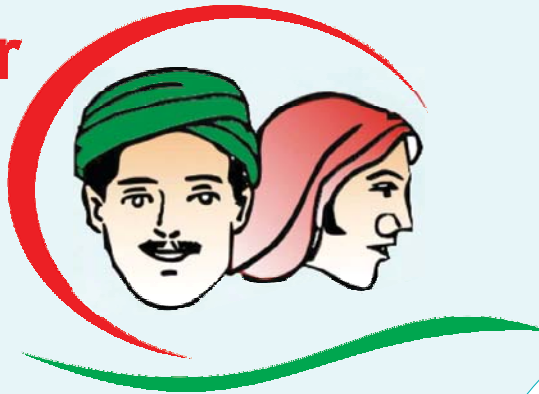


Uplifting Tribal Farmers of Chhattisgarh An NIBSM initiative through Farmer FIRST Programme

**Farmer
FIRST**



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FOREWORD

Farmer FIRST programme has been implemented in the year of 2016 by ICAR-NIBSM, Raipur to improve the tribal farmer's livelihood through implementing agricultural enterprises integration in rice fallow. The cluster of five tribal villages namely Bakla, Kharaha, Bamhani, Kurraha and Kharri in the Kasdol block of Baloda Bazar district, Chhattisgarh has been adopted for this programme. Total five modules were identified and implemented viz.



More than, 500 tribal farm families benefitted under this programme. Under each module, interventions crop based module, livestock-based module, enterprise-based module, horticulture-based module and NRM based module are selected based on the matrix ranking and agro-eco system analysis. As a result, the interventions such as goat farming with Sirohi, Jamnapari and Barbari breeds, backyard poultry farming with Kadaknath breed, oyster mushroom production, Farmer Communication Centre (FCCs), low cost Azolla production, nutritional home garden, drudgery reduction equipment for women farmers through Custom Hiring Centers (CHCs), Agro Processing Centers (APCs), low-cost poly house with drip and poly-mulching for vegetable production and eco-friendly pest management technologies played vital role in the additional income generation and brought tangible changes in the socio-economic condition of tribal farming community. In economic terms, additional income of Rs. 12,054/- per farm family has been generated through the introduction of crop, livestock, horticulture, enterprise and NRM based modules respectively. In 2021, the sum of Rs. 97.74 lakhs have been generated by the farming community from different enterprises. As a social impact, nearly 26% of farmer's seasonal migration reduced from the adopted villages by this initiative. FFP initiatives attracted 34% of farm women and 20% of rural youth in agricultural activities in the adopted villages. Overall, 24 - 30% of knowledge gain observed among tribal farmers in the selected technologies by the intervention of FCCs, Agricultural Film Shows, Capacity building programmes and social media groups. Significant rate of skill acquisition observed in the adopted technologies such as scientific vegetable production, zero tillage, livestock production and eco-friendly plant protection SAV measures. Woman farmer's drudgery reduced through village level CHCs. Tribal farm families' nutritional level enhanced through nutritional home gardening. Total 52 agricultural interventions introduced and sustained in the farmer's field. Cropping intensity has been increased by 120% in the adopted villages. Backward and forwarded production linkages established for crop, livestock and horticulture enterprises. Market linkages established for different commodities produced under this project for the sustainability of the disseminated technologies. In total, 347 capacity building programmes organised and 8417 tribal farmers benefitted under this initiative. The Farmer FIRST approach proved that it is successful role model programme in the Socio-economic upliftment of tribal farmers through suitable agricultural enterprises integration in rice fallow pulse cropping system.

Dr. P K Ghosh

Founder Director and
Vice Chancellor

Farmer FIRST Programme: An Success tale from ICAR-NIBSM

Approach of Farmers FIRST Programme:

The Farmer FIRST Programme (FFP) is an ICAR initiative to move beyond the production and productivity, to privilege the smallholder agriculture and complex, diverse and risk prone realities of majority of the farmers through enhancing farmers-scientists interface. There are concepts and domains that are new in emphasis like resource management, climate resilient agriculture, production management including storage, market, supply chains, value chains, innovation systems, information systems, etc. The Farmer FIRST as a concept of ICAR is developed as farmer in a centric role for research problem identification, prioritization and conduct of experiments and its management in farmers' conditions. The focus is on farmer's Farm, Innovations, Resources, Science and Technology (FIRST). Two terms 'enriching knowledge' and 'integrating technology' qualify the meaning of Farmer FIRST in Indian context. Enriching knowledge signifies the need for the research system as well as farmers to learn from each other in context to existing farm environment, perception of each other and interactions with the sub-systems established around. Technology integration is looked from the perspective that the scientific outputs coming out from the research institutions, many times do not fit as such in the farmers' conditions and thus, certain alterations and adaptations are required at field level for their acceptance, adoption and success.

