

PAKISTAN

**ENVIRONMENTAL AND SOCIAL SCREENING AND
ASSESSMENT FRAMEWORK**

**FOR
EARTHQUAKE EMERGENCY RECOVERY PROGRAM –
PHASE I AND
EARTHQUAKE EMERGENCY RECOVERY PROGRAM –
PHASE II
(EMERGENCY RECOVERY CREDIT)**

NOVEMBER 2, 2005

PAKISTAN

ENVIRONMENTAL AND SOCIAL SCREENING AND ASSESSMENT FRAMEWORK

I. Objectives

1. The Environmental and Social Screening and Assessment Framework (ESSAF) provides general policies, guidelines, codes of practice and procedures to be integrated into the implementation of the initial phase of World Bank-supported emergency reconstruction operations in Pakistan. This Framework has been developed to ensure compliance with the World Bank's safeguard policies in connection with the emergency earthquake reconstruction work in Pakistan. The objective of the ESSAF is to ensure that activities under the proposed reconstruction operations will address the following issues:

- ❖ Protect human health;
- ❖ Prevent or compensate any loss of livelihood;
- ❖ Minimize environmental degradation as a result of either individual subprojects or their cumulative effects;
- ❖ Minimize impacts on cultural property; and
- ❖ Enhance positive environmental and social outcomes.

II. General Principles

2. Recognizing the emergency nature of the proposed relief and reconstruction operations and the related need for providing immediate assistance, while at the same time ensuring due diligence in managing potential environmental and social risks, the ESSAF is based on the following principles:

- ❖ The proposed operations will support multiple subprojects, the detailed designs of which may not be known at appraisal. To ensure effective application of the World Bank's safeguard policies, the ESSAF provides guidance on the approach to be taken during implementation for the selection and design of subprojects and the planning of mitigation measures;
- ❖ Environmental category 'A' subprojects are not expected in the first year's subprojects. If any do occur, EAs for specific subprojects will be prepared during implementation, instead of before appraisal. Corrective measures in the form of an Environmental Management Plan will be built into either the emergency project or a future lending operation. The above is in accordance with paragraph 13 of OP 4.01 and paragraph 5 of BP 4.01;
- ❖ No resettlement issues are expected in any of the FY04 operations for the first year's subprojects. If any do occur, Resettlement Plans (RPs), and/or Resettlement Policy Frameworks for specific subprojects will be prepared. However, these RPs can be prepared during implementation, provided a waiver on the submission of RPs prior to appraisal is given by the MD. The waiver would also specify a timetable for the preparation of the RPs, in accordance with the requirements of OP 4.12, during implementation;
- ❖ The proposed emergency reconstruction operations will finance feasibility and detailed design studies for these subsequent investments, which will include environmental assessments and social studies as required by World Bank safeguard policies;
- ❖ Project design and subproject selection will aim at maintaining regional balance and equity among ethnic and religious groups in the affected areas of North West Frontier Province (NWFP)

and Azad Jammu Kashmir (AJK), considering variations in population density. Employment opportunities within the projects will be available on an equal basis to all, on the basis of professional competence, irrespective of gender or ethnic or religious group. In all projects which require consultations with local communities or beneficiaries, consultations will be conducted to elicit the views of the male and female population; and

- ❖ Consultation and disclosure requirements will be simplified to meet the special needs of these operations. This ESSAF will be disclosed in the sector ministries and other public places in Pakistan and in the World Bank InfoShop.

III. Environmental and Social Screening and Assessment Framework (ESSAF)

3. This ESSAF has been developed specifically for these proposed operations to ensure due diligence, to avoid causing harm or exacerbating social tensions, and to ensure consistent treatment of social and environmental issues by all donors and the Governing of Pakistan. The purpose of this Framework is also to assist the Project Implementing Agencies in screening all the subprojects for their likely social and environmental impacts, identifying documentation and preparation requirements and prioritizing the investments.

4. **P 4.01 Environmental Assessment.** Most of the proposed subprojects are likely to focus on the repair, rehabilitation, reconstruction and upgrading (where necessary) of damaged buildings, roads, , bridges and infrastructure of critical importance. This would include power generation, transmission and distribution, water supply and sanitation, agricultural infrastructure, irrigation and drainage networks including dams, health care facilities and rehabilitation of primary and secondary schools as well as tertiary education facilities. Support may also be provided to restore degraded ecosystems, once studies to assess the damage on ecosystems are completed. The work in these areas will be done under OP 4.01 and it is anticipated that OP 4.04 on natural habitats may be triggered as well.

5. Considering the nature and magnitude of potential environmental impacts from relatively limited scale and magnitude of reconstruction works, the proposed operations are likely to be classified as category 'B'. The requirement to carry out an Environmental Analysis as part of project preparation can be waived but, for subprojects with potential adverse impacts, a limited Environmental Analysis will be done during project implementation. At the same time, prior to appraisal the implementing agency will agree to apply the following minimum standards during implementation: inclusion of standard environmental codes of practice (ECOP) in the repair and reconstruction bid documents of all subprojects; review and oversight of any major reconstruction works by specialists; implementation of environmentally and socially sound options for disposal of debris; and provisions for adequate budget and satisfactory institutional arrangements for monitoring effective implementation.

6. **OP 4.12 Involuntary Resettlement.** The need for involuntary resettlement or land acquisition in specific subproject areas will only be known during project implementation, when site-specific plans are available. Therefore subprojects will be screened for applicability of the resettlement policy and any subprojects involving involuntary resettlement or land acquisition will only be approved after preparation of a resettlement plan acceptable to the Bank. The safeguards framework will therefore include procedures for identifying eligible project-affected people, calculating and delivering compensation, and mechanisms for land dispute grievance redress.

7. Although land disputes of affectees of natural disasters are not covered by OP 4.12, the policy does cover those displaced by the project's activities. Even for those not covered by the policy, and to ensure effective poverty reduction, it is good practice for the borrower to undertake a social assessment and implement measures to minimize and mitigate adverse social impacts, particularly on poor and vulnerable groups. Well documented consultation mechanisms will be required to establish eligibility for

compensation. Absent refugees who later claim compensation will require clear legal remedies to resolve or adjudicate disputes.

8. **OP/BP 4.10 Indigenous Peoples.** There are no known indigenous peoples living in the affected areas and ethnicity is in any case only one of many factors determining vulnerability in the present situation in Pakistan. In this perspective, a social assessment with focus on potential vulnerability covering all affected groups is planned to ensure effective consultations and culturally appropriate benefits for each group, instead of focusing only on groups defined as “indigenous peoples”. As part of this analysis, subproject preparation will assess the vulnerability of different groups in particular project contexts (in terms of potential exclusion from project benefits, negative project impacts, and the need for specific culturally compatible mechanisms for participation, e.g. for women, permanently disabled), and will incorporate adequate measures to address such vulnerability in project design.

10. **OPN 11.03 Cultural Property.** The emergency operations may pose limited risks of damaging cultural property, assuming that they will not include large-scale excavations, movement of earth or demolition. Nevertheless, projects and subprojects will be reviewed for their potential impact on cultural property and clear procedures will be required for identification, protection of cultural property from theft, and treatment of discovered artifacts, and will be included in standard bidding documents. While not damaging cultural property, subproject preparation may later identify and include assistance for preservation of historic or archeological sites. If these opportunities occur, cultural property management plans would be prepared for those subprojects.

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11. **OP 4.37 Safety of Dams.** There are 2 dams over 15 meters high in AJK (Mangla Dam) and NWFP (Tarbela Dam), but were outside the area of influence of the earthquake. Investigation done on these dams show no impact or loss of structural integrity due to the earthquake. Therefore, these dams will not be included in the operations. However, because of local site conditions, even restoring smaller, earthen dams and linked irrigation infrastructure (partly abandoned, damaged or destroyed by civil unrest and war) will require application of standard engineering safety codes, inspection and evaluation of their safety status, and preparation and implementation of operation and maintenance procedures. Decisions on dam safety requirements will be made with the concurrence of the Bank.

12. **OP 4.04 Natural Habitats.** The earthquake may have damaged sensitive ecosystems and natural habitats due to landslides. While the extent of such damage is not known at this time, studies that will be conducted to assess damage to ecosystems and natural resources will be identify such damage or degradation, if any. Subsequently, ecosystem restoration activities are proposed and may be funded under this operation or by another donor agency. In addition, since the World Bank will not support sub-projects that involve conversion of critical natural habitats such as in Declared Forest Reserves, Wildlife Reserves and National Parks and Sanctuaries, an EA is required prior to initiation of the specific sub-project that may involve the conversion of natural habitats. Decisions on actions and requirements will be made with the concurrence of the Bank.

