President’s report

Proposed loan and grant to the Republic of Indonesia for the Integrated Participatory Development and Management of the Irrigation Project

Note to Executive Board representatives

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For: Approval
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### Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>AWP</td>
<td>annual work plan</td>
</tr>
<tr>
<td>BAPPEDA</td>
<td>Badan Perencanaan Pembangunan Daerah (provincial/district development planning agency)</td>
</tr>
<tr>
<td>DGWR</td>
<td>Directorate General of Water Resources</td>
</tr>
<tr>
<td>EA</td>
<td>executing agency</td>
</tr>
<tr>
<td>FMA</td>
<td>financial management assessment</td>
</tr>
<tr>
<td>IA</td>
<td>implementing agency</td>
</tr>
<tr>
<td>IMP</td>
<td>irrigation management plan</td>
</tr>
<tr>
<td>IPDMIP</td>
<td>Integrated Participatory Development and Management of the Irrigation Project</td>
</tr>
<tr>
<td>KMC</td>
<td>knowledge management centre</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
</tr>
<tr>
<td>MoA</td>
<td>Ministry of Agriculture</td>
</tr>
<tr>
<td>MoHA</td>
<td>Ministry of Home Affairs</td>
</tr>
<tr>
<td>MoPWH</td>
<td>Ministry of Public Works and Housing</td>
</tr>
<tr>
<td>NPIU</td>
<td>national project implementation unit</td>
</tr>
<tr>
<td>NPMU</td>
<td>national project management unit</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>operations and maintenance</td>
</tr>
<tr>
<td>PIU</td>
<td>project implementation unit</td>
</tr>
<tr>
<td>PPMS</td>
<td>Project Performance Management System</td>
</tr>
<tr>
<td>RB-COSOP</td>
<td>results-based country strategic opportunities programme</td>
</tr>
<tr>
<td>WUA</td>
<td>water users’ association</td>
</tr>
<tr>
<td>WUAF</td>
<td>WUA federation</td>
</tr>
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</table>
Indonesia

Integrated Participatory Development and Management of the Irrigation Project

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The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 00-11-2015
Republic of Indonesia

Integrated Participatory Development and Management of the Irrigation Project

Financing summary

<table>
<thead>
<tr>
<th>Initiating institutions:</th>
<th>International Fund for Agricultural Development (IFAD) and Asian Development Bank (ADB)</th>
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</thead>
<tbody>
<tr>
<td>Borrower:</td>
<td>Republic of Indonesia</td>
</tr>
<tr>
<td>Executing agency:</td>
<td>Directorate General of Water Resources (DGWR), Ministry of Public Works and Housing (MoPWH)</td>
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<tr>
<td>Total project cost:</td>
<td>US$802.4 million</td>
</tr>
<tr>
<td>Amount of IFAD loan:</td>
<td>EUR 93.15 million (equivalent to approximately US$98.5 million)</td>
</tr>
<tr>
<td>Amount of IFAD grant:</td>
<td>EUR 1.41 million (equivalent to approximately US$1.5 million)</td>
</tr>
<tr>
<td>Terms of IFAD loan:</td>
<td>Ordinary: Maturity period of 18 years, including a grace period of 6 years, with an interest rate per annum equal to 100 per cent of the IFAD reference interest rate</td>
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<tr>
<td>Cofinancier(s):</td>
<td>Asian Development Bank (ADB)</td>
</tr>
<tr>
<td>Amount of cofinancing:</td>
<td>ADB: US$600 million</td>
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<tr>
<td>Terms of cofinancing:</td>
<td>Loan</td>
</tr>
<tr>
<td>Contribution of borrower:</td>
<td>US$102.4 million</td>
</tr>
<tr>
<td>Appraising institution:</td>
<td>IFAD</td>
</tr>
<tr>
<td>Cooperating institution:</td>
<td>Directly supervised by IFAD</td>
</tr>
</tbody>
</table>
Recommendation for approval

The Executive Board is invited to approve the recommendation for the proposed financing to the Republic of Indonesia for the Integrated Participatory Development and Management of the Irrigation Project, as contained in paragraph 44.

Proposed loan and grant to the Republic of Indonesia for the Integrated Participatory Development and Management of the Irrigation Project

I. Strategic context and rationale
   A. Country and rural development and poverty context
      1. Indonesia has made significant progress in reducing poverty and promoting economic growth. Agriculture remains an important sector as a pathway for rural transformation and poverty reduction. Yet Indonesian farmers face new threats from volatile food prices, erratic agricultural markets and policies, growing insecurity of access to land, degradation of natural resources and the worsening effects of climate change. Ensuring inclusive economic development through strengthened agriculture-sector performance is a key priority for the Government of Indonesia, which has recently prioritized issues of food sovereignty and rural development. Food security is challenged by a declining rural infrastructure – a consequence of inadequate financing and delivery of operations and maintenance (O&M) that limits increased productivity for rice and other high-value crops. High transport and logistics costs are a serious constraint on business operations and undermine the competitiveness of agricultural value chains. In addition, increased higher-value cropping and commercialized agriculture are needed to improve rural livelihoods. Technical and administrative capacity constraints hamper effective planning, management and development as Indonesia’s decentralized government structure heightens capacity challenges. Climate change is expected to further worsen water scarcity in some areas, result in more-frequent extreme weather events and less-favourable rainfall patterns for agriculture. It is recognized that improved integration of irrigation management and agricultural development is needed if the country is to achieve the desired impact on food security and rural livelihoods.

   B. Rationale and alignment with government priorities and RB-COSOP
      2. As part of its National Medium-Term Development Plan 2015-2019, the Government aims at self-sufficiency in key staple foods, including rice, by 2017. In support of this target, it has committed to rehabilitating 3.2 million hectares (ha) of degraded irrigation systems to enhance rice and other food production. This has placed considerable focus on agriculture and water, with calls for both the public and private sectors to consider comprehensive and collaborative responses to national development targets. Earlier attempts to enhance the productivity of irrigated agriculture through a largely infrastructural focus have achieved suboptimal longer-term results, mainly owing to: (i) failure to empower farmers and strengthen a farming system response that maximized their opportunities to capture sustainable economic benefits from infrastructure investments; and (ii) failure to ensure that all parts of the new or rehabilitated irrigated schemes were well maintained.
3. The project builds on these lessons and on learning from previous and ongoing investments in irrigated agriculture. It is strongly aligned with government policies and expenditure plans.

4. The Integrated Participatory Development and Management of the Irrigation Project (IPDMIP) will significantly contribute to achievement of government priorities to: (i) increase rice production for food security; (ii) develop higher-value cropping to improve rural nutrition and livelihoods; and (iii) promote more productive irrigation infrastructure and its sustainable management through the delivery of an integrated package of infrastructure, institutional reforms and capacity development to catalyse sector advances. Importantly, the project will complement – and provide a robust framework for promoting – more-effective public and private investment in irrigated agriculture.

