Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 14-Jun-2018 | Report No: PIDISDSC23462

June 20, 2018 Page 1 of 16

BASIC INFORMATION

A. Basic Project Data

Country Myanmar	Project ID P164448	Parent Project ID (if any)	Project Name Myanmar National Food and Agriculture Systems Project (P164448)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date Oct 01, 2019	Estimated Board Date Apr 22, 2019	Practice Area (Lead) Agriculture
Financing Instrument Investment Project Financing	Borrower(s) The Republic of the Union of Myanmar	Implementing Agency Ministry of Agriuclture, Livestock, and Irrigation	

Proposed Development Objective(s)

The Project Development Objective (PDO) is to, "increase productivity of select high value commodities, enhance agricultural diversification and competitiveness, and diet diversity in selected agro-ecological zones of Myanmar". This will be achieved through the provision of key public goods and services that will facilitate and further enhance the engagement of (and with) the private sector.

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	100.00
Total Financing	100.00
of which IBRD/IDA	100.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	100.00
IDA Credit	100.00

June 20, 2018 Page 2 of 16

Environmental Assessment Category

B - Partial Assessment

Concept Review Decision

Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

- 1. The political reforms of 2011-2015 in Myanmar and economic liberalization coincided with strong economic growth and macroeconomic stability, followed by a slowing of economic activity since 2015. After reaching 8.5% annual Gross Domestic Product (GDP) growth in 2014/2015, economic activity began to slow down with growth reaching 7% and 5.9% in 2015/2016 and 2016/2017, respectively, due to (i) a challenging macroeconomic environment characterized by high inflation, and a reduction in government spending; (ii) a decline in commodity exports (gas and agriculture); (iii) constrained private and public investments; (iv) contraction of the agriculture sector due to the extreme weather shocks of the 2015/2016 El Niño—Southern Oscillation (ENSO) event; and (v) a decline in industrial output. Expectations of strong exports, industry and services activities contributed to a positive growth forecast for 2017/2018 at 6.4%, counterweighing a slow agricultural recovery¹. The agriculture sector continues to be vulnerable to supply shocks and demand fluctuations from major trading partners (e.g., China and India) affecting the sector's potential to significantly and sustainably contribute to growth and poverty reduction of Myanmar.
- 2. Despite a decline in poverty in Myanmar over the last decade, poverty remains high and inequality is increasing. Nearly 70% of Myanmar's population lives in rural areas where poverty is prevalent. The poverty incidence fell from 48.2% in 2004/2005 to 42.4% in 2009/2010 to 32% in 2015, making it today one of the poorest countries in Southeast Asia ². The decline in poverty was rapid in urban than rural areas with the urban-rural gap being substantial in 2015, i.e., 38.8% of the rural population are found to be poor relative to 14.5% of the urban population. In addition, one in ten households fail to meet their basic food needs. In addition to the 32% of the population identified as poor, 14% are categorized as near-poor making them vulnerable to shocks from crop failures, natural disasters, and health setbacks. A sizable proportion of Myanmar's poor rely on agricultural activities as smallholder farmers or casual employment with low income diversification and high reliance on paddy production. Female headed households are not identified as being poorer than male headed households irrespective of level of profit making, the poor have limited dietary diversity, and have weaker productive and financial asset base. Although living standards of the poorest in Myanmar improved, greater improvements were noted among richer households contributing to inequality increase. There were no significant changes in the welfare of the poorest 10% of the population relative to the obvious welfare changes of the average household.

