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**Environmental and Social Framework**

**Environmental and Social Information Package**

**For**

**Grantees of PMDFC Grants**

**VOLUME II**

**( Final Draft )**



**PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY**

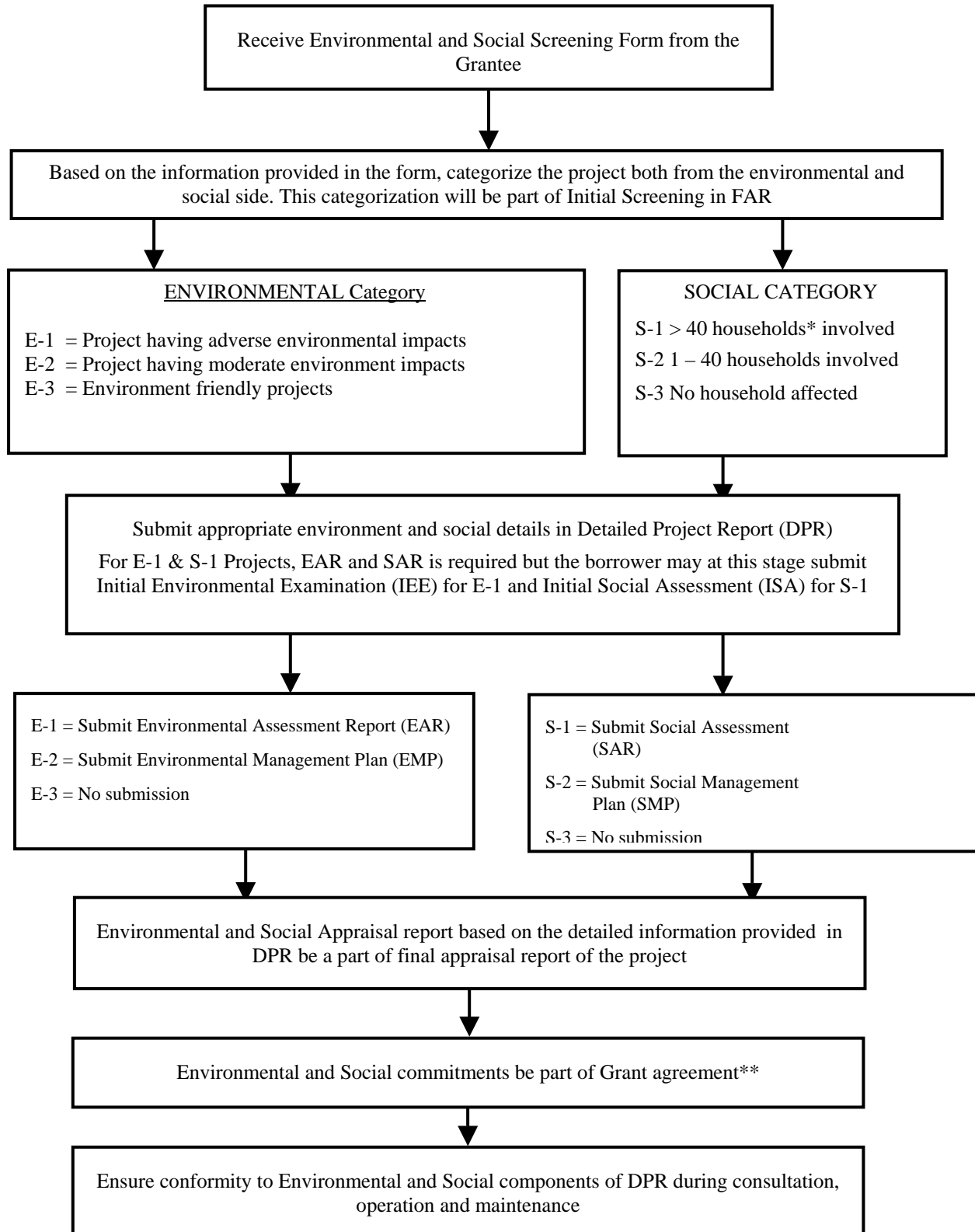
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## **DOCUMENTS**

- Document 1** Environmental and Social Screening Form
- Document 2** Possible Environmental and Social Issues in Urban Infrastructure Projects
- Document 3** Environmental and Social Categorisation of Urban Infrastructure Projects
- Document 4** EAR Outline for E-1 Category Projects
- Document 5** Environmental Management Plan for E-2 Category Projects
- Document 6** SAR Outline for S-1 Category Projects
- Document 7** Social Management Plan for S-2 Category Projects
- Document 8** Checklist for Water Supply Projects
- Document 9** Checklist for Sewerage and Drainage Projects
- Document 10** Impact Assessment and Mitigation Measures
- Document 11** Site Handing Over Document
- Document 12** Land Acquisition and Resettlement Impacts Checklist

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## GUIDE TO GRANTEE



\* Household is a group of persons who commonly live together and take their meals from a common kitchen.

\*\* For approval of the Grant but before disbursement, the grantees have to submit EAR and SAR with Resettlement and Rehabilitation Plan (RAP) for E-1 and S-1 project.

**ENVIRONMENTAL AND SOCIAL SCREENING FORM**  
(AS PART OF GRANT APPLICATION FORM)

Name of the Project :

Environmental Category 

|   |  |
|---|--|
| E |  |
|---|--|

  
(Use Document 4)

Social Category : 

|   |  |
|---|--|
| S |  |
|---|--|

  
(Use Document 6)

**Title of Land:**

1. Total land required for the proposed project (In acres):
2. Total land already in the possession (in acres):
3. Process of land selection and acquisition:
4. Total land need to be acquired (in acres):
  - (a) Ownership of the proposed land to be acquired:
  - (b) Current use of proposed land to be acquired:
  - (c) No. of persons/households to be affected:

*Other associated impacts:*

- (a) Are there any squatters on the land?
- (b) Is there any valid structure on the land?
- (c) Is there any person losing employment/livelihood?
- (d) Is there any trees/crops on the land?

