



**NATIONAL PROJECT MANAGEMENT UNIT  
WATER RESOURCES AND IRRIGATION SECTOR MANAGEMENT PROJECT  
PROJECT IMPLEMENTATION PLAN (PIP) FOR WISMP-2**

**PROJECT IMPLEMENTATION PLAN (PIP)  
(FINAL)**



**ANNEX 9 – ENVIRONMENTAL AND SOCIAL  
SAFEGUARD FRAMEWORK [ESSF]  
December 2010**

## Preface

This Environment and Social Safeguard Framework (ESSF) shall be applied to all the sub-projects to be approved by DGWR and the World Bank under the Water Resources and Irrigation Sector Management Programme (WISMP-2).

## Table of Contents

I.	INTRODUCTION & SUMMARY .....	3
II.	BRIEF PROGRAMME DESCRIPTION .....	5
III.	LEGAL AND REGULATORY BASIS.....	6
IV.	SAFEGUARD SCREENING PROCESS.....	9
V.	IMPLEMENTATION ARRANGEMENT .....	13
VI.	CAPACITY BUILDING, TRAINING AND TECHNICAL ASSISTANCE.....	15
Annex A	: Safeguard Screening Forms (A1, A2, A3) .....	16
Annex B	: Land Acquisition And Resettlement Policy Framework (LARPF) .....	22
Annex C	: Indigenous Peoples Planning Framework (IPPF).....	33
Annex D	: Environmental Impact Mitigation Measures.....	38
Annex E	: Pest Management Plan .....	43
Annex F	: Standard Clauses For Environmental Management During Construction .....	51
Annex G	: Minutes of Consultation Meeting On .....	57
Annex H	: Regulation of The Minister Of Public Works (Attachment) .....	60
Annex I	: Chance Find Procedures.....	62

## I. INTRODUCTION & SUMMARY

1. This Environmental and Social Safeguard Framework (ESSF) is designed to minimise adverse environmental and social impacts that may occur due to the implementation of the Water Resources and Irrigation Sector Management Programme (WISMP-2) subprojects.

Given the objectives and scope of the WISMP programme, i.e. a focus on rehabilitation of existing works, it is anticipated that the majority of sub-projects will not cause negative social or environmental impacts. However there is the possibility that some subprojects could unavoidably involve small amounts of land acquisition or affect physical / cultural resources, or natural habitats. To avoid or mitigate these risks, a “Negative List”, safeguard screening, and specific actions are provided to ensure that the issues are identified and adequate measures are undertaken. This is to ensure that the subprojects/activities are in compliance with the Government of Indonesia (GOI) regulations and the following World Bank Safeguard Policies: Environmental Assessment (OP 4.01), Pest Management (OP 4.09), Involuntary Resettlement (OP 4.12), and Indigenous Peoples (OP 4.10) and if possible, maximise positive gains.

2. The ESSF shall be applied to all sub-projects and their proposed activities to be implemented under the WISMP-2. Since the Programme aims to improve water resources management and irrigation system improvements that are implemented through relatively small and medium sub-projects, no major environmental or adverse social impacts are expected. This ESSF describes the Programme (Section II), Legal and Regulatory Basis (Section III), the safeguard screening process (Section IV), and the implementation arrangement (Section V), then the capacity building, training and technical assistance (Section VI).

***Although the proposed interventions are many and widespread, their small size and the fact that they are largely rehabilitation of existing works makes it likely that few proposed works will involve impacts that would cause concern or will require special mitigation measures.***

***Interventions are not expected to cause resource access restriction nor to adversely impact on ethnic groups or indigenous peoples.***

**Nevertheless, this safeguard framework – as an “umbrella” requirement - is to be applied to all WISMP sub-projects, whether implemented by works contract or by the community.**

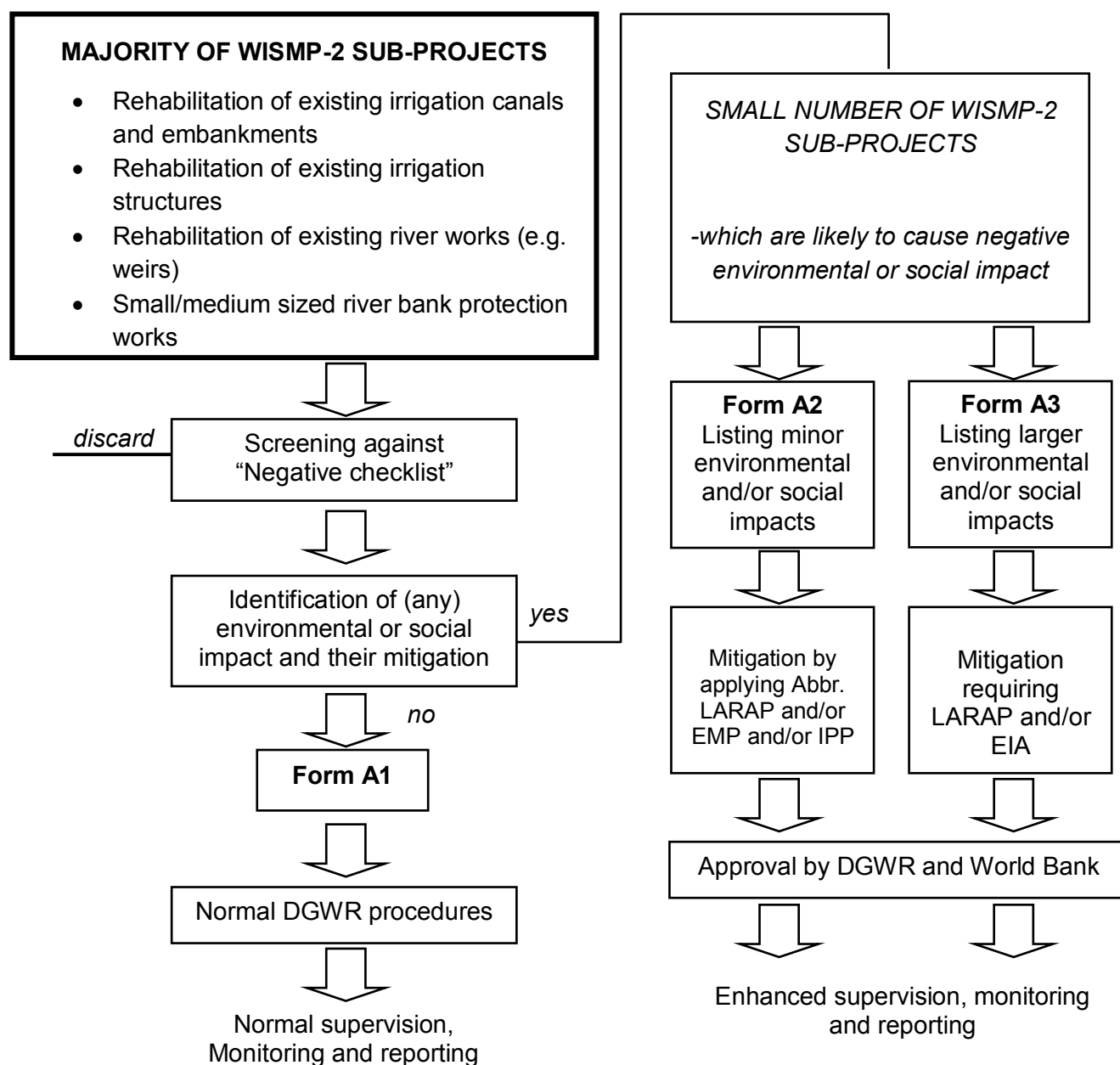
3. The following **Figure 1** shows the application of the ESSF in a simplified format, highlighting the expected situation that the majority of WISMP-2 sub-projects will have minimal or no adverse environmental and social impacts and can therefore be dealt with by completing Form A1.

Only a relatively small number of WISMP-2 sub-projects are expected to cause any adverse environmental and social impacts and it is only these for which the more

detailed provisions of this ESSF document (including Forms A2 & A3) will apply.

**Figure 1: Schematic Summarising the Expected Application of ESSF to WISMP-2**

Nevertheless, screening through the ESSF process is still required in order to identify the small number of sub-projects which DO require LARAP, EMP etc. and how these will be dealt with.



## II. BRIEF PROGRAMME DESCRIPTION

### 4. The programme development objectives of WISMP-2 are:

- Further to improve the governance, institutional capacity and infrastructure for basin water resources and irrigation management and service delivery, and;
- To increase irrigated agriculture productivity in several target river basins and provinces in Indonesia.

To achieve this objective, WISMP-2 provides funding support to government agencies, non-government agencies and local communities, giving high priority to (a) building policy and institutional capacity in the target provinces, (b) developing integrated river basin management including irrigation improvements, and (c) implementation of the national policy to promote sustainable water resources development. In order to ensure protection and conservation of natural habitats and biodiversity, the programme will also include strengthening institutional capacity to implement the necessary environmental and social safeguards. The activities will be funded through the WISMP-2 over a period of five years starting in 2011, in 14 participating provinces with about 101 districts.

### 5. Other than the rehabilitation and SRI activity as noted in Improvement of Participatory Irrigation Management the remaining activities under WISMP-2 include:

- Programme management and technical assistance
- Strengthening overall sector governance
- Capacity building for river basin and irrigation planning institutions
- Performance improvement for river basin management agencies
- Implementing policy for increased cost recovery within river basins
- Strengthening and empowering WUAs and farmer institutions
- Strengthening PIM processes

### 6. In general terms, all of the above seven activities are institutional or managerial and are not expected directly to cause adverse environmental and/or social impacts.

Rehabilitation works and activities leading to intensification of agricultural production, however, depending on their scale and nature, have the potential to cause adverse environmental and/or social impacts such as may require mitigation. In order to mitigate these effects, the programme will include:

- (i) Active promotion of Organic SRI (System of Rice Intensification) aimed at reducing the use of chemical fertilisers and pesticides, and encouraging integrated pest management techniques in accordance with the Pest Management Plan (see Annex E). Part of Component 2 for Training of WUAF will include integrated pest management techniques.
- (ii) Inclusion of suitable clauses in each construction contract to minimise the adverse impacts of construction, and provide regular reporting (see Annex F).

### III. LEGAL AND REGULATORY BASIS

7. Laws and Regulations in Indonesia relating to Environmental Safeguards are as follows:

- a. Law (UU) No. 32/2009 on environmental management and protection confirming that control of impacts is governed by *AMDAL* and UKL / UPL Article 22 and Article 34;
- b. Government Regulation (PP) No. 27/1999 Article 5 (1): Criteria for major and significant impact on business and / or activities on the environment, covering inter alia:
  - The number of people affected,
  - The area of impact,
  - Intensity and duration of effects,
  - Other environmental components affected,
  - The nature of cumulative impacts, and
  - Reversibility (or irreversibility) of effects.

Article 11 (1) states that the Central *AMDAL* Commission authority is to assess the results of EIA for types of business and / or activities that meet the strategic elements of national interest, impacts covering more than one province, and with impact external to Indonesia.

Article 11 (2) requires the Environmental Impact Commission (provincial and regency / municipality) authority to assess the EIA for types of business and / or activities that are outside the above criteria;

- c. According to EIA PP 27/1999 on article 33 (3), within 30 days after the announcement of the project, the parties concerned, including affected people, local NGOs, and others, may present their comments, suggestions and complaints to the initiator of the activity;
- d. Minister of Environment Regulation No. 13/2010 relating to UKL / UPL and SPPL Guidelines;
- e. Minister of Environment Regulation No. 11/2006 concerning types of business plan and / or activities requiring Environmental Impact Assessment;
- f. Minister of Environment Regulation No. 8/2006 concerning Guidelines for preparation of Environmental Impact Assessment (EIA);
- g. Minister of Public Works Regulation No. 10 / PRT/M/2008 determining the types of public works business plans and / or activities requiring environmental management and environmental monitoring (see Annex H).

### Categories of Subproject by Environmental Impact

Category	Impact	Government Requirements
A	Subproject may result in adverse environmental impact, sensitivity and diversity-related impacts; impacts difficult to mitigate	ANDAL and RKL / RPL
B	Subproject with small size and volume, resulting in environmental impacts but mitigation is possible	UKL / UPL
C	Subproject with no significant construction component and does not cause pollution of air, soil or water	SPPL

**Note:** ANDAL : Environmental Impact Analysis

RPL/RKL : Environmental Monitoring Plan / Environmental Management Plan

UKL : Environmental Management Plan

UPL : Environmental Monitoring Plan

SPPL : Capacity Statement Letter for Environmental Management and Monitoring

8. Existing Laws and Regulations in Indonesia relating to Social Safeguards are as follows:

Land acquisition:

- Basic Agrarian Law of 1960 (Agrarian Law No.5 1960) and BPN Regulation No.1 (1994)
- Presidential Regulation No.36 (2005) jo Presidential Regulation No.65 (2006) on Land Acquisition for Public Interest;
- Regulation of the Head of National Land Agency (BPN) No. 3 / 2007 concerning implementation guidelines of the land acquisition for public interest.

Indigenous Peoples:

- Presidential Decree No. 111/1999 regarding Provision of Isolated Traditional Community (KAT);
- Social Ministry Decree No. 06/PEGHUK/2002 regarding Implementation Guidelines of Isolated Traditional Community Empowerment;
- Social Empowerment Director General Decree No. 020.A/PS/KPTS/2020 regarding Implementation Guidelines of Isolated Traditional Community.

