

The Republic of the Union of Myanmar

Global Agriculture and Food Security Program (GAFSP) Project Proposal (Fourth call for proposals)

Ministry of Agriculture, Livestock and Irrigation (MOALI)

January 2017

1. Summary of Overall Agriculture and Food Security Strategy and Associated Investment Plan

- 1. Since 2011, Myanmar is undergoing a triple transition, from a military regime to a democratic system; from a centrally-controlled economy to a market-driven one; and from decades of conflict to peace. It is estimated that at least 37% of the 51.4 million population live under the poverty line. Myanmar's stunting rate ranks 106 out of the 132 countries surveyed by UNICEF. It is among the top ten countries most affected by global climate risk. In this context, Myanmar is committed to improve the income and food and nutrition security of its citizens, particularly among the rural poor, by strengthening the enabling environment to support equitable growth through public and private sector investment and technical assistance in raising agricultural productivity, linking farmers to markets, and reducing risk and vulnerability associated with climate change. The Ministry of Agriculture, Livestock and Irrigation (MOALI) recently formulated the Agriculture Policy (Second Short Term Five Year Agriculture Policies and Plans) with its vision statement for the development of the agricultural system contributing to the socio-economic well-being of farmers and rural people and further development of the national economy.
- 2. The Agriculture Policy is based on the UN's Sustainable Development Goals (SDGs) and was developed after the new government came into office (1 April 2016) and after the merge of three Ministries (Ministry of Agriculture and Irrigation; Ministry of Livestock, Fishery and Rural Development and Ministry of Cooperatives) into the Ministry of Agriculture, Livestock and Irrigation (MOALI). MOALI's policy will be operationalized through the Agricultural Development Strategy (ADS) and its investment plan for 2017-2021. Work on the ADS and the investment plan started in August 2016 and went through a series of consultations. At the moment the ADS and the investment plan are in draft version and are scheduled to go through additional consultations in early 2017 before being finalized by the start of the next fiscal year (April 2017). Development partners started reengaging in Myanmar only recently due to the political situation and most ongoing projects are still in their first phase. The ADS benefitted from the inputs of all partners working in the agriculture and rural development sector and from the knowledge and lessons learned they developed in these recent years.

1.1 Overall Sector Strategy and Investment Plan

3. After more than five decades of stagnancy, isolation and decline, Myanmar's economy is at a crucial juncture. Myanmar's gross domestic product expanded by over 8 percent per year during the period 2010/11 to 2015/16. Over the same period agricultural GDP has expanded at an average growth rate of 3.2%. Myanmar remains a largely agricultural and rural economy. Agriculture, livestock and fisheries account for about 28% of GDP, and over two thirds of employment. Together these sectors are a key source of foreign exchange, earning over \$3.1 billion in 2015/2016 through exports of products such as pulses, rice, shrimp, livestock, and rubber.

- 4. The production of paddy rice continues to dominate Myanmar's agricultural production. Rice accounts for 45.7% of harvested area and 53.4% of the volume of major crops produced in Myanmar which was 28.2 million MT (2014/15). As a whole, the country has a surplus of rice and its rice self-sufficiency rate is estimated at around 168%.
- 5. Despite its success in rice production, Myanmar continues to face problems of low quality and productivity and lack of crop diversification. These problems contribute to high rate of rural poverty and food and nutrition insecurity. The Agriculture Policy addresses these challenges and serves as a roadmap to support an agriculture-led economic growth for Myanmar. Actions required to operationalize the Agricultural Policy are outlined in the ADS and in the Investment Plan.
- 6. The Agriculture Policy defines a number of core objectives including the following:
 - To improve **food security and safety**, and balanced diets intakeⁱ;
 - To ensure that farmers are **enjoying their rights** fully and experiencing the emerging economic benefits in person;
 - To modernize and improve the performance of the entire sector by supporting small scale farmers, livestock keepers and fisher folks gathered into **groups or cooperatives**, based on the newly gained knowledge and experience and in which women participation is incorporated;
 - To sustain the development of existing farmers' socioeconomic situation by planning and implementing programs of **rural road construction**, **rural infrastructure development**, **land use management and small scale production industry with the intension to sustain the development of existing farmers' socioeconomic situation**;
 - To assist in securing needed **technologies and financial** assistance from local and external sources for further improvement and development of crop, livestock and fish production sector as well as cooperative sector;
 - To enhance production of **high quality** grain, meat and fish products for external markets;
 - To improve and develop **agro-based industry**, small scale industries, and vocational education;
 - To assist in getting increased **access to local and external investment** sources for agriculture sector; and
 - To actively support the **coordination** work to ensure full participation by all stakeholders involved in poverty alleviation program, agriculture sector development program, and sustainable rural development program.
- 7. In order to realize these policy objectives, the formulation of the ADS builds on 12 basic principles. These principles include: 1) Clear definition of the roles of the private and public sector; 2) Smallholder farmers' rights and voice; 3) Emphasis on smallholder farmers and SMEs; 4) Food and nutrition security; 5) Inclusion; 6) Transparency, participation, and accountability; 7) Environmental and social sustainability; 8) Linkages among agricultural subsectors and between the agriculture sector and the agrifood sector; 9) Coordination for improved policy-making and implementation; 10) Integrated and effective MOALI structure; 11) Monitoring the effectiveness of policy implementation enhances accountability; 12) Regional planning.

- 8. Based on these principles, the ADS will facilitate the implementation of the Agriculture Policy through a process of accelerated agricultural sector growth that will be achieved through outcomes, outputs and activities that are based on three strategic pillars:
 - Governance: The rules, capacities, and functions that underlie all other measures.
 - **Productivity:** The institutions and practices that benefit farmers through sustainable increase in productivity.
 - **Competitiveness:** The investments and policies to modernize the agricultural system and link farmers and enterprises to growing domestic and international markets.
- 9. Activities to be respectively undertaken in the three strategic pillars will focus on creating an enabling environment that reflects the following characteristics: inclusiveness (both social and geographic); sustainability and resilience to climate change; development of the capacity of individuals and institutions; development of the private sector and farmer organizations; connectivity of farmers, second and tertiary producers as well as consumers to market infrastructure (such as agricultural roads, collection centers, packing houses, market centers), information infrastructure and ICT, and power infrastructure (such as rural electrification schemes, and renewable and alternative energy sources).

Outcome	Indicator	Current Situation	Target 5 years		
Enhanced Governance and Capacity of Institutions Responsible	Agricultural Growth	2% average annual growth	4% average annual growth		
for Agricultural Development					
	Land productivity (ag GDP/harvested area)	\$1,200/ha	Increase by 50%		
Increased Productivity,	Stunting (children under 5) Underweight (children under 5)	29.2% 18,9%	20% 10%		
Food and nutrition security and Farmers'	Labor productivity (ag GDP/ag labor)	\$1,600/labor	Increase by 50%		
Income	Water use efficiency	Crop yield in Kg/liter of water used	Improve by 10%		
	Soil organic matter	3%	4% organic matter		
	Organic production	Less than 1% of total production	3% of total production		
Enhanced Market Linkages and	Agribusiness GDP	xx% of GDP	2xx% of Agricultural GDP		
Competitiveness	Agrifood exports	\$ 2,400 million	\$ 3,865 million		

10. Key indicators for each pillar, both current and target, are summarized in the table below.

11. The Investment plan is aligned with the three pillars of the ADS. Of the MMK 2,290,308 million of the proposed investment, 34% (totaling around MMK 771,575 million or USD 564 million) will be funded through budgetary provisions of the Government. The private sector will contribute 3% (totaling around MMK 65,104 million or USD 47 million), some in-kind

and also by way of public-private-partnership that were identified during plan preparation. Farmers and farmers' organizations are anticipated to contribute around 2% (totaling around MMK 45,475 million or USD33 million), virtually all of it through in-kind outlays. The rest of the funding is expected to come from Official Development Assistance (around MMK 1,405,750 million or USD 1 billion).