Note: For E1 and S1 projects, as the detailed census data and costs may not yet be known at the initial stage, final approval will be decided only after SAR and EAR are approved. After approval of the grant but before disbursement, the grantee has to submit an acceptable EAR and SAR for the proposed sub-project for clearance by the World Bank and PMDFC.

**POSSIBLE ENVIRONMENTAL AND SOCIAL ISSUES IN URBAN INFRASTRUCTURE PROJECTS**

Urban infrastructure projects aim to improve the standard of living within a urban locale and hence have associated positive impacts. However, possible negative impacts of urban infrastructure projects are as shown below:

| <b>Project</b>                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>10</b> | <b>11</b> | <b>12</b> | <b>13</b> | <b>14</b> | <b>15</b> |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>I. Water Supply &amp; Sewage</b> |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| <b>A. Water Supply</b>              |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| 1. Water supply lines & taps        |          | v        |          | v        |          |          |          |          | v        |           |           |           |           |           |           |
| 2. Water tankers                    |          | v        |          | v        | θ        |          |          |          | θ        |           |           | v         |           |           |           |
| 3. Overhead tanks                   | θ        |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| 4. Water treatment plants           | v        |          |          | v        |          |          |          | v        | θ        |           |           | v         |           |           | θ         |
| <b>B. Stormwater Drainage</b>       |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| 1. Open drains                      | v        |          | v        | v        | θ        |          |          |          | v        |           |           | v         | v         |           |           |
| 2. Closed/Underground drains        | v        |          | v        | θ        |          |          |          |          | v        |           |           |           |           |           |           |
| <b>C. Sewerage/ Sanitation</b>      |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| 1. Public conveniences              |          | v        | v        | v        |          |          |          | θ        |          |           |           |           |           | v         |           |
| 2. Pay & use latrines               |          | v        | v        | v        |          |          |          | θ        |          |           |           |           |           | v         |           |
| 3. Sewage treatment plants          | v        | v        | v        | v        | θ        |          |          |          | θ        |           |           |           |           | v         | v         |
| 4. Septic Tanks                     |          | v        | v        | v        |          |          |          |          |          |           |           |           |           | v         |           |
| 5. Sewage Farms                     | v        | v        | v        | v        |          |          |          | v        |          |           |           |           | v         | v         | θ         |
| <b>II. Solid Waste Management</b>   |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| <b>A. Compost Yard/Land Fills</b>   | v        | v        | v        | v        | θ        |          | v        |          |          |           |           |           | v         | v         | v         |
| <b>B. Vehicles</b>                  |          |          |          |          | θ        | θ        |          |          |          |           |           |           |           |           |           |
| <b>III. Transportation</b>          |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| <b>A. Roads</b>                     |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| 1. Widening of roads                | θ        |          |          |          | v        | v        |          | v        | v        | v         |           | θ         |           |           | θ         |
| 2. Improvement of surface           |          |          |          |          | θ        |          |          |          | v        |           |           |           |           |           |           |
| 3. New roads                        | v        | v        |          |          | v        | θ        |          | v        | θ        | θ         |           | θ         |           |           | v         |
| 4. Traffic islands                  |          | v        |          |          |          |          |          |          | v        | θ         |           |           |           |           |           |
| 5. Road divider                     |          | v        |          |          |          |          |          |          | v        | θ         |           |           |           |           |           |
| 6. Footpaths                        | v        | v        |          |          |          |          |          |          | v        | v         | θ         |           |           |           |           |
| <b>B. Street Furniture</b>          |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| 1. Traffic signals                  |          |          |          |          | v        | v        |          |          | v        |           |           |           |           |           |           |
| 2. Street lights                    |          |          |          |          |          |          |          |          | v        |           |           |           |           |           |           |
| 3. Sign Boards                      |          |          |          |          |          |          |          |          | v        |           | θ         |           |           |           |           |

1: Landuse change

2: Hydrology and drainage Patterns

3: Surface and Ground Water Quality

4: Water Logging

5: Air Quality

6: Noise

7: Solid Waste

8: Destruction of habitat/Vegetation

9: Disturbance to Other Services

10: Urban Congestion

11: Urban Aesthetics

12: Public Health and Safety

13: Smell and Smoke

14: Fire Hazards

15: Resettlement and Rehabilitation\*\*

\*\* Almost any project could require land acquisition and resettlement, depending upon site selection.

Note : Major Negative Impact = v

Minor Negative Impact = θ

| <b>Project</b>                         | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>10</b> | <b>11</b> | <b>12</b> | <b>13</b> | <b>14</b> | <b>15</b> |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>C. Road Structures</b>              |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| 1. Underpasses                         |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| - Pedestrian                           | v        | v        |          | v        |          |          |          |          | θ        | θ         |           |           |           |           | θ         |
| - Cycle                                | v        | v        |          | v        |          |          |          |          | θ        | θ         |           |           |           |           | θ         |
| - Fast moving                          | v        | v        |          | v        | θ        | θ        |          |          | θ        | θ         |           |           |           |           | θ         |
| 2. ROBs*                               | v        | v        |          |          |          |          |          |          | θ        |           |           |           |           |           | θ         |
| 3. Culverts                            |          | v        |          |          |          |          |          |          | θ        |           |           |           |           |           |           |
| 4. Small Bridges                       |          | v        |          |          |          |          |          |          | θ        |           |           |           |           |           |           |
| <b>D. Terminals / Shelters</b>         |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| 1. Bus Shelters                        | θ        |          |          |          | θ        | θ        |          |          | v        |           |           |           |           |           | θ         |
| 2. Bus Terminals/Stands                | θ        |          |          |          | θ        | θ        |          |          | v        |           |           |           |           |           | θ         |
| 3. Truck Terminals                     | θ        |          |          |          | θ        | θ        |          |          | v        |           |           |           |           |           | θ         |
| 4. Workshops                           |          |          |          |          | θ        | θ        |          |          | v        |           |           |           |           |           | θ         |
| 5. Car parking Complexes               | v        |          |          |          | v        |          |          | v        | v        | v         |           |           |           |           |           |
| <b>IV. Commercial Complexes</b>        |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| A. Shopping/office complexes           |          |          |          |          |          |          | v        |          |          |           |           |           |           |           |           |
| B. Vegetable/Fish markets              |          |          |          |          |          |          | v        |          |          | θ         |           |           | v         |           |           |
| C. Slaughter houses                    |          |          |          |          |          |          | v        |          |          |           |           | v         | v         |           |           |
| <b>V. Non-Comm/Community Amenities</b> |          |          |          |          |          |          |          |          |          |           |           |           |           |           |           |
| A. Parks                               | v        | v        |          |          |          |          |          |          |          |           |           |           |           |           | v         |
| B. Playgrounds                         | v        | v        |          |          |          |          |          |          |          |           |           |           |           |           | v         |