9. Existing Environmental and Social Safeguard Policies of the World Bank which are applicable to WISMP-2 are as follows:

No.	Name of Operational Policy	Short Description
1	OP 4.01 – Environmental Assessment	The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making. EA takes into account the natural environment (air, water, and land), human health and safety; social aspects (involuntary resettlement, indigenous peoples, and physical cultural resources) and transboundary and global environmental aspects. EA considers natural and social aspects in an integrated way. EA is initiated as early as possible in project processing and is integrated closely with the economic, financial, institutional, social, and technical analyses of a proposed project. EA's should include analysis of alternative designs and sites, or consideration of "no option" requiring public consultation and information disclosure should be done throughout the project cycle.
2	OP 4.09 – Pest Management	Procurement of pesticides or pesticide application equipment is envisaged (either directly through the project, or indirectly through on-lending, co-financing, or government counterpart funding). The project may affect pest management in a way that harm could be done, even though the project is not envisaged to procure pesticides. This includes projects that may (i) lead to substantially increased pesticide use and subsequent increase in health and environmental risk, (ii) maintain or expand present pest management practices that are unsustainable, not based on an IPM approach, and /or pose significant health or environmental risks.
3	OP 4.10 – Indigenous Peoples	The Bank requires the project involves indigenous peoples to design and implement projects in a way that fosters full respect to Indigenous People's dignity, human rights, and cultural uniqueness and so that they: (a) receive culturally compatible social and economic benefits; and b) do not suffer adverse effects during the development process. Indigenous Peoples are identified as possessing the following characteristics in varying degrees: self identification and recognition of this identity by others; collective attachment to geographically distinct habitats or ancestral territories and to the natural resources in these habitats and territories; presence of distinct customary cultural, economic, social or political institutions; and indigenous languages.
4	OP 4.12 – Involuntary Resettlement	Bank experience indicates that involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social, and environmental risks: production systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost. This policy includes safeguards to address and mitigate these impoverishment risks.



#### IV. SAFEGUARD SCREENING PROCESS

10. The safeguard screening process comprises five major steps as discussed below:

**(a) Step 1: Screening against the negative checklist**

11. Negative List of Prohibited Activities: To avoid adverse impacts on the environment and people, subproject proposals that involve the following activities are explicitly excluded from funding under the WISMP-2:

- (i) New settlements or expansion of existing settlements inside natural habitats and existing or proposed protected areas.
- (ii) Likely to create adverse impacts on ethnic groups or indigenous peoples within the village and/or in neighboring villages or unacceptable to ethnic groups living in a village of mixed ethnic composition.
- (iii) Loss or damage to cultural property, including sites having archaeological (prehistoric), paleontological, historical, religious, cultural & unique natural values.
- (iv) New roads, road rehabilitation, road-surfacing, or track upgrading of any kind inside natural habitats and existing or proposed protected areas.
- (v) Purchase or use of pesticides, insecticides, herbicides and other dangerous chemicals; asbestos and other investments detrimental to the environment.
- (vi) Significant conversion or degradation of natural habitat or where the conservation and/or environmental gains do not clearly outweigh any potential losses.
- (vii) Large scale construction or small/medium scale construction expected to lead to significant negative environmental impacts.

**(b) Step 2: Identification of safeguard issues and preparation of mitigation measures**

12. If a subproject proposal is not excluded from funding because of the negative list shown in Step 1 above, the sub-project applicant shall identify key safeguard issues and provide mitigation measures relating to the following aspects:

- Land acquisition. Land acquisition must be avoided or minimised to the greatest extent possible by exploring alternative subproject design. If necessary, small amounts of land acquisition may be conducted in accordance with the principles and procedures described in Annex B. Bank prior consultation, appropriate documentation, review and approval will be necessary.
- Civil works. DGWR will ensure that all subprojects that involve civil works will comply with GOI regulations. Mitigation measures will be prepared, incorporated, and implemented for any proposal that involves construction work or changes to land or water use that may generate negative environmental impacts. The first fundamental measure is to avoid or minimise the negative impacts to the

greatest extent possible through exploring alternate subproject design. Small-scale construction activities may proceed with the application of good engineering and housekeeping practices as reflected in Annex D Medium-scale construction, or any other activity expected to produce modest, local environmental impacts must produce a subproject Environmental Mitigation Plan. Annex D also provides guidance on the mitigation of environmental impacts.

- Indigenous peoples. No adverse impacts are anticipated to the indigenous peoples. If the subprojects will work at the area that the indigenous peoples are presence, specific measures and plans will be developed in accordance with the principles and procedures describe in the Indigenous People Planning Framework (Annex C) to ensure that the indigenous community who are vulnerable of being excluded from any development programs will receive culturally compatible social and economic benefits.

**Since almost all the subprojects will work at the existing facilities with community-decision making process, it is likely that when the IP are presence in the project area, a stand-alone Indigenous Peoples Plan (IPP) will not be required. The process of IP inclusion in the subproject will be incorporated into the subproject design.**

### **(c) Step 3: Safeguard documentation and information disclosure**

13. Documentation: For each sub-project, the applicant shall identify all potential negative impacts together with the proposed mitigation measures. The applicants for the sub-project shall record the results of the safeguard screening (in form A1, A2, or A3) as follows:

- Form A1 to be used if the proposal will not involve any land acquisition and/or cause negative impacts to natural habitats, or physical cultural resources. Form A1 signals that all activities will include a standard clause on environmental and social safeguard aspects (Annex F) in every contract and follow DGWR SOPs.
- Form A2 to be used if the proposal will involve only minor land acquisition or may have minor negative effect on natural habitats, physical cultural resources, or cause other minor environmental or social impacts and if the proposal will involve and affect indigenous peoples in positive manner. Form A2 signals that an abbreviated LARAP and/or UKL/UPL and/or IPP are required.

In this context, “minor” denotes land acquisition no greater than 10% of total holding of productive assets and affect <200 persons or involve no physical relocation. (Annex B)

“Minor” environmental impact denotes a level which can be fully mitigated by good engineering practice as detailed in Annexes D and F respectively to this document.

- Form A3 to be used if the proposal involves major land acquisition, or may create significant negative impacts on natural habitats, physical cultural resources, or

cause other environmental or social impacts. In general terms, Form A3 signals the requirement for a Land Acquisition and Resettlement Action Plan (LARAP) and / or an Environmental Impact Assessment (EIA).

In this context, “major” denotes land acquisition greater than 10% of total holding of productive assets and affects > 200 persons (Annex B) or involve physical relocation.

“Major” environmental impact denotes a level which can not be mitigated by good engineering practice as detailed in Annexes D and F respectively to this document.

14. Information disclosure and Public Consultation: The applicant for each sub-project shall make available for local public access information relating to the approved subproject and the mitigation of social or environmental impacts, including the mitigation plans.

This ESSF document (both in Indonesian and English) and any LARAP, EMP and IPP for the first year investment, if any, shall be disclosed on the website of the Ministry of Public Works, as well as the InfoShop of the World Bank.

Other than website-based disclosure, the LARAP, EMP and IPP documents should be disclosed at places accessible to all levels of the community which may be affected.

The draft ESSF was presented at a consultative workshop on 31 August 2010 in Jakarta to national-level stakeholders as well as representatives from the regions where the sub-projects from the four components’ would be implemented. Participants at the workshop were presented with copies of the draft ESSF in the Indonesian language. Minutes of the workshop are presented in Annex G.

Presentation at the consultative workshop focused on:

- Brief summary presentations on the overall project objective and modus operandi.
- Institutional arrangements for project implementation.
- Key environmental and social challenges for the WISMP-PIP project as a whole and for individual subjects identified for implementation in Year 1.
- The key provisions of ESSF in term of screening requirements, processes and responsibilities, Sub project A1, A2 and A3 categorizations, preparation of EMP documentation, their review and approval process, etc.
- Standard proposed mitigation measures to manage the environmental and social impact.

The main conclusion of the Public consultation Meeting were:

- 1 That the Indonesian draft of the ESSF document should be simplified;
- 2 That the different processes associated with Forms A1, A2, & A3 should be clarified.

**(d) Step 4: Safeguard clearance and implementation**

15. DGWR shall review the results of Step 2 for all sub-projects before submitting them to the World Bank together with appropriate documentation. During the safeguard review process DGWR shall invite appropriate agencies to provide comments on the safeguard measures. After the review, DGWR shall request the WB to issue a “No Objection Letter” (NoL), for any safeguard instrument (LARAP/EMP/EIA/IPP).

The screening results and/or mitigation shall be included in the next steps of the proposal review process. If denied clearance, the subproject shall be rejected. All the safeguard documentation (screening and other documents) will be kept in the program’s files for possible review by the World Bank. DGWR shall ensure that the agreed actions are included in the subprojects and that the applicants understand and commit to implement the mitigation measures.

**(e) Step 5: Supervision, monitoring, and reporting**

16. DGWR/NPIU shall supervise and monitor the safeguard implementation performance continuously and include the progress/results in project progress reports. The World Bank will conduct safeguard supervision, monitoring, and post review at least one for each participating local government.

## V. IMPLEMENTATION ARRANGEMENT

17. DGWR is responsible for applying and ensuring compliance with the ESSF. All subprojects shall be screened according to the safeguard screening criteria and the results shall be documented using appropriate forms (A1, A2, or A3) described in Annex A. The safeguard screening should be completed before it is submitted to the evaluation committee and peer review (if required). All safeguard documents, such as A1, A2, A3, and other related documents must be attached to the subprojects as appropriate and kept in the program file. The screening should be conducted in close consultation with the applicants and agreement on next steps and/or mitigation measures should be reached. In cases where the applicant does not have the capacity or resources to complete all required planning and documentation, the applicant can apply for a smaller subproject to complete the required mitigation measures.

**Table 5.1 Summary of Responsibilities of Key Parties.**

Who	Responsibilities
Applicants  [Subproject Implementers]	<p>During preparation:</p> <ul style="list-style-type: none"> <li>• Read ESSF and annexes</li> <li>• Ensure no prohibited activities or budget items are included in the subproject proposal, see the negative checklist</li> <li>• Identify potential impacts and prepare appropriate mitigation measures and required documents and plans, such as Good Engineering and Housekeeping practices, Environmental Mitigation Plans (EMP, LARAP, and IPP). Consultation with DGWR (Directorate of Planning/NPMU) will be highly recommended. The proposed plan and/or actions should be made in consultation with the affected population (positive or negative)</li> <li>• Disclose all safeguard information in an appropriate manner.</li> </ul> <p>During implementation:</p> <ul style="list-style-type: none"> <li>• Implement the agreed actions as indicated in the subproject documents and submit progress report to DGWR (Directorate of Planning/NPMU) periodically. The documents should be kept in the programme files for possible review by WB.</li> </ul>
DGWR (Directorate of Planning/NPMU)  [as coordinator and reviewer of applications from Balais, Kabupaten and Jatiluhur]	<ul style="list-style-type: none"> <li>• Screening of all proposals for safeguards compliance</li> <li>• Maintains records of all proposals and screening decisions</li> <li>• Highlights potential safeguard issues and provides recommendations for mitigation if required, based on consultations with the applicants and affected population</li> <li>• If needed, make site visits during safeguard screening review to those subprojects that trigger safeguards in order to verify the physical characteristics of the subprojects with environmental impacts and/or to verify the consultation process with project-affected Persons</li> <li>• Review safeguards documentation before submission to the WB</li> <li>• Facilitates agreements between communities/stakeholders and implementers for safeguards mitigations measures</li> <li>• Confirms agreed terms of mitigations in private discussions with affected communities/stakeholders</li> </ul>

Who	Responsibilities
	<ul style="list-style-type: none"> <li>• Assist communities to identify potential impacts and mitigations measures</li> <li>• Oversees the implementation of the EMPs, LARAPs, IPPs or other measures; Specialised technical assistance may be necessary;</li> <li>• Periodic monitoring and supervision the safeguard implementation performance and include the result in the progress report.</li> </ul>
World Bank	<ul style="list-style-type: none"> <li>• Assist the DGWR and its consultant in preparing any safeguard instruments;</li> <li>• Review and clear safeguards documentation, issues “No Objection Letter” as necessary;</li> <li>• Supervise regularly the implementation of any social and environmental mitigation plans.</li> </ul>

## VI. CAPACITY BUILDING, TRAINING AND TECHNICAL ASSISTANCE

18. The Project organizational team will be responsible for ensuring that the level of expertise associated with the Project is sufficient to undertake the tasks at hand. Under the overall coordination by the Ministry of Public Works, each project implementing entity at the province and local government level is expected to take responsibility in ensuring that this framework is supported. The main capacity needs and related budget items required to support implementation will be addressed by carrying out an environmental and social awareness training programme for relevant project staff working at sub-project level.

ESSF outline training programme:

- 1 Environmental and Social Issues in Infrastructure projects;
- 2 Overview of Environmental and Social Policies and Regulatory Framework in Indonesia;
- 3 The key principles of WISMP-2 Environmental and Social Safeguard Framework that should be followed, including the process of screening subprojects against the land acquisition, indigenous peoples involvement and environment issues; documents to be prepared based on the scale of impacts, etc.;
- 4 Case Studies on projects that have followed WISMP-2's WB ESSF.