5 year ADS investment i ian – sources of Funding							
	Source of Funding						
Pillars/Outcomes	Government	Private sector	Farmers	Donors	Total in Million Kyat		
OUTCOME 1 - Enhanced reputation of MOALI capacity of government to design, formulate and implement policies and plans and discharge functions.	58,260	500	14,765	59,882	135,812		
OUTCOME 2 - Increased agricultural productivity, food and nutrition security and income of smallholder farmers	453,597	51,529	29,370	707,390	1,241,886		
OUTCOME 3 - Enhanced market linkages and competitiveness of Myanmar farmers and agro- enterprises	259,718	13,075	1,340	638,478	912,611		
TOTAL in Million Kyat	771,575	65,104	45,475	1,405,750	2,290,308		
Share (%)	34%	3%	2%	61%	100%		

5 year ADS Investment Plan – Sources of Funding

1.2 Key Elements of the Policy Environment

12. A number of policies currently in place (and planned) in Myanmar support the investment plan. Several key policies fall under the authority of MOALI, while implementation oversight falls also under other line ministries. The table below provides a summary of specific policies relevant to the implementation of the investment plan.

Investments Plan	Current Policies
Pillar 1: Governance	
Assure sufficient budget for addressing land issues	National Land Use Policy: adopts international good practice for addressing land governance issues implemented through the comprehensive umbrella National Land Law National Land Law: allows farms under 10 acres greater flexibility to use paddy land for aquaculture and other cash crops Agriculture Policy: identifying new farm land development for landless, farm laborers, and
Dedicate resources to policy, M&E, coordination and participation	poor small farmers as a priority National Comprehensive Development Plan (NCDP): provides an overarching policy framework for coordination and participation Agriculture Policy: supports and promotes an open and sustainable development of the agriculture sector that responds to poverty alleviation, and food and nutrition insecurity
Food and nutrition security interventions	Agriculture Policy and National Action Plan for Food and Nutrition Security: address issues relevant to the access of adequate nutritious and affordable food, stunting and malnutrition reduction, establishing sustainable food systems, increase in productivity and income from agriculture, livestock and fisheries, and zero loss or wastage of food
Pillar 2: Productivity	
Reduce budget to Agriculture Mechanization Department (privatization of the stations)	Framework for Economic and Social Reform: introduces an open tender system to increase transparency and improve valuation in future privatization of state economic enterprises
Increase investment in REE (research, extension and	Agriculture Policy: one of the policy's mission is to develop sound research and extension service program and human resource development initiatives, but no single policy currently

education)	defines priorities and relevance of research, extension and education in the agriculture sector,
	and as a result occurs as a one-off and often an ad hoc way
Rationalize research and	The National Export Strategy: prepared in 2014 by the Ministry of Commerce, with support
extension towards	from the UN International Trade Centre and the German government. It is a five-year roadmap
prioritized value chains	of the needs and priorities for Myanmar's sustainable development through trade in the
	following priority sectors: beans, pulses and oilseeds; fisheries; forestry products; textiles and
	garments; rice; rubber; and tourism. This strategy recommends targeted investments for each
	export sector and addresses constraints in the business environment through cross-sector
	functions including: access to finance; trade information and promotion; trade facilitation and
	logistics; and quality management. It also aims to enhance innovation capabilities by
	businesses and trade support institutions.
Assure O&M for irrigation	Agriculture Policy: highlights the importance of and promotes renovation and maintenance of
infrastructure	existing irrigation infrastructure
	National Water Policy: defines usage of water and establishment of irrigation infrastructure,
	but does not respond to issues related to O&M of irrigation infrastructure
illar 3: Competitiveness	
Assure sufficient resources	Myanmar Investment Law: the government has approved a bill in September 2016 on the
for prioritized value chains	Myanmar Investment Law (MIL), which is aimed at promoting foreign investment. The bill is
	expected to take effect with the new fiscal year in April 2017, according to a Myanmar
	Investment Commission-MIC's announcement. The new investment law, which combines the
	Foreign Investment Law drafted in 2012 and Citizens' Investment Law drafted in 2013,
	includes tax breaks which are different from those stipulated under the former. By-laws and
	related safeguards on the implementation of the law are currently being prepared. The ADS
	will align agribusiness investment with the safeguards under the MIL.
Establish innovation,	Small and Medium Enterprise Development Policy: supports the development of human
competition, and matching	resources, technology innovation, access to finance, infrastructure development, market access,
grant funds for SME	appropriate taxation and procedures and creating a conducive business environment
0	Agriculture Policy: supports and provides seed money for establishing small scale industry is
	a core activity
Sufficient funds to quality	Agriculture Policy: sanitary, phytosanitary, quarantine, quality inspections, and safety
and safety assurance	assurance are covered under the Plan
systems	National Drug Law, National Food Law, and Public Health Law: the three laws form the
	backbone of food and drug qualify and safety assurance in Myanmar
Assure O&M for rural	Rural road strategy: it includes different modalities and budget sources to cover O&M
	The Highways Law: ensure systematic maintenance of road for safety and durability
roads	

1.3 Government Commitment to Agriculture and Food and Nutrition Security

- 13. MOALI budget for 2016-17 is MMK 1,019,024 million. Three departments (Department of Rural Development; Department of Irrigation; and Agricultural Mechanization Department) account for about 94% of the budget. The Department of Rural Development (DRD) accounts for nearly half of MOALI budget. This large budget allocation toward DRD reflects a systemic approach taken by MOALI to link the agricultural sector (including crops, livestock, and fisheries) with farm and off-farm activities that are enhanced by improving connectivity (e.g. rural roads and electricity) which will lead to the emergence of a vibrant rural economy. This is essential not only for increasing farmer's income, but also to ensure employment and diversified income for the poor and landless farmers.
- 14. The DRD's mission is to reduce poverty through an inclusive and sustainable development approach that strengthens and makes community-based organizations more resilient. Specifically, about 30% of DRD's 2016-17 budget is allocated towards community-based projects which directly address poverty and food and nutrition insecurity.
- 15. The government has closely considered the principles for responsible investment in agriculture and food systems as outlined by the Committee on World Food Security (CFS).

These principles are reflected in a number of different activities and policies currently being implemented by various parts of the government as follows:

	The principles	What action is Myanmar taking to respond to these principles
		The Agriculture Policy, the Agriculture Development Strategy and the
		National Action plan for Food and Nutrition Security, 2015, address how to
1	Contribute to food security and nutrition	respond to food security and nutrition issues
		The Agriculture Policy, the Rural Development Strategic Franework and the
	Contribute to sustainable and inclusive economic development and the	Agriculture Development Strategy address how to respond to inclusive
2	eradication of poverty	economic development and poverty reduction
3	Foster gender equality and women's empowerment	The Farmland Law, 2012, gives men and women equal access to land
4	Engage and empower youth	A Youth Policy is being developed by the Ministry of Social Welfare, Relief and Resettlement
5	Respect tenure of land, fisheries and forests, and access to water	Currently being considered under a revised VFVL Law
	Conserve and sustainably manage natural resources, increase resilience,	Myanmar Climate Change strategy and Action plan (2016-2030) addresses
6	and reduce disaster risk	these issues
	Respect cultural heritage and traditional knowledge, and support	
7	diversity and innovation	The new government established a new Ministry in charge of ethnic affairs
		The Agriculture Policy, the Agriculture Development Strategy and the
		National Action Plan for Food and Nutrition Security, 2015 address how to
8	Promote safe and healthy agriculture and food systems	promote safe and healthy agriculture and food systems
		Establishment of a system of arbitration is being considered to introduce a
	Incorporate inclusive and transparent governance structure, process	mechanism for agricultural land disputes to be settled through a judiciary
9	and grievance mechanisms	system rather than by the State
10	Assess and address impacts and promote accountability	Anti-corruption Law, 2013