12. **OP 7.50 Projects on International Waterways.** There are two major rivers in the affected area that are shared with India—Jhelum and Neelum—which eventually become part of the Indus. There is a water sharing agreement between India and Pakistan in place. There are also potential water sharing issues with downstream users in provinces of Pakistan. Components affecting waters in riparian neighbors and downstream users will trigger the policy and project components will be screened to identify riparian issues and to ensure adequate notification, as required under the policy. Decisions on actions and requirements will be made with the concurrence of the Bank.

IV. Safeguard Screening and Mitigation

13. The selection, design, contracting, monitoring and evaluation of subprojects will be consistent with the following guidelines, codes of practice and requirements. The Governments of Pakistan and of Azad Jammu Kashmir will confirm that areas to be accessed during reconstruction and rehabilitation activities have been de-mined. The safeguard screening and mitigation process will include:

- ❖ Overall guidelines for environmental and social aspects of Earthquake Emergency Recovery Program (Attachment 1). This provides guidelines for addressing potential environmental and social issues that are eligible for funding under Phase I and Phase II of the Emergency Recovery Program. Typical activities envisaged to be financed are listed in the Attachment, with typical environmental and social concerns and opportunities as well as an identification of typical environmental and social mitigation measures, which are to be included in the sub-projects. The checklists prepared for each sub-project will enable the preparation of detailed Environmental Management Plans;
- ❖ List of negative sub-project attributes (Attachment 2);
- ❖ A proposed checklist of likely environment and social impacts to be filled out for each subproject or group of subprojects (Attachment 3);
- ❖ Guidelines for land and asset acquisition, entitlements and compensation (Attachment 4);
- ❖ Procedures for the protection of cultural property, including the chance discovery of archaeological artifacts, unrecorded graveyards and burial sites (Attachment 5);
- ❖ A sample Environmental Safeguards procedures for Inclusion in the Technical Specifications of Contracts (Attachment 6).

V. Responsibilities for Safeguard Screening and Mitigation

14. A number of Ministries will act as the implementing agencies for the proposed emergency operations, including the Ministries of Environment, Communication, Housing and Construction, Water and Power, Public Works, Women's Development, Social Welfare and Special Education, Food and Agriculture Education and Health, as well as the Water and Power Development Authority (WAPDA) and provincial ministries responsible for the subjects of water and sanitation and irrigation in NWFP and AJK. . Each Implementing Agency be responsible for applying the safeguard screening and mitigation requirements to its own subprojects. Within each Ministry, a Safeguards Focal Point (SFP) will be identified with responsibility for overseeing the implementation of the Framework. The federal Ministry of Environment/Environmental Protection Agency (EPA) and the EPAs of NWFP and AJK will be responsible for environmental clearance for operations or sub-projects that require statutory environmental clearance, as required by law. Although the GOP and AJK's clearance procedure is adequate and fairly reliable, IDA will still review a samples of the EAs prepared under each sub-component and provide necessary concurrence for the approval of disbursements of funds.

VI. Capacity-Building and Monitoring of Safeguard Framework Implementation

15. As part of the capacity-building to be provided for implementation of the proposed operations, the Safeguards Focal Points and relevant staff of the concerned Ministries will also receive training in ESSAF's application. The Environmental Protection Agency (EPA) of the federal government and the

EPAs of NWFP and AJK will be trained in evaluation of environmental assessments prepared under this operation.

16. To assist in this capacity-building, and to provide subsequent guidance and review of the ESSAF's application, the World Bank and subsequently the Governments of Pakistan and of Azad Jammu Kashmir will contract specialist services for environmental and social safeguards. During supervision of these operations, the World Bank will assess the implementation of the ESSAF, and recommend additional strengthening, if required.

VII. Consultation and Disclosure

17. This ESSAF will be shared with the related Government Ministries of Pakistan and AJK, concerned nongovernmental organizations and development partners of reconstruction of the earthquake affected areas. It will be disclosed in Urdu and English by the Ministry of Environment and the Environmental Protection Agencies of AJK and NWFP in Islamabad, Muzaffarabad and Peshawar. It will also be made available at the World Bank's InfoShop. Relevant subproject specific safeguard documents/mitigation plans prepared subsequently will also be disclosed.

18. The proposed operations will support a number of feasibility and detailed design studies for future infrastructure investments for which World Bank safeguard policies relating to consultation and disclosure will apply. In particular, for environmental Category A and B investments¹ proposed for future operations, the implementing agency will consult project-affected groups and local nongovernmental organizations on the project's environmental and social aspects, and will take their views into account. The implementing agency will initiate these consultations as early as possible, and for meaningful consultations, will provide relevant material in a timely manner prior to consultation, in a form and language(s) that are understandable and accessible to the groups being consulted.

19. For Category A projects, the implementing agency will consult these groups at least twice: (a) shortly after the environmental screening and prior to finalization of the terms of reference for the Environmental Impact Assessment (EIA); and (b) once a draft EIA report is prepared. For the initial consultation, the implementing agency will provide a summary of the proposed project's objectives, description, and potential impacts. For both Category A and B projects, the implementing agency will provide these groups with a summary of the EIA report's conclusions. In addition, the implementing agency will make the draft reports publicly available to project-affected groups and local nongovernmental organizations.

VIII. Guidelines for preparation of Environmental Management Plans

20. Having identified the potential impacts of the relevant sub-component, the next step of the EA process involves the identification and development of measures aimed at eliminating, offsetting and/or reducing impacts to levels that are environmentally acceptable during implementation and operation of the project (EMP). EMPs provide an essential link between the impacts predicted and mitigation measures specified within the EA and implementation and operation activities. World Bank guidelines state that detailed EMP's are essential elements for Category A projects, but for many Category B projects, a simple EMP alone will suffice. While there are no standard formats for EMPs, it is recognized that the format needs to fit the circumstances in which the EMP is being developed and the requirements, which it is designed to meet. EMPs should be prepared after taking into account comments and clearance conditions from both the relevant agency providing environmental clearance and IDA. Given below are the important elements that constitute an EMP.

a. Description of mitigation measures

¹ As defined in World Bank Operational Policy 4.01, Environmental Assessment.

21. Feasible and cost effective measures to minimise adverse impacts to acceptable levels should be specified with reference to each impact identified. Further, it should provide details on the conditions under which the mitigatory measure should be implemented (ex; routine or in the event of contingencies). The EMP also should distinguish between type of solution proposed (structural & non structural) and the phase in which it should become operable (design, construction and/or operational). Efforts should also be made to mainstream environmental and social aspects where possible.

b. Monitoring programme

22. In order to ensure that the proposed mitigatory measures have the intended results and complies with national standards and donor requirements, an environmental performance monitoring programme should be included in the EMP. The monitoring programme should give details of the following;

- Monitoring indicators to be measured for evaluating the performance of each mitigatory measure (for example national standards, engineering structures, extent of area replanted, etc).
- Monitoring mechanisms and methodologies
- Monitoring frequency
- Monitoring locations

c. Institutional arrangements

23. Institutions/parties responsible for implementing mitigatory measures and for monitoring their performance should be clearly identified. Where necessary, mechanisms for institutional co-ordination should be identified as often monitoring tends to involve more than one institution.

d. Implementing schedules

24. Timing, frequency and duration of mitigation measures with links to overall implementation schedule of the project should be specified.

e. Reporting procedures

25. Feedback mechanisms to inform the relevant parties on the progress and effectiveness of the mitigatory measures and monitoring itself should be specified. Guidelines on the type of information wanted and the presentation of feedback information should also be highlighted.

f. Cost estimates and sources of funds

26. Implementation of mitigatory measures mentioned in the EMP will involve an initial investment cost as well as recurrent costs. The EMP should include costs estimates for each measure and also identify sources of funding.