Why Farmer FIRST Programme

The past efforts brought lot of success in terms of raising production and productivity and addressing issues of the farmers and the technology was considered as a vital factor in the production system and farmer as a recipient of the technology outputs. The knowledge and innovations of the farmers were not valued much and their presence was relegated at most as a participant but not as a partner in the experimentations. The wisdom available with the farmers was also not channelized so much to derive suitable options for different production systems. The participation of multiple stakeholders was also not taken up in perspective for technology development, integration and adoption. Now the situation has changed drastically in terms of increased number of smallholders, growing proposition of women-led agriculture, need for higher return per unit area and addressing the changing socio-economic environment, etc. This necessitates new approach for project development involving innovation and technology development with the strong partnership of the farmers for developing location specific, demand driven and farmer friendly technological options.

Applying Farmer FIRST Approach

Farmers tend to face problems related to production and natural resource management but they might not have found out solutions to overcome them. In such situations, Farmer FIRST is an opportunity for the researchers, extension professionals and farmers to work together and find appropriate ways through assessing different solutions. During the production process, farmers often evolve new ideas to improve their cultivation and natural resource management activities. This creates a space for researchers, extensionists and farmers to design and organize new experiments. Farmer FIRST can be applied not only at household level but also at village and community level as community experimentation.

Usually, the experiments are managed at the individual farmer's level who are involved in the project or who are selected by the village as the representatives to conduct experiments. In addition, there are some cases where experiments focus to solve problems of the whole village. Farmer FIRST is a concept in which the farmers participate in the research process with scientists. Research questions are found out together with selected farmers or the whole village and villagers' participation in monitoring experiments with scientists. The aim is to find out new ways of doing and bringing in synergy of the stakeholders. The experiments need to be adapted to specific conditions of a farming system and to have the participation of farmers as well as scientists. Especially they must acknowledge local wisdom as a vital element for the development of useful innovations. The role of extensionists is to ensure implementation.

Farmer FIRST will create linkages between farmers-researchers and extensionists to support farmers to conduct appropriate experiments selected by them. It will help researchers and extensionists understand and know real needs of villages. In this process, priority does not come from researchers or extensionists but from the end users of results of research and technology development.

Aims and Objectives of FFP

'Farmer FIRST' programme aims at enhancing farmer-scientist interface for technology development and application. It will be achieved with focus on innovations, technology, feedback, multiple stakeholder's participation, multiple realities, multi method approaches, vulnerability and livelihood interventions. The specific objectives are:

- To enhance farmer-scientist interface, enrich knowledge and facilitate continued feedback;
- To identify and integrate economically viable and socially compatible technological options as adoptable models for different agro-ecological situations;
- To develop modules for farm women to address drudgery reduction, income enhancement and livelihood security;

- To study performance of technologies and perception of the farmers about agriculture as a profession in the rural settings;
- To build network of linkages of organizations around the farm households for improving access to information, technology, input and market.
- To institutionalize Farmer FIRST process.

Components of FFP

(i) Enhancing Farmer –Scientist Interface

- Enabling involvement of researchers for continuous interaction with farm conditions, problem orientation, exchange of knowledge between farmers and other stakeholders, prioritization of problems and setting up of research agenda.
- This component will create a strong farmer-scientist bond for continuous exchange of idea, innovations, resources, feedback for development of appropriate technology and human resource development.
- Identification of farm innovators and grooming them as technology agents for farmer to farmer technology dissemination, up-scaling and out-scaling.
- Regular visits of project team and other scientists to project site for orientation of problems and ground realities.
- Multi stakeholders' participation in building strong farmer-scientist interaction.
- Regular interactions of farmer-scientist at institute and project site through trainings, visits, workshops, interfaces, extension activities, etc.

(ii) Technology Assemblage, Application and Feedback

- Integrating components of technology for application in different agro-ecosystems will focus on innovations and feedback.
- Crop based modules will focus on intensification and diversification of existing systems with introduction of new varieties and technologies to substantially enhance income. On site input management like seed production by farmers through training, timely supply of quality seeds and resource management may be major activities.
- Horticulture based module will focus on seed production and nursery management, vegetable, fruit production, floriculture, post-harvest management, poly house technology and adoption of new technologies.
- Livestock based module will focus on raising the production and productivity of existing livestock, introduction of new breeds, animal health management, development of viable milk production units, poultry and fisheries. The livestock related different modules are to be developed as per the micro farming situations and socioeconomic status of the farmers.

- Enterprise based module will cover various income generating activities like seed and other inputs production, bee keeping, mushroom production, vermi-compost production, handicraft, processing and value addition, marketing through federating farmer groups etc. The farmers, youth, landless and farm women may be important target groups.
- NRM based module will have the insight to work upon natural resource management, climate resilient agriculture, use of resource conservation technologies, water harvesting and micro irrigation, micro-organisms, land races and bio diversity etc.
- Integrated Farming Systems (IFS) module emphasise different categories of land holders based on resource availability, socioeconomic conditions, risk bearing capacity, market availability etc.