Principles for responsible investment in agriculture and food systems

Source: Principles as defined by CFS

- 16. In line with its vision and mission statement to boost production and profitability in order to improve the socioeconomic life of its people, an increasing portion of MOALI's budget has focused on expanding the availability and accessibility of mechanized equipment through the Department of Mechanization and its 117 stations spread throughout the country. The introduction of mechanized equipment and rehabilitation and expansion of irrigation systems, combined with improved access to certified seeds and seedlings, breeds, and mother stock for livestock and aquaculture have contributed to an impressive increase in yield rates for many of the country's major crops, livestock, and aquaculture.ⁱⁱ This growth is particularly impressive taking into consideration that unlike other countries, it is only in recent years that Myanmar has had the benefits of financial and technical assistance provided by development partners.
- 17. With respect to MOALI's focus on agriculture research intensity, the Agriculture Science & Technology Indicator (ASTI) figures are from 2005/06, and somewhat outdated. According to these figures, 12 agencies were involved in agriculture R&D, employing approximately 619 full-time equivalent staff and spending about MMK400 million.ⁱⁱⁱ Today, MOALI's Department of Agriculture Research (DAR) alone has a staff of 1,150, in addition to divisions and subdivisions within MOALI engaged in research and development:^{iv}
- 18. In addition, Myanmar currently is home to 12 state agricultural institutes, of which 7 offer courses in crop specialization, and the Yezin Agriculture University, with a teaching staff of approximately 446. These institutions turn out around 6,000 graduates with degrees and certificates each year.^v

19. Development partners continue to play an important role in supporting the capacity development of research, extension and farmer organizations in Myanmar. Between 2010-15, 23% (USD29,606,091) of the USD131,352,122 in development finance for the agriculture sector received by the country went into supporting the capacity development of research, extension and farmers' organizations. This figure tripled to USD\$89,401,930 for 2016-22.

1.4 Process by Which the Strategy and Investment Plan Were Developed, and Where Relevant, Updated

- 20. For the development of the ADS, the investment plan and the GAFSP proposal, MOALI established a task force comprising key government departments and national and international consultants. Working sessions and brainstorming meetings were organized every week to formulate the ADS framework, discuss institutional arrangements and key issues.
- 21. In addition to the weekly meetings, a series of national consultations took place between September and December 2016. Participants comprised farmers' representatives, civil society, members of parliament, development partners, private sector and government officials from related Ministries. Details of the consultation process are provided as an annex.

1.5 Implementation Arrangements and Capacity to Implement

- 22. The implementation of the ADS will require the concerted effort of various organizations from the government, civil society, private sector, and development partners. The National Economic Coordination Committee will provide overall policy and planning coordination, and MOALI will lead the implementation. MOALI comprises 114,627 staff.
- 23. Overall, the ADS will be implemented through existing Government structures. Recognizing the complexity and multi-agency requirements to implement the ADS, technical assistance and capacity building will be undertaken to strengthen existing agencies to assist with planning, coordination, implementation, and monitoring. Civil society will have an important role in building capacity. The private sector will be a key partner for activities related to value chain and market development.
- 24. Overall coordination of policies and programs will be achieved through the National ADS Coordination Committee (NADSCC) which is based on existing coordination mechanisms (such as National Planning Commission, State Planning Commissions, District Planning Commissions, Township Planning Commissions); overall implementation of programs and projects will be undertaken under the overall guidance of the National ADS Implementation Committee (NADSIC). The NADSIC will serve as the Steering Committee for the ADS Implementation Support Unit (ADSISU) which will be established under MOALI and will act as the unit responsible to support implementation of the ADS during the initial 5 years.

2. Specific Proposal for GAFSP Financing

2.1 Specific Objectives, Expected Results, and Target Beneficiaries

25. The **project development objective** of the GAFSP project will be to create an enabling environment that reduces the incidence of poverty, malnutrition and food insecurity among the rural poor. The quickening of an inclusive structural transformation of agriculture that empowers the poor, and particularly women, will be achieved by **improving access to land, water, finance and skills necessary for the rural poor to engage in productive livelihoods activities**. This will, in turn, reduce food and nutrition insecurity, and increase household and income diversification leading to greater resilience. The **Expected Results** are illustrated below:

Objectives	Expected Results	Links to ADS
Deliver support services that increase income, and reduce malnutrition and food insecurity	 20% increase in household income from on and non-farm livelihoods activities 9% decline in malnutrition among children under 5 years 15% decline in food insecure households 	 Pillar 1 (Governance): Improved food and nutrition security Pillar 2 (Productivity): Adoption of climate smart agriculture and commercialization of smallholder farmers.
Increase women and poor households access to land, water, and financial resources	• 100,000 women and poor households	Inclusion of women and poor households in the rural economy Pillar 1 (Governance): Improved access to land; Pillar 2 (Productivity): Improved access to water; Pillar 3 (Competitiveness): Improved access to finance that provides opportunities to procure mobile agricultural services, and quality inputs
Create opportunities and provide targeted support specifically to women and poor rural farmers to engage in the rural non-farm economy	• 20,000 women and poor households integrated into the rural non-farm economy	Pillar 3 (Competitiveness) : Promotes the rural non-farm economy where women and youth will find the greatest employment opportunities
Build technical, planning, implementation and management capability of institutions at the national, regional/state, township and household/farm level to address rural poverty, malnutrition and food security	 100% of MOALI staff in project area trained 100% of project activities are based on pro-poor, food and nutrition security focused and gender-sensitized participatory techniques Local gender disaggregated information system and statistics Agro-ecological database and land use plans available for target areas, and used for planning and management purposes Annual plans including participatory inputs of stakeholders produced and used for implementation and M&E of activities 	 Pillar 1 (Governance): Builds capacity at the national and subnational level in planning, policy, coordination, participation, land administration, food and nutrition programs, and monitoring and evaluation. Pillar 2 (Productivity): Builds capacity at different level in research, extension, farmer organization, climate resilience, good practices, water management, soil nutrient management, O&M of irrigation systems Pillar 3 (Competitiveness): Builds capacity in value chain development, supply chain management, contract farming, linking smallholders to markets, trade negotiation, food safety assurance, competitiveness analysis, agrifood SME development, O&E of road.

- 26. **Target Beneficiaries:** the GAFSP Project will target its support to women and rural poor households in the Central Dry Zone (CDZ) who are landless or are farming less than 2 hectares.
- 27. The Project will cover up to eight townships in the CDZ. The selection of townships will be defined through a participatory, pro-poor, gender-inclusive approach. Within the 8 townships, the estimated number of direct beneficiaries will be 100,000 poor people, of which half will be women. Particular focus will be on female heads of households where more than one half of the 1.1 million poor and landless living in CDZ are women.
- 28. The capacity of around 10,000 members of community organizations and civil society organizations will be strengthened. In addition, there will around 80,000 technical staff benefiting from the training programs.

2.2 Justification for the Overall Approach

- 29. Over 50% of the CDZ's population^{vi} derives an income from farming and the region is Myanmar's primary producer of important crops, such as mung bean, sesame, and pigeon pea. However, farmers in the CDZ face mounting challenges that threaten production of these key crops, such as insufficient rainfall, shortage of labor, increased foreign competition, and a lack of access to quality seed. Furthermore, the CDZ poor are challenged by:
 - Low agriculture productivity (yield on beans/pulses/oilseeds is significantly low);^{vii}
 - Inadequate access to land, water and finance; viii
 - Poor access and quality of extension support;^{ix}
- 30. Nearly 25 percent of the CDZ's population is under the national poverty line and about 39% are landless. The CDZ rural poor are also affected by a high incidence of malnutrition and food insecurity. In particular, the high incidence of malnutrition among children under five years old (stunting: 27.5%, and underweight: 27.2%) is problematic to the future of CDZ.^x
- 31. The following graph illustrates the long period of food insecurity faced by the rural poor in the CDZ—nearly 40% of the rural population faced problems meeting food needs in the past 12 months^{xi}. For the target beneficiaries, lack of livelihoods (43%) is the key driver of poverty, and thus social assistance and casual labor (38%) are their primary coping mechanisms. In this regard, access to livelihoods through access to productive agricultural resources is expected to respond effectively to addressing poverty among the target beneficiaries.



