Resilience to drought
SRI shows the way

CROPS-Jangaon (Warangal district)
A Case study
ICRISAT-WWF Project

ICRISAT-WWF Interventions

Actively involved in SRI promotion since 2004

Field demos, farmers exchange programs, meetings, trainings, workshops and national symposia etc., with partner organizations

Supporting research on SRI – ANGRAU, DRR, ICRISAT etc.

Policy advocacy through policy dialogues

Media advocacy

Publications and website (www.sri-india.net)

CROPS - Jangaon, Warangal

- Dryland (83%) and rainfed agriculture
- Rice-growing region - most farmers grow rice under conventional method for both subsistence and commerce.
- Operational Area - Katkur village, Bonakallur and Chinnaramcherla
- 463 farmers have been motivated from 7 villages to adopt SRI method in 354.5 acres of land
- Katkur village has gained the distinction as first of its kind village in the Andhra Pradesh with the highest percentage (80%) of SRI farmers achieved in a record time of within 2 seasons.

Katkur Village-Jangaon Mandal

Total land area: 3075.32 acres
- **Cultivable land: 2631.23 acres**
- **Non cultivable land : 444.09 acres**

Water sources
- **Total no. of bore wells : 305**
- **Open wells: 81**
- **Ponds : 2**

Total no. of SRI farmers in CROPS operational area – 334
Acreage – 202
- **Katkur – 175 farmers in 121 acres**

Kharif 2009

- Severe drought declared in the entire Telangana region along with several parts of the country
- Failure of –
  - dryland crops
  - conventional paddy

Rainfall and Groundwater levels

	Rainfall in mm			Depth to Groundwater levels in metres	
	Normal up to July	Actual up to July 08	Actual up to July 09	July 08	July 09
Andhra Pradesh	297	245	157	9.93	11.09
Coastal Andhra	277	283	175	7.80	8.98
Rayalaseema	168	121	92	12.20	13.50
Telangana	367	261	166	11.00	12.14
Hyderabad	277	161	106	9.55	9.49

The Hindu, August 18th, 2009

Observations

	Conventional	SRI
Irrigation	Flooded daily	Once in 4-5 days
Field condition	Deep and large cracks because of lack of earthingup with weeders	Minor surface cracks because of regular unearthing of soil
Root spread	Dried and dead due to lack of water	Healthy and deep
Tillering	10-15	50-60 tillers
yield	15 bags per acre	50 bags per acre
Cost of cultivation	More (digging deeper borewells)	Less (existing water sources adequate)

The alternate wetting and drying of the paddy field and the strong and deep root growth makes the roots and soil adaptable to drought conditions

Farmer Siddimalaiah's SRI crop could sustain without water for even up to 9 days

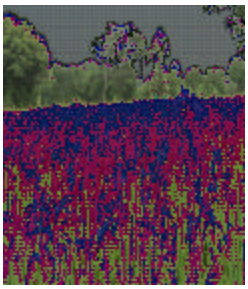
Drought affected Conventional Paddy field (8th June 2009)

SRI Paddy field (8th June 2009)

Katkur Village Paddy Fields

12th August 2009
(height of drought)

Conventional field
(Early Planting)



SRI field
(Late Planting)

Socio-economic impact

The yield of SRI paddy was not only a possibility but was in fact more than the average yield under conventional method in normal climatic conditions

1. Reduced migration
2. Food security for the entire family
3. Reduced crop expenditure
4. Reduced debt traps/ loan sharks
5. Reduced ecological destruction

Though pest attack was noticed, Sugunamma is not much affected by the drought conditions in her three acres of SRI paddy field (12th August 2009)

Impact of SRI under drought conditions – Kharif 2009

A study conducted by ICRISAT-WWF Project and DRR

The study is ongoing and the results are awaited

Thank you