides;[4] (b) ozone-depleting substances;[5] (c) polychlorinated biphenyls[6] and other hazardous chemicals;[7] (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora;[8] and (e) transboundary trade in waste or waste products.[9]
(iii) Production of or trade in weapons and munitions, including paramilitary materials.
(iv) Production of or trade in alcoholic beverages, excluding beer and wine.[10]
(v) Production of or trade in tobacco.[10]
(vi) Gambling, casinos, and equivalent enterprises.[10]
(vii) Production of or trade in radioactive materials,[11] including nuclear reactors and components thereof.
(viii) Production of, trade in, or use of unbonded asbestos fibers.[12]
(ix) Commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests.
(x) Marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers, and damaging to marine biodiversity and habitats.

2. The following types of sub projects / investment activities will also not be taken up for

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1 Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.

2 Child labor means the employment of children whose age is below the host country's statutory minimum age of employment; or employment of children in contravention of International Labour Organization's Minimum Age Convention. International Labour Organization. ILO Convention No. 138 Minimum Age Convention, 1973. http://blue.lim.ilo.org/cariblex/pdfs/ILO_Convention_138.pdf

3 A list of pharmaceutical products subject to phaseouts or bans is available at http://www.who.int

4 A list of pesticides and herbicides subject to phase-outs or bans is available at http://www.pic.int

5 A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicized ozone holes is listed in the Montreal Protocol, together with target reduction and phase-out dates. Information is available at http://www.unep.org/ozone/montreal.shtml

6 A group of highly toxic chemicals, polychlorinated biphenyls, are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.

7 A list of hazardous chemicals is available at http://www.pic.int

8 A list is available at http://www.cites.org

9 As defined by the Basel Convention; see http://www.basel.int

10 This does not apply to investee companies that are not substantially involved in these activities. Not substantially involved means that the activity concerned is ancillary to an investee company's primary operations.

11 This does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment for which ADB considers the radioactive source to be trivial and adequately shielded.

12 This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

ADB financial assistance since they would fall under category A for environment and category A or B for involuntary resettlement and indigenous peoples' safeguards:

(i) Sub-project sites falling partly or fully in core and buffer zones of National Parks;

(ii) Sub projects falling fully or partly within notified bird sanctuaries, wild life sanctuaries and conservation areas of Himachal Pradesh;

(iii) Subproject sites falling partly or fully within the tribal zones of Himachal Pradesh;

(iv) Sub projects falling partly or fully on land which is owned by tribal communities;

(v) Subproject sites falling partly or fully on land parcels which are privately owned;

(vi) Subproject sites within 300 m of notified archaeological and heritage sites; and

(vii) Subproject sites having land tenure partly or fully titled, tenanted, customary or communal, non-titled and temporarily leased by the Government.

(viii) Subprojects having:

a. significant adverse environmental impacts that are sensitive, diverse, or unprecedented;

b. risk associated with large scale infrastructure;

c. significant occupational and community health and safety risks;

d. large-scale conversion or degradation of natural habitats;

e. direct discharge of pollutants resulting in degradation of air, water or soil;

f. production, storage, use or disposal of hazardous materials and wastes; and

g. risks associated with the purchase and use of pesticides and harmful chemicals

APPENDIX 5: OUTLINE OF SEMIANNUAL ENVIRONMENTAL MONITORING REPORT

(i) Introduction

(ii) Compliance status

(iii) Compliance status with National/ State/ Local statutory environmental requirements

(iv) Compliance status with the environmental covenants as stipulated in the Agreement

(v) Compliance status with environment management and monitoring plans as stipulated in the environmental documentation as agreed with ADB

(vi) Approach and methodology engaged for environmental monitoring of the project

(vii) Monitoring of environmental receptors/ attributes

(viii) Implementation of environmental monitoring plan

(ix) Any other environmental aspects, impacts observed during implementation which were not covered earlier

(x) Details of complaints received from public and action taken thereof to resolve

(xi) Follow-up actions and conclusions

APPENDIX 6: ENVIRONMENTAL MANAGEMENT PLAN

A. Generic Environmental Management Plan

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
1. PLANNING PHASE (Location of Subproject Sites)				
a. New site identification for Woman Polytechnic, RLCs, MCCS, CLCs, etc.	Damage to vegetation and ecosystems and felling of trees Site in reserved or protected forest Site in protected areas (national park, wildlife sanctuary, bird sanctuary) Site near defense installations	Develop designs that help to minimize clearing or disturbance to vegetation and trees Avoid sites in reserved or protected forests Avoid sites in protected areas to avoid clearance processes and impacts, as well as to meet ADB's SPS policy principles Avoid sites near defense installations to avoid any conflicts with defense activities	Evaluation of designs and plans Observation and reporting Verification of sites with SFD Verification of sites from revenue records	HPKVN and other implementing agencies
b. Water streams, rivers, ponds, and lakes	Damage to ecosystems Sedimentation in streams, rivers, water bodies Contamination of water supplies Biodiversity loss Contribution to flooding potential	Find alternative sites and avoid subproject sites close to rivers, streams, ponds, lakes, etc., and riparian ecosystems (those located next to a water body), which are extremely sensitive. Water bodies provide important environmental services such as water storage, bird and animal habitations, flood control, and filtering toxins and nutrients from runoff. <u>If no alternative is available:</u> Set back any infrastructure as far as possible (minimum 500 meters away from highest flood level and	Evaluation of designs and plans Observation and reporting	HPKVN and other implementing agencies

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		water bodies, rivers, streams Revegetate as soon as possible		
c. Hilly landscape with sloping terrain	Sedimentation of streams and surface water Contamination of ground and surface water supplies Erosion and damage to terrestrial and aquatic ecosystems during construction or use	Design facility and apply construction practices that minimize risks, e.g., use sandbags or hay to control erosion during construction Pay particular attention to potential erosion and redirection of water flows during design and construction Revegetate as soon as possible Maintain protection features during design and construction	Evaluation of designs and plans Observation and reporting	Contractor(s)
d. Site prone to flooding	Sites may get destroyed and/or subject workers or inhabitants to risk of injury or death Environmental damage from accidental release of toxic, infectious, or otherwise harmful material during flooding Contamination of drinking water	Find alternative sites or design infrastructure that is raised above flood plain, if possible Design infrastructure to minimize risks, e.g., design with proper grading and drainage Maintain design features, such as drainage structures, during construction and operation Avoid constructing sanitation or other facilities that will use and store harmful materials at flood-prone areas Chose dry sanitation options or closed disposal systems, instead of wet ones such as septic tanks or detention ponds	Evaluation of designs and plans Observation and reporting	Design team, contractor(s)
e. Area or site	Exposure of	Find alternative sites	Evaluation of	Design team,