(iii) Partnership and Institution Building

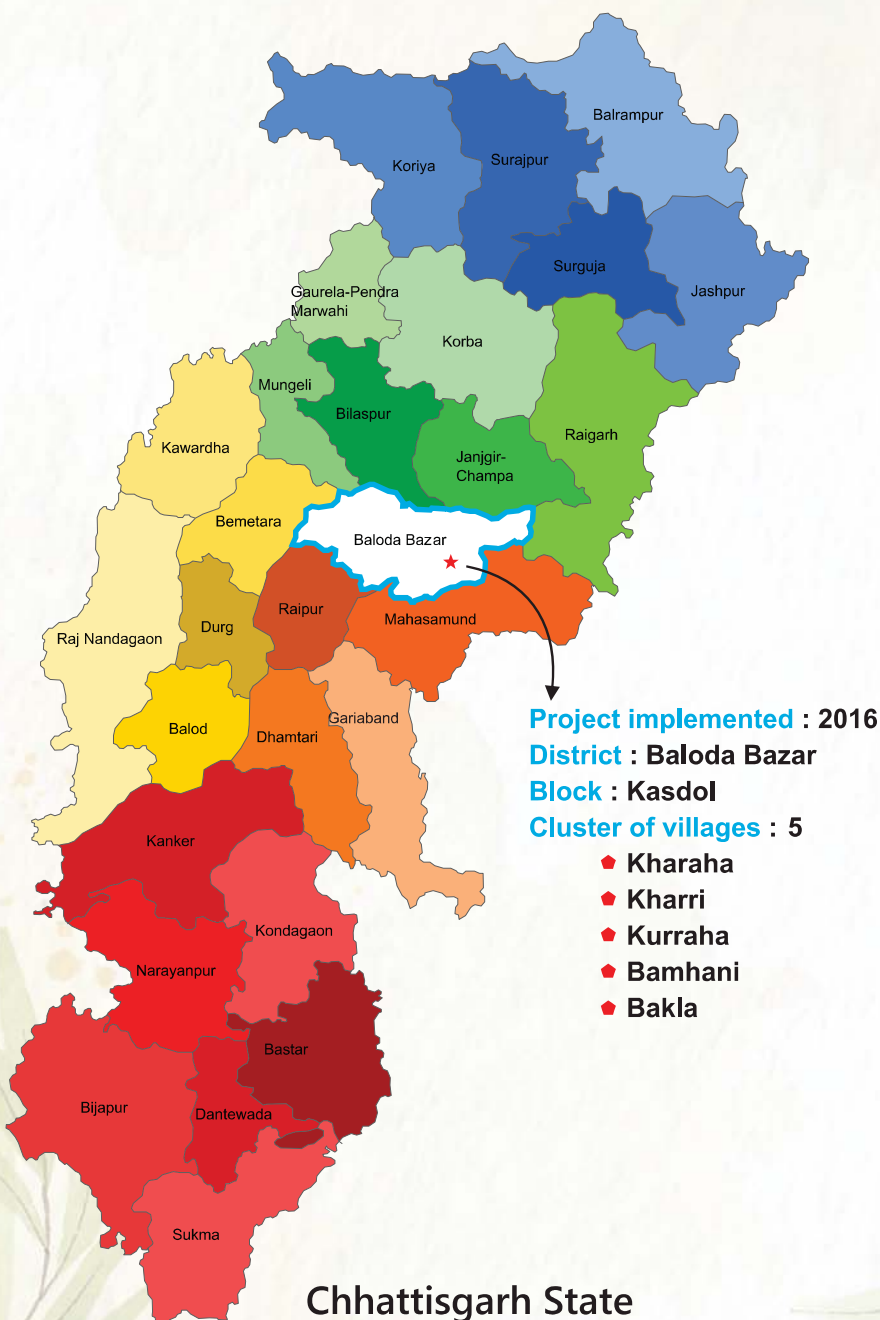
- Building partnerships involving different stakeholders, development of rural based institutions, agro-ecosystem and stakeholders analysis and impact studies.
- Creation of models of partnerships
- Institution building for bringing professionalism, leadership, marketing ability, organizing capability among farmers, database creation on perception, attitude and agricultural scenario.

(iv) Content Mobilization

- Project platform having institutions as partners will be used to develop specific contents for e-enabled knowledge sharing.
- Identification and pooling of available transferrable technologies available with different institutions.
- Project outcome to be utilized as part of content.
- Preparation of knowledge models as network representation of agricultural knowledge.
- Content management platform enabling off and online access.