5. By integrating a focus on irrigation rehabilitation into strengthened support for agricultural and farmer livelihood development, the project provides an innovative approach to investing in irrigated agriculture. It will introduce strengthened mechanisms to promote more-effective cross-sectoral coordination and institutional and policy development.

6. IPDMIP is fully aligned with the IFAD Strategic Framework 2011-2015, the current interim country strategy and the forthcoming results-based country strategic opportunities programme (RB-COSOP) for Indonesia (April 2016), which will focus on productivity enhancement, market access and institution- and capacity-building for rural women and men.

II. Project description

A. Project area and target group

7. Project area. The proposed project area will cover an initial 16 provinces (5 in Sumatra, 4 in Java, 2 in Kalimantan, 3 in Sulawesi and 2 in Nusa Tenggara), comprising 74 districts and up to 1,800 irrigation schemes, covering a total area of some 450,000 ha (approximately 14 per cent of the 3.2 million ha national target). Importantly, it will pursue a scaling-up strategy to promote the replication of project activities in other villages in the targeted districts and in other districts and provinces. It is estimated that the project model could be replicated in approximately 10,000 subprojects covering some 2.2 million ha. This would increase potential coverage to 6 million households or some 24 million individuals.

8. Target group. The project design adopts an inclusive targeting approach at the irrigation scheme level to benefit all active farmers in the scheme. Within targeted communities, categories of poor rural people consist of poor, near-poor and better-off people. An explicit poverty and targeting strategy will be employed to reach the most marginal households, including ‘poor people’ (i.e. moderately poor, poor and very poor people), women, youth and those farmers at the tail end of the irrigation schemes, who are normally the most vulnerable. The total number of project beneficiaries is estimated at 900,000 households or 4 million individuals, of whom approximately 50 per cent are women.

B. Project development objective

9. The goal of the project is to improve food security and livelihoods in rural Indonesia. Its outcome objective is to increase the value and sustainability of irrigated agriculture.

C. Components

10. Component 1. Increased irrigated agriculture incomes will focus on improving farm and market systems and on providing appropriate service support, including financial services, mainly for rice and high-value irrigated crops.
(a) **Subcomponent 1.1. Improved farm productivity and services** focuses on on-farm activities and comprises: support to improved farmer extension services available to smallholder farmers; farmer-to-farmer knowledge dissemination; access to and storage of sufficient good-quality seed and other inputs; and mechanization, including support for enhancing on-farm systems for crop intensification and diversification and ensuring that farmers acquire the necessary knowledge, skills and confidence to adopt improved agronomy and better risk-management practices.

(b) **Subcomponent 1.2. Improved market access and services** focuses on promoting better value addition and post-harvest activities and comprises facilitating public and private investment through combined funding instruments, supported by consultation platforms and capacity development initiatives for rice, vegetables and technology access. For rice, support will be provided to improve post-harvest activities and value addition. For vegetables, support will build on existing and emerging production clusters, following an iterative process to facilitate and develop links between buyers, producers and service providers. It will prioritize innovation in local value chains and actively promote development of local private-sector markets. As with subcomponent 1.1, initiatives will be taken to encourage partnership with private input suppliers.

(c) **Subcomponent 1.3. Improved financial access and use of services** is based on facilitating better access to and leveraging mainstream financial services. It will include savings, credit and, subsequently, other innovative rural financial services (e.g. digital financial services and agriculture microinsurance) by sustainable financial service providers, enabling seasonal finance needs to be met through inclusive and pro-poor services. The approach will build on existing structures and will develop partnerships with a small number of existing financial service providers that demonstrate a clear social inclusion performance and business strategy in expanding their smallholder agricultural portfolio, and that have existing, proven financial service schemes broadly aligned with the project’s objectives and aspirations for rural financial services.

11. **Component 2. Improved irrigation systems infrastructure** will focus on support to rehabilitation or upgrading of primary and secondary irrigation systems and drainage infrastructure, and will include modernization of these systems for one or several larger schemes.

(a) **Subcomponent 2.1. Preparatory assessments comprises**: activities to provide reliable information regarding water availability in the basin, in relation to the needs of the irrigation scheme – to be taken into account to ensure that the scheme has adequate water to meet irrigation requirements; and participatory rapid rural assessments, pre-design and drafting of overall scheme intervention plans. Hydrological assessments will also take into account the possible impacts of climate change.

(b) **Subcomponent 2.2. Irrigation systems rehabilitation, upgrading and/or modernization** comprises activities to design and implement civil works with respect to irrigation and drainage infrastructure. Detailed engineering designs for civil works will cover primary and secondary irrigation infrastructure, tertiary irrigation infrastructure and drainage works. To address the water/food/energy nexus, the project will equip irrigation canals with hydropower turbines – on a pilot basis – for management by WUAs where technically, economically and institutionally feasible.

12. **Component 3. Improved irrigation systems management** will focus on strengthening irrigation water delivery at the scheme level.
(a) **Subcomponent 3.1. Empowerment of WUAs** comprises activities to facilitate the organization of irrigating farmers into empowered WUAs/WUAFs capable of investing in and managing tertiary irrigation infrastructure, to ensure adequate water supply and access to all farmers in the tertiary irrigation scheme. Specifically, this will support training and capacity-building of WUAs/WUAFs at the institutional level. Institutional support activities will establish, reorganize and complete the WUA organizational structures in the targeted irrigation systems, following government policy and procedure and introducing the lessons of international experiences. This will also include legal registration of WUAs/WUAFs, development of by-laws by their members, appointment of board members and assignment of roles and responsibilities in agreement with all involved farmers.

(b) **Subcomponent 3.2. Improvement of irrigation systems field management** comprises activities to support central, provincial and district governments in improving the efficiency and effectiveness of irrigation water management through activities such as: irrigation system performance assessments; preparation of irrigation management plans and irrigation service plans; volumetric discharge measurement and water accounting; improvement of irrigation service performance; needs-based planning and budgeting; and refurbishment of existing offices, equipment and facilities within the context of the preparation of O&M. To achieve sustainable improvement of irrigation system performance, this will include establishment and start-up assistance to irrigation management units (IMUs) for selected irrigation schemes under the project.

(c) **Subcomponent 3.3. Operationalization of a national asset management system** comprises activities in support of operationalizing such a system, including aerial surveys – using remote sensing technology – of primary, secondary, tertiary and other infrastructure, as well as hydrological and agricultural data. These data will also be used to further inform hydrological assessments under subcomponent 2.1 and to assist project management and implementation under subcomponent 4.4.

13. **Component 4. Strengthened policy and institutional frameworks for irrigated agriculture** will focus on: (a) strengthening the capacity of government institutions and staff; and (b) supporting executing and implementing institutions at national and provincial levels in undertaking overall project supervision. Improving coordination among the different government institutions will be an important element of these aspects.