1: Landuse change

2: Hydrology and Drainage Patterns

3: Surface and Ground Water Quality

4: Water Logging

5: Air Quality

6: Noise

7: Solid Waste

8: Destruction of habitat/Vegetation

9: Disturbance to Other Services

10: Urban Congestion

11: Urban Aesthetics

12: Public Health and Safety

13: Smell and Smoke

14: Fire Hazards

15: Resettlements and Rehabilitation\*\*

ROBs\* = Road Over Bridges

\*\* Almost any project could require land acquisition and resettlement, depending upon site selection.

Note : Major Negative Impact = v

Minor Negative Impact = θ

**ENVIRONMENTAL AND SOCIAL CATEGORISATION OF URBAN  
INFRASTRUCTURE PROJECTS**

| <i>Project</i>                          | <b>Environmental<br/>Category</b> |
|---|-----------------------------------|
| <b>1. Water Supply &amp; Sewage</b>     |                                   |
| A. Water Supply                         |                                   |
| 1. Water supply lines & taps            | E-3                               |
| 2. Water tankers                        | E-3                               |
| 3. Overhead tanks                       | E-3                               |
| 4. Water treatment plants               | E-1                               |
| B. Stormwater Drainage                  |                                   |
| 1. Open drains                          | E-3                               |
| 2. Covered/Underground drains           | E-2                               |
| C. Sewerage / Sanitation                |                                   |
| 1. Public conveniences                  | E-1                               |
| 2. Pay & use latrines                   | E-2                               |
| 3. Sewage treatment Plants              | E-1                               |
| 4. Septic tanks                         | E-2                               |
| 5. Sewage Farms                         | E-1                               |
| <b>II. Solid Waste Management</b>       |                                   |
| A. Compost Yard/Land Fills              | E-2                               |
| B. Vehicles                             | E-3                               |
| <b>III. Transportation</b>              |                                   |
| A. Roads                                |                                   |
| 1. Widening of roads                    | E-3                               |
| 2. Improvement of surface               | E-3                               |
| 3. New roads                            | E-2                               |
| 4. Traffic islands                      | E-3                               |
| 5. Road divider                         | E-3                               |
| 6. Footpaths                            | E-3                               |
| B. Street Furniture                     |                                   |
| 1. Traffic signals                      | E-3                               |
| 2. Street lights                        | E-3                               |
| 3. Sign Boards                          | E-3                               |
| C. Road Structure                       |                                   |
| 1. Under passes                         |                                   |
| - Pedestrian                            | E-2                               |
| - Cycle                                 | E-2                               |
| - Fast moving                           | E-2                               |
| 2. ROBs (Road Over Bridge)              | E-2                               |
| 3. Culverts                             | E-2                               |
| 4. Small Bridges                        | E-2                               |
| D. Terminals / Shelter                  |                                   |
| 1. Bus Shelters                         | E-3                               |
| 2. Bus Terminals/Stands                 | E-3                               |
| 3. Truck Terminals                      | E-3                               |
| 4. Workshop                             | E-2                               |
| 5. Car Parking Complex                  | E-3                               |
| <b>VI. Non Comm/Community Amenities</b> |                                   |

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|                |     |
|----------------|-----|
| A. Parks       | E-3 |
| B. Playgrounds | E-3 |

Note: For types of projects that have not been environmentally categorized, they will initially be considered as category E-1, unless otherwise specified by the MD of PMDFC.

## II. SOCIAL CATEGORISATION OF PROJECTS

Based on the number of households that may be affected by the project, i.e. PAHs and magnitude of impacts, projects have been categorised as either S-1, S-2 or S-3 projects.

- a. S-1 projects are those that will involve the resettlement of more than 40 households, and are expected to have significant negative social consequences.
- b. S-2 projects are those which will involve the resettlement of less than 40 households and are expected to have significant social consequences affecting local inhabitants.
- c. S-3 projects, are not expected to have any significant adverse social impacts.

## **EAR OUTLINE FOR E-1 CATEGORY PROJECTS**

**A full Environmental Assessment Report (EAR) should be concise and should focus on significant environmental issues. The report's level of detail and sophistication should be commensurate with the potential impacts.**

The EAR should include the following items:

**A: Executive Summary:**

Concise discussion of significant findings and recommended actions.

**B: Policy, Legal, and Administrative Framework:**

Discussions of the policy, legal and administrative framework within which the EAR is prepared. The environment requirements of any co-financiers should be explained.

**C: Project description:**

Concise description of the projects geographic, ecological, social, and temporal context, including any off-site investments that may be required by the project (e.g., dedicated pipelines, access roads, power plants, water supply, housing, and raw material and product storage facilities)

**D: Baseline Data:**

Assessment of the dimensions of the study area and description of relevant physical, biological, and socio-economic conditions, including any changes anticipated before the project commences. Current and proposed development activities within the project area (but not directly connected to the project) should also be taken into account.

