

**INTEGRATED SAFEGUARDS DATA SHEET
CONCEPT STAGE**

Report No.: AC3822

Date ISDS Prepared/Updated: 10/05/2009

I. BASIC INFORMATION

A. Basic Project Data

Country: Indonesia	Project ID: P111034
Project Name: Jakarta Urgent Flood Mitigation Project	
Task Team Leader: Hongjoo J. Hahm	
Estimated Appraisal Date: January 20, 2010	Estimated Board Date: April 15, 2010
Managing Unit: EASIS	Lending Instrument: Specific Investment Loan
Sector: Flood protection (100%)	
Theme: Natural disaster management (67%); Other urban development (33%)	
IBRD Amount (US\$m.):	0.00
IDA Amount (US\$m.):	0.00
GEF Amount (US\$m.):	0.00
PCF Amount (US\$m.):	0.00
Other financing amounts by source:	
Borrower	0.00
<u>Financing Gap</u>	<u>130.00</u>
	130.00

B. Project Objectives [from section 2 of PCN]

JEDI will alleviate the impacts of annual floods in the Province of Jakarta (DKI Jakarta) and achieve reductions in associated socio-economic costs through: (i) priority rehabilitation of existing floodways and retention basins; and (ii) provision of technical expertise to improve stormwater drainage and flood control.

Dredging and rehabilitation of existing floodways and retention basins will have immediate, positive impacts for over one million people who will no longer be directly affected by severe flooding, like the devastating February 2007 event. Beneficiaries will be predominantly poor communities living in flood-prone areas.

Dredging and rehabilitation is only an entry point through which JEDI can begin to engage with and strengthen the capacity of the local government of DKI Jakarta to operate and maintain its flood control system. It represents a platform, a basis from which the World Bank can promote and support comprehensive flood mitigation interventions, not least of which is increased technical O&M capacity, and inter-agency coordination. JEDI has already generated momentum

towards creating inter-agency and inter-regional cooperation on a range of issues, including water resource management, environmental and social initiatives, and funding mechanisms.

Regarding critical social safeguard issues, JEDI has introduced a rights-based approach to community engagement and social development ensuring that beneficiaries enjoy sustainable benefits from the project. Foremost in this endeavor is the development of a World Bank approved Resettlement Policy Framework that adequately engages with and addresses the needs of formal and informal communities alike.

C. Project Description [from section 3 of PCN]

C1. Project Components

JEDI will target major waterways in order to clear serious bottlenecks that choke the system. At the same time, JEDI will support the development of technical and management capacity and inter-agency coordination. These factors have been identified as the critical “missing links” between quick fix dredging initiatives and longer-term flood mitigation efforts.

JEDI is comprised of two components: Component A includes structural works for flood infrastructure improvement; and Component B focuses on non-structural measures needed to address institutional capacity in order to achieve institutional effectiveness and longer-term sustainability. The project components complement each other by implementing works and building institutional capacity, as well as providing technical assistance (TA) for preparing strategies and coordinating efforts for promoting critical additional investments in comprehensive flood mitigation. Initial infrastructure rehabilitation activities, combined with institutional effectiveness, will support sustainable project outcomes, while TA activities will assist in preparation of additional flood mitigation efforts.

Component A: Structural Works

According to studies carried out as part of the Bank’s West Java Environmental Management Project (WJEMP), a series of floodways, drains and retention basins (including screens and pumping stations) is in urgent need of rehabilitation (i.e., dredging and embankment work). Dredging will remove the sediment deposits that occupy half of the designed or required depth of the major drains and have caused a decrease of flood protection from a design level of 25 years to 2 years. In addition to dredging, works to improve some embankments and repairs to some pumps and (trash) racks will be necessary. In 2004, surveys of the four major floodways (Cakung Floodway, Sunter River, Cengkareng Floodway and West Banjir Canal) found some stretches of embankment in need of rehabilitation and confirmed high levels of sedimentation. In some cases, embankment crest levels need to be raised to contain floodwaters. In other cases, watercourses need normalizing, or earthen embankments need stabilizing to prevent their collapse into the newly-dredged channels.

