

**Draft Report**  
***Esek Farmers Co-operative***  
***Society***

**RESULTS FROM THE FIRST SRI  
HARVEST IN ZAMBIA,  
SOUTHERN AFRICA  
30<sup>TH</sup> JUNE, 2006**

# Practice

- Esek Farmers Co-operative Society was registered in 2002 under the Ministry of Agriculture and Cooperatives in Zambia. Its membership is composed of 12 farmers (6 women, 6 men).

# Land selection

- Choice of land depended upon the source of water and soil fertility. The type of soils was clay-loam. Terracing was also taken into consideration.



# Land preparation

Leveled land was prepared in readiness for water management and seedling transplanting. Pegs and measuring ropes were used to determine field size. Size of field was 12.5 x 12.5 m. Field preparation was by hoes, shovels and rakes using human labor.



# Varieties planted

Local seeds were collected from another district of Zambezi in the same province. The type of seed grown is known as “**Super.**” Zambezi district is the leading rice-growing area despite low production.



# Seed management

- 2 days before sowing, the seed was manually sorted by hands. Subsequently, seed was placed in a soaked sack and kept wet, being immediately transferred to the seedbed when it was seen about to sprout. This was a two-day process. No other treatment was used.

# Seeding rate

Ordinary nursery was prepared and enriched with composite manure. Seeds were sparsely broadcasted in the nursery. The nursery was just one seedbed, which was enough to cover the field.



# Nursery management

Sowing of seed in the nursery was on 10<sup>th</sup> December 2005, followed by careful watering, using tin cans. Removing of weeds was done as and when spotted in the nursery.



# Field fertilization

- First, no fertilization was conducted. The soils looked naturally rich. Composite manure made out of maize straw, and ordinary grass and leaves were applied six weeks after preparation.

# Transplantation

Transplanting was conducted on 25<sup>th</sup> December 2005, 15 days after sowing of seeds in nursery. As shown in the photo, seedlings had 2-3 leaves. Spacing was 25 x 25 cm.



# Weeding and hoeing

- Weeding was carefully conducted by hoe.
- This was done after every 10 days.

# Water management

Zambia experiences favorable annual rainfall of about 1,400 mm. However, there is the danger and fear of occasional rain shortages. This prompted the digging of a dam to supplement rainwater for the SRI field. Water from the dam was controlled by a furrow regulating the flow as and when it was required. Rain water was controlled by drainage, and the field was kept wet for 6 to 7 days and subsequently dried for 4 days.



# Harvest

- Harvest was completed on 1<sup>st</sup> July, 2006, six months after planting
- Harvested rice was dried on PVC paper was packed in bags and weighed on July 20, 2006.
- The yield of 96 kg from a field 156.25 m<sup>2</sup> calculates to be a yield of 6.144 t ha<sup>2</sup> – in a province where usual yields are 1-2 t ha<sup>2</sup> and where food aid (rice) is being imported

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**THANK YOU !**