- 32. The fact that Myanmar retains its position as a top five world producer for five key crops (mung bean, pigeon pea, chickpea, sesame and groundnut, all of which are grown in the CDZ), and its proximity to the large and buoyant export markets of India, China and ASEAN provides the GAFSP's targeted beneficiaries with most likely its biggest opportunity to get out of poverty and improve their food and nutrition security.
- 33. The GAFSP proposal is guided by principles of MOALI's Agriculture Policy, and actions to be implemented under the Agriculture Development Strategy (ADS), and is in line with the Agricultural Investment Plan. Gender issues associated with this Project will be guided by the principles outlined in the National Strategic Plan for the Advancement of Women (2013-2022). With respect to nutrition, the Project will be guided by the principles prescribed in the National Plan of Action for Food and Nutrition Security, and seek close collaboration with the SUN-MSP (Scale-Up Nutrition Multi-Stakeholder Platform) led by the Ministry of Health and Sports.
- 34. The MOALI recognizes the significance of rural non-farm employment (RNFE) as part of the solution to poverty and food security, modernization of agriculture and the transformation of the rural economy. Rural non-farm income represents a growing percentage of total income among poor rural households^{xii}. RNFE is a significant part of the livelihood strategies of the rural poor, and the building of assets in the rural poor and communities will strengthen the multiplier effects of the Project's agricultural investments. Though there is no government policy regarding the development of the rural non-farm economy, MOALI is guided by the ADS and committed to working across ministries to make the inclusion of the RNFE as an integral part of the GAFSP Project.
- 35. In order to maximize the impact of the GAFSP funds, the Project will coordinate and leverage successful existing projects and activities that support food and nutrition security and poverty reduction in the CDZ. The following projects have laid a solid foundation upon which to build:
 - Land Administration and Management Program (LIFT/UNHABITAT)

- Development of Water Saving Agriculture Technology in Central Dry Zone (JICA)
- Promoting an Integrated Home Garden and School Garden Approach for food and nutrition security in Myanmar (FAO)
- Backyard Greenhouses (LIFT/TDH)
- Rural Financial Inclusion (LIFT/Rural Microfinance Institutions) and Agribusiness Finance Program (LIFT/Yoma Bank)
- 36. The Project will be implemented under a twinning arrangement with the ADB Climate Friendly Agribusiness Value Chain Sector Project (CFA) in the CDZ which is currently under design and is scheduled to be implemented by MOALI in mid-2018 and funded by ADB for an amount of approximately USD30 million. The integrated nature of the population in the CDZ makes it essential that the Project develop a singular/shared vision with the ADB CFA project which will make investments in areas such as post-harvest processing, food quality and safety, farm-to-market roads, water management, green financing, and others which the GAFSP Project will complement, and specifically add value to by making these investments accessible and extending the value chain to the poor (refer to table below). In addition, the shared project management under the proposed twinning arrangement will expand access to additional expertise, as well as help reduce administrative costs thereby allowing greater share of Project funds to be directed towards support of the beneficiaries.

			GAFSP expanding reach of
	CFA	GAFSP	CFA investment to the poor
Target area: CDZ	Х	Х	
Target beneficiaries			
Farmers with land	Х		
Farmers with land, but below the poverty line		Х	Х
Landless		Х	Х
Cropping			
Specialization	Х		
Diversification		Х	
Investments in post-harvest processing	Х		Х
Promote non-farm income	Х	Х	Х
Investments in food quality/safety	Х		Х
Farm mechanization	Х		Х
Farm-to-market roads	Х		Х
Water management	Х	Х	Х
Climate smart agribusiness policy/standards	Х		Х
Capacity building for climate smart agriculture/agribusiness	х		х
Green financing (crop insurance)	Х		Х
Access to land		Х	
Access to water	Х	Х	
Access to finance		Х	
Strengthening community-based supply chain		Х	
Market information network		Х	
Local value added	Х	Х	Х

Links Between Investments and Activities under Climate Friendly Agribusiness Value Chain Sector Project (CFA) and GAFSP

2.3 Activities to be Financed and Their Justification

37. The proposed Project will invest in five components outlined in the GAFSP Framework Document that are considered high priority areas for MOALI, and are integral components in the ADS and the Investment Plan. The component areas include the following: 1) Raising Agricultural Productivity; 2) Linking Farmers to Market; 3) Reducing Risk and Vulnerability; 4) Improving Non-Farm Rural Livelihoods; and 5) Technical Assistance, Institution Building and Capacity Development.

Component 1: Raising Agricultural Productivity

Activity 1: Access to Land

- 38. The lack of access to agricultural land is considered a driver of poverty in the CDZ. MOALI data indicates that there are approximately 229,686 acres of fallow agricultural land, and over 7.5 million acres of reserved forest, other wood land and culturable waste lands in the CDZ.^{xiii} Parts of these lands will be made available to the rural poor for agricultural production. This will first require that maps be updated in order to develop a transparent and sustainable land use plan.^{xiv}
- 39. The Department of Agricultural Land Management and Statistics (DALMS/MOALI) has prioritized the development of land use maps for the CDZ. But, DALMS currently lacks funding to complete satellite imaging of the CDZ, without which land use zoning and land classification cannot be defined. The GAFSP project will undertake the following activities:
 - Support DALMS to prepare a digitized land use map and develop a crop suitability map of the target area;
 - Support government ministries to facilitate transparent and equitable issuance of Land Use Certificates to target beneficiaries;^{xv}
 - Support poor farmers secure land use rights;^{xvi} and
 - Train farmers in land management and land development.
- 40. A community-based, gender-sensitive participatory process will be used to identify and prioritize land recipients, while international best-practice in land reform will guide implementation of the land distribution process.^{xvii}
- 41. Activity 1 is estimated to result in the issuance of approximately 40,000 Land Use Certificates to the target beneficiaries. Based on an assumption that each beneficiary will receive a minimum of 5 acres, the estimated geographic coverage of the proposed Project will be approximately 200,000 acres.

Activity 2: Access to Water

42. Water is arguably one of the most important factors of production for the targeted beneficiaries in the CDZ. Irrigation is changing the world for smallholder farmers through widespread adoption of small-scale pumping (surface and ground water). Individual irrigation using small pumps to access a mix of surface and groundwater sources ("water

scavenging") is emerging rapidly - direct pumping from primary canals, shallow aquifers and to a lesser extent on-farm storages.

- 43. The Ayeyarwady river system lies within and is connected to a large alluvial aquifer system underlying the floodplain in the CDZ. For the targeted beneficiaries, pumping directly from the alluvial aquifers surrounding the rivers could be a viable alternative to other approaches to bring irrigation from source to infield. Rather than pumping large volumes from the river at a single point, and distributing water through canals, water can be pumped directly from shallow groundwater by the farmer, at the point of use. This has multiple benefits:
 - The aquifer effectively provides storage and transmission "infrastructure," so that the only required infrastructure are tube wells and small pumps;
 - Farmers have full control over water delivery, allowing flexible cropping systems;
 - Water could be available over larger areas since availability is controlled by location of the aquifer;
 - Well drilling and pumping costs will be relatively low (shallow depths (up to 250 feet) and soft-rock drilling) since only the alluvial aquifer is targeted;
 - Pumping costs are low since there are lower transmission losses and only the required volumes are pumped; and
 - Solar pumping could be a viable option since only relatively low lift is needed.
- 44. The Project will also build on JICA's Project for Development of Water Saving Agricultural Technology in the Central Dry Zone, which has successfully introduced water-saving irrigation technologies adapted to the CDZ.
- 45. The Project will focus on delivering effective management and utilization of surface and ground water, e.g. water harvesting, small-scale irrigation systems, and portable lift irrigation pump sets. The economics of delivery from source to infield is central to the adaptation of this relatively new technology, and will be analyzed before investments are made.
- 46. Accessing ground water requires responsible management. The assumption that the alluvial aquifer can be pumped substantially because it is connected to the river must be validated and actual recharge quantified. Based on this understanding, regulation of the number and spacing of wells may be needed to prevent local drawdown and conflict between users. Water quality in the alluvial aquifers is generally good, but it will be important to check salinity, arsenic and iron levels. An assessment covering the above points will be undertaken in early 2017. Activity 2 is estimated to directly benefit 80,000 women and poor households.

