

## RBF+ SEC's Appraisal Note – Grant Approval Committee Meeting on 2<sup>nd</sup> Dec. 2024

A: Appraisal Overview			
<b>Project Title</b>	<b>Food Safety &amp; Value-added Production at a Rice Mill in Pathein Township</b>		
<b>Name of MSME</b> <b>RBF+ Project Reference Number</b>	Aung Thapyay Rice Mill A7-01-037		
<b>Names of the majority owners of the MSME</b>	U Khin Aung		
<b>Geographic Location of the Project</b>	Pathein Township, Ayeyarwady Region	<b>Timeframe</b>	7 - 9 months
<b>RBF+ Focus Window and Areas Covered</b>	Window-2 / Food Safety & Value-Added Production (Area 7)		
<b>Proposed RBF+ Grant in million MMK</b>	60.2	<b>RBF+ Grant as a % of total investment</b>	50%
<b>Project summary</b>	<p>Rice milling is a vital component of the agricultural value chain, supporting rural economies and ensuring national food security. It provides livelihoods for hundreds of thousands of primary producers, mill operators, and workers in rural areas. However, limited investment in modern infrastructure, such as upgraded rice mills, prevents Myanmar's key agricultural products from achieving the best market value. Many existing rice mills lack advanced cleaning and drying systems, leading to contamination from dirt, stones, pests, and mold, which increases the risk of harmful aflatoxins. These mills also struggle to effectively separate broken or damaged grains, resulting in inconsistent quality and lower market value. Inefficient milling processes lead to greater grain losses and reduced recovery rates, while manual or semi-mechanized operations increase microbial contamination risks due to inconsistent hygiene standards.</p> <p>To address these issues, the SME proposes the Food Safety and Value-Added Production Improvement project, which aims to replace the outdated rice mill with a modern 80-ton capacity automated rice mill. This upgraded system will feature advanced cleaning mechanisms, such as destoners and separators, to effectively remove impurities like dirt, stones, and metal. Automated drying systems will regulate moisture content precisely, reducing the risk of mold and aflatoxins, while improving shelf life and food safety. Furthermore, the automated system will ensure consistent dehusking and polishing, increasing rice quality and uniformity, thereby enhancing its economic value.</p> <p>The proposed investment will increase the SME's productivity by approximately 2,520 tons annually, compared to the current rice mill. Moreover, the project is expected to reduce broken rice output by 10-20%. These improvements will benefit 110 farmers across 1,200 acres and are anticipated to result in a 5-10% increase in their income.</p>		
<b>Recommendation (YES / NO)</b>	YES		
B: Assessment of the Applicant and Due Diligence			
<b>Review of past business performance of the Applicant and support if any received from other Donor Programs</b>	The SME established its rice milling business in 1950. Currently, it produces 60 tons of rice per day and employs 7 permanent workers, and 30 temporary workers. Their products are distributed locally in Pathein and Yangon cities.		

	<p>SME's approach of working closely with paddy farmers has helped them contribute towards the economic resilience of the local farmers and their workers, while providing quality rice to consumers. SME has never received donor assistance in the past.</p>			
<b>C: Technical Analysis</b>				
<b>Potential Benefits to Farmers/Primary Producers</b>	<p>In Patheingyi Township, over 110 farmers cultivate 1,200 acres of paddy fields. Proposed investment to replace the traditional rice mill with more efficient equipment will reduce the post-harvest losses (broken rice) and improve the quality of milled rice. This will lead to higher yields and increased incomes for small paddy farmers. SME believes this investment will not only improve their operations but also support local farmers by boosting productivity, safety, and quality in rice milling.</p>			
<b>Commercial viability measured in terms of pay-back period of the investment</b>	<p>Without RBF+ support, the proposed project will take 3.5 years to pay back the investment, depending on the quantity of paddy farmers bring for processing at the SME's rice mill and the processing fee they can charge. With RBF+ grant support, the pay-back period for the proposed project is estimated to be 1.8 years.</p>			
<b>Service Provider / Equipment Supplier's track-record</b>	<p><b>Nyan Lin Htet Company Limited (NLH)</b> was established in 2019 for the supply of heavy machinery and related accessories. Later, in 2020, NLH expanded its offering to include agribusiness machinery and related accessories for factories located in different regions and states of Myanmar. The company customizes the design of the machines, and the factory layout based on customer requirements and their site area. It offers logistics support, installation and after-sales service, and training to handle the machines, and annual maintenance support.</p>			
<b>Predicted Reduction of Environmental and Climate Impact</b>	<p>Modernizing the rice mill reduces environmental impact by using advanced equipment like rubber rollers and aspirators, which minimize dust emissions and improve air quality. Enhanced efficiency lowers energy use and greenhouse gas emissions. Better management of by-products, such as rice husks and bran, reduces waste and prevents open burning. These changes promote a more sustainable and eco-friendly agricultural process.</p>			
<b>Confirmation of 'No-harm' on GESI and Conflict Sensitivity</b>	YES	✓	NO	
<b>Description of project's potential for transformative results on GESI and Conflict Sensitivity</b>	None			
<b>D: Project Implementation Risks</b>				
<b>Risks foreseen by the Applicant or assessed by RBF+ - SEC</b>	<p>Though SME has committed to bringing their contribution, it is possible that they may not be able to raise the required funds in time.</p>			
<b>Suggested Measures for Risk Mitigation</b>	<p>RBF+ SEC will discuss financing options with SME and, if necessary, assist them in raising a loan from a commercial bank.</p>			