







Study Report on

Contract Farming on the Rice Seed Sector in the Ayeyarwady Delta



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Study Report on Contract Farming Mapping the Seed Sector in the Ayeyarwady Delta, Recommending and Developing Strategies for Contract Farming Mechanisms



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DISCLAIMER

This study is supported with financial assistance from Livelihoods and Food Security Fund (LIFT). The views expressed herein are not to be taken to reflect the official opinion of any of the LIFT donors

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President Message of MRF

With the support of **R**ice **S**eed **S**ector **D**evelopment (RSSD) Project, Myanmar Rice Federation **(MRF)** has prepared this publication on findings and recommendations of the recent study on contract farming activities in Ayeyarwady Delta. **MRF** has been promoting and prioritizing the concept of contract farming in Myanmar as it is more suitable and promising than large scale farming. Myanmar used to experience negative consequences of large scale land acquisitions and land grabs, in which smallholder farmers faced tremendous economic hardship, aggravated their poverty and some even lost their futures.

Nowadays, in new and democratic Myanmar, MRF firmly believes that contract farming is the practical way to prevent such kind of land grabs as farmers can keep their land rights, get access to markets and value chains, get access to finance, training, seeds, fertilizers and reap the benefits of predetermined guaranteed price. The only significant point to make sure is that contracts need to be fair, voluntary and participating farmers need to have negotiation power in today's growing buyer's market. With this crucial point in mind, MRF has been generating the recommendations for the emergence of Guidelines and SOPs for sustainable contract farming practices, with the guidance and support from Ministry of Agriculture, Livestock and Fishery.

To some significant extent, this publication undoubtedly fills the knowledge and understanding gaps of Myanmar rice sector, with special regard to existing and emerging contract farming systems in Myanmar. MRF and her Executive Committee are very grateful to The Livelihoods and Food Security Fund (LIFT) donors of RSSD Project, the development partners, authors, coauthors and researchers who contributed a great deal for making this publication possible. This report surely lifts our level of understanding and enables both private and public stakeholders to have sustainable progress in the rice industry of Myanmar.

LIST OF ACRONYMS



AD Ayeyarwady Delta

ADS Agricultural Development Strategy
ASEAN Association of Southeast Asian Nations

CS Certified seed

CSO Civil Society Organization
DOA Department of Agriculture
DOC Department of Cooperative

DAR Department of Agricultural Research
DRD Department of Rural Development

EGS Early Generation Seed

FAO Food and Agriculture Organization of the United Nations

FD Foundation Seed

GMS Greater Mekong Subregion

GoRUM Government of the Republic of the Union of Myanmar

GS Golden Sunland

INGO International Non- Government Organization

JICA Japan International Cooperation Agency
LIFT Livelihood and Food Security Trust Fund
MAPCO Myanmar Agribusiness Public Cooperation

MoALI Ministry of Agriculture, Livestock and Irrigation

MoC Ministry of Commerce MTF Monsoon Foundation

MRF Myanmar Rice Federation

MSDP Myanmar Sustainable Development Plan

NGO Non-Government Organization

NES National Export Strategy
RSC Rice Specialized Companies

RS Registered Seed

RSSD Rice Seed Sector Development SOP Standard Operation procedure

SWOT Strengths, weaknesses, opportunities and threats

UNDP United Nations Development Programme

WHH Welthungerhilfe

WUR Wageningen University & Research

EXECUTIVE SUMMARY



This study on contract farming was initiated by the Rice Seed Sector Development (RSSD) Ayeyarwady Delta and Myanmar Rice Federation (MRF) in Myanmar. It was part of a RSSD project that identified ways to facilitate rice seed entrepreneurs to invest in Myanmar Rice Seed Contract Farming. The study was in line with the Agriculture Development Strategy (ADS) of the Myanmar Government, which viewed contract farming (CF) as a key component for improving export value, for knowledge transfer in agricultural development, for increasing food security and improving food safety through commercialization.

The study confirmed that limited documented success in rice seed CF arrangements in Myanmar. The purpose of the study was therefore to provide evidence-based insights into the existing frameworks, relevance of RSSD and the future integration of contract farming mechanisms into the rice seed sector of Myanmar.

- The study analysed contract farming mechanisms based on a set of 10 critical issues for successful CF arrangements between companies and farmers. Companies interviewed expressed different expectations on critical issues while farmers simply saw as lessons for the success of CF in Myanmar.
- The study showed that Myanmar still needed to improve the whole procedure of seed supply/ seed source, quality production, certification, sampling, analysis and traceability. Ninety percent of companies reflected that they needed financial support to invest in technical team for regular monitoring and advise to farmers.
- Case studies also showed that contract farming would work well if the company considered the entire value chain - from seeding to transplanting, from planting to harvesting, from milling to packaging, and from exporting to marketing to produce quality assurance and food safety rice.
- Recommendations suggest how the Myanmar Government should support CF companies by providing regulatory enforcement at the pre-contracting, contracting, production, and post-harvest phase.
- Recommendations suggest how it can support CF companies by strategic partnerships with NGOs, commercial banks, agri- input companies and mechanization companies.
- Encouraging farmers' groups to mobilize more active members and promoting them to be seed producers/entrepreneur who could serve as role models for upcoming contract farming expansion in Myanmar.

1. BACKGROUND

Myanmar has good access to agricultural export markets due to its strategic geographic location with respect to China and India, and to its participation in regional groupings such as the Association of Southeast Asian Nations (ASEAN) and the Greater Mekong Subregion (GMS). Therefore, Myanmar enjoys a potential comparative advantage in rice production within Southeast Asia, with opportunities to export rice to regional markets. Recently, contract farming has received increased attention from agribusiness firms in Myanmar as well as the government for more than a decade.

While agribusiness companies view contract farming as an instrument for managing raw materials, the government considers it as an avenue to develop markets, to transfer technology and to provide inputs including credit to smallholder farmers. A large number of agribusiness firms have undertaken contract farming for a number of agricultural and horticultural products in Southeast Asian (SEA) countries. While some of them are working smoothly, others have experienced difficulties because of improper design or ineffective implementation of CF.

Myanmar's agriculture contributes 30% of GDP, 25% of the country's exports and is the leading employer in the economy, (-56%) Over 60 different types of crops are grown in Myanmar on 12.8 million hectares – equivalent to 19% of Myanmar's total land mass. Along with rural, non-farm enterprises, the agriculture sector and downstream activities provide livelihoods for 70% of Myanmar's population who continue to reside in rural areas.

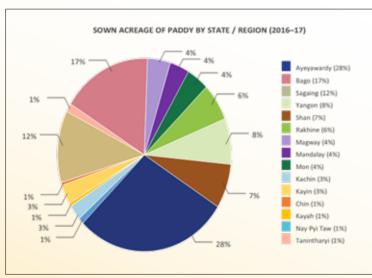


Figure 1: Rice sown acreage per region 2016-2017 (European Chamber of Commerce in Myanmar) (Source: Ministry of National Planning and Economic Development)

Nationwide, rice paddy is sown on 46% of Myanmar's land, producing 28 million tons in 2016-17. Rice is cultivated approximately by 6 million farmers in the Avevarwady Delta region as well as Yangon, Bago and Northern Sagaing districts (Figure 1). The Ayeyarwaddy Delta is the rice bowl of Myanmar, with extensive cultivated areas only a few metres above sea level, covering an area of over 20,000 km2. Rice paddy remains the dominant production crop, accounting for 45.7% of harvested areas and 53.4% of production value amongst major crops. Rice seed production has been identified as one of the agriculture-based sub-sectors with the greatest potential to become an 'economic driver' for the Ayeyarwady Delta region.

For most farmers in Myanmar, rice production is the main source of income and development in the rice sector. It effectively determines whether households fall into or climb out of poverty. Rice production is, and will remain an important sector to ensure food security in Myanmar, and so will the supply of quality rice seed.

Several studies indicated that development of the rice sector should focus both on productivity and production of appropriate varieties of rice for which there is a niche in the market (NESAC 2016). Currently, the average yield in Myanmar for monsoon paddy (rice) is 3.8 MT/ha and 4.6 MT/ha for summer paddy in (2016-17). Rice exports from Myanmar are limited due to the competitive nature of international market, which sees higher quality rice from being placed in the market from neighbouring countries and fetching higher prices (Figure 2).

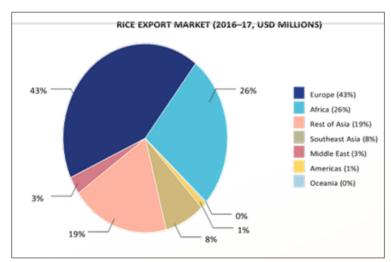


Figure 2: Rice sown acreage per region 2016-2017 (European Chamber of Commerce in Myanmar) (Source: Ministry of National Planning and Economic Development)

To increase yields, improvements are required in the seed sector, specifically in terms of access to inputs, agricultural extension and private sector involvement. The marketing system of the informal local seed production sector is an essential factor in the development of the rice sector.

The rice value chain in general and quality rice seed production in particular are expected to improve continuously and sustainably. Many small seed growers are gradually expanding their seed business, therefore there is a huge need of integrating small seed growers with commercial seed companies in the region, especially rice seed businesses by applying most appropriate contract farming mechanisms. The recent effort of the Myanmar government, development partners, local and international non-profit organizations and private firms to work jointly on agricultural development and poverty reduction, offers a space in which contract farming opportunities can be explored. Some innovative contract farming models have evolved, such as through the Myanmar Agribusiness Public Cooperation (MAPCO), as part of MRF, which has been

working closely with farmers for the production of rice seed and grain under a contract growing scheme. Similarly, Gold Delta is regarded as a pioneer in the private sector's involvement in providing certified seeds to farmers along with other necessary farm inputs to promote the welfare and socio-economic well-being of rural farmers in the Ayeyarwady Delta. Gold Delta is actively implementing large-scale contract farming projects by placing a special emphasis on sustainable agriculture and the development of supply chains - optimizing productivity and modernizing production techniques.

The Rice Seed Sector Development (RSSD) project in the Ayeyarwady Delta (AD) is coordinated by a consortium of Welthungerhilfe (WHH) and Wageningen University & Research (WUR), with support from associate technical partners, Myanmar Rice Federation (MRF), Resilience B.V. and Mukushi Seeds. The project is operated from a WHH office in Pathein and it is funded by the Livelihoods and Food Security Trust Fund (LIFT) in Myanmar.

The RSSD project works extensively with over 50 seed producers, 5 seed farms and 5 seed companies, Department of Agriculture (DOA), and Department of Agricultural Research (DAR), both at national and regional level. The RSSD project contributes to improveded quality seed production, to increase yields significantly, to improve access to markets and to raise income for farmers and, subsequently, to strengthen their overall resilience. Recently, RSSD supports seed companies that are working with contract farmers in order to expand their seed business in the region. The RSSD project aims to contribute to increasing sustainable agricultural production for farmers by improving female and male farmers' access to and uptake of quality rice seed of improved and well adapted varieties

The involvement of the Myanmar Rice Federation (MRF) in the RSSD project is mainly to facilitate the linkage with private sector players and to create seed value chain linkages, but also lobby the government to create room for more private sector investment. MRF is a strategic partner in facilitating value chain linkages of seed producers with input and service providers, as well

as marketing agents, including millers and traders. These linkages are anticipated to reduce risks for and strengthen the business position of seed producers.

MRF has been commissioned to conduct this study in close collaboration with Welthungerhilfe (WHH) - RSSD project, and Mercy Corps Labutta project, in the Ayeyarwady Delta. The results from the study have direct relevance to the work of agribusiness companies, agencies and organizations as well as decision-makers working to promote the welfare of rice seed producing farmers, either through practical field support or through policy advocacy

This report was developed as a key component of "Mapping the Seed Sector in the Ayeyarwady Delta, Recommending and Developing Strategies for Contract Farming Mechanisms". The studies are informed by desk-based research conducted from March to April 2019 and field-based stakeholder interviews in each target area of Ayeyarwady Delta, Nay Pyi Taw and Yangon from March to May 2019.

2. OBJECTIVES

The ultimate aim of the study was to map current contract farming practices, types of contract-farming arrangements, contract enforcement practices, with a focus on the seed sector in the Ayeyarwady Delta, and to develop a strategy and mechanism for contract farming.

The findings will inform key rice sector stakeholders, the Myanmar government and development agencies. In addition, the present study will provide an opportunity for contract farming actors to access appropriate information from individual companies/contractors contracted with farmer groups.

The objectives of the assignment were to address the followings:

- Existing Frameworks: Identify models, lessons, and guidelines for effective contract farming and implementing standard operating procedures for contract farming, particularly for the rice seed business.
- Relevance of RSSD: Appraising the potential impact of both production and market development-related activities of four RSSD project components, and interpret the relevancy of contract farming systems within the Theory of Change (TOC) of the RSSD project.
- Future Integration: Exploring possible approaches of further expanding current contract farming systems and integrating them in the rice seed business.
- Contract Farming Adaptation: Based on the findings of the study, RSSD, Mercy Corps, MRF and other project stakeholders are anticipated to adopt the recommendations in current and future projects to increase production and seed availability in the region.

3. METHODOLOGY

The approach to achieve the objectives of the assignment was stakeholder-driven, evidence-based, and validated through a consensus-building process. A qualitative method was chosen to fulfil the expected outputs. An advantage of this approach is that the information can be gathered from rice value chain actors who keep good records. The objectives and proposed methodology were shared with the RSSD, MRF's Project Leader and WHH's Seed Business Development Advisor. Regular consultation with MRF and RSSD representatives was undertaken throughout the study to help the consultant to develop the process of this assessment.

The results of the study build on previous evidence, informed by rice value chain stakeholders, and integrated into priorities and recommendations from key decision makers and stakeholders. Key informants included RSSD staff, DOA and DAR staff, rice seed producers, seed farms, MRF executives, smallholders/farms, seed companies, millers, traders and other project implementing partners in the region and relevant actors. Depending on stakeholders' location and availability, the questionnaires were implemented through one-on-one interviews on-site, and through focus group interviews. Prior to conducting the field research, the consultant conducted:





3.1 Desk Review of Available and Relevant Literature



The Consultant reviewed relevant studies on current agricultural policy atmosphere and contract farming implementation in Myanmar and examined the following subjects with three main themes; pre-conditions, implementations and monitoring and dispute resolutions. Further studies included types of contract farming being implemented in AD particularly linked to the RSSD project, appropriateness and adaptation of existing contract farming models in terms of addressing the needs of parties engage; gaps for effective implementation of contract farming in Myanmar and what can be done to improve the situation; and analysis of draft Standard Operating Procedures (SOP) as developed by the government.

The consultant also reviewed the available literature on rice seed sector and contract farming mechanisms which are closely relevant to the study prior to conducting the field research and made the subjective judgement of these observations and reflections. The resources included existing information on contract farming systems in country and abroad, policy review and best practices models, especially on the rice seed sector in the Delta region and RSSD proposal, LIFT reports and other relevant resources.

3.2 Assessing/Mapping Contract Farming Mechanisms



A conceptual framework is a way to understand the problem before and at the beginning of data collection. Therefore, the consultant developed a simple framework for this research after exploring different resources. It guides the design of the research and the data collection methodology. In a well-functioning contract farming system, actors respond to market-based incentives. With effective management, contract farming can be a means to develop markets and to bring about the transfer of technology in a way that is profitable for both the contractor and the farmer. Growers are provided incentives to meet these expectations, and they invest in practices and technologies accordingly. In developing countries, however, this system regularly breaks down as information flows are limited, incentives are not clear, technologies are not readily available, and technical capacity to adopt the appropriate practices is limited.