19. Indicative budgeting for Capacity Building are as follow:

Item	Needs	Indicative Budget	Funding
Environmental/ Social Safeguard at National/NPMU	1 Senior ESSF Specialist (to develop and to deliver modules)	24 months	Included in WISMP-2 Programme Management TA
ESSF Training / Refreshing Course on Environmental and Social Safeguard for staff of Dinas (91 districts)	Training Budget	US \$ 10,000 for training including accomodation/ consumption, cost of travel	Included in WISMP-2 Programme Management TA
Environmental Refreshing Course for Informal Environmental Leader	During the project cycle (intermittent bases)	120 sub-project x 1 person x 2 days x IDR 250,000 = IDR 60,000,000 = US\$ 6,000	Included in WISMP-2 Programme Management TA
Community consultation	In the first year	120 sub-project x 100 people x IDR 250,000 = IDR 3M = US\$ 300,000	By sub-project instigators
Composing UKL/UPL	20 Large sub-project and 100 Medium sub-project	120 sub-project x US\$ 15,000 = US\$ 1,800,000	By sub-project instigators
Monitoring and reporting	Travel cost	Up to US\$ 25,000 to be allocated to each provincial team	Programme support to PPMU/PPIUs

**ANNEX A**

**SAFEGUARD SCREENING FORMS (A1, A2, A3)**





## Republic of Indonesia

Number: .....

### WISMP-2

#### Sub-Project Safeguard Screening Form A1

Applicant:	Proposal name:	Proposal number:
Sub-Project type:		Amount requested:
<p><b>I certify that this subproject does not involve any of the seven activities included in the negative checklist provided in Step 1 of the ESSF. The sub-project also will not cause any adverse social or environmental impacts (not listed as activities within PermenPU No. 10/PRT/M/2008 or Annex H), and therefore standard clauses for environmental management during construction will be applied in sub project design. And there is no indigenous people in the project area that to be affected by the project, negatively and positively.</b></p> <p><b>Screened by:</b> .....</p>		Date:
<p>Remarks:</p> <p>1. Briefly describe location, objective and scope of the proposal</p>		

#### SIGN OFF: PROPONENT

NAME: .....

POSITION: .....

DATE: .....



## Republic of Indonesia

Number: .....

### WISMP-2

### SubProject Safeguard Screening Form A2

Applicant:	Proposal name:	Proposal number:
Sub-Project type:		Amount requested:
<p><b>I certify that this subproject does not involve any of the seven activities included in the negative checklist provided in Step 1 of the ESSF.</b>  <b>If the sub-project involves land acquisition, this is minor and requires only an abbreviated LARAP (as described in Annex B).</b></p> <p><b>and/or</b></p> <p><b>If the subproject will involve indigenous people, they will be positively affected and specific measures will be followed (as described in Annex C )</b></p> <p><b>and/or</b></p> <p><b>If other social or environmental adverse impacts are likely, these are minor, (listed as types of public works business plans and / or activities requiring environmental management and environmental monitoring under PermenPU No. 10/PRT/M/2008 such that an Environmental Management Plan refer to Annex H ) will be prepared and integrated into subproject design..</b></p> <p><b>Details of the potential impacts and mitigation measures are listed below.</b></p> <p>Screened by: .....</p>		Date:
<p>Remarks:</p> <ol style="list-style-type: none"> <li>1. Describe location, objective and scope of the proposal</li> <li>2. Describe potential impact</li> <li>3. Describe the mitigation measures</li> </ol>		

SCREENING QUESTION	No	Yes	Proposed Mitigation Measures
<b>A. Social Issues</b>			If yes, see Guidelines Annex B.
▪ Minor land acquisition (affects <10% of land holding and <200 people?)	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Are indigenous vulnerable peoples presence in the project area			If yes, briefly describe who they are and specific plans to ensure they will get social and economic benefits
- Self identification and recognized by others?	<input type="checkbox"/>	<input type="checkbox"/>	
- Collective attachment to the natural resources?	<input type="checkbox"/>	<input type="checkbox"/>	
- Customary cultural, economic, social, or political that separate from the majority?	<input type="checkbox"/>	<input type="checkbox"/>	
- Indigenous language?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Potential other social conflicts?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe the conflicts and key mitigation measures
<b>B. Environmental Issues</b>			If yes, see Guidelines in Annex C. If unknown, collect more information
▪ Involve small civil works and requires contractors	<input type="checkbox"/>	<input type="checkbox"/>	If yes, Describe key mitigation measures
▪ Include in the list of public work activities that require environmental management and monitoring (Annex H)	<input type="checkbox"/>	<input type="checkbox"/>	If yes, Describe key mitigation measures
▪ Introduction of non-native species, but these are already present in the vicinity or known from similar setting to be non-invasive	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Noise or dust from construction equipment?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Are there risks of soil erosion?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures

**C. SIGN OFF:  
PROPONENT**

NAME: .....

POSITION: .....

DATE: .....



## Republic of Indonesia

Number: .....

### WISMP-2

#### SubProject Safeguard Screening Form A3

Applicant:	Proposal name:	Proposal number:
Sub-Project type:		Amount requested:
<p><b>I certify that this subproject does not involve any of the seven activities included in the negative checklist provided in Step 1 of the ESSF.</b></p> <p><b>The sub-project involves major land acquisition, and requires LARAP (as described in Annex B).</b></p> <p><b>and/or</b></p> <p><b>involves other major social or environmental adverse impacts that will need the EIA (AMDAL).</b></p> <p><b>Details of the potential impacts and mitigation measures are listed below.</b></p> <p>Screened by: .....</p>		
<p><b>Remarks:</b></p> <p><b>1. Describe location, objective and scope of the proposed subproject</b></p> <p><b>2. Describe potential impacts</b></p> <p><b>3. Describe mitigation measures</b></p>		

SCREENING QUESTIONS	No	Yes	Proposed Mitigation measures
Do the proposed activities or budget include any of the following:			
<b>A. SOCIAL SAFEGUARDS TRIGGERS</b>			If yes, see Guidelines in Annex B.
DOES THE SUBPROJECT INVOLVE OR IMPACT ANY OF THE FOLLOWING:			
▪ Affects >200 people and >10% of land holding	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Involve physical relocation?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, how many HHs and describe key mitigation measures
▪ Permanent or temporary or permanent loss of land or resources	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Conflicts in water supply rights and related social conflicts?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Impediments to movements of people and animals?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Potential social conflict arise from land tenure and land use issues?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Deterioration of livelihoods or living conditions of women or the poorest families in the subproject service area?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Other:	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
<b>B. POTENTIAL ENVIRONMENTAL IMPACTS</b>			If yes, see Guidelines in Annex C. If unknown, collect more information
▪ Impairment of downstream water quality and therefore, impairment of downstream beneficial uses of water?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Are there any pollution and/or public health risks?	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Protected Area, Wildlife Reserve, Buffer Zone, or other conservation area	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
▪ Wetland and/or other sensitive areas (schools, hospitals, etc)	<input type="checkbox"/>	<input type="checkbox"/>	If yes, describe key mitigation measures
<b>D. OTHER REMARKS:</b>			
<b>E. CONCLUSIONS-RECOMMENDATIONS:</b>			
<b>F. SIGN OFF:</b>			
<b>PROPONENT</b>			
NAME:			
.....			
POSITION:			
.....			
DATE:			
.....			

**ANNEX B****LAND ACQUISITION AND RESETTLEMENT POLICY FRAMEWORK (LARPF)****B.1. Introduction**

1. This document constitutes the Policy Framework for Land Acquisition, Compensation, Resettlement and Rehabilitation of Project Affected Persons for the WISMP-2. The Government of the Republic of Indonesia (GOI) has agreed to apply World Bank environmental and social safeguard policies in the design and implementation of this program, including OP 4.12, "Involuntary Resettlement." Because this program identifies subprojects during the implementation phase, it is impossible to determine all resettlement planning requirements at appraisal. This framework establishes principles and procedures to be followed if activities undertaken during the WISMP 2 implementation cause land acquisition. In such instances, the framework requires that a Land Acquisition and Resettlement Action Plan (LARAP) is prepared for subprojects causing land acquisition. The purpose of the LARAP is to ensure that any such potential impacts are minimized, and that any Persons affected by such impacts are provided ample opportunity, through provision of compensation or other forms of assistance, to improve or at least restore their incomes and living standards.

**N.B. If a Resettlement Action Plan (LARAP) is required, the LARAP must be approved by the World Bank before the LARAP is implemented.**

**B.2. Policy Objectives and Key Definitions**

2. OP 4.12 provides essential guidance on objectives and principles that are applicable in projects generating land acquisition and resettlement-related impacts taken in the context of local regulations. Key objectives and definitions are as follows:
3. Every reasonable effort will be made to avoid or minimize the need for land acquisition, and to minimize all resettlement-related adverse impacts. If land acquisition and associated adverse impacts cannot be avoided, the principle objective of the LARPF is to ensure that all Persons subjected to adverse impacts ("Project Affected Persons" as defined below) are compensated at replacement cost (as defined below) for lost land and other assets and otherwise provided with any rehabilitation measures or other forms of assistance necessary to provide them with sufficient opportunity to improve, or at least restore, their incomes and living standards.
4. "Project Affected Persons" (PAP) refers to all of the people who, on account of the project related activities, would have their (i) standard of living adversely affected; or (ii) right, title, interest in any house, land (including premises, agricultural and grazing land) or any other fixed or movable asset acquired or possessed temporarily or permanently; (iii) access to productive assets adversely affected,

temporarily or permanently; or (iv) business, occupation, work or place of residence or habitat adversely affected; and “Project Affected person” means any of the Project Affected Persons.

5. "Replacement cost" is the method of valuation of assets which determines the amount of compensation sufficient to replace lost assets, including any necessary transaction costs. Replacement cost shall normally be assessed by an independent appraisal team/institutions, properly constituted in accordance with Indonesian Law and applying the appropriate rules for valuation.

Where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures so as to meet the replacement cost standard.

6. “Land acquisition” is the process whereby a person involuntary loses ownership, use of, or access to, land as a result of the project. Land acquisition can lead to a range of associated impacts, including loss of residence or other fixed assets (fences, wells, tombs, or other structures or improvements that are attached to the land).
7. “Rehabilitation” is the process by which Project Affected Persons are provided sufficient opportunity to restore productivity, incomes and living standards. Compensation for assets often is not sufficient to achieve full rehabilitation.
8. “Cut-off Date” is the date prior to which the ownership or use establishes eligibility as Project Affected Persons for compensation or other assistance. The cut-off date is established in the LARAP. It normally coincides with the date of the census of affected Persons, or the date of public notification regarding the specific civil works that would cause displacement. Persons coming into the project area after the cut-off date are not eligible for compensation or other assistance.

### **B.3. Key Principles**

9. World Bank’s OP 4.12 establishes several key principles to be followed in resettlement planning and implementation. Of particular relevance for this LARPF are the following:
  - a) Wherever possible, subproject designs and LARAPs should be conceived as development opportunities, so that Project Affected Persons may benefit from the services and facilities created for, or by, subproject activities.
  - b) All Project Affected Persons are entitled to compensation for lost assets, or to alternative but equivalent forms of assistance in lieu of compensation; lack of legal rights to the assets lost will not bar Project Affected Persons from entitlement to such compensation or alternative forms of assistance.
  - c) Compensation rates as established in a LARAP refer to amounts to be paid in full to the individual or collective owner of the lost asset, without depreciation or deduction for taxes, fees or any other purpose.

- d) Value of assets to be compensated will be assessed by independent appraisal team/institution as required in national regulation (Perpres 36/2005 jo. Perpres 65/2006). Their appointment as independent assessor should be agreed in principle by the Project Affected Persons. Valuation methods need to reflect use of replacement cost.
- e) When cultivated land is acquired, effort should be made to provide land-for-land replacement.
- f) Replacement house plots, sites for relocating businesses, or replacement agricultural land should be of equivalent use value to the land that was lost.
- g) The resettlement transition period should be minimised. Compensation for assets should be paid prior to the time of impact, so that new houses can be constructed, fixed assets can be removed or replaced, and other necessary mitigation measures can be undertaken prior to actual displacement.
- h) Project Affected Persons are to receive support (direct assistance or allowances) to meet moving expenses or for temporary subsistence until they can resume productive activities.
- i) Project Affected Persons should be consulted during the process of LARAP preparation, so that their preferences regarding possible resettlement arrangements are solicited and considered; LARAPs are publicly disclosed in a manner accessible to Project Affected Persons.
- j) The previous level of community services and access to resources will be maintained or improved after resettlement.
- k) Responsibility must be clearly established for meeting all costs associated with land acquisition and resettlement, and for ensuring that sufficient funds are available as they become needed.
- l) Clear institutional arrangements must be established to ensure effective and timely implementation of all resettlement and rehabilitation measures.
- m) Adequate arrangements for effective monitoring will be made on implementation of all resettlement measures.
- n) Methods by which Project Affected Persons can pursue grievances will be established, and information about grievance procedures will be provided to Project Affected Persons.