Overall Guidelines for Environmental and Social Aspects of Earthquake Recovery Program Phase I and Phase II

Notes:

This provides guidelines for addressing potential environmental and social issues that are eligible for funding under Phase I and Phase II of the Emergency Recovery Program. Typical activities envisaged to be financed are listed in the Attachment, with typical environmental and social concerns and opportunities as well as an identification of typical environmental and social mitigation measures, which are to be included in the sub-projects. The checklists prepared for each sub-project will enable the preparation of detailed Environmental Management Plans;

➤ Also see following attachments and other sections of this framework

➤ The concerns, opportunities and mitigation measures are cumulative in the rows for each sector (indicated by “+” bullets)

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
Drinking Water Supply	<ul style="list-style-type: none"> Rehabilitation of existing schemes 	<ul style="list-style-type: none"> Reconstruction/ Rehabilitation of drinking water schemes (e.g. piped schemes) Rehabilitation of tubewells/dug wells (incl. excavation of sand in wells) Installation of new tubewells/dugwells 	<ul style="list-style-type: none"> Public health concerns due to poor water quality (e.g. pathogens, salt water contamination, other contamination from sanitation, municipal waste or agricultural areas) Debris (sand, etc.) in wells Source sustainability Creation of stagnant pools No land acquisition / R&R issues expected 	<ul style="list-style-type: none"> Better reflection of community and gender and vulnerable group-specific needs and priorities More disaster-resistant construction where possible Possible beneficial use of debris (e.g. as fill, construction material) Provide cover for dug wells to reduce contamination Reduce cross-contamination from sanitation that could adversely impact source quality 	<ul style="list-style-type: none"> Gender-balanced consultation Test water quality (chemical and bacteriological) from proposed and nearby sources; subsequent monitoring Detection & prioritization of repairs Improve local drainage (e.g. around taps/ wells/ tube wells) Remove debris and dispose safely Pumping out of salt water Include chlorination / disinfection. Design of repairs by qualified specialists Operator training

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
	<ul style="list-style-type: none"> New Schemes serving <500 households 	<ul style="list-style-type: none"> Feasibility reports/Designs Construction 	<ul style="list-style-type: none"> Some Land acquisition, R&R possibly required Lack of clarification of rights/ responsibilities in use and maintenance of system and problems with access/ asset capture/ exclusion 	<ul style="list-style-type: none"> More robust design and construction Location of schemes to reduce vulnerability and provide effective amenity; serving poor areas Protection of source sustainability Use of systems with locally-available equipment/ materials/ skills 	<ul style="list-style-type: none"> Site clearance Community organization, planning and clarify rights and responsibilities Source sustainability report clearance Plans/designs to protect source quality/sustainability (e.g. recharge structures, catchment treatment) Use of Guidelines for Land and Asset Acquisition, Entitlements and Compensation and Cultural Property protection Monitoring/Reporting/Audits
	<ul style="list-style-type: none"> Building New Schemes serving >500 households 	<ul style="list-style-type: none"> Feasibility reports Detailed Designs Rapid assessment of aquifer quality 	<ul style="list-style-type: none"> Water source sustainability Downstream/ groundwater impact / land subsidence issues Substantial land acquisition, R&R may be required 	<ul style="list-style-type: none"> Maximize health and other utility benefits in operation 	<ul style="list-style-type: none"> Environmental and Social Assessment for schemes

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
Sanitation	<ul style="list-style-type: none"> • Latrines/ Toilets/ Cesspits 	<ul style="list-style-type: none"> • Rehabilitation of latrines • Provision of temporary latrines/ public toilets 	<ul style="list-style-type: none"> • Contamination of water supply/ surface and ground waters due to seepage/ flooding/ system choking • Public health concerns due to improper use/ handling and disposal of waste/ nightsoil 	<ul style="list-style-type: none"> • Maximize health benefits • Provision of public and private amenity • Nightsoil could be used for agricultural use after composting • Appropriate clothing and containers for nightsoil transportation 	<ul style="list-style-type: none"> • Appropriately located latrines/ toilets with due consideration for the needs of women/girls and the disabled • Well designed and constructed latrines/ toilets (with appropriate seals, drainage) – e.g. locate pit latrines >10m from any water source with a sealed base and separated by at least 2m of sand or loamy soil from groundwater table; Seal nightsoil latrines or septic tanks; drain outflows to working drain (or soakaway located > 10m from any water source) • Composting/disposal of nightsoil for adequate time (e.g. 6 weeks in direct sunlight with regular turn-over) to destroy pathogens • Relevant training/awareness for use/maintenance/health protection to users, operators, nightsoil handlers • Relevant health education/awareness of sanitation issues at household/community level
	<ul style="list-style-type: none"> • Rehabilitation of wastewater collection and treatment systems 	<ul style="list-style-type: none"> • Rehabilitation of previously existing collection systems (e.g. pipes, sewers) and treatment systems 	<ul style="list-style-type: none"> • Improper disposal of wastes/sludge • Inadequate treatment • Improper disposal/use of effluent 	<ul style="list-style-type: none"> • Adequate rehabilitation of collection and disposal systems • More disaster-resistant rehabilitation 	<ul style="list-style-type: none"> • Check status of disposal; Disposal plan with local consultation • Incorporate stronger construction where possible
	<ul style="list-style-type: none"> • New wastewater collection and treatment systems serving < 500 households 	<ul style="list-style-type: none"> • Construction of new small collection systems (e.g. pipes, sewers) • Construction of new small wastewater treatment systems 	<ul style="list-style-type: none"> • Improper siting • Need for R&R • Improper disposal of wastes/sludge • Inadequate treatment • Improper disposal/use of effluent 	<ul style="list-style-type: none"> • Adequate collection and disposal systems • More disaster-resistant rehabilitation 	<ul style="list-style-type: none"> • Site Clearance • Consultation • Treatment and Disposal plan (incl. adequate treatment, monitoring and safeguards for wastewater reuse or disposal into receiving waters) • Resettlement plan

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
	<ul style="list-style-type: none"> New wastewater collection and treatment systems serving > 500 households 	<ul style="list-style-type: none"> Plan for construction of new large collection systems (e.g. pipes, sewers) Plan for construction of new large wastewater treatment systems 	<ul style="list-style-type: none"> Same as above on larger scale 	<ul style="list-style-type: none"> Same as above on larger scale 	+ Environmental and Social Assessment for schemes

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
Solid Waste	<ul style="list-style-type: none"> Disposal of disaster-induced debris/waste 	<ul style="list-style-type: none"> Collection of debris Transport of debris Temporary storage of debris Creation of safe temporary and permanent disposal facilities (e.g. for storage, composting and landfilling) Re-transport of debris from temporary to permanent sites Management and monitoring of permanent storage/disposal of debris 	<ul style="list-style-type: none"> Lack of availability of appropriate sites, use of inappropriate sites, or improper use of good disposal sites Contamination of surface and ground water and public health concerns due to improper removal, handling, disposal of debris and waste Presence of disease vectors (insects, rats) and public health, safety and nuisance concerns Use of unsafe chemicals Possible R&R issues 	<ul style="list-style-type: none"> Disposal site location to minimize adverse impacts and costs Separation of debris by type (e.g. construction and compostable wastes hauled away and directly reusable materials left at site) to maximize benefits and minimize transportation/ disposal costs Sufficient frequency of collection Reuse/recycling of debris for beneficial purposes (e.g. use of directly reusable materials, compost, use for construction, fill, etc.) Provision of local employment 	<ul style="list-style-type: none"> Identification and rapid assessment of source, transport methods, temporary storage and permanent disposal options for construction and for compostable wastes (site locations cleared by suitable experts and in conformity with applicable legislations) Clear identification of and safe access to sites; protection of sites to minimize public health and safety concerns Professional management and logistics coordination Safe containment of waste during collection and transfer Minimize burning of waste Separation of wastes (especially for medical and hazardous wastes that require special handling) Use of safe chemicals (e.g. pesticides, rodenticides) – no chemicals to be financed from Extremely Hazardous Class Ia and Highly Hazardous Class Ib lists from FAO/WHO Pesticide classification; Class II chemicals can be used with clearance) Prevent dumping into water bodies, drains, ecologically-sensitive areas and the ocean Monitoring sites to prevent illegal/ clandestine dumping Resettlement Plan as required Training (for staff, community, rag-pickers)
	<ul style="list-style-type: none"> Rehabilitation of dumps/ transfer stations 	<ul style="list-style-type: none"> Identification of damages Rehabilitation of sites Procurement of equipment 	<ul style="list-style-type: none"> Debris disposal Procurement of chemicals 	<ul style="list-style-type: none"> Segregation of waste 	<ul style="list-style-type: none"> + Clearance of sites/ disposal of debris + Clear procurement of chemicals + Training

