# PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC2158

Project Name	Agricultural Development Support Project (P147629)	
Region	EAST ASIA AND PACIFIC	
Country	Myanmar	
Sector(s)	Irrigation and drainage (30%), Agricultural extension and research (30%), Crops (40%)	
Theme(s)	Rural services and infrastructure (60%), Other rural development (20%), Climate change (20%)	
Lending Instrument	Investment Project Financing	
Project ID	P147629	
Borrower(s)	Republic of the Union of Myanmar	
Implementing Agency	Ministry of Agriculture and Irrigation	
Environmental	B-Partial Assessment	
Category		
Date PID Prepared/ Updated	03-Mar-2014	
Date PID Approved/ Disclosed	03-Mar-2014	
Estimated Date of Appraisal Completion	26-Sep-2014	
Estimated Date of	05-Feb-2015	
Board Approval		
<b>Concept Review</b>	Track I - The review did authorize the preparation to continue	
Decision		

### I. Introduction and Context Country Context

Myanmar is the largest country in mainland Southeast Asia with a land area of about 654,000 square km. It is located between China, India, and Thailand, with more than 2,800 miles of coastline. It is also one of the poorest countries in East Asia, with an estimated GDP per capita of US\$900 and a poverty headcount of 26 percent among its population of around 64 million.

The new government which took in office in March 2011 has introduced sweeping political and economic reforms. Myanmar is now embarking on a triple transition: from an authoritarian military system to democratic governance; from a centrally directed economy to a market-based economy; and from 60 years of conflict to peace in the border areas. The key economic reforms aimed to remove major policy distortions by floating the national currency, enacting new fiscal regulations to rationalize personal income tax and reduce consumption tax, launching reforms aimed at developing

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the private sector and stimulating direct foreign investments, reviewing of the financial sector with the view of promotion of access to finance, and creating an environment conducive to job creation.

From a strategic point of view, agriculture is of central importance for achieving the twin goals of ending extreme poverty and promoting shared prosperity in Myanmar. The sector accounts for about 43 percent of the GDP, which is largest share of GDP among ASEAN members. Rice production constitutes about 30 percent of agricultural GDP and covers about one-third of cultivated land. The sector generates about 54 percent of total employment and is source of livelihoods for about 70 percent of population who live in rural areas. Some 29 percent of rural households live below the poverty line. The government places high priority on the development of the agriculture sector and sees it as the basis for food security, employment generation and export promotion.

#### Sectoral and Institutional Context

Myanmar has a favorable agricultural potential. It has abundant water resources -- 20,870 m3 per person compared to the Asia-wide average of 3,948 m3 per person -- and relatively abundant agricultural land, which translates into the highest agricultural land per worker in the East Asia and Pacific (EAP) region of about 1.1 ha/worker, compared to 0.8 ha/worker in Thailand and Cambodia and less than half of Myanmar figure in Vietnam and Indonesia). According to the Myanmar Census of Agriculture (2010), the average farm area is 2.6 hectares, which is the second largest in EAP after Thailand (3.1 ha) (and about five times of that prevailing in Vietnam's Mekong Delta region). Finally, it has diverse agro-ecological conditions which would allow it to produce a wide range of temperate, sub-tropical and tropical crops.

The current agricultural productivity is seriously constrained by under supply of public services (extension, basic education), low levels of technology adaption and farm mechanization, insecure irrigation water supply, limited access to affordable credit suitable for agricultural production cycles, and rising labor costs that have trapped farmers in poverty even within double cropping systems in irrigated areas. Agricultural public spending is mainly limited to staff wages and irrigation expenditures. The majority of the latter is allocated to bulk water supply infrastructure (e. g. primary irrigation structures) while operating budgets have remained very limited.

Many irrigation schemes function below their potential because of inappropriate operation of reservoirs and a lack of responsive irrigation system management. For example, while about 2 million hectares are equipped with irrigation and drainage infrastructure, a second crop is being grown on only about 28 percent of this area (2011/12). While primary irrigation structures (dams, canals) seem in general in good shape there are problems in getting water to farmer fields. With improved management and a change in cropping patterns to non-rice crops it is possible to expand the cropping areas and cropping intensity. This may necessitate minor structural alterations to the irrigation schemes to improve drainage and, for some fields, to which improves in-field drainage through land leveling.