#### **B.4. Preparing Land Acquisition and Resettlement Instrument**

10. The suproject proponent will screen and pre-identify the scale of impact of the land acquisition, based on estimated number of affected people and size of land to be taken. There are two main resettlement planning instruments for project impacts, namely Land Acquisition and Resettlement Action Plan (LARAP) and Abbreviated LARAP.



- Land Acquisition and Resettlement Action Plan is required when land acquisition affects more than 200 people, takes more than 10% of household productive assets and/or involves physical relocation.
  - Abbreviated LARAP is acceptable if fewer than 200 persons are affected but land acquisition is minor, less than 10% of all productive assets of the affected households is taken.
11. Full details on the requirements of both LARAP and Abbreviated LARAP are shown in *Appendix A* of this LARPF. There are no fundamental differences in terms of achieving objectives of equality and compensating social cost; however there are some procedural differences between an Abbreviated LARAP and LARAP. The LARAP is more detailed and takes longer to complete. A LARAP needs to include a review of the legal and institutional framework whereas an Abbreviated LARAP does not. An Abbreviated LARAP can be based on an asset census with each affected household while a LARAP requires both an asset census and a community socio-economic survey to provide a monitoring benchmark for understanding how PAPs' socio-economic conditions have changed.
12. All LARAPs must be reviewed and approved by DGWR prior to subproject final approval. All LARAPs must be disclosed locally in a manner accessible to Project Affected Persons, and kept on file by DGWR. Each LARAP should be reviewed and approved by the World Bank before being implemented.

### **B.5. Public Consultation and Disclosure**

13. The subproject proponent shall disclose information about the Project and land acquisition process to the PAPs and the village leader explaining the proposal, potential impacts and legal rights of the PAP under this framework. This information will be disclosed in the appropriate local language and in non-technical terms, taking into account literacy levels.
14. Project Affected Persons should be provided with opportunities to participate in planning and implementation of any resettlement. At minimum, Project Affected Persons should be consulted on preferences and concerns during the resettlement planning process. All Project Affected Persons are to be informed regarding potential impacts and proposed mitigation measures, including compensation rates.
15. The LARAP/Abbreviated LARAP in Bahasa Indonesia will be disclosed at places accessible to the PAP, in particular to ensure that the PAP understand their entitlements. The document will also be disclosed at the project website at Ministry of Public Works as well as the InfoShop of the World Bank.

### **B.6. Eligibility and Entitlement Policy**

16. All Project Affected Persons are eligible for compensation and/or other forms of assistance, as relevant to the nature of impacts affecting them. Though the subproject screening is intended to eliminate significant impacts such as loss of

house or commercial structures, or major loss of productive land, provisions of this framework will apply in the event that significant impacts unavoidably occur.

17. In general, people eligible for compensation would include those affected in the following ways:

- Land to be permanently acquired for the subproject: This includes a) owners with formal legal title, b) land users eligible for formal legal title under Indonesian law, and c) those residing on, or using, state land prior to an established cut-off date, usually the date of public notification regarding the specific civil works activity that would cause displacement. Project Affected Persons in categories a) and b) are entitled to compensation at replacement cost. In lieu of formal compensation, Project Affected Persons in category c) are provided with alternative forms of assistance, in value equivalent to replacement cost.
- Loss of houses, other structures and fixed assets, including trees and standing crops: Owners of houses and other assets (regardless of whether they hold land title or building permits for structures erected prior to the cut-off date).
- Losses associated with temporary impacts: This includes temporary loss of land, and transitional costs associated with moving, or disturbance to businesses during construction.

18. Specifically, Project Affected Persons will be entitled to the following types of compensation and rehabilitation measures:

1. Project Affected Persons losing agricultural land:

- a) The preferred mechanism for compensation of lost agricultural land will be through provision of replacement land of equal productive capacity and satisfactory to the Project Affected Person. If satisfactory replacement land cannot be identified, compensation at replacement cost may be provided.
- b) Project Affected Persons will be compensated for the loss of standing crops at market prices, for economic trees at net present value, and for other fixed assets (ancillary structures, wells, fences, irrigation improvements) at replacement cost.
- c) Compensation will be paid for temporary use of land, at a rate tied to duration of use, and the land or other assets will be restored to prior use conditions at no cost to the owner or user.

2. Project Affected Persons losing residential land and structures

- a) Loss of residential land and structures will be compensated either in-kind (through replacement of house site and garden area of equivalent size, satisfactory to the Project Affected Person, or in cash compensation at replacement cost.
- b) If after partial land acquisition the remaining residential land is not sufficient to rebuild or restore a house of other structures of equivalent size or value,

then at the request of the Project Affected Person the entire residential land and structure will be acquired at replacement cost.

- c) Compensation will be paid at replacement cost for fixed assets.
- d) Tenants, who have leased a house for residential purposes will be provided with a cash grant of three month's rental fee at the prevailing market rate in the area and will be assisted in identifying alternative accommodation.

### 3. Project Affected Persons losing business

Compensation for loss of business will involve, as relevant: (i) provision of alternative business site of equal size and accessibility to customers, satisfactory to the Project Affected business operator; (ii) cash compensation for lost business structures: and (iii) transitional support for loss of income (including employee wages) during the transition period.

### 4. Infrastructure and access to services

Infrastructure will be restored or replaced at no cost to the communities affected. If new resettlement sites are established, infrastructure and services consistent with local standards will be provided at no cost to the relocated Persons.

## B.7. Voluntary Land Acquisition

19. It is very likely that the subprojects will involve voluntary land acquisition, in which the affected persons are voluntarily contribute their small portion fo land for the projects. Land contribution is acceptable only if there are "informed consent" and "power of choice". "informed consent" means that the people involved are fully knowleagable about the project and its implications and consequences and freely agree to participate in the project. "Power of choice" means that the people involved have the option to agreeor disagree with the land acquisition.
20. Because determining informed consent can be difficult, the following criteria are suggested as guidelines:
  - The infrastructure must not be site specific.
  - The impact must be minor, that is, involve no more than 10 percent of the area of any holding and require no physical relocation.
  - The land required to meet technical project criteria must be identified by the affected community, not by line agencies or project authorities (nonetheless, technical authorities can help ensure that the land is appropriate for project purposes and that the project will produce no health or environmental safety hazard).
  - The land in question must be free of squatters, encroachers, or other claim or encumbrances.
  - Verification (for example, notarized or witnessed statements) of the voluntary

nature of land donations must be obtained from each person donating land. (See *Appendix B* of the LARPF for sample of Letter of Land Contribution)

- If any loss of income or physical displacement is envisaged, verification of voluntary acceptance of community-devised mitigatory measures must be obtained from those expected to be adversely affected.
- If community services are to be provided under the project, land title must be vested in the community, or appropriate guarantees of public access to services must be given by the private title holder.
- Grievance mechanism must be available.

## **B.8. Rehabilitation Measures**

21. Compensation may be sufficient to allow Project Affected Persons to restore incomes if paid at replacement cost, assuming that replacement assets are available. Often, however, resettlement may require Project Affected Persons to obtain new skills required for resuming production in a new environment, or to pursue new sources of income. The LARAP should assess the significance of impacts to be imposed on Project Affected Persons, and provide measures to assist those significantly affected in adapting to new livelihood challenges. Terms for participation in such measures, including training, extension services, or employment, along with responsibility for providing them, should be specified in the LARAP.

## **B.9. Implementation Arrangements**

22. The LARAP reviews organisational arrangements, to ensure that implementation procedures are clear, that responsibility is clearly designated for provision of all forms of assistance, and that adequate coordination among all agencies involved in LARAP implementation is assured. The LARAP must include a detailed implementation schedule, linking the project construction timetable to land acquisition-related activities. The implementation timetable should establish that compensation (in cash or in kind) should be completed at least one month prior to initiation of civil works, and at least three months before residential structures are demolished.

## **B.10. Costs and Budget**

23. Each action plan will include detailed cost of compensation and other rehabilitation entitlements and relocation of Project Affected Persons, if that be the case, with a breakdown by agricultural land, residential land, business land, houses, businesses and other assets. The cost estimates will make adequate provision for contingencies. The action plans will explicitly establish sources for all funds required, and will ensure that fund flow is compatible with the timetable for payment of compensation and provision of all other assistance.

**B.11. Grievance Procedure**

24. LARAPs will establish means for Project Affected Persons to bring complaints to the attention of relevant project authorities. Grievance procedures should include reasonable performance standards, e.g., time required to respond to complaints, and should be provided without charge to Project Affected Persons. The LARAP should also state other avenues available to aggrieved Persons if the project-related procedures fail to resolve complaints.

The primary avenue for complaints related to the WISMP programme shall be DGWR and the PM-TA consultants responsible for monitoring and evaluation. The name and contact details of the designated PM-TA consultant shall be displayed at each disclosure site.

**B.12. Resettlement Monitoring**

25. In addition to internal programme monitoring arrangements, DGWR will ensure that LARAP implementation will be monitored by a qualified agency independent of programme implementing agencies at least once every three month (quarterly report) during each year of the WISMP programme. The LARAP should establish the scope and frequency of monitoring activities. External monitoring reports will be prepared for simultaneous submission to the project office and the World Bank.
26. Regular, for instance monthly, report should track items such as: i) disclosure of information and consultation with PAP; ii) status of land acquisition and payments on compensation; iii) payments for loss of income; iv) income restoration activities; v) number and type of grievances received, how they are being addressed and when they have closed out.

## **Appendix A**

### **Requirements of Abbreviated LARAP and LARAP**

#### **Abbreviated LARAP**

- Asset and livelihood census survey of 100% of PAPs and a valuation of their assets and respective income sources;
- Description of compensation and resettlement assistance to be provided;
- Consultation with PAPs about acceptable alternatives;
- Institutional responsibility for implementation and procedures for grievance redress;
- Arrangements for monitoring and implementation; and,
- A timetable and a budget.

#### **Land Acquisition and Resettlement Action Plan (LARAP)**

The scope and level of detail of the action plan vary with the magnitude and complexity of land acquisition and resettlement. The plan covers the elements below as relevant and when not relevant, it is noted in the LARAP.

- A description of the project, identification of how the Project has given rise to involuntary resettlement;
- Identification of potential project impacts;
- The objectives of the resettlement programme;
- A description of the socio-economic studies (both a baseline survey and an asset census survey);
- The legal framework;
- The institutional framework and organisational responsibilities;
- Eligibility and the entitlement matrix showing resettlement measures;
- Methodologies for valuation of losses and compensation for losses;
- Site selection, site preparation and relocation where appropriate including housing, infrastructure and social services, and integration support to be provided;
- Environmental protection and management;
- PAP participation, consultation and disclosure;
- Grievance mechanism procedures;
- Implementation schedule and budget; and,
- Monitoring and evaluation activities.

## Appendix B

### SAMPLE OF

### STATEMENT LETTER OF LAND DONATION

I, the undersigned this:

Name :

Occupation :

Address :

declare that I have the right to get compensation for my assets affected (land / crops) ...  
 ... .. m<sup>2</sup> / ... .. trees .. (Write down the extent of assets  
 affected ) with compensation of Rp. ....  
 ... .. (Write down the estimated amount of compensation actually entitled)

But I voluntarily donate my land or assets affected for the project / sub-project ... ..  
 ... .. (Write the name of project / sub-projects to be  
 constructed)

Location of land :

Size of land :

Current land use :

Status of land ownership :

with reasons :

.....

.....

.....

.....

.....

.....

.....

.....

.....

This statement was made in good faith without any coercion.

*Place, date of the agreement*

Knowing,

Landowner Signature

Signature  
of (project proponent)

Name: .....  
.....

Name:

Signature of witnesses :

1. Name : ..... signature :
2. Name : ..... signature :
3. Name : ..... signature :



**ANNEX C****INDIGENOUS PEOPLES PLANNING FRAMEWORK (IPPF)****A. Introduction**

1. The project objective is to improve the capacity for basin water resources and irrigation management, and increase irrigated agriculture productivity in the project basins, provinces and districts. The proposed project covers a total 14 provinces and 101 districts. It covers: (i) improvement of water resources and irrigation management capacity and effectiveness through investments in institutional strengthening, capacity-building and infrastructure; and (ii) interventions to increase irrigated productivity and farmer income.
2. Since WISMP-2 components may support subprojects across several provinces in the country, they are likely to affect IP in a number of subproject areas in participating provinces such as Aceh, South Sulawesi, Central Sulawesi, West Nusa Tenggara and East Nusa Tenggara, which are also the participating provinces of WISMP-1. This IPPF is prepared in order to provide some general principles and procedures that will be applied during subproject preparation and implementation, if IP are to be affected. In the WISMP-2, therefore, the purpose of the framework is for ensuring consultation, giving IP a voice, and an opportunity to benefit from the program. No adverse impacts are anticipated, as it is negative listed in the subproject screening.

**B. Objective**

3. The primary objectives of the Framework are:
  - To ensure that such groups are afforded meaningful opportunities to participate in planning that affects them;
  - To ensure that opportunities to provide such groups with culturally appropriate benefits are considered;
  - To ensure that any project impacts that adversely affect them are avoided.
4. This is in line with the national objective in empowering indigenous community (*Komunitas Adat Terpencil/KAT*), in which to grant of authority and belief to *KAT* to self-determine their own destiny and various development activity programs available within their location and their necessity through protection, reinforcement, development, consultancy and advocating to improve their social prosperity level.