ICAR-NIBSM implemented Farmer FIRST project in 2016 at Baloda Bazar district in Chhattisgarh state. Baloda Bazar is located at 30.67°N 82.17°E. It has an average elevation of 254 m (833 ft). The district is subdivided into six development blocks called *tahsils*, namely Palari, Baloda Bazar, Kasdol, Bilaigarh, Bhatapara and Simga and 3 subdivisions namely Baloda Bazar, Bhatapara and Bilaigarh. Out of this Kasdol block were selected purposively because of the majority of tribal population. Total five villages namely – Kharaha, Bamhani, Kurraha, Kharri and Bakla were selected from Kasdol block and 500 tribal farm families covered from the five cluster of villages. In this project, resource poor tribal farmers, marginal and small land holders, youth, landless and farm women received the highest priority. In the project site rice was grown in more than 80% area during *Kharif* season. Cropping intensity of the area is 100%. Chickpea, wheat, horse gram, lathyrus and field pea are major rabi crops in the cluster villages. The project site is about 130 Kms. away from the ICAR-NIBSM, Raipur.

Project Site



General agricultural issues found in the study area:

- Rice fallow lands (82% of land left fallow after *Kharif* season)
- Low production and productivity
- Low level adoption of high yielding varieties
- Unawareness of GAPs and modern management strategies
- Lack of knowledge in plant protection measures & technical know-how
- Shortage of valid and timely farming information
- Lack of alternative livelihood options and seasonal migration
- Inability to do higher investment, Lack of marketing network
- Shortage of skilled labour, Mono cropping (Rice-Rice-Rice)
- Lack of awareness on conservation of biodiversity and importance in sustainability
- of homestead system and subsistence nature of farming.

Priority based Agricultural Problems Identified in base line survey (2016)

S. No.	Priority based Agricultural Problems	Action taken/ Possible solution provided
1.	Low yield in rice due to yellow stem borer	Introduced and demonstrated pheromone trap, trichocard and IPM and resistant varieties
2.	Reduction in yield of Pumpkin due to pumpkin beetle	Demonstrated scientific package of practices
3.	FMD in live stock	Health camp organized and mass awareness created
4.	Nitrogen and Boron deficiency in soil	Established village soil testing unit, training conducted on INM
5.	<i>Helicoverpa armigera</i> damage in chickpea	Demonstrated pheromone trap and training provided
6.	Wild animal damage of crops	Promoted community farming/fencing and provided low-cost fencing materials.
7.	Bacterial infection in poultry	Vaccination, health camp and institution building with state veterinary department organised.
8.	No irrigation source in <i>Rabi</i> season	Introduced conservation technologies, happy seeder, drip, polymulch and aqua ferti seed drill.
9.	Migration of youth	Established 27 village level agricultural enterprise, promoted for self-employment, awareness created
10.	Weed menace in vegetables	Introduced drip system and poly mulching. Demonstrated IWM technologies and promoted for the use of organic mulch.
11.	Low milk production	Awareness created, promoted for fodder production, Introduced azolla
12.	Low yield in rice due to Brown Plant Hopper	Line transplanting, SRI and IPM demonstrated
13.	Powdery mildew of pumpkin	Training conducted on IDM and Scientific production technology
14.	Low income	Self-employment opportunities created in different agro-enterprises to double the income of farmers.
15.	Malnutrition	Nutrition garden promoted for the whole year supply of essential seasonal vegetables.
16.	Lack of knowledge in modern agricultural practices	Village level Farmer Communication Centers established with instructional video and literatures of recommended scientific farming practices.
17.	Drudgery among farm women	Village level Custom Hiring Centers established with major/minor drudgery reduction farm implements to reduced drudgery.

Major technological changes after implementation of the project

S. No.	Particulars	Before	After
1.	Cropping intensity	100%	120%
2.	Major Agricultural technologies		
a.	Goat	Desi breed	Sirohi, Jamunapari, Barbari breed with scientific farming practices
b.	Poultry farming	Desi breed, household consumption	Kadaknath breed, with scientific farming technology, Pucca shade, Hatchery units
c.	Vegetable Cultivation	Local varieties, Traditional Practices,	Improved varieties from IIHR, TNAU, NSC, Beej Nigam, IGKV, and KVKs, Scientific practice, Poly house, Drip irrigation, poly mulching and post-harvest technology
d.	Pulses and oilseed crops	Local variety, very less area through Utera cropping only	Improved variety like - Lathyrus (Prateek and Mahateoda), Chick pea (Vaibhav, JAKI 9218 and JG-11,12), Back gram (Azad - 03), Mustard (Indira Sarson, Pusa Jay Kisan and Pant Pili Sarson), Lentil (KLS - 218) and Linseed (RLC-92) in rice fallow, using with Happy Seeder and Aqua-Ferti Seed Drill
e.	Rice cultivation	Local Varieties, Traditional cultivation practices	Improved varieties such as - Chandrahasini, IGKV R-1, IGKV R-2, Indira Aerobic, Swarna, HMT, Mahamaya and Indira Barani with SRI technology and scientific package of practices
f.	Agro-based enterprise	Nil	Established – 04 Agro-processing Centers, 05 Custom Hiring Centers, 05 Kadaknath Hatchery units
g.	Availability of Farm machinery	Limited availability from nearby farmers and villages	Established five Custom Hiring Centers (CHCs) with variety of drudgery reduction equipments and highly useful farm machinery
3.	Source of Information	TV, Radio, Mobile, Local leaders	Farmer Communication Centers (FCCs), Farmers Scientist Interface, Agricultural Film Shows (AFSSs), Mobile App, WhatsApp group, Facebook page, YouTube Channel,
4.	Additional income	Only farm (rice) income	Rs.12054/- additional income generated per farm family