The scope of works for JEDI include floodways, canals and drains under the responsibility of (i) Directorate General of Human Settlements (DGCK) of the Ministry of Public Works (MoPW); (ii) Directorate General of Water Resources (DGWR) of the MoPW; and (iii) DKI Jakarta.

Component A consists of two main structural works: (i) dredging (including dredging, processing and transporting); and (ii) rehabilitation and repairs to embankments, racks and pumps.

- (i) Dredging. The structural works of dredging will be carried out on 16 sites:
- Three Drains of National Importance (DGCK): (i) Tanjungan drain; (ii) Lower Angke drain; and (iii) Cideng-Thamrin drain;
 - Three Floodways under DGWR authority: (i) Cengkareng floodway; (ii) West Banjir canal/floodway; and (iii) Sunter floodway;
 - Five Major Drains under DKI Jakarta authority: (i) Ciliwung-Gunung Sahari drain; (ii) Sentiong-Sunter drain; (iii) Diversion Grogol-Sekretaris drain; (iv) Pakin-Kali Besar-Jelakeng drains; and (v) Krukut drain; and
 - Five Retention Basins (waduks) under DKI Jakarta authority: (i) Waduk Pluit; (ii) Waduk North Sunter; (iii) Waduk South Sunter; (iv) Waduk East Sunter III; and (v) Waduk Melati.

(ii) Embankment Rehabilitation. JEDI includes ten sub-projects of embankment rehabilitation and pump reparation:

- Three Drains of National Importance (DGCK): (i) Tanjungan drain; (ii) Lower Angke drain; and (iii) Cideng-Thamrin drain;
- One Floodways under DGWR authority: (i) Cengkareng floodway;
- One Major Drains under DKI Jakarta authority: (i) Pakin-Kali Besar-Jelakeng drains; and
- Five Retention Basins (waduks) under DKI Jakarta authority: (i) Waduk Pluit; (ii) Waduk North Sunter ; (iii) Waduk South Sunter; and (iv) Waduk Melati. and, (v) Waduk East Sunter III.

Disposal. The total dredge volume for all 16 sites is estimated to be between 7.5 and 9.5 million m³. Currently, the most viable option for the Confined Disposal Facility (CDF) is at West Ancol, a centrally located sea-based site in the Bay of Jakarta. The Ancol Development Authority (PT Pembangunan Jaya Ancol, owned by DKI Jakarta) has a long term plan to enlarge their existing coastal site by reclaiming land from the sea. The planned Ancol CDF (maximum capacity: 12 million m³) would have sufficient capacity to receive the dredge material from all 16 JEDI sites. The Regional Environmental Agency (BPLHD) of DKI Jakarta has already approved the Ancol reclamation EIA (AMDAL) required by Indonesian law. The AMDAL, which covers a 125 ha to be reclaimed, was initially approved on the basis that sand would be used for the filling; it has now been revised to include dredge material.

The physical construction of the West Ancol CDF will be self-financed by the PT Pembangunan Jaya Ancol (PT PJA); however supervision during the construction and operation of the CDF will be performed by the project preparation consultant (PPC) hired by the project management unit (PMU). The Bank will review the Ancol's EIA to ensure that the EIA (including social aspects) and EMPs meet the Bank standards.

Component B: Capacity Building.

Component B is designed to assist the local government of DKI Jakarta and MoPW in acquiring the necessary capacity and technical expertise to rehabilitate and maintain its flood control system beyond the lifetime of the project. This component involves three types of activities: (i) technical Assistance; (ii) capacity building; and (iii) non-structural measures. The initial focus will include the development of technical designs for the project sites, a framework for proper environmental and social management, assistance in procurement and financial management, and project monitoring and reporting. A PMU established at DGWR of MoPW will ensure proper project preparation. Technical assistance will be provided for the preparation

of consultant packages and bidding documents for dredging works contracts and disposal site works.

