

Success Story

1. Title: A Project for Demonstration and Popularization of SIRA technology for profitable cultivation of transplanting rice in South Gujarat Heavy rainfall zone.

2. Category: Agriculture

Most of the farmers who adopted this technology have seen above 20 percent yield increase over their conventional practice of paddy cultivation. From the above instances it is clear that this method of paddy cultivation is very economical and advantageous to the farmers of south Gujarat.

3. Challenge: To increase the production of paddy and maintain soil physical condition of farmers' field in South Gujarat

4. Initiative : First component of SIRA technology is to utilize Paddy husk ash in nursery bed. This imparts resistance in plants against disease like blast and sucking insects. Urea-DAP briquettes is the novel way of application of fertilizer. This application improves Urea efficiency by nearly 2.5 times compared to normal broadcast in paddy field.

5. Key results: 'Savant's Integrated Rice Agro technology' popularly known as "SIRA" Technology under Rashtriya Krishi Vikas Yojna has gone at Regional Rice Research Station, Navsari Agricultural University, Vyara "a project for demonstration and popularization of SIRA technology for profitable cultivation of transplanting rice in South Gujarat Heavy rainfall zone". More than 5934 farmers of all seven districts of South Gujarat trained to SIRA method of paddy cultivation. Total 51 training, 13 field days /farmers day on SIRA technology were conducted during the year 2012-15. About 2104 farmers directly benefited through this technology. On an average more than 20 % grain yield was increased under SIRA method over farmer's practices.

6. Impact: 1. On an average farmer obtained 1905 kg/acre grain yield under SIRA method of transplanted rice cultivation. Overall farmers get 22.5 per cent increase in grain yield under SIRA method during the year 2012-13. **2.** Farmers obtained grain yield 4390kg/ha. under SIRA method of transplanted rice cultivation and overall farmers get 19.67 per cent increase in grain yield under SIRA method during 2013-2014. **3.** Total 620 demonstrations conducted during summer and *kharif* 2014, data collected and analyzed from all demonstrations. On an

average farmer obtained 4571 kg/ha grain yield under SIRA method of transplanted rice cultivation during summer 2014 . Where as they obtained 3732 kg/ha. grain yield under conventional method (farmers practice). During *kharif* -2014 farmers obtained yield 4199 kg/ha. Where as they obtained 3489 kg/ha. grain yield under conventional method (farmers practice). Overall farmers get 22.67 per cent yield increase during *summer*-2014 where as 19.23 percent yield increased during *Kharif*-2014 under SIRA method. Improved farmers practices to integrated nutrient management and reduction of excess use of chemical fertilizer

7. **Lesson Learned:** Adoption of SIRA technology is definitely proved very effective for profitable paddy cultivation in south Gujarat Zone. Conventional paddy cultivation is very costly as well as environmentally unhealthy as farmers use heavy doses of inorganic fertilizers. Therefore, in such areas effective and eco-friendly profitable paddy cultivation through SIRA technology is possible. Farmers particularly of small and marginal who sustain on rice cultivation seem very enthusiastic and punctual in implementing such beneficial technology. Farmers are availing the benefit through such project. Most of the farmers wanted to cultivate their rice crop in SIRA method provided availability of Urea-DAP briquettes nearby village/tehsil place. Hence, necessary arrangements should be made so that URE-DAP briquettes available at farmers' doorstep. So that farmer judicious utilized chemical fertilizer without compromising yield. This will sustain food productivity as well as environmental health.

8. Supporting Quotes and Images:



Paddy seed given to farmers for SIRA demonstration in FLD



Uprooting of paddy seedling by farmers at Moretha (Mandvi) in FLD



Puddling and transplanting of paddy by farmers at kaswav in FLD



Transplanting of paddy and Urea-DAP Briquettes were placed in paddy field by farmers at kaswav in FLD

9. Additional Information:

Success Story during 2012-13

Mr. Patel Ashokbhai Setubhai of Fulwadi , Dharampur , Valsad district achieved 48 per cent increase over conventional practice. He got 2222.2 kg per acre paddy yield compared to only 1500 kg /acre yield in conventional practice under rainfed farming condition.

Similarly, Choudhari Ballubhai Maganbhai of Salliya, Mandvi, Surat, Kharari Gamanbhai Koldubhai of Fulwadi, Dharmpur Valsad, and Gamit Kapilaben Premchandbhai of Kapura, Vyara, Tapi got over all above 40 percent increase in their yield over their conventional practice of transplanted rice cultivation.

Farmers like Patel Jigneshbhai Manubhai of Ruva Bharampur, Bardoli, Surat used to prefer heavy application of fertilizers (About 200 kgs/bigha of Mix fertilizer) in their paddy fields also got 16 percent increase under SIRA method of rice cultivation. He applied only 50 kg of Urea-DAP briquettes/bigha of land in improved SIRA technology. He planted his crop at 15 x 15 x 25 spacing in SIRA method compared to normal practice of random planting.