**E. Environmental Impacts:**

Identification and assessment of positive and negative impacts likely to result from proposed project. Mitigation measures, and any residual negative impacts that cannot be mitigated, should be identified. Opportunities for environmental enhancement should be explored. The extent and quality of available data, key data gaps, and uncertainties associated with predictions should be identified/estimated. Topics that do not require further attention should be specified.

**F. Analysis of Alternatives:**

Systematic comparison of the proposed investment design site, technology, and operational alternatives in terms of their potential environmental impacts, capital and recurrent costs, suitability under local conditions, and institutional, training, and monitoring requirements. For each of the alternatives, the environmental costs and benefits should be quantified to the extent possible, and economic values should be attached where feasible. The basis for the selection of the alternative proposed for the project design must be stated.

**G. Mitigation Plan:**

Identification of feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels, and estimation of the potential environmental impacts, capital and recurrent costs, and institutional, training, and monitoring requirements of

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those measures. The plan should provide detail on proposed work programmes and schedules. Such details help ensure that the proposed environmental actions are in phase with engineering and other project activities throughout implementation. The plan should consider compensatory measures if mitigation measures are not feasible or cost-effective.

**H. Environmental Management and Training:**

Assessment of the existence, role and capability of environmental units on-site, or at the agency and ministry level. Based on these findings, recommendations should be made concerning establishment and/or expansion of such units, and training of staff, to the point that EA recommendations can be implemented.

**I. Environmental Monitoring Plan:**

Specification of the type of monitoring, who will do it, how much it will cost, and what other inputs (i.e., training) are necessary.

**J. Appendices:**

- i List of EA Prepares-individuals and organisations.
- ii Reference –written materials used in study preparation. The list is especially important given the large amount of unpublished documentation often used.
- iii Record of Interagency/Forum/Consultation meetings-including lists of both invitees and attendees.

The record of consultations for obtaining the informed views of the affected people and local NGOs should be included. The record should specify any means other than consultations that were used to obtain the views of affected groups and local NGOs.

**ENVIRONMENTAL MANAGEMENT PLAN FOR E-2 CATEGORY PROJECTS**

| Environmental Assessment   | Yes | No | If Yes,<br>Specify<br>Details | Environmental<br>Management<br>Measures |
|--|-----|----|-------------------------------|---|
| 1. Will the project involve any of the following changes in landuse classification?<br>i. Conversion of recognised environmentally/historically/culturally sensitive land to any other use.<br>ii. Conversion of open/recreation areas to commercial/industrial residential use.<br>iii. Conversion of agricultural land to any other use.<br>iv. Conversion of residential/industrial areas to industrial/commercial use.<br>v. Any other. (please specify) |     |    |                               |   |
| 2. Will the project create risk of contamination of ground/surface or drinking water. Due to:<br>i) Effluents or leachates<br>ii) Due to leakages<br>iii) Any other? (please specify)  |     |    |                               |   |
| 3. Will the project increase or decrease?<br>i) Depth of GW table.<br>ii) Flow/quantity in water bodies.   |     |    |                               |   |
| 4. Will the project have any possibility of water-logging?   |     |    |                               |   |
| 5. Will the project cause any air pollution?   |     |    |                               |   |
| 6. Will the project cause noise pollution?   |     |    |                               |   |
| 7. Will the project generate solid waste?  |     |    |                               |   |
| 8. Will the project result in cutting of trees?  |     |    |                               |   |
| 9. Will the project damage or disturb other service lines?<br>i) Water supply lines<br>ii) Electric cables<br>iii) Roads<br>iv) Telephone cables<br>v) Any other (please specify)  |     |    |                               |   |
| 10. Will the project cause any health hazard?  |     |    |                               |   |
| 11. Will the project create smell and/or smoke?  |     |    |                               |   |
| 12. Will the project cause any effect on flora and fauna?  |     |    |                               |   |

## **SAR OUTLINE FOR S-1 CATEGORY PROJECTS**

### **Executive Summary:**

- Provide an outline of magnitude of potential impacts, significant findings of census and socio-economic survey and provide a brief account of proposed mitigation measures including the time-table, budget and its sources and institutional arrangements for implementation.

### **Introduction about the project:**

- Brief introduction about the project.
- Description of project components causing land acquisition and resettlement. Overall estimates of land acquisition and resettlement.

### **Census and socio-economic surveys:**

- Identify all categories of impacts (loss of property and assets; loss of livelihood; impacts on groups and communities).
- Census surveys results.
- Summarised process for consultations on the results of the census surveys.
- Describe need and mechanism to conduct updates, if necessary.

### **Resettlement policies and framework**

- Describe the policy and approach in ESF.
- Describe entitlement categories for each category of impact.
- Describe method of valuation used for affected structure, land trees and other assets.
- Provide entitlement matrix.

### **Resettlement sites:**

- Does the project need community relocation sites? Have these been approved by the Project Affected Households (PAHs)?
- Give layouts and designs of residential sites.
- Have the PAHs agreed to the strategy for housing replacement? Have the selected sites been explicitly approved by the PAHs? Describe the specific process of showing the sites to the PAHs and obtaining their opinion on them.

- 
- Describe the technical and feasibility studies conducted to determine the suitability of the proposed sites.
  - Is the quality/area adequate for allocation to all of the PAHs eligible for allocation of agricultural land?
  - Give calculations relating to site requirements and availability.
  - Describe mechanisms for (i) procuring, (ii) developing and (iii) allotting resettlement sites.
  - Provide detailed description of the arrangements for site development for agriculture, including funding of development costs.

**Participation and consultation:**

- Describe the process of consultation/participation in resettlement preparation and planning.
- Describe the various stakeholders.
- Describe the plan for disseminating information to project affected households (PAHs), such as provisions for a booklet to inform PAHs and other stakeholders
- Describe examples of outcomes of participation and consultation, such as how local beneficiaries' views have influenced the design process, entitlements and support mechanisms, or other issues.
- Have workshops been conducted, or are they planned? Who are the participants, and what are the expected outcomes?
- Women affected should be given equal attention.