Additional support will be provided for strengthening the monitoring framework for assessing flood mitigation infrastructure in order to identify the most appropriate investments; the monitoring system will also support in providing data for flood hazard risks in the region. Other activities include the development of the institutional framework for coordinating water management and for involving communities in flood mitigation activities.

C2. Project Phasing

The project will be implemented in two distinct phases. Phase 1 involves dredging activities with relatively minor social and environmental impacts, while Phase 2 subprojects are more challenging from an environmental and social perspective. Detailed engineering design (DED) of Phase 1 subprojects will be completed first. Environmental and social assessments and action plans (i.e. EIA/SIA or AMDAL, EMPs, and LARAPs) for the Phase 1 will be based on DED. A framework approach will be used to address impacts in Phase 2; site specific EMPs and RAPs for the Phase 2 will be completed as soon as the DED becomes available.

For Phase 1, six sites were selected (for dredging and disposal only) based on a combination of factors, including proximity and ease of water access for hydraulic transport of dredge material and possibilities to minimize social and environmental impacts. Phase 1 work will test dredging equipment and dredge material transportation techniques in the six project sites. The embankment work for Lower Angke and Waduk Melati will be built during Phase 2. The project preparation consultant (PPC) will give priority in the preparation of DED and the dredging contracts for Phase 1 sites. The PPC will prepare all Phase 1 dredging works into one contract, with a focus on minimizing long-term social impact (e.g. no embankment repair, hydraulic dredge material transport). Nevertheless, a Land Acquisition and Resettlement Action Plans (LARAPs) for two sites (Lower West Banjir Canal and Grogol-Sekretaris Drain) will be prepared, as there are dwellings and other structures built inside the river channel to be dredged.

Phase 2 activities involve dredging, disposal, and embankment rehabilitation. Phase 2 sites could have significant social impacts. The planned works are likely to involve resettlement in the following project sites: (i) Lower Angke Drain; (ii) Waduk North Sunter; (iii) Waduk South Sunter; (iv) Sunter; (v) Cideng-Thamrin; (vi) Cengkareng; (vii) Waduk Pluit; (viii) Jelakeng-Pakin-Kali Besar; and (ix) Tanjungan.

C3. Institutional Arrangement

The JEDI requires coordination amongst three implementing agencies (Fig. 1): (i) Directorate General of Water Resources (DGWR) of Ministry of Public Works (MoPW), (ii) Directorate General of Human Settlements (Cipta Karya) (DGCK) of MoPW, (iii) Provincial Government of DKI Jakarta. To oversee project coordination at the policy level and to ensure that national policies are adhered to by the Project, a Joint Steering Committee (JSC) has been established. The Committee comprises representatives from: MoPW, National Development Planning Board (BAPPENAS), Ministry of Finance (MoF), Province of DKI Jakarta, Reclamation Agency, and the World Bank. The MoF has been involved with the task of formulating the project financing and fund channeling framework, while BAPPENAS has been involved to help develop the long-term sequence of flood mitigation activities, from dredging to solid waste and waste water control to sea defense mechanisms.

The DGWR is the executing agency and has established a Project Management Unit (PMU) for the purpose of preparing and executing JEDI. The PMU is comprised of three staff from DGWR, three from DGCK, three from DKI and one from MoPW's Office of Planning and Overseas Cooperation. While the PMU will retain responsibility for all sub-project procurement, project implementation will be in the hands of three Project Implementation Units (PIUs):

- (i) PIU-DGWR will be represented by the Regional Office for the Ciliwung-Cisadane River Catchment Area (Balai Besar Daerah Aliran Sungai Ciliwung-Cisadane) and
- (ii) PIU-DGCK will be represented by the Working Unit of MSW Infrastructure and Sanitation Development for Jabodetabek (Satuan Kerja Pengembangan Infrastruktur Persampahan dan Sanitasi Jabodetabek); and
- (iii) PIU-DKI will be represented by the Public Work Agency (Dinas PU DKI Jakarta) of the Provincial Government of DKI Jakarta.