(a) **Subcomponent 4.1. Strengthened local-level policy, regulatory and institutional framework comprises**: supporting government line agencies at provincial and district levels in identifying specific policy issues and reflecting on how these could be tackled; supporting Badan Perencanaan Pembangunan Daerah (BAPPEDA), the provincial and district planning agency, in undertaking analysis and synthesis of knowledge from various sources and in informing policy dialogue; and supporting both the line agencies and BAPPEDAs in identifying policy options and actions.

(b) **Subcomponent 4.2. Establishment of water resource management and knowledge centres.** Sixteen such centres will be established or strengthened at the provincial level – including through recruitment of personnel and procurement of office and training equipment and facilities – for training on technical and institutional aspects of irrigation planning, development and management.

(c) **Subcomponent 4.3. Improved policy coordination for irrigated agriculture** comprises support for establishing and supporting a knowledge management centre (KMC) in the National Development Planning Agency.
(BAPPENAS), which will coordinate support for smallholder irrigated agriculture, promote policy dialogue among domestic stakeholders and strengthen national and local policy processes. The KMC’s remit would be related to knowledge management and policy development, enabling the Government to: foster continuity between development projects and policies for smallholder irrigated agriculture by drawing out lessons; unify knowledge from diverse initiatives; promote coordinated approaches to policy dialogue among domestic stakeholders; and support national and local policy processes.

(d) **Subcomponent 4.4. Project management and implementation support** comprises support to executing and implementing agencies (EA and IAs) at national and provincial levels in undertaking overall project supervision and strengthening the planning, implementation and management capacities of IAs.

### III. Project implementation

#### A. Approach

14. The project adopts a menu-based programmatic approach: identifying and packaging a strategic set of interventions in order to achieve the desired outcomes and development objectives. Menu items will essentially consist of the subcomponents and activities attributed to each output.

15. The implementation approach builds on the recently completed Asian Development Bank (ADB) supported Participatory Irrigation Sector Project. Adjustments have been made based on lessons learned from ADB’s and IFAD’s project implementation experiences in Indonesia. These seek to strengthen linkages between agriculture and the irrigation rehabilitation interventions, to strengthen poverty targeting, and to respond to the need to expedite project implementation, with a view towards contributing to national development targets for agriculture and for irrigation rehabilitation.

#### B. Organizational framework

16. The National Steering Committee on Water Resources (NSCWR), chaired by the Deputy Minister of Maritime and Natural Resources, Ministry of National Development Planning/BAPPENAS, will be responsible for the overall coordination of the project. The Directorate General of Water Resources (DGWR) in the Ministry of Public Works and Housing (MoPWH) will be the executing agency. A national project management unit (NPMU) will be established under the Directorate of Irrigation and Lowland in DGWR to ensure overall coordination of implementation of the project. A total of four national project implementation units (NPIUs) will be established: one in the Directorate of Irrigation and Swamps (DoIS) in DGWR, responsible for implementation of the irrigation infrastructure systems and related activities; one in DoIS, responsible for implementation of O&M-related activities; one in the Directorate General of Regional Development in the Ministry of Home Affairs (MoHA), responsible for overall guidance of the BAPPEDA’s; and one in the Agency for Agricultural Extension and Human Resources Development (AAEHRD) in the Ministry of Agriculture (MoA), responsible for implementation of agricultural and related activities, in cooperation with provincial and district agriculture agencies. The IFAD grant will be administered by the Ministry of National Development Planning/BAPPENAS.

#### C. Planning, monitoring and evaluation, and learning and knowledge management

17. **Planning.** The NPMU, in consultation with the NPIUs, will prepare and submit an overall annual workplan, showing supporting (general) and subproject activities, to
ADB and IFAD for review and no objection. In addition, each participating district and province will prepare an overall work plan and budget.

18. **Monitoring and evaluation.** Monitoring and evaluation (M&E) will serve three distinct functions strengthening management, accountability and learning. A project performance monitoring system will consolidate the M&E functions into a unified system. Building on lessons learned under the IFAD-supported Coastal Community Development Project (CCDP), it will comprise both a comprehensive list of performance indicators at impact, outcome, output and suboutput levels, derived from the project Design and Monitoring Framework (appendix II), and impact and post-completion performance data. Data will be disaggregated by component and, where possible, by district, gender and other dimensions. The indicators used will include those contributing to IFAD’s Results and Impact Management System (RIMS). The project will undertake baseline, midterm and impact studies and conduct annual outcome surveys.

19. **Learning.** The M&E system will also seek to inform on issues that can improve the relevance, effectiveness and efficiency of the project. The M&E unit, in collaboration with the NPMU and other key project stakeholders, will identify specific topics that need particular analysis – technical, institutional and policy-derived – and will conduct snapshot studies. For each study topic, a learning plan will be developed to ensure that the study feeds into a larger process of reflection at the project level and, where appropriate, beyond.

D. **Financial management, procurement and governance**

20. **Financial management.** The NPMU will be responsible for the overall consolidation and coordination of project financial reporting and audit. The four NPIUs will be responsible for financial management of expenditures under the respective project components and/or activities. The roles and responsibilities of the implementing entities will be clearly defined in the project implementation manual.

21. Financial management implementation arrangements will be aligned to national public financial management (PFM) systems, which have been strengthened in recent years. PFM modernization initiatives include an integrated financial management information system, consolidation of the Treasury single account, government accounting and reporting, strengthened audit institutions, accrual accounting and adoption of international accounting and auditing standards. A financial management assessment of the project has been prepared in accordance with IFAD and ADB’s guidelines for financial management of projects. This assessment finds that the overall project financial management risk is moderate, and identifies mitigating actions, including strengthening financial management capacity at all levels (EA, IAs and PIUs) in terms of staff training and technical assistance, automated accounting systems, and internal and external audits.

22. **Flow of funds.** Donor funding will flow through three designated accounts managed by the Ministry of Finance for the IFAD loan, IFAD grant and ADB loan respectively. Three types of disbursement mechanisms will be adopted for the project, consisting of: (i) replenishments of both the IFAD and ADB designated accounts; (ii) reimbursement of prefinanced expenditures by both IFAD and ADB; and (iii) direct payments.

23. Flow of funds for the project will be determined by the implementation strategies adopted by IAs. These will consist of a combination of: (i) reimbursement from Anggaran Pendapatan dan Belanja Negara (the national revenue and budget agency) funded activities, which would then be passed on to local governments through the deconcentration mechanism (Dekonsentrasi/Tugas Pembantu); and (ii) reimbursement for activities implemented under prefinancing agreements.

24. **Audit.** Internal audits will be conducted by the internal audit units of IAs, in accordance with their mandate and annual workplans. As regards external audit
arrangements, the consolidated project accounts, prepared by the NPMU, will be audited by the national auditor, in accordance with international standards for these institutions. Audited project financial statements will be submitted to IFAD and ADB within six months of the end of each fiscal year, in line with IFAD and ADB audit guidelines. The audit reports will provide opinions, for IFAD and ADB funding respectively, on the financial statements, use of designated accounts, statements of expenditure and financing agreement covenants. The audit report will include a management letter assessing the project’s internal control framework at diverse implementing levels and making recommendations for improvement. The resolution of audit observations will be monitored by the NPMU, the NPIUs and the national auditor.

