Environmental and Social Considerations in Detailed Planning Survey
(Technical Cooperation for Development Planning)

1. Full title of the Project
   Project for Treatment of Sewage, Rainwater and Wastes in Kaolack City

2. Type of the study (e.g. Master Plan, Feasibility Study, Detailed Design, etc.)
   Master Plan and Feasibility Study for highly prioritized project

3. Categorization and its reason
   (1) Category: B
   (2) Reason:
       The project is not likely to have significant adverse impact on the environment
       under the JICA Guidelines for Environmental and Social Consideration (April, 2010)
       in terms of its sectors, characteristics and areas.

4. Agency or institution responsible for the implementation of the project
   Office National de L’Assainissement du Sénégal (ONAS)

5. Outline of the Project (objectives, justification, location, proposed activities, and scope of the study)

5.1. Objectives
   (1) to review existing planning and current condition of sewerage, rainwater drainage and solid waste management in Kaolack city
   (2) to compile Master Plan of sewerage, rainwater drainage and solid waste management in Kaolack city
   (3) to conduct Feasibility Study for highly prioritized area
   (4) to transfer relevant skills and technologies to personnel concerned in the course of the Project
   Note: Islamic Development Bank (IDB) is responsible for carrying out cooperation activity in the field of waste management including landfills.

5.2. Location
   Kaolack city in Senegal.
5.3. Scope of the Project
   Phase I: Collection of basic information
   Phase II: Compiling of Master Plan
   Phase III: Feasibility Study on the highly prioritized projects

6. Description of the project site (maps, environmental and social condition, current issues, etc.)

6.1. Location Map of Kaolack city

6.2. Environmental and social condition
   Kaolack city locates on the North bank of the River Saloum with around 250,000 populations. Major roads cross in the city which are connected Dakar to Gambia to the south and connected to Mali to the East. Kaolack city is an important regional market and is Senegal's main peanut trading and processing centre. The weather is tropical dry climate and there are dry and wet season. It locates in quite low land and its sea level is close to zero.
6.3. Current issues
Sanitary environment in the city is quite poor. The sewage is not treated appropriately and discharged into the river or illegally dumped around the city. Rainwater drainage is partially filled with solid waste and water in the drainage stagnates and gets spoiled. Waste is scattered all around the city. Wastes are dumped in landfills without any sanitary management.

7. Legal Framework of Environmental and Social Considerations

7.1. Laws, Regulations and Relative agencies and institutions
Environment and social issues are prescribed by Environmental law which was established in 2001 and Presidential Degree published in the same year. The process of environmental and social assessment is regulated by 5 ministerial ordinances.

DEEC (Direction de l’Environnement et des Etablissements Classées) under the Ministry of Environment is in charge of supervision and approval of Environmental Impact Assessment (EIA). Public consultation and information disclosure are recommended at the initial stage of EIA process based on the Presidential degree and a ministerial ordinance (No. 9468 MJEHP/DEEC 28 Nov. 01).

7.2. Procedures of EIA, stakeholder participation and information disclosure
The new Environmental Code and its enforcement orders make impact studies obligatory and set out their scope and content as well as the public consultation process. Projects are classified into two categories: Category 1. Installations or activities representing a danger to public health and safety, hygiene, nature, and the environment in general, or a nuisance for neighboring communities (projects likely to have considerable impact). Category 2. Installations or activities that do not cause such damage for the issues outlined above (projects with limited impacts which can be mitigated).

Automatic EIA. Category 1 projects are automatically subject to an EIA and public consultations while Category 2 projects are subject to a declaration backed up by relevant documentation. The environmental assessment process is linked to the authorization process and the scope, content, and acceptability of
EIA are under the authority of the DEEC. DEEC sets up technical committees to validate EIA of each project. The flow of environmental assessment process is as follows;

- Submission of project application to DEEC
- Categorization of the project by DEEC
- Public consultation
- Review and approval of Terms of Reference for environmental assessment
- Environmental assessment
- Compilation of EIA report
- Submission of Draft EIA report to the technical committees
- Revision of Draft EIA report based on the comments from the technical committee
- Review of EIA report through public consultation
- Submission of Final EIA report
- Tentative approval by Director General of DEEC
- Approval of the Minister of Environment

