

Proposed Research Program 2024-2025

	Program Area: Rice Farming Systems			
Sl. No.	Program Area/Project/ Experiment Title & Duration	Major Objective	Expected output	
	Rice Farming Systems Division			
Characterization of Farming System				
1.1	Study on cropping pattern of LSTD technology villages and harnessing opportunities for improvement	<ul style="list-style-type: none"> • To create database of existing cropping system in LSTD technology villages • To find out the status of MV rice coverage under different cropping pattern • To point out major constraints for further adoption of MV rice and other crops to increase productivity • To explore the scope of improvement of existing cropping pattern • To create cropping pattern map using GIS tools 	Improvement of existing cropping could be achieved	1050.0
1.2	Survey of rice-based cropping patterns and its improvement in Kushtia district	<ul style="list-style-type: none"> • To create database of the existing cropping pattern scenario in Kushtia district • To explore the scope of improvement of existing cropping pattern 	Profitable cropping pattern will be identified	420.0
2. Development of Cropping System and Component Technology for Favorable Ecosystem				
2.1	Performance evaluation of four crop cropping pattern for irrigated medium high land ecosystem	<ul style="list-style-type: none"> • To evaluate the agronomic and economic performance of four crop cropping Crop pattern • To assess the soil fertility and weed 	Crop productivity will be increased	200.00

		infestation in cropping patterns		
2.2	Performance evaluation of three crop cropping pattern for irrigated medium high land ecosystem	<ul style="list-style-type: none"> • To evaluate the agronomic and economic performance of three crop cropping pattern • To assess the soil fertility and weed infestation in cropping patterns 	Productivity will be increased as well as soil health will be assessed	300.00
2.3	Determination of optimum planting window of newly released rice varieties in Mustard-Boro-T. Aman cropping system	<ul style="list-style-type: none"> • To find out the suitable rice varieties for Mustard-Boro-T. Aman cropping pattern under different planting times • To find out the optimum sowing/planting window of mustard-Boro-T. Aman cropping pattern 	Optimum planting window under Mustard-Boro-Aman could be determined	200.00
2.4	Modification of waterlogged fallow land into year-round integrated agroforestry and fishery production system	<ul style="list-style-type: none"> • To bring waterlogged fallow land under year-round integrated production system through efficient utilization of different niches • To explore the best adaptative practices of fish, vegetables, and fruit production for increasing productivity 	Productivity as well as livelihoods of farmers will be increased	500.00
2.5	Transformation of waterlogged wetland into three-tier production system for integrated rice-fish, vegetables, and fruit cultivation	<ul style="list-style-type: none"> • To maximize productivity and production diversity through integrating rice-fish, vegetables, and fruits • To meet up the nutritional requirements of the farm family and increase income 	Productivity as well as livelihoods of farmers will be increased	300.00
2.6	Performance of the main and ratoon crops of Boro rice at different planting dates	To identify the optimum time of the ratoon crop in Boro season	Optimum planting time could be achieved of ratoon crop	150.00
2.7	Effect of fertilizer management of late Boro rice under Mustard-Boro-T. Aman cropping Pattern	To compare the yield performance of late Boro rice with different fertilizer doses under Mustard - Boro -T. Aman cropping pattern	Optimum fertilizer dose could be achieved of Mustard-Boro-T. Aman cropping pattern	200.00

2.8	Management of aged seedling to minimize the yield loss of T. Aman rice	To compare the yield performance of aged seedling of T. Aman rice through nitrogen fertilizer and crop management techniques		250.00
2.9	Suitability mapping of Mustard-Boro-T. Aman cropping pattern	<ul style="list-style-type: none"> • To find out the suitable environment of the Mustard-Boro-T. Aman cropping pattern • To relate crop yield, soil properties, water availability, agronomic practices, and weather parameters. • To develop GIS-based suitability maps for Mustard-Boro-T. Aman cropping pattern. 	Crop productivity will be increased	400.0
2.10	Evaluation of crop productivity and soil health under conservation tillage system in Maize-Mungbean-T. Aman cropping pattern	To identify the extent of resource conservation and soil health by strip tillage system	Profitability of farmers will be increased	200.0
2.11	Evaluation of establishment method of mustard in Mustard-Boro-T. Aman cropping pattern	To identify the profitable cropping pattern and extent of resource conservation for increasing the crop productivity	Crop productivity will be increased	250.0
2.12	Introducing Boro rice in Maize (Silage)- T. Aman cropping pattern in Rajshahi region	<ul style="list-style-type: none"> • To increase the crop productivity and profitability • To increase the cropping intensity 	Crop productivity and profitability will be increased	400.0
2.13	Maximize the resource use efficiency of agro-forestry system in Rajshahi and Kushtia region	<ul style="list-style-type: none"> • To increase the system productivity and existing resources • To find out the suitable DS Aman rice variety for agroforestry system 	Crop productivity will be increased	200.0
2.14	Interpolation of premium	To increase system productivity and	Crop productivity will be increased	250.0