June 20, 2018 Page 3 of 16

 $^{^{\}rm 1}$ "Myanmar Economic Monitor". April 2018. World Bank

² "An Analysis of Poverty in Myanmar: Part 02-Poverty Profile". December 2017. World Bank

- 3. There are variations in poverty incidence across the agro-ecological zones (AEZ)³ of Myanmar. The poverty headcount rate in the Hills & Mountains AEZ is 40%, in the Dry AEZ the rate is 32.1%, in the Delta AEZ, the rate is 26.2%, and in the Coastal AEZ, the poverty headcount rate is 43.9%. The Hills and Mountains and the Coastal AEZs have a lower share of the population living in them, yet they comprise 47% of the food poor, and 38% are in the bottom quintile of the expenditure distribution. These two AEZs combined have 40% poverty rate and one in six will struggle to meet their basic food needs. Nearly 65% of the poor reside in the densely populated Dry AEZ and Delta AEZ. Even though the Delta AEZ has the lowest poverty head count rate, the number of poor in this area is significant due to its high population density (5.5 million poor which also includes Yangon) relative to the 2 million poor in the Coastal AEZ⁴.
- 4. **Myanmar's human development faces numerous challenges.** While net primary education enrollment is high (93%), there is substantial student drop-out in enrollment at the secondary level resulting in net total enrollment of 55% in 2015. Gender enrollment gaps have been narrowing over time. On health outcomes, 41% of children under the age of five are stunted, 30% are underweight, and 11% are wasted. In addition, 40% of the population between ages 5 and above are overweight or obese, and close to 1 in 7 infants are born with a low birth weight. It was estimated that on an annual basis, Myanmar loses nearly US\$400 million in GDP to Vitamin and mineral deficiencies. Overall, Myanmar's Human Development Index (HDI) is 0.556, well below the average for East Asia and Pacific (0.720), ranking it 145 out of 188 countries. As a result, Myanmar is on a slow path towards achieving the Millennium Development Goals (MDGs) health outcomes.

Sectoral and Institutional Context

- Despite Myanmar experiencing rapid structural change over the last decade, it is still an "agri-based" economy. Agriculture's share of GDP declined from 52% to 32% during 2000-2015, while manufacturing share increased from 11% to 28%. Nevertheless, the sector shares of employment remained constant over the last decade. Agriculture continues to be the largest employer with agriculture's share of jobs registering nearly 52%. More than one-third of workers (nearly 8.5 million jobs) identified farming as their primary source of employment through work in own family farms, and 16% (equivalent to 2.6 million people) are agricultural laborers. The employment share in services and industry were 36% and 12%, respectively. The formal modern sector in Myanmar contributes to only 11% of the jobs.
- 6. **Agricultural growth relative to other sectors is low and volatile in Myanmar.** In 2011/12, agriculture growth was -0.7%, 1.7% in 2012/13, 3.6% in 2013/14, 2.8% in 2014/15, 3.4% in 2015/2016, and 4.3% in 2016/17 respectively. The average sector growth during the period 2011/2012-2016/2017 was 15%, which is substantially lower than the 55% and 59% growth seen in the industry and services sectors, respectively⁶. Hence, contribution of the agriculture sector to the growth of Myanmar's economy over time has been small.
- 7. Low agricultural growth in Myanmar is attributed to low productivity with varying degrees across the agroecological zones. Paddy land and labor productivities in Myanmar are among the lowest in Asia. In 2013/2014, the average land productivity for paddy was 2.7 tons/ha in Myanmar, 3.9 tons/ha in the Philippines, 2.8 tons/ha in Thailand, 6.7 tons/ha in China, and 5.8 tons/ha in Vietnam. Within Myanmar, paddy productivity and profitability are the lowest in Ayeyarwady and Sagaing States, and highest in Shan State. Average paddy yield was 2.7 tons/ha (dry paddy equivalent)

June 20, 2018 Page 4 of 16

³ There are four agro-ecological AEZs in Myanmar: (i) Hills and Mountainous AEZ (covers Chin, Kachin, Kayah, Kayin, and Shan States); (ii) Coastal AEZ (covering Rakhine and Taninthayi); (iii) Delta AEZ (covering Ayeyarwady, Bago, Mon, and Yangon); and (iv) Dry AEZ (covering Mandalay, Magwe, Nay Pyi Taw, and Sagaing).

⁴ "An Analysis of Poverty in Myanmar: Part 02-Poverty Profile". December 2017. World Bank.

⁵ "Nutrition at a Glance". World Bank.