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
prone to landslides	workers or inhabitants to risk of injury or death Environmental damage from accidental release of toxic, infectious, or otherwise harmful material Contamination of water supplies	on stable ground Design infrastructure to minimize risk, e.g., plant trees all around the facility Maintain protective design features Avoid constructing sanitation or other facilities that will use and store hazardous or bio-hazardous materials at landslide-prone sites <u>If the above is not possible:</u> Design storage area so that hazardous materials are stored in leak-proof containers Choose dry sanitation options or closed disposal systems, instead of septic tanks	designs and plans Observation and reporting	contractor
f. Felling of trees for clearing land as well as for materials for construction and refurbishment	<u>Loss of trees and vegetation may lead to:</u> • Disaster-related issues (i.e., soil erosion, landslides) • Lack of ventilation and shade for students and teachers	Consider alternate options to reduce the loss of trees and vegetation Plant native tree species in vacant spaces (a green belt) at the Rehan Women Polytechnic, RLCS, MCCs, CLCs, etc. wherever construction is on a new plot Plant the same species of trees and vegetation as a compensatory measure Minimize the use of wood for construction Use local materials as	Maintenance of survival rate for planted trees	Construction team, implementing agency site team, contractor(s)

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		much as possible. Construction materials such as stone dust, sand, etc. should be obtained from licensed quarries only. Integrate innovations into the design plan Contractor shall supply kerosene or LPG at camps and restrict cooking and heating using firewood Provide ventilation in newly constructed buildings of subprojects per specifications in building codes		
g. Workers' welfare facilities at the construction sites	Lack of proper workers' welfare facilities including toilets, canteen, first aid, etc. may inconvenience the workers	Include workers' welfare facilities in the design and preconstruction plan Provide temporary toilets with washing facilities for construction workers	Check for such facilities on construction site	Site staff of implementing agency or representative to supervise the contract work, contractor
h. Wastewater and solid waste generation, collection, and disposal facilities at workers' camp	Nonavailability of wastewater collection, treatment, and disposal facilities will lead to sanitation problems and vector-borne diseases	At the time of workers' camp planning, provisions (such as septic tank or soak pit) should be made for wastewater collection and disposal. Similarly, for solid waste collection, bins and disposal arrangements must be finalized.	Check for such facilities at construction sites	Implementing agency site staff or representative supervising the contract work, contractor
i. Disaster management	Extreme climate (e.g., cyclone, storm surge), natural disasters (e.g., earthquake), etc. and fire may cause damages to lives and properties	Adopt appropriate adaptation and disaster risk reduction strategies, emergency preparedness and recovery, training or orientation programs for teachers and students on climate change, disaster and earthquake, etc.	Disaster Management Plan for each subproject site	Safeguards Cell at HPKVN, site supervision teams

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		Construct disaster shelters at subproject sites to cover the urgent needs of the community, students, and teachers Design the new buildings for subprojects and construct these in a way to make these disaster- and earthquake-resilient, i.e., "climate-proof" Create awareness among teachers and students about natural calamities and extreme climatic conditions Perform fire safety management and mock drills Ensure emergency equipment and facilities like fire extinguishers and water hoses, first aid boxes, whistles, torch-lights, etc. at the construction campsite		
2. DESIGN PHASE				
a. Provision of health and sanitary services at the subproject sites	Untreated or insufficiently treated sewage would result in: Contaminated drinking water (ground and surface) Spread of diseases Degraded aquatic ecosystems	Provide sanitary facilities, per requirements of building codes and local municipal authorities Obtain building certification standards and requirements of the local authority Avoid sites where the water table is high or underlying geology makes contamination of groundwater likely	Check whether there is building certification for the sanitation facilities Check whether there are adequate numbers of sanitary facilities provided with respect to the student	Safeguards Cell at HPKVN, contractor(s)

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		Choose dry sanitation options or closed disposal systems instead of wet ones such as septic tanks or detention ponds Ensure adequate and maintained sanitary facilities Maintain required ratio of men/women toilets Maintain the drainage system to avoid water logging	population	
b. Construction of science laboratories at Rehan Women Polytechnic	Exposure of workers or students to toxic, carcinogenic, and teratogenic materials such as heavy metals, dyes, solvents, acids, etc. Lack of properly designed disposal mechanisms for chemical waste may lead to contamination of surface and groundwater resources Lack of safety measures in the design will lead to fire and increase occupational safety hazards	Design with proper storage, handling, and treatment facilities Avoid site near wetlands or water bodies	Review the design plans and inspect the foundation of the building initially	Design and safeguards team, contractor(s)
3. DEMOLITION PHASE				
a. Refurbishment or renovation of existing buildings for subprojects	Spoiled materials generated would obscure the landscape and may pose a health risk to the surrounding community	Dispose of solid waste according to the guidelines of the local authority Make arrangements with the local authority on waste disposal	Spot check and site observations on a quarterly basis	Implementing agency's site supervising team, environmental expert of Safeguards Cell, contractor(s)