8. Provisional Scoping (types and magnitudes of possible adverse impacts and mitigation measures)

(1) Types of magnitudes of possible adverse impacts

Table 1. Checklist for scoping

<table>
<thead>
<tr>
<th>No</th>
<th>Impacts</th>
<th>Rating</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Environment</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Flora and Fauna</td>
<td>D</td>
<td>Deforestation around landfills (IDB is responsible.)</td>
</tr>
<tr>
<td></td>
<td>Topography and Geographical</td>
<td>-</td>
<td>Around landfills (IDB is responsible.)</td>
</tr>
<tr>
<td></td>
<td>features</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land Erosion</td>
<td>-</td>
<td>Around landfills (IDB is responsible.)</td>
</tr>
<tr>
<td></td>
<td>Underground water</td>
<td>+</td>
<td>Around landfills (IDB is responsible.)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Contamination by penetration of waste water will be reduced.</td>
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<tr>
<td></td>
<td>Lake and River</td>
<td>+</td>
<td>Positive impacts are expected.</td>
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<tr>
<td></td>
<td>Meteorology</td>
<td>D</td>
<td>No impact.</td>
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<td>--------------------------------</td>
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<td>-----------------------------------------------------------------</td>
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<tr>
<td><strong>Landscape</strong></td>
<td></td>
<td>Scale of the facilities is small.</td>
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<tr>
<td><strong>Pollution</strong></td>
<td></td>
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<tr>
<td>Air Pollution</td>
<td>B</td>
<td>Gases from landfills (IDB is responsible.) Sludge from sewage treatment plant</td>
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<tr>
<td>Water Pollution</td>
<td></td>
<td>Around the waste treatment and landfills (IDB is responsible.) Contamination will be reduced.</td>
<td></td>
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<tr>
<td>Soil Contamination</td>
<td></td>
<td>Around the waste treatment and landfills (IDB is responsible.) Contamination will be reduced.</td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>B</td>
<td>Sludge from sewage treatment plant</td>
<td></td>
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<tr>
<td>Noise and Vibration</td>
<td>B</td>
<td>During construction stage, Noise and Vibration will be occurred</td>
<td></td>
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<tr>
<td>Odor</td>
<td>B</td>
<td>Odor from landfills (IDB is responsible.) Odor from spoiled waste water will be reduced.</td>
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<tr>
<td><strong>Social Environment</strong></td>
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<tr>
<td>Involuntary Resettlement</td>
<td>C</td>
<td>Construction of waste treatment / landfills (IDB is responsible.) Construction of sewer networks and rainwater drainage</td>
<td></td>
</tr>
<tr>
<td>Economic Activities</td>
<td></td>
<td>Waste pickers may be affected (IDB is responsible.) Positive impacts are expected thanks to less contamination.</td>
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<tr>
<td>Equipment of Traffic</td>
<td></td>
<td>Some impact by waste transportation (IDB is responsible.)</td>
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<tr>
<td>Cultural Heritage/ Asset</td>
<td>D</td>
<td>No impact</td>
<td></td>
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<tr>
<td>Water Right</td>
<td></td>
<td>Positive impact</td>
<td></td>
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<tr>
<td>Sanitation</td>
<td></td>
<td>Positive impact</td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>+</td>
<td>Positive impact</td>
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<tr>
<td>Disaster</td>
<td>+</td>
<td>Positive impact</td>
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Note: Evaluation categories
A: Serious impact is expected
B: Some impact is expected
C: Extent of impact is unknown
(Examination is needed. Impacts may become clear as study progress)
D: No impact is predicted. IEE/EIA is not necessary.
+: Positive impacts are expected

(2) Mitigation measures
Detailed mitigation plans will be analyzed through an implementation of the Project.

9. Alternatives to the project activities including ‘without project’ option.
If the Project is not commenced, waste water would not be treated appropriately and it would pollute river and ground water. Rainwater would not be drained effectively and cause flood and bad sanitary condition. Waste would be scattered around the city. This situation would deteriorate sanitary condition of the city and may cause health problems for people living in and around the city. There seem no spaces to plan alternatives.

10. Result of the consultation with recipient government on environmental and social consideration including roles and responsibilities.
Senegalese side agreed with JICA Preparatory Study Team on June 1st, 2011 that, environment and social consideration based on JICA guidelines for environmental and social considerations (April, 1st, 2010) is carried out through the Project.

11. Terms of Reference for Environmental and Social Considerations
Environment and social consideration based on JICA guidelines for environmental and social considerations (April, 1st, 2010)

12. Other relevant information
None