Farmer FIRST Project (2016-2022) – At a Glance

S. No.	Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
A.	Total Budget (Rs.)	26,80,000	25,70,000	28,80,000	19,45,000	16,75,000	31,25,000
B.	Expenditure (Rs.)	26,47,287	23,36,448	28,60,738	17,65,569	16,45,049	30,87,859
3.	Capacity Building Programme						
A	Training/Farmers	4/120	29/870	41/1089	34/889	23/322	61/917
B	Demonstration/Farmers	10/157	31/465	25/478	51/802 f	16/264	33/808 farmers
C	Gosthi and group discussion/Farmers	-	14/490	16/276	21/544	06/82	13/196
D	Exposure Visit/Farmers	1/55	02/42	03/42	01/16	02/18	02/26
E	Farmers Scientist Interface/Farmers	1/85	02/88	04/202	02/112	02/39	12/619
F	Agricultural Film Shows/Farmers	-	14/580	9/370	08/336	10/94	12/142
4.	Total farmers Covered in CBP	417	2535	2457	1794	819	2708
5.	Technology Introduced	09	29	38	52	54	54
	Area/Farmers Covered under Pulses	-	40ha/180	32ha/154	30/150	2750/66	42/167
6.	Area/Farmers Covered Under Vegetable	2 ha. /36	12ha/110	18ha/300	06/35	44/86	8.5/64
7.	Area/Farmers Covered Rice Production	-	-	-	-	28.80/70	54/76
8.	Household covered	154	502	612	622	625	634
9.	Income generated per farm family (Rs.)						
A	Crop Based Module	0	6,821	9,850	24,542	18,200	22,600
B	Livestock Based Module (Kadaknath + Goat)	0	K 23,692+ G 16,282	K 20,042+G 39,150	K 48613+ G 3,212	K 1,53,166+ G 24,200	K 1,50,000 + G 21,750
C	Horticulture Based Module	7,600	6,000	12,722	5,400	8,600	6,500
D	Enterprise Based Module	4,200	6,250	14,000	18,240	23,320	36,000
E	NRM Based Module	2,300	4,650	3,650	2,035	4,200	3,600

Summary

Technology transferred

Tribal farm families covered 634	Technology introduced 54	Crop varieties introduced 35	Rice fallow covered with pulses 122 ha
Alternative Crops Introduced 12	Area Covered under Horticulture 38 ha	Animal Breeds Introduced 04	Capacity building programmes 347
Farmer Interest Groups (FIGs) 08	Kadaknath Farming cum Hatchery Unit 04	Custom Hiring Centres (CHCs) 04	Model Agro Processing Centre (APC) 01
Small Scale Soil Testing Unit 01	Low-cost Shade Net and Poly House 04	Farmer Communication Centre (FCCs) 02	Model Mushroom Production Unit 02

Impact / Outcome



Additional Income Generated
118.75 Lakh

Income Generated
₹ 12054
(Family/year)

Cropping Intensity Increased by
120%

Migration Reduced by
35%

Women Farmers Empowered
34%

Youth Attracted in Agriculture
20%

ICT Agro Advisory Delivered
1650

Farmers Benefitted
8417



Selected Success stories under Doubling Farmers Income



Name of farmer: Mr. Sukhi Ram
Address: Vill – Kharri, Post – Aamakhoha, Block -Kasdol,
 Distric Balodabazar

Age: 27 Years
Education: 10th
 Size of land holding (in acre): 2.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	2.0	21.20 Quintal	39960.00	26760.00
Total	-	-	-	39,960.00	26,760.00

2) Status in 2020

Component Description		Period 2020 -21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	Production	Income
Field Crop 1	Rice	2.0	30.24 Quintal	56,300.00	44,280.00	42%	65%
Field Crop 2	Lathyrus	0.50	2.45 Quintal	7,150.00	4,490.00	100% Additional Income	
Livestock 1	Kadaknath Poultry Farming	01 unit	10.22 Quintal	5,20,000.00	3,61,600.00	100% Additional Income	
Total				5,84,102.00	4,10,370.00		1433%

Brief: The farmer used to get annual income of **Rs. 26,760** from **Rice Cultivation**. He faced problems like **Low productivity and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation, Rice Fallow Pulses and Kadaknath farming** etc., he is getting annual income of Rs. 4,10,370. In addition, there is cost saving of Rs. 1180 in the production of Rice.