By obtaining direct stakeholders' feedbacks from along the value chain, the consultant gathered a clear understanding of the scale and insights into the current operating context and existing capabilities of actors at each level who are implementing contract farming in Myanmar. Understanding the operating context and existing capacities allowed the consultant to recommend scale and context of appropriate contract farming mechanism and practices.

The following figure provides a simplified visual illustration of the conceptual framework for the study.

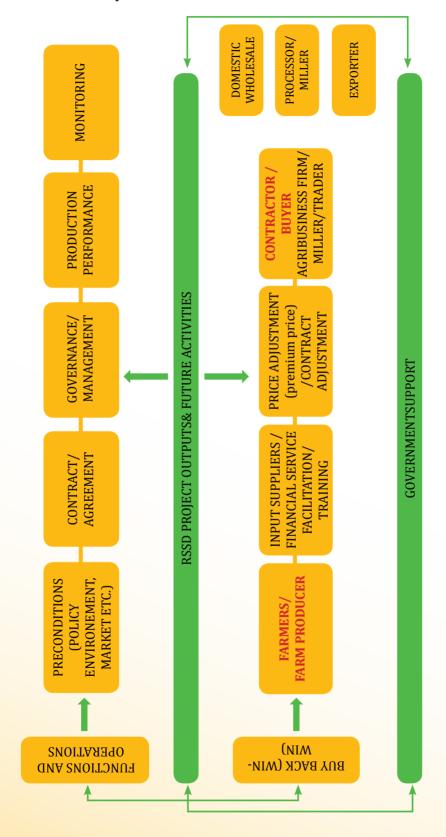


Figure 3: A simplified visual illustration of the conceptual framework for the study

3.3 Detailed Research Plan

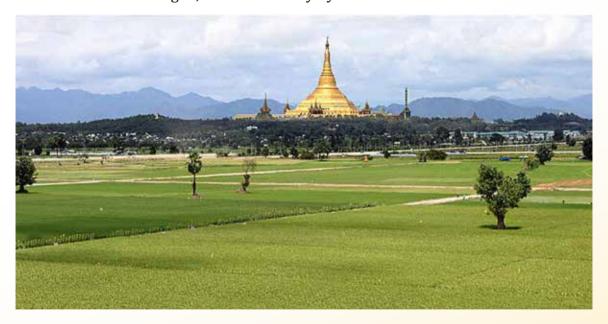


The consultant developed an inception report (detailed research plan) including a list of people/groups to be interviewed; desk review of available and relevant literature; selection criteria for these people/groups; and, a set of questionnaires/semi-structured interviews/Farmer Group Discussion (FGD) Questions based on the study objectives were shared with RSSD and MRF in order to get feedback and comments before conducting the activities.

3.4 Key Informant Interviews (KIIs)



The consultant conducted interviews with key informants of the rice seed value chain in Yangon Region, Pathein township, Kyeik Lat township and Kyoun Gone township from AD. The Consultant conducted FGD in Pathein with farmer groups from: Mawlamyinekyun, Yay Kyi, Ma U Bin and Pathein townships in AD. Field visits were made to Pathein from 27- 30 March 2019 and in Nay Pyi Taw from 25-26 April 2019. At national level FGD were undertaken in Yangon. The interviewees included the relevant Director General, and Directors of DOA, and Director of Cooperative Department from MOALI and from MOC, Parliamentarian, Financial institutes such as Private and Public Banks, representatives of MRF and MAPCO, and heads of seed farms from DOA in Yangon, Pathein and Nay Pyi Taw.



3.4.1 Selection Criteria for In-depth Interview

The main criterion for selecting respondents for this study was whether the person, association or organization was involved in rice and paddy seed business, the rice value chain and/or contract farming. Those stakeholders were primarily from the private sector, producers, intermediaries/traders, service providers, processors,

domestic distributors/wholesalers, retailers, and/or exporters. The consultant aimed for 3-5 actors at each of the 5 value chain levels (producer/farmer, buyer, processor, domestic wholesaler/retailer/exporter) and decision maker/policy maker for a total of 42 stakeholders to be interviewed. Although the available and relevant literature is limited, and low on primary data-based estimates of contract farming mechanism in country, they may be used to base estimates on credible sources at that time even if the sources are not explicitly provided.

3.5 Focus Group Discussions (FGD)



The consultant conducted FGD during the field research when the consultant's team met with rice seed growers/producers' associations and farmer groups. Three townships out of four in the Delta were visited during the study. The consultant also conducted FGD with Yangon Region's DOA staff in Yangon in May 2019. The collected data were formulated as content analysis (thematic analysis, evaluative propositions and stereotypes).

3.6 Case Studies



The relevant case studies of contract farming initiatives (successful and failed) were highlighted as necessary to generate a deeper understanding of the consultant's findings, observations and analysis of the research.

3.7 Content Analysis



Content analysis (thematic analysis, evaluative propositions and stereotypes) and SWOT analysis were employed by using available evidences derived from the literature, meetings/consultations, interviews and consultant's self-assessment.

3.8 Stakeholder Briefings and Debriefings



Stakeholder briefings and debriefings were undertaken on: the overall findings, analysis, and recommendations at relevant meetings and forums as advised by MRF and RSSD.

3.9 Report Writing Phase



Draft and Final Report in English, include common lessons drawn from the policy context, with separate policy briefing paper as necessary.

4. LITERATURE REVIEW

4.1 Overview of Contract Farming



Internationally, contract farming can be defined as "an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices" (Maria Theresa S. Medialdia 2018). Contracts are often initiated by agribusiness firms (processors, traders, company, producers), which undertake backward linkages by forming alliances with groups of smallholders and, through written or verbal agreement, specifying provision of farm inputs such as credit and extension in return for guaranteed delivery of products with specific quality often at predetermined prices.

From the world experience, contract farming is more commonly found in exporting commodities or large processors where a steady supply of raw materials or high value crops . Contract farming is found to be only cost-effective when large-scale buyers, such as processors or exporters, need to introduce a new crop, to obtain special product characteristics, to stagger the harvest over the year, or to control some aspects of production methods. Contract farming is typically used to organize production of perishable, high-value commodities for a quality-sensitive market. A review of literature in the context of the outcome of contract farming in many developing countries reveals a mixed performance with some successes and some failures.

Contract farming schemes can take numerous forms. However, it was observed that contract farming can be categorized either by the intensity of contractual arrangement or the schemes of organizational structures (the organization of stakeholders within the scheme). Looking from the objective perspectives, the contract could be drafted to transfer decisions – rights and transfer of risk. The three typologies of contracts then are used, including market provision, resource provision and production management specification. The schemes of contract organizational structures depend on the nature of the product, resources of the processors and the intensity of the relationship between farmers and processors. Most studies identified contract farming into five different models; Centralized model, Nucleus-estate model, Tripartite model, Informal model and Intermediary model (http://www.fao.org/3/y0937e/y0937e05.htm).

The centralized model: The level of involvement of the sponsor in production can vary from a minimum where, perhaps, only the correct type of seed is provided, to the opposite extreme where the company provides land preparation, seedlings, agrochemicals and even harvesting services. The extent of the sponsor's involvement in production is rarely fixed and may depend on its requirements at a particular time or its financial circumstances.

 Involves a centralized processor and/or packer buying from a large number of small farmers

- Is used for tree crops, annual crops, poultry, dairy. Products often require a high degree of processing, such as tea or vegetables for canning or freezing
- Is vertically coordinated, with quota allocation and tight quality control
- Sponsors' involvement in production varies from minimal input provision to the opposite extreme where the sponsor takes control of most production aspects

The nucleus estate model: The estate is often fairly large in order to provide some guarantee of throughput for the plant, but on occasion it can be relatively small, primarily serving as a trial and demonstration farm.

- It is a variation of the centralized model where the sponsor also manages a central estate or plantation
- The central estate is usually used to guarantee throughput for the processing plant but is sometimes used only for research or breeding purposes
- It is often used with resettlement or transmigration schemes
- Involves a significant provision of material and management inputs

The multipartite model: The multipartite model usually involves statutory bodies and private companies jointly participating with farmers. Multipartite contract farming may have separate organizations responsible for credit provision, production, management, processing and marketing.

- May involve a variety of organizations, frequently including statutory bodies
- Can develop from the centralized or nucleus estate models, e.g. through the organization of farmers into cooperatives or the involvement of a financial institution

The informal model: The success of informal initiatives depends on the availability of supporting services, which, in most cases, are likely to be provided by government agencies. For example, while companies following the centralized model will probably employ their own extension staff, individual developers usually have to depend on government extension services. In addition, individual developers often have limited funds to finance inputs for farmers and therefore may have to develop arrangements whereby financial institutions provide loans to farmers against the security of an agreement with the developer (an informal multipartite arrangement). Furthermore, while nucleus estates and centralized developers frequently purchase products for which there is no other market (oil palm, tea and sugar, which depend on the availability of nearby processing facilities, or fruits and vegetables for export), individual developers often purchase crops for which there are numerous other market outlets. It is therefore important that agreements reached between the developers and farmers are backed up by law even if, in many countries, the slowness and inefficiency of the legal system make the threat of legal action over small sums a rather empty one.

- It is characterized by individual entrepreneurs or small companies
- Involves informal production contracts, usually on a seasonal basis
- Often requires government support services such as research and extension
- Involves greater risk of extra-contractual marketing

The Intermediary Model: Throughout Southeast Asia the formal subcontracting of crops to intermediaries is a common practice. In Thailand, for example, large food processing companies and fresh vegetable entrepreneurs purchase crops from individual "collectors" or from farmer committees, who have their own informal arrangements with farmers.

- Involves sponsor in subcontracting linkages with farmers to intermediaries
- There is a danger that the sponsor loses control of production and quality as well as prices received by farmers

For Myanmar, it is very difficult to identify which model is used by contracting entities.

Table 1. Characteristics of contract farming structures

Structure Model	Sponsors	General Characteristic
Centralized	Private corporate sector, State development agencies	Directs contract farming. Popular in many developing countries for high-value crops. Commitment to provide material and management inputs to farmers.
Nucleus estate	State development agencies, Private/public plantations, Private corporate sector	Directs contract farming. Recommended for tree crops, e.g. oil palm, where technical transfer through demonstration is required. Popular for resettlement schemes. Commitment to provide material and management inputs to farmers.
Multipartite	Sponsorship by various organizations, e.gState development agencies -State marketing authorities -Private corporate sector -Landowners -Farmer cooperatives	Common joint-venture approach. Unless excellent coordination between sponsors, internal management may have difficulties. Usually, contract commitment to provide material and management inputs to farmers.

Informal developer	Entrepreneurs, Small companies, Farmer cooperatives	Not usually directed farming. Common for short-term crops; i.e. fresh vegetables to wholesalers or supermarkets. Normally minimal processing and few inputs to farmers. Contracts on an informal registration or verbal basis. Transitory in nature.
Intermediary (tripartite)	Private corporate sector, State development agencies	Sponsors are usually from the private sector. Sponsors control of material and technical inputs varies widely. At time sponsors are unaware of the practice when illegally carried out by largescale farmers. Can have negative consequences.

Source:(http://www.fao.org/3/y0937e/y0937e05.htm).

4.2 General Gaps in Contract Farming



- Prerequisites for contract farming are almost entirely absent in rural area. Those include good governance, consensual agreements between producers and buyers, and well-organized, state-protected farming communities, including regulations over land transactions.
- A poorly governed agrarian context
- Unequal bargaining positions and lack of information
- Responsibility of the company
- Lack of the regulatory framework and it needs to be functional
- Implementation and enforcement of good laws and policies. There was no clear agreement system between the contract farmers and the companies, making it impossible for companies to punish through the legal system
- A poor re-payment rate among contract farmers with respect to their contract farming schemes due to adverse weather, poor storage facilities and underdeveloped infrastructure
- Lack of negotiating power of smallholders due to low education level and awareness

4.3 Overview Policy Environment for Contract Farming in Myanmar



The Government has tried to improve the competitiveness of agribusiness by creating coherence and harmonization of contract farming through the development of agricultural guidelines and policies. An example is the agricultural development strategy and investment plan by Ministry of Agriculture, Livestock and Irrigation (MOALI). Recent progressive agricultural policy reforms include (i) land law reforms; (ii) abolition of the rice production quota, allowing farmers to choose which crops to cultivate; (iii) liberalization of domestic and international marketing of rice in 2003, and of industrial crops in 2004; (iv) removal of the export tax on key agricultural commodities; (v) a law allowing the establishment of microfinance institutions; (vi) use of crops as loan collateral; and (vii) passage of a plant pest quarantine law in 1990, a pesticide law in 1993, and a fertilizer law in 2000.

In spite of this progress, the need remains to adopt a more coherent and comprehensive approach to agriculture and rural development, and to make agriculture more commercially oriented, as has been done by the leading ASEAN members that have sizable agriculture sectors. To accomplish this, the Myanmar Government has been adopting a value-chain approach to agriculture since 2011, which aims to facilitate job creation and income growth needed to achieve not only rural development but also sustainable inclusive growth (Jeff Shim 2017).

It is apparent that Myanmar requires significant investment to strengthen the rice industry including improved seed, more uniform varieties, particularly by location, quality and timely delivery of inputs, access to credit, and efficient use of fertilizers, other agro-chemicals and water. At the same time, it will require major investment in rice processing and post-harvest technology such as packaging and branding. Such investment needs to be both demand-driven and led by the private sector to minimize the risk of over-investment and to ensure that an appropriate choice of technology in rice processing is made.

As indicated in the manual of "Enabling regulatory frameworks for contract farming (FAO 2018)" that at the heart of contract farming is an agreement between farmers and buyers: both partners agree in advance on the terms and conditions for the production and marketing of farm products. Contract farming is always governed by a national legal framework, regardless of whether a country has adopted any legislation containing specific rules for it. Depending on the legal system, a variety of different laws and regulations with different regulatory purposes and with varied scopes may be applicable to contract farming.



BOX 1: Examples from India and Thailand

- India: The Model Contract Farming Act (The --- State/UT Agricultural Produce and Livestock Contract Farming and Services (Promotion & Facilitation) Act 2018) enforced in 2018 with a view to integrate farmers with bulk purchasers including exporters, agro- industries etc. for better price realization through mitigation of market and price risks to the farmers and ensuring smooth agro raw material supply to the agro- industries.
- Thailand: The Contract Farming Promotion and Development Act enforced in 2018 and provide specific rules on the formulation of contracts as well dispute resolution and mediation mechanisms. This Act establishes Contract Farming Promotion and Development Commission to develop plans and measures for contract farming development, as well as to give counsel on the resolution of problems and obstacles arising from contract farming agreements. The Act also tasks the Office of the Permanent Secretary for Agriculture and Co-operatives (OPSAC) to disseminate knowledge and give advice to farmers on conclusion of contract, access to finance, and agricultural technology.