However, improving irrigation management is not sufficient to increase farm incomes. This is because farmers often do not possess the necessary agronomic technologies and skills to take advantage of an improved access to irrigation. The current public extension system is underresourced and extension personnel rarely visit farmers to provide advice on the correct fertilizers rates to use improved technologies such as improved seeds. There is also some reluctance by farmers to change from growing rice to more water efficient crops, such as legumes and sesame. This may be partly caused by the rigidity of irrigation systems as they do not allow any flexibility in water delivery and consolidation of interests between farmers who want to grow monsoon paddy vs. non-paddy crops, and result in a lack of control over water levels on individual farm plots. Lack of social cohesion among farmers further limits effective use and management of current irrigation systems.

The development of smallholder agriculture in Myanmar requires significant public investment in institutional development, technology generation and dissemination, rural infrastructure, human and social capital for years to come. Medium- to longer term gains will come from more and better agriculture sector spending programs that reduce production costs and increase productivity. There is a need for a new vision for the provision of agricultural support services and improved management and delivery systems.

Ongoing sector diagnostics show that the immediate opportunity for progress toward shared growth and poverty reduction goals in rural areas in Myanmar is to capitalize on significant public investment already made in irrigation and drainage infrastructure. The Ministry of Agriculture and Irrigation (MOAI) has made significant investments in irrigation infrastructure between the 1980s and 2000s which can serve as platform for future Bank engagement in the agriculture sector. Many of these schemes host large numbers of smallholders who have the potential to respond to public investments under a supportive environment. These schemes would offer good opportunities for landscape-based rural development approaches that address agricultural, natural resource management, and social development goals.

#### **Relationship to CAS**

Linkages to the Interim Strategy Note (ISN). The proposed project is consistent with the Myanmar Interim Strategy Note (October 2012). The ISN builds on the four objectives of government's development strategy (agricultural development; balanced growth; inclusive growth; and development of quality statistics), which will be supported through three strategic pillars. The proposed project will contribute towards the following two ISN pillars:

Pillar I: Building Confidence. The proposed project would support building confidence that the reform process will generate benefits for the people. The proposed project aims to realize "low regret" and "quick wins" investments in agricultural productivity enhancement which would generate immediate and significant changes in farm household welfare, such as interventions in existing gravity irrigation schemes.

Pillar II: Transforming Institutions. The proposed project would support government's efforts at transforming institutions to equip them to successfully mediate competing demands, steer an increasingly complex economy, and navigate the country on its development path. It would provide institutional and human capacity building and sector planning at central and local government levels for improved agricultural service provision to rural households.

### **II.** Proposed Development Objective(s)

#### Proposed Development Objective(s) (From PCN)

The proposed Project Development Objective is to increase crop yields and cropping intensity in the target irrigated areas. This will be achieved through improved provision of irrigation and farm advisory and technical services.

#### Key Results (From PCN)

The proposed project outcome indicators include: (i) Number of direct project beneficiaries covered; (ii) Average crop yields in target irrigated areas increased; and (iii) Cropping intensity increased.

### III. Preliminary Description Concept Description

Project Beneficiaries are expected to include farm households with direct access to irrigated land; rural households who engage as workers on the irrigated land; and households who would participate in labor intensive works of rehabilitation and maintenance of irrigation infrastructure.

Approach. The project will use phased approach which allows for flexible identification of the number and size of target gravity irrigation perimeters. It is suggested that the project implementation will start with smaller and technically simple irrigation sites while carrying out studies for more complex sites. Local communities will be consulted to seek their inputs and agreement to participate in project activities. The specific boundaries and features of the irrigation schemes within these sites will be determined as an output of the technical feasibility studies which include relevant environmental and social assessment to be prepared during the first year of the project implementation.

Project locations. The target irrigation schemes are located in well-established agricultural production areas in Naypyitaw, Bago-East, Mandalay, and Sagaing regions. It is estimated that the project would target 7-8 irrigation schemes over its life. Selection of sites is determined by their agricultural and poverty reduction potential, technical readiness, environmental and social impacts (e.g. no significant environmental and social impacts, no conflict over land or water resources or vicinity to sensitive ecological sites) and with the implementation capacity of MoAI.

Cost. The total cost of the project is expected to be \$100 million of IDA Credit. The IDA lending instrument will be a 7 year Investment Project Financing (IPF).

