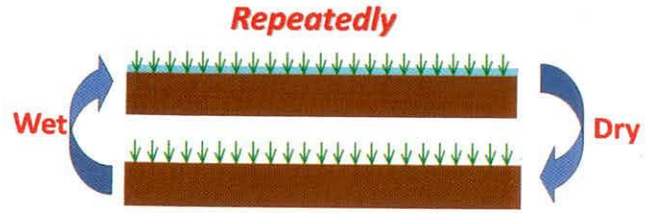
Intermittent irrigation ??

Water shortage is one of the biggest issues in Mwea Irrigation Scheme. As part of Mwea' society, rice farmers are required to save water because the society relies on the same for both agricultural & domestic supply. This method, ensures adequate amounts of water is supplied to the soil and rice. In the WSRC, the interval of 3 days flooding (2cm standing water) & 7 days dry (drained) is recommended. The treatment is called "Alternate Wetting and Drying" (AWD). This practice starts 10 days after transplanting and is repeated & continued for 30 days.



Leveling is a key factor of intermittent irrigation because the method requires that water is spread evenly.

Drained fields under intermittent irrigation look like picture below. Not too dry, but no standing water. This enables (air)oxygen entry into the soil.

Intermittent Irrigation saves water of more than 20% !

Water Saving Rice Culture

What is good for WSRC ??

In main season of 2014, the WSRC was introduced to farmers through the integrated training, followed by field test.

The average yield & profit of farmers who implemented the WSRC increased although the average yield of entire MIS decreased in the season.

Increased after introduction

	2013	2014
Main season Average Yield/acre	23 bags	26 bags
Main season Average Profit/acre	84,000 Ksh	92,000 Ksh
Ratoon Average Yield/acre	9 bags	12 bags

Enhance Productivity & Save water
with
Water Saving Rice Culture

Rice-based and Market-oriented Agriculture Promotion Project
RICEMAPP
稲作を中心とした市場志向農業振興プロジェクト

Contact: RiceMAPP
Mobile: 0777-32685

Water Saving Rice Culture

Ministry of Agriculture, Livestock and Fisheries

JICA ジャイカ

Outline of

WSRC

Water Saving Rice Culture For Mwea Irrigation Scheme

Enhance Productivity & Save water

Rice-based Market-oriented Agriculture Promotion Project

RiceMAPP

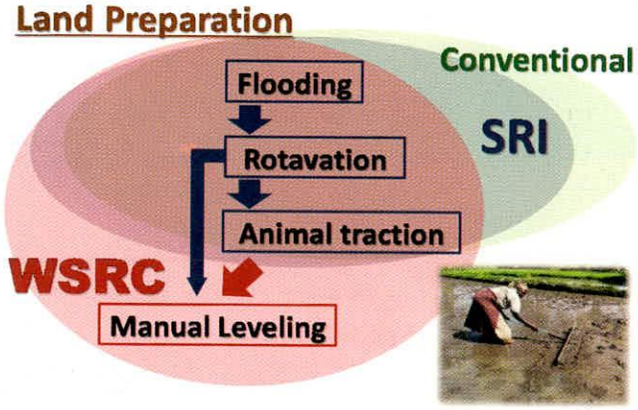
What is the WSRC ??

WSRC is a technical package that aims at yield improvement and water saving. It consists of 5 main technologies namely: 1. Healthy seedling, 2. Hand leveling, 3. Line planting, 4. Improved weeding and 5. Intermittent irrigation. This is a sister technology to SRI (System of Rice Intensification).

5 Components of WSRC

Difference at Land preparation ??

WSRC includes hand (manual) leveling after rotavation or animal traction so that the field can be uniformly leveled which results into successful transplanting & easy water management.



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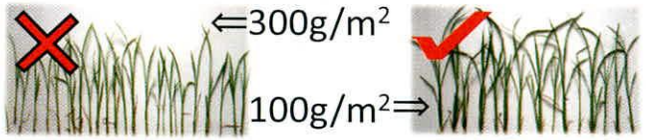
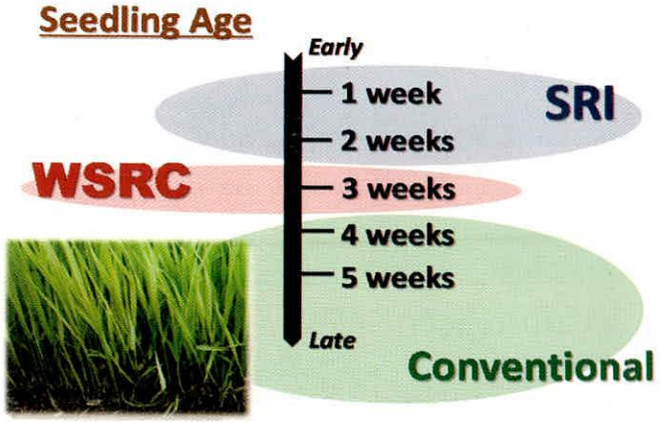
Healthy seedlings ??

WSRC strongly recommends use of healthy seedlings. Seeds are pre-germinated by soaking in water for 24 hours followed by incubation for another 48 hours to attain higher and even germination rate. The pre-germinated seeds are then sown at the rate of 100g/m^2. In the conventional method, seeds are sown at high rate of up to 300g/m^2 which leads to elongated & weaker seedlings with higher incidences of diseases.



Difference in Seedling age ??

WSRC recommends younger seedlings (3 weeks) for better tillering which results into better yield. SRI recommends 1 to 2 weeks seedling which can give more yield but it requires a completely leveled field due to the size of seedlings. Deep planting that disturbs root development, can be avoided if using young seedling.



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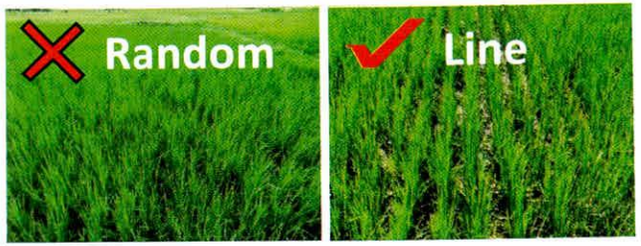
Line planting ??

WSRC recommends line planting rather than random planting to secure the appropriate plant population. The spacing of 30 x 15 cm is recommended. The method gives better yield than random planting. Missing hills should be filled by gap filling to maintain proper population otherwise the yield decreases.



Improved weeding ??

If rice is planted in lines with the spacing of 30cm in row, push-weeder can be used. Weeding for an acre can be done in a day with 2 men using the weeder.

Water Saving Rice Culture