(Source; http://www.fao.org/in-action/contract-farming/news-cf/news- detail/en/c/1145200/,

http://pib.nic.in/newsite/PrintRelease.aspx?relid=180920)

4.4 Role of Contact Farming and Rice Seed Industry in Myanmar



According to the statistics of the Ministry of Agriculture, Livestock and Irrigation (MoALI), the average yield of rice is slightly less than 4 ton/ha, but USDA estimates that the average yield should be 2.5 ton/ha (Eurochan Myanmar 2019). Therefore, the productivity of rice in Myanmar is considered to be lower than that in other Asian countries. Some studies show that rice contract farmers generate higher incomes when they have a contract with reliable companies (Jeff Shim 2017). A rice seed supply system has been established in cooperation with the government research centres producing breeder seed, foundation seed, registered seed and certified seed. It has been found, however, that breeder seed of a considerably large number of varieties shows lack of uniformity in relation to the period of maturity (difference of 10 to 14 days), meaning that those varieties have not genetically stabilized (Subedi, A et al 2017).

Many varieties are contaminated with each other thus the quality of seed supplied is not satisfactory. As a result, productivity remains low and the quality of produced rice grain is low because of the high ratio of broken rice grains (90% of rice produced is graded as the low-quality rice with 25% broken grains). Accordingly, on the export market rice produced in Myanmar is sold at a price 30 to 40 % lower than that produced in Thailand (Eurochan Myanmar 2019).

In the low-land rice producing areas such as the Ayeyarwady Delta, a two-crop cultivation system is applied where pulses are introduced after the rice cultivation during the rainy season. In the irrigated paddy fields, some farmers transplant rice from December to January and harvest it in April (Summer Season Rice).

Farmers possess certain knowledge on rice cultivation. However, they are not capable of utilizing agricultural chemicals and fertilizer effectively, as their labels are written only in the language of the producing country and farmers themselves do not have sufficient knowledge on their utilization. The government unable to provide farmers with necessary information and training as the extension system is not functioning well on the ground level.

In Myanmar, the production of open pollenated rice seed is fairly straightforward and requires no special equipment beyond a seed cleaner. Since certified seed production requires cross-fertilization between male and female plants, crop management is more complicated than the usual rice production. Rice seed production requires separation from standard seed plants to avoid cross- pollination. Further, since rice seed is not treated with chemicals, unsold seed can be taken back to the grain market. The processors follow a subcontracting approach to deal with the contract agreement. In the subcontracting agreement, the service provider or the organizer plays an important role to facilitate the contract. The service provider identifies the farmers and secures their commitment to the respective processor for production of seed during the season. To avoid cross-pollination, the service provider makes contracts with geographically based communities and requires cultivation of only rice seed. It shows that effective planning and management of contract farming is key to improvinge the rice seed industry of Myanmar.

The following diagram provides the recent value chain of rice seed industry in Myanmar

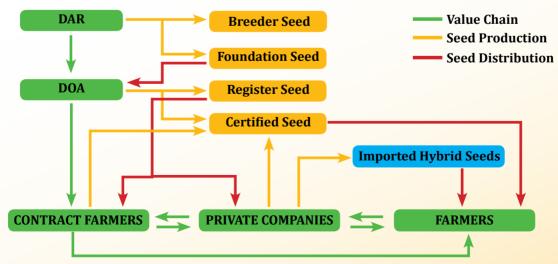


Figure 4. Value Chain of Rice Seed Industry in Myanmar (Source: MoALI)

4.5 Innovation of RSSD Project in Ayeyarwady Delta



The Ayeyarwady Delta is a rice bowl of Asia, about 25 per cent of Myanmar's rice acreage is in this area but there is a lack of quality resources available to stakeholders in rice seed industry. Improving the supply of quality, certified rice seed available to farmers in the Ayeyarwady Delta is crucial for improving rice yields. The most significant gap is the lack of quality rice seeds that are well-adapted to the growing environment. Only one in 20 farmers in the lower Delta use certified quality rice seeds. Good quality seed can boost yields by more than half.

The in-depth study conducted by Wageningen University and Research (WUR) in 2017 identified challenges for rice seed providers in the Delta that included lack of capacity for quality rice seed production and certification, fragmentation in the sector and limited collaboration within the rice seed value chain. There is a large informal seed system operating in the Delta where seeds are exchanged with neighbourhoods; but this does not solve the challenge to get quality seed being used. It was recommended that developing a formal seed system to improve farmers' access to quality seed was required to boost yields and improve rice production in this important rice growing region of Myanmar. With the recommendation of this study in response, LIFT decided to fund a project to support the sector's development.

The project aims to strengthen the rice seed value, performance of different operators and service providers, increasing demand orientation, and coordination among seed value chain actors in AD. The project is designed to strengthen the formal private and public seed systems by improvinge farmers' access to quality seed. The project will increase the capacity of government seed farms to produce early generation seed, to upgrade laboratories in supporting the provision of quality assurance and seed certification to international standards and to incentivize the private sector in engaginge in seed production.



4.6 Contract Farming and Benefits for Farmers



This section reviews the relationship between contract farming and benefits (income and livelihood) for farmers. There is evidence that contract farming is a growing trend in Asia due to high-value agriculture, supermarkets, processing, and export-oriented agriculture. The evidences suggest that the importance of contract farming is growing.

Critics of contract farming argue that large agribusiness firms use contracts to take advantage of cheap labor and transfer production risk to farmers. Another concern is that because companies tend to prefer to work with medium- and large-scale growers, smallholders will be marginalized, exacerbating rural inequality and lack of environmental sustainability concern. However, there is also ample evidence of contract farming contributing to higher income for farmers among many other benefits which are presented in the literature. Because contracts often involve the provision of seed, fertilizer, and technical assistance on credit and a guaranteed price at harvest, this form of vertical coordination simultaneously solves a number of constraints on small-farm productivity, including access to inputs, credit, and risk (Maria Theresa S. Medialdia 2018).

Based on previous studies, it can be seen that contract farming has attracted serious concern from State and the Government (Nam Khine Su Thwin 2016). Although there are both successful and unsuccessful cases of contract farming, in general contract farming arrangement has positive impacts for farmers. It is evident that local seed producing networks have established a good reputation, and - with help of the extension station – farmers are able to receive agricultural inputs with credits and important selling to traders through buyers. Those farmers have become clients of local seed producers' networks in AD. It is observed that through these networks production has increased and in some cases more than double (The World Bank 2014). However when local producers start to depend on larger contracts, there is a risk: what if the agreement is not followed through? Currently, contracts that deviate much from this market force are under pressure.





In AD, GRET's has been working to support rice seed certification. The team provided support to approximately fifty village-based farmers' organizations setting up financial (microcredit, hire-purchase, inventory credit) and non-financial (purchase of inputs, storage, certification of rice seeds) economic services for their members. The Japan International Cooperation Agency (JICA) involved in certified seed (CS) production and upgrading of Government seed farms. Mercy Corps (MC) has worked in Labutta area in collaboration with some local NGO and CSOs since tropical storm "Nargis". MC continued support to rice seed sector by collaborating with Golden Sunland that demonstrates a further model of contract farming engagement in rice seed sector development in AD. GRET collaborated with local NGO, RadanarAyar Association and Law Ka Ahlin are supporting small and medium farmers on rice seed production and market linkages with private partners in AD.



5. RESULTS AND DISCUSSIONS

The assessment showed a substantial scope and willingness for engagement of the government, legislators, agribusiness firms, rice seed producers and processors, farmer groups, agricultural technicians and NGOs to improve an enabling environment for contract farming implementation in Myanmar. There was consensus among the interviewees and focus group meeting participants that success of contract farming can and needs to tackle both quality control and price. The following data/information were analysed from interviews.

5.1 Government Policy and Legal Framework



It was observed, that there are two types of facilitating policies that are relevant to contract farming. They are, (i) adjusting the regulatory regime to reduce transaction costs for participants in contracts and (ii) government playing an enabling role to encourage contract farming. Regulatory adjustments to create a desirable policy environment for contracting, they were included reducing paper work for exporters, reducing certain import and export taxes, removing import restrictions, and implementing food-safety standards. Removal of specific regulations could directly facilitate contracting. One of the main challenges to successful contract farming in Myanmar was the absence of strong legal systems that guaranteed an adequate protection to the parties (both farmers and companies) in their contractual relations.

The agricultural development investment strategy (ADS) promoted a stronger private sector investment in rice seed sector development however, there is a need, to clearly define the division of roles between the public and private sectors. The macro policies likely to influence contract farming were land ownership rules, taxes, exchange rates and food security. Many farm contracts supplied either export or import-competing markets hence volatile exchange rates could lead to difficulties since revenues earned in one currency while costs incurred in another. Shared value reached through setting up a long-term relationship, in which continuity and mutual benefit were central.

The Road map for the Myanmar Seed sector (2017-2020) stressed that the mandate and focus of the seed farms requires a shift towards a combination of more autonomy with greater accountability. Specific public-private business models have been developed in other countries which could be introduced to Myanmar as well. Models successfully implemented in other countries included the outsourcing of early generation seed production through contract farming; performance contracts of seed farms and the introduction of internally generated funds2. It is important that reforms and investments go hand in hand – providing the right incentives for seed farm staff and management. In addition, close collaboration with the private sector (seed companies and seed growers) was required to plan for adequate supply of the right crops and varieties.

Myanmar Economic Monitor (2019) stressed that the decline farmgate paddy prices and wholesale rice prices was squeezing farmer profitability and had impacts on farmers' ability to invest for the next cropping period. The recent drop in rice prices led the government to encourage the Myanmar Rice Federation (MRF) to guarantee a minimum purchasing price to control the fall in rice prices. However, the Government should be aware of lessons from the past and also from Thailand that if the government chooses to set a specific price, it would require more frequent government intervention, oversight and monitoring to enforce and therefore it can lead to higher implementation costs. If the Government will not enforce its floor, it will affect to both farmers and buyer's revenue who do not want to violate the policy or regulation.

In order to increase quality of seed that farmers used, the state has to play a more active role in producing, promoting, subsidizing and distributing the officially recommended varieties. State extension services saw it as their task to promote and sold seed from the formal (state) sector. In fact, seed quality can only, or best, be controlled through state regulations (e.g. requirements regarding certification) and close coordination with the private sector.

The policy formulation needs to consider the high transaction costs and various investment constraints associated with partnering with smallholder farmers as well as economic and social inequality that women and marginalized populations in priority of contract farming relationships as the principal reasons. The contract farming can harm the environment and thus requires the government to provide appropriate environmental protection measures before the implementation.

The study pointed out that the Myanmar Government should create an appropriate legal and regulatory framework to promote contract farming. For example, setting the price need to be fair for farmers as well as for buyers and rice seed entrepreneurs not to affect their revenue and market. The government needs to realize that issuing the regulation is not sufficient but strict enforcement of the regulation is necessary.



The law/regulation enforcement means that it needs to be implements at every step of along the rice seed value chain and in implementing contract farming (David Chen, Golden Sunland).

It was observed in Road Map for Seed Sector (2018) that Seed Sector Coordination Platform served in order to stimulate dialogue between the public and private sector and to undertake seed chain planning that brought together key representatives from the public sector, private sector and international organizations. This coordination seed platform should take more active role to discuss the regulatory environment, undertake seed demand forecasting and plan for EGS requirements of specific crops and varieties.

In general, Myanmar's agricultural policies focused on the formal seed sector. These policies were under pressure to reform, however to date reform has not focused on how to facilitate an emerging private seed sector, with small enterprise on local levels. It is commonly understood that, at least on local levels, there can be a vast difference between policies and practices, and that practices varied from place to place. Moreover, the policy makers require understanding on grass root realities, the gaps between supply and demand as business atmosphere and rice seed value chain channels in the rice seed sector.

5.2 Standard Operating Procedure (SOP) (for Contract Farming in Myanmar

The regulations and Standard Operating Procedures for contract farming are in place to ensure effective dispute settlement. In order to fill the gap of legal requirement for contract farming, Department of Agriculture (DOA) of MoALI drafted the Standard Operating Procedure (SOP) for Contract Farming in Myanmar in 2017 (personal communications). In 2018, various members of the Myanmar Agriculture Network (MAN) and AgriProFocus Myanmar network indicated their interest to learn about contract farming to be able to start implementation in Myanmar. Thereafter, Grow Asia, MAN and AgriProFocus Myanmar jointly organized the "Contract Farming Schemes: Challenges and Opportunities for Myanmar" learning event on June 6, 2018 in Yangon. The event clearly showed the high interest and need for further discussion. All groups at the event stated the urgent need for government policies and regulations, including standard grading systems, dispute settlement procedures and access to finance. The event supported stakeholders to learn about different models of contract farming appropriate for Myanmar, to learn from best practices in South East Asia and to identify needs and constraints to introduce effective contract farming schemes in Myanmar.

Mercy Corps Myanmar conducted desk research on Contracting Farming Implementation in Myanmar and drafted SOP in 2019. Recently, the MoALI (DoA), UMFCCI, MRF and Thingaha Foundation jointly organized the consultation meeting in

Nay Pyi Taw on 9-10 May 2019. Thereafter MoALI submitted the second draft version of SOP to AmyothaHluttaw. The draft SOP (2019) includes three main sections; rules to be obeyed by the farmers, the requirements by companies (or) privates individuals and the roles of the Government (see detail content in Annex 2& 3).

5.3 Contract Farming Law



There was no law and policy for contract farming in Myanmar. However, Bago Regional Government together with Bago DOA drafted a contract farming law and has presented this to the Parliament, AmyothaHluttaw. It is an interesting point from "The law of contract in Myanmar (2017)" that all contracts are agreements, but not all agreements are contracts. The partnership agreement is sharing the benefits and risks. Eighty percent of interviewees responded that MIC- DICA was the best in Myanmar in flexibility- but for the practically operation, land acquisition process was taking time a lot to implement contract farming.

Myanmar should learn lessons, failure and success of law development from other countries. For Example, the private sector driven regulatory instruments in the area of contract farming may be 'inter-professional agreement' agreed by private parties of a specific value chain. These agreements can be considered an example of self- or co-regulation, depending on the level of government involvement.

The Contract farming law was not working well in many countries. SOP should be in line with Foreign Direct investment law (FDI) to motivate foreign private investment in the seed sector. Currently the Government is preparing the Investment manual. MoC put rice in the first priority in National Export Strategy (NES). Seed and land are major issues to be addressed according to the NES. Having many different varieties was also one of the issues in exporting rice from the point of quality control. Seed development plan will be placed into the overall rice export plan by MoC but responsibilities and accountabilities between MOALI and MoC should be clarified. Multi-stakeholder coordination would be needed in order to meet the demand from the private sector.



The public regulator may either encourage or require the establishment of structured entities, for example associations for a given commodity or value chain, where the production sector and the agribusiness industry are represented, and where the government can be represented. Such entities have a number of policies and technical functions aimed at improving and increasing production, which becomes more responsive to market needs, and enhancing market stability. They would also be recognizing for organizing and harmonizing practices between producers/farmers and buyers/companies. Therefore, Myanmar can formulate specific regulatory framework for contract farming.

5.4 Analysis of Key Stakeholders



5.4.1 Public Sector

Myanmar Agriculture Development Bank (MADB) provides seasonal loan to the farmers at 0.8% monthly interest rate. Farmers can get MMK150,000 per acre under rice production for up to ten acres. However, the farmers do not view the loan as being convenient because they struggle to pay back the loan after harvest. Rice farmers interviewed largely reported that at least half of the contracted MADB loan was spent on rice production, and by the time of the interview, the loan had been repaid for the past production season. The main expenditures covered by the loan were fertilizers (39%) and hired labour (36%) which were two important expenses and constraints for rice producers (KII and FGD). However, the credit did not cover out-of-pocket costs and the high interest rates of informal credit remained a problem.