Kadaknath Farming Units



Feeding to Kadaknath



Kadaknath Hatchery Unit



Name of farmer: Mr. Binesh Kumar Paikra
Address: Vill – Bakla, Post – Borsi, Block - Kasdol, District – Baloda bazar

Age: 26 Years

Education: 08th

Size of land holding (in acre): 3.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	2.5	24.65	46450.00	31100.00
Total	-	-	-	46450.00	31100.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	2.50	31.59 Quintal	58860.00	46200.00	28.15%	48.55%
Field Crop 2	Lathyrus	0.50	2.20 Quintal	6,300.00	3,800.00	100% A additional Income	
Livestock 1	Kadakhnath Poultry Farming	01 unit	07.20 Quintal	3,55,600.00	2,52,000.00	100% Additional Income	
Total				4,20,760.00	3,02,000.00		871%

Brief: The farmer used to get annual income of **Rs. 31100** from **Rice Cultivation**. He faced problems like **Low productivity and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation, Rice Fallow Pulses and Kadakhnath farming** etc., he is getting annual income of Rs. 3,02,000. In addition, there is cost saving of Rs. 2690 in the production of Rice.



Kadakhnath Farming Units



Monitoring the health of Kadakhnath



Kadakhnath Hatchery Unit



Name of farmer: Mr. Rakesh Kumar
Address: Vill – Bakla, Post – Borsi, Block Kasdol,
 District – Balodabazar

Age: 31 Years
Education: 08th
Size of land holding (in acre): 2.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	2.0	24.30 Quintal	45,900.00	30,700.00
Hort. Crop 1	Vegetables (Tomato, Brinjal, Chili and Radish)	0.30	10.50 Quintal	29,300.00	22,500.00
Total	-	-	-	75,200.00	53,200.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	2.0	27.00 Quintal	50,500.00	39,000.00	11.00%	27.00%
Horticulture 1	Vegetables (Tomato, Brinjal, Chili and Radish)	0.30	13.20	38,100.00	32,600.00	25.71%	44.80%
Livestock 1	Goat Farming (Sirohi Breed)	05 Nos.	1.35 Quintal	52,300.00	41,200.00	100% Additional Income	
Total				1,30,000.00	1,12,800.00		112%

Brief: The farmer used to get annual income of Rs. 53,200 from Rice and Vegetable Cultivation. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice and Vegetable Cultivation and Goat farming** etc., he is getting annual income of Rs. 1,12,800. In addition, there is cost saving of Rs. 5,000 in the production of Rice and Vegetable.



Scientific Goat Farming



Scientific Vegetable Cultivation



Scientific Goat Farming



Name of farmer: Mr. Shyam Lal Thakur
Address: Vill – Kharri, Post – Aamakhoha, Block - Kasdol,
 District – Balodabazar
Age: 54 Years
Education: 05th
Size of land holding (in acre): 1.5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	1.5	17.80 Quintal	33,400.00	19,700.00
Total	-	-	-	33,400.00	19,700.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	1.5	23.60 Quintal	44,800.00	31,200.00	32.58%	58.37%
Field Crop 2	Lathyrus	0.50	3.20 Quintal	8,550.00	5,800.00	100% Additional Income	
Hort. Crop 1	Vegetables (Pumpkin, Ash gourd and Chili)	0.50	5.80 Quintal	18200.00	13,600.00	100% Additional Income	
Livestock 1	Kadaknath Poultry Farming	01 unit	1.42 Quintal	78,000.00	59,500.00	100% Additional Income	
Total				1,49,550.00	1,10,100.00		458%

Brief: The farmer used to get annual income of Rs. 19,700 from Rice Cultivation. He faced problems like **Low productivity, Lack of alternative livelihood option and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation, Rice Fallow Pulses, Vegetable cultivation and Kadaknath farming** etc., he is getting annual income of Rs. 1,10,100. In addition, there is cost saving of Rs. 100 in the production of Rice.



Kadaknath Farming Units



Kadaknath Hatchery Unit



Egg laying by Kadaknath chicken



Name of farmer: Mr. Purushottam Das
Address: Vill – Kharaha, Post –Hataud, Block - Kasdol,
 District – Balodabazar

Age: 52 Years

Education: 10th

Size of land holding (in acre): : 1.10 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	1.0	12.30	23,100.00	16,500.00
Hort. Crop 1	Vegetables (Onions, Cauliflower, Cabbage, Tomato, Amaranthus, Palak and Coriander)	0.10	2.80 Quintal	9,200.00	7,000.00
Total	-	1.10	-	32,300.00	23,500.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	1.0	15.20	28652.00	22422.00	23.58%	37.76%
Field Crop 2	Lathyrus	0.40	2.00 Quintal	5,900.00	4,280.00	100% Additional Income	
Hort. Crop 1	Vegetable Cultivation in Poly house and open field (Cauliflower, Cucumber, Chili & Tomato)	0.10 01 unit (Poly house 120m2)	8.00 Quintal	30,600.00	25,300.00	185.00%	261.00%
Total		1.10		65,152.00	52,002.00		121%

Brief: The farmer used to get annual income of **Rs. 31100** from **Rice Cultivation**. He faced problems like **Low productivity and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation, Rice Fallow Pulses and Kadaknath farming** etc., he is getting annual income of **Rs. 3,02,000**. In addition, there is cost saving of **Rs. 2690** in the production of Rice.