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
	<ul style="list-style-type: none"> New dumps/transfer stations serving < 5 tons/day 	<ul style="list-style-type: none"> Siting Design Construction 	<ul style="list-style-type: none"> Waste disposal/ containment to prevent contamination of water and public-health hazards Livelihood of rag-picking community Public health concerns for workers/ rag-pickers Possible R&R 	<ul style="list-style-type: none"> Segregation of waste Reuse/Recycling of waste Methane recovery Additional investments in final disposal site 	<ul style="list-style-type: none"> + Site clearance + Separation of waste (at source where possible) + Separate collection and disposal system for medical and hazardous wastes + Provide daily soil covering + Design dumping bays for rag-pickers to safely access waste prior to disposal + Use Resettlement Framework
	<ul style="list-style-type: none"> New dumps/transfer stations serving > 5 tons/day 	<ul style="list-style-type: none"> Siting Design 	<ul style="list-style-type: none"> Waste disposal Public health concerns for workers Possible R&R 	<ul style="list-style-type: none"> Segregation of waste Methane recovery 	<ul style="list-style-type: none"> + Environmental and Social Assessment for schemes
Shelters	<ul style="list-style-type: none"> Construction of new shelters/Rehabilitation of existing shelters 	<ul style="list-style-type: none"> Planning Design Construction of shelters 	<ul style="list-style-type: none"> Improper siting, design, construction, maintenance Lack of warning system Lack of knowledge on when to use shelter Possible R&R 	<ul style="list-style-type: none"> Disaster-resistant siting, design, construction, maintenance Explore alternative uses of shelters Provision of adequate water supply/storage, sanitation, solid waste management Provision of access to disabled 	<ul style="list-style-type: none"> • Consultation and awareness program • Incorporation of good disaster-resistance standards for siting, design, construction and operation • Community disaster management strategy (incl. warning system) • Use Resettlement Framework • Training/Awareness building
Housing and Public Buildings/ Schools	<ul style="list-style-type: none"> Rehabilitation of previously existing structures 	<ul style="list-style-type: none"> Removal of debris Repairs and rehabilitation 	<ul style="list-style-type: none"> Improper debris disposal Sourcing of materials from unsustainable sources Impacts on cultural property 	<ul style="list-style-type: none"> Use of quality materials Disaster-resistance Priority for rehabilitation of toilets and water tanks/systems Provision of access to disabled where possible 	<ul style="list-style-type: none"> • Consultation • Debris disposal in safe areas • Sourcing of materials cleared • Use of disaster-resistant techniques and materials where possible • Activities on or adjacent to historic buildings/sites are reviewed/ designed by qualified specialists

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
	<ul style="list-style-type: none"> • Building new structures on small-scale (emergency-related) 	<ul style="list-style-type: none"> • Planning • Construction of structures 	<ul style="list-style-type: none"> • Site location could be inappropriate (e.g. very vulnerable to disasters) • Sourcing of materials from unsustainable sources 	<ul style="list-style-type: none"> • Use of quality materials • Disaster-resistance (e.g. low-cost seismic designs) • Designs with adequate inclusion of safe water supply, sanitation and waste management • Provision of access to disabled where possible 	<ul style="list-style-type: none"> • Inclusive (gender, vulnerable groups, etc.,) consultation and community involvement in planning • Designs cleared by qualified personnel • Incorporation of more disaster-resistant building codes for design and construction • Determine any decommissioning triggers and procedures
	<ul style="list-style-type: none"> • Building new Structures on large-scale 	<ul style="list-style-type: none"> • Planning • Detailed Designs • Initiating Construction 	<ul style="list-style-type: none"> • Site location could be inappropriate (e.g. very vulnerable to disasters, aggravate political conflicts) • Sourcing of materials from unsustainable sources • Public health and nuisance concerns from improper water supply, sanitation and waste disposal • Waning commitment for adequate staffing and maintenance • R&R concerns 	<ul style="list-style-type: none"> • Use of quality materials • Disaster-resistance • Planning, design and maintenance is appropriate to local needs, traditions, culture and desires • Provision of access to disabled 	<p>Environment and social assessment, including:</p> <ul style="list-style-type: none"> • Inclusive consultation and needs assessment • Community involvement in planning • Designs, cleared by qualified experts, includes safe water supply, sanitation and solid waste management • Incorporation of more disaster-resistant building codes for design and construction • Comprehensive organizational and management plan, commitment from local government and public to maintain supplies and staff • R&R plan

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
	<ul style="list-style-type: none"> Building new Townships 	<ul style="list-style-type: none"> Siting Planning Initial Designs 	<ul style="list-style-type: none"> Site location could be inappropriate (e.g. very vulnerable to disasters) Sourcing of materials from unsustainable sources Inadequate access Public health and nuisance concerns from improper water supply, sanitation and waste disposal Waning commitment for adequate staffing and maintenance R&R concerns from large-scale relocation 	<ul style="list-style-type: none"> Incorporation of disaster mitigation measures into siting, design, materials, construction Provision of access to disabled 	<p>Environment and social assessment, including:</p> <ul style="list-style-type: none"> Inclusive consultation and needs assessment Community involvement in planning Mapping Analysis of alternative sites (including vulnerability analysis, community preferences) Incorporation of more disaster-resistant building codes for design and construction Incorporation of early warning / communication systems Maintenance, staffing plan Also see sections on drinking water, sanitation, solid waste management, roads, power R&R plan
Health	<ul style="list-style-type: none"> Rehabilitation of health care facilities 	<ul style="list-style-type: none"> Rehabilitation of damaged health-care facilities Provision of health services 	<ul style="list-style-type: none"> Biomedical waste handling and disposal (from debris and new waste) 	<ul style="list-style-type: none"> Improve health services & delivery Priority to rehabilitation of toilets and water tanks/ systems Improve public health awareness Provide disabled access where possible Improve access to poor 	<ul style="list-style-type: none"> Redesign checked by qualified experts Identify disposal options and waste management protocol; clearance of waste management plan by qualified experts Training/awareness programs
	<ul style="list-style-type: none"> Construction of new hospitals (<50 beds) 	<ul style="list-style-type: none"> Siting Planning/Designs Initiating Construction 	<ul style="list-style-type: none"> Appropriateness of site location Biomedical waste handling and disposal Inadequate water supply, sanitation or solid waste disposal Some R&R expected 	<ul style="list-style-type: none"> Incorporation of disaster mitigation measures into siting, design, materials, construction Provide disabled access Improve access to poor 	<ul style="list-style-type: none"> Inclusive consultation Site Clearance Designs cleared and construction supervised by qualified experts Disaster resistant construction Emergency response plans Resettlement Action Plan Training

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
	<ul style="list-style-type: none"> Construction of new hospitals (>50 beds) 	<ul style="list-style-type: none"> Siting Planning/Designs 	<ul style="list-style-type: none"> Appropriateness of site location Biomedical waste handling and disposal R&R expected 	<ul style="list-style-type: none"> Incorporation of disaster mitigation measures into siting, design, materials, construction Provide disabled access Improve access to poor 	<ul style="list-style-type: none"> + Environmental and Social Assessment for schemes
Roads	<ul style="list-style-type: none"> Repair of existing roads 	<ul style="list-style-type: none"> Repair of roads 	<ul style="list-style-type: none"> No R&R expected Inadequately rehabilitated borrow pits 	<ul style="list-style-type: none"> Erosion protection Durable construction 	<ul style="list-style-type: none"> Inclusive consultation Borrow pit rehabilitation
	<ul style="list-style-type: none"> New roads < 1 km Widening of existing roads by <1 m 	<ul style="list-style-type: none"> Determine location (for short connections) Determine Alignment Conduct surveys Detailed designs Construct road 	<ul style="list-style-type: none"> Improper Siting Limited R&R expected Inadequately rehabilitated borrow areas Cross-drainage problems 	<ul style="list-style-type: none"> Erosion protection Roadside plantation Durable construction 	<ul style="list-style-type: none"> Inclusive consultation and community involvement in planning Suitable design and construction supervision by qualified experts (incl. cross-drainage, energy dissipators, balancing cut and fill, vegetative measures for erosion-prone areas) Minimize loss of trees/natural vegetation and, where minor loss unavoidable, provide compensatory planting Suitable labor camp water, sanitation and waste disposal arrangements Rapid assessment of alternatives from environmental/social perspective Resettlement Action Plan Borrow area rehabilitation Maintenance responsibility assigned Training

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
	<ul style="list-style-type: none"> New Roads > 1 km Widening of Primary Road by > 1 m 	<ul style="list-style-type: none"> Determine location Determine Alignment Conduct surveys Detailed designs 	<ul style="list-style-type: none"> Significant R&R expected Restrictions on cross-drainage/ stagnation of drainage Increased sediments to water bodies due to erosion Increased run-off and flooding Loss of trees/vegetation Cultural property related to chance finds Inadequately rehabilitated borrow pits 	<ul style="list-style-type: none"> Erosion protection Roadside plantation Durable construction Labor camp arrangements (water, fuel, sanitation, waste management) Construction period worker health and safety Compensatory tree plantation/ revegetation Explore beneficial use of borrow-pits (e.g. for fishing) Local conflict resolution mechanism strengthening (e.g. for managing migration) 	<ul style="list-style-type: none"> + Environmental and Social Assessment for schemes
Dams	<ul style="list-style-type: none"> Damaged dam rehabilitation (<15m) 	<ul style="list-style-type: none"> Prioritization/ Classification Debris disposal Repair of dams (e.g. grouting, sluice replacement) in original site 	<ul style="list-style-type: none"> Improper debris disposal Inadequate repair Dam safety concerns No R&R expected 	<ul style="list-style-type: none"> Improved dam knowledge base and local emergency monitoring and management skills Rehabilitation of other associated structures (e.g. hydropower) Disaster-resistance 	<ul style="list-style-type: none"> Prioritization based on consequence (index-based/risk-based prioritization if high consequence) Inclusive consultation Clearance of sites for debris disposal Assess any changes in hydrology Rehabilitation design and construction oversight by qualified engineers (with independent experts as required) Assess and implement any temporary or longer-term evacuation requirements Training (incl. for officials and community-based surveillance and emergency preparedness for breaches)
	<ul style="list-style-type: none"> New dam construction (<5m) 	<ul style="list-style-type: none"> Determine location Conduct surveys Detailed designs Construction 	<ul style="list-style-type: none"> Improper debris disposal Inadequate repair Dam safety concerns R&R expected Minimum flows 	<ul style="list-style-type: none"> Incorporation of other investments to improve water productivity (e.g. hydropower, fisheries) Disaster-resistance 	<ul style="list-style-type: none"> + Rapid hydrologic assessment, design and application of generic dam safety measures by qualified engineers (e.g. including prevention of excessive seepage through dam body for earthen dams and provision of piping at or near toe or abutment of dam, spillway design)