D. Project location (if known)

Jakarta is the political and economic capital of Indonesia. It was established by the Dutch colonial government in 1619, in a low-lying area along the north coast of Java, the country's most populated island. After more than four centuries of moderate population and spatial growth, the city has expanded rapidly since the 1960s. Nowadays, the Greater Jakarta area covers a land area of 7,300 km² and has a population of over 23 million, up from 12 million in 1980, which makes it one of ten largest metropolitan areas in the world. Rapid population growth has not been accompanied by commensurate investments in public infrastructure, which has resulted in severe environmental degradation and falling standards in public service provision. DKI Jakarta (population 8.9 million) is the center of government and the headquarters of most multinational corporations operating in Indonesia.

E. Borrower's Institutional Capacity for Safeguard Policies [from PCN]

The project will be implemented by three PIU (i) PIU-DGWR; (ii) PIU-DGCK; and (iii) PIU-DKI Jakarta. All of them have experiences in working with Bank-supported projects, and therefore are most likely are aware of the Bank's policy on environment and resettlement policies. They have some experiences in implementing these Bank's policies for their World Bank-supported projects. An environmental and social working group (ESWG or Pokja) (Fig. 1) consisting of representatives of the above three organizations, technical experts from local university, BPLHD (i.e. regional environmental agency of DKI Jakarta) and the Ministry of Environment (MoE) has been established and has been actively working on the preparation of environmental and social management framework (i.e. environmental management framework and LARAPs) for this project.

F. Environmental and Social Safeguards Specialists

- Mr Heinrich K. Unger (EASIS)
- Mr Juan D. Quintero (EASER)
- Mr Isono Sadoko (EASIS)
- Ms Indira Dharmapatni (EASIS)
- Ms Sulistiowati Ms. (EASIS)
- Mr Jose Vicente Zevallos (EAPCO)
- Mr Andrew Daniel Sembel (EASIS)
- Mr Kian Siong (EASIS)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies Triggered	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	X		
<p>The proposed project will finance investment for embankment rehabilitation and dredging (including transport of dredged materials to the Ancol disposal site). Both embankment rehabilitation and dredging activities may potentially have significant positive and adverse environmental impacts. The impacts are most likely prevalent at 1) location where embankment rehabilitation is to be carried out, 2) location close to and along the dredging site, 3) along the dredged materials transportation corridor, and 4) the disposal sites and its vicinity.</p> <p>In general, the main environmental impacts of the JEDI project are short term from the dredging and embankment rehabilitation activities, and long term from the dredge spoil disposal facilities. And the impacted component can generally be grouped into two: 1) Natural environment; and 2) Urban environment.</p> <p>Dredging. The potential environmental impact from the dredging will be 1) the impact resulted from the dredging process itself (including the need for access to the watercourse for equipment); 2) the impact resulted from the transportation of the dredged material to the disposal site; and 3) the impact generated due to the disposal of the dredged material.</p> <p>During the dredging process, the main environmental impact is associated with the removal of sediments from the bed of the rivers, drains and waduks, loss material during transport from bottom to the surface (especially for deep site) and separation of sediment from municipal solid wastes and other materials. However few previous studies - related to water and sediment quality in DKI Jakarta suggests that negative impacts to the environment due to dredging are likely to be minor and short-term. This is because the proposed dredging sites i.e. rivers, main drains and retention basins (waduks) have been polluted by industrial and domestic activities and by municipal solid waste entering the water body. Dredging of those waterways and retention basin is thus, likely to produce positive impacts to the environment through removal of contaminated sediments and solid waste that are claimed to be the one of the major causes of flooding in DKI Jakarta. On the urban environment, communities living close proximity to the dredging site may experience temporary impacts, such as temporary increase of noise, odor and access disturbance. These impacts could be significant.</p> <p>The main environmental concern during the transportation to the disposal site includes leakage and spill of dredged material, traffic disturbance, odor, noise and air pollution. Overland transportation from dredging site to the disposal site is likely to generate potential significant negative impact on the urban environment.</p> <p>The environmental impact due to dredged material disposal will be long-term and could potentially have adverse environmental impact on the seawater quality. Although, the risk of heavy metals contamination is less likely, there is a potential significant negative impact due to risk of pathogens contamination of the public beach (e.g. e-coli bacterial) located adjacent to the disposal site.</p> <p>Embankment Rehabilitation, Rehabilitation of the rivers and canals embankment will reduce erosion of the riverbank, thus have positive impact on water quality (e.g. reducing suspended sediment load). However, there will be also few short-term negative environmental impacts during the embankment work. On the natural environment, the impact will include short term reduction of water quality. On the urban environment, communities living close proximity may temporary increase of noise level, dust, vibration and possibly reduce air quality. And yet</p>			