**C. Definition**

5. The national legislation, Presidential Decree No. 111/1999 sets the criteria as follows: a) in form of small, closed and homogenous community; b) social infrastructure supported by familial relationship; c) in general geographically remote and relatively difficult to reach; d) in general live with sub-system economy; e) its

- equipment and technology is simple; f) dependency to local environment and natural resources are relatively high; g) limited access of social, economic, and political service.
6. The terms “indigenous peoples”, “indigenous ethnic minorities” and “tribal groups”, describe social groups with a social and cultural identity distinct from the dominant society that makes them vulnerable to being disadvantaged in the development process. For the purposes here, “indigenous people” is the term that will be used to refer to these groups.
  7. Indigenous people are commonly among the poorest segments of a population. , According to the Bank policy, the term “Indigenous Peoples” is used in generic sense to refer to s distinct, vulnerable, social and cultural group processing the following characteristics in varying degrees: a) a close attachment to ancestral territories and to the natural resources in these areas; b) self-identification and identification by others as members of a distinct cultural group; c) n indigenous language, often different from the national language; and d) presence of customary cultural, economic, social or political institutions.
  8. For the purpose of this Framework, the definition of IP will try to follow both the criteria of the Bank and the national legislation.

#### **D. Screening for indigenous peoples among the affected populations**

9. Initial screening of the potential presence of IP in the subprojects area will be conducted by using combination criteria of Bank and national legislation identification. All subproject areas which have IP communities and are candidates for WISMP-2 support will be visited (at the time of first consultation with communities) by a project implementing unit and relevant local authorities, including personnel with appropriate social science training or experience. Prior to the visit, respective project implementing unit will send notice to the communities informing their leaders that they will be visited for consultation. The notice will request that the communities invite to the meeting representatives of farmers, women associations and village leaders for discussion on the subproject. During the visit, the community leaders and other participants will be consulted and present their views with regards to the subproject.
10. At this visit, personnel with social science training or experience will undertake a further screening for IP population with the help of local leaders, local authorities, and NGO as necessary. The screening will check for the following: (a) names of IP groups in the affected village; (b) total number of IP in the affected villages; (c) percentage of IP in affected villages; (d) Number and percentage of indigenous households within a described zone of influence of the proposed subproject.
11. If the results show that there are IP communities in the zone of influence of the proposed subproject, a social assessment will be planned for those areas.

## **E. Social Assessment and Consultation**

12. During the preparation of the subproject proposal and/or subproject approval, a social assessment process will be undertaken to define the nature and scope of impacts on the IP among the affected populations. By gathering both qualitative and quantitative data in the subproject areas, the basic social and economic profile of beneficiary population or project affected people will be developed.
13. The social assessment (SA) will be undertaken by qualified social scientists (or consultants). The SA will gather relevant information on the following: demographic data; social, cultural and economic situation; and social, cultural and economic impacts - positive and negative.
14. The social assessment will become a basis for formulating specific measures to consult with, and give opportunity for IP populations in participating decision making related to the sub-project, should they so desire. The social assessment process itself is often the method by which such consultations are undertaken; however they can be undertaken as a separate exercise.

## **F. Indigenous Peoples Plan**

15. Free, prior and informed consultations will be conducted through a series of meetings, including separate group meetings: indigenous village chiefs; indigenous men; and indigenous women, especially those who live in the zone of influence of the proposed work under subproject. Discussions will focus on subproject impacts, positive and negative; and recommendations for design of subprojects. If the SA indicates that the proposed subproject will cause adverse impact or that the IP community rejects the proposal, the subproject will not be approved (and therefore no further action is needed). If the IP supports the subproject implementation an IPP will be developed to ensure that the IP will receive culturally appropriate opportunities to benefit from the subproject activities.
16. The IPP is prepared in a flexible and pragmatic manner, and its level of detail varies depending on the specific project and the nature of effects to be addressed. It will include the following elements, as needed:
  - a. A summary of Social Assessment;
  - b. A summary of results of the free, prior, and informed consultation that was carried out during subproject preparation;
  - c. A framework for ensuring free, prior, and informed consultation with the affected indigenous communities during project implementation;
  - d. An action plan of measures to ensure that the Indigenous Peoples receive social and economic benefits culturally appropriate;
  - e. The cost estimates and financing plan for the IPP;
  - f. Accessible grievance mechanism, which takes into account the availability of customary mechanism;

- g. Monitoring, evaluation and reporting mechanism
- 17. The IPP of each subproject should be reviewed and approved by the Bank before subproject implementation begins.
- 18. The IPP should be disclosed publicly so that accessible to the affected indigenous community.
- 19. Upon agreed by the Bank, for the subprojects that work at the existing systems with community-decision making process, a stand-alone IPP may not be required. The process to ensure that the IP are included as beneficiaries and participate in any activities will be incorporated in the subproject design.

### **G. Principles if a subproject affects indigenous peoples**

- 20. There are a number of main steps to be applied when the IP are presence in the subproject area and are part of the beneficiaries, in relation to the development of indigenous peoples plan.
- 21. DGWR (NPIU/NPMU) will ensure that free, prior and informed consultations are undertaken, in a language spoken by, and location convenient for, potentially affected IP. The views of IP are to be taken into account during preparation and implementation of any subproject, while respecting their current practices, beliefs and cultural preferences. The outcome of the consultations will be documented into the subproject documents.
- 22. If the IP conclude that the subproject will be beneficial to them, and that any minor adverse impacts, if any, can be mitigated, a plan to assist them will be developed based on consultation with the IP and local representatives. The community should also be consulted to ensure that their rights and culture are respected. The assistance may also include institutional strengthening and capacity building of indigenous villages and community groups working with the subproject.
- 23. In the project's river basin component, staff of the *Balai PSDA* will be trained in the identification of indigenous people in the project's irrigation component. Community Organizer (CO or *TPM*) will be trained in the identification of indigenous people during the Community Organizing training. For each subproject, identification of indigenous people is obligated and reported to the respective province/kabupaten Project Management Unit (PMU) and Project Implementation Unit (PIU). For the areas where indigenous people are identified, the PMU and PIU will organize an orientation training for relevant COs, kabupaten agencies or *Balai PSDA/Balai WS* staff in how to work with indigenous people, to identify mechanisms for effective participation, and address specific challenges in working with such groups, for example, as how to deal with groups that may be in conflict with the larger community.
- 24. Where indigenous people are identified that represent a sufficiently large interest, efforts will be made to ensure that the group is represented in the Irrigation Commission and the River Basin Water Resource Council, respectively, and that

regular and formal communication is established with the group.

25. Where the indigenous people speak a language different from Bahasa Indonesia, relevant brochures and documents will be translated in the appropriate language. Provision has been made in the project budget to allow for additional translations of relevant project documents.
26. These steps will be aimed at ensuring that indigenous people participate fully in the project, are aware of their rights and responsibilities, and are able to voice their needs during the social/economic preliminary survey/exercise and in the formulation of the Irrigation and River Basin sub-projects and operational policies. In addition, they will be encouraged to submit subproject proposals that cater to their group's needs, if necessary.

## **H. Reporting, Monitoring and Documentation**

27. Besides specific attention to IP issues in supervision and monitoring, NPMU/NPIU will include these matters in their progress reporting. The World Bank supervision missions will periodically pay special attention to ensure that the subprojects affecting IP afford benefits to them and no adverse impacts on them.

## **I. Implementation Arrangement**

28. NPMU/NPIU will be responsible for training the respective project implementing unit or local authorities to undertake the work of consultation, screening, social assessment, analyses and preparing IPPs and addressing any grievances.
29. PIU of individual subprojects and local authorities are responsible for implementing IPP (arrange adequate staff and budget).

**ANNEX D****ENVIRONMENTAL IMPACT MITIGATION MEASURES**

The ESSF screening process will identify the level of impact of each proposed sub-project and the type of mitigation required.

It is expected that most sub-projects will require no special mitigation of environmental impacts, other than those that will be specified in the standard construction contracts to be used for WISMP-2 (Annex E).

**D.1. Good Engineering Practice**

In whole WISMP-2 application of good engineering practice should be encouraged. The following environmental and mitigation measures are recommended:

*(Source: Social and Environmental Guidelines, Poverty Reduction Fund, April 2008)*

**D1.1. Environmental effects and mitigation measures for irrigation schemes**

Potential Negative Effects	Possible Mitigation Measures
Soil erosion	Proper design and lay-out of furrows or field avoiding too steep gradient; Land levelling; Design of terraces on hillsides minimising surface erosion hazard; Maintain vegetation cover
Water logging of soils	Regulation of water application to avoid over-watering; Installation and maintenance of adequate drainage system; Use of lined canals or pipes to prevent seepage; Accurate calculation of delivery irrigation requirement
Salinisation of soils	Leaching of salts by flushing soils periodically; Cultivation of crops with salinity tolerance
Scouring of canals	Design of canal system to minimise risk; Use of canal lined with rocks
Clogging of canals by sediment	Measures to minimise erosion on fields; Design and managements of canals to minimise sedimentation; Provision of access to canals for removal of weeds and sediments
Leaching of nutrients from soils	Avoidance of over watering; Replacement of nutrients through crop rotation; Accurate calculation of fertiliser requirements
Algal blooms and weed proliferation	Appropriate and management of canals to minimise weed growth; Nutrient management; Provision of access to canals for treatment or removal of weeds
Deterioration of river quality below irrigation sub-project and contamination of local groundwater (higher salinity, nutrients, agrochemicals) affecting fisheries and downstream users	Improved water management; Improved agricultural practices and control of inputs (particularly pesticides and chemical fertilisers); Imposition of water quality criteria
Sea water intrusion into freshwater systems	Location of scheme; Appropriate water management

Potential Negative Effects	Possible Mitigation Measures
Reduction of downstream flows affecting flood plain use, flood plain ecology, riverine and estuarine fisheries, users of water, dilution of pollutants	Relocation or redesign of subproject; Regulation of take-off to mitigate effects; Compensatory measures where possible
Encroachment on swamps and other ecologically sensitive areas	Choose subproject's site to avoid or minimise encroachment on critical areas; Establishment of compensatory parks or reserved areas
Threat to historical, cultural or aesthetic features	Choose subproject's site to prevent loss; Salvage or protection of cultural sites
Alteration or loss of food plain vegetation and disturbance of coastal ecosystem (mangroves)	Choose subproject's site to be in less vulnerable area; Limitation and regulation of water take-off to minimise problems to the extent possible
Introduction or incidence of water-borne or water-related diseases	Use of lined canals or pipes to discourage vectors; Avoidance of stagnant or slowly moving water; Installation of gates at canal ends to allow complete flushing; Filling or drainage of borrow pits along canals and roads; Water testing; Disease prophylaxis and treatment
Disease and health problems from use of waste water irrigation or irrigation waste water	Wastewater treatment (e.g. settling ponds prior to use); Establishment and enforcement of standards for wastewater use
Conflicts over water supply and inequalities in water distribution throughout service area	Means to ensure equitable distribution among users and monitor to assure adherence; Establishment of effective water users associations
Over-pumping of groundwater	Limitation of withdrawal so that it does not exceed "safe yield" (recharge rate)
Water quality deteriorated or made unusable by upstream land use and pollutants discharge	Control of land use in watershed areas; Control of pollution sources; Water treatment prior to use
Failure of upstream dams or reservoirs on which the sub-project activities depend	Check dam or reservoir safety prior to sub-project implementation



**D.2. Format of UKL/UPL of Permen KLH No. 13 of 2010****I. IDENTITY initiator**

1. Company Name : \_\_\_\_\_
2. Responsible Name for : \_\_\_\_\_  
Business Plan and / or Activity
3. Office Address : \_\_\_\_\_  
Telephone Number / Fax

**II. BUSINESS PLAN AND/ OR ACTIVITY**

1. Business Plan Name : \_\_\_\_\_  
or Activities
2. Business Plans Location: \_\_\_\_\_  
and / or Activities

Write down the location of the business plan and / or activities, such as among others: the name of the street, village, sub district, district and province where he'll do the business plan and / or activities.

For activities that have the scale and or large events, such as mining activities, need to be equipped with a map location of activities with sufficient scale (1:50,000 if available) and location based on latitude and longitude lines.

3. Business Scale and / or : \_\_\_\_\_ (unit)  
Activity

Write down the size or extent and length and or volume and / or capacity or other quantities that can be used to give an idea of the scale of activity. For example, among others:

- 1) Industry: The type and production capacity, the amount of raw and auxiliary materials, energy usage and the amount of total water usage.
- 2) Mining: area of land, mineral reserves and quality, length and area of seismic test trajectory and the amount of explosives.
- 3) Transportation: size, length and volume of transportation facilities will be built, the depth and weight of the ship leaning moorings and other measures in accordance with the transportation sector.
- 4) Field of Agriculture: extensive business plan and / or activities, the capacity of processing units, the number of raw and auxiliary materials, energy usage and the amount of total water usage.



- 5) Field of Tourism: the land that is used, extensive tourist facilities to be constructed, the number of rooms, number of laundry machines, the number of holes, places of entertainment seating capacity and number of seats in the restaurant.