Department of Cooperatives provided 81 billion MMKs as microfinance through over 3600 members groups in Ayeyarwaddy delta. Department of Co-operative supported to seed growers who are member of cooperative groups, 300000 MMK/ac for seed production with 3 years re-payment which has been started in 2018-19. The interest rate was 1.5 % per month and the finance came from China Exim Bank (CEB) as a loan of 400 million USD. There are 5 Seed growers cooperatives in Ayeyarwaddy region. The constraint was lack of monitoring and technical back stopping to the seed growers. Farmers did not have enough financial literacy and management capacity. Awareness and trainings only were not enough and effective monitoring and coaching were needed to implement effectively. Department of Cooperative was willing to become involve in rice seed contract farming in the role of financial institution and strengthening of seed growers' cooperative groups.

Department of Agriculture (DOA) and Department of Agricultural Research (DAR) The strategic cooperation between the private sector and the DOA and DAR to generate registered seed, and small farmers to produce certified seed would benefit the system since the DOA and DAR do not have the funds. In such a scheme, private businesses would provide registered seed (and potentially farming inputs) to contracted smallholder farmers and would buy back the resulting certified seed which

would be cleaned, graded, and packaged for sale the following year. The Myanmar government will need to augment this scheme with amended seed law that explicitly protects certified seed-producing smallholder farmers from abusive contracts, price fluctuations, and quality issues resulting from uncontrollable environmental conditions.

The Department of Agriculture (DOA) should work to boost demand for quality seed through pluralistic extension approaches and marketing campaigns advocating the benefits of certified adapted seed. The establishment of a pilot program linking existing informal seed villages with formal private breeding companies would assist this approach. In addition, since a current lack of coordination between entities hampers Myanmar's seed-producing system, the country would benefit from the creation of an entity that leads and manages the transition to a privatized seed industry. The responsibility of this entity would be to encourage a public-private dialogue in the formation of a seed sector transition plan, to coordinate the entry of agribusinesses, NGOs, and international investors into priority challenge sectors. Lastly, since the success of seed research and development depends on pathways that connect farmers to seeds and information, farmer cooperatives will be tasked with coordinating seed demand in remote regions, and reducing inhibitive extension and transport costs for all stakeholders as better seeds become available and Myanmar's research and development capacities improve.

5.4.2 Private Sector

Rice Miller: Millers or processors have a central role to play in rice value chains and are usually located in semi urban and urban trading centers. It was observed that rice milling in the country was carried out in three categories: large-sized, medium-sized and small-sized rice mills though the milling capacity varied among the categories. Currently, the modern medium and large-sized mills returned higher yield of rice output with least broken and better quality of by-products. The owners of the small rice mills were often farmers because they had insufficient capital to invest in upgrading their mills. They milled their marketable surplus paddy and home consumption as well. Most of the large millers bought paddy from farmers/collectors with commission and sold the milled rice to wholesalers and retailers. The large millers in surplus area often acted also as wholesalers, and they sold their milled rice to wholesalers in the central markets in other regions.

It is noted from interviews, that Rice Millers were in need of quality seeds due to increasing awareness of favorable environment for high milling standard and performance. They had built trust with farmer groups for many years already. Most of the time they served as marketing centers where sellers and buyers met: local traders delivered the crop and sold it directly to wholesalers while processors took a fee for processing the crop commodity. Farmers also brought their crop directly to millers and thus directly bore the transport cost. By participating in contract farming,

Millers can get good quality seeds and paddy. This can be an opportunity for MRF and development organizations to work closely with Miller groups who are very well connected with farmers, traders, retailers and collectors economically and socially. RSSD should continue to work with them to support contract farming zone in AD.

Mechanization Companies: The mechanization of rice cultivation was limited in Myanmar. Farmers (land owners) hired farm workers seasonally for rice transplanting, weeding and harvesting. However, in regions remote from Yangon some farm workers began to move to cities such as Yangon for work or they found other jobs locally in other sectors such as service industries and manufacturing, thus individual farmers had difficulty in hiring farm workers according to their need. Power tillers (from China or Thailand) are being introduced at lower prices. However, the introduction of tractors and combines was limited.

Some of the Rice Specialized Companies (RSC) started offering contract mechanization services for land preparation in many areas, as well as mechanized threshing and, to a lesser extent, combine harvesting. Some RSCs were also experimenting with mechanical transplanters and seeders. However, mechanizations is not effectively utilized for rice contract farming in AD. Some service providers have provided machine to farmers, it is required to coordinate among companies and service providers how to provide more effectively to farmers through contract farming.

Recently, farmers possessing tractors or specialized farming companies start to offer services to undertake land cultivation with payment. Because of the increasing labour shortage in rural areas, the mechanization of agriculture is considered to be urgent. However, the lack of medium-sized agricultural financing institutions providing a long-term credit with a modest interest does not allow average farmers to purchase agricultural machinery. This current lack of access to formal financing drives farmers to borrow from informal moneylenders with high-interest rates, reducing any profits they make from their harvests. The Myanmar Agricultural Developing Bank (MADB) funds 2 million farm households at subsidized interest rates of 8 percent per year. However, it can only issue year-long loans of MMK150,000 per acre, for up to 10 acres.

Private Banks

United Amera Bank (UAB): It is commercial bank and most of their investments are in construction, trade and other sectors but not for Agriculture sector since Agriculture is riskier although Agriculture is a huge part of Myanmar economy. UAB provided purchase loan for farm machinery to farmers with 6 months payment plan. UAB provided finance to other micro-financing companies and fertilizer companies. UAB and similar commercial banks showed less interest in investing in seed sector. However, UAB interest in plush loan system for the farmers who want to store their seeds/ products.

Yoma Bank: It is also a commercial bank, is willing to provide financing to 1) the

large-scale rice farmers who have 200 acres of land (insurance is needed), 2) agriinput dealers – manufactures / importers/ dealers, 3) Contract farming companies, 4) traders and 5) rice millers. Yoma Bank also interest in Plush loan/ locked in here system for paddy as (Agri-inventory discounting). In this system, it is necessary to work with third party such as commodity management company from India.

Myanmar Apex Bank (MAB): It is also a commercial bank but working/ supporting to MAPCO and the rice sector. If MAPCO is working on warehouse financing, MAB will provide financing in the system. MAB also provides loan in upgrading rice mills, exporting of rice and input distribution with long-term loan 3-5 years pay back to as the instruction of Central Bank in Myanmar. With USAID program, development project such as weather-based insurance will be tested.

NGOs: In AD, GRET's has been working to support rice seed certification. The team provided support to approximately fifty village-based farmers' organizations setting up financial (microcredit, hire-purchase, inventory credit) and non-financial (purchase of inputs, storage, certification of rice seeds) economic services for their members. The Japan International Cooperation Agency (JICA) involved in certified seed (CS) production, and upgrading of Government seed farms. Mercy Corps (MC) has worked in Labutta area collaboration with some local NGO and CSOs since tropical storm "Nargis". MC continued support to rice seed sector by collaborating with Golden Sunland is another model of contract farming engagement in rice seed sector development in AD. GRET collaborated with local NGO, RadanarAyar Association and Law Ka Ahlin are supporting small and medium farmers on rice seed production and market linkages with private partners in AD.

5.5 Analysis of Rice Seed Contract Farming Implementation in Myanmar



Traditionally, the smallholder farmers in Myanmar were challenged with using sufficient inputs and securing the price of produce at harvesting time. In an attempt to address these issues; smallholder farmers have been encouraged to cultivate their rice under the contract farming arrangement. The main focus of contract farming should be how to utilize investment opportunity without undermining individuals' and communities' rights to their land, making a discussion of contract farming particularly applicable.

Myanmar has historically suffered from uncertainty and inconsistency of policy formulation and implementations and therefore, an analysis of Myanmar's legal and regulatory framework, in the context of contract farming, has the potential to have real and practical consequences with the changing political atmosphere in country. Overall, contracts are an appealing mode of governance, but may be ill advised in some situations. Trust, good planning and sound implementation are essential for the success of any contract farming scheme.

Table 2: Summary of the Activities of Private Seed Companies

Company	Capacity of Seed Production	Rice Varieties/ Seed grade	Contract Farming	Active Areas
Ayer Dagon	100 ac	Sin Thukha	Yes	Ye Kyi township, AD
Ayer Pathein	Around 500 ac, (50000 baskets contracted)	Pawsan Yin, Sinth- weLat, Sinthukha, Thee Htat Yin, Ayermin	Yes	Pathein township, AD
Monsoon Foundation	30 ac (own) + 65 farmers networks	Sinthukha, and 90 days, PakhanShwe War and Paw San Yin	Yes	Kyaung Gone township, AD
Mone Thida	Not yet established in delta	-	Yes	Magway & Bago Regions
Good Brothers	300 ac own+ 6000 ac CF	-	Yes	Ye Kyi town ship, AD
KyaikLat	500 ac	Japanese Hitome bore, 90 days, Shan Yadana, Paw San Yin	Yes	Kyeiklat township, AD
Gold Delta Rice Specialized Company	400 ac	Sin Thwe Latt and Hmawbi-2	Yes	Danubyu, AD

5.5.1 Ayer Dagon

The company started contract farming in 2012-13 with over 100 acres in 3 villages (40-50 farmers) of AD. The Company provided credit at 2% monthly interest rate and machinery service. The Company contracted farmers who were recommended by village authority, having good record of land and site location, and following the technical guidelines and quality control through field inspections by DoA. The Company produced Sinthukha variety. It was a bit difficult for the company to sell the seeds to farmers who always increase the seed rate year by year due to lack of technological knowledge. Thus, they had to buy more seeds and spent more investment for seeds. The biggest bottle neck for seed producer was financial investment. For example, farmer can sell the Pawsanhmwe seeds only in summer. Seed growers can earn the money only in summer although they invested year-round to produce

seeds. The transportation charge was also costly. The company can get better profit if they could send seeds directly to growers. The company had two ways of contract farming. He had a contract with bigger company (international buyer/investor) to supply their demand. He also had contract with seed growers to achieve the demand of what company needs and to fulfil the international buyer/investor. There is a need of mutual benefits between and among contract partners.

The company wants to work with farmer groups adjacent to the company office or in their own field to manage the process and to do regular monitoring. Labour shortage was also a big constraint for seed producers/growers. For example; he had to pay minimum 10,000 MMKs per expert labor during crop season. He had to offer advance payment to those skilled labours. Because they were well trained for seed production as well as they were quite good in time management.

5.5.2 Ayer Pathein

Ayer Pathein company was founded when the Government drove the private sector to invest in rice specialized contract farming in 2009. Since then, the Company received an export quota and opportunities for its business. MRF is taking a major role of helping its members, private companies to implement contract farming to assist national rice reserves. The company's main business was credit. Ayer Pathein has done rice contract farming (50,000 acres) to produce quality seeds of different rice varieties. Ayer Pathein Public Company had production contracts with 650 farmers in four townships of Ayeyarwady Region. It supplied them with seeds, machinery and other inputs, and bought their paddy this year at around \$370 per basket (around 100 kilo). The Managing Director, U Win Myint Hlaing said that despite guarantees of inputs supply and sale of their harvests, many contract farmers remained reluctance to level their land and construct roads suitable for mechanized harvesters because they lost some productive land in the process. "Most farmers are afraid of losing parts of their plots when the land conditions are adjusted for modern farming," he said. "The government should adopt clear plans for the transformation to modern farming systems. The public can only be convinced of this system if they understand the advantages well," he said.

The MD suggested that there is a need of firm policy /system/guideline for successful implementation of contract farming. The coordination gap between farmers and company was huge. DOA has extension staff and land but lack of processing facilities such as seed dryer. The recent development of Regional Government is that they allocated regional budget for agricultural development such as establishment of seed and soil test laboratories. But seed lab needs accreditation and staff capacity. Farmers and firm business received seed dryer from regional General Reserve Fund as well. Regional Government also supported land consolidation for contract farming. The Company staff mentioned that role of NGO is important to facilitate selection of proper farmers, contracting process, building trust and price negotiation with famers. The Government should assist with regulatory enforcement.

5.5.3 Kyaiklat Company

This company is initiated as a rice seed producing company by rice seed growers/entrepreneurs. Kyaiklat company produced Pawsan Yin 80 from 80 acres and 90 days variety from 300 acres in the monsoon season and Shan Yadanar (DU 8) variety for GBS company in the summer season. The Company contracted with Good Brothers' Company Limited to produce CS to get 6000 baskets of Shan Yadanar-1 variety this year. U Aye Than who is a Chairman of the company stressed that he also produced Paw San Yin variety. Grower has to discard off-type seeds. Regarding RS source, they cannot rely on DOA's Farms because they found poor seed quality which was the product of DOA farm. Then, company tried to produce itself and it gave this information to DOA. DOA corrected this weakness in 2018. The company observed that the assistance of RSSD project is very helpful for business such as providing processing facilities such as dryer with cost share system. Seed source from DAR is good but they can produce very limited quantity. It will be great if farmers/growers can produce RS.

According to his experience, most companies faced the challenge of field inspection. Although seed law came out while DOA tried to cut some steps of seed laboratory, the process is still quite slow. It took almost 3 months. In reality, he sold out all seeds before his sample seeds had not returned from the laboratory. The quality of seed is a big concern for export quality.

In addition, rice seed growers have been struggling for higher production cost; 1) investing money for 4 months of storage while volume decreased to 10-15 baskets per 100 baskets, 2) special labour cost is higher than normal about double and they have to keep them the whole year (10000 MMK /day/head), 3) lack of support from the Government regulatory enforcement. He added that the mutual trust is necessary between farmer groups, company and labours.

5.5.4 Mone Thida Seed Production Co.,Ltd.

This company is based in Pwint Phyu, Magway Region. It has engaged in contract farming with about 40 farmers in Daka, Kan Gyi Daunt township in AD. The company is widely known for 90 days rice variety. It has strong technical skills and knowledge. It keeps strategic collaboration with rice seed actors. The most successful effort of this company is having mutual trust with rice millers in AD. The company sees the potential of contract farming in the AD. The company is a model for local business to learn how they need to prepare for technical part as well as good network with rice miller groups. The continuous support of millers is a key for this company. The Millers serve as an intermediary between the company and farmer groups for selling the seeds. The terms of contract are very important for both contractor and farmers. Most farmers do not care about the contract terms. It will be a good opportunity to work with foreign investors in contract farming. The same time, local companies and millers need to have collective voice and action to deal with exporters and the government. The FGD with farmers and buyers in Pathein revealed that the role of MRF is very important to be a transparent and inclusive rice sector platform.

5.5.5 Monsoon Rural Development Foundation (MRDF)

It started with Farmer Field School in 2015, funded by private donors to provide agricultural trainings and linked with the technicians from DAR. MRDF was also conducting machine repairing and maintenance training, and cultural practices. It provided farm inputs (seeds, fertilizers, chemicals/ organic inputs, and credits) to the farmers. MRDF initiated land consolidation activity with the support from the Regional Government Budget in 2017-18. It covers 17-18 villages with 150 acres. It took three years for MRDF to come up this contract farming, and collaborated marketing by linking with farmers, millers and traders. MRDFF guaranteed farmers for seed procurement back at 10% higher than grain market price. This was a good deal (incentive) for farmers in region. MRDF built a good relationship with DAR and DOA for quality assurance. Rice experts from DAR directly come and inspected 2-3 times per season in rice seed production.