25. **Procurement.** The procurement of goods and works for IFAD financing will be undertaken in accordance with the borrower/recipient procurement regulations to the extent they are consistent with IFAD’s Procurement Guidelines.

26. **Governance.** In line with their respective policies, IFAD and ADB will investigate, directly or through their agents, any violations of the anticorruption policy relating to the project. All contracts shall include provisions specifying the right of ADB and IFAD to audit and examine the records and accounts of the EA and all project contractors, suppliers, consultants and other service providers.

27. In addition, ADB’s accountability mechanism and IFAD’s complaints procedure provide independent processes through which people adversely affected by ADB- and IFAD-assisted projects can voice and seek resolution of their problems, as well as report alleged violations of ADB’s and IFAD’s operational policies and procedures.

28. **Supervision.** Supervision will be undertaken by IFAD in collaboration with ADB. A formal supervision plan covering the period up to the midterm review will be agreed upon at project start-up. In addition, IFAD will adopt a continuous supervision and implementation support approach through the newly opened country office. An extensive review will be carried out after two years of project implementation.

IV. **Project costs, financing and benefits**

A. **Project costs**

29. The project is estimated to cost US$802.4 million, including physical and price contingencies of US$49.17 million.

<table>
<thead>
<tr>
<th>Component</th>
<th>IFAD loan</th>
<th>IFAD grant</th>
<th>ADB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increased irrigated agriculture incomes</td>
<td>97 473</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Improved irrigation systems infrastructure</td>
<td>434 592</td>
<td>434 592</td>
<td></td>
</tr>
<tr>
<td>3. Improved irrigation systems management</td>
<td>1 038</td>
<td>85 448</td>
<td>156</td>
</tr>
<tr>
<td>4. Strengthened policy and institutional frameworks for irrigated agriculture</td>
<td>1 489</td>
<td>79 960</td>
<td>102 265</td>
</tr>
<tr>
<td><strong>Total project cost</strong></td>
<td>98 511</td>
<td>1 489</td>
<td>600 000</td>
</tr>
<tr>
<td><strong>Interest during implementation</strong></td>
<td>49 917</td>
<td>49 917</td>
<td></td>
</tr>
<tr>
<td><strong>Commitment charges</strong></td>
<td>524</td>
<td>524</td>
<td></td>
</tr>
<tr>
<td><strong>Total disbursement</strong></td>
<td>98 511</td>
<td>1 489</td>
<td>600 000</td>
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</table>
B. Project financing

30. The Government has requested financing of US$100 million from IFAD, consisting of a loan of US$98.5 million and a grant of US$1.5 million. The IFAD loan and grant will finance component 1 and some activities under components 3 and 4. The Government has further requested a loan of US$600 million from ADB’s ordinary capital resources. The ADB loan will finance components 2, 3 and 4. The Government contribution to project costs is estimated at US$102.4 million.

<table>
<thead>
<tr>
<th>Expenditure category</th>
<th>IFAD loan</th>
<th>IFAD grant</th>
<th>ADB</th>
<th>Borrower</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>1. Civil works</td>
<td>362 805</td>
<td>0</td>
<td>14 991</td>
<td>3</td>
<td>362 805</td>
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<td>2. Vehicles and equipment</td>
<td>4 663</td>
<td>150</td>
<td>3 798</td>
<td>1</td>
<td>6 374</td>
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<tr>
<td>3. Consulting services - international</td>
<td>2 709</td>
<td>361</td>
<td>10 141</td>
<td>2</td>
<td>11 179</td>
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<tr>
<td>4. Consulting services - national</td>
<td>18 154</td>
<td>361</td>
<td>44 586</td>
<td>7</td>
<td>63 231</td>
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<tr>
<td>5. Term staff</td>
<td>5 342</td>
<td>127</td>
<td>101 032</td>
<td>17</td>
<td>102 136</td>
</tr>
<tr>
<td>6. Service contract</td>
<td>1 038</td>
<td>10 141</td>
<td>12 179</td>
<td>2</td>
<td>12 179</td>
</tr>
<tr>
<td>7. Workshop, training, socialization</td>
<td>29 014</td>
<td>271</td>
<td>36 956</td>
<td>6</td>
<td>66 243</td>
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<tr>
<td>8. Survey and studies</td>
<td>777</td>
<td>327</td>
<td>101 032</td>
<td>17</td>
<td>102 136</td>
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<tr>
<td>9. Institutional capacity-building</td>
<td>2 709</td>
<td>361</td>
<td>113 940</td>
<td>100</td>
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<tr>
<td>10. Safeguard/land acquisition/resettlement</td>
<td>1 260</td>
<td>10 141</td>
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<td>11. Incremental administration cost</td>
<td>380</td>
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<td>102 421</td>
<td>100</td>
<td>113 940</td>
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<tr>
<td>12. Materials</td>
<td>15 297</td>
<td>327</td>
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<tr>
<td>13. Finance and credit</td>
<td>21 516</td>
<td>327</td>
<td>21 516</td>
<td>2</td>
<td>21 516</td>
</tr>
</tbody>
</table>

Total project cost 98 511 12 1 489 0.2 600 000 75 102 421 13 802 421
Interest during implementation 49 917 100 49 917
Commitment charges 524 100 524

Total disbursement 98 511 12 1 489 0.2 600 000 70 152 862 18 852 862

C. Summary benefit and economic analysis

31. Benefits. Benefits would accrue from: (i) improved extension delivery; (ii) use of improved seed; (iii) adoption of better water management techniques; (iv) access to mechanization; (v) access to finance; (vi) enhanced access to and more-reliable irrigation; and (vii) enhanced productivity in agriculture. Yet, in addition to on-farm investments, higher returns are also generated by other important factors, including: (i) an improved tertiary irrigation system; (ii) more-functional WUAs; (iii) improved access to farm roads; and (iv) farmer training in water budgeting and in financial literacy.

32. Economic analysis. The overall economic internal rate of return (EIRR) of the project is estimated at 17 per cent for the base case. The net present value of the net benefit stream, discounted at 10 per cent, is 4,944 billion Indonesian rupiah. The EIRR was subject to sensitivity analysis to measure the impact variations in key variables due to unforeseen factors. The results indicate that the most significant of these risks would be overestimation of the achievable with-project rice yields or a two-year (or more) delay in achieving project benefits. The former is considered a low risk, as the yield potential is well known for available rice varieties genetically superior to the varieties normally used by farmers at present. The latter will only be a risk if there are delays once the project has started, and mitigation measures are already being implemented to ensure a timely achievement of project benefits.