 $^{^{\}rm 6}$ "Myanmar Agriculture Public Expenditure Review". 2017. World Bank.

⁷ Productivity estimates are derived from the "Myanmar: Analysis of Farm Production Economics".

or 3.5 tons/ha (wet paddy equivalent). This puts Myanmar on the lower end of rice production relative to rice producing Asian countries. Labor productivity for paddy is also low. For example, in monsoon season, the labor return from one day's work yields 23Kgs of paddy, relative to 62Kgs in Cambodia, 429Kgs in Vietnam, and 547Kgs in Thailand. Although Myanmar's labor productivity is higher during the dry season, it is still considered very low in comparison with other countries. Paddy production in Myanmar is still labor intensive (farmers in Ayeyarwady spend more than 100 days/ha of monsoon paddy relative to 52 says in Cambodia, 22 days in Vietnam, and 11 days in Vietnam).

- 8. Productivity of non-paddy crops are also low but generally higher than paddy productivity also with varying degrees across the agro-ecological areas. Myanmar's farming systems are diversified and produce a range of non-paddy crops with higher productivity than paddy. The labor productivity (value of crop per day of labor) of black gram, green gram, chickpeas, groundnuts, sesame, and sunflower seeds ranged from \$9.29/day to \$15.92/day, while for both monsoon and dry season paddy labor productivity was \$4.75/day and \$9.20/day, respectively. The productivity of non-rice crops also varied across the agro-ecological zones depending on the production potential of each area. For example, the productivity of green gram in Ayeyarwady (Delta AEZ) was \$13.39/day while in Sagaing (Dry AEZ) productivity was at \$17.69/day.
- 9. Low earnings for both paddy and non-paddy production, although earnings from the latter are higher, reflects on the low agricultural competitiveness of Myanmar relative to its regional neighbors. In 2013/2014, the net margin (\$/ha) from producing monsoon paddy averaged \$114/ha (ranging from \$88/ha in Ayeyarwady to \$337/ha in Shan State due to proximity to China, resulting in higher farm-gate prices and lower input prices relative to other areas in Myanmar). Although the profitability of the dry season paddy was higher at \$246/ha, this is still considered low relative to the earning of farmers in neighboring Asian countries. In addition, male-headed households accrue higher profits than female headed households for many crops (for few crops the gender differentials in earning is insignificant). On the other hand, the profitability of non-paddy crops (black gram, green gram, chickpeas, groundnuts, sesame, and sunflower seeds) is higher and ranged from \$141/ha to \$581/ha. The earning differentials between paddy and non-paddy is due to the higher production cost of the former crop. The low earnings raise alarming concerns about the potential of agriculture at its current state and a primary focus on paddy alone to achieve agricultural growth and uplift rural households from poverty.
- 10. The inferior performance of Myanmar's agriculture sector is first a legacy of past agricultural policies and investments centered on rice to attain primarily food security. This was conducted through input intensification mainly for rice. Public agricultural investments neglected undertaking "Resilient", "Inclusive", Competitive", and "Environmentally" (RICE) sustainable investments that takes advantage of Myanmar's diverse farming systems.
- 11. The undersupply of quality agricultural public goods plays a significant role in Myanmar's low agricultural productivity and weak support for diversification. According to the 2017 World Bank Agricultural Public Expenditure Review⁸, the most underfunded function in the sector is agricultural research while there is compelling evidence of high returns to investments in core public goods related to technology generation and diffusion, market linkages and infrastructure, especially when augmented by policy and institutional reforms. Undersupply of public goods: first, agricultural extension services are limited in number and have weak capacity to provide outreach to farmers. The ratio of extension staff and farm family is very low (nearly 1 to 585)⁹. Given the 3,819,1925 acres covering major crops, this means on average 1 extension worker covers 5,081 acres. In addition, extension outreach was geared mostly towards paddy; second, farm management is poor. Farmers have weak knowledge about the appropriate application of production technologies such as fertilizers, seed varieties, and pesticides; and third, agricultural research is underfunded, fragmented, and suffers from weak human resource capacity.