**Institutional arrangements:**

- Identify and discuss the institutions responsible for delivery of each item/activity in the entitlement policy.
- Describe the project resettlement unit – functions and organisational structure of the unit and coordination relationship.
- State how coordination issues will be addressed in cases where resettlement is spread over a number of jurisdictions.
- Identify who will coordinate all agencies – with the necessary mandate.
- State when the project resettlement unit will be staffed.
- Describe plans for training and development of staff in the resettlement unit/local agencies.
- Discuss initiatives taken to improve the long-term capacity or resettlement institutions.

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**Income restoration:**

- Briefly spell out the main restoration strategies for each category of impacts, and describe the institutional, financial and technical aspects.
- Describe the process of consultation with project affected households (PAHs) to finalise strategies for income restoration.
- How do these strategies vary with the area/locality of impact?
- Are the compensation entitlements sufficient to restore income streams for each category of impact? What additional economic rehabilitation measures are necessary?
- Does income restoration require change in livelihoods, development of alternative farmlands, etc., or involve some other activities which require a substantial amount of time for preparation and implementation?
- How are the risks of impoverishment proposed to be addressed?
- Are choices and options built into the entitlement? If so, what is the mechanism for risk and benefit analysis of each option? What is the process of ensuring that PAHs have knowledge about alternatives and can make informed decisions? Is there a mechanism to encourage vulnerable groups among PAHs to choose lower risk options, such as support in kind rather than cash?
- What are the main institutional and other risks for the smooth implementation of the resettlement programmes?

**Implementation schedule:**

- List and briefly describe the chronological steps in implementation of the resettlement, including identification of agencies responsible for each step of the programme.
- Prepare a month-wise implementation schedule of activities to be undertaken as part of the resettlement implementation (Gantt Chart).
- Describe the linkages between resettlement implementation and initiation of civil works for each of the project components.

**Costs and budgets:**

- Clear statement of financial responsibility and authority.
- Ensure that the cost of resettlement is included in the overall project costs.
- Resettlement costs should be a part of annual development plans.
- Prepare a cost-wise, item-wise budget estimate for the entire duration of resettlement implementation, including administrative expense, monitoring and evaluation and contingencies.
- List the sources of funds and describe the flow of funds.
- Describe the specific mechanisms to adjust cost estimates by the inflation factor.

- 
- Describe provisions to account for physical and price contingencies.

**Grievance redress:**

- Describe the step-by-step process for registering and addressing grievances.
- Provide specific details regarding registering complaints, response time, communication modes, etc.
- Describe the mechanism for appeal.
- Describe the provisions to approach civil courts in case other provisions fail.

**Monitoring and evaluation:**

- Describe the internal monitoring process.
- Define key monitoring indicators. Provide a list of monitoring indicators which would be used for internal monitoring.
- Describe institutional (including financial) arrangements.
- Describe frequency of reporting and content for internal monitoring.
- Describe process for integrating feedback from internal monitoring into implementation.
- Describe financial arrangements for external monitoring and evaluation, including process for awarding and maintenance of contracts for the external monitoring.
- Describe methodology for external monitoring.
- Define key indicators for external monitoring, focusing on outputs and impact.
- Describe frequency of reporting and content for external monitoring.

**SOCIAL MANAGEMENT PLAN FOR S-2 CATEGORY PROJECTS**

| <b>Social Assessment</b>                                      | <b>Yes</b> | <b>No</b> | <b>If Yes, Specify Details</b>  | <b>Social Management Measure</b>  | <b>Cost</b> |
|---|------------|-----------|---|---|-------------|
| 1. Is there loss of homestead land?                           |            |           | i. Total area of land acquired<br>ii. Total No. of households (HHS) losing their land   | i. No. of HHs (with valid title) to be given alternate land<br>ii. No. of HHs to be given cash compensation<br>iii. No. of squatters / encroaches to be given transition allowance.   |             |
| 2. Is there loss of agricultural land?                        |            |           | i. Total agricultural area acquired<br>ii. Total No. of HHs losing their land<br>iii. Total No. of tenants / share-croppers losing their land                                   | i. No. of HHs (with valid title) to be given alternate land<br>ii. No. of HHs (with valid title) to be given cash compensation<br>iii. No. of individuals to be given cash compensation<br>iv. No. of individual tenants / leaseholder to be given equal leased land  |             |
| 3. Is there loss of commercial/industrial/institutional land? |            |           | i. No. of HHs (with title) losing their land<br>ii. No. of tenants/leaseholders losing their land<br>iii. No. of squatters / encroachers losing their land                      | i. No. of units (with valid title) to be given alternate land<br>ii. No. of units (with valid title) to be given cash compensation<br>iii. No. of tenants to be given reimbursement for un-expired lease.<br>iv. No. of tenants to be given transition allowance<br>v. No. of squatters / encroachers to be given transition allowance<br>vi. No. of squatters to be given cash compensation. |             |
| 4. Is there loss of house structure?                          |            |           | i. No. of HHs (with valid title) losing their structure<br>ii. No. of tenants/leaseholders losing their structure<br>iii. No. of squatters / encroachers losing their structure | i. No. of HHs (with valid title) to be given equivalent structure<br>ii. No. of HHs to be given cash compensation<br>iii. No. of tenants/leaseholders to be given transition allowance<br>iv. No. of squatters / encroachers to be given repair allowance<br>v. No. of squatters to be given cash compensation.   |             |
| 5. Is there loss of commercial/                               |            |           | i. No. of HHs (with valid title) losing their   | i. No. of units (with valid title) to be given equivalent   |             |