The success of MRDF shows that it has a strategic network with big farmers groups in region. The MRDF will extend to about 100 acres of contract farming to Bago and Magway Regions. The Foundation wanted to get more engagement with MRF to increase networking and investment to expand their business and activities. The difficulties were need of post-harvest technology assistance and processing facilities. The foundation took time to select farmers for contract farming.

Table 3. SWOT Analysis of Selected Rice Seed Companies of RSSD in AD

	Strength	Weakness	Opportunities	Threat
AYER PATHEIN	- Well organized - Whole value chain covered (Input, machinery, seed, MF, milling, Wholesale)	 Weak linkages to market and technology gap in whole value chain Focus microfinance Contract farming agreement is arranged for grain not for seed Low Quality of seeds 	improvement and Quality seed - Better investment and best return in seed sector - It will be more effective if	 Farmers don't pay back money Loss of money and could not punish to farmers breaking the contract and selling their produce on alternative markets. Inefficient management of staff capacity and their working time.

	Strength	Weakness	Opportunities	Threat
AYER DAGON	Closely work relationship with DoAEGS is easily available from DoA	 Lack of 70% technical inputs Lack of skilful technician/ staffs 	 Cover whole supply chain up to export/ wholesale Less rely on DoA 	 Farmers don't pay back money Loss of money Need to recruit technical staff/ person
KYAIK LAT	 Strong technical support to farmers Marketing/ good reputation with big companies Strong Business advisory/ planning Management 	 Weak management Weak financial literacy, cash flows etc. 	 To be cooperated with Aya Dagon More business expansion opportunities Recruit accounting/ finance 	Lack of financial capacity and capability for the expansion of business
MONE THIDA SEED PRODUCTION CO., LTD.	- Strong Technical skills and knowledge - Good keeping linkages with rice millers & traders - Seed to be sold to miller and miller will sell to the farmers (strategic coordination) - High demand from rice millers	 No activity has done in delta yet due to dispute of land ownership Feedback from the farmers, expensive firm although they know the quality is excellent. 	- Strong Business Plan since it aligns the management team toward a common set of goals and it will attract to professional investors - Double cropping, bigger market - Well connect with millers & traders	- Some opponents may appear - Climate change impact
MONSOON RURAL DEVELOP- MENT FOU- NDATION	- MTF used "Farmer friendly incentive mechanism"	Weak in marketingWeak business plan	Expand market channelIncreases capacity in business	Some opponents may appearNo crop insurance

which draws	- Weak in	planning,	
huge attention	marketing	- Existence	
of farmer gro-	- Weak business	of Training	
ups to work on	plan	Center and	
seed contract	F -	presence of	
farming		big farmer	
- Strategic Cont-		network (with	
ract farming		300 farmers),	
and strong		- Establishing	
Technical sup-		the "Sin Thu	
•		Kha Zone"	
port - Own seed		which is	
production and		high demand	
satisfactory		in AD and	
support by		other parts of	
DAR		country	

In addition, the interviews with more companies revealed the following.

5.5.6 Good Brothers' Chemical Co., Ltd (GBC)

GBC was established with the purpose of providing the agriculture chemical products for farming in Myanmar. By implementing contract farming, GBS introduced new varieties; Sinthukha and Shan Yadanar 1 and 2 from China and multiplied in Myanmar. Contract farmers received fertilizers (1 bag of Urea, 1 bag of T-Super and 0.5 bag of P) supplied by Chinese fertilizer Company, YounTi Hwa and 80000 MMK/ac for labor charges with 2.5% monthly interest rate. GBS bought back seeds 2000 MMK/basket higher than the market price which attracted to farmers to continue in its contract farming scheme. GBS made targets to work for 30,000 acres of contract farming. They contracted with some growers to fulfil their demand of rice seed. The best thing of GBC was they bought all seeds and kept their promise and guarantee. They offered price flexibility.

5.5.7 Myanmar Agribusiness Public Corporation Limited (MAPCO)

MAPCO is a non-government Public Corporation, established in August 2012. MAPCO mobilized public savings and to foster broader investments in the agriculture and other agro-based industries in Myanmar in response to the growing demand for a corporation to lead the private sector of Myanmar's agribusiness industries. MAPCO was using market-based approaches and strategies as well as working in partnership with all the stakeholders from the farmers to the exporters.

MAPCO's contract farming of seed production and quality rice production seemed to be successful since 95% of the money had returned by the farmers. In 2017-18, a total of 7000-8000 acres of paddy was operated in AD. MAPCO was using a buy back at pre-determined price, which was already agreed based on market price. MAPCO

together with MRF has been involved in progress of Standard Operating Procedures (SOP) for contract farming which has already drafted second time in May 2019 by DOA and was proposed to Parliament. It was observed that MAPCO's purchasing power, technical monitoring and advising to farmers is limited. Financial capacity of MAPCO was limited since the interest rate of JICA's two steps loan was still high (8.5%- 13% fixed in SME loans to the millers).

Recent collaboration with China's state-owned enterprise CITIC Group, MAPCO was expected to start three projects – an agribusiness services centre project, an engineering and contracting business and a rice industry project. The rice project was expected to result in joint investments in Kyaiklat, Nay Pyi Taw, Myaungmya, and Kyauktaw in Rakhine State and a rice mill project in Twante Township. Meanwhile, the agribusiness services centre project which was key for rice seed contract farming involved opening service centres in 33 townships across the country. The services centre project alone was estimated to cost about US\$400 million (MMK 612.2 billion) and discussions about the financing and government approvals were being held. The study revealed that the links and networking among stakeholders, type of contract farming arrangement, and involvement of public sector were different to each other and in individual issue for seed production, multiplication and distribution channels.

5.5.8. Gold Delta Rice Specialized Company

The Gold Delta Rice Specialized Company (GDRS) was formally established in April, 2009 to concentrate in agro-based value and supply chain activities specialized in Danubyu Township, Ayeyarwady Region. Gold Delta is specialized in rice supply chain, from farm to market. Gold Delta is actively implementing large scale Contract Farming Program and it is regarded as a pioneer in private sector's involvement in providing quality seeds to farmers along with other necessary farm inputs.

- Contract Farming in Danubyu Township: Gold Delta has been working contract farming program with the farmers in Danubyu. Annually, about 1300 to 1500 farmers with the area of 5000 to 6500 acres have been contracted with Gold Delta. Gold Delta provides credits, quality seeds, inputs and buy back system. The Gold Delta also give advanced guaranteed prices at the time of contract signing. At harvesting, if the market prices is higher than guaranteed prices, Gold Delta gives market prices and if lower, the company gives guaranteed prices, in order for the farmers not to lose their income.
- Quality Seed Production: With the guidelines, training and support of the GDRS company's agricultural technicians, 50 farmers are producing certified seeds in 400 acres in this 2019 rainy season. The GDRS is producing the high quality certified seeds of the most promising 2 high yielding rice varieties, Sin Thwe Latt and Hmawbi-2 developed by the Ministry of Agriculture, Livestock and Irrigation. Annually, about 28,000 baskets of certified seeds have been produced and distributed to the contracted farmers.

- Introduction of improved farm mechanization: Land development is also important to increase the rice production. Therefore, the GDRS company is providing farm mechanization services for the farmers. The company purchased 20 New Holland heavy tractors and harrow and plough discs, 4 combine harvesters, and other farm implements for the contract farming program. The company has established farm mechanization unit and technicians, and provide the services for farming in farmers' field. The farm mechanization unit is able to provide services about 10,000 acres yearly in the farmer fields.
- The establishment of land consolidation: The Gold Delta Co., Ltd has been providing mechanized farming services. The total farm land of 2060 acres owned by 250 farmers were already consolidated and mechanized.
- Providing Agricultural Education to the Farmers: Gold Delta's Agricultural Technicians has been continuously implementing Agricultural Education Programs, giving training for seed production, fertilizer application, pest and diseases control, post-harvest technology, etc.
- Mills and Werehouses: Gold Delta has been carrying out high quality rice milling and reprocessing activities in their rice mills. Gold Delta possesses total storage capacity of about 250,000 Matric Tons.
- Community Development Activities: In order to promote social welfare and economic wellbeing of rural farmers and their children, Gold Delta has been actively implementing rural community development activities, such as providing underground tube wells, renovation of primary schools, bridges, health care and eye treatment, etc.

5.6 Case Studies



Case Study # 1: From Independent Seed Grower to Commercial Scale: Kyaik Lat Company

U Aye Than is a champion of rice seed industry in AD, a professional seed producer with excellent EGS linkages with the DOA and DAR. He recently established the Kyaik Lat Company. He was selected to collaborate with RSSD project. He has been involved in rice contract farming since 1998. He noticed that seed source from DAR was pretty good but not enough to go for CS while DOA itself could not fulfil the seed demand even for AD. Since then, he has been asking one big question



"why can't we (capable farmers) get permission to produce RS ourselves? Today, he has successfully made this product. Due to his tireless work of rice seed business contract farming, he is now producing his own registered seed (RS) with excellent quality. Because of the high quality, he is able to sell 100 per cent of the CS to various customers in various regions of Myanmar.

In the past, his big challenge was field inspection. He sold all his seeds although his sample seeds were still in the seed lab and he had not received a certificate. He felt guilty and he did not enjoy this kind of process. But he had to deal with it. He could sell and offered the price at 1.5 – 2times higher than market price. I asked how he dealt with pricing. He gave me a big smile..." he is a farmer thus, he understands how the farmer feeling is. He calculated his cost, benefit, profit margin and risks. He had a contract with GBC to produce 6,000 baskets of long grain Shan Yadanar 1 variety. He also worked with other contracted seed growers to produce RS from FS and CS from RS. His annual sales varied between 500-1000 seed baskets.

According to him, high rice price was a major factor attracting farmers to join the contract, which not only forced them to strict quality standards but also limited their freedom in farming activities such as the use of seeds and chemicals. According to his experiences, rice seed contract farming was functioning if the proper system was set up with mutual trust and understanding between contractor and farmers. In the past, formal contract did not exist. Most farmers did not care about the content of contract. Farmers only care about guarantee of market and price. Contract farming is successful when contractor can support the whole value chain 'seed to market'. This is evidence that further capacity building for farmers/growers and private seed entrepreneurs can play a role in registered seed production and supply in the Ayeyarwady region

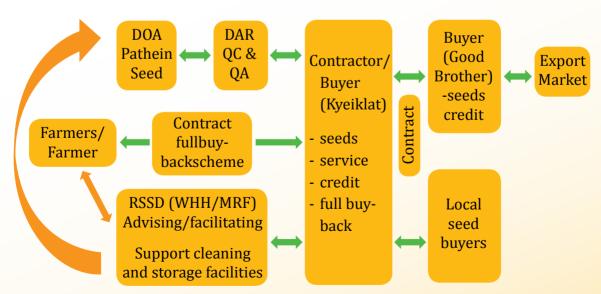


Figure 5: Rice seed contract farming with multi-stakeholder (with a farmer, a contractor/entrepreneur/buyer, buyer/exporter)

Case Study # 2: "From Seed to Bowl": Collaboration of NGO and Private Sector

Mercy Crops, an international NGO and a member of the Regional Seed Sector Platform of RSSD project was actively supporting as facilitator for rice seed contract farming system in AD. Mercy Crops has developed innovative contract growing models and has learnt important lessons. The project "Linking to Labutta Market(LLM)" funded by LIFT, brought benefits to all parties where Myanmar AWBA Group involved as input product supplier, while Golden Sunland, a Singapore-based agricultural firm also promoted responsible farming business from seed to harvest, signed a contract farming agreement to purchase paddy sown based on Good Agriculture Practice from Labutta paddy farmers. This partnership has encouraged the development of commercial relation between farmer groups and rice seed buyer directly by facilitation of Mercy Corps, and tried as well to develop the capacities of farmers. Golden Sunland (GS) provided credits, quality seeds, fertilizers and agrochemicals, as well as improved farming practices including better post-harvest handling and applied full buy-backscheme. GS will then export the procured paddy to international markets. There are currently 40 farm families farming across 200 acres of land in Labutta working under the project. The initiative was very promising because farmers increased their technical capacity and profits.



It was assessed that the price offered by the GS to its contact farmers engaged in the collective paddy selling operation was quite high compared farm-gate price offered by local paddy collectors, and the price set by the State. Contract farming will work well if the working process considers the entire value chain - from seeding to transplanting, from growing to harvesting, from milling to packaging,

and from exporting to marketing to produce quality assurance and food safety rice. This demonstrates the effective integration of the agendas of both NGOs and the private sector for rice seed contract farming in Myanmar

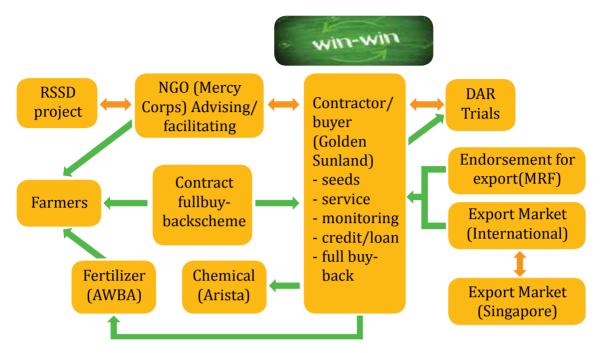


Figure 6: Rice seed Contact farming with Multi- stakeholders (with a farmer, a contractor/buyer, NGO, two inputs suppliers and exporter)

Case Study # 3. Example of rice export and import

When the rice trade stops!

The trader from Muse Warehouse always purchased rice from farmers of Ayeyarwady, Bago and Sagaing regions. Back in 2014, he was able to sell about 50 tonnes a month to Chinese buyers, who came from Ruili, just across the nearby border. They transported it to China for use mostly in making rice noodles and snacks. However, the stock has been stranded since Chinese authorities sealed the border in late September in 2014. Rice was piling up at dozens of other warehouses south of Muse, and there were no buyers at all. Regarding Myanmar's perspective, China officially banned rice imports from Myanmar due to a lack of agreements governing the trade. However, China's border officials turned an official opening to imports, enabling Myanmar's rice exports to China to increase from nearly nothing in 2011 to 752,000 tonnes – or 59 percent of Myanmar's total rice exports – in the 2012-13 fiscal year.

Myanmar's rice exports are generally lower quality than its competitors such as Vietnam, Thailand and Pakistan. However, buyers, particularly in remote Yunnan Province, have been willing to offer top dollar for even poor-quality Myanmar rice for use in processed, rice-based foods. This was changed in late September 2014. According to Myanmar traders, Chinese border officials began seizing the cargo nearly every truck, launching a crackdown on a trade that had been steadily growing in importance. With little recourse, traders have stopped trying to sell rice across the border. Where more than 100 truckloads a day crossed the border by road or

water, as few as two or three were attempting to export now. Chinese officials have not yet publicly explained the seizures but traders said it may be linked to China's ongoing rice harvest. By shutting off Myanmar exports, the idea was that Chinese farmers will receive a higher price for their own crop (https://www.mmtimes.com/business/12157-what-to-do-when-the-rice-trade-stops.html).