Nursery Preparation - Rice



Vegetable Cultivation



Protected Vegetable Cultivation



Name of farmer: : Mr. Harishankar Paikra
Address: Vill – Bamhani, Post – Hataud, Block - Kasdol,
 District – Balodabazar

Age: 47 Years
Education: Graduate
Size of land holding (in acre): 5.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	5.0	51.00	96100.00	61500.00
Enterprise 1	Mini rice mill	1 unit	-	36500s.00	24300.00
Total	-	-	-	132600.00	85800.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/ No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	5.0	67.50	127230.00	94200.00	32.35%	34.70%
Enterprise 1	Agro-Processing Center with – PKV Dal mill, flour mill, oil expeller machine and spice grinding machine	-	-	65700.00	43740.00	-	50.20%
Livestock 1	Kadakhnath Poultry Farming	01 unit (200 chicks)	02.10 Quintal	103716.00	73500.00	100% Additional Income	
Total				230946.00	211440.00		146%

Brief: The farmer used to get annual income of Rs. 85800 from Rice Cultivation and rice mill. He faced problems like **Low productivity and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation, Agro-processing center and Kadakhnath farming** etc., he is getting annual income of Rs. 211440. In addition, there is cost saving of Rs. 1600 in the production of Rice.



Kadakhnath Farming Units



Operation of the PKV Dal mill



Kadakhnath Hatchery Unit



Name of farmer: Mr. Kanshi Paikara
Address : Vill – Kurraha, Post – Hataud, Block – Kasdol
 District – Balodabazar

Age: 44 Years
Education: 07th
Size of land holding (in acre): 3.5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	3.20	32.60 Quintal	42200.00	30,700.00
Hort. Crop 1	Vegetables (Tomato, Brinjal, Chili and Bottle gourd)	0.30	10.80 Quintal	32400.00	23,500.00
Total	-	-	-	72900.00	54,200.00

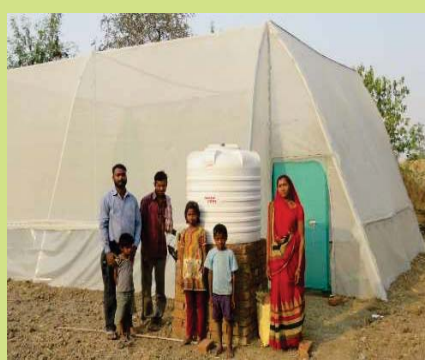
2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	3.20	41.50 Quintal	50,200.00	39,000.00	27.30%	21.28%
Field Crop 2	Chickpea	1.50	10.65	38940.00	30530.00	100% Additional Income	
Horticulture 1	Vegetables cultivation in shade net house and open field (Tomato, Brinjal, Chili, yard long bean and bottle gourd)	0.30 Shade net house 120m2	16.00 Quintal	48,100.00	39600.00	-	68.51%
Livestock 1	Kadakhnath Farming	150 chicks	1.40 Quintal	84000.00	70350.00	100% Additional Income	
Total				221240.00	179480.00		231%

Brief: The farmer used to get annual income of **Rs. 54,200** from **Rice and Vegetable Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice and Vegetable Cultivation, Polyhouse, Chickpea and Kadakhnath farming** etc., he is getting annual income of **Rs. 179480**. In addition, there is cost saving of **Rs. 600** in the production of Rice and Vegetable.



Kadakhnath Hatchery Unit



Protected Cultivation



Seed Treatment



Name of farmer: Mr. Jaikishnoo Kanwar

Address: Vill – Kharri, Post – Aamakhoha, Block - Kasdol,
District – Balodabazar

Age: 45 Years

Education: 05th

Size of land holding (in acre): 5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	5.0	64.30 Quintal	1,23,000.00	81,000.00
Total	-	-	-	1,23,000.00	81,000.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	5.0	84.20 Quintal	1,58,000.00	1,17,400.00	30.95 %	44.94 %
Field Crop 2	Chickpea	1.50	10.65	38,940.00	30,530.00	100% Additional Income	
Field Crop 3	Lathyrus	1.0	5.0	9,200.00	7,800.00	100% Additional Income	
Horticulture 1	Vegetable Cultivation (Pumpkin, Ash gourd, Brinjal, Tomato and Chili)	0.50	10.60 Quintal	36,100.00	24,600.00	100% Additional Income	
Total				2,42,240.00	1,80,330.00		122 %

Brief: The farmer used to get annual income of **Rs. 81,000** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice and Vegetable Cultivation and Rice Fallow Pulses** etc., he is getting annual income of **Rs. 180330**. In addition, there is cost saving of Rs. 1400 in the production of Rice.



