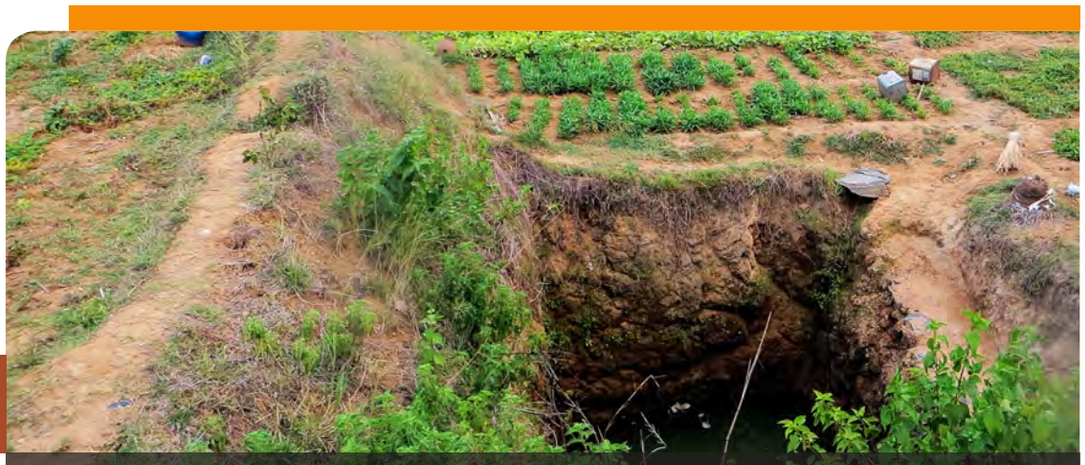
Case studies



Success stories from the field- Case studies of farmers who have successfully adopted the happa model along with an integrated farming approach

DRCSC has been pioneering the task of introducing, developing and popularizing the Happa/Small tank(ditch) models embedded with an integrated farming approach in the undulated and dry lands of Purulia, West Bengal. The success stories of two marginal farmers from the district testifies the potential of these sustainable and innovative irrigation models in addressing the acute water needs and making transformative impact on the lives of small and marginal farmers.

Adoption of Happa not only delivers substantial impact on the livelihood but also creates a 'farmer entrepreneur'

Farmer's Profile

Mahadev Tudu, aged 25, is a 'farmer entrepreneur' in making. He is one of the 'successful farmer' in the drylands of Purulia district of West Bengal who has successfully adopted and leveraged the Happa model in effectively meeting the water requirements for his farming system. The introduction has not only enabled him to earn higher cash earnings from the farm's marketable surplus but also changed his attitude from just being a farmer to become an entrepreneur farmer.

At a Glance		
Total Land Size	Adopted the Happa model	Average annual cash earnings since adoption
2.31 acre	Year 2012	INR 81,268

The effectiveness of the Happa is corroborated by the substantial increase in the marketable surplus and the subsequent cash earnings from the various products of his farmland

During the period of 2008-2011, Mahadev had started eyeing alternative livelihood opportunities. The reason being his ancestral livelihood practice of farming was failing to meet the basic food requirements of the three member family. Given the topographical conditions of the region and with no access to a perennial water source, his crop cultivation was restricted to only paddy and few other vegetables particularly in the Kharif season.

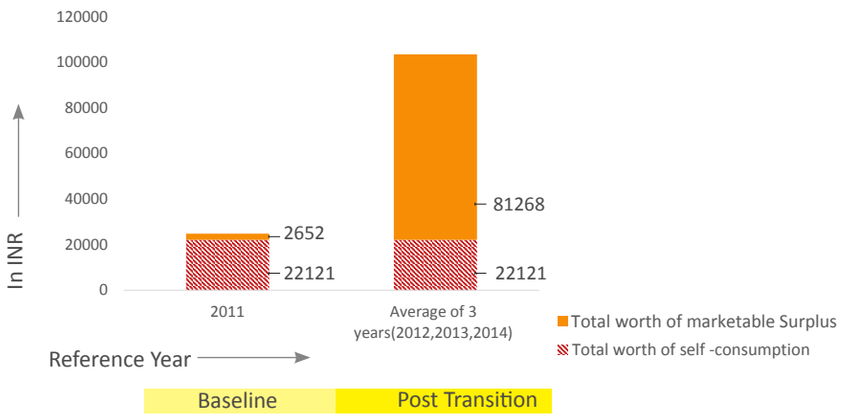
Mahadev was one of the first farmers in his village to experiment with the Happa model under the guidance of DRCSC. Three years post adoption of Happa irrigation he is now able to generate enough marketable surplus without compromising the nutritional needs of his family.

A snapshot of Pre Happa adoption economic value creation and value created in 2013 & 2014 : the model has created sizable marketable surplus for Mahadev

Mahadev Tudu's case of value creation post adoption of Happa and Integrated farming model

Notes:

1. *Cash earnings and worth of self-consumption is considered only for farmland; labour cost is not factored in*
2. *The worth of self-consumption is considered equivalent for year 2011 & average for years 2012, 2013 & 2014 as in both periods Mahadev was able to produce for self consumption*
3. *The cash earnings in year 2011 have been adjusted to 2014 prices, Net Cash earnings of Mahadev Tudu in year 2011 was INR 1,435*
4. *The earnings do not include other income sources like daily labour*



The combination of the integrated farming approach along with Happa irrigation has enabled Mahadev to unlock to unlock optimal value from his farm

Mahadev success in the Happa irrigation technique is significantly explained by the presence and the effective integration of various sub-systems in his farmland. Happa /ditch was introduced as the first sub-system followed by the other sub-systems including vermicompost, livestock and biogas.

Happa plays an indispensable role in maintaining all these sub-systems given water is a critical requirement for all of them. The successful management has resulted in significant decline in cash input cost on one hand and increase in the cash earnings from each of the sub-systems.