5.7 The Process of Contract Farming



	Farmer	Contractor	Government
Pre-conditions			
Problems /challenges	Price is needed to be discussed in advance. Terms should include clarity on payment quality, varieties of inputs. These should be clearly understood and agreed upon by farmers and buyers.	Contractor needs to have business plan. Selection of farmers should be done in process in advance. Contractor to prepare market accessibility and related linkages. Farmer groups should be systematically organized.	Trust building and transparency are necessary. Standardization of crop quality and cost per acre are required to be set up before starting the conditions.
Solutions	Premium price needs to be mutually satisfactory and agreed. Farmer wants better price. Farmers are responsible to produce the quality standard. Both sides need negotiation in all stages.	Contractor takes responsibility of the followings; farm services, input supply, extension and technical assistance, link with banks and financial services, organizing farmer groups.	Both sides should keep their promises by having of mutual understanding. Both sides should strictly adhere to agree commodity grades by cropping season and geographical regions.
Legal/ regulation /framework	Both sides need to ensure implementation of contract farming mainly to get better price for farmers and to work on dispute settlement.	There is no contract farming law in Myanmar.	It is suggested the Government to develop the law.

Contractual Arrangement

The contract arrangements need the adherence to the contract guidelines from parties involved need and to be enhanced. The arrangement should involve at last three parties: contractor, farmers and local authority. NGO can take a facilitator role if it is feasible as necessary. Contracting parties need to devise alternative mechanisms. Pricing mechanisms and enforcement mechanisms during default need to be clearly spelled out.

Implementation

implementation	1		
Problems /challenges	Farmers do not have a good variety and EGS. They cannot get inputs timely. Climate change is a real concern. They cannot sell the paddy timely.	Farmers are not adhering the agreement. They cannot do regular monitoring. Natural disaster is a big challenge.	The government needs to prepare a strategy for climate change impacts. Both sides need to agree for implementation in advance. Crop/weather insurance may be advantage for farmers if they completely lost the crop. But this will be a risk for buyers.
Solutions	To link with seed farms. Need timely information of accessing inputs. Need crop insurance. RSSD's initiative should take advantage here to supply the demand of EGS in AD. The project establishes "supply and demand mechanism of EGS". By doing this, farmers and seed growers aware of EGS source, volume and price within their network. Need of information on where to buy	Need clear terms for management committee (authority, accountability). Need crop insurance.	Require dispute resolution mechanism. To assist crop insurance system. Fairness of agreement for both sides.

		on the rice seed sector h	
	seeds, how much the price is. Data sourcing and updating are to be done by DoA in 26 townships of AD.		
Legal/ regulation /framework	The government needs to issue the law.	There is no contract farming law in Myanmar.	Efficient enforcement procedures, whether deriving from the contract, or as decided under a dispute resolution mechanism involving a third party
Monitoring and	dispute resolution		
Problems /challenges	Require the followings; equipment for quality control, standard weighing, technology, intervention by authority for contracting	Delayed actions taken by relevant parties for resolution of existing conflicts/ disputes	Require representative, responsive and systematic farmer organization (farmer groups, farmer related committees and farmer leaders/ representatives)
Solutions	 Both parties to get legal advice and must have the legal capacity to contract to follow the standard consent. Require technology assistance and relevant trainings given by the contractor 	Problems should be solved locally. Farmer representatives/ group should have the responsibility of farmer choices.	Require to solve conflicts/ disputes reported by the agreed representatives from contractor, famers and local authority
Legal/ regulation /framework	The Government should make rules and principles of law. SOP is recently	There is no contract farming law in Myanmar.	If both parties break the contract agreement or violate the law,

drafted second time. It is good opportunity for farmers to send the collective voices when the MoALI does wider consultation. according to the law, the severity of the punishment should reflect the seriousness of the case operational aspects of contract farming.

5.8 Major Factors Affecting Current Quality Rice Seed Supply and Blocking Private Sector for Contract Farming Implementation in Myanmar



General restrictions of investments in rice seed sector development include inadequate EGS, lack of law enforcement, policy instability, corruption, lack of technical persons, and inability to secure land and property rights. The lack of post-harvest infrastructure, bureaucratic procedure (Ex: access to credit, documentation process) and lack of transparency are the most influential factors among negative perceptions.

In fact, the economic environment for local seed production in Myanmar is favourable; there is a great potential market for locally produced quality seed. Therefore, Myanmar should take the opportunity on existence of wide range of varieties to consider demand of quality seed for local consumption as well as international consumption. On the other hand, restrictions posed by authorities do not always favour the evolution of local seed producing organizations and farmer groups into autonomous farmer producers/entrepreneurs to focus on their core task of producing and selling Certified Seed. The Government agencies also operate on the same seed markets, and whose economic transactions are subsidized in a variety of ways, but are not able to fulfil demand for seed in the country. This can be reinforced by formal propaganda to promote only the seed that is sold in the formal sector.

It was learned from the discussion with AD regional and DoA that DoA has been mainly involved in seed multiplication and distribution channel in AD. The Department of Cooperatives (DOC) mentioned that they have planned to produce CS from RS. The technical assistance should be in the hand of DOA not DOC. DOC's role is to provide finances to seed growers' associations or contracted seed growers rather than trying to produce seeds itself. These confusions may affect current quality rice seed supply and block private sector's function. The government departments should consider whether they will run as an enterprise or they will encourage private sector for this particular issue. It can be mutually beneficial by understanding each other and every stakeholder's strength in seed production under AD. The transparent collaboration between public and private is essential for this important issue.

5.9 Illegal Market



Myanmar has been in a long struggle of price volatility due to the illegal market. According to the data from the Ministry of Commerce, over 50 percent of Myanmar-produced rice is sold to China via the border trade. Rice exports have decreased by over a third from 2.5 million tonnes worth US\$780 million in the same period the year before. The main reason for the recent fall in export is lower demand from China. The collaboration between MoALI and MOC is very important to control the illegal purchase of rice by Chinese merchants in cooperation with local brokers to export rice to China illegally. The lack of effective actions against illegal exports of rice has a severe effect on the local rice market. This illegal trade causes lower rice prices, the total shutdown of rice mills and poultry, fish and cattle breeding industries which use rice raw materials.

5.10 Setting the Price Floor and Enforcement



Although the Government set the price floor, the enforcement is weak. For a price floor to be effective, it must be set above the equilibrium price. Actually, price floors are used often to try to protect farmers. But, when the enforcement is not working, farmers will lose their profit margin. Simply, the market won't sell below its equilibrium and the price floor will be irrelevant. The Government should understand the logic of setting purchasing price of paddy rice. The market is happening itself and the buyer decides how much margin he or she is willing to pay the farmer above the market rate. At the same time, if the buyer forecasts with his "buy back analysis", the buyer can adjust his cost benefit ratio to set the price within both farmer and buyer profit margin. This adjustment will help both parties not to lose their revenue.

Recently, The Ministry of Commerce is planning to grant loans totalling MMK15 billion to the Myanmar Rice Federation (MRF). With these funds, the MRF will purchase unhusked rice; currently, the market price is lower than the floor rates set by the government and the MRF. For the time being, the local rice market is experiencing sluggish demand, which has lowered prices. With the loan, which is set for 120 days, the Myanmar Rice Federation will attempt to both reduce financial losses for farmers and stabilize the market price of rice. The MoC stressed that "Despite lower rice prices, they (MRS) can't buy the unhusked rice at the price floor. The Myanmar Rice Federation bought the unhusked rice from farmers at a price lower than the floor rate. Furthermore, co-operative associations are also planning to buy the unhusked rice to help fluff the market up a bit (http://www.thaibizmyanmar.com/en/news/detail.php?ID=228).

In this case, The Government needs to realize how they consult with different levels of buyers and farmer groups to set the price floor and how they need to follow the law/policy without breaking the ground. Here, decision makers should seriously consider

the impact to the investors who are not breaking law and how the Government can handle enforcement to those who break the laws/regulation. This will lead to critical consideration of how can create enabling environment for FDI in rice seed sector development and contract farming.





BOX 4. Example of Decision-Making Tool for Sustainable Profit Margin

The buyers/contractors can work with his/ her decision-making tool by adding ground data to run the scenario. The three factors to be considered as follows;

- 1) **Traders/Buyers/Millers Cost Assumptions:** This includes Paddy Bag Cost (to pack and transport paddy from point of purchase to dryer/mill/store), Field to Dryer Cost (transport cost to move paddy from point of purchase to dryer/mill/store), Drying Cost (assuming modern vertical dryer being used, this fee is paid to service provider), milling cost, packaging, selling cost.
- 2) **Buy Back Analysis:** Paddy buyback price is an important factor for farmers' livelihood. Commonly, paddy is purchased in unit of 'Basket'. This unit is loosely correlated to 46 pounds/basket with the assumption of 14% moisture content of rice. Golden Sunland introduced a tiered system to produce interest of both farmers and off-takers. These data can do comparison with traditional model. The unit price is based on per kg at 14% moisture content. This part is designed to help buyer to decide how much margin he/she is willing to pay the farmer above the market rate. It would be great if farmers could understand this analysis.
- 3) **Scenario A:** Outline the Cost of Goods (COG) to produce 1mt of DRIED Paddy into white rice. The objective is to figure out at what paddy purchase price will make sense for farmers and buyers. For example, if buyer adjusts the cost/basket to 5,500 MMK/basket. If this program presents very little risk to the farmers because the profit margin is not less than previous operation. However, since hybrid rice has higher yield potential, at 120 baskets/acre, the difference in margin is 28%. However, at 5,500 MMK/basket, even with a very good mill, the buyer makes only 15% profit margin, this may be unsustainable for his business.

It reflects the current price setting mechanism's impact to buyers and contractors.

5.11 Suggestions for Improvement



Government

- Should improve its responsibility and accountability to adequately protect the land rights of its citizens, imposing a benefit-sharing requirement on investors/ contract firms may alleviate problems of dispossession and displacement
- Acts as or identifies a third party to review and settle disputes properly
- Should have appropriate legislation to ensure producers' rights
- Works with the private sector such as MRF and NGOs/CSOs in implementing SOPs or concession programs to protect larger investments and/or create a business enabling environment
- Facilitates access to funding for producers and buyers, such as loans to farmers or grants to buyers committed to invest in lifting smallholders' capacity
- Establishes code of conduct with other companies operating in the same or nearby area to reduce the risk of side-selling
- Assists to be strict in enforcing contract requirements
- Ensures that the contract farming schemes share benefits as well as risks

Farmers

- Consider forming or joining allies, existing groups/associations, which will facilitate the communication of grievances
- Understand the terms of the contract, including the product requirements. The forming of associations or cooperatives can aid this process too
- Standard CF contract templates which protect the interests of participating famers should be developed

Seed Producers/Buyers

- Conduct field survey to get actual agrarian context and supply and demand data
- Take time to build a good communication with and close monitoring of farmer groups
- Before the signing agreements, conduct a prior and proper consultation with producers, including on how conflict will be resolved and what punishment can be expected
- Contract via groups has the potential of reducing default as well as transaction cost
- Engage producers in the scheme design and implementation, for example in determining prices and pricing formulas, the degree of risk sharing and the quality of produce
- Ensure producers to receive prompt payment or agreed duration by building mutual trust and understanding
- Provide producers appropriate training, technology, insurance and inputs
- Ensure producers understand the terms of the contract
- Invest in building good relationships and trust with producers, for example

- through regular communication, training, the provision of secondary support services or the promotion of producer's land rights
- Ceollaboration among buyers enhance their agreement that they will not buy rice seed from farmers who are producing under another contract. This will prevent farmers to do side selling.

NGOs

- In some cases, NGOs may intervene where their expertise of social mobilization is fit into the local context to take a role of facilitation and monitoring as necessary. The example of The RSSD's platform is the best model for coordinated attempts by government, agribusiness actors and development agencies.
- The NGOs can provide agronomic advice to the smallholders and evaluate advice given to growers by technical team from the Contractor or from the Government.
- NGOs can act as an intermediary between smallholders and agribusiness firms/ contractors in negotiating contracts and facilitating arrangements in contract farming production. Their role includes contract evaluation, discussion with smallholders, liaison with the contractor, technical assistance and helping with purchases of farm inputs.
- NGOs should provide networking with companies and linking to markets. The best example of rice seed industry in Myanmar is WHH-RSSD project involvement in rice seed sector development in AD and its innovation of supporting business sector for contract farming.



6. ANALYSIS ON CRITICAL ISSUES OF SUCCESSFUL CONTRACT FARMING IN MYANMAR

The study carefully analysed and concluded the findings using ten critical issues (Hans Nijhoff 2010).

Meeting quality criteria

Companies highlighted that it was critical for success of contract farming to keep up with producing quality seed standard. Myanmar still needed to improve the whole procedure of seed supply/ seed source, quality production, certification, sampling, analysis and traceable. 90 % of companies reflected that they needed financial support to invest in technical team for regular monitoring and giving advices to farmers. It can be concluded the companies who were successful in contract farming used their own technical staff and did proper and regular quality checks. These companies also supported seeds, warehousing, cleaning and packaging facilities to ensure high quality of rice seeds. In Myanmar only, few companies are working on these requirements as mentioned above. Farmers' deeper awareness on quality guarantee was cent percent related to price guarantee.

Open communication with well organized groups

Companies understood that they need to take time to build a good relationship with farmer groups by using transparent and open communication. In Myanmar, most companies used village administrative committee rather than conducting one to one meeting with farmers. It is concluded that companies were more comfortable working with farmer groups and farmer representatives by intervening of NGO or CSO. The farmer groups became seed entrepreneurs by building a farmer platform from village to village tract and township levels.

Contract terms

Companies stressed in interview that they felt contract was very important to negotiate from individual farmer to a group of farmers. Most farmers did not care what the terms are. In Myanmar, most companies made the contract with individual farmers. It will be effective if the company can contract with group of farmers or at association level. Some used Rice Millers to negotiate with farmers. Some used the DOA staff but they were limited for this activity. Companies are aware that contract terms should be simple and understandable by farmers. It is noticed during the interview that companies were improving the format of contract and made it easier for farmers. The study used the agreement terms of Golden Sunland as a sample.

Extension support, training and knowledge

Many companies in Myanmar knew it as DOA's task to provide knowledge, guidance, technology to farmers, while farmers understood such extension support as key to

success of CF. Few companies indicated that approximately one extension worker per 100 farmers was needed, often making them financially unfeasible to hire own staff and therefore they used staff from the DOA to carry out extension services for them. However, most companies were aware that it was not feasible due to DOA's limitation. Few companies having their own extension staff and own demonstration farms will make visibility of production method which made the successful CF mechanism.

Collection of produce

Most companies involved in rice seed CF did not see it their task to collect produce from farmers to their collection points. In reality, farmers faced transportation difficulties to send their produce on time to collection points. The company should provide reliable mechanism for farmers how they can deliver and how company can collect and transport further to the processing plant. Transportation time was very important for both sides but this was still a big gap in Myanmar. The company should consider to hire an agent for collection of produce from farmers and deliver to the plant. Farmers should consider this process collectively by groups to save the cost and time.