Success Story during 2013-14

Mrs. Gamit Radhaben Babubhai of village Pipalkuva, Songadh, Tapi district achieved 22.61 per cent increase over conventional practice. she got 6897 kg /ha. paddy yield compared to only 5625 kg /ha yield in conventional practice under rainfed farming condition.

Similarly, Gamit Hareeshbhai Ranchidbhai of village Dadakvan, Vyara, Tapi district, got over all above 40.35 percent increase in their yield over their conventional practice of transplanted rice cultivation.

Success Story during 2014-15



1. Mr. Champakbhai Udaisingbhai Chaudhari of village Jasingpura, Vyara, Tapi district achieved 36.60 per cent increase over conventional practice. He got 4160 kg /ha. paddy yield compared to only 3042 kg /ha yield of GAR-13 variety in conventional practice under rainfed farming condition.

2. Mr. Ratilalbhai Somabhai of village Kakadkui, Netrang, Bharuch district achieved 35.82 per cent increase over conventional practice. He got 3500 kg /ha. paddy yield compared to

only 2577 kg /ha yield of GR-7 variety in conventional practice under rainfed farming condition.

3. Dr. Maheta Harilal Dahyabhai of village Jamaniya, Valod , Tapi district achieved 35.52 per cent increase over conventional practice. He got 4333 kg /ha. paddy yield compared to only 3217 kg /ha yield of GAR-13 variety in conventional practice under rainfed farming condition.



4. Mr. Nileshbhai Karsanbhai Patel of village Arnala, Pardi , Valsad district achieved 35.30 per cent increase over conventional practice. He got 5250 kg /ha. paddy yield compared to only 3880 kg /ha yield of GNR-3 variety in conventional practice under rainfed farming condition.

5. Mrs. Ramilaben Arvindbhai Gamit of village Magarkui, Vyara , Tapi district achieved 34.68 per cent increase over conventional practice. He got 4333 kg /ha. paddy yield compared to only 3217 kg /ha yield of GAR-13 variety in conventional practice under rainfed farming condition.

6. Similarly, Ambubhai Chogdabhai Chaudhari of village Jesingpura, Vyara, Tapi district, he got highest 6000kg/ha. As compared to 5000 kg/ha paddy yield in GR-13 Variety with one irrigation given at the time of grain filling stage when rain was not occurred. over all above 20.0 percent increase in their yield over their conventional practice of transplanted rice cultivation.





Mothers of Ramsingbhai Dansingbhai Chaudhari of village Kasvav, Vyara

7. Mr. Ramsingbhai Dansingbhai Chaudhari of village Kasvav, Vyara, Tapi district, he got highest 6000kg/ha. As compared to 4800 kg/ha paddy yield in GAR-13 Variety with one irrigation given at the time of grain filling stage when rain was not occurred. over all above 25.0 percent increase in their yield over their conventional practice of transplanted rice cultivation.

10. Checklist

No.	Question to consider	Yes	No
1	Is the story interesting to the target audience of the project/activity report?	Yes	
2	Does the story explain what new insights the project brings? What is the main lesson learned from this story? Does the story describe a key insight on what works and what doesn't and something that future project could build on	Yes Urea-DAP briquettes was the novel way of application of fertilizer which was improved Urea efficiency by nearly 2.5 times compare to normal broad casting in paddy field and increased grain yield	
3	Does the story describe the outcomes the project produced and the people who are benefitting? What changes – in skills, knowledge, attitude, practice, or policy – has the project brought, and who is benefitting from these changes?	Improved knowledge related to integrated nutrient management and reduction of excess use of chemical fertilizer	
4	Does the story make a compelling point that people will remember? Does the story show how the project makes a difference to improving livelihoods and lessening poverty?	Reduced the use of higher amount of Urea and increased production for reducing poverty.	

5	Does the story provide an interesting fact that people will remember? For example, how much yields increased, how many hectares of land could become more productive from this innovation or technology?	One can get higher production with limited and timely fertilizer application and reduce excess chemical fertilizer with more than 20 % yield was increased under 842 hectares .	
6	Does the story explain what kind of impact this innovation or technology could have if scaled up?	Greatly reduced use of chemical fertilizer in paddy cultivation	
7	Does the story show which partners contributed and how?		no
8	Does the story include quotes from Stakeholders or beneficiaries?	beneficiaries	
9	Have I provided links to other media (journal articles, website news, newsletter, blogs, annual reports of other Programme/ project) that also feature this story?	annual reports	
10	Have I provided the contact details of people who can provide more information?	Dr. V.P. Patel 8469417374	