D. Sustainability

33. Sustainability of the project’s results is based on: (i) impact of capacity-building activities on the formation of social and human capital among the identified target
groups (farmer groups and government officials); (ii) impact on relevant policy frameworks and compilation of knowledge stock within the Government; (iii) the demand-driven nature of the intervention; and (iv) linkages built among different actors within the value chain.

34. Moreover, the project has an explicit scaling-up strategy to enhance the impact and sustainability of achieved results.

E. Risk identification and mitigation

35. Although this is a very large and geographically dispersed project, its overall premise is simple. The main risk of lack of support by the Government is reduced, given the close alignment of project activities with national development priorities. Already, prior to implementation, stakeholders across government agencies are collaborating closely in preparing project implementation. The risk of lack of coordination among stakeholders and limited understanding of project activities is thus considered manageable. Assessments with regard to risks related to financial management and procurement have been conducted and mitigation measures identified. Environmental risks have been identified as manageable. The project approach includes an additional mechanism to assess and mitigate risks at the localized, subgroup level.

V. Corporate considerations

A. Compliance with IFAD policies

36. The project design adheres to relevant IFAD policies for microfinance, private-sector participation, the environment, targeting and gender. The project is categorized as environmental category B, in accordance with ADB's Safeguard Policy Statement 2009.

B. Alignment and harmonization

37. The project is set within a number of key government policy documents. The National Long-Term Development Plan 2005-2025 and the related National Medium-Term Development Plan 2015-2019 give prominence to: agriculture-sector development, in particular ensuring food security, self-sufficiency and food sovereignty through increased domestic production capacity; and the improved provision of food which is sufficient in quantity and diversity, and which meets the requirements of food safety, quality and nutrient content at an affordable price. The project will support implementation of the participating ministries’ strategic plans and priorities.

38. The project will complement and provide a robust framework for government expenditure plans: MoPW will invest almost US$25 billion over the period 2015-2019, including more than US$5 billion for irrigation rehabilitation works. MoA has allocated US$219 million in 2015 through UPSUS for nationwide investments in priority areas (i.e. agricultural infrastructure, seed, fertilizer, agricultural machinery and extension services). Overall investments of almost US$15 billion are foreseen for 2015-2019, including more than US$3 billion for improvements in agricultural irrigation infrastructure and almost US$3 billion for improvements in productivity and production. Both investments are for rice and food crops and are intended to contribute to achieving food self-sufficiency by 2017. Thus the project enables more effective and more efficient coordination of public investment in irrigated agriculture.

C. Innovations and scaling up

39. The project adopts an innovation and scaling-up agenda responding to the Government’s expectation that externally financed projects offer innovative solutions that can be scaled up and that they assist learning through implementation experience and the development of new policies, institutional arrangements and programmes at the national level. The project will: (i) facilitate
piloting of innovations through subprojects, as well as at the overall project management level; (ii) conduct evaluations or studies to review experiences gained with the innovations promoted; (iii) analyse evidence, discuss findings with stakeholders and synthesize conclusions; and (iv) support the scaling up of successful approaches, methods and technologies – both within the project and beyond it, through public policies, institutions and practices.

D. Policy engagement

40. In response to the Government’s request for strengthened policy-level support for irrigated agriculture, the project will focus on strengthening the capacity of government institutions and staff at national, provincial and district levels to conduct consultative policy dialogue and design and to implement evidence-based policies, regulations and strategies for participatory irrigation management and irrigated smallholder agriculture. It will strengthen the local-level policy and regulatory framework for supporting smallholder irrigated agriculture, building on the participatory irrigation principles of the Government and ensuring that these are operationalized. It will also strengthen the capacity of those institutions responsible for coordinating irrigation development and delivering services, and will build farmers’ understanding of their rights and responsibilities under national/local policies. Moreover, the project will support the establishment and initial operation of irrigation knowledge and training centres at the provincial level and will establish a KMC within BAPPENAS to coordinate support for irrigated agriculture, promote policy dialogue among domestic stakeholders and strengthen national and local policy processes.

VI. Legal instruments and authority

41. A project financing agreement between the Republic of Indonesia and IFAD will constitute the legal instrument for extending the proposed financing to the borrower/recipient. A copy of the negotiated financing agreement is included as appendix I.

42. The Republic of Indonesia is empowered under its laws to receive financing from IFAD.

43. I am satisfied that the proposed financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

VII. Recommendation

44. I recommend that the Executive Board approve the proposed financing in terms of the following resolutions:

RESOLVED: that the Fund shall provide a loan on ordinary terms to the Republic of Indonesia in an amount equivalent to ninety-three million one hundred and fifty thousand euros (EUR 93,150,000), and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

RESOLVED FURTHER: that the Fund shall provide a grant to the Republic of Indonesia in an amount equivalent to one million four hundred and ten thousand euros (EUR 1,410,000), and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Kanayo F. Nwanze
President
**Negotiated financing agreement:**

"**Integrated Participatory Development and Management of Irrigation Project (IPDMIP)**"

(Negotiations concluded on 11 December 2015)

Loan Number: [click and insert number]
Grant Number: [click and insert number]

Project Title: Integrated Participatory Development and Management of Irrigation Project (IPDMIP) ("the Project")

The Republic of Indonesia (the "Borrower/Recipient")
and

The International Fund for Agricultural Development (the "Fund" or "IFAD")

(each a "Party" and both of them collectively the "Parties")

hereby agree as follows:

**PREAMBLE**

**WHEREAS**

(A) the Borrower/Recipient has requested a loan and grant from the Fund for the purpose of financing the Project described in Schedule 1 to this Agreement (the "Project"). The Loan from IFAD will finance Component 1 of the Project and a portion of Component 3 of the Project, while the Grant from IFAD will finance a portion of Component 4 of the Project; and

(B) the Borrower/Recipient intends to obtain from the Asian Development Bank ("ADB") a loan ("ADB Loan") in estimated amount of 600 million USD to finance other components of the Project, or portions of components, not financed by the Fund, on terms and conditions to be set forth in an agreement between the ADB and the Borrower/Recipient (the "ADB Agreement").

NOW, THEREFORE, the Parties hereto hereby agree as follows:

**Section A**

1. The following documents collectively form this Agreement: this document, the Project Description and Implementation Arrangements (Schedule 1) and the Allocation Table (Schedule 2).

2. The Fund’s General Conditions for Agricultural Development Financing dated 29 April 2009, amended as of April 2014, and as may be amended hereafter from time to time (the “General Conditions”) are annexed to this Agreement, and all provisions thereof shall apply to this Agreement. For the purposes of this Agreement the terms defined in the General Conditions shall have the meanings set forth therein.
3. The Fund shall provide a Loan and a Grant to the Borrower/Recipient (the "Financing"), which the Borrower/Recipient shall use to implement the Project in accordance with the terms and conditions of this Agreement.