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		Demarcate an area for waste collection within the construction sites and practice waste minimization practices such as recycling and composting		
b. Safe handling of asbestos	Health and safety hazards with loose asbestos fibers for the workers	Follow the guidelines in the ESMF Where needed, use only bonded asbestos cement sheeting that contains less than 20% of asbestos in any construction under this project The environmental specialist of the Safeguards Cell will closely monitor handling, transportation, and storage at site, and national and international regulations will be complied with	The implementing agency's site team should ensure that sheets containing less than 20% of asbestos are used, if unavoidable	Implementing agency's site team, contractor(s)
c. Traffic management plan	Spoiled material generated due to construction will need to be transported to the disposal site. This may lead to traffic congestion and inconvenience to the local population on roads surrounding the subproject construction sites.	The contractor, in consultation with implementing agency's supervising team, will prepare a traffic management plan for transport of spoils and debris. This traffic management plan will ensure no traffic congestion on surroundings due to project activities.	Surrounding roads	Implementing agency's supervising team at site
4. CONSTRUCTION PHASE				
a. Construction of Rehan Women Polytechnic, RLCs, CLCs, MCCs, etc. within existing building premises	Lack of solid waste management on-site can lead to the lack of general cleanliness due to waste material generated Waste material will be hazardous to	Make arrangements with the local authority on disposal of solid waste generated during construction Observe cleanliness and good housekeeping practices on-site	Solid waste storage is demarcated All construction solid waste removed at end of construction	Implementing agency's supervising team at site, contractor

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
	children's health and safety (i.e., injuries from corroded metal waste)	Demarcate waste storage area in operation Under no circumstances should the solid waste be burned on-site		
	Dust generation during construction activities may impact workers and community	Take steps to avoid dust emissions during loading and unloading of construction materials	Observation and control of dust emissions and the spraying of water Check whether construction materials are stored properly to avoid dust emission	Implementing agency's site team, contractor(s)
	Transportation of construction materials may block access roads and may lead to accessibility problems	Do not place construction materials and machinery in a manner that blocks any access road or path Unload construction materials, taking care not to block roads or paths Do not leave waste on the roads	Observation and field check	Implementing agency's site supervising team, contractor(s)
	Construction noise can disturb surroundings	Conduct work during daytime, if possible. Adhere to noise levels stipulated under Noise Pollution (Regulation and Control) Act, 1990 and adopt mitigation measures such as portable noise barrier, and regular monitoring of noise levels	Noise level during daytime 55 dB(A) and nighttime 45 dB(A) should be maintained	Implementing agency's site team, contractor(s)
	Injury due to lack of occupational safety measures and health risks	Contractor should encourage workers to use personal protective equipment to avoid injuries Ensure that first-aid	Check for the existence of adequate first-aid measures in the premises Check whether	Site team, contractor(s)

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		provisions are available on-site	workers are using personal protective equipment	
	Occupational safety issues: Noise generated from cement precasting machines and concrete pilling may pose an occupational health risk Activities such as loading and unloading, shuttering metal poles, and handling of heavy objects may result in accidental injury or crushing In the absence of nonfunctional sanitary facilities, health issues may arise at sites	Train maintenance and operations staff to monitor and repair machines to increase efficiency of the machines while reducing vibration and noise Maintain noise levels within stipulated limits Train workers on occupational risks involved in lifting heavy construction equipment Train workers on managing risks, emergencies, and first aid Ensure that sanitation facilities are working	Check whether all workers are in appropriate safety attire Proper maintenance of sanitation facilities	Implementing agency's site team, contractor(s)
b. Water for construction	Setting up of a storage facility will require water for consumption and cleaning of equipment	The contractor should arrange water for construction from local municipal authorities, or permission should be obtained from the Central or State Ground Water Board if groundwater is planned to be withdrawn Check water quality in a laboratory before construction To ensure minimal wastage of water, train maintenance and operations staff to monitor and repair	Secure water extraction permission or commitment letter from the local municipality for water supply for construction Periodic water quality testing (also indicated under construction)	Implementing agency's site team, contractor(s)

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		leaks from cracked containment structures, broken pipes, faulty valves, and similar structures Construct a suitable pump and overhead tank considering the daily requirement of water to ensure uninterrupted water supply		
	Unprotected wells can lead to safety and health issues	Provide dug well(s) within premises with a protective wall, as well as appropriate covering, to prevent external material from entering the well	Well-protected water sources should be in place and maintained	Implementing agency's site team, contractor(s)
	Arsenic contamination in drinking water may case health-related problems	Analyze local surrounding arsenic test results and determine whether tubewells are recommended or not Adopt rainwater harvesting, filter, and piped water supply After installation of tubewells, test for presence of arsenic in drinking water; use the water only if it satisfies the Drinking Water Standards (IS:10500)	Water quality test reports	Implementing agency's site team, contractor(s)
c. Waste oil from construction camps and construction sites	If not properly handled, discarded lubricants and grease may cause water and soil pollution at construction sites	Store waste oil generated from vehicle and machinery maintenance in drums. These drums should be placed on impervious surfaces. The oil should be sold to authorized recyclers for recovery. As much as possible, avoid maintaining vehicles on-site. These should be sent to garages in the city,	Stored oil and grease	Contractor(s), site supervisory staff from implementing agency

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		as subproject sites will be mostly near urban centers.		
d. Wastewater and solid waste collection and disposal at workers' camp	Untreated wastewater and nondisposal of solid waste will lead to sanitary problems and vector-borne diseases. Further, the community residing in the vicinity may file strong objections to civic authorities.	The contractor must ensure that wastewater from sanitation facilities (temporary toilets and kitchen facilities) is properly diverted to septic tanks or soak pits. The solid waste bins should be regularly emptied, and waste disposal carried out at a disposal site to be identified in consultation with supervising staff.	Solid waste collection bins, wastewater reception facilities (septic tanks, soak pits, etc.)	Contractor(s), site supervisory staff from implementing agency
e. Traffic management plan	The transportation of construction materials, debris, and spoils from construction site may lead to traffic congestion in the surroundings of subproject construction sites	The contractor, in consultation with the implementing agency's supervising team, will prepare a traffic management plan for transport of spoils and debris. This traffic management plan will ensure that there will be no traffic congestion in the surroundings due to transportation of construction materials to the subproject construction sites, and transportation of spoils and debris from the construction site to the disposal site.	Surrounding roads	Implementing agency's supervising team on-site
f. Safe handling and use of asbestos	Health and safety hazards for workers from loose asbestos fibers	Avoid using asbestos as much as possible. In case it is unavoidable, the following mitigations will be followed: a. Follow the guidelines in the ESMF, i.e., where needed, only bonded asbestos cement sheeting that contains less	The implementing agency's site team, and the environmental expert of the safeguards cell, should ensure that sheets containing less than 20% of asbestos are used, if	Implementing agency's site team, environmental expert of safeguards cell, contractor(s)