### III. COMPONENT OUTLINE BUSINESS PLAN AND / OR ACTIVITIES

Write down the components of the business plan and / or activities that are believed to have an impact on the environment.

The writing process can use the description of activities at each stage of project implementation, namely pre construction phase, construction, operation and post-operative or by decomposing the component activities based on process, from handling raw materials, production processes, up to the handling of post production.

#### Example: Livestock Activities

##### Pre construction:

- a. Land acquisition (describe briefly the area of land that is liberated and the status of the land).
- b. And others ....

##### Construction:

- a. Land clearing (describe briefly the land area and land clearing techniques).
- b. Construction of stables, offices, and dormitory employee (describe area of the building).
- c. And others ....

##### Operation:

- a. The importation of cattle (write down the number of cattle that entered).
- b. Animal husbandry (describe the stages that lead to the maintenance of livestock waste, or the impact on the environment).
- c. And others ....

Especially for business and / or large-scale events, such as among others: the paper industry, textiles, etc., also attach a process flow diagram is accompanied by a description of materials and water balance (mass balance and water balance).

#### IV. ANTICIPATED ENVIRONMENTAL IMPACTS

Describe briefly and clearly:

1. Activities that are a source of impact on the environment;
2. Types of environmental impacts occur;
3. That represents the size of the impact;
4. And other things that need to be submitted to explain the environmental impacts that will occur on the environment.

SOURCE OF IMPACT	TYPE OF IMPACT	The scale of impact	FACTS
<p>Write down activities that generate impacts on the environment</p> <p>Example: Activity on the stage of Operation Ranch</p> <p>Rearing livestock waste causes include:</p> <ol style="list-style-type: none"> <li>1. Liquid Waste</li> <li>2. Solid Waste (Dirt)</li> <li>3. Waste gases due burning residual fodder</li> </ol>	<p>Write the environmental component will change due to the impact source</p> <p>The decrease in river water quality due to XYZ liquid waste disposal and solid waste.</p> <p>Decrease in air quality due to burning</p>	<p>Write down the size of which can express the magnitude of impact</p> <p>Liquid waste generated is 50 liters / day.</p> <p>Solid waste generated is 1.2 m3/week.</p>	<p>Write down any other information which needs to be submitted for explaining the environmental impacts that will occur</p>

#### V. PROGRAM MANAGEMENT AND MONITORING ENVIRONMENT

Describe briefly and clearly:

1. The steps taken to prevent and manage the impact, including efforts to address and tackle the emergency situation;
2. Monitoring activities are conducted to determine the effectiveness of impact management, and compliance to regulations in the environmental field;
3. Yardsticks used to measure the effectiveness of environmental management and compliance to regulations in the environmental field.

#### VI. SIGNATURE AND STAMP

After the entry form on the UKL and UPL filled completely, the responsible business and/or activity shall sign and the business and / or activity concerned.

**ANNEX E****PEST MANAGEMENT PLAN****E.1. BACKGROUND**

During the 1970s and early 1980s the Indonesian Government, supported by the World Bank carried out rehabilitation of some 500,000 ha of rice irrigation schemes throughout the country. The result was that in 1984 Indonesia became self-sufficient in paddy, after a decade as the world's largest importer of rice. Unfortunately, this self-sufficiency in rice was not to last long. Although there was sufficient water to meet the crops' irrigation requirement, several factors led to a reduction in rice production. One of those factors was a pest named the "brown plant hopper" which attacked many provinces known as major rice producers.

The scale of the pest problem verged on that of a national disaster, following closely on the introduction of high yielding crops, in particular new rice varieties such as *PB (Padi Baru)* and IR (Indonesian Rice) and other fertilizer-responsive crop varieties throughout the country. The use of chemical pesticides has been increasing steadily since 1970, with the result that excessive pesticide use had disturbed agro-ecosystems over a wide area. Pesticides had also become a significant factor in the loss of many non-targeted organisms, including bird life.

For any project funded by the World Bank, where an increase in the use of pesticides is expected, the Bank's policies and procedures require that a Pest Management Plan (PMP) should be prepared. Under the WISMP programme, improving basin water resources management, participatory irrigation management and rehabilitation of irrigation schemes are expected to result in the increased availability of irrigation water to paddy fields growing high yielding varieties which are likely to use higher applications of pesticide - hence the need for a PMP.

**E.2. ENVIRONMENTAL IMPACTS**

The excessive and indiscriminate use of pesticide inevitably has an adverse effect on the environment. While targeting harmful pests, benign insects are also affected, thus disturbing the balance of the ecosystem balance. For example, honey bees, instrumental in pollination in the plant kingdom, are sensitive to pesticides and in some instances are killed in large numbers. Loss in biodiversity occurs, with a consequent adverse effect on birds and other wildlife.

In general, the resulting environmental problems may be classified as follows:

- a. Water Pollution (with a potentially major effect on human life);
- b. Soil Pollution;
- c. Environmental Pollution;
- d. Pollution of fish ponds;
- e. Animal Health;
- f. Forced change of habits.

Each of these problems needs to be investigated by suitable research. In particular, research must be directed at established areas of intensive agriculture, both with and without irrigation which is vital to the country's food supply.

### **E.3. HUMAN HEALTH**

Persons directly affected by pesticides are workers in the pesticide industry, and both male and female agricultural field workers. Sickesses of various kinds are frequently induced, some of which are listed below:

- a. Headache
- b. Irritation of the skin, eyes, nose, throat (all very common)
- c. Dizziness, vomiting
- d. Blurred vision
- e. Heart irregularities
- f. Cancer
- g. Fatality

### **E.4. INTEGRATED PEST MANAGEMENT PLAN (IPMP)**

The main objectives of the Pest Management Plan for WISMP-2 are:

- 1) To increase and maintain the productivity of agricultural crops through Integrated Pest Management that includes rational use of chemical pesticides and nutrients;
- 2) To raise awareness among farmers and other stakeholders regarding the importance of the IPM approach to crop management, and to train extension staff and farmers through WUAF and WUA to become effective practitioners of IPM;
- 3) To determine the level of pesticide residue on agricultural crops in normally-treated and IPM-treated areas and to disseminate information to stakeholders on the usefulness of undertaking IPM practices.

#### **E.4.1. Basic Regulations**

- a) Law No. 12/1992 on Food Crops Cultivation;
- b) Law No.23/1992 on Health;
- c) Law No.23/1997 on Environmental Management;
- d) Law No.8/1999 on Protection of Consumers;
- e) Government Regulation No.7/1973 on Supervision of Circulation, Storage and Usage of Pesticides;
- f) Government Regulation No.6/1995 on Protection of Crops and Cultivation;

- g) Minister of Agriculture Regulation No.45/Permentan/SR.140/10/2009 on Condition and Procedure of Pesticide Registration;
- h) Minister of Agriculture Guidelines on Integrated Pest Management

#### E.4.2. Actions of the Coordinating Team

- a) The Minister of Agriculture (through DG of Land and Water Management and/or DG of Plant Protection) will coordinate the control of pests and other paddy disease, by developing an Integrated Control system, by regulating the distribution and provision of seed of high yielding variety that are resistant to pests, by controlling the usage of pesticides, by monitoring the results of these interventions, in particular the occurrence of resurgent and resistant strains;
- b) Minister of Home Affairs will instruct all Governors and Bupati to take prescribed measures as follow up to the above mentioned interventions;
- c) The State Minister of the National Planning Board will synchronies all measures of planning and design for controlling pesticides and their use;
- d) The Minister of Information will develop programmes of clear and focused information directed at stakeholders;
- e) The Deputy Minister of Agriculture will coordinate, monitor and evaluate all activities on Pest Management;
- f) under supervised of DG of Land and Water Management and/or DG of Plant Protection a unit of Public Awareness Campaign (PAC) and Supervising, Monitoring, and Evaluating (SME) unit will be develop.

#### E.5. LOGICAL FRAMEWORKS FOR THE IMPLEMENTATION OF IPM

##### Basic Log frame

Narrative Summary	Expected Results	Performance Indicators	Assumptions/Risks
<b><u>Objective :</u></b> Raise awareness of all stakeholders about the IPM approach to crop management, and train extension staff and farmers through WUA/WUAF	<ul style="list-style-type: none"> <li>Members of WUA and River Basin Organization join IPM</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of increase of awareness among people about IPM practices</li> </ul>	<ul style="list-style-type: none"> <li>Law, regulation regarding IPM impose consistently by Government</li> </ul>
<b><u>Activities:</u></b>  <b>Activity 1</b> Launching awareness program	<ul style="list-style-type: none"> <li>Stakeholders are more aware of harmful effects of pesticides</li> </ul> <b><u>Milestones:</u></b> <ul style="list-style-type: none"> <li>Electronic media, printed materials, brochure could be distributed to farmers</li> </ul>	<ul style="list-style-type: none"> <li>Incidence of accidents in handling, usage, storage and disposal of pesticide</li> <li>Use of bio-pesticide is increased</li> <li>IPM and IPSNM practices are adopted</li> </ul>	<ul style="list-style-type: none"> <li>River Basin Institutions, WUA/WUAF continuously involved in information dissemination programs</li> </ul>

Narrative Summary	Expected Results	Performance Indicators	Assumptions/Risks
<b>Activity 2</b> Introduction of IPM	<ul style="list-style-type: none"> <li>Use of organic fertilizers and residues is promoted</li> </ul> <p><b>Milestones:</b></p> <ul style="list-style-type: none"> <li>A pilot projects scale operation, in collaboration with the River Basin council and WUAF, is launched to introduce IPMP in the project area</li> </ul>	<ul style="list-style-type: none"> <li>25 plots are laid out to demonstrate the usefulness of IPMP</li> <li>Financial incentives are provided to participating farmers</li> <li>Results are monitored</li> </ul>	<ul style="list-style-type: none"> <li>Provincial Gov't is convinced of the need to introduce eco-friendly practices in the agriculture sector</li> </ul>
<b>Activity 3</b> Strengthening Institutional Capacity in IPM	<ul style="list-style-type: none"> <li>Agricultural officials at all levels are abreast of developments in the fields of IPSNM</li> </ul> <p><b>Milestones:</b></p> <ul style="list-style-type: none"> <li>Short refresher courses for the officials of the Agricultural Extension Department and District Governments are arranged to keep them abreast of the latest developments in IPM</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of enhanced knowledge of IPMP in agricultural officials</li> </ul>	<ul style="list-style-type: none"> <li>Provincial government commitments by way of encouraging and allowing officials to attend refresher courses</li> </ul>

## E.6. IMPLEMENTATION PLAN FOR INTEGRATED PEST MANAGEMENT

Activity	Year 0	Year 1	Year 2	Year 3	Year 4
<b>Awareness</b> Raise awareness, dissemination of information	DG of Land and Water Management /Plant Protection established and strengthening unit PAC for launching IPM.	<ul style="list-style-type: none"> <li>Unit PAC begin to action, introduction IPM in collaboration with any other agriculture related activities, i.e., field school, field day, others</li> <li>In collaboration with agriculture official</li> </ul>	<ul style="list-style-type: none"> <li>Unit PAC begin to action, introduction IPM in collaboration with any other agriculture related activities, i.e., field school, field day, others</li> <li>In collaboration with agriculture official</li> </ul>	<ul style="list-style-type: none"> <li>Unit PAC begin to action, introduction IPM in collaboration with any other agriculture related activities, i.e., field school, field day, others</li> <li>In collaboration with agriculture official</li> </ul>	<ul style="list-style-type: none"> <li>Unit PAC begin to action, introduction IPM in collaboration with any other agriculture related activities, i.e., field school, field day, others</li> <li>In collaboration with agriculture official</li> </ul>

Activity	Year 0	Year 1	Year 2	Year 3	Year 4
<b>Monitoring Pesticide Residue on agricultural product</b>	DG of Land and Water Management /Plant Protection established and strengthening unit SME for IPM.	Unit PAC Supervised, Monitored, and Evaluated IPM understanding on regular basis, i.e., quarterly	Unit PAC supervised, monitored, and evaluated IPM understanding on regular basis, i.e., quarterly	Unit PAC supervised, monitored, and evaluated IPM understanding on regular basis, i.e., quarterly	Unit PAC supervised, monitored, and evaluated IPM understanding on regular basis, i.e., quarterly

## E.7. EXAMPLE: ORGANIC SYSTEM OF RICE INTENSIFICATION (SRI)

In accordance with the present guidelines of the Ministry of Agriculture, WISMP-2 will actively promote the adoption of Organic SRI (System of Rice Intensification) aimed at reducing the use of chemical fertilizers and pesticides, and encouraging integrated pest management techniques.

The following outline summarizes the main features of Organic SRI as a practice aimed at achieving increased yields but with lower adverse impact on the environment.