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
					to prevent over-topping) + Good practice construction measures (e.g. for earthen dams – crushing of earth lumps, watering to near-optimal moisture content, compacting during construction) + Cultural property management (archaeological and historic site survey/clearance accompanied by chance-find procedures)
	<ul style="list-style-type: none"> Rehabilitation of Dams (>15m) 	<ul style="list-style-type: none"> Determine location Conduct surveys Detailed designs Initiate rehabilitation 	<ul style="list-style-type: none"> Same as for rehabilitation of dams <15 m on a larger scale 	<ul style="list-style-type: none"> Same as for rehabilitation of dams <15 m on a larger scale 	+ Environmental and Social Assessment for schemes
	<ul style="list-style-type: none"> New dam construction (>5m) 	<ul style="list-style-type: none"> Determine location Conduct surveys Detailed designs 	<ul style="list-style-type: none"> Same as for new dam construction <5 m on a larger scale 	<ul style="list-style-type: none"> Same as for new dam construction <5 m on a larger scale 	+ Environmental and Social Assessment for schemes

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
Agricultural Diversification	<ul style="list-style-type: none"> Small-scale agricultural diversification 	<ul style="list-style-type: none"> Identification of agricultural opportunities and design of interventions Crop diversification Water provision Livestock provision and management 	<ul style="list-style-type: none"> Impacts on vegetative cover, soil fertility Induced impacts on public health/water quality/residues due to potential increase in agro-chemical use Potential diversion of additional water resources and associated conflicts Monoculture and disease/ pest/ fire resistance Unsustainable grazing Access capture by elite/ livelihood protection (esp. for vulnerable groups) Potential conflict between livestock herders and farmers/local population 	<ul style="list-style-type: none"> Gender analysis of agricultural production as basis for design of targeted interventions and training programs Use of environmentally-friendly Integrated Pest Management (IPM) and Integrated Nutrient Management (INM) measures Consider a variety of multi-purpose (with local benefits for food/fuel/fodder)/ fast-maturing indigenous species that promote sustainable soil and water conservation Take measures to ensure sustainability of associated water supplies Prevent erosion problems during grazing/ possible stall-feeding Monitor and protect livestock health Provide adequate training and expertise Improve product management and marketing linkages 	<ul style="list-style-type: none"> Inclusive consultation and measures for conflict management Site location clearance (avoid infringing on protected areas/ critical habitats/significant biodiversity areas/ wetlands) Training and use of IPM/INM measures Also see section on irrigation as relevant Provide adequate training/ extension and access to local expertise (by training local farmers/groups where possible) on all aspects (including post-harvest management and marketing) Awareness program on proper procurement, storage, use and disposal of agro-chemicals and their containers Agriculture/Horticulture/Livestock species choice determined by qualified experts and community consultation; avoid introducing species that may cause disruption in eco-balance Provide adequate veterinary services Assessment of grazing requirements (for incremental and projected herd) and legal access to sufficient sustainable grazing ensured; restrict livestock increase depending on grazing constraints Protection of customary grazing rights of pastoral migratory communities Identification and management of potential conflicts and protection of rights of vulnerable groups (e.g. women, minorities, poor) through appropriate training and institutional/ process arrangements (e.g. rotational grazing, development of dry-season grazing areas and reserves)

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
Irrigation	<ul style="list-style-type: none"> Irrigation system rehabilitation 	<ul style="list-style-type: none"> Identify damages Repair/rehabilitate damaged systems 	<ul style="list-style-type: none"> Improper debris and silt disposal Inadequate repair No R&R expected Soil or groundwater may be saline Substantial agrochemicals may be required to improve agricultural productivity Waterlogging/ salinization Water resource sustainability Significant R&R not expected if limited rehabilitation Conflicts over user rights and scarcity management Access capture by elite/ livelihood protection (esp. for vulnerable groups) 	<ul style="list-style-type: none"> Provision of adequate drainage Rehabilitate/ strengthen upstream dams Examine scope/ need for alternative crops Strengthening existing water user association to enhance ownership and sustainability 	<ul style="list-style-type: none"> Inclusive consultation and involvement of local water user association/water users. Debris/Silt management plan (to avoid haphazard dumping, preventing washing back into system and avoiding dumping on fields without farmer permission) Clearance of sites for debris disposal Examine need to use more salt-tolerant crops Assess any proposed changes in crops and water requirements Analyze groundwater yields if substantial increases in abstraction proposed Use of locally available materials for rehabilitation Rehabilitation of borrow areas Rehabilitation design and construction oversight by qualified engineers Clear agrochemicals to be procured – encourage IPM/INM measures Also see section on Dams Access for traditional use of bunds and intervening non-cropped areas for grazing Identification and management of potential conflicts and protection of rights of vulnerable groups (e.g. women, minorities, poor) through appropriate training and institutional arrangements Training of local water user association/water users

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
Energy	<ul style="list-style-type: none"> Rehabilitation of power transmission/ distribution systems 	<ul style="list-style-type: none"> Debris disposal Rehabilitation of systems 	<ul style="list-style-type: none"> Improper debris disposal PCB disposal 	<ul style="list-style-type: none"> Reduce system losses 	<ul style="list-style-type: none"> Consultation Clearance of sites/ debris disposal Waste transformer coolant oil should be stored in sealed containers and disposed of safely Training R&R Plan
	<ul style="list-style-type: none"> Rehabilitation of power generation systems 	<ul style="list-style-type: none"> Debris disposal Rehabilitation of systems 	<ul style="list-style-type: none"> Improper debris disposal Fuel sourcing PCB disposal No R&R expected 	<ul style="list-style-type: none"> Use cleaner technology where possible and improve energy efficiency 	<ul style="list-style-type: none"> Consultation Clearance of sites/ debris disposal Ensure fuel sourcing is sustainable Meet emission standards Waste transformer coolant oil should be stored in sealed containers and disposed of safely Training
	<ul style="list-style-type: none"> Construction of new power systems (<10MW) 	<ul style="list-style-type: none"> Siting Planning/Detailed Designs Access roads Related transmission/ distribution systems Construction 	<ul style="list-style-type: none"> Fuel sourcing Emissions and waste disposal (if thermal) PCB disposal Some R&R expected Erosion and deforestation due to access roads/ transmission and distribution systems Risk of injury or death due to accidents, power line collapse Potential cultural property impacts 	<ul style="list-style-type: none"> Use cleaner fuels and technologies Dam safety (if hydro) Energy efficiency 	<ul style="list-style-type: none"> + Application of generic safety standards + Use of cleaner fuels (e.g. natural gas if thermal) and technologies + Meet emission standards + Location or sound-proofing (max of 55 decibels in residential areas or 3 decibels in background levels, whichever is more stringent) + Selection of access alignments to minimize cut and fill, tree felling (also see section on Roads) + Archaeological and historic site survey/ clearance with chance-find procedures • Training/Safety Awareness
	<ul style="list-style-type: none"> Construction of new power generation (>10MW)/ transmission systems 	<ul style="list-style-type: none"> Siting Planning/Detailed Designs 	<ul style="list-style-type: none"> Same as above but could be of a much higher magnitude 	<ul style="list-style-type: none"> Similar to above on larger scale 	<ul style="list-style-type: none"> + Environmental and Social Assessment for schemes

Sector	Sub-project Type & Thresholds	SubProject Characteristics			Typical Mitigation/ Enhancement Measures to be included in Project
		Typical Activities envisaged in Emergency Assistance Phase	Typical Env & Social Concerns	Typical Env & Social Opportunities	
	<ul style="list-style-type: none"> Fuelwood management 	<ul style="list-style-type: none"> Fuelwood needs assessment Fuelwood sourcing 	<ul style="list-style-type: none"> Degradation of forests and catchment areas and associated impacts (on erosion, biodiversity, etc.) 	<ul style="list-style-type: none"> Use sustainable sources Use of alternative, cleaner fuels Reduce energy wastage 	<ul style="list-style-type: none"> Consultation – gender specific Develop system for provision of fuelwood for reconstruction activities Use of plantations for sourcing fuelwood Sourcing fuelwood from sustainable sources (importing as necessary) Exploring alternative fuels (e.g. for firing bricks) + Improving energy efficiency
Income Generating Activities	<ul style="list-style-type: none"> Livelihood restoration activities 	<ul style="list-style-type: none"> Community infrastructure rehabilitation Community-based social funds/grants and low-interest loans Technical training 	<ul style="list-style-type: none"> Wastes (if any) from new community enterprises Safety concerns (e.g. from any machinery) Capture of access to resources by elite group 	<ul style="list-style-type: none"> Assistance with overall rehabilitation/ reconstruction that may have social/ environmental benefits (ex: fishing, well rehabilitation, drinking water, sanitation, tourism, sustainable agriculture,) Targeting benefits to women and vulnerable groups 	<ul style="list-style-type: none"> Consultation with community groups and local government Appropriate institutional / financial arrangements Waste disposal plan for community enterprises (where applicable) Training/ awareness building (on use and safety)

List of Negative Subproject Attributes

Subprojects with any of the attributes listed below will be ineligible for support under the proposed emergency reconstruction operations.