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		than 20% of asbestos should be used in any construction under this project b. The environmental specialist of the safeguards cell will closely monitor handling, transportation, and storage at the site, and national and international regulations are to be complied with	unavoidable	
g. On-site emergency plan	Handling of emergencies resulting from accidents at the subproject construction site	The contractor in consultation with the Safeguards Cell will prepare an on-site emergency plan for accidental scenarios such as fire, fuel oil, LPG spillage, leakage of any flammable gas such as acetylene, etc. Necessary fire protection measures at the site shall be made, and details of contacts with nearest fire station will also be recorded.	Regular updating of on-site emergency plan during the construction phase	Implementing agency's site team, environmental expert of safeguards cell, contractor(s)
h. Handling and treatment of wastewater generated from construction site	Wastewater generated from construction sites, if not properly handled and treated, may cause unhygienic conditions at the site and may cause mosquito breeding and contamination of groundwater.	The contractor will prepare a drainage plan for the site for the construction phase. The storm water will be properly diverted to natural drainage channel. Waste generated due to vehicle and equipment washing and curing of concrete shall be properly collected and diverted to septic tanks; or may be collected in temporarily constructed, lined, and covered underground sump. From this sump, the wastewater	Wastewater collection, handling, and transport	Implementing agency's site supervision team, environmental expert of safeguards cell, contractor(s)

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
		collected may be transported to the nearest sewage treatment plant through tankers.		
5. OPERATION AND MANAGEMENT PHASE				
a. Solid waste management: **(i) domestic solid waste disposal**	Lack of management of domestic wastewater may cause health risks and ruin the landscape Since solid waste collection will not be daily, there is risk of solid waste piling up on-site. These can lead to an increase in vector population and health risks.	Ensure demarcated solid waste storage areas with source separation for organic waste and other domestic nonorganic waste. This storage facility should be able to accommodate solid waste up to 7 days. The contractor and local staff of the implementing agency should tie up with local municipal authorities for waste disposal. Recycle construction waste as much as possible.	The inorganic and organic waste may be disposed on a weekly basis or as scheduled per arrangement with local authorities Cleanliness and good housekeeping practices on-site Review solid waste management plan during site visits	Management team, safeguards cell
(ii) domestic liquid waste disposal	Lack of disposal of domestic wastewater will result in health issues to the workers	Ensure that the domestic wastewater is directed to soakage pits in conformity with local authority guidelines. If possible, domestic liquid waste may be connected to a local sewer line available near the site, or to a package sewage treatment plant.	Check the design plans for soak pits and septic tanks	Implementing agency management team, Safeguards Cell
(iii) Hazardous waste and e-waste disposal	Lack of disposal mechanisms for hazardous waste from laboratories may lead to pollution of surface water resources and land due to leaching Potential for	The Safeguards Cell should identify the subprojects generating hazardous waste. For these subprojects, hazardous waste disposal authorization should be obtained from the SPCB, per the requirements of Hazardous Waste (Management and	Check for adoption of existing disposal guidelines and plans	Implementing agency management team, safeguards cell

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
	increased health risk among students and teachers Lack of a disposal mechanism for e-waste (computer and information technology-based waste management)	Handling) Rules, 2011. Transport waste to the nearest hazardous waste disposal site for safe disposal E- waste should be disposed of per provisions of the Waste (Management and Handling) Rules, 2011 of MOEF		
b. Waste from science laboratories at Rehan Women Polytechnic	Lack of properly designed disposal mechanisms for hazardous waste, and fumes from laboratories may lead to contamination of surface and groundwater resources Lack of safety measures in the design of the Rehan Women Polytechnic will lead to fire and increase occupational safety hazards	Ensure regular maintenance of gas tubes and taps to ensure the maintenance of fume cupboards Provide safety measures in the design such as good ventilation and thermal circulation Install fire extinguishers Display the laboratory safety manual for students and teachers Provide safety wear—face masks, goggles, noise-isolating ear plugs	Checking for adoption of existing disposal guidelines and plans	Implementing agency's management team
c. Sanitary facilities	Discharge of untreated or partially treated sewage, and lack of maintenance of sanitary facilities may lead to: Contamination of drinking water (ground and surface) Spread of disease among the student population and the	Ensure proper maintenance of sanitary facilities Train maintenance and operation staff to monitor and repair leaks from cracked containment structures, broken pipes, faulty valves, and similar structures Provide a suitable pump and overhead tank, considering the daily requirement of	Observation and site reports to check the proper maintenance of pipes in sanitary facilities	Implementing agency's management team

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
	surrounding community Degradation of aquatic ecosystems	water, to ensure uninterrupted water supply for the sanitary facilities Maintain a minimum distance of 15 meters between a tubewell and latrine to prevent contamination of water resources In case of shallow hand tubewells, this distance should be 20 meters as horizontal filters are used in these types of tubewells Provide separate toilets (boys' and girls' washrooms) situated from each other at an adequate distance Ensure adequate water supply in the toilets Each latrine should be designed for about 30 pupils (20 for girls and 40 for boys)		
d. Canteen	Lack of domestic waste management may lead to land and water contamination; increase vector-borne diseases; spoil the aesthetic beauty of the Rehan Women Polytechnic and the environment of the educational institute; and give rise to odor	Handle, store, and transport domestic waste for disposal following provisions of the Municipal Waste (Management and Handling) Rules, 2000	The waste should be segregated and disposed of with the support of the local municipality	Implementing agency's management team
	Lack of training in canteen	Provide training in food handling to	Hygienic conditions at	Implementing agency 's

Environmental Management Plan	Environmental Impacts	Mitigation Measure(s)	Monitoring Sources	Responsible Party(s)
	commodity handling can lead to wastage and hygiene issues	minimize wastage Ensure that food handlers practice personal hygiene, and inform the supervisor if an employee is sick or injured Maintain good housekeeping practices per food hygiene regulations	the canteen, and training of the canteen management team	management team

ADB = Asian Development Bank, CLC = city livelihood center, dB = decibel, HPKVN = Himachal Pradesh Kaushal Vikas Nigam, LPG = liquefied petroleum gas, MCC = model career center, RLC = rural livelihood center, SFD = State Forest Department, SPCB = State Pollution Control Board, SPS = Safeguard Policy Statement.
Source: Asian Development Bank.