| <b>Social Assessment</b>   | <b>Yes</b> | <b>No</b> | <b>If Yes, Specify Details</b>  | <b>Social Management Measure</b>   | <b>Cost</b> |
|--|------------|-----------|---|--|-------------|
| industrial/institutional structure?  |            |           | structure<br>ii. No. of tenants/leaseholders losing their structure<br>iii. No. of squatters, pavement dwellers losing their structure  | structure<br>ii. No. of units to be given cash compensation<br>iii. No. of units to be given transition allowance<br>iv. No. of squatters / encroachers to be given repair allowance<br>vi. No. of squatters to be given cash compensation   |             |
| 6. Is there loss of wage employment?   |            |           | i. No. of individual losing their livelihood?   | i. No. of jobs can be provided in reconstructed enterprise<br>ii. No. of individuals to be provided employment packages and transition allowance<br>iii. No. of individuals to be provided wages compensation (for closer period)  |             |
| 7. Is there loss of access to Common Property Resources (CRP) and or facilities? |            |           | i. Specific type of CPR being lost<br>ii. No. of HHs losing their access to CPRs  | i. No. of HHs to be provided CPRs<br>ii. No. of HHs to be provided amenities   |             |
| 8. Is there loss of standing crops/trees/ perennial plants                       |            |           | i. No. of trees chopped<br>ii. Amount of crop destroyed<br>iii. No. of perennial plants chopped   | i. Cash compensation to be given for trees<br>ii. Cash compensation to be given for crops<br>iii. Cash compensation to be given for perennial plants<br>iv. Cash compensation to be given for initial investment and care until the time of land acquisition for perennial plants  |             |
| 9. Is there loss of public infrastructure  |            |           | i. No. of relevant agencies   | i. No. of relevant agencies to be given cash compensation  |             |
| 10. Are any losses expected during transition of displaced establishment?        |            |           | i. No. of HHs/units who will suffer losses during transition of displaced persons/ establishment<br>ii. No. of families/units who will suffer maintenance losses due to displacement<br>iii. No. of families/units who will require construction work | i. No. of HHs / units to be provided transport facilities<br>ii. No. of families / units to be provided with cash equivalent to transportation<br>iii. No. of families / units to be provided with cash compensation equivalent to three months (for maintenance)<br>iv. Total amount paid as cash compensation for construction work<br>v. Total amount to be given as compensation for materials |             |
| 11. Are there losses to host communities?  |            |           | i. Specify the type of losses<br>ii. No. of communities losing their amenities/services   | i. Money to be spent on restoration of losses due to resettlement<br>ii. Money to be spent on restoration of amenities   |             |
| 12. Are there any adverse effects to   |            |           | i. No. PAPs affected  | i. No. of PAPs to be given cash compensation for affected  |             |

| <b>Social Assessment</b>   | <b>Yes</b> | <b>No</b> | <b>If Yes, Specify Details</b>  | <b>Social Management Measure</b>   | <b>Cost</b> |
|--|------------|-----------|---------------------------------|--|-------------|
| land, structures or other fixed assests, crops trees etc. during temporary possession of land? |            |           | ii. Specify the types of losses | structures and other fixed assests, trees, crops etc.<br>ii. No. of PAPs to be given rent allowance for shifted structures.<br>iii. No. of damaged assests restored. |             |
| 11. Is there any impact on indigenous people?  |            |           | i. No. of householders          |  |             |
| 12. Is there any induced development?  |            |           |                                 |  |             |

**CHECKLIST FOR WATER SUPPLY**

| S/No | Question  | Please tick the appropriate option   | Remarks |
|------|---|--|---------|
| 1    | What is the proposed source of water supply?  | i. canal water/surface water pacification<br>ii. stream (percolation wells)<br>iii. underground (tube-wells)<br>iv. spring |         |
| 2    | When will be the disposal of household waste water?   | i. sewerage system<br>ii. no proper arrangements<br>iii. kacha drains<br>iv. disposed in pond                              |         |
| 3    | Are the sewerage/drainage facilities available in the project area, if not how the impact of standing of waste water will be mitigated?                               |  |         |
| 4    | What will drainage and/or sewerage be supplied to this area?  | i. next year<br>ii. within five years<br>iii. no plan  |         |
| 5    | Is the laboratory analysis of the water source attached?  |  |         |
| 6    | Is there any impact of scheme on the groundwater?   |  |         |
| 7    | Are there any other wells in the vicinity of the project which draw water from this source? If yes, how many and what is their combined annual withdrawal?            |  |         |
| 8    | Is there any possibility of subsidence due to water withdrawal?   |  |         |
| 9    | Is there any possibility of intrusion of brackish water in the sweet water pocket due to excessive pumping/ extraction of water than the seepage rate of sweet water? |  |         |
| 10   | Have proper safeguards been included in the scheme to deliver uncontaminated water to the users and how?  | i. by gas chlorination<br>ii. by hypochlorination<br>iii. by ozonisation   |         |
| 11   | Is the scheme operationally sustainable?  |  |         |
| 12   | On going monitoring for checking of quality of drinking water   | i. Twice a year<br>ii. Thrice a year<br>iii. or more   |         |

Note:- Remarks should be in “Yes” or “No”

**CHECKLIST FOR SEWERAGE & DRAINAGE**

| S/No | Question   | Please tick the appropriate option  | Remarks |
|------|--|---|---------|
| 1    | What is the current practice of excreta and liquid household waste?  | i. No. proper arrangements<br>ii. Kacha drain.<br>iii. Any other please specify   |         |
| 2    | What is the ultimate disposal of liquid household waste?   | i. Village pond/lake (please name)<br>ii. Seepage drain/nullah (pl. name)<br>iii. Lake/river/canal<br>iv. Any other, please specify |         |
| 3    | How many villages/settlement are on the downstream of the receiving water body up to 10 km from the disposal point?  |   |         |
| 4    | What activities take place on or along the receiving body at and downstream of the discharge point for 5 km?   | i. Human consumption<br>ii. Livestock use<br>iii. Washing/bathing<br>iv. Irrigation   |         |
| 5    | Is there any source of drinking point near the point of disposal e.g. 2 km?  |   |         |
| 6    | Will final disposal of sewage effect the water quality for the consumers on/along/down stream of the water body?   |   |         |
| 7    | Whether the effluent is used for irrigation. If yes, for how much it could be sold per annum?  |   |         |
| 8    | Whether the environmental awareness progress regarding the ill effects of the re-use of raw sewage is included in the project? If yes, please elaborate how it will be carried out?  |   |         |
| 9    | Is the complete laboratory analysis or any data of sewage waste water, at existing disposal point attached?  |   |         |
| 10   | Are treatment of effluents arrangements provided in the project estimates? If not what are the long term/short term plans for the same?<br><br>Please show in the estimate as well as on the plan, the proposed site such treatment facilities and their type. | i. Lagoons or stabilization ponds<br>ii. Trickling filters or other treatment plants  |         |
| 11   | Will construction/alignment of the sewerage/water supply project dislocate population or encroach on private land?   |   |         |
| 12   | Have air pollution and odor abating measures been included in the project's cost sewerage/drainage/water supply scheme)? If yes, give details of how these will be implemented by the contractors?   |   |         |
| 13   | Whether the schemes is sustainable. How?   |   |         |