Section B

1. A. The amount of the Loan is ninety-three million one hundred fifty thousand Euro (EUR 93 150 000)

   B. The amount of the Grant is one million four hundred ten thousand Euro (EUR 1 410 000).

2. The Loan shall be subject to interest on the principal amount outstanding at a rate equal to the IFAD Reference Interest Rate, payable semi-annually in the Loan Service Payment Currency, and shall have a maturity period of eighteen (18) years, including a grace period of six (6) years starting from the date that the Fund has determined that all general conditions precedent to withdrawal have been fulfilled in accordance with the General Conditions and Section E of this Agreement.

3. The Loan Service Payment Currency shall be Euro.

4. The first day of the applicable Fiscal Year shall be 1 January.

5. Payments of principal and interest shall be payable on each 1 March and 1 September.

6. There shall be two (2) Designated Accounts denominated in Euro, for the Loan and the Grant respectively, at the Bank of Indonesia.

7. The Borrower/Recipient will provide counterpart financing for the Project in the form of taxes, staffing, and other in kind contributions.

Section C

1. The Lead Project Agency (LPA) shall be Directorate General of Water Resources (DGWR), Ministry of Public Works and Housing (MoPWH)(also referred to as Executing Agency or EA).

2. The following are designated as additional Project Parties also referred to as Implementing Agencies: Ministry of Public Works and Housing, Ministry of Agriculture, Ministry of Home Affairs, Ministry of National Development Planning (BAPPENAS), and local governments.

3. The Project Completion Date shall be the sixth anniversary of the date of entry into force of this Agreement.

Section D

The Loan and Grant will be administered and the Project will be supervised by IFAD. The Project will be implemented in collaboration with the ADB.

Section E

1. The following are designated as additional ground for suspension of this Agreement: any transfer of key Project staff in the National Project Implementation Unit (NPIU) located in the Ministry of Agriculture, has not been communicated to IFAD.
2. The following are designated as additional general conditions precedent to withdrawal:

   (a) The National Project Management Unit (NPMU) within the Ministry of Public Works and Housing and the NPIU shall have been created and key Project staff in the NPMU and in the NPIU within the Ministry of Agriculture shall have been nominated to the satisfaction of IFAD;

   (b) The Project implementation manual (PIM) shall have been prepared in a manner satisfactory to IFAD; and

   (c) The ADB Agreement shall have entered into force.

3. The following are the designated representatives and addresses to be used for any communication related to this Agreement:

For the Borrower/Recipient:

Director General of Budget Financing and Risk Management
Ministry of Finance
Frans Seda Building, 2nd Floor
Jalan Dr. Wahidin Raya No.1
Jakarta 10710
Indonesia

For Correspondence:

Attn: Director of Loans and Grants
Frans Seda Building, 6th Floor
Jalan Dr. Wahidin Raya No.1
Jakarta 10710
Indonesia
Tel: (62-21) 3458289, 3865330
Fax: (62-21) 3812859

For Disbursements and Payments:

Attn: Director of Evaluation, Accounting and Settlements
Frans Seda Building, 7th Floor
Jalan Dr. Wahidin Raya No.1
Jakarta 10710
Indonesia
Tel: (62-21) 3864778
Fax: (62-21) 3843712

For the Fund:

The President
International Fund for Agricultural Development
Via Paolo di Dono 44
00142 Rome
Italy
This Agreement, dated [click and type], has been prepared in the English language in two (2) original copies, one (1) for the Fund and one (1) for the Borrower/Recipient and shall enter into force as provided in Section 13.01 of the General Conditions.

REPUBLIC OF INDONESIA

____________________
Authorized Representative

INTERNATIONAL FUND FOR
AGRICULTURAL DEVELOPMENT

____________________
Kanayo F. Nwanze
President
Appendix I

Schedule 1

Project Description and Implementation Arrangements

I. Project Description

1. Target Population. The Project adopts an inclusive targeting approach at the irrigation scheme level to benefit all active farmers on the irrigation scheme. Within the targeted communities, categories of rural poor consist of the poor, near poor and better off. An explicit poverty and targeting strategy will be employed to reach the most marginal households including the poor (i.e. the moderately poor, poor and very poor), women, youth and those farmers at the tail end of the irrigation schemes that are normally most vulnerable. The total number of Project beneficiaries is estimated to be around 900,000 households or around 4 million individuals.

The Project area (the "Project Area") will cover an initial 16 provinces (5 in Sumatra, 4 in Java, 2 in Kalimantan, 3 in Sulawesi and 2 in Nusa Tenggara) comprising 74 districts. The Project will pursue a scaling up strategy to promote the replication of Project activities in other villages in the targeted districts and in other districts and provinces.

2. Goal. The goal of the Project is to improve food security and livelihoods in rural Indonesia.

3. Objectives. The objective of the Project is to increase the value of sustainable irrigated agriculture.

4. Output (i.e. "components"). The Project shall consist of the following Outputs:

4.1. Output 1: Increase irrigated agricultural incomes will focus on improving farm and market systems, providing appropriate services support including financial services, mainly for rice and high value irrigated crops.

(a) Sub-output 1.1: Improved farm productivity and services focuses on on-farm activities and comprises support to improved farmer extension services available to smallholder farmers, farmer-to-farmer knowledge dissemination, access to and storage of sufficient good quality seeds and other inputs, and mechanization, including support for enhancing on-farm systems for crop intensification and diversification and ensuring that farmers acquire the necessary knowledge, skills and confidence to adopt improved agronomy and better risk management practices.

(b) Sub-output 1.2: Improved market access and services focuses on promoting better value addition and post-harvest activities and comprises facilitating public and private investment through combined funding instruments supported by consultation platforms and capacity development initiatives for rice, vegetables and technology access. For rice, support will be provided to improve post-harvest and value addition. For vegetables, support will be given to build on existing and emerging production clusters following an iterative process to facilitate and develop links between buyers, producers and service providers, giving priority to innovation in local value chains and actively promoting the development of local private sector markets.
(c) Sub-output 1.3: Improved financial access and use of services is based around facilitating better access to and leveraging mainstream financial services, including savings, credit and subsequently other innovative rural financial services (e.g. digital financial service, agricultural micro-insurance) by sustainable financial service providers, to enable seasonal finance needs being met through inclusive and pro-poor services. The approach will build on existing structures and develop partnerships with a small number of existing financial service providers, who have a clear social inclusion performance and business strategy in expanding their smallholder agricultural portfolio and who have existing proven financial service schemes, which are broadly aligned with the Project objectives and aspirations on rural financial services.

4.2 Output 2: Improved irrigation systems infrastructure will focus on support to rehabilitation, upgrading of primary and secondary irrigation systems and drainage infrastructure and include modernization of these systems for one or several larger schemes.

(a) Sub-output 2.1: Preparatory assessments comprise activities to provide reliable information regarding water availability in the basin, in relation to the needs of the irrigation scheme, to be taken into account to ensure the scheme has adequate water to meet irrigation requirements in addition to participatory rapid rural assessments, pre-design and the drafting of overall scheme intervention plans. The hydrological assessments will also take into account the possible impacts of climate change.

