2022-2023 Dry Season Rice Cultivation Report

The harvest of the boro rice cultivated from November 2022 will be completed by the end of May 2023, and the results have arrived. Since this planting season straddles the year, the planting in 2022-2023 will be referred to as "2023FY" and compared with the 2022FY, based on the harvest year of 2023. In addition, the yield and planting period for each variety will be compared.

In the project, as a countermeasure against the flash floods that occurred in 2017, we aim to switch to and popularize extremely short duration varieties (the varieties colored blue on the right side of BRRI84 in the figure below) that can be harvested before flash floods arrive. In the preceding project areas, we have generally succeeded in replacing with new varieties.

Conversion to disaster-resistant varieties (preceding project: 2016-2023)





(Fig.1 Results of product conversion in the preceding project)

1. Overview of Boro cultivation in 2023

Planting in 2023 was affected by long rains in February, high temperatures in day time / low temperature in night time, and damage from hail and pests in March. That' why the total Production decreased by 30-40% from 2022. In particular, the occurrence of rice blast caused by long rains and high temperatures caused a large decrease in production throughout the haor area.

2. Limitations of data collection and analysis

In the preceding project (JFGE), we collected data on all the seeds sown on the land of all 100 target farmers, but from the 297 target farmers of the JICA project, we only collected data on the seeds we supplied. I can't grasp the whole picture. Therefore, the analysis is based on limited data (additional data are being collected).

3. Results by Area wise and variety wise(FY2023)

· Total results of JICA target producers

	Total JICA Pr		Average of		
Rice Variaty	Planted Farmers	Total production	Cultivated Area	Ton/ha	Total Duration
BRRI 67	22	10,486kg	2.39ha	4.39ton/ha	143.5days
BRRI 84	138	27,673kg	14.86ha	1.86ton/ha	141.4days
BRRI 88	131	51,716kg	14.77ha	3.50ton/ha	143.0days
BRRI 89	132	76,506kg	14.51ha	5.27ton/ha	152.7days
BRRI 92	147	114,348kg	17.01ha	6.72ton/ha	154.2days
BRRI HB 3	118	83,618kg	14.20ha	5.89ton/ha	145.5days
BRRI HB 5	143	105,332kg	16.16ha	6.52ton/ha	146.3days
Surovi-1	24	15,264kg	2.70ha	5.65ton/ha	145.7days
JICA Total	297 farmer	484,942kg	96.60ha	5.02ton/ha	147.1days



Harvest was low due to blast, hail damage, and pests. In particular, very early ripening rice such as BRRI67, 84, and 88 had a large decrease in yield due to blast disease. In particular, BRRI84 was heavily damaged, and some farmers did not harvest because they could not recover the labor costs for harvesting. On the other hand, BRRI89 and 92, which have a slightly longer harvesting varieties, suffered less damage, and hybrid varieties (BRRI HB3, 5, Surovi-1) suffered only limited damage, even with extremely early ripening rice.

Although there is no data, BRRI28, which was originally cultivated in large numbers in this area, suffered devastating damage from blast disease, and the government has announced that it will no longer cultivate seeds of this variety.

On May 11, a harvest inspection (yield inspection per unit) of BRRI92 was conducted by BRRI Habigonj Center Chief in the presence of the Habigonj Deputy Commissioner (DC) and the Deputy Director (DD) of DAE. It was reported on some News Papers.



• Area wise data (Pukra Union)

		Average of			
Rice Variaty	Planted Farmers	Total production	Cultivated Area	Ton/ha	Total
BRRI 67	5	1,903kg	0.53ha	3.56ton/ha	137.6days
BRRI 84	41	8,117kg	4.08ha	1.99ton/ha	140.5days
BRRI 88	33	11,830kg	3.44ha	3.44ton/ha	141.5days
BRRI 89	36	18,436kg	4.10ha	4.50ton/ha	153.4days
BRRI 92	41	32,356kg	4.65ha	6.95ton/ha	156.6days
BRRI HB 3	20	14,219kg	2.27ha	6.27ton/ha	150.8days
BRRI HB 5	39	29,147kg	4.37ha	6.66ton/ha	151.7days
Surovi-1	14	8,845kg	1.67ha	5.30ton/ha	147.9days
Pukra Total	80 farmer	124,854kg	25.12ha	4.97ton/ha	