B. Guidelines for preparing site-specific environmental management plans under HPSDP

1. The subprojects in HPSDP are of a relatively small size. The impacts will be localized and restricted to the construction phase. Environment management plans (EMP) will be prepared to cover the design and pre construction, construction, and operation phases of the training facilities.

a. For the design and pre-construction phase, the following will be considered:

(i) minimization of impact on local aesthetics through appropriate design around proposed subproject site;
(ii) mitigation measures in design to ensure stability of slopes since Himachal Pradesh is a hilly state;
(iii) design to cater for increased storm water runoff to ensure quick and efficient drainage during construction and operation phases;
(iv) integration of energy conservation and energy efficient measures into the design;
(v) baseline monitoring with respect to ambient air quality, water quality and noise levels;
(vi) location and dimensions of construction camp;
(vii) identification of licensed and authorized sources for procurement of construction materials;
(viii) identification of haul roads to be used for transporting construction material;
(ix) relevant occupational, safety and health indicators; and
(x) mitigation measures for site clearance.

b. For the construction phase, the following will be considered: - sanitation facilities at construction camp

(i) traffic circulation around the subproject site;

(ii) availability of potable drinking water at the construction camp and site;
(iii) generation, collection, and disposal of construction waste;
(iv) safe stockpiling of construction materials;
(v) potential soil erosion and corresponding mitigation measures;
(vi) potential for water pollution and corresponding mitigation measures;
(vii) siltation in water bodies due to spillage of construction waste;
(viii) generation of dust;
(ix) emission from construction machinery and supply trucks;
(x) noise pollution due to construction;
(xi) impacts on local flora and fauna;
(xii) safety measures during construction; and
(xiii) clearance of construction camp and rehabilitation of camp site.

c. For the operation phase, the following will be considered: :

(i) monitoring of environmental conditions during operation phase;
(ii) safe disposal of waste from the operation and maintenance of solar PV cells; and
(iii) integration of onsite emergency plan into the district management plan.

d. Environmental Monitoring Plan

2. Environmental monitoring plans will be prepared for the pre-construction, construction, and operation phases. The plans will specify the key parameters to be monitored along with the frequency and number of locations. There will be monitoring of ambient air quality, water quality and noise levels at camp and construction site of each subproject. Adequate funds will be allocated for monitoring in the EMP budget. .

e. Capacity building training programs

3. The PMU with assistance of the safeguards consultants fielded by the PMC firm will organize capacity building training programs for the contractors and relevant staff of the implementing agencies. Suitable training programs modules will be designed and adequate funds will be allocated in the EMP budget.

f. EMP Budget

4. The EMP budget will comprise costs estimated for monitoring, training, compensatory tree and shrubs plantation, and any other cost foreseen. It will be included in overall project cost. The PMU will ensure that EMP is included in the civil works contract documents so that the civil contractors are able to abide by the provisions during construction.

APPENDIX 7: OUTLINE OF AN IEE REPORT

A. Abbreviations

B. Executive Summary

a. Introduction
b. Description of Project Components
c. Description of Existing Subproject Environment
d. Environmental Impacts and Mitigation Measures
e. Environmental Management Plan
f. Public Consultation and Information Disclosure
g. Findings and Recommendations
h. Conclusions

Appendices

1. Categorization Form
2. Rapid Environmental Assessment Checklist
3. Checklist for Climate Risk Screening
4. Brief Description of Himachal Pradesh Skills Development Project
5. Site Photographs
6. Land Records from Revenue Department showing clear title of Government of Himachal Pradesh
7. Sample Traffic Management Plan
8. Photographs and Attendance Sheet of Public Consultations

APPENDIX 8: HANDLING, TRANSPORTATION, AND USE OF ASBESTOS

A. Guidelines on Asbestos Use in Construction

1. The main risk of exposure to asbestos comes from fibers that are easily airborne following minimal pressures such as cutting of asbestos cement products. Renovations, repairs, and decommission of buildings containing asbestos cement products such as roof sheets can pose a risk.

2. Health hazards from breathing asbestos dust include asbestosis, a lung-scarring disease; and forms of cancer, such as mesothelioma. In asbestos cement corrugated sheets, the fiber is present in nonfriable forms, which means that the fiber is embedded in the cement and not readily airborne. Once the roof is completed, the risk from it is minimized.

3. Although the World Bank Group's Good Practice Note on Asbestos and its Health and Safety Guidelines[21] does not encourage the use of asbestos products in construction, in light of their practical uses for construction of subproject-related infrastructure, cost considerations, availability in local markets, and lack of feasible alternatives, use of asbestos may be the most feasible option at some work sites. To minimize the health risks that asbestos products pose, the World Bank's Health and Safety Guidelines and other sources should be followed. Application of the International Labor Organization's (ILO) convention guidelines as stated below are recommended for the safe use of asbestos.

4. The ILO's Asbestos Convention requirements include:

(i) work clothing to be provided by employers;
(ii) double changing rooms and wash facilities to prevent dust from clinging to street clothes;
(iii) training of workers on the health hazards posed to themselves and their families;
(iv) periodic medical examinations of workers;
(v) periodic air monitoring of the work environment with records retained for 30 years;
(vi) development of a work plan for demolition work to protect workers and provide for proper waste disposal; and

B. Construction Phase

5. To minimize the risk of damage from asbestos cement sheets, transportation of material must be done with care. Where possible, sheets should be transported in airtight containers or with dust covers. During installation of sheets, ensure that the damage is minimized. Use of power tools to drill holes that may release particles should be kept to a minimum. Protective sheets (i.e., insulation foil) should be placed between the asbestos cement sheets and the classrooms and lecture theaters to reduce the risk of entry of minute particles into rooms.

6. Workers who handle and install asbestos cement sheets should take precautions to minimize exposure by wearing protective masks and showering to minimize the spread of dust. Work clothes used during the installation of sheets should be washed, and workers need to

[21] The World Bank Group. 2009. *Good Practice Note: Asbestos: Occupational and Community Health Issues.* Washington, DC.

change into clean clothes before leaving the construction site. Workers should be made aware of the risks of asbestos cement sheets, and how to minimize these risks.

