

A photograph of a long, straight asphalt road stretching into the distance. The road is flanked on both sides by a dense line of tall palm trees. The sky is clear and blue. The text is overlaid in the center of the image.

Trial On Cultivation Methods
In Rice
Kyaikmayaw Township
(2017 – 2018)

Introduction

- Crop - Rice (Myee Kauk)
- Experimental type - Planting methods
- Plots location - Paine Hnae Kaune
- District / State - Mawlamying / Mon
- Presenter - U Khin Maung Tint
- Rank /Department - Assistant Staff Officer/
Department Of Agriculture

Objectives

- To share knowledge and technologies to farmers for improving their socio – economic status through increasing productivity and improving quality of rice.
- To know and train the farmers on advanced agricultural practices related to climate change adaptation.

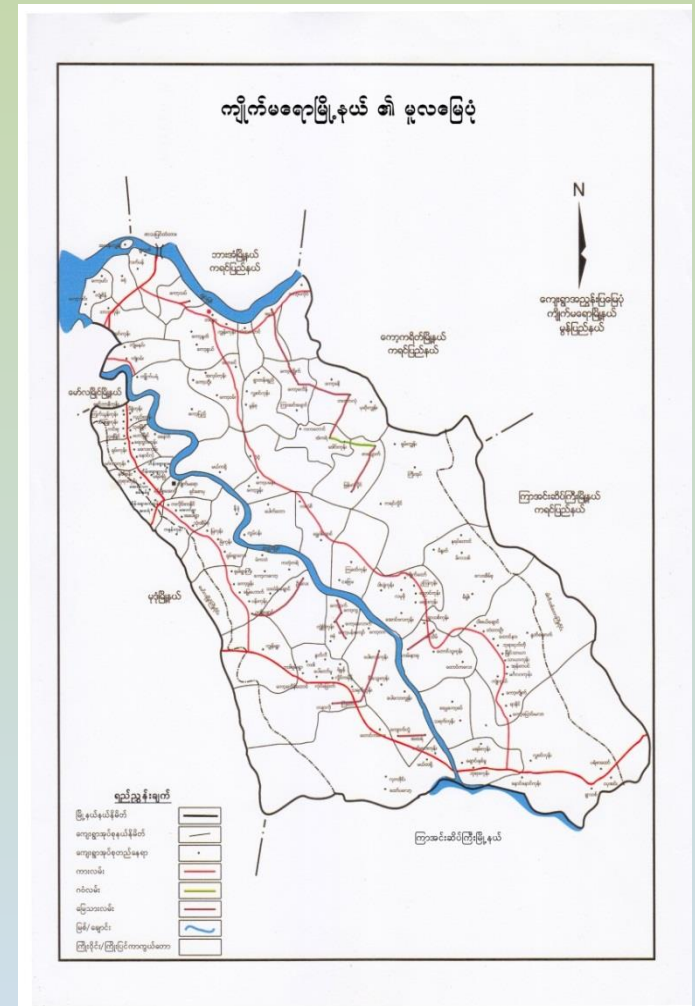


Village Background

Village is situated (10)miles away from Kyaikmayaw, at the side of the Kyaikmayaw – Mawlamying High – way.

North Latitude is from $16^{\circ} 7'$ to $16^{\circ} 34'$. East Longitude is from $97^{\circ} 9'$ to $97^{\circ} 50'$.

Rainfed cultivated area is 52331 acre.



Climatic condition

Rainfall - Average 188"