Activity 3: Access to Improved Seeds and Agricultural Machinery

47. While crop yield rates continue to be low, production and supply of improved beans/pulses and oilseed varieties, currently being produced by MOALI, is very limited in quantities (less than one-half of one percent of demand). LIFT is investing up to USD 10 million in a public private sector partnership to establish a commercial seed production, processing and marketing cooperative in early 2017. The Cooperative will produce the next generation of registered and certified open pollinated beans/pulses varieties from breeder seed being grown by MOALI. This will, in part, address one of the key constraints in agricultural productivity. The Project will provide conditional seed transfer for the first year of planting with training

on how to be successful at seed saving, thus increasing their gross margins and building their assets. MOALI will coordinate the supply of breeder seed to the Cooperative, and act as a marketing channel to supply quality seed to targeted beneficiaries. ADB CFA project in coordination with LIFT will invest in infrastructure for improved seed production.

- 48. Access to agricultural mechanization increases labor productivity. The increase in agricultural labor productivity results in income changes, employment generation and rural non-farm economy multiplier changes. Targeted beneficiaries have small landholdings, often with some degree of land fragmentation. In order to increase their agricultural production, they will be able to increasingly outsource power-intensive stages of production, like harvesting and land preparation, to specialized mechanization service providers who travel throughout the country and provide these services at competitive prices—mobile agricultural service providers. A system of referrals to mobile service providers will be established with the government extension workers.
- 49. The development of mobile agricultural service providers is supported by the LIFT/Yoma Bank Agribusiness Finance Project (AFP). The AFP provides hire-purchase and small enterprise loans that enable rural entrepreneurs to set up businesses that provide agricultural services like tillage, threshing, land leveling, harvesting transportation or post-harvest processing, which speed up the structural transformation essential for the modernization of the CDZ's agriculture.
- 50. Targeted beneficiaries are in particular need to develop land that is transferred to them. They are gaining access to a non-productive asset land that is not under cultivation. During the first year, all land preparation will be provided as a service transfer partially subsidized by the project. The access to mechanization for land preparation will convert the non-productive asset to a productive asset that earns returns and builds beneficiaries' assets.
- 51. Activity 3 is estimated to directly benefit 80,000 women and poor households.

Component 2: Linking Farmers to Market

52. There is a perceived lack of community/village based aggregation, and storage facilities. As the target beneficiaries begin to produce for the market and become more food secure, demands for linking to markets are expected to increase. To address these challenges, the Project proposes to engage in three activities to improve market access and price negotiation capability of poor farmers, and ensure access to finance required for crop production, processing and trading.^{xviii}

Activity 1: Community-level Supply Chain Development

53. Individual smallholder farmers are often restricted from gaining access to local supply chains due to insufficient volume and quality of crop and products. While in some areas of the CDZ, formal and informal supply chains have evolved through traders and community-based brokers, there appears to be a need to strengthen these supply chains through deepening interaction between farmers, traders, input suppliers and suppliers along the supply chain to improve market access and efficiency.

- 54. Through community-based organizations^{xix}, the Project will improve efficiency of local supply chains and crop aggregation schemes specifically to support smallholder farms and farmer groups (including women's groups) with limited access to markets and lack of leverage to negotiate competitive prices. The Project will deliver support to beneficiaries through the storage and handling facilitates that will be established by the ADB CFA project as crop aggregation points, and will provide technical training to local aggregators in areas such as crop handling and storage, marketing and market information, and bookkeeping to ensure that participating farmers receive competitive prices for their crops. The Project will further capitalize on the quality management infrastructure and on the storage and handling investments to be developed under the ADB CFA project to build capacity of local aggregators to address key quality control challenges along the farm-to-market supply chain.
- 55. An overarching principal before investing in processing, storage, handling and agricultural services will be to first assess what is already operating, and what the threshold investments are for the scale and technology needed to compete and be financially sustainable. There already exists a dense network of wholesalers and brokers in the CDZ (that have increased as production in beans/pulses has increased over the past decade), together with their investments in processing, transportation and warehouses.
- 56. This activity aims to benefit at least 50% of the beneficiaries (approximately 50,000 beneficiaries half of which will be women or female heads of households).

Activity 2: Market Information Network

- 57. The use of SMS text message for market transactions is not new to Myanmar. The proposed Project will facilitate the linkage of existing market price information networks between local markets and traders, with the target area/beneficiaries. Multiple relationships between market intermediaries (traders) operating in local/regional markets and farmer groups to transmit crop specific market prices on a regular basis using SMS text messaging already exists and can be expanded. The Project will work with a number of market information systems, e.g. Greenway and Shwe Thee Nha.
- 58. There is already evidence of a quiet revolution in the structural transformation of agriculture, e.g. trader groups in Magway are providing/advertising a phone number for farmers to call and get the latest pricing information. The Project anticipates 100% of the beneficiaries using the market information network to help negotiate markets and market prices for their crops and products.^{xx}

Activity 3: Access to Finance

59. The enormous gap in access to financial services remains one of Myanmar's most pressing development challenges^{xxi}. Improving access to finance for unserved and underserved market segments is critical to expanding rural households' economic opportunities, while generating positive social and economic benefits for Myanmar. The Myanmar government's response has been to make inclusive finance a priority. The government has articulated its position in the National Strategy for Poverty Alleviation and Rural Development (2011), the Strategic Framework for Rural Development (2013) and Microfinance Law 2011.

- 60. The Project will make investments to deepen the CDZ rural financial market and increase the access to financial services for the targeted beneficiaries, particularly financing for non-paddy agricultural production (beans/pulses and oilseeds). Currently, financing for non-paddy agricultural production by Myanmar Agriculture Development Bank (MADB) is one-tenth of what is provided to lower return, lower value paddy.
- 61. The Project will capitalize on the existing rural finance infrastructure (e.g. PACT Global Microfinance, Proximity Finance, and Yoma Bank). Both PACT and Proximity Finance are financially sustainable MFIs with deep penetration throughout the CDZ.
- 62. The biggest constraint to expanding rural finance is the lack of capital. The current macroeconomic environment in particular, currency exchange volatility has made foreign direct investment to microfinance institutions unattractive. Though deposit-taking is now legal for some microfinance institutions (as of November 2016), it will be several years to start seeing significant growth in savings mobilized that can be intermediated. In the short- to medium term, the Project will invest funds to groups of targeted beneficiaries, who will, in turn, "invest" or deposit funds with existing MFIs to manage and provide financial services.
- 63. Activity 3 aims to engage 100 percent of target beneficiaries (at least half of them women) to gain access to responsible finance through the Project.^{xxii}

Component 3: Reducing Risk and Vulnerability

Activity 1: Production of Nutritious Foods

- 64. The Project will promote a more diversified and nutrition-sensitive farming system that maximizes the contribution of agricultural production to nutrition. An example of this is the LIFT/Terres des Hommes (TdH) project and the FAO integrated home garden project. Terres des Hommes is successfully working in 45 villages in Magwe and Mandalay Regions introducing hydroponic greenhouses and drip irrigation schemes at household level. In the villages ten to thirty percent of the households run these greenhouses and supply the entire village with fresh vegetables. The benefit of these specialized home gardens are in improved nutrition of the children and other family members, in savings (not buying vegetables from travelling traders) and selling parts of the production in their villages. The main difference to conventional home gardens is the year round production of fresh vegetables and the very low water requirement that can be met with the existing ponds and wells in the villages.
- 65. This, combined with household level small livestock rearing and nutrition education for behavioral change promoted by FAO, is expected not only to diversify the household income sources, but also increase the intake of nutritious foods among the target beneficiaries while diversifying the composition of their dietary intake away from rice (81% of calories derived from rice) to include animal protein and locally grown vegetables and fruits. The promotion of crop diversification and small-scale livestock production is aligned with one of twenty prioritized Core Nutrition Action under the Government's multi-stakeholder platform (SUN MSP). This activity is expected to reach at least 80,000 beneficiaries (most of them women and children).