### **SRI (System of Rice Intensification)** *(Direktorat Jenderal Pengelolaan Lahan dan Air 2010)*

#### **Current Problems In Rice Agriculture**

- It is difficult to increase production; production tends to decline
- Use of chemical fertilizers (Urea, TPS, KCL) is increasing
- Farm costs are increasing, but revenue is declining
- Pest and disease attacks are increasing
- Soils are becoming increasingly dense, hard and sticky, acidic and easily dried
- Water quantity is insufficient and decreasing
- Pesticides remain a mainstay, attracting even more dependence

#### **Advantages of Organic SRI**

- SRI is compatible with a business-friendly environment
- Promotes efficient irrigation water use
- Saves *saprodi* (seeds)
- Achieves high yields (above national average)
- Recycles waste
- Improves soil fertility
- Based on local experience
- Healthy production, free of chemical residues
- Achieves above-average price for rice

## Organic SRI Development Opportunities

- There is ample availability of irrigated paddy area to apply SRI
- Compatible with increased public preference for healthy food products
- Existing support of government, private sector and universities in the development of organic SRI

## Organic SRI Development Challenges

- The practice of burning or otherwise disposing of straw is entrenched in the majority of farmers
- Requires farmers to learn new techniques
- Requires intensive assistance programmes

## Steps in the Implementation of Organic SRI:

### 1. Making MOL (Micro Organisms Liquid)

- MOL is a liquid made from natural ingredients
- MOL facilitates decomposition, and acts as additional nitrogen activator for plants
- MOL can be made with existing materials on site, such as golden snail, bamboo shoots, bones etc.

### 2. Making Compost

- Compost is a natural material that has weathered through the process of decomposition / destruction
- Composting materials can be obtained from animal dung, crop residues, organic waste, straw, etc.
- Decomposition of the materials can be accelerated by prior use of choppers and addition of MOL

### 3. Land preparation

- Soil is processed using conventional methods
- Compost is added at rate of 5-7 tons/ha (depending on soil fertility)

### 4. Selection of healthy seeds

- Rice seeds tested using a saline solution
- After submergence in the solution, rice seeds washed with fresh water, then ready for sowing

### 5. Seedbed

- Seedbed created in *besek* / box / tray with soil / compost growing medium mixed in a 1: 1 ratio
- Seeds requirement per hectare approximately 5 kg



## 6. Planting and spacing

- Seedlings planted at age 5-7 days
- Transplanting to take no more than 15 minutes
- Plant singly, at shallow depth and in letter L shape
- Spacing 40 x 40 cm or 50 x 50 cm

## 7. Water supply and weeding

- At the vegetative stage of rice growth, water to be applied - *macak macak* (humid/ wet, not inundated)
- Inundation 2-3 cm depth only during weeding
- Weeding at intervals of 10 days after planting, as many as four times
- MOL applied as nutrition after weeding
- 45 days after planting, crop should be un irrigated for 10 day
- After 55 days, water applied *macak macak* (saturated/ wet not inundated)
- After rice has ripened, crop should be air dried until harvest

## 8. Control of pests and diseases

- Control of pests and diseases carried out according to the concept of Integrated Pest Management (IPM)
- Pest and disease control practices that will damage the agro-ecosystem to be avoided
- Pesticide plants may be used to control pests and diseases

**Ministry of Agriculture : List of Prohibited Ingredients for Pesticides**  
**Regulation No. 45/Permentan/SE.140/10/2009 – 8 October 2009**  
**Active Materials, prohibited for any usage in Pesticides**

<b>No</b>	<b>Active Materials</b>	<b>CAS Number</b>
1	2,4,5-T	95-95-4
2	2,4,6-T	88-06-2
3	Natrium 4-brom-2,5-diklorofenol	4824-78-6
4	Aldikarb	116-06-3
5	Aldrin	309-00-2
6	1,2-Dibromo-3-kloropropan (DBCP)	96-12-8
7	Cyhexatin	13121-70-5
8	Dikloro difenil trikloroetan (DDT)	50-29-3
9	Dieldrin	60-57-1
10	2,3-Diklorofenol	50-29-3
11	2,4-Diklorofenol	60-57-1
12	2,5-Diklorofenol	576-24-9
13	Dinoseb	88-85-2
14	Ethyl p-nitrophenyl benzenethiophosponate (EPN)	2104-64-5
15	Endrin	106-93-4
16	Endosufan	115-29-7
17	Etilen dibromida (EDB)	72-20-8
18	Formaldehida	50-00-0
19	Fosfor kuning (Yellow Phosphorus)	7723-14-0
20	Heptaklor	76-44-8
21	Kaprafol	2425-06-1
22	Klordan	57-74-9
23	Klordimefon	19750-95-9
24	Leptofos	21609-90-5
25	Heksakloro Siklo Heksan (HCH) (included lindan)	608-73-1
26	Metoksiklor	72-43-5
27	Mevinfos	26718-65-0
28	Monosodium metam arsonat (MSMA)	2163-80-6
29	Natrium Klorat	7775-09-9
30	Natrium tribromofenol	
31	Metil paration	298-00-0
32	Halogen fenol (included Penta Kloro Fenol (PCP)	87-86-5
33	Pestisida with salmonella active component	
34	Arsenic Compounds	1327-53-3
35	Mercury Compounds	10112-91-1, 7546-30-7, 7487-94-7, 21908-53-2
36	Strikhnin	57-24-9
37	Telodrin	297-78-9
38	Toxaphene	8001-35-2
39	Mireks	2385-85-5

**ANNEX F****STANDARD CLAUSES FOR ENVIRONMENTAL MANAGEMENT DURING CONSTRUCTION**

Construction contracts under WISMP-2 will be required to include the following clauses aimed at minimising the adverse impacts of construction, and to provide regular reporting.

**F.1. GENERAL****F.1.1. Description**

- a) This Section covers the provision of environmental counter measures and actions that are needed to perform any civil works required under the Contract. In most cases the clauses have been extracted from other Sections of these Specifications and are included here to ensure awareness and compliance.
- b) The Contractor shall take all reasonable steps to protect the environment (both on and off the Site, including base camp and other installations under the control of the Contractor) and to limit damage and disturbance to people and property resulting from pollution, noise and other results of his operations. The Contractor should also ensure that transportation and quarrying activities are undertaken in an environmentally acceptable manner.
- c) As a means of minimising environmental disturbance to all nearby communities all construction and transportation activities must be confined to the hours of operation as defined unless otherwise approved by the Engineer.
- d) In order to assist in ensuring the effective implementation of all the Environmental Safeguards referred to in this section the Engineer shall complete on a monthly basis the Environmental Management and Monitoring Plan identifying the adverse environmental activities or environmental omission, details of those activities and omissions, and activities carried out to rectify or remedy that omission.

**F.2. ENVIRONMENTAL MANAGEMENT****F.2.1. Impacts on Water Resources**

- a) The Contractor shall ensure that polluting effluent from all of the Contractor's activities shall not exceed the values stated in the prescribed applicable Laws (Refer specifically to Government Regulation (*Peraturan Pemerintah*) No.82 Year 2001 regarding Water Quality Management and Water Pollution Control).
- b) The contractor shall make every effort to ensure no construction materials and liquids, waste materials and liquids, and any other materials and liquids are not allowed to enter any irrigation or other channel.
- c) Natural streams or channels within or adjacent to the works of this Contract shall not be disturbed without the approval of the Engineer.

- d) If any excavation or dredging in the water channels that is unavoidable for the proper execution of the works, the Contractor shall, after the works are constructed, backfill all such excavations to the original ground surface or stream bed with material approved by the Engineer.
- e) Material deposited within the water channels from foundation or other excavations, or from the placing of cofferdams, shall be removed completely following construction.
- f) All excavation shall be maintained free of water and the Contractor shall provide all necessary materials, equipment and labor for diverting waterways and the construction of temporary drains, cut off walls and cofferdams.
- g) Excavation for borrow materials shall be prohibited or restricted where they might interfere with all drainage channels.
- h) Any damaging liquid or solid contaminant, such as hydraulic or lubricating oils, dropped or spilled upon any portion of the site work and adjacent environment, base camp, or haul route shall be cleaned up immediately by the Contractor in order to avoid contamination of water and soil. The Engineer must approve the completion of the clean up.
- i) Adequate means of trapping silt at the mixing plants shall be provided through temporary systems discharging into permanent drainage systems.
- j) Washing of contractor's vehicles and equipment shall only be permitted in specially designated and equipped areas and shall not be permitted in any existing water courses.
- k) Temporary closure and diversion of water and irrigation channels shall only be done with the express approval of the Engineer and advance notification shall be given to all communities likely to be affected by the closure and diversion.

#### F.2.2. Impacts on Air Quality

- a) The Contractor shall ensure that emissions from all the Contractor's activities including transportation activities are kept to an absolute minimum through use of modern equipment and through good management and maintenance, and any emissions shall not exceed the values stated in the applicable Laws (Refer specifically to Government Regulation (*Peraturan Pemerintah*) No.41 Year 1999 regarding Air Pollution Control).
- b) Trucks shall be sealed and all covers shall be securely fastened.
- c) The Contractor shall maintain at the work site adequate supplies of water for moisture control during all placing and compacting operations, and shall also remove excess material from all existing roadways.

#### F.2.3. Impacts on the Noise Environment

The Contractor shall take all necessary precautions to minimize the amount of noise and vibrations coming from construction and transportation activities, by all

vehicles and equipment, through the use of modern vehicles and equipment and through good management and maintenance. The contractor shall ensure that all noise and vibration levels from all the Contractors Activities are in accordance with the applicable Laws. *(Refer specifically to Decree of Minister of Environment No.48 Year 1996 regarding Noise Level Standard and Decree of Minister of Environment No 49 year 1996 regarding Level of Vibration.)*

#### F.2.4. Impacts on Adjoining Properties, and Utilities

- a) The provision regarding Traffic Management and Safety, shall apply.
- b) The Contractor shall be responsible for obtaining any existing information on the existence and location of existing underground utilities and for obtaining and paying when required for any necessary permits or other authorisation for their diversion or temporary cessation.
- c) The Contractor shall be responsible for the care and protection of any existing serviceable underground piping, cables, conduit, or other subsurface lines or structures that may be encountered and for repairing any damage caused to them by his operations.
- d) At all times during the time for completion the contractor shall maintain vehicular and pedestrian access to all houses, commercial, industrial and all other uses. Temporary accesses must provided where construction will close permanent access for any period of over 6 hours and all affected owners and community members must be notified at least 24 hours in advance of any impact on accesses.

#### F.2.5. Human Health and Safety

- a) Provisions given in Particular Conditions Health and Safety apply.
- b) The Contractor shall: (i) comply with all applicable safety regulations (Refer specifically to Law No. 1 Year 1970 regarding Work Safety and Law No. 12 Year 1999 regarding Fire Safety in work sites); (ii) take care for the safety of all persons entitled to be on the Site; and (iii) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.
- c) The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel and shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents.
- d) The Contractor shall at all times take necessary actions to protect the health and wellbeing of the Contractor's Personnel employed on the Site by ensuring that all parts of the worksite are regularly kept clean and sanitary.
- e) The provisions regarding Safety of Excavation Works, shall apply.

- f) All gears, pulleys, chains, sprockets, and other dangerous moving parts of Mixing Plants shall be thoroughly guarded and protected.
- g) Adequate sanitary waste control facilities shall be provided for all project staff and workers and waste shall be collected regularly and disposed of in accordance with applicable laws. (*Refer specifically to Government Regulation (Peraturan Pemerintah) No. 82 Year 2001 regarding Quality Management and Water Pollution Control, and Law No. 1 Year 1970 regarding Work Safety*).

#### F.2.6. Impact on Flora and Fauna

- (a) The cutting of trees shall be carried out only when absolutely necessary and will be specifically defined and agreed by all parties during the field investigation. Every tree felled should be replaced by two semi mature trees of the same or similar species. Tree planting shall be in accordance with Site Preparation, of the Specifications and in accordance with payment
- (b) The Contractor shall limit the movement of his employees, the location of Base Camps, AMP etc and equipment within the sensitive environmental areas, such as the National Parks, Forest areas and all other officially protected sensitive areas so as to minimise damage to natural vegetation and shall endeavour to avoid any damage to land. No Base Camp, AMP, equipment or vehicle parking or storage area will be allowed outside the ROW where the road passes through an officially protected sensitive area.

#### F.2.7. Impacts on Soil

- a) The Contractor shall ensure that pollutant discharge from the Contractor's activities shall not exceed the values stated in the prescribed applicable Laws (*Refer specifically to Government Regulation (Peraturan Pemerintah) No. 82 Year 2001 regarding Quality Management and Water Pollution Control*).
- b) In order to avoid land sliding and erosion during excavation for borrow materials, the edge of a borrow pit shall be not closer than 2 meters from the toe of the embankment or 10 meters from the top of any cutting.

#### F.2.8. Disposal of Waste

- a) The disposal of all solid and liquid waste from construction activities should only take place i) in accordance with Transportation and Handling, and ii) in accordance with requirements and permissions of responsible institution at Province or *Kabupaten/Kota*.
- b) When any material is to be disposed of outside the Site, the Contractor shall obtain a written permit from the property owner on whose property the disposal is to made, which permit shall designate the disposal location and shall be submitted to the Engineer together with a request for approval to proceed.
- c) When material is disposed of as provided above and the disposal location is visible from a highway, the Contractor shall dispose of the material in a neat and uniform manner to the satisfaction of the Engineer.

### F.2.9. Impact on Cultural Heritage

The provisions given in Annex I shall apply.