Note:- Remarks should be in "Yes" or "No"

**ROADS AND STREETS**  
**IMPACT ASSESSMENT AND MITIGATION MEASURES**

| <b>Potential Negative Environmental Impacts</b>                | <b>Mitigation Measures</b>   |
|--|--|
| Dust   | <ul style="list-style-type: none"> <li>• Water will be sprinkled frequently on the work site to mitigate dust emission</li> <li>• Storage material will be located away from community and sensitive receptors</li> <li>• Hauling trucks will be covered with canvas to avoid dust emission</li> </ul> |
| Noise  | <ul style="list-style-type: none"> <li>• No construction work will be undertaken near the thickly populated residential areas and hospitals during the night</li> <li>• Construction work near the educational institutions will be minimized before noon</li> </ul>                                   |
| Interruption to the local traffic                              | <ul style="list-style-type: none"> <li>• Sign boards will be used</li> <li>• Diversions will be provided</li> </ul>  |
| Trees cutting and damage to vegetation                         | <ul style="list-style-type: none"> <li>• Number of tree to be cut</li> <li>• Number of trees to be cut will be minimized. For every tree cut, at least two trees will be planted</li> <li>• Landscaping and roadside plantation of ornamental plants will be undertaken</li> </ul>                     |
| Damage to sites of cultural importance                         | <ul style="list-style-type: none"> <li>• A safe distance will be maintained from such sites</li> <li>• The sites will be marked and possibly fenced during the construction period</li> </ul>  |
| Demolishing of structures such as houses, buildings, shops etc | <ul style="list-style-type: none"> <li>• Owners of the land (houses, buildings etc.) will be compensated</li> </ul>  |
| Silting of water bodies  | <ul style="list-style-type: none"> <li>• It will be ensured that runoff from roadwork does not go to the water bodies by constructing runoff channels, contouring or other means</li> </ul>  |
| Community safety   | <ul style="list-style-type: none"> <li>• The equipment will not be parked near residential areas</li> <li>• Community will be informed in advance of the construction work and schedule</li> <li>• All open ditches and other potential hazards will be marked with visible tapes</li> </ul>           |
| Damage to standing agricultural crops                          | <ul style="list-style-type: none"> <li>• Water will be sprinkled frequently on the work site to mitigate dust emission</li> </ul>  |
| Risk of erosion and landslide                                  | <ul style="list-style-type: none"> <li>• Stabilization measures will be undertaken</li> </ul>  |
| Waste Disposal   | <ul style="list-style-type: none"> <li>• Waste asphalt and other waste materials will be disposed well away</li> </ul>   |
| Restoration  | <ul style="list-style-type: none"> <li>• All properties, utility lines and other structures damaged during the construction will be restored</li> </ul>  |

**WATER SUPPLY SCHEMES**  
**IMPACT ASSESSMENT AND MITIGATION MEASURES**

| <b>Potential Negative Environmental Impacts</b> | <b>Mitigation Measures</b>  |
|---|---|
| Damage to sensitive ecosystem                   | <ul style="list-style-type: none"> <li>• Wetlands and other ecologically sensitive sites in the project area will be avoided</li> </ul> |

|  |   |
|--|---|
| Erosion and sedimentation                      | <ul style="list-style-type: none"> <li>• Silt screens, straw bales or similar erosion control measures will be used</li> <li>• Damage to vegetation will be avoided</li> <li>• Areas damaged during construction will be re-vegetated</li> <li>• Proper bedding material will be used for pipes</li> </ul>                          |
| Alteration in natural flow of rainwater runoff | <ul style="list-style-type: none"> <li>• Riprap (Cobbled stone), gravel or concrete will be used as needed to prevent erosion of drainage structures</li> </ul>   |
| Creation of stagnant water pools               | <ul style="list-style-type: none"> <li>• Contouring will be undertaken to ensure proper flow</li> <li>• It will be ensured that spilled water and rain water drain to a soak way or equivalent structure and do not accumulate and create stagnant standing water</li> </ul>  |
| Water contamination                            | <ul style="list-style-type: none"> <li>• Leaks from cracked structures, broken pipes, faulty valves and similar structures will be monitored and repaired</li> <li>• Animals will not be allowed to drink directly from the water source</li> <li>• No major sewerage line will be constructed within 50 m of the source</li> </ul> |
| Water supply exhaustion                        | <ul style="list-style-type: none"> <li>• Water levels will be monitored</li> <li>• Water levels in wells or impoundment structures will be monitored to detect overdrawn</li> </ul>   |
| Depletion of aquifer                           | <ul style="list-style-type: none"> <li>• Water levels in wells or impoundment structures will be monitored to detect overdrawn</li> </ul>   |
| Salt water intrusion                           | <ul style="list-style-type: none"> <li>• Quality of aquifers will be monitored to detect the salt water intrusion</li> </ul>  |