Component 4: Improving Non-farm Rural Livelihoods

66. Local value added processing can be a key investment for diversifying the income stream, and in turn, reducing the impact of market and climate cycles on poor households. Target beneficiaries will benefit directly from the ADB CFA project investments in community-based processing, storage and handling facilities. But, there are challenges for village/household level to produce products and be competitive in the market, and challenges of redundancy with systems already functioning at township and district level. Therefore other household level small-scale investments in primary value added services will be promoted under the Project, particularly to ensure that women have access to alternative income generating opportunities in addition to farming.

Activity 1: Rural Non-Farm Rural Employment

- 67. The majority of non-farm employment is in services and this is because there are typically low entry barriers for services. There are a number of agriculture-related services that include both value added processing and other services that are in short supply and ripe for small business investment that can be owned and/or employ women in rural areas of the CDZ.
- 68. There are a number of small businesses providing agriculture-related services in the CDZ that are in heavy demand, e.g. mobile labor teams for land preparation, groundwater tube well drilling and maintenance services, and lift irrigation pump sets and lay flat piping.
- 69. The project will carry out a rural investment climate assessment to gain greater further insight for other location-specific investments that there is a demand for. For example, traders/millers are very interested in obtaining higher quality beans/pulses—moisture, cracking, discoloration, breakage susceptibility, mold and mycotoxin count, pesticide residual and foreign matter. Supporting the development of agriculture-related services for drying and cleaning has immense promise.
- 70. As part of the assessment, trainings will be identified and provided by the project to upgrade business skills, and linkages to rural financial institutions (microfinance) for these small services businesses.
- 71. A crucial perspective in developing service enterprises in general, and processing in particular, is to take into account that the township-town-village cluster is an integrated system, not a series of fragmented parts. No part of the system can operate independently of the others. Medium sized processing enterprises in towns alleviate poverty in the rural areas both through local employment and from the radiating demands for products to use as throughput in the processing plants. The latter, in turn, is crucial to spur crop diversification locally.
- 72. The Project anticipates at least 20% of the beneficiaries with over 50% of them women, engaged in rural non-farm employment.

Component 5: Technical Assistance, Institution Building and Capacity Development

73. Myanmar is in a transition phase where an open and transparent governance structure is being mainstreamed that reflects a more inclusive and participatory process as the backbone of government policies and strategy. Likewise, strengthening institutions and building capacity of public and private sector stakeholders through a wide range of technical assistance lies at the heart of implementing successful programs that respond to poverty and food and nutrition security challenges faced by the poor. The Project will build technical, planning, implementation and management capability of institutions at the national, regional/state, township, and household/farm levels.

Activity 1: Capacity Building for Sector Strategy, Investments and Implementation

- 74. Strengthening the capacity and technical expertise of government staff, NGOs, communitybased organizations, farmers and private sector is essential for the effective implementation of the ADS, the Investment Plan, and the GAFSP Project. The Project aims to make substantial contributions toward this end by exposing stakeholders to a more evidence-based transparent and inclusive risk-informed decision making process through targeted training and peer-to-peer learning processes. Stakeholders in the agriculture sector have had little training, particularly in areas such as participatory and gender inclusive process, planning and implementation. In this regard, the Project will include a wide range of targeted training activities that cater specifically to the needs of relevant stakeholders at every level of government, NGOs, community-based organizations, private sector, and farmers.
- 75. The Project will also explore the option of establishing scholarship programs for qualified government staff in target issue areas that can help build long-term capacity of MOALI. At the government level, MOALI, has limited capacity, both with respect to budget and the capacity of its staff. As the primary focal point of implementation activity, the Project will provide budget and technical assistance to support the Department of Planning (DOP) at the Union level. The Project will assist the DOP develop its capacity, particularly in areas such as implementation plans, and project facilitation and management.
- 76. Equally important will be the Project's focus on delivering training for farmers through farmer-field schools and demonstration farms that cater to and reflect the needs of poor farmers. The Project will give specific focus on building capacity of stakeholders at the township and village levels where project implementation capacity is low. At the same time, the Project will also ensure that access to training is made available to private sector stakeholders with a specific emphasis on promoting transparent market transactions.
- 77. Of particular focus is the LIFT/International Fertilizer Development Center (IFDC) project that improves the knowledge of farmers in conservation agriculture and farm productivity by training agricultural input suppliers to provide better services (advisory services and mechanization) to their customers ("Dry Zone Agro-Input and Farm Services Project"). Retailers are supported by government agricultural extension workers helping in the advisory services and setting demonstration field and field days. IFDC reaches 50 retailers, 100 extension officers and 30,000 farmers with their training, field days and messages. Already visible are better managed retail shops that invest in new services, a closer collaboration of

retailers with the official extension officers and a high adoption rate by farmers who are keen to implement what they have learned.

78. Moreover, the Project will emphasize the development of human resources among female workers and staff at all levels of project intervention, and ensure that those receiving training will remain in the project area for the duration of the proposed Project.

Activity 2: Enhancing Program Design, Monitoring and Evaluation

- 79. The lack of data and information, particularly with respect to poor farmers, continues to undermine MOALI's efforts to introduce a strong evidence-based planning process. The Project will support MOALI develop a local gender disaggregated information system which includes statistics, agro-ecological and climate risk database and land use plans. The focus of the Project will be to build the competence of MOALI staff using gender disaggregated data as the foundation for developing a gender-sensitive and inclusive planning process, agriculture development plans, and food and nutrition approaches that respond to the needs of poor farmers. The analytical activities will be guided by the principles prescribed in the National Strategic Plan for the Advancement of Women (2013-2020) issued by the Ministry of Social Welfare, Relief and Resettlement.
- 80. Moreover, analytical skills at all levels of government continue to be limited. In this regard, the Project aims to support MOALI in a number of areas including strengthening analytical capacity, implementation of adaptive research techniques, participatory and gender sensitive methods and planning, and M&E.
- 81. Data collected and analyzed through the Project will be used as a management tool to support the DOP and other departments within MOALI to refine and modify their respective planning, technical assistance, human resources and investment strategy to more effectively meet departmental objectives that contribute to MOALI realizing the goals outlined by the Agricultural Policy and the Agricultural Development Strategy.

2.4 Implementation Arrangements

- 82. The twinning arrangements with the ADB CFA project will ensure efficient project management with one joint Project Management Unit and broader international expertise and experience in project management. In addition, the Project will ensure complementarity and effective project implementation by coordinating with on-going donor initiatives and projects, and making full use of existing knowledge, skills and capacity in the CDZ. The lead implementing agency will be the Department of Planning (DOP) within MOALI, since planning and coordination between various departments within MOALI is already a part of DOP's mandate. Furthermore, DOP is the focal point within MOALI for donor-funded projects.
- 83. The Project proposes to establish within DoP a joint Project Management Unit (PMU) with the ADB CFA project, headed by a National Project Director. Members of the PMU will consist of assistant director level staff from relevant departments within MOALI. The primary functions of the PMU will be project management, M&E, analysis and reporting. Local and international TA experts will be working as part of the PMU on all components.