C. Decommissioning

7. The contractors should dispose of waste containing asbestos in a manner that does not pose a health risk to workers concerned or the nearby population. They should consult the State Pollution Control Board to obtain guidance on proper disposal. The contractors should be encouraged to develop an asbestos management plan that identifies the content (whether it is in friable form and has potential to release fibers), and proper removal procedures. During the removal of asbestos cement sheets, workers should wear proper protective gear such as masks, and shower to prevent the spread of dust. Clothes worn during this process should be washed, and workers should change into clean clothes prior to leaving the construction site.

8. Workers who are, or have been, exposed to asbestos in their occupational activities should be provided with medical examinations as are necessary to supervise their health, and to diagnose occupational diseases caused by the exposure to asbestos. For the prevention of disease and functional impairment related to asbestos exposure, all workers assigned to work involving asbestos exposure should be provided with

(i) a medical examination;
(ii) periodic medical examinations at appropriate intervals (at least every 3 years);
(iii) other tests and investigations, particularly chest radiographs and lung function tests, which may be necessary to monitor their state of health in relation to the occupational hazard, and to identify early indicators of diseases caused by asbestos; and
(iv) a copy of their medical record.

9. The above requirements will be based on the type of construction and its magnitude.

APPENDIX 9: ENVIRONMENTAL SAFEGUARD REQUIREMENTS IN CONTRACTS

1. The following environmental safeguard requirements will be included in contracts as part of the environmental management plan (EMP).

A. General

2. The contractors and their employees will adhere to the mitigation measures laid down in the EMP, and take all necessary measures required to prevent harm and minimize the impact of operations on nearby communities. If the subproject is within the premises of existing educational or training institutes, then the impact on them should also be minimal. The contractor shall avoid the use of heavy or noisy equipment during class hours in the institutes or buildings if the subproject is within or close to an educational institute. Upon completion of construction, the contractor will take full responsibility for cleaning the construction premises.

B. Disposal of Solid Waste and Debris

3. All construction debris and residual spoiled material including any leftover earth shall be disposed of by the contractor at a location approved by the local municipal bodies. The debris and spoils shall be disposed of in such a manner that (i) waterways and drainage paths are not blocked, (ii) the disposed materials are not washed away by floods, and (iii) such materials do not create a public nuisance.

C. Protection of Ground Cover and Vegetation

4. Contractors shall provide necessary instructions to their workers not to destroy ground vegetation covers unnecessarily.

D. Soil Erosion

5. Contractors shall take all steps necessary to ensure the stability of slopes, including those related to temporary works. Work resulting in erosion should be avoided during the raining season. If activities need to be continued during the rainy season, prior approval must be obtained from the implementing agency and local authorities by submitting a proposal on actions the contractors will undertake to prevent erosion. The work, permanent or temporary, shall consist of measures to control soil erosion, sedimentation, and water pollution. Typical measures would include grass cover, slope drains, and retaining walls.

E. Labor Camps (Construction Workers' Camp)

6. Labor camps will be provided with adequate and appropriate facilities for disposal of sewerage and solid waste. The sewage systems should be properly designed, built, and operated so that no pollution of ground or adjacent water bodies or watercourses takes place. Garbage bins will be provided in the camps and emptied regularly. Garbage should be disposed of in a hygienic manner. The contractor will ensure good housekeeping at the construction workers' camp and construction sites. For this, there will be proper storage of construction materials. Waste oil generated will be stored in drums. The construction material and machinery should be parked at the allocated places in the camp and construction site.

7. The Contractors will ensure that all camps are kept clean and hygienic. Necessary measures shall be taken to prevent breeding of vectors and diseases. The contractors will promptly report any outbreak of infectious disease of importance at a labor camp to the medical officer of health, or to the public health inspector of the area. They will dismantle the labor

camps after the construction work is completed. They will empty and/or close septic tanks, remove all garbage and debris, and clean and restore the area back to its former condition.

F. Dust Management

8. To prevent dust pollution during the construction period, contractors shall carry out regular watering of the construction site, and cover on-site material stocks to prevent dust and other particles from being airborne. All vehicles delivering materials to the sites should be covered to avoid spillage and dust emission.

G. Health and Safety

9. The contractors shall take necessary actions to prevent breeding of mosquitoes at places of work, labor camps, material stores, etc. Stagnation of water in all areas including gutters, used and empty cans, and containers shall be prevented.

10. The contractors shall keep all places of work, labor camps, plus office and store buildings, clean and devoid of garbage to prevent breeding of rats and other vectors such as flies. Construction vehicles, machinery, and equipment shall be used and stationed only in designated areas of the work site and should not pose any danger to the community, students, teachers, and administrative staff.

11. Material stockpiles shall be located so as not to interfere with the operations of industrial training institutes, educational institutes, and any other public utility building in the vicinity. Construction sites should be fenced off temporarily to avoid any risk to the nearby community, students, teachers, and administrative staff. Contractors shall enforce vehicle speed limits for construction vehicles in areas around and inside construction premises.

H. Sourcing of Raw Material

12. The contractors shall ensure that all raw materials such as sand, rubble, metal, and timber required for construction are sourced from licensed sources. If the contractors plan to operate own quarries or sand pits, all necessary approvals should be obtained from relevant authorities.

I. Inclusion of Environmental Management Plan in Contract Document

13. To address all probable adverse impacts, the EMP table will be made part of the contract documents.

APPENDIX 10: SAFEGUARDS CELL

1. Since the Himachal Pradesh Kaushal Vikas Nigam (HPKVN) is established as a specialized company to lead in delivering the mandate of the Himachal Pradesh State Skill Development Mission, it will establish a dedicated Safeguards Cell by nominating a senior officer with the relevant experience of handling environmental and social safeguards issues for the state government.[22] HPKVN will be assisted by the Public Works Department (PWD) will be fully responsible for the procurement and supervision of all civil works, i.e. construction of various training facilities

2. The project management consulting (PMC) firm to be engaged under the proposed loan will have experienced environment and social safeguards experts. These experts will assist PWD in preparing IEEs and EMPs for all subprojects. The PMC will also assist PWD and HPKVN in preparing semi-annual safeguards monitoring reports as required by ADB.