Attributes of Ineligible Subprojects
GENERAL CHARACTERISTICS
<p>Concerning significant conversion or degradation of critical natural habitats. Including, but not limited to, any activity within:</p> <ul style="list-style-type: none"> • Forest reserves; • Wetlands • National Parks/Game reserves • Other Environmentally sensitive areas <p>Except for purposes of restoring critical ecosystems damaged by the earthquake</p> <ul style="list-style-type: none"> •
<p>Damages cultural property, including but not limited to, any activities that affect the following sites:</p> <ul style="list-style-type: none"> • Archaeological Ruins at Moenjodaro • Taxila • Buddhist Ruins at Takht-i-Bahi and Neighboring City Remains at Sahr-i-Bahlol • Historic Monuments of Thatta • Fort and Shalamar Gardens in Lahore • Rohtas Fort • A archaeological and historical sites; and <p>Religious monuments, structures and cemeteries.</p> <ul style="list-style-type: none"> • Archaeological and historical sites; and • Religious monuments, structures and cemeteries.
<p>Requiring pesticides that fall in WHO classes IA, IB, or II.</p>
<p>Affecting waters of riparian neighbors and downstream</p>

Attachment 3

Checklist of Likely Environmental and Social Impacts of Subprojects

This Form is to be used by the Safeguard Focal Point (SFP) or Project Implementation Unit (PIU) in Screening Subproject Applications.

Note: One copy of this form and accompanying documentation to be kept in the PIU office and one copy to be sent to the task team leader of the World Bank.

Name of Subproject:

Number of Subproject:

Proposing Agency:

Subproject Location:

Subproject Objective:

Infrastructure to be Rehabilitated:

Estimated Cost:

Proposed Date of Commencement of Work:

Technical Drawing/Specifications Reviewed (circle answer): Yes ___ No ___

I. Subproject Related Issues

S No	ISSUES	No	Small	Medium	Large
A.	Zoning and Land Use Planning				
1.	Will the subproject affect land use zoning and planning or conflict with prevalent land use patterns?				
2.	Will the subproject involve significant land disturbance or site clearance?				
3.	Will the subproject land be subject to potential encroachment by urban or industrial use or located in an area intended for urban or industrial development?				

B.	Utilities and Facilities				
4.	Will the subproject require the setting up of ancillary production facilities?				
5.	Will the subproject make significant demands on utilities and services?				
6.	Will the subproject require significant levels of accommodation or service amenities to support the workforce during construction (e.g., contractor will need more than 20 workers)?				
C	Water and Soil Contamination				
7.	Will the subproject require large amounts of raw materials or construction materials?				
8.	Will the subproject generate large amounts of residual wastes, construction material waste or cause soil erosion?				
9.	Will the subproject result in potential soil or water contamination (e.g., from oil, grease and fuel from equipment yards)?				
10.	Will the subproject lead to contamination of ground and surface waters by herbicides for vegetation control and chemicals (e.g., calcium chloride) for dust control?				
11.	Will the subproject lead to an increase in suspended sediments in streams affected by road cut erosion, decline in water quality and increased sedimentation downstream?				
12.	Will the subproject involve the use of chemicals or solvents?				
13.	Will the subproject lead to the destruction of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards?				
14.	Will the subproject lead to the creation of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors?				
D.	Noise and Air Pollution Hazardous Substances				
15.	Will the subproject increase the levels of harmful air emissions?				
16.	Will the subproject increase ambient noise levels?				
17.	Will the subproject involve the storage, handling or transport of hazardous substances?				
E.	Fauna and Flora				
18.	Will the subproject involve the disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes)?				
19.	Will the subproject lead to the destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development?				
20.	Will the subproject lead to the disruption/destruction of wildlife through interruption of migratory routes, disturbance of wildlife habitats, and noise-related problems?				

F.	Destruction/Disruption of Land and Vegetation				
21.	Will the subproject lead to unplanned use of the infrastructure being developed?				
22.	Will the subproject lead to long-term or semi-permanent destruction of soils in cleared areas not suited for agriculture?				
23.	Will the subproject lead to the interruption of subsoil and overland drainage patterns (in areas of cuts and fills)?				
24.	Will the subproject lead to landslides, slumps, slips and other mass movements in road cuts?				
25.	Will the subproject lead to erosion of lands below the roadbed receiving concentrated outflow carried by covered or open drains?				
26.	Will the subproject lead to long-term or semi-permanent destruction of soils in cleared areas not suited for agriculture?				
27.	Will the subproject lead to health hazards and interference of plant growth adjacent to roads by dust raised and blown by vehicles?				
G.	Cultural Property				
28.	Will the subproject have an impact on archaeological or historical sites, including historic urban areas?				
29.	Will the subproject have an impact on religious monuments, structures and/or cemeteries?				
30.	Have Chance Finds procedures been prepared for use in the subproject?				
H.	Expropriation and Social Disturbance				
31.	Will the subproject involve land expropriation or demolition of existing structures?				
32.	Will the subproject lead to induced settlements by workers and others causing social and economic disruption?				
33.	Will the subproject lead to environmental and social disturbance by construction camps?				

II. Site Related Issues

S.No	ISSUES	YES	NO	DO NOT KNOW
1.	Does the subproject require land acquisition? [Note: Fill in the land acquisition form if YES]			
2.	Will the subproject negatively impact livelihoods [Note: Describe separately if YES]			
3.	Is the subproject located in an area with designated natural reserves?			

S.No	ISSUES	YES	NO	DO NOT KNOW
4.	Is the subproject located in an area with unique natural features?			
5.	Is the subproject located in an area with endangered or conservation-worthy ecosystems, fauna or flora?			
6.	Is the subproject located in an area falling within 500 meters of national forests, protected areas, wilderness areas, wetlands, biodiversity, critical habitats, or sites of historical or cultural importance?			
7.	Is the subproject located in an area which would create a barrier for the movement of conservation-worthy wildlife or livestock?			
8.	Is the subproject located close to groundwater sources, surface water bodies, water courses or wetlands?			
9.	Is the subproject located in an area with designated cultural properties such as archaeological, historical and/or religious sites?			
10.	Is the subproject in an area with religious monuments, structures and/or cemeteries?			
11.	Is the project located in an area from where people have been displaced?			
12.	Is the project located in an area where IDPs are temporarily settled?			
13.	Is the project in a politically sensitive area?			
14.	Is the subproject in a polluted or contaminated area?			
15.	Is the subproject located in an area of high visual and landscape quality?			
16.	Is the subproject located in an area susceptible to landslides or erosion?			
17.	Is the subproject located in an area of seismic faults?			
18.	Is the subproject located in a densely populated area?			
19.	Is the subproject located on prime agricultural land?			
20.	Is the subproject located in an area of tourist importance?			
21.	Is the subproject located near a waste dump?			
22.	Does the subproject have access to potable water?			
23.	Is the subproject located far (1-2 kms) from accessible roads?			
24.	Is the subproject located in an area with a wastewater network?			
25.	Is the subproject located in the urban plan of the city?			
26.	Is the subproject located outside the land use plan?			

Signed by Safeguard Focal Point: _____

Title: _____

Date: _____

Signed by Project Manager:

Name: _____

Title: _____

Date: _____

Guidelines for Land and Asset Acquisition, Entitlements and Compensation

I. Objectives

1. Resettlement and land acquisition will be kept to a minimum, and will be carried out in accordance with these guidelines. Subproject proposals that would require demolishing houses or acquiring productive land should be carefully reviewed to minimize or avoid their impacts through alternative alignments. Proposals that require more than minor expansion along rights of way should be carefully reviewed. No land or asset acquisition may take place outside of these guidelines. A format for a Land Acquisition Assessment Data Sheet is attached as Attachment 3(i).