Components. The proposed project has four components: (i) Irrigation and Drainage Management (US\$70 million); (ii) Farm Advisory and Technical Services (US\$23 million); (iii) Project Coordination and Management (US\$7 million); and (iv) Emergency Contingency Response (US\$0 million):

Component 1. Irrigation and Drainage Management and Land Improvement

This component seeks to enhance the provision of irrigation and drainage services and improve their management in designated pilot areas. The project would support the following sub-components:

1.1 Strengthening Irrigation and Drainage Management Institutions. Capacity building of relevant MOAI departments for improved service delivery; farmers and water user groups as their clients, and the Agriculture Coordination Committees (ACCs) as their joint platform for planning and monitoring. The sub-component would aim to establish water user groups as an entry point for enhanced on-farm water management in the target project irrigation sites. Strengthening of the capacity of ACC and relevant MOAI staff responsible for water allocation and distribution scheduling on relevant township or district level for the establishment of joint planning procedures for irrigation and drainage service delivery, asset management, O&M, and related strategic studies.

1.2 Rehabilitation and Upgrading of Irrigation, Drainage and Flood Management Infrastructure. The project would support modifications, rehabilitation or modernization of existing irrigation systems. The subcomponent would finance potential investments associated with rehabilitation and upgrading of main irrigation and drainage systems, farm roads attached to the irrigation schemes and improve the existing single purpose (irrigation) dams and appurtenant structures serving selected irrigation systems; rehabilitation and upgrading of the tertiary water course level irrigation and drainage systems; and pilot 2-3 small land improvement schemes in the targeted irrigation areas with the focus on demonstration of climate-smart agriculture techniques.

Component 2: Farm Advisory and Technical Services

This component seeks to enhance MOAI farm advisory services at target districts which host selected irrigation schemes to improve farmer crop choices and increase farm productivity. The project would support the following sub-components and activities:

2.1 Seed Multiplication. The sub-component would support the production of foundation seed, registered seed and multiplication of certified seed by farmers and seed multiplication groups in project villages. Support will be provided for seed inspections to ensure quality of seed produced under the project and for technical assistance to finalize seed policies, plant variety rights and other related regulatory requirements.

2.2 Soil Management. The sub-component will support soil mapping in target irrigation schemes which will be used to develop fertilizer use recommendations for each soil type in project sites to be introduced to farmers through on-farm extension demonstrations to show their effectiveness.

2.3 Plant protection. The sub-component would support establishment of the specimen-based problem identification collections of pests in project regions which will be used to develop appropriate IPM techniques to be demonstrated to farmers through on-farm extension demonstrations to farmers.

2.4 Extension of Modern Farming Practices. The sub-component will support the delivery of the extension, farmer training and on-farm demonstrations activities of the technologies and developed under activities 2.1-2.3.

2.5 Farm Mechanization. The sub-component would support the existing mechanization training centers, including purchase and testing of a limited number of farm machinery and equipment which are suitable for the demonstration of climate-smart agriculture techniques relevant to the small-holder farming systems in Central Dry Zone.

Component 3: Project Coordination and Management

The Project Implementation Unit (PIU) will be established, which will be responsible for the overall coordination of the project implementation and fiduciary arrangements.

Component 4: Emergency Contingency Response

The objective of this zero component is to allow a rapid reallocation of funds from other

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components to provide rapid response support to disaster, emergency and/or catastrophic events as needed.

# **IV. Safeguard Policies that might apply**

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	x		
Natural Habitats OP/BP 4.04			x
Forests OP/BP 4.36		x	
Pest Management OP 4.09	x		
Physical Cultural Resources OP/BP 4.11		x	
Indigenous Peoples OP/BP 4.10	x		
Involuntary Resettlement OP/BP 4.12	x		
Safety of Dams OP/BP 4.37	x		
Projects on International Waterways OP/BP 7.50	x		
Projects in Disputed Areas OP/BP 7.60		x	

# V. Financing (in USD Million)

Total Project Cost:	100.00	Total Bank H	Financing:	100.00	
Financing Gap:	0.00				
Financing Source				Amount	
BORROWER/RECIPIENT				0.00	
International Development Association (IDA)				100.00	
Total				100.00	

# VI. Contact point

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