

ICAR-Central Research Institute for Dryland Agriculture, Santoshnagar, Hyderabad

Proforma for 'Success story in NICRA TDC Villages'

1	Name	:	First name: Kailash Middle Name: Surname: Jaysingh																						
2	Postal address	:	Achhutadaspur, Japa, Jagatsinghpur, Odisha Phone: Mobile: 8658450400																						
3	Home town	:	Village: Achhutadaspur Taluk/Mandal: Japa	District: Jagatsinghpur State: Odisha																					
4	Age	:	56																						
5	Education	:	Graduate																						
6	Land holding (acres)	:	Irrigated:1	Rainfed:4																					
7	Farming experience	:	<table border="1"> <thead> <tr> <th>Crops grown:</th> <th>Area (acres)</th> <th>Productivity (kg/acre)</th> </tr> </thead> <tbody> <tr> <td>1 Rice</td> <td>4.5</td> <td>1900</td> </tr> <tr> <td>2 Green gram</td> <td>2</td> <td>150</td> </tr> <tr> <td>3 Tomato</td> <td>0.5</td> <td>12000</td> </tr> <tr> <td>4 Okra</td> <td>1</td> <td>4000</td> </tr> <tr> <td colspan="2">Livestock (no.): -NA</td> <td>Poultry (no.): NA</td> </tr> <tr> <td colspan="2">Small ruminants (no.): NA</td> <td>Farm machinery available: Power tiller, Knapsack sprayer</td> </tr> </tbody> </table>	Crops grown:	Area (acres)	Productivity (kg/acre)	1 Rice	4.5	1900	2 Green gram	2	150	3 Tomato	0.5	12000	4 Okra	1	4000	Livestock (no.): -NA		Poultry (no.): NA	Small ruminants (no.): NA		Farm machinery available: Power tiller, Knapsack sprayer	
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8	List the Rainfed/ Innovative farming technologies adopted	:	In situ water harvesting: Mulching, Conservation tillage, Ridge and Furrow system Ex-situ water harvesting: Farm Ponds, Improved varieties: Waterlogging tolerant varieties like Swarna Sub-1, CR 1009 Sub-1; Salt tolerant varieties like Luna Suvarna, Luna Barihal; High yielding variety: Kalachampa, Farm machinery usage: Power tiller, Tractor, Knapsack Sprayer, combine harvester, rice mill Any other:																						
9	Recognition Certificates, awards etc. already recieved) Received from (Name of the organization)	:	Progressive farmer award on integrated farming system (by NRRI, Cuttack 2021)																						
10	Description of innovation/ adopted technologies - Farm / Climate resilient practices (1 or 2 practices) Describe in not more than 100 words and attach separately/ photo of the	:	System of Rice Intensification (SRI), Application of Dhanicha (<i>Sesbania aculeata</i>). Integrated nutrient management in rice using Dhanicha combines the efficient use of chemical fertilizers with organic sources like compost and green manures to enhance soil fertility and crop productivity. The technology emphasizes soil health restoration, nutrient cycling, percolation of fresh water crossing hard pan and efficient water use, which helps improve crop																						

	innovation/adopted technology)		resilience to climate stresses such as drought and erratic rainfall.
11	Process of innovation/ Adoption (Describe in not more than 100 words)	:	Field trials were conducted under NICRA-TDC project to determine optimal fertilizer combinations, including biofertilizers, compost and minimal chemical inputs. He participated in various training programs conducted by KVK Jagatsinghpur on sustainable nutrient management techniques suited to their soils and crops. Technology adoption was further encouraged through demonstrations, showing improved yields and soil health benefits. By integrating local practices with scientific insights, the technology gained acceptance, promoting climate-resilient farming through balanced nutrient application and efficient use of natural resources.
12	Practical utility of the innovation/adoption of technology (Benefits-yeild/income/resource conservation etc.,)	:	Adoption of INM technology has improved the farm yield and income by optimizing nutrient use. By integrating organic sources (like vermi-compost and green manure) with chemical fertilizers has enhanced soil health and crop resilience to climate variability. This balanced approach conserves resources by reducing the need for costly chemical fertilizers and enhances nutrient-use efficiency, which is vital for rainfed agriculture. As a result, farmers see stable yields, lower input costs, and long-term soil fertility. This technology supports sustainable productivity, helping other farmers to adapt the INM practice and increase profitability. Integrated Nutrient Management with Dhanicha enhances soil fertility, increasing organic matter by 1-2% annually. It improves crop resilience, leading to 15-20% higher yields under climate stress. This practice reduces chemical fertilizer use by 20-25%, resulting in a 20-30% increase in income.
13	Impact of innovation on other farmers (Quantify in terms of no. of other farmers adopted, area covered etc.)	:	More than 50% farmers adopted the INM technology and use of salt tolerant varieties like Luna Suvarna and Luna Barihal and water logging tolerant varieties like Swarna Sub-1 and CR1009 Sub-1 also motivated the farmers to continue rice cultivation saline and low land areas.
14	Any other information pertaining to innovation/adoption of the technology not covered above	:	Salt-tolerant varieties like Luna Suvarna and Luna Barihal, also covering remarkable area in the village. This has led to better yields and resilience to stress condition like soil salinity and water logging.
15	Any other institutions related to		Department of Agriculture, Govt. of Odisha
16	Spread of the technology		Farmer trainings, demonstrations, and Farmer-scientist interaction promoted widespread adoption of these technologies

Signature of forwarding Authority:
(PC, KVK)