		Average of			
Rice Variaty	Planted Farmers	Total production	Cultivated Area	Ton/ha	Total
BRRI 67	13	6,828kg	1.34ha	5.10ton/ha	145.2days
BRRI 84	57	10,375kg	5.65ha	1.84ton/ha	140.8days
BRRI 88	53	21,534kg	5.18ha	4.16ton/ha	142.5days
BRRI 89	59	33,924kg	5.69ha	5.96ton/ha	151.7days
BRRI 92	59	44,411kg	6.05ha	7.34ton/ha	152.4days
BRRI HB 3	41	28,177kg	4.33ha	6.51ton/ha	143.1days
BRRI HB 5	76	54,301kg	7.87ha	6.90ton/ha	144.0days
Surovi-1	10	6,419kg	1.04ha	6.20ton/ha	142.5days
Katkhal Total	120 farmer	205,968kg	37.13ha	5.55ton/ha	

(Lashkarpur Union)

Summary of at a glance on Boangaon						Average of
Rice Variaty	Planted	Farmers	Total production	Cultivated Area	Ton/ha	Total
BRRI 67	2	<u> </u>	933kg	0.27ha	3.49ton/ha	147.0days
BRRI 84	2	5	6,307kg	3.14ha	2.01ton/ha	143.9days
BRRI 88	30	0	12,119kg	4.27ha	2.84ton/ha	144.7days
BRRI 89	26		17,018kg	3.20ha	5.32ton/ha	153.9days
BRRI 92	2	9	23,362kg	3.88ha	6.02ton/ha	154.8days
BRRI HB 3	3	8	27,600kg	4.90ha	5.64ton/ha	145.6days
BRRI HB 5	2	1	16,399kg	2.93ha	5.60ton/ha	145.2days
Surovi-1	0)	0kg	0.00ha	_	
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Boangaon Total	61	farmer	103,738kg	22.58ha	4.59ton/ha	

Sun		Average of			
Rice Variaty		Total production	Cultivated Area	Ton/ha	Total
BRRI 67	2	821kg	0.25ha	3.33ton/ha	144.0days
BRRI 84	15	2,874kg	1.99ha	1.44ton/ha	142.1days
BRRI 88	15	6,232kg	1.87ha	3.33ton/ha	144.4days
BRRI 89	11	7,128kg	1.53ha	4.67ton/ha	153.3days
BRRI 92	18	14,219kg	2.42ha	5.87ton/ha	153.4days
BRRI HB 3	19	13,622kg	2.71ha	5.02ton/ha	144.6days
BRRI HB 5	7	5,486kg	1.00ha	5.51ton/ha	145.0days
Surovi-1	0	0kg	0.00ha	-	
Char Hamuya Total	36 farmer	50,382kg	11.77ha	4.28ton/ha	·

In the comparison between unions, the results in the Pukla Union are slightly better. In particular, the yield was high in Kakkar Village. Further investigation is required as to what causes this.

· Results in the Preceding Project Area founded by JFGE (comparison between FY2022 and FY2023) FY2022

Summary	Summary of at a glance on Syedabad and Abdullahpur						
Name of variaty of	Planted by		Total production	Cultivated Area	Ton/ha		
BRRI 28	6		1,997kg	0.93ha	2.15ton/ha		
BRRI 29	34	4	48,913kg	8.54ha	5.73ton/ha		
HIRA2	8		14,668kg	2.20ha	6.67ton/ha		
Janakraj	18	5	27,191kg	3.87ha	7.03ton/ha		
BRRI 58	0	1	0kg	0.00ha			
BRRI 67	0	1	0kg	0.00ha			
BRRI 84	46	<u> </u>	41,112kg	8.54ha	4.81ton/ha		
BRRI 88	89	9	147,971kg	25.10ha	5.90ton/ha		
BRRI 89	7.	5	190,614kg	29.32ha	6.50ton/ha		
BRRI 92	72	2	225,885kg	31.64ha	7.14ton/ha		
BRRI HB 3	0	1	0kg	0.00ha			
BRRI HB 5	59	9	96,557kg	11.55ha	8.36ton/ha		
Surovi-1	0		0kg	0.00ha			
		<u>'</u>					
Syedabad and Total Abdullahpur	100	farmer	794,908kg	121.69ha	6.53ton/ha		