Safeguard Policies Triggered	Yes	No	TBD
<p>the main potential negative impact from the embankment work will be from the social aspect, particularly issue related to the involuntary resettlement of people occupying the riverbank.</p> <p>Considering the potential severity and intensity of these impacts, the task team is proposing an EA category “A”. To fully understand and address these risks, the Borrower will be preparing the required Environmental Assessments and Environmental Management Plans as required under both the Indonesia EA (AMDAL) system and the Bank’s OP4.01.</p> <p>As the project will be implemented in two phases, the Environmental Assessment will also be carried out in phases. Baseline information on sediment and water quality has already been collected for all project sites. Also, all project sites have been screened for environmental and social issues. Phase 1 will include: (i) EIA (AMDAL) for six sites; (ii) standardized environmental mitigation measures for all types of dredging techniques and sediment transport systems that will be used to tailor the bidding documents for all sites in the project and the preparation of site specific EMPs; (iii) a summary of the EA that has been carried out for the main disposal site already selected for Phase 1 (Environmental Review of Ancol’s EIA). An Environmental and Social Management Framework (ESMF) will be applied to the second Phase sites; this framework includes the terms of reference for EAs of any additional disposal sites and EAs for Phase 2 projects, and the screening and scoping procedures that will be applied for the preparation of site specific EMPs in Phase 2 sites.</p>			
Natural Habitats (OP/BP 4.04)			X
The JEDI activity will not trigger OP 4.04 unless the project includes the construction of CDF at Muara Kali Adem that locates close proximity to the natural reserve. This will be addressed through the EIA for the Phase 2 sites.			
Forests (OP/BP 4.36)		X	
JEDI will not affect forests.			
Pest Management (OP 4.09)		X	
Pesticides will not be used in the project.			
Physical Cultural Resources (OP/BP 4.11)		X	
The project will not affect physical cultural resources.			
Indigenous Peoples (OP/BP 4.10)		X	
The project will not affect IPs.			
Involuntary Resettlement (OP/BP 4.12)	X		
<p>The structural works to be carried out as part of Component A involve involuntary resettlement. These structural works are (1) dredging of waterways and retention basins (waduk) that are occupied by dwellings and other structures and (2) rehabilitation and repairs to embankments, racks and pumps.</p> <p>Phase 1 will consist of dredging activities in six sites. These activities will involve involuntary resettlement in two of the six sites: Lower West Banjir Canal and Grogol-Sekretaris Canal. The Lower West Banjir Canal could displace up to 240 dwellings and other structures and the Grogol-Sekretaris Canal could displace up to 34 dwellings/structures. Two LARAPs will be prepared for these sites on the basis of detailed engineering design (DED).</p> <p>Phase 2 involves dredging and embankment work in 10 sites. These works could affect as many as 5,450 dwellings/structures. Of these, 4,200 are in one site (Waduk Pluit). The actual number of families affected will not be known until the DEDs are available and a census is</p>			

Safeguard Policies Triggered	Yes	No	TBD
carried out. A Resettlement Policy Framework (RPF) will be prepared to guide the preparation of RAPs to address displacement caused by activities implemented during Phase 2. The RPF will also apply to other dredging and embankment activities that are carried out by DKI but not financed by the Bank.			
Safety of Dams (OP/BP 4.37)		X	
Projects on International Waterways (OP/BP 7.50)		X	
Projects in Disputed Areas (OP/BP 7.60)		X	

Environmental Category: A - Full Assessment

III. SAFEGUARD PREPARATION PLAN

- A. Target date for the Quality Enhancement Review (QER), at which time the PAD-stage ISDS would be prepared: 06/02/2009
- B. For simple projects that will not require a QER, the target date for preparing the PAD-stage ISDS: N/A

C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing¹ should be specified in the PAD-stage ISDS.