(b) Sub-output 2.2: Irrigation systems rehabilitation, upgrading and or modernization comprises activities to design and implement civil works with respect to irrigation as well as drainage infrastructure. The detailed engineering designs will be for civil works and cover primary and secondary irrigation infrastructure as well as tertiary irrigation infrastructure and drainage works. To address the water-food-energy nexus, the Project may also equip irrigation canals with hydropower turbines for management by Water users’ associations (WUAs), where technically, economically and institutionally feasible.

4.3 Output 3: Improved irrigation systems management will focus on strengthening of the irrigation water delivery at scheme level.

(a) Sub-output 3.1: Empowerment of WUAs comprises activities to facilitate the organization of irrigating farmers into empowered Water users’ association Federations (WUA/Fs) that are capable of investing in and managing tertiary irrigation infrastructure, to ensure adequate water supply and access to all farmers in the tertiary irrigation scheme. Specifically this will support at an institutional level and to training and capacity building of WUA/Fs. The institutional support activities will establish, re-organize and complete the WUA/Fs organizational structures in the targeted irrigation systems, following government policy and procedure and introducing good international experiences. This would also include the legal registration of the WUA/Fs, the development of by-laws by the WUA/F members, appointment of board members and the assignment of roles and responsibilities in agreement with all involved farmers.

(b) Sub-output 3.2: Improvement of irrigation systems field management comprises activities to support the central, provincial and district governments in improving the efficiency and effectiveness of irrigation water management through activities such as irrigation system performance assessments, preparation of irrigation management plans and irrigation service plans,
volumetric discharge measurement and water accounting, improvement of irrigation service performance, needs-based planning and budgeting, as well as refurbishment of existing offices, equipment and facilities within the context of PROM (i.e. preparation of operation and maintenance). To achieve the sustainable improvement of irrigation system performance this will include the establishment and assistance in start-up of Irrigation Management Units for selected irrigation schemes included under the proposed project.

(c) Sub-output 3.3: Operationalization of national asset management system comprises activities in support of operationalizing the national asset management system, including aerial surveys using appropriate technology (i.e. remote sensing) of tertiary, primary and secondary infrastructure along with other infrastructure as well as hydrological and agricultural data. The data will also be used to further inform the hydrological assessments under sub-component 2.1 and to assist the Project management and implementation under sub-component 4.4.

4.4 Output 4: Strengthened policy and institutional frameworks for irrigated agriculture will focus on: (a) strengthening the capacity of government institutions and staff; and (b) supporting the executing and implementing institutions at national and provincial levels to undertake overall Project supervision. Improving coordination between the different government institutions will be an important element of these aspects of this output.

(a) Sub-output 4.1: Strengthened local-level policy, regulatory and institutional framework comprises supporting the government line agencies at provincial and district levels to identify specific policy issues and reflect on how these could be tackled, supporting Badan Perencana Pembangunan Daerah (Bappeda), the regional body for development planning, to undertake the analysis and synthesis of knowledge from various sources and inform the policy dialogue and supporting both the line agencies and Bappeda to identify policy options and actions.

(b) Sub-output 4.2: Establishment of water resource knowledge and management centers comprises the establishment or revitalization of the water management knowledge and training centers – a total of sixteen at the provincial level – including recruitment of personnel and procurement of office and training equipment and facilities.

(c) Sub-output 4.3: Improved policy coordination for irrigated agriculture comprises support to establish and support a Knowledge Management Centre (KMC) in the National Development Planning Agency/Bappenas, which will coordinate support for smallholder irrigated agriculture, promote policy dialogue among domestic stakeholders and strengthen national and local policy processes. The KMC’s remit would be related to knowledge management and policy development, enabling Government to foster the continuity between development projects and policies for smallholder irrigated agriculture by drawing out lessons, bridge the knowledge from different initiatives and promote coordinated approaches to promote policy dialogue among domestic stakeholders and support national and local policy processes.

(d) Sub-output 4.4: Project management and implementation support comprises support to the executing and implementing agencies (IAs) at national and provincial levels to undertake overall Project supervision and strengthen the planning, implementation, and management capacities of the IAs.
II. Implementation Arrangements

5. The National Steering Committee Water Resources (NSCWR) will be chaired by the Deputy of Maritime and Natural Resources, National Development Planning Agency/BAPPENAS, with the following membership: (i) the Director General of Water Resources, MPWH; (ii) Head of Agency for Agricultural Extension and Human Resource Development (AAEHRD), Ministry of Agriculture; (iii) Director General of Regional Development, Ministry of Home Affairs; (iv) and Echelon I officials of related Ministries. An implementation team will be established under NSCWR, chaired by the Director of Water Resources and Irrigation, National Development Planning Agency/BAPPENAS, with the Director of Water Resources Development, the Directorate General of Water Resources (DGWR), MPWH as Deputy Chairman with the participation from Echelon 2 officials of the related Ministries.

6. The DGWR, Ministry of Public Works and Housing (MoPWH) will be the LPA. A NPMU will be established under DGWR, MoPWH, to ensure overall coordination for implementation of the Project. Two National Project Implementation Units (NPIU) will be established under DGWR, MoPWH; an NPIU will be established under the Directorate General of Regional Development, Ministry of Home Affairs; and an NPIU will be established under the AAEHRD, MoA for the implementation of Output 1 activities in cooperation with provincial and district agriculture agencies. The IFAD Grant will be administered by the Ministry of National Development Planning/Bappenas.

7. The NPMU, in consultation with the NPIUs, will prepare an annual work plan and budget (AWPB) showing supporting (general) and sub-project activities, and will be reviewed by NSCWR. The reviewed AWPB will be submitted by the NPMU to ADB and IFAD for review and no objection. In addition, each participating district and province will prepare an overall work plan and budget.

8. Monitoring and Evaluation (M&E) will serve three distinct functions, strengthening: (i) management; (ii) accountability; and (iii) learning. A Project Performance Monitoring System will consolidate the M&E functions into a unified system. It will comprise both a comprehensive list of performance indicators at impact, outcome, output and sub-output levels, derived from the Project Design and Monitoring Framework and impact and post-completion performance data. Data will be disaggregated by component and, wherever possible, by district, gender and other dimensions. The indicators used will include those that contribute to IFAD’s Results and Impact Measurement System. The Project will undertake baseline, midterm and impact studies and conduct Annual Outcome Surveys.