June 20, 2018 Page 5 of 16

⁸ World Bank 2017. Myanmar Agricultural Public Expenditure Review. Increasing the impact of public spending on agricultural growth. WB/LIFT.

⁹ "Current Status of Agricultural Extension in Myanmar". 2017. MOALI

- 12. **Private sector engagement in agricultural value chains is low.** In addition to the constraints mentioned above, several other factors are adversely affecting the private sector's full participation in agricultural value chain development. Infrastructure challenges such as post-harvest storage and cold chain facilities, and testing laboratories restricts them from contributing to the downstream side of the value chain. Poor accreditation of services geared towards the regional and global export markets is also a constraint.
- 13. Climate variability and extreme weather events have also significantly impacted performance of the agricultural sector. In 2012, Myanmar was ranked the country most at-risk to climate shocks within Asia-Pacific, due to the wide range of hazards including, floods, cyclones, earthquakes, landslides, and tsunamis. In addition, it ranks 2 out of 187 countries in the Global Climate Risk Index. However, there are regions and states that are more vulnerable than others. In 2015-2016 ENSO event and the accompanying drought in the Central Dry Area decreased production and export of traditional crops such as sesame, beans and pulses. Overall the drought from El Niño affected more than 15 million people in the Delta and Dry areas affecting livelihood, food access, decreased productivity and farmer income.
- 14. **Improving nutritional status of Myanmar's population remains a significant challenge.** Rice continues to be the key staple crop consumed in Myanmar. However, rice lacks nutritional value in terms of the minerals and vitamins typically found in a meal with dietary diversity. A 195-gram serving of long grain cooked brown rice provides 11% of the recommended daily calorie value and provides no vitamin A, C or D intake, has only 5% of recommended daily iron value, 2% of daily calcium and no vitamin B12 value¹⁰. In addition, sufficient knowledge on dietary intake is lacking, especially among the rural population. One way to tackle this challenge is to promote agricultural diversification and increase the knowledge of rural households about dietary diversity and importance for improved health outcomes, and productivity.
- Despite the significant sector challenges, Myanmar's agriculture has ample potential for growth and rural poverty reduction. Myanmar has abundant natural resources, youthful workforce, and diverse faming systems. Myanmar is the world's second largest exporter of beans and pulses (after Canada) and the largest exporter in the ASEAN region. For example, in 2014, the export earnings from beans and pulses was \$835 million (exported to India, Thailand, Bangladesh, China, and UAE) which is higher than the export value of rice valued at \$630 million during the same year. In addition, urbanization and income growth amongst segments of the population are translating into changing dietary preferences and food spending patterns. All these developments are expected to accelerate and expose enormous opportunities for farmers, and private sector across all segments of the value chain, and overall sectoral growth.
- 16. Leveraging agriculture for sector growth and rural poverty reduction is a top government priority, and this is recognized in the 2017 Agriculture Development Strategy (ADS). The ADS accept limitations of past approaches to ensure food security for promoting agricultural transformation and rural poverty reduction. The strategy identified three priority areas requiring support: (i) Governance; (ii) Productivity; and (iii) Market Linkages and Competitiveness.
- 17. The 2018 Myanmar Sustainable Development Plan (MSDP) recognized the agriculture sector challenges and proposed action plans. The MSDP recognizes the high dependence of Myanmar's economy on agriculture and its significance for poverty reduction, as noted under "Pillar 2: Prosperity & Partnership". Under this Pillar, "Strategy 3.1: Creating a diverse and productive economy with rural development and agriculture as the foundation" stresses on addressing Myanmar's low productivity to support value chain development, increase private sector participation and eventually boost agricultural competitiveness.

¹⁰ "Crop Diversification and Nutrition". 2014. Partners.