	quality and nutrient enriched rice varieties in Existing Mustard-Boro-T. Aman cropping pattern	profitability of existing cropping system		
2.15	Determination of optimum planting window of newly released T. Aman Rice varieties in Boro-Jute-T. Aman cropping pattern	To find out the effective rice varieties with appropriate planting time for increasing yield potential of T. Aman rice	Optimum planting window of rice will be identified	400.0
2.16	Potato intercropping with maize in Maize-T. Aus-T. Aman cropping pattern in char area	<ul style="list-style-type: none"> • To increase system productivity and profitability of existing cropping pattern • To maximize the land use efficiency 	Crop productivity will be increased	600.0
2.17	Adoption of newly released rice variety in Boro- T. Aus- Fallow cropping pattern in char area	To increase system productivity and profitability of existing cropping pattern	Crop productivity will be increased	400.0
2.18	Development and fine-tuning of suitable cropping pattern in rainfed lowland ecosystem in Sylhet region	<ul style="list-style-type: none"> • To increase the productivity through utilization of the fallow period • To find out the economically feasible CP 	Crop productivity will be increased	200.0
2.19	Evaluation of different Aman rice varieties under Wheat-Jute-T. Aman cropping pattern in Faridpur region	<ul style="list-style-type: none"> • To find out the suitability of newly released Aman rice varieties under Wheat-Jute-T. Aman cropping pattern • To increase the system productivity and farmers' income 	Suitable variety will be identified	500.0
2.20	Integration of fish in Boro-Fallow-B. Aman cropping pattern in low land ecosystem of Gopalganj area	To increase the productivity through fish inclusion in Gopalganj area	Productivity and profitability will be increased	400.0
2.21	Varietal improvement of Boro-T. Aus-T. Aman cropping	To maximize the productivity and farm income	Crop productivity will be increased	300.0

	pattern in Cumilla region			
2.22	Improvement of Boro-Fallow-T. Aman cropping pattern in Cumilla region	To increase cropping intensity and productivity through crop intensification in rice-based cropping system	Crop productivity will be increased	250.00
3.0. Development of Cropping System and Component Technology for Stress Prone Area				
3.1	Intensification of Watermelon-Fallow-T. Aman cropping pattern through inclusion of Aus rice	<ul style="list-style-type: none"> • To find out the suitable BRRI released rice varieties for Watermelon-T. Aus-T. Aman cropping pattern • To maximize the productivity and farm income 	Crop productivity will be increased	200.0
3.2	Inclusion of rabi crops in single T. Aman area of saline coastal region	<ul style="list-style-type: none"> • To find out the suitable rabi crops varieties for Fallow-Fallow-T. Aman cropping pattern • To maximize the productivity and income 	Crop productivity will be increased	350.00
3.3	Improvement of Boro-Fallow-T. Aman cropping pattern with BRRI newly released rice varieties	<ul style="list-style-type: none"> • To evaluate the performance of BRRI newly released rice varieties in Boro-Fallow-T. Aman cropping pattern • To increase the productivity of the existing two crop system 	Crop productivity will be increased	400.0
3.4	Ratooning ability of BRRI released Boro rice varieties in Boro-Fallow-T. Aman cropping pattern	<ul style="list-style-type: none"> • To identify potential ratoon rice variety for tidal non saline ecosystem • To identify best fertilizer management under appropriate stem cutting for best ratoon rice crop • To intensify the CP and increase the productivity 	Crop productivity will be increased	200.0
3.5	Development of improved cropping pattern in the non-saline tidal ecosystem	<ul style="list-style-type: none"> • To develop profitable cropping pattern in the non-saline tidal ecosystem • To increase the cropping intensity as 	Crop productivity will be increased	400.0

		well as the total productivity		
3.6	Suitable varietal combination for Fallow-T. Aus-T. Aman cropping pattern in Barishal region	<ul style="list-style-type: none"> • To identify potential Aus and Aman varieties at different inundation depth in Barishal region • To increase the rice productivity of Barishal region 	Crop productivity will be increased	300.0
4.0 Development of Cropping System Technologies for Hill Ecosystem				
4.1	Exploring the hills for rice research: Feasibility study for exploring spring water for Boro cultivation	<ul style="list-style-type: none"> • To explore available water resource (Chhara) in hilly areas • To expand Boro rice cultivation using low lift pump (LLP) for irrigation in Fallow-Fallow-T. Aman cropping pattern • To increase overall rice production in hilly areas 	Crop productivity will be increased	350.0
4.2	Exploring the hills for rice research: Feasibility of Boro rice cultivation in fringe land at Rangamati district	To increase the Boro coverage across the fringe land by cultivation of different Boro rice varieties	Crop productivity will be increased	200.0
4.3	Improvement of Jhum production system through the inclusion of modern HYV Aus varieties	To increase the system productivity through the inclusion of modern HYV Aus varieties along with the local varieties in jhum culture.	Crop productivity will be increased	400.0
5.0 Validation and Delivery of Cropping System Technology				
5.1	Validation of pair row potato/pair row Maize-T. Aus-T. Aman cropping pattern in Northern region of Bangladesh	<ul style="list-style-type: none"> • To validate the profitable cropping pattern under farmers field condition • To increase the Aus rice production 	Crop productivity will be increased	1500.0
5.2	Inclusion of short duration Rabi	• To evaluate the performance of short	Crop productivity will be increased	8400.0