9. The NPMU will be responsible for overall consolidation and coordination of Project financial reporting. The four NPIUs will be responsible for the financial management of expenditures under the respective Project components and/or activities. The roles and responsibilities of the implementing entities will be clearly defined in the PIM.
## Schedule 2

### Allocation Table

1. **Allocation of Loan and Grant Proceeds.** (a) The Table below sets forth the Categories of Eligible Expenditures to be financed by the Loan and the Grant and the allocation of the amounts of the Loan and the Grant to each Category and the percentages of expenditures for items to be financed in each Category:

<table>
<thead>
<tr>
<th>Category</th>
<th>Loan Amount Allocated (expressed in EUR)</th>
<th>Grant Amount Allocated (expressed in EUR)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equipment and material</td>
<td>18 880 000</td>
<td>140 000</td>
<td>100% net of taxes</td>
</tr>
<tr>
<td>2. Consultancies</td>
<td>21 440 000</td>
<td>650 000</td>
<td>100% net of taxes</td>
</tr>
<tr>
<td>3. Workshops and training</td>
<td>27 440 000</td>
<td>260 000</td>
<td>100% net of taxes</td>
</tr>
<tr>
<td>4. Credit</td>
<td>20 340 000</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>5. Salaries</td>
<td>5 050 000</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>6. Operating costs</td>
<td>-</td>
<td>360 000</td>
<td>100% net of taxes</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>93 150 000</strong></td>
<td><strong>1 410 000</strong></td>
<td></td>
</tr>
</tbody>
</table>

(b) The terms used in the Table above are defined as follows:

“Equipment and Material” includes the following investments in the demonstration activities such as seeds and machinery;

“Consultancies” includes surveys and studies and finances international and national consultants, the seed sector design and value chain mapping activities as well as service contracts for community facilitators;

“Workshops and training” includes supporting project workshop and dissemination activities, extension staff training, farmer field schools and training, exchange visits, activities to promote partnerships, knowledge and technology transfer, value chain training and savings and credit groups training;

“Credit” includes financing seed sector implementation, the value chain fund and financial service providers;

“Salaries” includes the costs of additional agricultural extension staff; and

“Operating costs” includes additional technical inputs to support the Knowledge Management Centre.

2. **Start-up Costs.** Withdrawals from the Loan account in respect of expenditures for start-up costs (in Categories 1, 2, 3, 5) incurred before the satisfaction of the general conditions precedent to withdrawal shall not exceed an aggregate amount equivalent to three hundred thousand Euro (EUR 300 000). Eligible expenditures may include office equipment and furniture, expenditure related to national launching of Project, training for Project staff and to community planning processes. Withdrawals from the Grant account in respect of expenditures for start-up costs (in Category 6) incurred before the
satisfaction of the general conditions precedent to withdrawal shall not exceed an aggregate amount equivalent to one hundred thousand Euro (EUR 100 000).

3. “On-Granting” Mechanism. Loan proceeds for regional administrations (provinces and districts) will be made available through “On-Granting Agreements” (OGA). The estimated total amount will be approximately the equivalent of forty-one million Euro (EUR 41 000 000). The full details of On-Granting mechanism will be defined in the PIM.
## Design and Monitoring Framework

<table>
<thead>
<tr>
<th>Results Chain</th>
<th>Performance Indicators with Targets and Baselines</th>
<th>Data Sources and Reporting</th>
<th>Risks</th>
</tr>
</thead>
</table>
| **Impact**    | **Improved food security, rural incomes and livelihoods in rural Indonesia**<br>• At least 75% of households with improvement in RIMS household asset index
• Reduction in prevalence of child malnutrition
• At least 75% of households have improved food security
• Additional ha. in project areas served by improved irrigation services increased to at least X ha. By 2021 [2015 baseline = 0 ha.]<br>**Data Sources and Reporting**<br>• Impact Assessments including RIMS<br>• MoPW, MoHA, MoA<br>**Risks**<br>• Government policy does not continue to prioritize irrigated agriculture investments<br>• No decline in the area of land under production<br>• No adverse effects of climate change or natural disaster |
| **Outcome**   | **Increased value and sustainability of irrigated agriculture**<br>• Additional ha. served by improved irrigation services increased by 2021 [2015 baseline.]<br>• Additional ha. with higher value and or commercial agriculture by 2021 [2015 baseline]<br>• Percentage of irrigation schemes in program areas showing improved performance in management increased to at least 90% by 2021 [2015 baseline]<br>**Data Sources and Reporting**<br>• MoPW, MoHA, MoA<br>**Risks**<br>• Government policy does not continue to prioritize irrigated agriculture investments<br>• Government funding is made available for project activities and sustainable O&M<br>• Provinces and districts commit to irrigation management policy reforms |
| **Outputs**   | **1. Increased irrigated agricultural incomes**<br>• Additional ha. of adopting improved practices for rice cultivation by 2021 [2015 baseline.]<br>• Additional ha. using demonstration for higher value and diversified cropping by 2021 [2015 baseline]<br>• Additional ha. under commercialized growing arrangements by 2021 [2015 baseline]<br>**Data Sources and Reporting**<br>• MoPW, MoHA, MoA<br>**Risks**<br>• Government guidelines are not properly implemented due to poor capacity or commitment<br>• Political issues impede the establishment and functioning of extension agencies.<br>• Demotivation of extension staff and field facilitators impede activities |
|               | **2. Improved irrigation systems infrastructure**<br>• Additional kilometre of irrigation infrastructure in program areas rehabilitated and upgraded by 2021 [2015 baseline]<br>• Number of irrigation schemes having detailed engineering designs prepared in line with government guidelines increased [2015 baseline]<br>• Water Resources Diagnostics completed<br>• No irrigation schemes modernized according to government technical standards by 2021 [2015 baseline]<br>**Data Sources and Reporting**<br>• MoPW, MoHA, MoA<br>**Risks**<br>• Government guidelines are not properly implemented due to poor capacity or commitment<br>• Political issues impede the establishment and functioning of commissions and WUAs.<br>• Demotivation of WUAs, staff and field facilitators impede activities |
### 3. Improved irrigation systems management

- No of irrigation commissions operationalized by 2021 [Baseline 2015]
- No Irrigation Development and Management Plans (IMPs) endorsed by Provincial and District Irrigation Commissions by 2021 [2015 baseline]
- Number of WUA/WUAFs established and trained with program support increased by 2021 [2015 baseline]
- Number of irrigation schemes managed by WUA/WUAFs increased by 2021 [2015 baseline]
- Number of updated and GIS-based Irrigation asset management systems increased by 2021 [2015 baseline]

MoPW, MoHA, MoA

- Government guidelines are not properly implemented due to poor capacity or commitment
- Political issues impede the establishment and functioning of commissions and WUAs.
- Demotivation of WUAs, staff and field facilitators impede activities

### 4. Strengthened policy and institutional frameworks for irrigated agriculture

- Number of IMP incorporated into regional medium-term development plans (RPJMD) increased by 2021 [2015 baseline]
- Competency certification system established for irrigation planning, financing & participatory management
- At least 70% of staff and field facilitators certified by the system by 2021 [2015 baseline]

MoPW, MoHA, MoA

- Regional parliaments delay endorsement of IMPs for RPJMD for political or other reasons