June 20, 2018 Page 6 of 16

Relationship to CPF

- 18. The proposed project is aligned to the 2015-2017 World Bank Country Partnership Framework (CPF) and the two years extended partnership framework. Rural poverty reduction is outlined as a focus area with several objectives, including increased productivity in farming and agribusiness, and addressing critical infrastructure and service gaps for the rural poor. The extended CPF continues its support for rural poverty reduction through rural growth.
- 19. Furthermore, the proposed project is aligned with the identified pathways for poverty reduction as outlined in the Systematic Country Diagnostic (SCD). The SCD identified improvements in agricultural productivity as necessary for poverty reduction and as an opportunity for short term gains. The SCD recognizes the immense potential for improvement in Myanmar by addressing yield gaps, diversification, and value-addition.
- 20. The proposed project is also aligned with the World Bank's Twin Goals. The proposed project activities are intended to increase the income of the rural poor and generate shared prosperity by building the capacity and knowledge of farmers to undertake enhanced farming practices that increases the resilience of their diversified farming systems as well as increase their agricultural competitiveness.
- 21. This proposed project concept has benefited substantially from ongoing and completed analytical and investment activities. The experience from the ongoing Agriculture Development Support Project (ADSP) in project management and implementation (fiduciary aspects), and monitoring and evaluation (M&E) arrangements will be used extensively for the proposed NAFSP. Successful instruments of the ADSP such as Project Working committees (PWCs) that meets bi-monthly to improve collaboration and monitoring across participating departments and divisions and implementation through existing MOALI decentralized bodies such as Agricultural Consultative Committees (ACCs) at district and village track levels will be applied to this project.
- 22. Insights on the status of Myanmar's agriculture sector performance were drawn from two recent completely analytical activities. The first study is "Myanmar: Analysis of Farm Production Economics". This was funded by LIFT (Livelihood and Food Security Trust Fund) to address existing agriculture data constraints using a 2013/2014 Myanmar Agricultural Survey of 1,728 farm households in four regions/states across three Agro-ecological Zones (AEZs) in Myanmar: (i) Ayeyarwady and Bago (Delta AEZ), Sagaing (Dry AEZ), and Shan (Hills and Mountains AEZ). The study did not cover the Coastal AEZ. The survey covers crops produced during two main seasons i.e., monsoon and dry seasons. A follow-up survey is currently ongoing to assess changes in farming practices since the 2013/2014 survey. The second study this concept note benefited from is the "Myanmar Agriculture Public Expenditure Review". Several insights on the status of Myanmar's food system were highlighted during the recent "Workshop on Modern Food Systems in Myanmar" (February 2018). The workshop discussions noted the ongoing challenges and opportunities for the development of Myanmar's food systems, and these were captured in this concept note.

C. Proposed Development Objective(s)

23. The Project Development Objective (PDO) is to, "increase productivity of select high value commodities, enhance agricultural diversification and competitiveness, and diet diversity in selected agro-ecological zones of Myanmar". This will be achieved through the provision of key public goods and services that will facilitate and further enhance the engagement of (and with) the private sector.

June 20, 2018 Page 7 of 16

Key Results (From PCN)

- 24. The key results of the proposed project are:
 - i. Increase in production volume and yields of selected commodities
 - ii. Change in agricultural land productivity of targeted farmers supported by the project (percentage)
 - iii. Increase in sales of farm produce as a share of production among targeted farmers supported by the project (percentage, disaggregated by gender male- and FHHs)
 - iv. Increase in efficiency of processing facilities supported by the project (percentage)
 - v. Increase in linkages between producers and buyers
 - vi. Increase in dietary composition of targeted households (percentage, disaggregated by gender)
- 25. The key project beneficiaries are: (i) smallholders in four agro-ecological zones (Dry, Delta, Hills and Mountains, and Coastal); (ii) extension workers; (iii) agricultural researchers; (iv) buyers for value chain development; (v) MOALI departments and units participating in the project.

