

SUCCESS STORIES OF SRI

Project: Validation of SRI for higher productivity in Palakkad region

Project Period: 2009-2014

Intervention Suggested: Palakkad is commonly called as rice bowl of Kerala. The farmers face water shortage during the second which leads loss in crop due non release of water from dams of Malampuzha. Application of organic manures were seen diminishing in this areas due lack of availability of this manures. To overcome this problems the method of SRI was suggested in areas where farmers face such problems.

Objectives of the Project:

- To validate the SRI method of cultivation tested at RARS, Pattambi in comparison with farmers practice in 10 selected panchayats in Palakkad region.
- To validate the SRI practices comparison to farmers practices with B:C ratio's in Palakkad region.
- To implement the modified SRI methods in large scale in other farmer's fields with the help of trained farmers.

Activities taken under the project:

- Demonstration of SRI was conducted in 55.14 ha covering 19 panchayats in Palakkad districts during 2009-10 to 2011-12.
- Required implements like markers, single, double conoweeder and machine conoweeder were supplied under the project.
- Farmers meetings on SRI were held at Polpully, Priyari, Kongad, Mathur (3 meetings) were conducted covering 896 farmers.
- Harvest festival of SRI was conducted at Mathur, Kongad and Tarur covering 203 farmers.
- Video coverage was made and CD was brought about both in English and Malayalam showing the highlights success of SRI achieved through this programme.

Results / Outcome

- The areas like Kongad where SRI practices were not followed before our intervention were cultivating local varieties and were harvesting less than 2000 - 2500t/ha. After adoption of SRI continuously under the programme the yield increased from 4470 to 5700/ha and area under SRI increased from 6.80 ha to 10.00 ha. Likewise areas like Mathur, Vandthithalam and Pattithera the farmers were adopting SRI continuously after our intervention and harvesting better yields over conventional methods.
- A book on 'Success stories of SRI' under the programme will be brought in Malayalam by end of March 2015.

Some Success Stories under the Programme

1. Unniman

Age:74 years

Kunnath House

Education: nil

Parasseri post

Occupation: Agriculture

Kongad

No. of years in farming: 45years

Palakkad



Paddy Cultivation

Unniman is a very experienced farmer. He has 85 cent of agricultural land. His main source of irrigation is rain water. He cultivates rice crop both during Rabi and punja crop season. He gets an average yield of 1608kg/acre using conventional method of cultivation. He was frustrated with the low crop yield and wanted to improve his crop yield through any other improved technology.

SRI adoption

He came to know about SRI from scientist of RARS Pattambi. He was first hesitant to adopt SRI during his first crop , and with the support of constant guidance from Dr. Karthikeyan, Associate professor, Regional Agricultural Research station Pattambi, he gained confidence and started to practice the method of SRI cultivation continuously. From his five years of experience, he says that SRI is the best method for getting higher yield than the conventional method of cultivation with less use of water. According to him SRI is a successful technology for increasing the rice yield. He has been following SRI since 2009 with his 85 cent of rice field.

Benefits

- Less seed requirement
- Higher yield
- Less water requirement
- Simple technology
- Greater profitability

Constraints in Adoption

- Management of water in field is a problem
- Need more labors for line planting and cono-weeding

Lessons Learnt

Higher grain yield can be obtained by adopting SRI.

People who were criticizing the SRI farmers impressed by this SRI method

Weeding improves good aeration to roots of SRI plants and gave more numbers of tillers

Comparative study

Cost of cultivation(0.6 ha)

| SI.NO | PARTICULARS | SRI | WETLAND |
|-------|----------------------------|----------|----------|
| 1 | NURSERY PREPARATION | 1100.00 | 2720.00 |
| 2 | MAINFIELD PREPARATION | 5050.00 | 5628 |
| 3 | PLANTING | 5625.00 | 6000.00 |
| 4 | MANURES | 1175.00 | 1175.00 |
| 5 | FERTILIZERS | 2437.00 | 2600.00 |
| 6 | WEEDING | 4875.00 | 5500.00 |
| 7 | PLANT PROTECTION CHEMICALS | 1400.00 | 1594.00 |
| 8 | IRRIGATION | 600.00 | 800.00 |
| 9 | HARVESTING | 8000.00 | 8000.00 |
| | TOTAL COST | 30262.00 | 34017.00 |

Yield particulars

| SI.NO | PARTICULARS | SRI | WETLAND |
|-------|------------------|----------|----------|
| 1 | GRAIN YIELD(Kg) | 4800.00 | 4200.00 |
| 2 | STRAW YIELD(Kg) | 3200.00 | 3000.00 |
| 3 | GROSS INCOME(Rs) | 73600.00 | 64800.00 |
| 4 | NET INCOME(Rs) | 43338.00 | 30783.00 |
| 5 | C:B RATIO | 2.43 | 1.9 |

2. Sethumadhavan

Kalathil (Ho)

Kaitharav (Po)

Palakkad

Age: 65

Education: Pree-degree

Occupation: Agriculture

No: of years in farming: 8



PADDY CULTIVATION

Sethumadhavan owns an area of 3.5 acres of total agricultural land. His entire family depends on agriculture to meet their requirement. He cultivates paddy as the main crop during first and second crop season. He depends on rains and ponds as the major sources for his irrigation.