GAFSP Implementation Arrangements

- 84. At the township level, the Project proposes to form implementation teams consisting of MOALI field staff and community-based organizations, whose responsibilities will be project implementation, data collection and reporting, and technical support to beneficiaries. MOALI has approximately 7,516 extension officers in the field throughout the country, of which 2,630 are stationed in the CDZ. These extension officers themselves will receive extensive training, but will also work as an integral part of the implementation team to train and build capacity of beneficiaries. Even with the relatively large number of extension officers in the CDZ, there are an estimated 1.1 million poor and landless in the CDZ. This would mean that each extension officer would have to be responsible for supporting and overseeing nearly 430 poor and landless households, which is not viable. These figures suggest that additional human resources will be required to successfully implement the proposed Project. In this context the Project will work closely with civil society organizations, national and international TA experts and build capacity of community-based organizations and local service providers (including private sector) to help deliver support services to the target beneficiaries. The community-based organizations will liaise and coordinate their work with the township level Project implementation team and extension officers.
- 85. A project steering committee will be established at the Union level led by the Deputy Minister of MOALI and comprised of Direct Generals from each of the relevant departments to ensure effective coordination both within MOALI and with other ministries, and to address cross-cutting issues relevant to the implementation of the proposed project.
- 86. International and national NGOs play an important role in the CDZ in issue areas such as agriculture, environment, governance, health, livelihoods, nutrition, financial inclusion, private sector and protection (refer to the figure below). On issues such as health, livelihoods and protection, national NGOs have presence in the CDZ, but in other topic areas, their support to local communities is relatively weak. In this regard, the Project will work closely with international NGOs operating in the CDZ to building capacity of community-based organizations in the target areas.

International Organizations, International NGOs and National NGOS Operating in the CD2								
Agriculture	INGO	NNGO	10	Health	INGO	NNGO	10	
Extension support	3	0	0	Basic health care	4	1	0	
Ag inputs	5	0	0	Health education	2	1	3	
Ag research	1	0	0	Maternal/child health	6	1	0	
Ag development	4	1	0	Livelihoods				
Ag water resources	3	0	0	Income generation support	5	1	1	
Capacity building	2	0	0	Micro-finance	7	1	0	
Livestock/poultry	1	0	2	Support to CSOs	2	1	0	
Pest/disease control	2	0	0	Nutrition				
Plant production	2	0	0	Assessment	1	0	0	
Environment				Surveillance	1	0	1	
Biodiversity/conservation	1	0	0	Micro-nutrient supplement	1	0	0	
Governance				Private sector support	0	1	0	
Strengthening civil society	6	0	1	Protection				
IO: International organizati	on			Gender equity/empowerment	2	2	0	



INGO: International NGO

NNGO: National NGO

2.5 Amount of Financing Requested and Timeframe for Implementation

87. The overall cost of the proposed Project is estimated at USD80.75 million over six years. From this, USD38 million is requested from the GAFSP Fund, USD9.5 million will be contributed by the Government, USD3.25 million will be contributed by the private sector (in the form of beneficiary training) and the beneficiaries (in-kind contributions) and about USD30 million by co-financing from the ADB CFA project through investment in complementary activities such as farm to market roads, food safety and certification, infrastructure for seed production, post-harvesting and processing, water management, policy support on climate smart agriculture and green financing.

		F	inance So		
GAFSP Component/Activity	Total cost (USD million)	GAFSP	Govt	Private sector/ Farmers	Priority 1 = very high; 2 = high;
1. Raising agricultural productivity	22	16	5	1	
Activity 1: Access to land	5.75	4	1.5	0.25	1
Activity 2: Access to water	6.25	5	1	0.25	1
Activity 3: Access to improved seeds and agriculture machinery	10	7	2.5	0.5	1
2. Linking farmers to markets	14.5	10	2.75	1.75	
Activity 1: Community-level supply chain development	5.25	4	0.75	0.5	2
Activity 2: Market information network	3.25	2	1	0.25	2
Activity 3: Access to finance	6	4	1	1	2
3. Reducing risk and vulnerability	2.5	2	0.25	0.25	
Activity 1: Production of nutritious foods	2.5	2	0.25	0.25	1
4. Improving Non-farm rural livelihoods	4.25	3	1	0.25	
Activity 1: Non-farm rural employment	4.25	3	1	0.25	2
5. Technical Assistance, Institution Building and Capacity development	7.5	7	0.5	0	
Activity 1: Capacity Building for Sector strategy, investments and implementation	3.75	3.5	0.25		1
Activity 2: Enhancing program design, monitoring and evaluation	3.75	3.5	0.25		1
ADB CFA co-financing through complementary activities	30				
Grand Total	80.75	38	9.5	3.25	

2.6 Preferred Supervising Entities

- 88. The proposed supervising entities are the Asian Development Bank (ADB) and the Food and Agriculture Organization (FAO). The ADB and FAO have been chosen due to the wide range of regional and international expertise in technical and investments activities in agriculture and rural livelihoods, project management capability and experience, and capacity and capability in the area of monitoring and project supervision. The GAFSP project will also take advantage of the well-established administrative capacity available through both agencies to ensure effective and transparent implementation of the proposed Project. To ensure effective and timely implementation, the Project will conduct semi-annual supervision missions to monitor progress of project implementation and recommend any necessary changes to improve the performance of the Project in meeting its overall objectives. The ADB and FAO will jointly supervise the Project.
- 89. The investment components will be supervised by the ADB which is an important partner of MOALI in Myanmar working with the government, development partners, NGOs and the private sector throughout the country, including the CDZ. The ADB is particularly well positioned to supervise the proposed Project as it will be implementing two projects in the CDZ directly relevant to addressing some of the root causes of poverty and food insecurity in the CDZ. Specifically the Climate Friendly Agribusiness Value Chain Sector Project, with which the proposed Project will have a twinning arrangement, and the Irrigated Agriculture Inclusive Development Project. ADB has offices in Nay Pyi Taw and Yangon.
- 90. The Technical Assistance component will be supervised by the FAO which has been instrumental in delivering projects in areas such as food and nutrition security with focus on efficient use of water, sustainable cropland management, and improving agriculture livelihoods and resilience such as climate smart cropping patterns that address poverty, food security and nutrition in Myanmar. The range and depth of experience that the FAO brings to the Project through its work in Myanmar and the region will be invaluable in building the capacity of farmers, community-based organizations, government staff, the private sector, and NGOs. Furthermore, FAO has its main office in Yangon and a sub-office located in Sagaing in the CDZ.
- 91. The ADB and the FAO have a common and shared vision and objective of addressing poverty, food security and malnutrition through empowering the poor by creating a pro-poor, gender-sensitive enabling environment, and making available appropriate instruments required by the poor to help increase income and pave a pathway out of poverty.

2.7 Post Project Sustainability and Exit Strategies

- 92. Sustainability is a core project principle and is defined in the context of target beneficiaries building their assets in order to be both resilient and take advantage of economic opportunities when they arise. Sustainability will be fully factored into the detailed design through the features outlined below.
- 93. **Institutional Sustainability:** The Project will be implemented largely through communitybased organizations, microfinance institutions, local extension offices and other local service

providers. The community-based approach prescribed under the Project will place substantial emphasis on training and building capacity of local organizations to manage resources and deliver support to poor farmers through farmer-field schools, demonstration farms, and peer-to-peer learning. Furthermore, the Project will also build capacity of local private enterprises and facilitate linkages with farmer groups to enable private entities to also deliver support services to farmers. The Project will establish clear eligibility criteria for the selection of farmer groups to be supported under the Project. At least 50% of farmer groups supported by the Project will be headed by women, and where appropriate, the Project will support the formation of women only groups.

- 94. **Financial and Technical Sustainability:** The delivery of financial services, through existing financially sustainable microfinance institutions, addresses the demand for finance by the targeted beneficiaries. The increase in income from productivity increase and sales from value added processing, combined with access to existing partial risk guarantee schemes will further supplement incomes and open opportunities for poor farmers to access capital assets. The Project will aim to ensure that at least 50% of poor farmers accessing the fund will be women, and gender sensitive and inclusive approaches will be introduced as an integral part of government policy making in the future. While some services required by poor farmers will continue to be delivered as a public service through extension officers, over time, support through community-based organizations and private sector entities will be delivered as a part of a fee-for-service scheme.
- 95. Social and Environmental Sustainability: Capacity building of community-based organizations, extension offices and private service providers under the Project will be grounded on pro-poor, pro-gender approaches, which will ensure the social sustainability of the Project. Moreover, the diversified farming systems proposed under the Project will ensure that crop residue and livestock waste are utilized as agricultural inputs to help minimize greenhouse gas emissions resulting from decomposition.