### F.2.10. Other Matters

- a) For all quarries and other sources of material (whether owned or not owned by the Contractor) the contractor must submit to the Engineer details of the location of the material source in accordance with Materials and Storage, The contractor must also submit to the Engineer a Haul Route Plan in accordance with Transport and Handling, defining the routes on which the material will be hauled from the location of materials. The Engineer may require that the relevant local government institutions confirm that the source location and operation, and the haul route operation is undertaken in an Environmental and Socially acceptable manner in accordance with all local and national regulations.
- b) All Quarries used must be licensed and have full legal authorisation from the Local government.
- c) The extraction of any construction materials will not be allowed in any National Park or other officially protected sensitive area.
- d) The contractor must ensure that the Base Camp is operated in accordance with good environmental practice and that adverse environmental impacts are kept to an absolute minimum and in accordance with this section, and that the local community is not disturbed by any of the activities of the Base Camp.
- e) In compliance with sustainable development practice, all timber materials used for construction shall be purchased from a certified dealer (not from illegal logging). In Provinces where the *Surat Keterangan Sahnya Hasil Hutan (SKSHH)* (Letter indicating source from legal production forest) operates a certificate of its legal nature be attached to the purchase document for submission to the Engineer.
- f) All parts of the Site must be reinstated to its original condition prior to the commencement date of works.

## **F.3. IMPLEMENTATION OF REQUIRED ENVIRONMENTAL STUDIES**

For any Subproject which has an SPKPPLH, UKL/UPL or AMDAL, in accordance with the Government of Indonesia's environmental laws, the Contractor must comply with any specific recommendations which will have been incorporated into the design and specifications. The full SPKPPLH, UKL/UPL or *Amdal* document will be made available to the Contractor and Engineer for information.

## **F.4. MONTHLY REPORT**

The monthly Environmental Management and Monitoring Plan (EMMP) is required to be submitted for each calendar month of the Time for Completion.



The Engineer shall be responsible for preparation and submission of EMMP which shall conform to the following:

- a) The EMMP shall be supported by sufficient supporting documentation to make the submission complete and fully substantiated, in order that the Engineer may certify the application for payment within the time restraints of relevant Clauses of the General Conditions of Contract and these Specifications.
- b) A copy of the EMMP together with its supporting documentation shall be submitted to the Contractor for his immediate action where necessary.
- c) Each Monthly Report of Environmental Monitoring and Management Report shall be dated on the last day of the calendar month collectively with the Monthly Statement

The Contractor will be responsible for validating the accuracy of the report.

#### **F.5. BASIS FOR PAYMENT**

No separate payment shall be made for environmental management operations executed in accordance with this Section of these Specifications except for Article 2.6.(a) where payments will be made. The cost of this work shall be included in the Unit Price of all other Pay Items included in the Contract, which prices shall be deemed full compensation for furnishing all materials, labour, equipment, tools and other incidental necessary for the environmental management.

If the Contractor fails in the performance of this work, the Engineer, without relieving the contractor of his responsibility, shall be entitled to carry out such work as he deems to be necessary and to charge the Contractor with the full cost of rectification thereof which sum shall be deducted from any money due or which may become due to the Contractor under the Contract. The Engineer will be responsible for defining the works necessary to rectify the issue and preparing a cost estimate.



**ANNEX G**

**Minutes of Consultation Meeting on**  
**“Development of Environment and Social Safeguard Framework (ESSF)”**  
**for WISMP-2**

Location & Time : Hotel Ambhara, Kebayoran Baru, Jakarta, 31 August 2010

Head of Meeting : Director of Programming, DGWRD, Department of Public Works

Moderator : Ir. Pandi Hutabarat, M.Eng.

Presenters (PIP) : Mr. V. Hobcroft, Mr Wahyuno, Mr. Monty S. Padmanagara

Purpose :

- 1) Introducing and socialization of draft ESSF for WISMP-2
- 2) Discussion on development of draft ESSF for WISMP-2
- 3) Improvement of draft ESSF for WISMP-2

From the materials presented, the following comments, suggestions and questions were obtained:

1. Why do WISMP-1 and WISMP-2 differ in their participatory requirement? (there is a larger construction component in WISMP-2 and therefore more significant social impact).
2. The abbreviation “LARAP” needs to be explained.
3. The schedule for delivery of Forms A1, A2, A3 needs to be clarified.
4. To gain support from the community, the WISMP-2 programme should keep the community informed. (e.g. construction should be safe, and requirements of the community reasonable and fair).
5. The ESSF should include more guidance on how to implement a LARAP.
6. Screening format should be clarified, especially for projects with negligible impact.
7. Opinion was expressed that the process proposed for Component 2 (Irrigation in Kabupaten) appeared more simple – requiring only Form A1. Participants viewed Forms A2 or A3 as more likely to apply only to Jatiluhur Project (Balai Besar Citarum) and proposed river basin sub-projects from the Central Provinces.
8. Where possible, compensation should be in the form of non-monetary support rather than monetary.
9. The ESSF document requires further formatting and consultation with World Bank.

10. The deadline for receipt of further comments through the web site is 25 September 2010.

**Meeting Conclusion:**

1. That the Indonesian draft of the ESSF document should be simplified;
2. That the different processes associated with Forms A1, A2, & A3 should be clarified.

**Meeting Participants:**Participants invited:

1. Province Aceh	6
2. Province Sumatera Utara	7
3. Province West Sumatera	7
4. Province South Sumatera	7
5. Province Lampung	7
6. Province West Java	8
7. Province Central Java	7
8. Province DIY	7
9. Province East Java	6
10. Province South Sulawesi	7
11. Province West Sulawesi	6
12. Province Central Sulawesi	6
13. Province NTT	6
14. Province NTB	7
15. Central Government	
a. Bappenas	3
b. NPMU	3
c. DitJen SDA (NPIU)	3
d. DitJen Bangda	3
e. DitJen PLA	3
f. Biro Perencanaan	2
g. Bank Dunia	2
h. Konsultan IMRI	2
i. PTL Konsultan IMRI	9
j. Konsultan IDPIM	2
k. Konsultan BWRM	2
l. Konsultan GIM	2
m. Konsultan FMS	2
n. Konsultan NTB	2
o. Konsultan PIP	2
p. Konsultan JIMI	2
16. Others (LSM, University)	6
TOTAL	144

Participants present:

1. Province Aceh	4
2. Province Sumatera Utara	9
3. Province West Sumatera	3
4. Province South Sumatera	0
5. Province Lampung	5
6. Province West Java	10
7. Province Central Java	4
8. Province DIY	4
9. Province East Java	7
10. Province South Sulawesi	8
11. Province West Sulawesi	0
12. Province Central Sulawesi	5
13. Province NTT	6
14. Province NTB	9
15. Central Govmt. & Others	34
TOTAL	108

**ANNEX H****Regulation of the Minister of Public Works (Attachment)**

Number: 10/PRT/M/2008

Date: July 1, 2008

- Determining the types of public works business plans and / or activities requiring environmental management and environmental monitoring

No	TYPE OF ACTIVITY	SCALE / MAGNITUDE	SCIENTIFIC CONSIDERATIONS	SPECIAL CONSIDERATIONS
	<b>I WATER RESOURCES</b>			
1	Construction of dam / reservoir			
	a. Construction of dam, reservoir or other water storage - Height - Impounded area - Storage volume	6 m s /d <15 m 50 ha s /d <200 ha 300,000 m <sup>3</sup> – 500,000 m <sup>3</sup>	Landscape and landform changes, changes in environmental and aquatic ecosystem and the exploitation of natural resources, river morphology, the influence of social, cultural and economic environment, and utilisation of technology.	Rehabilitation that has environmental impacts such as changes in river morphology, aquatic ecosystems, changes in groundwater, land use, social and cultural changes in society.
	b. Rehabilitation of dams / reservoirs or other water storage - Height - Impounded area - Storage volume	6 m s /d <15 m 50 ha s /d <200 ha 300,000 m <sup>3</sup> - 500,000 m <sup>3</sup>		
2	Irrigation Area			
	a. New development area	500 ha s /d <2,000 ha	Natural forest and shape changes of land, increasing exploitation and utilization of water resources effect on decreasing the availability of water resources, economic and social environment influence the community culture	Changes to ecosystems, incidence of pesticide contamination of water, sediment balance, erosion and impact on water resource potential, socio-economic and cultural changes.
	b. Increased area	500 ha s /d <1,000 ha	Landscape and landform changes, increasing utilisation of water resources, the influence of social environment, and economic activity of the community	Changes to water balance, increased pollution, pesticides, increasing the potential for erosion and sedimentation, incidence of potential conflicts due to socioeconomic change
	c. Wetland development (by area)	100 ha s /d <500 ha	Change to the natural environment / land, increased exploitation and utilization of water resources, environmental influences, social, cultural, and economic activity.	Ecosystem changes in the environment, pesticide contamination of water, water balance, socio-economic and cultural changes

No	TYPE OF ACTIVITY	SCALE / MAGNITUDE	SCIENTIFIC CONSIDERATIONS	SPECIAL CONSIDERATIONS
3	Swamp Development (Reclamation of swamps for agricultural cultivation)	500 ha s /d <1,000 ha	Changes of landscape and landform, character of the conservation area of natural resource conservation, protection of cultural heritage and socioeconomic conditions of local culture.	Changes in ecosystems, changes in hydrological systems, changes in social and cultural impact on the community.
4	Development and repairs for coastal and estuarine protection			
	a. Parallel to the coast (sea wall / revetment)	> 1 km	Change in rate of sediment transport along the coast that influence its shape. Changing landscape and land, disruption of water biota environment, changes in socio-cultural environment	Shoreline changes, changes in aesthetics and culture, changes in asset values.
	b. Perpendicular to the shore (groins, breakwaters)	10 m s /d <500 m		
5	Normalisation of the rivers (including shortcut) and flood way			
	a. Large metropolitan city Length or Volume of dredging	1 km d <5 km 50,000 m s /d 500,000 m <sup>3</sup>	Landscape and landform changes and change of river ecosystems, changes in river morphology, and the influence of socio- economic conditions to change community culture	Changes in riverbed to promote regime flow, increase in air pollution, water pollution, traffic disruption and environmental or aesthetic disturbance.
	b. Medium city Length or Volume of dredging	3 km s /d <10 km 100,000 m s /d 500,000 m <sup>3</sup>		
	c. Rural Length or Volume of dredging	5 km s /d <15 km 150,000 m s /d 500,000 m <sup>3</sup>		

**ANNEX I****Chance Find Procedures**

If any person discovers a physical cultural resource, such as (but not limited to) archeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the Contractor shall:

1. Stop the construction activities in the area of the chance find;
2. Delineate the discovered site or area;
3. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;
4. Notify the Supervising Engineer who in turn will notify BBWS and the responsible local authorities immediately (within 24 hours or less);
5. Responsible local authorities are in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by archeologists. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
6. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
7. Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities; and
8. Construction works could resume only after permission is granted from the responsible local authorities concerning safeguard of the physical cultural resource.

### WISMP-2 PIP DOCUMENT MANAGEMENT SYSTEM

<b>Subject:</b>		Draft PIP Annex 9 (whole document)			
<b>Document Title:</b>		Draft PIP Annex 9 – ESSF			
<b>Approx. No. pages (excl. this):</b>		61			
<b>Edit No</b>	<b>Filename (=Footer)</b>	<b>Date</b>	<b>Author</b>	<b>Summary of revision</b>	
0	Annex 9 – Environmental and Social Safeguard Frameworks (draft) (E)	15Jun10	Menninger et al	[Interim PIP]	
1	Draft PIP_Annex9_30Jul10	30Jul10	VJH	Revisions of Interim PIP in line with WB comments	
2	Draft PIP_Annex9 (revised) 6Aug10	6Aug10	VJH	Further revisions of Draft PIP (incomplete)	
3	Draft PIP_Annex9 (revised) 6Aug10	9 Aug10	WAH	Revisions with WB Comments and completed legal basis for environment and LARAP Process (RTF)	
4	Draft PIP_Annex9 (revised) 20Aug10	20Aug10	VJH et al	Further revisions in line with WB comments; inclusion of PMP	
5	Draft PIP Annex 9 (revised) 22Sept10	22Sept10	Wahyuno/ Monty	Revisions based on consultation meeting and adding capacity building section	
6	WISMP-2 ESSF (PIP Annex9 revised) 29Sept10	29Sept10	Monty	Revision based on input from WB (Ninin and Andrew S)	
7	WISMP-2 ESSF (PIP Annex9 revised) 5Oct10	5Oct10	Wahyuno	Adding annex F and annex G	
8	WISMP-2_ESSF_PIP_Annex9_8Oct10	8Oct10	Monty	Corrections annex F and annex G	
9	WISMP-2_ESSF_PIP_Annex9_11Oct10	11Oct10	Monty	Adjustment to the comment from WB (Andrew S)	
10	WISMP_2_ESSF_PIP_Annex9_22Nov10	22Nov10	Wahyuno/ Monty	Adding new input from WB (Andrew and Ninin)	
11	WISMP ESSF Novb 2010_IP_Nov23[1]MWF	25Nov10	Wahyuno/ Monty	Adding new input from WB (Andrew and Ninin)	
12	PIP_Annex_9_(E)_25Nov10	25Nov10	Irwan	Formating	