	crops (Mustard/Potato) in Boro-Fallow-T. Aman cropping system	duration Rabi crops (Mustard/Potato) in Boro-Fallow-T. Aman cropping system • To increase the productivity of the existing cropping system		
5.3	Inclusion of Aus rice in Wheat/Maize-Fallow-T. Aman cropping system	• To evaluate the performance of Aus rice in Wheat/ Maize-Fallow-T. Aman cropping system • To increase the productivity of the existing cropping system	Crop productivity will be increased	4000.0
5.4	Validation Boro-Aus-Vegetable (Bitter gourd + Potato) in medium highland ecosystem	• To increase the system productivity of the existing Boro-Fallow-T. Aman cropping systems through diversified crop arrangement. • To improve the livelihood of the farmers	Crop productivity will be increased	300.0
5.5	Piloting of improved cropping pattern in rainfed lowland ecosystem in Sylhet region	• To validate the profitable cropping pattern in rainfed lowland ecosystem • To increase the cropping intensity as well as the total productivity	Crop productivity will be increased	400.0
5.6	Validation and fine tuning of Lentil+Muskmelon-Jute-T. Aman cropping pattern in Faridpur region	To increase the system productivity and farmers' income	Crop productivity will be increased	400.0
5.7	Validation of Boro-Deepwater Aman in the single Boro area of Faridpur region	To increase the system productivity and farmers' income	Crop productivity will be increased	350.0
5.8	Validation of improved cropping pattern in Barishal region	To increase the system productivity in Barisal region	Crop productivity will be increased	300.0
5.9	Inclusion of mustard (Canola) in Fallow-Fallow-T. Aman	• To evaluate the performance of mustard (Canola) in Fallow-Fallow-T. Aman	Crop productivity will be increased	200.0

	cropping system in Habiganj district	<p>cropping system</p> <ul style="list-style-type: none"> • To increase the productivity of the existing cropping system 		
5.10	Inclusion of Aus rice after Boro rice in Boro-Fallow-T. Aman cropping system in Mymensingh region	<ul style="list-style-type: none"> • To evaluate the performance of Aus variety in Boro-Fallow-T. Aman cropping pattern • To increase the productivity of the existing two crop system with the inclusion of Aus rice 	Crop productivity will be increased	300.0
5.11	Promotion of Gher production system	<ul style="list-style-type: none"> • To maximize the productivity of Gher system • To diversify the production system and to increase the farm income • To optimize the land and water use efficiency 	Crop productivity will be increased	400.0
5.12	Inclusion of Aus rice in Relay Grasspea-Fallow-T. Aman cropping system	<ul style="list-style-type: none"> • To evaluate the performance of Aus rice in Relay Grasspea-Fallow-T. Aman cropping system • To increase the productivity of the existing cropping system 	Crop productivity will be increased	350.0
5.13	Improvement of Fallow-Fallow-T. Aman cropping system	<ul style="list-style-type: none"> • To evaluate the performance of Aus rice and Sesame in Fallow-Fallow-T. Aman cropping system • To increase the productivity of the existing CS 	Crop productivity will be increased	
5.14	Inclusion of Aus in single T. Aman cropping pattern	To increase the system productivity of in single T. Aman cropping pattern cropping system by the inclusion of T. Aus	Crop productivity will be increased	
5.15	Field days and farmers' training on different farming systems	<ul style="list-style-type: none"> • To motivate farmers for adoption of FSR technologies 	Crop productivity will be increased	1200.0

	activities	<ul style="list-style-type: none"> • To improve farmers' knowledge base on improved agricultural production system 		
	6.0 Integrated Farming Systems			
6.1	Monitoring the whole farm activities of intervened farmers	<ul style="list-style-type: none"> • To determine the livelihood improvement of the farmers resulted from the intervention of farming systems technologies • To observe the resource flow in the selected farm family 	Livelihood of farmers will be increased	1000.0
6.2	Integration of mustard/sunflower/pulses in the rice-based cropping system under different rice growing environments	To increase the system productivity by inclusion of mustard, sunflower and pulses in the existing cropping systems	Crop productivity will be increased	300.0
6.3	Promotion of improved cropping pattern packages	To increase the system productivity and income of the farmers through introduction of improved cropping patterns	Crop productivity will be increased and livelihood of farmers will be increased	300.0
6.4	Farmers' participatory evaluation of recently released BRRI varieties for Boro and T. Aman season	<ul style="list-style-type: none"> • To find out the suitable T. Aman and Boro varieties for different rice growing ecosystems • To disseminate these varieties for achieving higher production over the existing varieties 	Crop productivity will be increased	200.0
6.5	Farmers' participatory quality seed production of recently released BRRI varieties for Boro and T. Aman season	<ul style="list-style-type: none"> • To demonstrate the quality rice seed production technique at farm level • To expedite the delivery systems of good quality seeds among the farmers' community 	Quality seed will be produced and disseminated.	200.0

--	--	--	--	--