FY2023

Summary				
Name of variaty of	Planted Farmers	Total production		Ton/ha
BRRI 28	0	0kg		
BRRI 29	7	1,400kg	1.60ha	0.87ton/ha
HIRA2	1	746kg	0.13ha	5.74ton/ha
Janakraj	4	6,345kg	1.07ha	5.93ton/ha
BRRI 67	0	0kg	0.00ha	
BRRI 84	55	187kg	11.75ha	0.02ton/ha
BRRI 88	82	58,879kg	28.64ha	2.06ton/ha
BRRI 89	47	52,534kg	16.91ha	3.11ton/ha
BRRI 92	87	325,391kg	50.46ha	6.45ton/ha
BRRI HB 3	0	0kg		
BRRI HB 5	59	79,836kg	11.41ha	7.00ton/ha
Surovi-1	0	0kg	0.00ha	
Syedabad and Total Abdullahpur	100 farmer	525,317kg	121.97ha	4.31ton/ha

In the preceding project area (JFGE), the results of all varieties of the target farmers could be compared. Overall, the yield was only 66.0% compared to the previous year, and about one-third of it to be damaged caused by rice blast disease. In particular, the extremely early maturing, high-yield varieties (BRRI-84, 88), which we hope to spread the most in this project, have suffered a great deal of damage, which is likely to have a major impact on our activities for the next fiscal year. On the other hand, BRRI-89, 92 and various hybrid rice were less damaged. However, since these crops are harvested in May, they are not the cultivars that can be harvested before flash floods, which was the original purpose.

According to BRRI, since 1956, flash floods have hit the Sylhet region six times in 1964, 1982, 1996, 2003, 2010 and 2017, and these flash floods occur almost every seven years. Since the next year, 2024, will be seven years after the previous flash flood, we, the project implementation side, are required to provide advice to farmers when selecting varieties for next cropping.

If a flash flood will be occurred, even BRRI84 and 88, which had been harvested earliest, would have been harvested around April 15, and we will discuss with BRRI in the future, including a review of the sowing timing.

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4. About seed supply

Seed supply results in Habigoni District by BADC are shown below.

BRRI-28 and 29 used to be the majority of BADC seeds, but in recent years they have been overwhelmed by hybrid rice from overseas. It was becoming less popular. In the past few years, we have been asking for the production of new varieties, but they have refused to accept our request because they cannot take the risk of "unsold" when introducing new varieties.

Due to the success of the preceding project and the pressure from the central government such as the agriculture minister and secretary who learned about it, the supply amount has been increased since last year, and the production and supply system for new varieties is being established. This can be said to have a significant impact on business.

Variety	Program	Sales (Kg)
BRRI Dhan 28	General Sale	6,556
BRRI Dhan 29	General Sale	39,570
BRRI Dhan 50	Farmers level, General Sale	100
	Exebision (Revenue), Follow-up (Revenue), Farmers level,	
BRRI Dhan 58	General Sale	3,880
BRRI Dhan 67	Follow-up (Revenue)	1,500
BRRI Dhan 69	Follow-up (Revenue), Farmers level	660
BRRI Dhan 81	Farmers level, General Sale	250
BRRI Dhan 84	Exebision (Revenue)	150
BRRI Dhan 86		
BRRI Dhan 88	Exebision (Revenue), Farmers level	650
	Exebision (Revenue), Follow-up (Revenue), Farmers level,	
BRRI Dhan 89	General Sale	2,840
BRRI Dhan 92		
BRRI Dhan 96		
BINA Dhan 14	Follow-up (Revenue)	280
	Total	56.436

Boro 2022-202	23	
Variety	Program	Sales (Kg)
BRRI Dhan 28		
BRRI Dhan 29	General Sale	16,000
BRRI Dhan 50		
BRRI Dhan 58		
BRRI Dhan 67		
BRRI Dhan 69		
BRRI Dhan 81		
BRRI Dhan 84	Exebision (Revenue)	250
BRRI Dhan 86	Exebision (Revenue)	50
BRRI Dhan 88	Exebition (Farmers level), Extension, Exebision (Revenue), General Sale	42,930
	Exebition (Farmers level), Extension, Exebision (Revenue),	
BRRI Dhan 89	General Sale	90,990
BRRI Dhan 92	Exebition (Farmers level), Extension, General Sale	18,790
BRRI Dhan 96	Exebition (Farmers level), Extension	1,200
BRRI Dhan 100	Exebition (Farmers level)	100
BINA Dhan 14		
	Total	170,310