As the project is being prepared and will be implemented in two distinct phases; priority is given to dredging sites that have relatively minor to no social and environmental impacts. Accordingly, the detailed engineering design (DED) as well as the associated environmental and social impact assessments (i.e. EIA/SIA or AMDAL) will also be carried out in two phases. The following documents (see Fig 2) are to be prepared to fulfill safeguard requirement, in which the first five documents are to be ready prior to project appraisal.

1. Environmental Review of Ancol's EIA, covering both environmental and social aspect. If the Bank does not find the EIA adequate, the EIA will be revised or a EIA Supplement will be prepared and disclosed prior to appraisal.

2. Phase 1 Environmental Impact Assessment. The Phase 1 EIA will cover both environmental and social impact assessment. Phase 1 sites include: (i) West Banjir Canal (the lower reach until the river mouth); (ii) Lower Angke; (iii) Ciliwung-Gunung Sahari; (iv) Grogol-Sekretaris; (v) Sentiong-Sunter; and, (vi) Waduk Melati. Noting that the embankment work slated for Lower Angke and Waduk Melati will be pushed back to Phase 2 with appropriate mitigation measures in place prior to the implementation of the works. The Phase 1 EIA report will include site specific EMPs for the six sites. The Phase 1 EIA consultant will be working in parallel with the Project Preparation Consultant (PPC) that will prepare technical design for each site. During the Phase 1 EIA, two public consultation will have to be carried out, as it is required by Indonesian EIA process (i.e. AMDAL)

¹ Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in-country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.

3. Land Acquisitions and Resettlement Action Plan for Phase 1. There will be two dredging sites covered by Phase 1 LARAPs, i.e. Lower West Banjir Canal (about 240 dwellings/structures) and Grogol-Sekretaris Drain (about 34 dwellings/structures).

4. Resettlement Policy Framework (RPF). The RPF will be prepared before appraisal covering all Phase 2 sites that potentially trigger the OP 4.12 involuntary resettlement. This framework will serve as guideline for preparation of LARAPs for nine sites (the worst case scenario) covered in the Phase 2. In addition, this RPF will also be mandatory for DKI Jakarta guidelines on any other maintenance dredging activities that require LARAPs.

5. Environmental and Social Management Framework (ESMF). Likewise the RFP, the ESMF will be prepared before appraisal. The ESMF will cover all Phase 2 sites that trigger OP 4.01 environmental assessment. This framework will also be the DKI Jakarta guideline for preparation of environmental assessment of future maintenance dredging activities.

6. Phase 2 Environmental Impact Assessment. The Phase 2 EIA that includes both environmental and social impact assessment will cover the rest of the 12 JEDI sites and two proposed disposal sites. The document will not be ready before the project appraisal. Site specific EMPs for the Phase 2 document will be prepared in accordance with the ESMF agreed during appraisal.

7. LARAPs for Phase 2, assuming the worst case scenario, three dredging sites in the Phase 2 and all sub-projects require embankment rehabilitation will need LARAPs. In addition LARAPs may also be prepared for four future implementation site (i.e. two for future disposal sites (Muara Kali Adem and Marunda), and the other two for Kamal drain and Cakung floodway that require dredging and embankment rehabilitation). The LARAPs for Phase 2 are to be prepared based on the RPF agreed at the project appraisal

IV. APPROVALS

<i>Signed and submitted by:</i>		
Task Team Leader:	Mr Hongjoo J. Hahm	04/08/2009
<i>Approved by:</i>		
Regional Safeguards Coordinator:	Mr Panneer Selvam Lakshminarayanan	10/05/2009
Comments:		
Sector Manager:	Ms Sonia Hammam	04/17/2009
Comments:		