**SEWERAGE SCHEMES**  
**IMPACT ASSESSMENT AND MITIGATION MEASURES**

| <b>Potential Negative Environmental Impacts</b> | <b>Mitigation Measures</b>  |
|---|---|
| Erosion and sedimentation                       | <ul style="list-style-type: none"> <li>• Silt screens, straw bales or similar erosion control measures will be used</li> <li>• Damage to vegetation will be avoided</li> <li>• Areas damaged during construction will be re-vegetated</li> </ul>  |
| Alteration in natural flow of rainwater runoff  | <ul style="list-style-type: none"> <li>• Riprap (Cobbled stone), gravel or concrete will be used as needed to prevent erosion of drainage structures</li> </ul>   |
| Creation of stagnant water pools                | <ul style="list-style-type: none"> <li>• Contouring will be undertaken to ensure proper flow</li> <li>• Ensure that spilled water and rain water drain to a soak way or equivalent structure and do not accumulate and create stagnant standing water</li> </ul>  |
| Groundwater contamination                       | <ul style="list-style-type: none"> <li>• Leaks from cracked structures, broken pipes, faulty valves and similar structures will be monitored and repaired</li> <li>• If water table is too high, tank will be lined with clay, plastic sheeting or some other impermeable material to prevent leakage</li> <li>• Slow rate overland flow and slow rate subsurface flow will be used where groundwater is &lt; 3 ft. below surface.</li> </ul> |
| Surface water contamination                     | <ul style="list-style-type: none"> <li>• Leaks from cracked structures, broken pipes, faulty valves and similar structures will be monitored and repaired</li> <li>• If water table is too high, tank will be lined with clay, plastic sheeting or some other impermeable material to prevent leakage</li> </ul>  |

|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>• Slow rate overland flow and slow rate subsurface flow will be used where groundwater is &lt; 3 ft. below surface.</li> <li>• Direct discharge of effluent to waterways will be avoided if possible. Direct discharge to waterways with sufficient volume and flow to assimilate the waste may be acceptable. It is better to add secondary treatment, such as passing effluent through an anaerobic filter, followed by discharge to an absorption, or better yet, a constructed wetland</li> <li>• Sludge will not be disposed of near water bodies</li> <li>• Collected sewage will be treated, e.g. in a wastewater stabilization pond, and not simply discharged to a river or stream or used directly in agriculture or aquaculture. This is especially important for simplified sewerage, since there is no interceptor tank</li> </ul> |
| Damage to ecosystem  | <ul style="list-style-type: none"> <li>• Collected sewage will be treated, e.g. in a wastewater stabilization pond, and not simply discharged to a river or stream or used directly in agriculture or aquaculture. This is especially important for simplified sewerage, since there is no interceptor tank</li> </ul>   |
| Disease transmission to workers and consumers of agricultural products | <ul style="list-style-type: none"> <li>• WHO or other national or international guidelines will be followed for use of sludge in waste water in agriculture and aquaculture</li> </ul>   |
| Provision of feeding grounds for disease vector                        | <ul style="list-style-type: none"> <li>• Creation of stagnant water pools will be avoided</li> <li>• Disease vectors will be monitored</li> </ul>  |
| Diseases in handlers and processors                                    | <ul style="list-style-type: none"> <li>• Workers will be provided with appropriate protective clothing, including rubber gloves, boots, long sleeved shirts and pants, and workers will be trained to wash hands and faces frequently with soap and warm water and both will be made available</li> </ul>  |

**SITE HANDING OVER DOCUMENT**

SUB-PROJECT: (title)

TMA: (name)

REFERENCE: (work award letter number)

CONTRACTOR: (name of the contractor / firm)

The site required for the execution / implementation of above mentioned project, as per plans, profiles, lines, grades and specifications is being handed over to you for mobilizing at site. The site includes the following parcels (*legal site description*).

The site being handed over for the construction activities (*select one*) is owned / acquired / purchased by the TMA and there is no claim pending for compensation as permissible under Environmental and Social Framework (ESF) of the Punjab Municipal Development Fund Company, approved for the PMSIP. The site is clear of all encumbrances and all entitlements and payments have been delivered to those affected.

You are supposed to mobilize at site to start the construction activities, with-in the stipulated time mentioned in your contract agreement for this sub – project.

Handed Over by

Taken Over by

Tehsil Municipal Officer  
(TMA \_\_\_\_\_ )

Contractor's Authorized Representative  
(Firm's Name and Address)

**Land Acquisition and Resettlement Impacts Checklist**

1. Name of Subproject:
2. TMA name:
3. Sub-project Location (include map/sketch):
4. Proposed Date of Commencement of Work:
5. Technical Drawings/Specifications Reviewed  
(circle answer): Yes--- No---
6. Will the sub-project involve land acquisition or demolition of existing structures? Yes/No,  
If yes, provide details.

- ❖ Land requirement for the sub-project (Ha):
  - (a) Prov. Govt. \_\_\_\_\_ ha (b) Private \_\_\_ha (c) TMA \_\_\_\_\_ ha
  - (b) Community/ Religious Land \_\_\_\_\_ ha (e) Other \_\_\_\_\_ ha

7. Current land uses of the above affected lands: (use) \_\_\_\_\_ (ha) \_\_\_\_\_

8. Existing users:
  - a) Number of Customary Claimants:
  - b) Number of Squatters:
  - c) Number of Encroachers:
  - d) Number of Owners:
  - e) Number of Tenants:
  - f) Others (specify)
  - g) Common facilities affected: (Describe) \_\_\_\_\_

9. Whether any common facilities or other structures affected due to acquisition of above lands:

10. Type of Plan required;
  - (a) S 1 Resettlement Plan
  - (b) S 2 Abbreviated Plan
  - (c) No Plan required

11. SMP Date ----- submitted:

- ❖ Have census, surveys and analysis identified all significant social impacts and affected people, and provided sufficient information for realistic plans?
- ❖ Is draft SMP ready for disclosure? List consultations to date (dates, places, attendance, issues raised and project response):
- ❖ Is SMP adequate to mitigate all significant impacts?
- ❖ Are M&E mechanism sufficient to detect and correct likely problems?

12. Recommendation for Clearance and any Conditions required:

Signed by M (E&S)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_