3. The Safeguards Cell will coordinate with PWD and other implementing agencies as follows:

(i) Conduct or supervise safeguards compliance reviews of each subproject.
(ii) Undertake environmental assessments in coordination with the implementing agencies.
(iii) Check the adequacy and effectiveness of initial environmental evaluations, due diligence reports, environmental audits, and environmental management plans.
(iv) Prepare gender checklists, socioeconomic surveys, and develop social development indicators to monitor the gender inclusivity of development outputs and targets.
(v) Prepare sector-specific checklists, guidelines, reporting formats, and reports.
(vi) Prepare safeguard progress and performance reports.
(vii) Recruit safeguard training personnel or agencies.
(viii) Keep the environmental and social management framework updated, based on the project's operational experience.

[22] Previous experience of conducting environmental and social assessments, preparing initial environmental examinations and environmental management plans; and knowledge of the government's environment and social safeguards policies will be required.

APPENDIX 11: ENVIRONMENTAL MANAGEMENT PLAN COMPLIANCE REPORTING TABLE

Name of person filling out the table:

Date of visit:

Name of subproject and location details:

Contractor's name and details:

Construction Activity (from EMP)	Mitigation Measures Proposed in the EMP (From EMP)	Describe Level of Compliance	Reasons for Noncompliance	Suggestions for Improvement	Other Remarks

APPENDIX 12: NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time-Weighted Average	Concentrations in Ambient Air	
			Industrial, Residential, Rural, and Other Areas	**Ecologically Sensitive Areas** (designated by central government)
1	Sulphur dioxide (SO2) µg/m^3	Annual * 24 hours**	50 80	20 80
2	Nitrogen dioxide (NO2) µg/m^3	Annual * 24 hours **	40 80	30 80
3	Particulate matter (size less than 10 µm) or PM10 µg/m^3	Annual * 24 hours **	60 100	60 100
4	Particulate matter (size less than 2.5µm) or PM2.5 µg/m^3	Annual * 24 hours **	40 60	40 60
5	Ozone (O3) µg/m^3	8 hours** 1 hour**	100 180	100 180
6	Lead (Pb) µg/m^3	Annual * 24 hours **	0.50 1.00	0.50 1.00
7	Carbon monoxide (CO) µg/m^3	8 hours** 1 hour**	02 04	02 04
8	Ammonia (NH3) µg/m^3	Annual * 24 hours **	100 400	100 400
9	Benzene (C4H4) µg/m^3	Annual*	05	05
10	Benzo pyrene (BaP)-particulate phase only µg/m^3	Annual*	01	01
11	Arsenic (As) µg/m^3	Annual*	06	06
12	Nickel (Ni) µg/m^3	Annual*	20	20

*Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week at 24-hour intervals.

** 24-hour, 8-hour, or 1-hour monitored values as applicable shall be compiled with 98% of the time in a year. For 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Source: Government of India, Ministry of Environment and Forests. 2009.

APPENDIX 13: GENERAL STANDARDS FOR EFFLUENTS

Schedule IV: Environmental Protection Rules, 1986

Sl. No.	Parameter	Standards			
		Inland Surface Water	Public Sewers	Land for Irrigation	Marine Coastal Area
1.	Color and odor	*	*	*	*
2.	Suspended solids, mg/l	100	600	200	(a) For process wastewater: 100 (b) For cooling water effluent: 10% above total suspended matter of influent
3.	Particle size of suspended solids	Shall pass 850 micron IS sieve	–	–	(a) Floatable solids, maximum 3 millimeters (b) Settleable solid, maximum 850 microns
4.	pH value	5.5–9.0	5.5–9.0	5.5–9.0	5.5–9.0
5.	Temperature	Shall not exceed 5^0C above the receiving water temperature	–	–	Shall not exceed 5^0C above the receiving water temperature
6.	Oil and grease, mg/l	10	20	10	20
7.	Total residual chlorine, mg/l	1.0	–	–	1.0
8.	Ammonical nitrogen, mg/l	50	50	–	50
9.	Total Kjeldahl nitrogen (N), mg/l)	100	–	–	100
10.	Free ammonia (NH_3), mg/l	5.0	–	–	5.0
11.	Biochemical oxygen demand (5 days at 20^0C), mg/l	30	350	100	100
12.	Chemical oxygen demand, mg/l	250	–	–	250
13.	Arsenic (As), mg/l	0.2	0.2	0.2	0.2
14.	Mercury (Hg), mg/l	0.01	0.01	–	0.01
15.	Lead (Pb), mg/l	0.1	1.0	–	2.0
16.	Cadmium (Cd), mg/l	2.0	1.0	–	2.0
17.	Hexavalent chromium (Cr^{+6}), mg/l	0.1	2.0	–	1.0
18.	Total chromium (Cr), mg/l	2.0	2.0	–	2.0
19.	Copper (Cu), mg/l	3.0	3.0	-	3.0
20.	Zinc (Zn), mg/l	5.0	15	-	15
21.	Selenium (Se), mg/l	0.05	0.05	-	0.05
22.	Nickel (Ni), mg/l	3.0	3.0	–	5.0
23.	Cyanide (Cn), mg/l	0.2	2.0	0.2	0.2

Sl. No.	Parameter	Standards			
		Inland Surface Water	**Public Sewers**	**Land for Irrigation**	**Marine Coastal Area**
24.	Fluoride (F), mg/l	2.0	15	–	15
25.	Dissolved phosphates (P), mg/l	5.0	–	–	–
26.	Sulphide (S), mg/l	2.0	–	–	5.0
27.	Phenolic compounds (as C_6H_5OH), mg/l	1.0	5.0	–	5.0
28.	Radioactive materials (a) Alpha emitters, uc/ml (b) Beta emitters, uc/ml	10^{-7} 10^{-6}	10^{-7} 10^{-6}	10^{-8} 10^{-7}	10^{-7} 10^{-6}
29.	Bioassay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
30.	Manganese (Mn), mg/l	2	2	–	2
31.	Iron (Fe), mg/l	3	3	–	3
32.	Vanadium (V), mg/l	0.2	0.2	–	0.2
33.	Nitrate nitrogen, mg/l	10	–	–	20

Note: * All efforts should be made to remove color and unpleasant odor as far as practicable. Schedule VI inserted by Rule 2 (d) of the Environment (Protection) Third Amendment Rules, 1993 notified vide G.S.R. 801 (E) dated 31.12.1993.