D. Concept Description

- 1. Once the priority agro-ecological zones and high value / potential commodities and value chains are determined, the proposed project will adopt the "Theory of Change" and "Maximizing Finance for Development (MFD) for Agricultural Value-Chains" frameworks for the identification and selection of project activities within each component and subcomponents.
- 2. The proposed project areas and interventions will be made with close consideration provided to the following: (i) promotion of improved nutritional outcomes; (ii) inclusiveness of minorities and other marginalized groups; and iii) implementation in conflict and non-conflict areas.
- 3. The proposed project is envisaged to have the following three components (with interventions tailored to the specific context of the selected commodities / value chains):
- 4. **Component 1: Development of Value Chains (US\$ 20 million)** The objective of this component will be to support mechanisms by which public sector services are improved in collaboration with the private sector where opportunities exist to promote the development of selected agricultural commodity value chains, innovative modalities to better link farmers to markets, and improvements in the enabling environment for agro-enterprise. This component will explore opportunities (including pilots) for private sector engagement on capacity strengthening to add value for key commodities, provision of equipment and infrastructure using out-grower schemes, and matching funds for farmer organizations and commodity specific associations. This component will also include improvements in the enabling regulatory / legal environment for agro-enterprise (support to farm inputs and products) including food quality and food safety. The infrastructure investment needs based on business plans and cost sharing mechanisms may include, (i) product collection centers, (ii) drying facilities, (iii) post-harvest storage structures, (iv) micro irrigation; (v) improved information technology service facilities, (vi) cold chain facilities, and (vii) facilitating a conducive policy environment, among others.
- 5. **Component 2: On-farm Agricultural Investment Support (US\$74 million) –** This component has two subcomponents: (i) On-farm Infrastructure Investments (US\$54 million) and (ii) Agricultural Support Services (US\$20 million).

June 20, 2018 Page 8 of 16

The objective of the first sub-component is to improve the production volume of selected commodities and crop diversification by providing support for infrastructure investments in priority farming systems. The activities may include upgrading/constructing of critical infrastructure for increased productivity, crop diversification and/or competitiveness such as in existing and new research/ experimental stations, seed multiplication farms, laboratory buildings and equipment, border post quarantine and testing service centers; irrigation systems on-farm/ downstream; and decentralized training centers / information centers. Capacity building related to optimizing infrastructure investments and operation and maintenance will also be included. This sub-component will prioritize infrastructure investments in high-value commodities and areas where the level of engagement of the private sector is low or nonexistent. The objective of the second sub-component is to ensure and enhance the provision of key public agricultural services such as agricultural research and innovation, extension services, institutional development and farmer training. This component will provide capacity building and policy support to the national agriculture research and extension system with the aim to improve service delivery in the agriculture sector. This component will also focus on services related to on-farm management practices which will include the adoption of climate smart production practices, crop diversification, and integration of nutritional and gender-sensitive activities.

6. **Component 3: Project Management (US\$ 6 million) -** The objective of this component is to ensure effective project management. This component will support carrying out of the day-to-day project management activities, including project administration and implementation, procurement, financial management and audit, social and environmental safeguards (including peace and inclusion filters, marginalized/vulnerable population groups, gender etc.), and monitoring and evaluation (M&E).

SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

At concept stage, location for project interventions have not been determined.

Myanmar is characterized by its central lowlands along the Ayeyarwady river, which flows from north to south through the Central Burma Basin and ends in a wide delta. These areas are its well-established agricultural production areas, which the current Agricultural Development Support Project (ADSP) (P147626) supports. The Central Valley Region is bordered by steep, rugged highlands in the north, the Arakan Mountains in the west and the Shan Hills, Karen Hills and Tenasserim Hills to the east. As a result, physical characteristics vary significantly across the country, as well as ethnic, social and cultural characteristics.

Once project locations are identified, further information will be provided.

B. Borrower's Institutional Capacity for Safeguard Policies

Under the current ADSP project, the project management has hired one environmental and one social safeguards consultant, who have the skills and experience to manage the environmental and social risks of the project. The project management unit overall has been gaining knowledge and experience on World Bank safeguards policies and their implementation. However, without the consultants, the project management unit does not have dedicated staff who has backgrounds and experience in environmental and social risk management. As a part of the project's environmental and social management framework (ESMF) preparation, a capacity need assessment will be conducted to identify areas for improvement and measures to increased capacities.

