

MINISTRY OF AGRICULTURE, LIVESTOCK AND IRRIGATION

DEPARTMENT OF AGRICULTURE

KYAUNGON TOWNSHIP



2018–2019 RAINY SEASON

TRIALS IN FOUR KINDS OF CULTIVATION METHOD

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INTRODUCTION

In Ayeyarwady Region, 3.75 million monsoon paddy areas are possible in every year. Department of Agriculture implement to get suitable cropping system and to go target to low cost in production from 2017-2018 (monsoon) to 2019-2020 by trial experiments. In this year, 27 trial experimental plots were done in 26 townships.



OBJECTIVES

- To know suitable method that which adaptability with the specific region
- To get high yield by using the suitable cultivation method
- To know costs and benefits of several cultivation methods
- To be transformed the usage of traditional cultivation practices to good agricultural practices
- To support in the implementation of sustainable agriculture

2018-2019 RAINY SEASON

FOUR KINDS OF CULTIVATION METHOD

- Number of Farmer - (5)
- Plot no - 384 B
- Sowing area - 10ac
- Cultivation method - SRI , Raised Bed,
Drumseeder, Broadcasting
- Village tract - zayatkwin
- Village - zayatkwin
- Township - kyaunggon



Materials and Methods

No	Contents	SRI	Raised Bed	Drum Seeder	Broadcasting
1	Variety	Sinthukha			
2	Plot size	0.5	0.5	0.5	0.5
3	Spacing	10"x 10"	6"x 8"	8" x 4"	-
4	Nursery/Direct Seeding date	30.6.2019	30.6.2019	30.6.2019	30.6.2019
5	Transplanting date	12.7.2019	19.7.2019	-	-





Raised bed





Drum seeder





Broadcasting



Results and Discussion

No	Contents	SRI	Raised bed	Drum seeder	Broadcasting
1	50% flowering date	10.10.19	10.10.19	7.10.19	7.10.19
2	Duration of 50% Flowering	102	102	95	95
3	Harvesting date	4.11.19	4.11.19	4.11.19	4.11.19
4	Plant high (cm)	113	110	108	106
5	Tillers/hill	14.5	9	-	-
6	Grain/panicle	164.2	138.2	90.6	80.5
7	Filled grain/panicle	144.1	108.3	69.4	60.8
8	Filled grain %	87.76	78.36	76.60	75.53
9	Yield(bsk)/ac	119.33	114.59	92.42	87.55
10	Cost/ac	325000	320000	235000	250000
11	Income/ac	642600	615000	496800	469800
12	Cost and Benefit ratio	1 : 0.98	1 : 0.92	1 : 1.11	1 : 0.88

No	Method	Advantages	Disadvantages
1	SRI	<ul style="list-style-type: none"> -use very low seed rate and water -get high yield -supporting sustainable agriculture 	<ul style="list-style-type: none"> -more investment -land levelling problem -labour scarcity and skills
2	Raised bed	<ul style="list-style-type: none"> -use low seed rate -get high yield -easy to take care throughout the life of plant 	<ul style="list-style-type: none"> -more investment -labour scarcity
3	Drum seeder	<ul style="list-style-type: none"> -use low seed rate -easy to grow -high cost and benefit ratio 	<ul style="list-style-type: none"> -land levelling problem -probability weed problem -not familiar with the farmers
4	Broadcasting	<ul style="list-style-type: none"> -use low investment -easy to grow -familiar with the farmers 	<ul style="list-style-type: none"> -use high seed rate -probability weed problem -possibility pest & disease problems

Conclusion and Suggestion

- **SRI method** – suitable for seed production, suggest to grow this method if the farmer have investment, skilled labour, and fine situation of land levelling
- **Raised bed method** – labour scarcity and more investment is the problems although get high yield
- **Drum seeder method** – get more profits for farmer according to the cost and benefit ratio
- **Broadcasting method** – familier with the farmer nowadays although it can get low profits

Conclusion and Suggestion

- Broadcasting is familiar for farmers and it makes poor quality for paddy because of more usage in seed rate, poor venelation, many pests and diseases and weddy. By using with seeder, low seed rate, good venelation, less pests and diseases and more advantages by changing nowadays.

Drum seeder methods should be done extensively to solve labour scarcity

(extension must be done to know the procedures of systematically cultivation methods)

**THANK YOU FOR
YOUR ATTENTION**