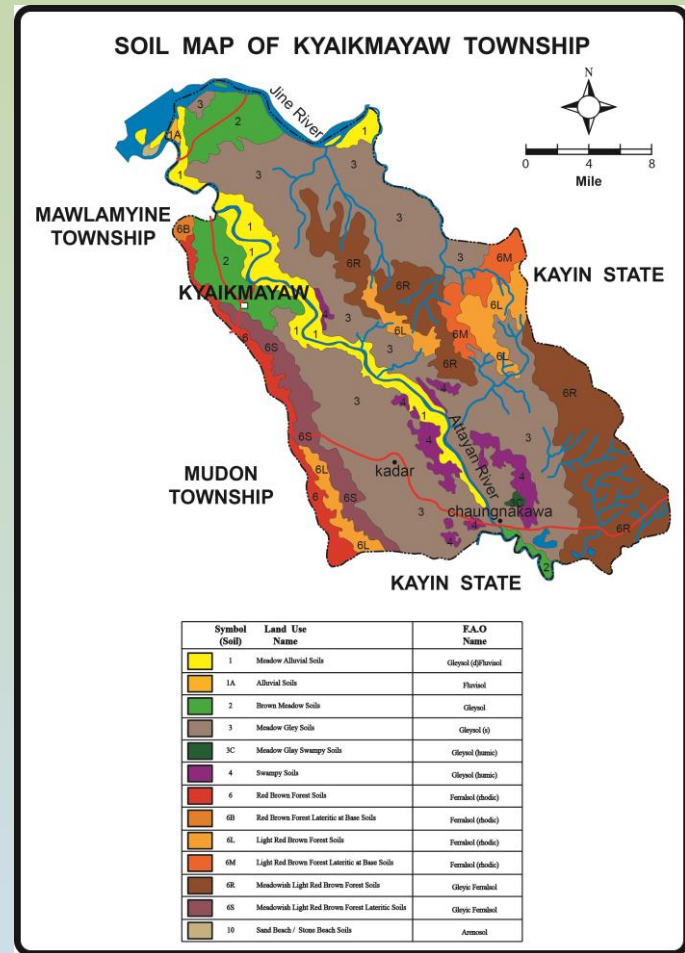
Raining day - 124 days

Temperature - High - 38.4 C[•]
Low - 22.1 C[•]

Sea level - above 18 ft

Soil pH - (4.5 - 5)

Soil type - Sandy Loam –
Silty Loam



Preparation of experiment site and Nursery bed

- ❑ Four methods of rice planting are (1) System of Rice Intensification (2) Raised bed (3) Direct Seeding Rice (4) Broadcasting.
- ❑ The experimental plot (2 acres) was divided into four plots. Each plot size was (0.50ac).
- ❑ Tillage operation was done , 25 bsks of well decomposed organic matter, cowdung are added to each plot – ½ bag of compound fertilizer (15:15:15) are used as basal.

- ❑ For SRI and Raised bed methods, Nursery beds were established with well decomposed organic matter and compost on 2.7.2017.
- ❑ For DSR method, germinated seeds were sown by line sowing.
- ❑ For Broadcasting method , germinated seeds were broadcasted by skillful worker.



Nursery preparation



Transplanting

- ❑ For SRI, (14) days old seedlings were transplanted into the field and the plant spacing was (10''×10'') on 16.7.2017.
- ❑ The seedlings were planted one plant per hill and for good ventilation, (1) row was skipped in every (12) rows.
- ❑ For (0.50 ac), Planting length of row was 112.5 ft long and there were 153 rows in a plot.



- ❑ For Raised bed, (25)days old seedlings were transplanted into the field and the plant spacing was (8"×6") on 27.7.2017.
- ❑ For good ventilation , (1) row was skipped in every (10) rows.
- ❑ For (0.50 ac),Planting length of row was 103 ft long and there were 162 rows in a plot.



Weed Control and Fertilizer Management

- ❑ Weed control was made by man and intercultivator for three plots.
- ❑ Herbicides are used in broadcast plot (a.i – Butachlor) dosage (240 cc / 0.50 ac)

Fertilizer application

First time - Urea (22 lbs) are supplied at active tillering stage.

Second time - Urea (22 lbs) and potash (10 lbs) are supplied at panicle initiation.

Third time - Urea (22 lbs) are supplied at flowering Stage.

Intercultivation and Fertilizer Application



Pests and Diseases Control

- ❑ No disease infection in all plots.
- ❑ In DSR and Broadcast, Rice Hispa infestation was occurred in vegetative phase .
- ❑ Integrated Pest Management was used.
 - Mechanical control was made in the field.
 - Cartap hydrochloride (50 SP) was treated.