Side selling

Most companies (90%) stressed farmers undertook side selling due to lack of enforcement of regulation or contract terms. To reduce side selling, the synergistic actions of companies or millers can prohibit buyers or traders not to buy directly from farmers. One way is that companies offer guaranteed price to farmers with some flexibilities of paying some percentage higher than market price. According to the results of interview, only two companies Golden Sunland (see case study) and Good Brothers were doing this. One company interviewed did not offer fixed prices, but offered current market price plus x %. This company also felt that being flexible to farmers to some degree of side selling per farmer was important. Companies knew that price setting was the most important incentive for farmers not to undertake side selling.

Access to credit

Companies interviewed knew that farmers needed loans and credit, while farmers in CF arrangements viewed access to alternative sources of credit as crucial. Some companies involved in CF has worked on providing credits to farmers. This can be both advantageous and disadvantageous for farmers. In Myanmar, there are many microfinance institutes providing agri-loan to farmers. The decision makers and companies require to consider that offering different agri-loan should not be a big burden for farmers. In line with this, the company directly linked with private banks can be functioning to have a guarantee funding scheme for farmers.

Access to inputs

Most companies in CF arrangements did not see it as their task to provide farm inputs

to farmers, but understood the necessity of it. Some companies directly linked with input companies to access inputs for farmers. Few companies used their standard inputs for farmers. Another company invested in collaboration with input companies to produce own high-quality seed and to provide inputs to farmers who would pay back after harvest (Ex, Golden Sunland and AWBA). But this approach became a burden for company's long-term investment. Some companies subsidized provision of inputs to farmers with reliable about 30-50 %. Some companies are now working with private banks (MAPCO with MAB) for supplying agri-inputs and credits as well.

Pricing and method of payment

Companies have changed their mindset that it was important to agree on guaranteed prices with farmers. But farmers always have a difficulty of cash, paid for in cash, inputs or goods, as a crucial component in their CF arrangement. On solving the guaranteed price issue, one company paid the current Government price floor plus x%. It is suggested from the interviews with traders and companies that to find the optimum balance between what flows back to the farmers versus the company. In many cases inputs are part of the payment system. For one company inputs were often used as a method of (pre) payment to farmers. Another company where costs of the provided (hybrid) seed to farmers were distracted the cost of seed from payment to these farmers after collection of their produce. Concerning cash payments, one company currently pays in cash, because it is working with private bank by means of a bank transfer mechanism. Farmers were also provided this bank mechanism to have access loans from the banks. A clear role for NGOs is noticed to overcome this constraint (Mercy Corps is offering facilitation role as well as technical advisory role to A Bank Golden Sunland for its upcoming contract farming in AD).

Sharing risk

The companies were reluctant to share production risks with farmers, while farmers knew it was very important. Most companies worked under the condition that all production risks were concerned with the farmers. It was stressed in the interviews that involving NGOs are essential to minimize these risks for farmers, and would consider setting up a contingency fund or bring in an insurance company to set up an insurance instrument. Another company made the arrangement with farmers that in case of crop failure by natural disaster, farmers did not have to pay back from their harvest for the costs of farm inputs. Another company tried to reduce risk by demonstrating produce as early as possible to adapt with climate change, and advised farmers for crop rotation and support investment. Ninety percent of interviewees revealed that climate change was a big challenge for their production.

7. STRATEGY RECOMMENDATIONS

The insights from in-depth interviews, combined with FGD results and regional and national level data, were then used to populate an analytical framework to identify opportunities for inclusive rice seed sector contract farming development. It can be seen that these proposed solutions are able to tackle multiple issues rather than trying to resolve each of the priority issues in isolation.

Some key issues to be considered on successful contract framing:

- To promote a successful contract framing model on seed business, supports from government is critical, ranging from general sector development policies and certification of the contract. In addition, the support from development projects include farmer coordination and technical support which are equally critical.
- The good governance of the Company is another factor. It is the key to efficiency and effectiveness of a contract.
- Agricultural extension services by the company are provided in the form of training, ongoing technical advice.
- From the producer side, good collaboration and ability to organise between farmers are also important. It helps to reduce the transaction costs for both parties.
- Contract farming is more likely to succeed if it can draw on farmers to join with distinctive advantage to non-contractual arrangements.
- Some upfront incentives for farmers such as credit scheme, access to agricultural inputs can be used as pre-condition for farmers to join in an alliance of production. With these initial supports, the linkage or binding between the Company and the farmers are stronger.
- A fair price setting process is likely to be one successful factor. In this process, it
 is critical that to decide the price with the participation of farmers, the company
 and an arbitration body protect the rights of farmers. However, given the price
 volatile, the price benchmarking should be flexible and enable to make quick
 decision.

7.1 Short-Term Strategy



- Empower local authorities and local service providers intervention might include supporting local authorities to understand the implication of contract farming for farmers and planning at the local level and identify situation where interests of involved parties, particularly farmers are affected.
- Empower farmer groups and improve their skills Agricultural technical knowledge provides the short-term wins for farmers. In the long run, activities such as technical support in setting farmer group, building up skills in

- negotiation, helping farmers to understand the impact of contract farming, analysis of market, financial management and etc are crucial to empower farmers.
- Good Company Governance the Company will receive support indirectly through the work of the NGO with farmers as it represents a cost saving for the Company. However, this could be used as a mechanism to bring in Company to implement good governance practice in their partnership with farmers. At the minimum, support to increase the information sharing between company and farmers will help to bridge the gaps

Coordination and Partnership

- National level: Improve strategic coordination and collaboration among MoALI, MoC and MRF
- Regional level: Continue Seed Platform and Match making, organize district level millers to start working collectively to explore new market opportunities
- Community level: Improve capabilities of farmer groups/organization in knowledge sharing, business skills, value creation and marketing will lead to direct links between producers and buyers of seed
- Encourage existing and established platforms at regional and national levels, and increase collaborations for service evaluation, intervention research, and work integrated learning etc. (Ex, seed platform and match making meetings)

Market position

- Revisit rice seed market and milled rice market
- Set target market for specific varieties for both domestic and export markets
- Develop marketing strategy for each target region/country
 Example; diversification of market is remedial treatment to solve current problem of low price and decline volume purchased by other countries
- Encourage contract farming for target variety and target market with "buy back strategy"
- Take advantage of existing wide range of varieties into an opportunity to be more focused on what consumers want from Myanmar

Mechanization Strategy

- Analyze the existing national/regional farm mechanization situation
- Establish network/platform service provider of agricultural mechanization
- Farmers/groups, contractors and other development arrangements for the multi- farm use of farm machinery, particularly in certain situations, can make an important contribution to contract farming. These arrangements facilitate an efficient use of machinery and make available to farmers' machines, which they might not be able to afford individually.

❖ Financial Institute

- The Banks's collateral requirements should be as flexible as possible to encourage rice seed growers and entrepreneurs to take risks in starting up a seed business.
- Development agencies may be able to assist to fill the financial gap of private companies.
- The banks may need to take time to build trust with seed growers for their financial management capacity
- Banks may need to be protected of their investment into contract farming.

7.2 Medium Term Strategy: "Making a Change Together"



Reinforce Government Agencies and Legislation

- Revision of Interventions: Some interventions of the DOA and DAR may not be effective. It needs to re-allocate technicians from responsible departments and potential partners and monitor the performance whether logically and effectively implemented or not.
- Explore the mutual interest and benefit of sharing costs, risks and profits by working together between public and private sectors.
 Example; Try join venture seed farm by DAR and MRF, DOA and Agribusiness Firm (at least 50% each cost share). By doing this, capacity and facility of breeders and technician will be improved and motivated while demand of private sector to be fulfilled. In addition, State invested agri-infrastructure as a means of strengthening the agricultural development, but those infrastructures could not properly run and lead to white elephants and wasted public money in the process. In this case, Government can do cost sharing with private partner (25% budget and 25% contribution in kind for total 50%) to use for agri-related facilities functioning.
- Legal security and dispute resolution mechanism: special attention needs to be put by the Government;
 - ✓ Existing enforcement mechanism to be functioning to protect legal business rights and properties as well as to solve the dispute when it happens at each and individual level, those who involved in the contract farming arrangement.
 - ✓ Promote a culture of responsible business and attracts the investment opportunities or provide necessary incentive for the private seed companies who are interested to integrate small holders farmers in to contract farming arrangement.

Strengthen MRF's strategic action on rice sector

 Leadership development: MRF is the most important stakeholder/actor for rice seed sector development and national/regional policy making for rice

- industry. For effective networking and linkages as well appropriate policy advocacy, MRF is required to develop its capacity further.
- Communication, coordination and collaboration: MRF is in the strategic position to connect with all key stakeholders. MRF should consider how to maximize its strength to effectively work with key actors from the ground level to policy making level.
- MRF should develop the stakeholder mapping and pick the strategic partners to increase momentum network and coordination to successfully implement future contract farming mechanisms.
- Consultation is needed to advocate for a change at a national level, contract farming should be more integrated with budget lines and appropriate financial incentives to encourage seed business to involve, where MRF could plan a critical role

Research and Innovation

- Conduct evidence-based research and innovation by learning lessons and milestones from the RSSD project in AD. This can be facilitated by adding different key stakeholders, for example, banks and mechanized group/ companies. This will encourage undergoing interventions done by RSSD partners to measure service quality/ capacity outcomes and impacts as well.
- Assist business partners and farmer groups to develop capacity in value creation and marketing within their demand chain. This will also help farmers to maintain market access and revenue.
- Maintaining a robust private sector partnership and engagement, is one way to anticipate and adapt to long-term macroeconomic developments in long run.
- Create business environment to promote private sector and greater engagement of private sector in order to improve structural performance in rice markets.

The following diagram provides key stakeholders involved in the process of the rice seed business contract farming in AD. It emphasizes how the dynamic can be improved by filling the gaps for future integration and by exploring possible approaches. This includes further expanding active contract farming systems and integrating them in the rice seed industry.

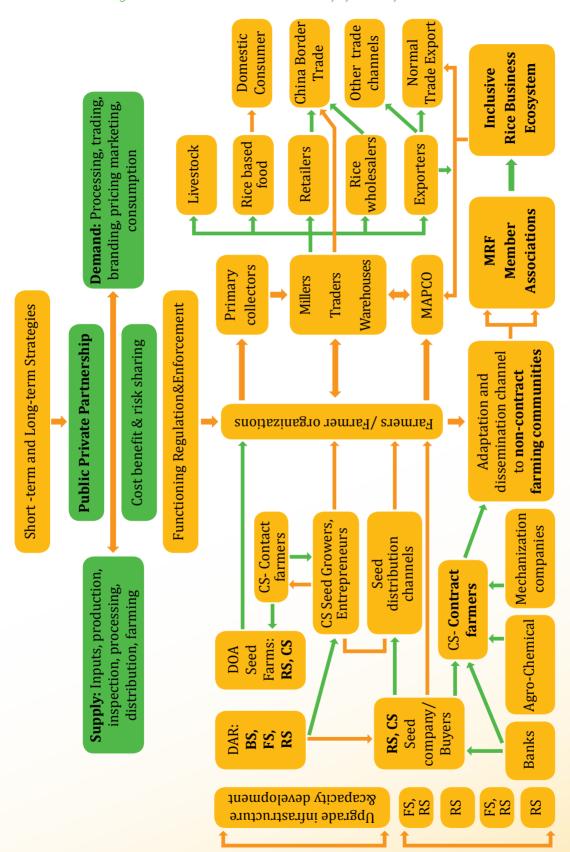


Figure 7. A Sustainable Rice/Rice Seed Industry in AD/Myanmar

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Annex 1. Detailed Activity Schedule

Item	Inputs	Outputs/ Deliverable
Desk research and literature review	First week of March 2019 - Telecommunications and Face-to face meetings with Supervisor of MRF and Advisor of RSSD	 Background Information and objectives of assignment Understanding current Myanmar agriculture policy and policy environment for contract farming systems, briefing on RSSD Project activities and required outputs of study and understanding the existing initiatives of MRF
Development and validation of study plan, interview guides, respondent selection criteria	 Second week of March 2019 Design assessment methodology and plan data collection, develop tools Discussion with supervisors Previous findings of key stakeholders 	 Draft assessment methodology Draft questionnaires for faceto – face interviews and FDG meetings Draft List of interviewers Detail Work Plan Inception Report summited
Revised works plan, finalized travel schedule	Third week of March 2019 - Meeting at MRF office - Interviews at MRF office	 Feedback on Inception Report by MRF Advisers and WHH Adviser Revised list of interviews Finalized travel schedule to Delta and Nay Pyi taw
Travel to Delta -Kyaiklat Data collection (including piloting of contract farming mapping tools)	Final week of March 27 March 2019 5:00 AM: Trip to Kyaiklat 8:00 AM: Meeting with Chairman of Kyaiklat Co.Ltd 10:00 AM: Greetings to Township officer from General Administrative Department of Kyaiklat	In-depth interviews are conducted with key stakeholders/actors of contract farming to gather ground facts of contract farming system, delivery of outputs from township authority, inputs mechanism, SWOT analysis and market accessibility for farmers etc.

10:30 AM: Driving to Kyoun Gone

1:30 PM: Interviews in

Kyoun Gone
1) Moonsoon
Foundation,
2) Good Brother

3) Farmers Groups

7:00 PM: Overnight in Pathein

28 March 2019

9:00 AM: Meeting with Regional Minister for Agriculture of Ayeyarwaddy Delta

11:00 AM: Meeting with RSSD project staff

1:00 PM: Meeting with

Regional
Director,
Department of
Rural Development

Rural Developme (DRD),

3:00 PM: Regional Director,

DOA, MOALI,

Ayeyarwaddy Delta Region

7:00 PM: Overnight in

Pathein

- Regional Minister can update for overview policy for Delta
- DRD is allocating fund to agricultural activities at district and township levels and community development. They are also working on loan for farmers.
- The Regional Director of DOA is a key player for contract farming and investment related projects.