June 20, 2018 Page 9 of 16

C. Environmental and Social Safeguards Specialists on the Team

Martin Fodor, Environmental Safeguards Specialist Vivianti Rambe, Environmental Safeguards Specialist Zeynep Durnev Darendeliler, Social Safeguards Specialist

D. Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
		The proposed project will focus on activities that (i) improve farm management and value chain development which include upgrading testing laboratories and upgrading/building post-harvest storage and cold chain facilities; (ii) strengthening capacities of agricultural extension officers and researchers; (iii) improve farm management which includes support of seed multiplication and procurement and distribution of seeds and seedlings as well as supply of biological control; and (iv) ensure effective project management.
Environmental Assessment OP/BP 4.01	Yes	Under Component 1, the proposed project will fund specific investments on infrastructure for improved farm management such as (i) research, ((ii) seed farms, (iii) national service laboratories, (iv) off-site and onsite service and testing laboratories and centers, (v) border post quarantine and testing centers, and (vi) training centers and other high priority infrastructure to support improved farm management in selected agro-ecological zones.
		The project will also fund infrastructure for value chain development such as (i) product collection centers, (ii) drying facilities, (iii) post-harvest storage structures, (iv) improved information technology service facilities and (v) cold chain facilities intended to support downstream agricultural value chain development.
		Main potential environmental impacts are related to construction activities, maintenance and operation of the post-harvest storage and cold chain facilities (e.g. hygiene, reliable and adequate water and power supply). In regards to seed farms, waste management on the use of polythene plant bags for seedlings/nursery will be the main issue.

June 20, 2018 Page 10 of 16

Main potential social risks are related to land acquisition, contested land ownership and land conflict, and potential exclusion of ethnic minorities, landless farmers, women-headed households or other vulnerable groups. Any social assessment conducted during preparation or implementation will cover these social risks.

Project target provinces and states are yet to be determined; therefore an Environmental and Social Management Framework (ESMF) will be prepared. The Framework will include the following:

- 1. Guidance for screening of subprojects, ensuring that relevant safeguard policies (natural habitats, forests, and projects in disputed areas) are adequately addressed.
- 2. Assessment of environmental and social impacts of various activities related to Component 1 and Component 3. Component 2 of the proposed project will focus on capacity building. The component will incorporate technical inputs from the safeguards specialists into TA's Terms of References to ensure safeguards aspects are mainstreamed.
- 3. Details on the type, level and depth of environmental and social impact assessments (SAs/EMPs/SOPs/ECoPs) required for each of the investments/activities.
- 4. Environment Health and Safety (EHS)
 Guidelines for reference as a generic environmental management plan, particularly for construction related activities.
- 5. Environmental and Social Management Plan (ESMP), particularly on the following issues: construction related activities, maintenance and operation (hygiene, reliable and adequate water and power supply) issues related to the post-harvest storage and cold chain facilities (Component 1), and waste management on the use of polythene plant bags for seedlings/nursery as well as implication of the

June 20, 2018 Page 11 of 16

Performance Standards for Private Sector	No	overall, the proposed project is expected to deliver a number of environmental benefits, such as improved soil and water management practices considering the agro-ecological context of the project intervention area. The project will also contribute to an integrated pest and disease management through the adoption of sustainable practices by supplying biological controls; the use of natural enemies to manage population of pest organisms. Considering the type of investments and activities, scale of the proposed project, as well as the nature and magnitude of its potential impacts, an environmental Category B operation is proposed.
Activities OP/BP 4.03 Natural Habitats OP/BP 4.04	Yes	The policy is triggered to ensure that any affected natural habitats are adequately protected, because some of the project sites may take place near parks or protected areas. The proposed project's ESMF will
Forests OP/BP 4.36	No	involve clearing of new land for agriculture. The proposed project's ESMF will screen out and exclude any clearing or effects on forest lands.
Pest Management OP 4.09	Yes	exclude any clearing or effects on forest lands. The policy is triggered as a precaution, because pesticide use is a necessity in agricultural activities in the region. The ESMF will promote Integrated Pest Management as standard practice. A screening mechanism will be included in the ESMF to determine if there are any sub-projects or activities with significant pest management issues; if so, then a separate Pest Management Plan will be required to ensure that these materials are well managed for those subprojects and/or activities. Under Component 3, the proposed project will fund an integrated pest and disease management which will support the adoption of sustainable pest and disease management practices by supplying biological controls; the use of natural enemies to manage population of pest organisms. The ESMF will provide