2.8 Risks and Risk Management

96. Because the government has had limited exposure to and management experience with donor supported programs, the proposed Project will likely face a number of risks and challenges. The Project will leverage lessons learned from implementing government and donor sponsored programs in the agriculture sector to develop effective means of addressing risks associated with projects of this nature. The major risks and proposed mitigation measures are outlined in the table below.

Main Risks	Mitigation Measures	Risk
		Level
Weak coordination between line departments within MOALI	MOALI will put in place within DoP a Project Management Unit responsible for coordinating project implementation by responsible line departments within MOALI. At the township level, line departments have field offices through which project implementation will be undertaken.	Medium
	The Project Steering Committee will ensure that appropriate directives are issued to relevant departments and provide guidance on overall coordination between relevant departments.	

	The Project will provide technical assistance and capacity development along with additional contract staff to ensure that MOALI staff have appropriate support, tools and skills to provide project oversight and management across different line departments.	
Limited implementation capacity	The Project gives high priority to pro-poor and pro-gender-based capacity building of farmers, government staff, community-based organizations, farmer groups and the private sector through on-the-job training, peer-to- peer learning, case study approach, etc. delivered by international and local experts.	Medium
Difficulties issuing Land Use Certificate to beneficiaries	Improving access to land, particularly for the poor is a high priority for the Government. Learning from past mistakes and strengthening land reform and management, the Project will take lessons learned from the DALMS-LIFT/UNHABITAT piloting of land use certificate assessment in 2 townships to help ensure timely and transparent transfer to land to the target beneficiaries.	Medium
Adverse climate events impact sustainability of poor farmers	The Project aims to invest in capacity building and training of poor farmers in water management techniques, including small scale water harvesting, combined with efforts to mainstream climate smart and conservation agriculture practices to improve crop resilience to adverse climate change events. The ADB CFA Project will provide substantial capacity building and support for policy development in the sector of climate change and resilience.	Medium

2.9 Consultation with Local Stakeholders and Development Partnersxxiii

- 97. The Project was prepared through multiple consultations with directors and other technical staff of relevant departments within MOALI, discussions with development partners, and through multiple consultations and validation workshops where feedback and suggestions on this proposal were solicited. The validation workshops were headed by the Deputy Minister of MOALI, with participation by Members of Parliament, and senior officers of each department within MOALI at the Union and regional levels (from CDZ), development partners, NGOs, private sector entities, farmer's and women's groups, farmer associations, and individual farmers from the CDZ. Invitations to the validation workshops were prepared with emphasis on ensuring high participation by women and women's groups. All consultations were conducted using simultaneous translation.
- 98. The consultation process yielded useful comments about how to improve the proposed Project activities, and deepened the understanding of the needs of the poor in the CDZ. A summary of the consultation process is provided as an annex (documents n. 10 and 11 of the GAFSP document checklist).

3.0 Plans for Detailed Preparation

- 99. The detailed design effort will be led by the Deputy Director General, of the Department of Planning/MOALI, with participation from other technical departments. The detailed design will be done as a joint exercise with the ADB CFA Project.
- 100. The Union level design team will work closely with other relevant ministries, and regional governments in the CDZ to screen and select the townships to be included in the

Project. In addition, the selection process will be conducted in consultation with development partners currently operating or anticipate implementing projects in the CDZ to ensure synergies and complementarity between various projects. At the township level participatory planning process will be used in collaboration with community-based organizations to identify potential target beneficiaries to be included in the Project. The detailed design will be vetted with relevant ministries, the Economic Affairs Committee, departments within MOALI, and development partners, including civil society and NGOs through a consultation process before seeking clearance and approval to the GAFSP Committee and the ADB Board. Grant funds do not require approval by the Parliament in Myanmar.

101. A joint team of experts from ADB, FAO and LIFT will support DoP in the detailed design. The team will work with relevant MOALI departments to prepare the necessary feasibility studies, environmental and social safeguard assessments, gender and pro-poor assessment, and the preparation of an operation manual. It is anticipated that the preparation of a detailed design will take approximately six to nine months to complete including time required for review by relevant development partners, government authorities, and committees. No preparation grant will be needed from GAFSP funds. Design costs will be covered by ADB, FAO and LIFT and MOALI will provide in-kind contribution.

End Notes

iii ASTI Country Brief No. 38, June 2007.

iv Department of Planning, MOALI.

^v Department of Agriculture and Yezin Agricultural University, and MOALI.

vi The CDZ region has the second highest population density in Myanmar but remains one of the least developed.

^{vii} According to FAOSTATS, yield rates for sesame in Myanmar, for example, were only 46% compared to its Asian neighbors, and 59% for wheat.

^{viii} Frequent adverse climate events and low average annual rainfall (500 – 1,000 mm). Food security assessment in the dry zone, Myanmar. WFP, 2011.

^{ix} In the CDZ, the ratio of extension worker to poor and landless households is 1:430.

^x A nutrition and food security assessment of the dry zone in Myanmar. Save the Children, WFP and the Ministry of Livestock, Fisheries and Rural Development. February 2014. <u>http://scalingupnutrition.org/sun-countries/myanmar/</u>. Incidents of micronutrient deficiencies (Vitamin A, iron deficiency anemia, Vitamin B, etc.) are prevalent. ^{xi} Ibid.

^{xii} LIFT Household Survey 2015.

xⁱⁱⁱ An updated land use map will be essential to determine customary tenure land, clearly demarcated reserve forest lands, and other lands not appropriate for agricultural use.

xiv Natural hazards and other climatic risk considerations will be incorporated into the land use plan. An inventory and audit of virgin, fallow and vacant lands with appropriate contractual agreements will be required.

^{xv} Other ministries include Ministry of Planning and Finance and Ministry of Home Affairs. A land use certificate issued by DALMS provides the holder the right to use the land.

^{xvi} Support will come in the form of such activities as awareness raising campaign on land use rights, and formation of community-based support groups to help safeguard rights of community members with land use certificates.

^{xvii} The Project will build on lessons learned through the development and piloting of the revised Land Use Certificates issuance methodologies developed jointly by DALMS and LIFT/UNHABITAT to help ensure transparency and accountability, and a gender inclusive process. The implementation of land distribution will be guided by the National Land Use Policy, 2016 (Part IX, section 75), which guarantees equal rights to land for men and women through the Land Use Committee established in each region/state by the National Land Use Council.

^{xviii} The detail project design will identify and prioritize financing needs of the target beneficiaries, based upon which more specific lending method and risk assessment will be defined.

xix The project will help strengthen existing organizations, and should one not exist, will work with the community to establish one.

^{xx} Benefits to rural farmers using SMS-based market information is presented in *Mobile Application for Agriculture and Rural Development, World Bank, 2011.*

^{xxi} In the CDZ the penetration rate of micro-finance is estimated to be about 18%, but about 84% of households carry highinterest rate loans issued by relatives or money lenders.

^{xxii} Also support to use of land as collateral.

^{xxiii} Consultations took place between September and December 2016. A summary of the consultation process and a list of participants are provided as annexes (documents n. 10 and 11 of the GAFSP document checklist). Should the proposal be accepted, further consultations with stakeholders are envisaged as part of the detailed design process.

ⁱ According to the HRCI, 2014, Myanmar ranked 1st in the national nutrition policy and strategy. The government has introduced a landmark policy, *Myanmar National Action Plan for Food and Nutrition Security: Response to the Zero Hunger Challenge*, in 2015, and formed the National Committee on Food and Nutrition Security to mainstream problems associated with hunger and malnutrition.

ⁱⁱ Between 2000/01-2014/15 the following average yield increases throughout the country have been noted: paddy (15.2%); wheat (64.3%); maize (117.9%); ground nuts/rain (42.9%); and ground nuts/winter (25/5%). Between 2010/11 and 2014/15, the number of heads of cattle, pigs and fowl increased 14.0%; 48.4%; and 57.9% respectively. For the same period, fish production through aquaculture measured in MT increased 20.5%.