SRI ADOPTION

He was introduced to SRI method by attending training at Tamilnadu Agricultural University, Coimbatore and he started doing SRI in his field with the support of Mr. Abilash, Agricultural officer, Perumatti Krishibhavan. He started practicing SRI with limited knowledge in 2006. Later scientists and project staff's at RARS provided him training and technical guidance about SRI cultivation. Conoweeder were supplied to him through RARS. By adopting proper conoweeding at regular intervals he realized huge tillers development in his SRI crop and overall crop health improved by adopting SRI.

Constraints in Adoption

Unavailability of labors

Scarcity of water during second crop season.

Weeding using Conoweeder is labor some

Benefits

Short age of seedlings during transplantation.

SRI is a Simple technology.

Crop production and productivity is improved

Lessons Learnt

Learned to cultivate his rice using SRI technique.

SRI adoption lowered the incidence of insects and disease.

Comparative study

Cost of cultivation (0.4ha)

| SI.NO | PARTICULARS | SRI | WETLAND |
|-------|----------------------------|-------|---------|
| 1 | NURSERY PREPARATION | 560 | 1600 |
| 2 | MAINFIELD PREPARATION | 4600 | 5100 |
| 3 | PLANTING | 3600 | 3240 |
| 4 | FERTILIZERS | 14248 | 15851 |
| 5 | WEEDING | 6875 | 6400 |
| 6 | PLANT PROTECTION CHEMICALS | 1120 | 1400 |
| 7 | IRRIGATION | 600 | 1500 |
| 8 | HARVESTING | 2880 | 2880 |
| | TOTAL COST | 34483 | 37971 |

Yield particulars

| SI.NO | PARTICULARS | SRI | WETLAND |
|-------|------------------|-------|---------|
| 1 | GRAIN YIELD(Kg) | 6000 | 5500 |
| 2 | STRAW YIELD | 3600 | 4000 |
| 3 | GROSS INCOME(Rs) | 91200 | 85000 |
| 4 | NET INCOME | 56716 | 47029 |
| 5 | C:B RATIO | 2.5 | 1.2 |

Suggestions

Government should take initiation to include labours under “thozhil urappu padhathi” in agriculture sector

3. Sreenivasan

Mathur agraharam,

Age: 60yrs, Male

Kuzhalmannam block

Education: SSLC

Puthanpura house,

Occupation: Farmer

Mathur agraharam

No: of years in farming: 40 years



Paddy Cultivation

Sreenivasan is a good rice farmer and he cultivates paddy in his all of his 5 acres land.

His main source of Irrigation is bore well and rain water.

SRI adoption

Sreenivasan came to know about SRI method of paddy cultivation from scientist of RARS, Pattambi. He has been practicing for SRI last one year over an area of 3 acres and harvested higher yield than the conventional method of cultivation. He extended his SRI cultivation over an area of 5 acres during this year.

Benefits

- Less seed requirement
- Higher yield
- Less water requirement
- Lesser insect pest infestation compared to the conventional method.

Lessons Learnt

- Conoweeding at the right time and the application of green manures along with chemical fertilizers increases the grain yield

- More tillers, bigger panicle size, bold grain with more weight were observed in SRI plants.

Comparative Study

Cost of cultivation(1 ha)

| SI.NO | PARTICULARS | SRI | WETLAND |
|-------|----------------------------|----------|---------|
| 1 | NURSERY PREPARATION | 581.00 | 2275.00 |
| 2 | MAINFIELD PREPARATION | 5775.00 | 6050.00 |
| 3 | PLANTING | 7600.00 | 9000.00 |
| 4 | FERTILIZERS | 7400.00 | 6500.00 |
| 5 | WEEDING | 14200.00 | 9000.00 |
| 6 | PLANT PROTECTION CHEMICALS | 500.00 | 1000.00 |
| 7 | IRRIGATION | 600.00 | 1000.00 |
| 8 | HARVESTING | 5000.00 | 6250.00 |
| | TOTAL COST | 41656.00 | 41075 |

Yield

particulars

| SI.NO | PARTICULARS | SRI | WETLAND |
|-------|------------------|-----------|-----------|
| 1 | GRAIN YIELD(Kg) | 7500.00 | 6000.00 |
| 3 | GROSS INCOME(Rs) | 127500.00 | 102000.00 |
| 4 | NET INCOME(Rs) | 85844.00 | 43925.00 |
| 5 | C:B RATIO | 3.06 | 2.07 |

Suggestions

- More awareness is needed among farmers for SRI adoption

- situation.



Var' Uma under SRI

Modification in SRI suited to all types of land



Paper clipping in 'Mathruboomi showing DR, KAU inspecting fields under SRI in Kongad during harvest Festival