2. These guidelines provide principles and instructions to compensate negatively affected persons to ensure that they will be assisted to improve, or at least to restore, their living standards, income earning or production capacity to pre-project levels regardless of their land tenure status.

II. Categorization

3. Based on the number of persons that may be affected by the project, Project Affected People (PAPs) and the magnitude of impacts, projects will be categorized as follows:

- (a) Projects that will affect more than 200 PAPs due to land acquisition and/or physical relocation and where a full Resettlement Plan (RP) must be produced. If the RAP cannot be prepared prior to project appraisal, a waiver can be provided by the World Bank Managing Director (MD) in consultation with the Resettlement Committee. In such cases, the TT should agree with the Borrower on a timetable for preparation of the RP.
- (b) Projects that will affect less than 200 persons require the following documentation: (i) a land acquisition assessment, (ii) the minutes or record of consultations which assess the compensation claimed and agreement reached, and (iii) a record of the receipt of the compensation, or voluntary donation, by those affected (see below).
- (c) Projects that are not expected to have any land acquisition or any other significant adverse social impacts; on the contrary, significant positive social impact and improved livelihoods are expected from such interventions.

III. Eligibility

4. PAPs are identified as persons whose livelihood is directly affected by the project due to acquisition of the land owned or used by them. PAPs deemed eligible for compensation are:

- (a) those who have formal legal rights to land, water resources or structures/buildings, including recognized customary and traditional rights;
- (b) those who do not have such formal legal rights but have a claim to usufruct rights rooted in customary law; and

- (c) those whose claim to land and water resources or building/structures do not fall within (a) and (b) above, are eligible to resettlement assistance to restore their livelihood.

IV. Acquisition of Productive Assets and Compensation

5. PAPs are eligible for replacement costs for lost assets as described below:

- (a) *Voluntary contributions.* Individuals may elect to voluntarily contribute land or assets provided the persons making such contributions do so willingly and are informed that they have the right to refuse such contributions; and
- (b) *Contributions against compensation.* A contributor/asset loser considered "affected" will be eligible for compensation and other necessary assistance.

6. Voluntary contribution should be clearly documented to confirm the voluntary nature of the transition. The documentation should specify that the land is free of any squatters, encroachers or other claims. A format is shown in Attachment 3(i), which includes a Schedule for assessing any compensation claimed and the agreement reached.

V. Compensation Principles

7. The project implementation agencies will ensure timely provision of the following means of compensation to affected peoples:

- (a) Project affected peoples losing access to a portion of their land or other productive assets with the remaining assets being economically viable are entitled to compensation at a replacement cost for that portion of land or assets lost to them. Compensation for the lost assets will be made according to the following principles:
 - (i) replacement land with an equally productive plot, cash or other equivalent productive assets;
 - (ii) materials and assistance to fully replace solid structures that will be demolished;
 - (iii) replacement of damaged or lost crops and trees, at market value;
 - (iv) other acceptable in-kind compensation;
 - (v) in case of cash compensation, the delivery of compensation should be made in public, i.e., at the Community Meeting; and
 - (vi) in case of physical relocation, provision of civic infrastructure at the resettlement sites.
- (b) Project affected peoples losing access to a portion of their land or other economic assets rendering the remainder economically non-viable will have the options of compensation for the entire asset by provision of alternative land, cash or equivalent productive asset, according to the principles in (a) i-iv above.

VI. Consultation Process

8. The implementing agencies will ensure that all occupants of land and owners of assets located in a proposed subproject area are consulted. Community meetings will be held in each affected district and

village to inform the local population of their rights to compensation and options available in accordance with these Guidelines. The Minutes of the community meetings shall reflect the discussions held, agreements reached, and include details of the agreement, based on the format provided in Attachment 3(ii).

9. The implementing agency shall provide a copy of the Minutes to affected people and confirm in discussions with each of them, their requests and preferences for compensation, agreements reached, and any eventual complaint. Copies will be recorded in the posted project documentation and be available for inspection during supervision.

Subproject Approval

10. In the event that a subproject involves acquisition against compensation, the implementing agency shall:

- (a) not approve the subproject unless satisfactory compensation has been agreed between the affected person and the local community; and
- (b) not allow works to start until the compensation has been delivered in a satisfactory manner to the affected persons.

Complaints and Grievances

11. Initially, all complaints should be negotiated to reach an agreement at the local community/village/district level. If this fails, complaints and grievances on these Guidelines, implementation of the agreements recorded in the Community Meeting Minutes or any alleged irregularity in carrying out the project can also be addressed by the affected peoples or their representative at the municipal or district level. If this also fails, the complaint may be submitted to the relevant implementing agency for consideration.

Verification

12. The Community Meeting Minutes, including agreements of compensation and evidence of compensation made shall be provided to the district, to the supervising engineers, who will maintain a record hereof, and to auditors and socio-economic monitors when they undertake reviews and post-project assessment. This process shall be specified in all relevant project documents, including details of the relevant authority for complaints at the municipal/district or implementing agency level.

Land Acquisition Assessment Data Sheet
(To be used to record information on all land to be acquired)

1. Quantities of land/structures/other assets required:
2. Date to be acquired:
3. Locations:
4. Owners:
5. Current uses:
6. Users:
 - Number of Customary Claimants:
 - Number of Squatters:
 - Number of Encroachers:
 - Number of Owners:
 - Number of Tenants:
 - Others (specify): _____ Number: _____
7. How land/structures/other assets will be acquired (identify one):
 - Donation
 - Purchase
8. Transfer of Title:
 - Ensure these lands/structures/other assets are free of claims or encumbrances.
 - Written proof must be obtained (notarized or witnessed statements) for the voluntary donation, or acceptance of the prices paid from those affected, together with proof of title being transferred to a representative and registered community organization or the government, with the guarantee of public access, by the title-holder.
9. Describe grievance mechanisms available:

Format to Document Contribution of Assets

The following agreement has been made on..... day of.....
between.....resident of(the Owner)
and(the Recipient).

1. That the Owner holds the transferable right ofhectares of land/structure/asset in.....
2. That the Owner testifies that the land/structure is free of squatters or encroachers and not subject to other claims.
3. That the Owner hereby grants to the Recipient this asset for the construction and development offor the benefit of the villagers and the public at large.

(Either, in case of donation:)

4. That the Owner will not claim any compensation against the grant of this asset.

(Or, in case of compensation:)

4. That the Owner will receive compensation against the grant of this asset as per the attached Schedule.
5. That the Recipient agrees to accept this grant of asset for the purposes mentioned.
6. That the Recipient shall construct and develop the.....and take all possible precautions to avoid damage to adjacent land/structure/other assets.
7. That both the parties agree that the.....so constructed/developed shall be public premises.
8. That the provisions of this agreement will come into force from the date of signing of this deed.

Signature of the Owner

Signature of the Recipient

Witnesses:

1. _____
2. _____
(Signature, name and address)

**Schedule of
Compensation of Asset Requisition**

Summary of Affected Unit/Item	Units to be Compensated	Agreed Compensation
a. Urban/agricultural land (m ²):	_____	_____
b. Houses/structures to be demolished (units/m ²):	_____	_____
c. Type of structure to be demolished (e.g. mud, brick, cement block, etc.,)	_____	Not Applicable.
d. Trees or crops affected:	_____	_____
e. Water sources affected:	_____	_____

Signatures of local community representatives:

Include record of any complaints raised by affected persons:

Map attached (showing affected areas and replacement areas):

Protection of Cultural Property

1. Cultural property include monuments, structures, works of art, or sites of significance points of view, and are defined as sites and structures having archaeological, historical, architectural, or religious significance, and natural sites with cultural values. This includes cemeteries, graveyards and graves.
2. The initial phase of the proposed emergency reconstruction operations pose limited risks of damaging cultural property since subprojects will largely consist of small investments in community infrastructure and income generating activities, reconstruction of existing structures, and minor public works. Further, the list of negative subproject attributes, which would make a subproject ineligible for support (Attachment 1), includes any activity that would adversely impact cultural property. Nevertheless, the following procedures for identification, protection from theft, and treatment of discovered artifacts should be followed and included in standard bidding documents as provided in Attachment 6.