June 20, 2018 Page 12 of 16

		more detailed information on the application of this method.
Physical Cultural Resources OP/BP 4.11	Yes	This policy is triggered to ensure that any "chance finds" or other physical cultural resources during excavation or other earth-moving activities are adequately protected. Project's ESMF will consist of a chance find procedure which requires that should any areas of potential cultural importance or artefacts be identified, works should stop and the government related agencies (to be identified at appraisal stage) should be contacted. No work should continue until approval has been sought from these agencies.
		Myanmar is one of the most ethnically diverse countries in Asia, and the project will likely fund subprojects where ethnic minorities are present. Both under Component 1 (rehabilitation and construction of infrastructure) and Component 2 (formation of farmer groups), there may be risks that ethnic minorities do not have equal and culturally appropriate access to benefits, and may not be adequately consulted in decision making.
Indigenous Peoples OP/BP 4.10	Yes	Since project sites are not known at this time, MoA will prepare an IPPF as part of the ESMF in order to ensure that in sub-projects are screened for ethnic minorities, and sub-project areas where ethnic minorities are present, MoE will conduct a social assessment and ensure that free, prior and informed consultations are held to reach broad community support. If target project locations are identified during preparation, a social assessment will be prepared by appraisal, and free, prior and informed consultations will be held. If locations and location-specific activities are not identified during preparation and this is left to project implementation, the social assessments under the current ADSP project will be combined and updated as an assessment of social risks in the agriculture sector, specific to the new project activities.
Involuntary Resettlement OP/BP 4.12	Yes	Rehabilitation and construction of test laboratories, post-harvest storage units and cold chain facilities are not expected to result in significant land acquisition impacts, especially since siting should be flexible for

June 20, 2018 Page 13 of 16

		construction of new facilities. The impacts should be moderate and manageable.
		Since siting of sub-projects is not known at this time, MoA will prepare a RPF in order to ensure that sub-projects are screened for land acquisition, and appropriate plans are prepared in cases where land acquisition is necessary. The RPF will also include protocols for voluntary land donation.
Safety of Dams OP/BP 4.37	TBD	The project will not finance construction of new dams, however, it is yet to be determined during project preparation whether it will include repairs / maintenance / rehabilitation of existing dams in which case the dam safety measures would be applied.
Projects on International Waterways OP/BP 7.50	TBD	Project target provinces and states are yet to be determined. ESMF will cover the provision of OP/BP 7.50 should project preparation discussions determine that the locations or activities subject to the policy are within the international waterway.
Projects in Disputed Areas OP/BP 7.60	No	The proposed project's ESMF will screen out and exclude any projects in disputed areas.

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Oct 10, 2018

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

MoALI- Department of Agriculture will prepare an ESMF, including a pest management plan, IPPF and RPF, before appraisal. If target project locations are identified during preparation, a social assessment will be prepared by appraisal, and free, prior and informed consultations will be held. If locations and location-specific activities are not identified during preparation and this is left to project implementation, the social assessments under the current ADSP project will be combined and updated as an assessment of social risks in the agriculture sector, specific to the new project activities. These will be disclosed and consulted on after being cleared by the Bank. These instruments will be informed by the documentation and implementation experience of the on-going Agriculture Development Support Project (ADSP).

June 20, 2018 Page 14 of 16

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APPROVAL

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June 20, 2018 Page 15 of 16

June 20, 2018 Page 16 of 16