Source: Government of India, Central Pollution Control Board**.** 1992. Pollution Control Acts, Rules and Notifications. In *Pollution Control Law (PCL)/2/1992*. New Delhi.

APPENDIX 14: NATIONAL AMBIENT NOISE LEVEL STANDARDS

Area Code	Category	Limits in dB(A)	
		Daytime	Nighttime
A	Industrial	75	70
B	Commercial	65	55
C	Residential	55	45
D	Silence Zones	50	40

dB(A) = decibel.
Notes: Daytime is 6 a.m. to 10 p.m.; nighttime is 10 p.m. to 6 a.m. Silence zone is an area up to 100 meters around premises such as hospitals, educational institutions, and courts.
Source: Government of India, Central Pollution Control Board. New Delhi.

APPENDIX 15: PROPOSED HIMACHAL PRADESH SKILLS DEVELOPMENT PROJECT

Safeguards Screening of Potential Sites During Project Design (as of 20 April 2017)

1. Sub-project sites already screened by ADB consultants

Zone[a]	S. No.	Sites Visited	District	Status[b]	Owner Department	IEE Preparation	Designs Prepared by Architect Engaged by ADB
SHIMLA ZONE	1	RLC at Chopal	Shimla	Yes	DORD	A comprehensive IEE is being prepared for the sites within the Shimla zone	Yes. Included under advance contracting
	2	CLC at Kasumti	Shimla	Yes	DOUD		Yes. Not included under advance contracting since formalities with respect to technical sanctions are being worked out (between DOUD and the Municipal Corporation of Shimla)
	3	CLC at Nahan	Sirmaur	Yes	DOTE		Yes. Included under advance contracting
	4	RLC at Pragati Nagar	Shimla	Yes	DOTE		
	5	MCC at Rekong Peo	Kinnaur	Yes. Formalities with respect to landownership are being worked out	DOLE		No
	6	RLC at Rekong Peo	Kinnaur	Rejected, since the site does not have adequate space	DORD		No
MANDI ZONE	7	CLC at Shamshi	Kullu	Yes	DOTE	A comprehensive IEE is being prepared for the sites within the Mandi zone	Yes. Included under advance contracting
	8	RLC at Sundernagar	Mandi	Yes	DOTE		
	9	RLC at Sadayana	Mandi	Yes	DORD		

Zone[a]	S. No.	Sites Visited	District	Status[b]	Owner Department	IEE Preparation	Designs Prepared by Architect Engaged by ADB
HAMIRPUR ZONE	10	MCC at Hamirpur	Hamirpur	Yes	DOLE	A single comprehensive IEE report is being prepared for the sites within the Hamirpur zone	Yes
	11	RLC at Mahal Sasan	Hamirpur	Rejected, since the site does not have adequate space DORD is looking for an alternative site near Mahal Sasan	DORD		Not required
	12	RLC at the ITI campus of Naduan-at-Rail	Hamirpur	Yes. This site may be considered in the next phase if DORD is unable to propose a better site	DOTE		No
KANGRA ZONE	13	CLC at Mohal Sidhbari	Kangra	Yes	DOUD	IEE prepared and submitted for ADB's review as part of the advance contracting package	Yes
	14	RLC at Nagrota Bagwan	Kangra	Rejected as the site is close to a river. Also, construction work would involve cutting of several trees	DOTE	Not required since the site has been rejected	Not required
	15	RLC site at ITI Shahpur	Kangra	Yes. This site may be considered in the next phase if DORD is unable to propose a better site	DOTE	IEE will be prepared after a final decision is made with respect to the construction of the RLC	No

ADB = Asian Development Bank, CLC = city livelihood center, DOLE = Department of Labor and Employment, DOTE = Department of Technical Education, DORD = Department of Rural Development, DOUD = Department of Urban Development, IEE = initial environmental examination, ITI = industrial training institute, MCC = model career center, PWD = Public Works Department, RLC = rural livelihood center.

[a] The entire state of Himachal Pradesh (12 districts) is divided into four administrative zones by PWD. Each PWD zone is under a chief engineer.

[b] Sites have been screened using ADB's environmental and social safeguards screening checklist.

Note: The ADB consultants include individual consultants (an environment and social safeguards specialist, an architect, a labor economist, and a gender specialist), plus relevant consultants from the consulting firm which has been engaged under the project preparatory technical assistance project. ADB. 2015. *Technical Assistance to India for Supporting Skill Development in Himachal Pradesh*. Manila (TA 9060-IND).

Source: Asian Development Bank.

2. Sites to be Visited by ADB Consultants between April 2017 and June 2017

Zone	S. No.	Sites to be Visited	District	IEE Preparation	Social Due Diligence Report Preparation	Designs Prepared by Architect Engaged by ADB
HAMIRPUR ZONE	1	CLC Una	Una	IEEs will be finalized by end of June 2017 after detailed site visit	Will be finalized by end of June 2017 after detailed site visit	Yes
SHIMLA ZONE	2	MCC Nahan	Sirmaur	IEEs will be finalized by end of June 2017 after detailed site visit	Will be finalized by end of June 2017 after detailed site visit	
	3	RLC at Bharmor	Chamba			
KANGRA ZONE	4	Site for Rehan Women Polytechnic at Rehan	Kangra	Preliminary screening of the site was undertaken in May 2016. The required clearances from the Revenue Department have been received. Topographic surveys and soil testing have been completed IEE will be finalized by end of May 2017 after detailed site visit	Will be finalized by end of May 2017 after detailed site visit	Yes

CLC = city livelihood center, IEE = initial environmental examination, MCC = model career center, RLC = rural livelihood center.
Note: The ADB consultants include individual consultants (an environment and social safeguards specialist, an architect, a labor economist, and a gender specialist), plus relevant consultants from the consulting firm which has been engaged under the project preparatory technical assistance project. ADB. 2015. *Technical Assistance to India for Supporting Skill Development in Himachal Pradesh*. Manila (TA 9060-IND).
Source: Asian Development Bank.