29 March 2019

9:00 AM: Participate in RSSD

project

event in Pathein

11:00 PM: In-depth

Interviews of
Millers, traders,
Input suppliers,
seed suppliers,
Ayeyarpathein
Company,
Ayeyardagon
Company,

- Gather relevant data and stakeholder inputs
- Intervention gaps, SWOT of contract farming implementation
- Collect ground data from input suppliers, bankers, traders, millers,

	1:00 PM: Focus group discussions with Farmers, 3:00 PM: Bankers, A Bank 4;00 PM: Moon Thida Foundation 7:00 PM: Overnight in Pathein	
	30 March 2019 7:00 AM: Travel to Laputta 10:00 AM: Meeting with	 Gather information and lessons learned from Mercy Corps working with Golden Sunland for contract farming Learn different perspectives of private sector and farmers for gaps, benefits, implementation, monitoring and feedback on existing model
Travel to Yangon	31 March 2019 AM: Meetings in Laputta with RSSD project staff PM: Driving back to Yangon and arrive Yangon	- Learn RSSD project activities and outputs at ground level
Yangon	First week of April 2019 In-depth interviews in Yangon 1) IFC/World Bank 2) Yoma Bank 3) MADB 4) UAB	- Inputs of development partners and private banks to explore opportunities for financing contract farming
Travel to Nay Pyi Taw	Third week of April 2019 25 April Specific meetings and interviews to be conducted as follows; - Meeting with DG of DOA - Meeting with DDG of DOA	- Identify gaps and weaknesses to present SWOT analysis to address contract farming mechanisms

	for existing contract farming implementation, monitoring and role of DOA - Meeting with MoC, MIC	
	 May 2019 Data analysis: content analysis (thematic analysis, evaluative propositions and stereotypes) Design PPT for the seed sector platform meeting, present key finding and policy recommendation 	Draft report on contract farming strategic including Analysis of "Successful" and "Failure" of Contract-Farming Initiatives, recommendations and summary Policy Brief paper to the WHH/ RSSD Seed Sector Secretariat
Travel to Nay Pyi Taw	9-10 May 2019Facilitate at ContractFarming SOP Workshop inNay Pyi Taw	Analysis of SOPRevised draft SOP
Travel to Pathein, AD	June 2019 11-12 June 2019 - Present preliminary findings of study at Seed Business Stakeholder	- Reflected the comments of key stakeholders from AD into final report
	Match-Making Session - Final report preparation	 Final Report The reports should cover, but are not restricted to: Introduction and background Summary of methodology Literature review, references noting anonymity of primary sources where required Overview findings, analysis and recommendations Annexes and attachments – Including tools used during assessment

Annex 2 Questionnaires

For Contractors/ Companies/Agribusiness Firms

1)	What types of contractual arrangement that smallholder farmers are being implemented with contracting firms?
2)	How long did you engage in contract farming?
3)	After engaging in the contract farming, how much did you spend for producing rice based on following items (seeds, fertilizers, ploughing, mechanization, harvesting, transportation etc)?
4)	What did the contracting firm offer when engaging in contract farming?
5)	What criteria did you need to fulfil under the contract farming?
6)	What are the challenges you encountered in engaging contract farming?
7)	What are the suggestions for improvement of existing contractual arrangement?
8)	Currently, has your household grown rice under an agreement with any companies/firm under which you have received some inputs or benefits for your agricultural activities?
For	Farmers
1)	What types of agreement do you have contracted?
2)	An official legal agreement with the company
3)	An official legal agreement with a middlemen
4)	Official registration with company (signature required), but no legal contract
5)	A verbal agreement with the middlemen (handshake agreement)
6)	A verbal agreement with the company (handshake agreement)
7)	How many years of experience have you in rice contract farming?
8)	What size of your own land now is growing rice under contract farming?

9)	As part of your most recent rice contract farming agreement, have you offered any of the following and did you receive or reject it (seed, fertilizer on credit, a cash loan, a grantee on sale price)?
10)	Under rice contract farming, which of these criteria did you need to fulfil?
11)	Provide a certain volume of produce
12)	Follow cultivation guideline (include chemical application)
13)	Sell produce exclusively to the CF company under the agreement
14)	How did you communicate with the contract farming company?
15)	What are the effects of engaging in rice contract farming on your household?
16)	What challenges did you encounter in rice contract farming?
17)	How to make contractual arrangement best suitable for you?
For	Government
1)	How did you take part in RSSD, any comments?
2)	What do you think on role of government in contract farming?
3)	How do you describe current contract farming?
4)	What capacity can you build during your engagement in RSSD project?
5)	How do you see future strategy for rice seed sector transformation?
6)	What are the main challenges and gaps in seed value chain?
7)	Have you experienced coordinating with private sector to supply quality seed?
8)	Have you ever connected to end -market for farmers?
9)	How do you think extension service of DOA to be involved in contract farming?
10)	What are the risks for Government if you facilitate the farmer groups and rice seed company to do contract farming and how will you plan the action as risk mitigation?

Annex 3 List of Interviewees and Participants

Sr.	Person Meet	Organization/ Company	Place
1	U Ye Min Aung	President, MRF	Yangon
2	Dr. Min Aung	Advisor, MRF	Yangon
3	U Khin Soe	Advisor, MRF	Yangon
4	Mr. EaknathKhatiwada	Seed Business Development Advisor, WHH	Yangon
5	U Tin Htut Oo	Chairman, Agricultural Group, Chairman of the Agriculture Group, Yoma Strategic. Holdings Ltd.	Yangon
6	U Ba Hein	Former Minister of Agriculture in Ayeyarwady Region	Yangon
7	U Yan Lin	PyithuHluttaw MP from Kyeik Lat Township and Chairman of Agriculture, Livestock and Rural Socio- Life Development Committee	Yangon
8	Dr. Larry Wong	Advisor, IFC/World Bank	Yangon
9	Daw Daphne Aye	Rice Market Specialist, IFC/ World Bank	Yangon
10	Mr. David Chan	Chief Operating Officer, Golden Sun Land Co. Ltd.,	Yangon
11	Mr. Wahyu Nugruho	Program Manager, Mercy Corps	Yangon
12	U Thet Oo	Senior Agricultural Advisor, Mercy Corps	Yangon
13	U Thaung Win	MD of MAPCCO Golden Lace	Kyeik Lat
14	U Aye Than	Kyeiklat Co., Ltd.	Kyeik Lat
15	U Kyaw San Oo	Seed Grower	Bogale
16	U Tin Nwe Oo	Seed Grower	Kyeik Lat
17	U Kyaw Kyaw Lin	Paddy Seed trader	Ma U Bin
18	U Kyaw Kyaw Aung	Head of FFS and Manager, Monsoon Foundation	Kyoun Gone
19	U Tin Aung Win	Regional Minster for Agriculture	Pathein
20	U Kyaw Win Tun	PC, Welthungerhilfe	Pathein
21	U Win Myint Hlaing	MD, Ayer PatheinCo.,ltd	Pathein
22	U Kyaw Swa Oo	Director, Department of Cooperative	Pathein

Contract Farming on the Rice Seed Sector in the Ayeyarwady Delta

23	Daw SuSu Naing	Director, Department of Cooperative	Pathein
24	U Sein MaungMyint	Deputy Regional Director,DoA	Pathein
25	U Tin Aung Than	Seed Grower, Ohn Pin Su village	Mawlamy inekyun
26	U Soe Myint	Technical Advisor, Good Brothers	Yay Kyi
27	U Thaung Tun	Manager, Ayar Dagon	Yay Kyi
28	Dr.Paung Shin Gum	International Liaison Officer, DAR	Naypyitaw
29	U Khin Maung Nyunt	Director, DOA	Naypyitaw
30	U Ko KoGyi	Director, DOA	Naypyitaw
31	Daw MyinMyint Aye	Deputy Director, DOA	Naypyitaw
32	U Aung Soe	Permanent Secretary, MoC	Naypyitaw
33	U Myo Thu	Director, Myan Trade, MoC	Naypyitaw
34	Dr.Khin Thanda Win	Kyushu University, Breeding Project, DAR	Naypyitaw
35	U Nay Win Mg	Regional Director, UAB Bank	Yangon
36	U Nanda Tin	Marketing Manager, Agribusiness Finance, Yoma Bank	Yangon
37	U Kyaw Naing Oo	Head of Agr-Finance, YOMA Bank	Yangon
38	U Ye Min Soe	MAPCO	Yangon
39	U Zaw Moe Aung	MAB	Yangon
40	U Kyaw Ni Khin	Chief Business Officer, MAB	Yangon
41	Mr Shee See Kuen	Golden Sunland	Yangon

Annex 4 Sample of Contract Farming Template (Golden Sunland Co. Ltd.)

CONTRACT FARMING AGREEMENT

3. Cash credit

4. Storage for FPE paddy

This is a contract farming agreement between a miller or trader (known as the 'buyer') and a Farmer-Producer Enterprise (known as the 'FPE'). According to the terms of this contract farming agreement, the buyer will provide selected services to the FPE and, in exchange, the FPE agrees to sell a specified quantity of paddy to the buyer.

The aim of contract farming is to build a relationship of trust between the buyer and the FPE, so that over time the FPE is able to improve the quality and quantity of paddy, and the buyer is able to provide a reliable and increasing supply of quality paddy.

The buyer and the FPE should complete this agreement together.

Buyer details		
Name of contract farming buyer		
Location of buyer		
Type of business		
Mobile phone number of buyers		
FPE details		
Location of FPE		
Identification number of FPE		
Name of General Manager		
Name of Paddy Sales Manager		
Name of Finance Manager		
Mobile phone number(s) of FPE		
Number of members in the FPE		
Details of contract farming agreement		
Contract farming services provided by the buyer	Yes	No.
1. Certified seeds on credit		
2. Fertilizer on credit		

1	Certified	COOK	On	crodit:
				uleull.

Number of baskets per FPE member	
Number of members in the FPE	
Number of baskets provided on credit	
Variety (government certified seed)	
Date(seeds will be provided to the FPE)	
Responsibility for delivery / collection	
Credit repayment per FPE member	
Credit repayment by FPE	
Variety of paddy	
Should paddy be produced from certified seed?	
Date of repayment	
2. Fertilizer on credit:	
2. Fertilizer on credit: Number of FPE members receiving fertilizer on credit	
Number of FPE members receiving	
Number of FPE members receiving fertilizer on credit	
Number of FPE members receiving fertilizer on credit Number of fertilizer bags per member Number of fertilizer bags provided on	
Number of FPE members receiving fertilizer on credit Number of fertilizer bags per member Number of fertilizer bags provided on credit to the FPE	
Number of FPE members receiving fertilizer on credit Number of fertilizer bags per member Number of fertilizer bags provided on credit to the FPE Brand of fertilizer provided	
Number of FPE members receiving fertilizer on credit Number of fertilizer bags per member Number of fertilizer bags provided on credit to the FPE Brand of fertilizer provided Price per bag	
Number of FPE members receiving fertilizer on credit Number of fertilizer bags per member Number of fertilizer bags provided on credit to the FPE Brand of fertilizer provided Price per bag Total value of fertilizer provided to FPE	
Number of FPE members receiving fertilizer on credit Number of fertilizer bags per member Number of fertilizer bags provided on credit to the FPE Brand of fertilizer provided Price per bag Total value of fertilizer provided to FPE Date fertilizer will be provided to FPE	

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Number of FPE members receiving cash credit	
Cash provided per FPE member	
Total cash credit provided to FPE	
Date (cash credit will be provided to FPE)	
Interest rate (% per month)	
Date of repayment	
4. Storage for FPE paddy:	
Number of baskets of paddy the buyer will store (should match the contract farming number of baskets)	
Location of storage	
Storage fee per 100 baskets	
Responsibility for transportation	
FPE sale of paddy to the buyer	
Number of paddy baskets per FPE member	
Number of paddy baskets the FPE is contractually required to sell to the buyer	
Variety	
Should paddy be produced from government certified seed?	
Quality of paddy	

Weight of paddy	
Responsibility for transportation	
Location for collection (must be outside embankment)	
Date of payment (number of days after buyer receives paddy)	

Other Terms and Conditions

Communication:

- 1. The buyer and the FPE agree to maintain regular communication throughout the duration of the contract farming agreement
- 2. After signing the contract farming agreement, the buyer will contact the FPE at the following points:
 - · When the buyer has ordered certified seed
 - When the certified seed is ready for collection by the FPE
 - When the fertilizer is ready for collection (if providing fertilizer)
 - When the cash credit is ready for collection (if providing cash credit)
 - When they are offering a high price for paddy
- 3. Following signing of the contract farming agreement, the FPE will contact the buyer at the following points:
 - To check the condition of their paddy (if the buyer is providing storage)
 - To check the price offered by the buyer (approximately monthly)
 - When the FPE has purchased paddy from members (harvest time)
 - When they/FPE are ready to sell their paddy to the buyer

FPE sale of paddy to the buyer:

- 4. The buyer agrees to pay the local market price for the FPE paddy, taking into account the quality of the paddy. If the quality is good, the price will be higher. If the quality is low, the price will be lower.
- 5. The FPE commits to sell their paddy to their contracted buyer, according to the detail contract provided above. If FPEs are not happy with the price offered by the buyer, they should meet the buyer to discuss.
- 6. The FPE agrees to sell only good quality rice to the buyer, according to the agreement above.
- 7. The buyer agrees to cover the transportation cost of the paddy, if the quantity is over an agreed amount (usually 500 baskets).

Signatures

1. Buyer	2. General Manager of FPE
Name:	Name:
Signature:	Signature:
Date:	Date:
3. FPE Paddy Sales Manager	4. FPE Finance Manager
Name:	Name:
Signature:	Signature:
Date:	Date:

Annex 5 Sample Content of Contract for rice seed (Source: Golden Sunland Co.Ltd.)

Introduction

This document outlines the collaboration betweenCo. Ltd. and Partner-Farmer within the Linking Labutta to Market (LLiVI) Programme. Conditions outlined in the document is effective from 20th Dec 2018 to 15th May 2019.

Conditions of Collaboration:

1. Buy-Back Price @ (.....) MMK/basket based on the following conditions•

Moisture	Ib/basket
22%	521b
21%	511b
<20%	501b

1% Increase In moisture =1lb Increase

- 2. Moisture content would be measured at the dryer site using equipment provided by the (......) to ensure standardization.
- 3. Paddy to be delivered to the dryer site no Later than (.....)hours after harvesting.
- 4. (......) Hybrid seed supplied (...). at (......) MMK/acre or (......) MMK/kg for 20kg (Original price (.......) MMK/kg, price adjustment after proven yield).
- 5. Partner-Farmer to follow the fertilizer regime below;

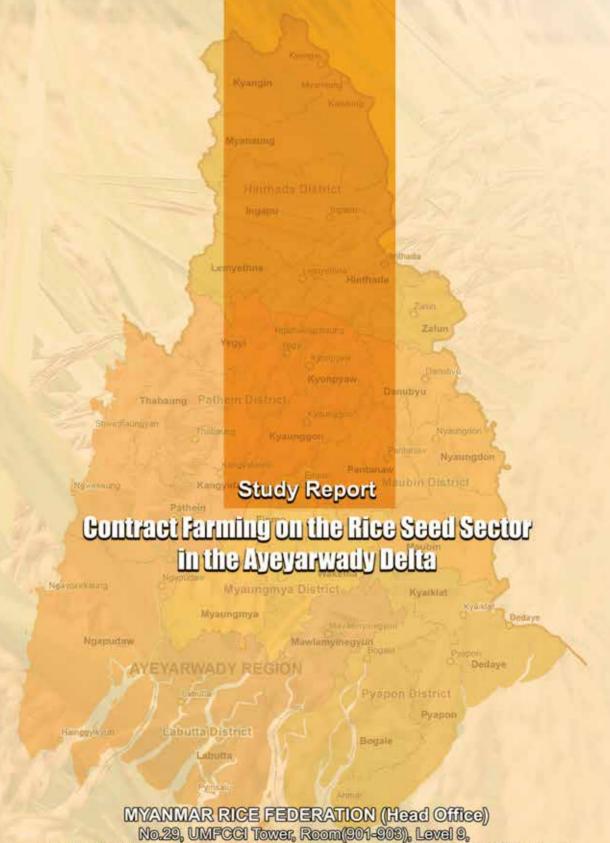
	Applications rate	Absolute nutrient	Basal (first)	second	Third	Fourth
N	() kg					
P	() kg					

6. Partner-Farmer to refer to the weed/pest/disease management recommendations

Weed	Pest	Disease

- 7. Final payment to be paid within 10 working days after paddy is handed over
- 8. Partner-Farmer to keep detailed record of '..... The planting season for fine-tuning purposes
- 9. Payment Mode/acre

Signed by....



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