Chance Find Procedures

3. Chance find procedures will be used as follows:
 - (a) Stop the construction activities in the area of the chance find;
 - (b) Delineate the discovered site or area;
 - (c) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the Ministry in charge of Department of Archaeology and Museums take over;
 - (d) Notify the supervisory Engineer who in turn will notify the responsible local authorities and the Ministry of Culture immediately (within 24 hours or less);
 - (e) Responsible local authorities and the Ministry in charge of Department of Archaeology and Museums would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists of the Department of Archaeology and Museums (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
 - (f) Decisions on how to handle the finding shall be taken by the responsible authorities and the Ministry in charge of Department of Archaeology and Museums. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
 - (g) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Ministry in charge of Department of Archaeology and Museums; and
 - (h) Construction work could resume only after permission is given from the responsible local authorities and the Ministry in charge of Department of Archaeology and Museums concerning safeguard of the heritage.
4. These procedures must be referred to as standard provisions in construction contracts, when applicable, and as proposed in section 1.5 of Attachment 6. During project supervision, the Site Engineer shall monitor the above regulations relating to the treatment of any chance find encountered are observed.

5. Relevant findings will be recorded in World Bank Project Supervision Reports (PSRs), and Implementation Completion Reports (ICRs) will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as appropriate.

Attachment 6

Safeguards Procedures for Inclusion in the Technical Specifications of Contracts

I. General

1. The Contractor and his employees shall adhere to the mitigation measures set down and take all other measures required by the Engineer to prevent harm, and to minimize the impact of his operations on the environment.
2. The Contractor shall not be permitted to unnecessarily strip clear the right of way. The Contractor shall only clear the minimum width for construction and diversion roads should not be constructed alongside the existing road.
3. Remedial actions which cannot be effectively carried out during construction should be carried out on completion of each Section of the road (earthworks, pavement and drainage) and before issuance of the Taking Over Certificate:
 - (a) these sections should be landscaped and any necessary remedial works should be undertaken without delay, including grassing and reforestation;
 - (b) water courses should be cleared of debris and drains and culverts checked for clear flow paths; and
 - (c) borrow pits should be dressed as fish ponds, or drained and made safe, as agreed with the land owner.
4. The Contractor shall limit construction works to between 6 am and 7 pm if it is to be carried out in or near residential areas.
5. The Contractor shall avoid the use of heavy or noisy equipment in specified areas at night, or in sensitive areas such as near a hospital.
6. To prevent dust pollution during dry periods, the Contractor shall carry out regular watering of earth and gravel haul roads and shall cover material haulage trucks with tarpaulins to prevent spillage.

II. Transport

7. The Contractor shall use selected routes to the project site, as agreed with the Engineer, and appropriately sized vehicles suitable to the class of road, and shall restrict loads to prevent damage to roads and bridges used for transportation purposes. The Contractor shall be held responsible for any damage caused to the roads and bridges due to the transportation of excessive loads, and shall be required to repair such damage to the approval of the Engineer.
8. The Contractor shall not use any vehicles, either on or off road with grossly excessive, exhaust or noise emissions. In any built up areas, noise mufflers shall be installed and maintained in good condition on all motorized equipment under the control of the Contractor.

9. Adequate traffic control measures shall be maintained by the Contractor throughout the duration of the Contract and such measures shall be subject to prior approval of the Engineer.

III. Workforce

10. The Contractor should whenever possible locally recruit the majority of the workforce and shall provide appropriate training as necessary.

11. The Contractor shall install and maintain a temporary septic tank system for any residential labor camp and without causing pollution of nearby watercourses.

12. The Contractor shall establish a method and system for storing and disposing of all solid wastes generated by the labor camp and/or base camp.

13. The Contractor shall not allow the use of fuelwood for cooking or heating in any labor camp or base camp and provide alternate facilities using other fuels.

14. The Contractor shall ensure that site offices, depots, asphalt plants and workshops are located in appropriate areas as approved by the Engineer and not within 500 meters of existing residential settlements and not within 1,000 meters for asphalt plants.

15. The Contractor shall ensure that site offices, depots and particularly storage areas for diesel fuel and bitumen and asphalt plants are not located within 500 meters of watercourses, and are operated so that no pollutants enter watercourses, either overland or through groundwater seepage, especially during periods of rain. This will require lubricants to be recycled and a ditch to be constructed around the area with an approved settling pond/oil trap at the outlet.

16. The contractor shall not use fuelwood as a means of heating during the processing or preparation of any materials forming part of the Works.

IV. Quarries and Borrow Pits

17. Operation of a new borrow area, on land, in a river, or in an existing area, shall be subject to prior approval of the Engineer, and the operation shall cease if so instructed by the Engineer. Borrow pits shall be prohibited where they might interfere with the natural or designed drainage patterns. River locations shall be prohibited if they might undermine or damage the river banks, or carry too much fine material downstream.

18. The Contractor shall ensure that all borrow pits used are left in a trim and tidy condition with stable side slopes, and are drained ensuring that no stagnant water bodies are created which could breed mosquitoes.

19. Rock or gravel taken from a river shall be far enough removed to limit the depth of material removed to one-tenth of the width of the river at any one location, and not to disrupt the river flow, or damage or undermine the river banks.

20. The location of crushing plants shall be subject to the approval of the Engineer, and not be close to environmentally sensitive areas or to existing residential settlements, and shall be operated with approved fitted dust control devices.

V. Earthworks

21. Earthworks shall be properly controlled, especially during the rainy season.
22. The Contractor shall maintain stable cut and fill slopes at all times and cause the least possible disturbance to areas outside the prescribed limits of the work.
23. The Contractor shall complete cut and fill operations to final cross-sections at any one location as soon as possible and preferably in one continuous operation to avoid partially completed earthworks, especially during the rainy season.
24. In order to protect any cut or fill slopes from erosion, in accordance with the drawings, cut off drains and toe-drains shall be provided at the top and bottom of slopes and be planted with grass or other plant cover. Cut off drains should be provided above high cuts to minimize water runoff and slope erosion.
25. Any excavated cut or unsuitable material shall be disposed of in designated tipping areas as agreed to by the Engineer.
26. Tips should not be located where they can cause future slides, interfere with agricultural land or any other properties, or cause soil from the dump to be washed into any watercourse. Drains may need to be dug within and around the tips, as directed by the Engineer.

VI. Historical and Archeological Sites

27. If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:
 - (a) Stop the construction activities in the area of the chance find.
 - (b) Delineate the discovered site or area.
 - (c) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the Department of Archeology and Museums and the responsible Ministry take over.
 - (d) Notify the supervisory Engineer who in turn will notify the responsible local authorities and the Department of Archeology and Museums and the responsible Ministry immediately (less than 24 hours).
 - (e) Contact the responsible local authorities and the Department of Archeology and Museums and the responsible Ministry who would be in charge of protecting and preserving the site before deciding on the proper procedures to be carried out. This would require a preliminary evaluation of the findings to be performed by the archeologists of the Department of Archeology and Museums and the responsible Ministry (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage, including the aesthetic, historic, scientific or research, social and economic values.
 - (f) Ensure that decisions on how to handle the finding be taken by the responsible authorities and the Department of Archeology and Museums and the responsible Ministry . This could include changes in the layout (such as when the finding is an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage.

- (g) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Department of Archeology and Museums and the responsible Ministry ; and
- (h) Construction work will resume only after authorization is given by the responsible local authorities and the Department of Archeology and Museums and the responsible Ministry concerning the safeguard of the heritage.

VII. Disposal of Construction and Vehicle Waste

28. Debris generated due to the dismantling of the existing structures shall be suitably reused, to the extent feasible, in the proposed construction (e.g. as fill materials for embankments). The disposal of remaining debris shall be carried out only at sites identified and approved by the project engineer. The contractor should ensure that these sites (a) are not located within designated forest areas; (b) do not impact natural drainage courses; and (c) do not impact endangered/rare flora. Under no circumstances shall the contractor dispose of any material in environmentally sensitive areas.

29. In the event any debris or silt from the sites is deposited on adjacent land, the Contractor shall immediately remove such, debris or silt and restore the affected area to its original state to the satisfaction of the Supervisor/Engineer.

30. Bentonite slurry or similar debris generated from pile driving or other construction activities shall be disposed of to avoid overflow into the surface water bodies or form mud puddles in the area.

31. All arrangements for transportation during construction including provision, maintenance, dismantling and clearing debris, where necessary, will be considered incidental to the work and should be planned and implemented by the contractor as approved and directed by the Engineer.

32. Vehicle/machinery and equipment operations, maintenance and refueling shall be carried out to avoid spillage of fuels and lubricants and ground contamination. An 'oil interceptor" will be provided for wash down and refueling areas. Fuel storage shall be located in proper bunded areas.

33. All spills and collected petroleum products shall be disposed of in accordance with standard environmental procedures/guidelines. Fuel storage and refilling areas shall be located at least 300m from all cross drainage structures and important water bodies or as directed by the Engineer.

VIII. HIV/AIDS Education

34. The Contractor shall ensure that detection screening of sexually transmitted diseases, especially with regard to HIV/AIDS, amongst laborers is actually carried out and will submit a certificate of compliance to the Head Construction Engineer.