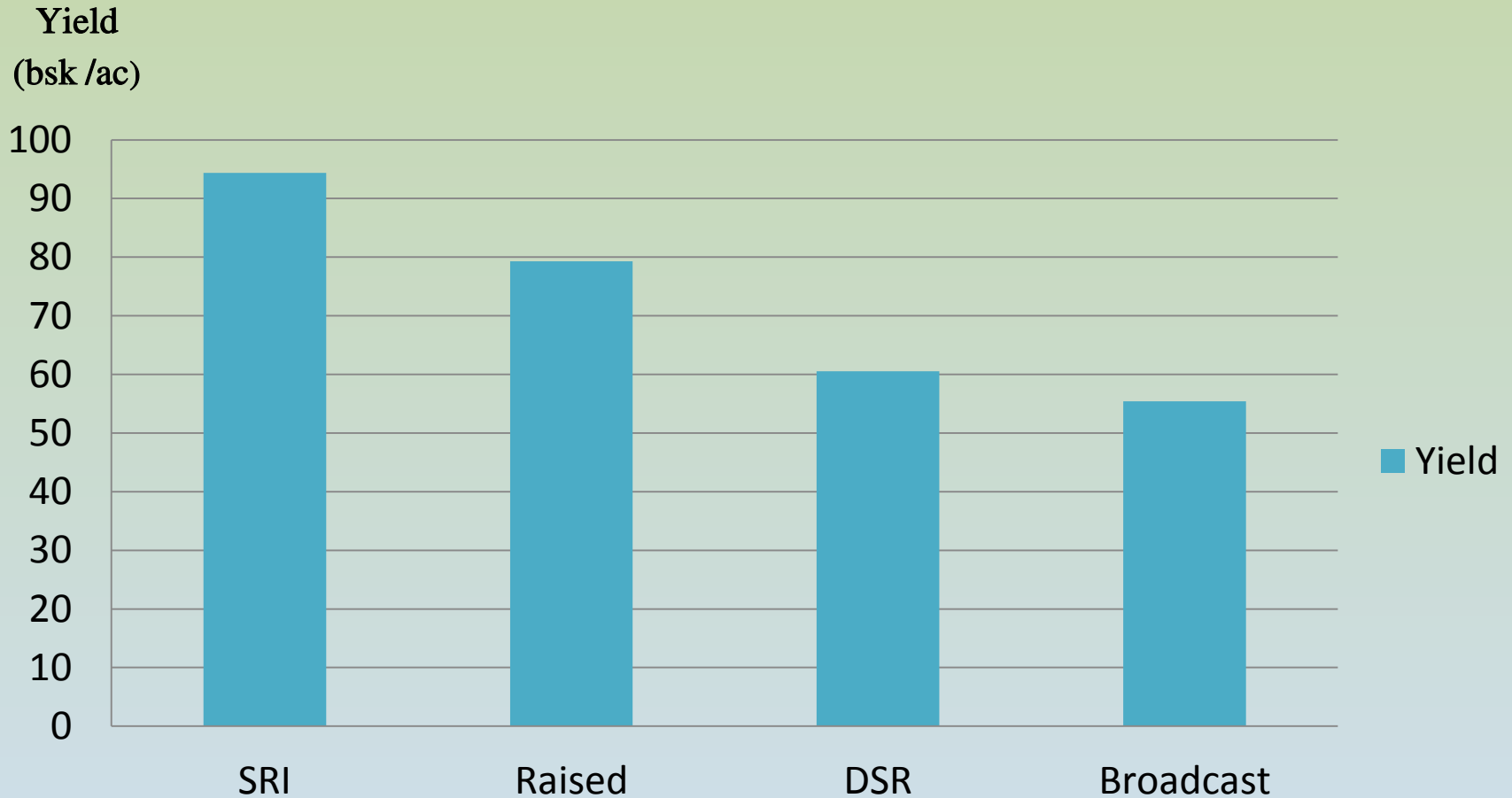
Data Collection (Final)

No	Content	SRI	Raised	DSR	Broadcast
1.	Plant height	168 cm	159 cm	160 cm	150 cm
2.	Plant tiller	21	10	9	3
3.	Booting stage	5.10.17	10.10.17	10.10.17	3.10.17
4.	50% flowering date	1.11.17	3.11.17	1.11.17	1.11.17
5.	50% flowering duration	124	126	124	124
6.	Panicle tiller	21	10	9	3
7.	Filled grain per panicle	108	95	90	84
8.	Harvesting time	1.12.17	31.11.17	1.12.17	30.11.17
9.	Yield / plot(0.50)ac	47.18	39.7	30.27	27.71
	Yield / acre	94.35	79.31	60.54	55.42

Data Collection (Weekly)



Yields of Four methods of planting in Myee Kauk (1.00)ac



Result and Discussion

- ❑ In this experiment, SRI planting method gave the highest plant height, tiller formation and yields.
- ❑ Raised bed planting method yield result was lower than SRI.
- ❑ Broadcast method gave the lowest yield
- ❑ DSR supplied more high yield than Broadcasting method.
- ❑ According to this result, SRI was the best in yield but it is not adaptable in Kyaikmayaw township because of heavy rain and scarce of skillful labours.
- ❑ Broadcasting method gave acceptable yield for the farmers with good weed management.

Conclusion

- ❑ Farmers accept all of these planting methods are good, but broadcasting and raised bed methods are better in profitable yield for them.





Thank You For Your Attention