Field Monitoring



Turmeric and Vegetable Seed Distribution



Scientific Rice Cultivation



Name of farmer: Mr. Balkumar Paikara
Address: Vill – Kurraha, Post – Hataud, Block - Kasdol,
 District – Balodabazar

Age: 38 Years
Education: 08th
Size of land holding (in acre): 5.5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	5.0	64.30 Quintal	1,22,500.00	80,000.00
Total	-	-	-	1,22,500.00	80,000.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	5.0	82.50 Quintal	1,68,300.00	1,26,500.00	28.30%	58.13%
Field Crop 2	Chickpea	1.0	7.20 Quintal	26,900.00	20,500.00	100% Additional Income	
Horticulture 1	Vegetables- Bottlegourd, Bitter gourd, Okra, Brinjal and Chilli	0.50	6.25 Quintal	26,500	20,800	100% Additional Income	
Total				2,21,700.00	1,67,800.00		110%

Brief: The farmer used to get annual income of **Rs. 80,000** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice and Vegetable Cultivation and Chickpea** etc., he is getting annual income of **Rs. 1,67,800**. In addition, there is cost saving of Rs. 700 in the production of Rice.



Scientific Vegetable Cultivation



Rice fallow Pulses



Scientific Vegetable Cultivation



Name of farmer: Mr. Firat Ram Patel
Address: Vill – Kharri, Post – Aamakhoha, Block - Kasdol,
 Distric Balodabazar

Age: 36 Years
Education: Graduate
Size of land holding (in acre): 2.5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	1.0	13.50 Quintal	27,300.00	18,300.00
Hort. Crop 1	Vegetables – Cauliflower, Brinjal, Tomato, Chili, Okra, and cucurbits	1.50	48.50 Quintal	1,65,000.00	1,22,300.00
Total	-	-	-	2,02,300.00	1,40,600.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	1.0	18.00 Quintal	34,500.00	26,300.00	33.33%	43.72%
Field Crop 2	Chickpea	0.50	4.10 Quintal	14,800.00	11,500.00	100% additional income	
Horticulture 1	Vegetables – Cauliflower, Brinjal, Tomato, Chili, Okra, Turmeric, and Cucurbits under polyhouse and open condition	1.50	65.75 Quintal	2,63,000	2,09,000	-	44.84%
Livestock	Kadakhnath farming	100 chicks, 1 unit	93.50 kg	67,750.00	58,250.00	100% additional income	
Total				3,80,050.00	3,05,050.00	-	116 %

Brief: The farmer used to get annual income of Rs. 1,40,600 from Rice and Vegetable Cultivation. He faced problems like Low productivity, Lack of improved variety and Lack of technical know-how etc. With DFI interventions like Scientific Rice cultivation, Chickpea cultivation, Scientific Vegetable Production and Kadakhnath Farming etc., he is getting annual income of Rs. 3,05,050. In addition, there is cost saving of Rs. 800 in the production of Rice.



Low-cost shade net house



Scientific Nursery Raising Technology



Scientific Vegetable Cultivation



Name of farmer: Mr. Chhabbu Lal Paikara Paikara
Address: Vill – Bamhani, Post –Hataud, Block - Kasdol
 Distric Balodabazar

Age: 54 Years
Education: 8th
Size of land holding (in acre): 4 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	4.0	50.00 Quintal	94,200.00	60,000.00
Field Crop 2	-	-	-	-	-
Total	-	-	-	94,200.00	60,000.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	4.0	67 Quintal	1,26,100.00	93,400.00	34.00%	55.67%
Horticulture 1	-	-	-	-	-	-	-
Livestock 1	Kadakhnath Farming	350 chicks	3.20 Quintal	1,96,000.00	1,70,000.00	100% Additional Income	
Total				3,22,100.00	2,63,400.00		339 %

Brief: The farmer used to get annual income of **Rs. 60000** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation and Kadakhnath farming** etc., he is getting annual income of **Rs. 2,63,400**. In addition, there is cost saving of **Rs. 900** in the production of Rice.



Kadakhnath Farming



Innovative Farmer Award



Low-cost Azolla Production



Name of farmer: Mr. Battu Lal Paikara
Address: Vill – Kharaha, Post –Hataud, Block - Kasdol,
 Distric Balodabazar

Age: 53 Years
Education: 8th
Size of land holding (in acre): 2.5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	2.50	30.50 Quintal	57,700.00	35,800.00
Total	-	-	-	57,700.00	35,800.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	2.50	43.00 Quintal	81,000.00	60,500.00	40.98%	69.00%
Horticulture 1	-	-	-	-	-	-	-
Livestock 1	Kadaknath Farming	300 chicks	2.85 Quintal	1,72,000.00	1,48,000.00	100% Additional Income	
Total				2,53,100.00	2,08,500.00		483 %

Brief: The farmer used to get annual income of **Rs. 35800** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation and Kadaknath farming** etc., he is getting annual income of **Rs. 208500**. In addition, there is cost saving of Rs. 700 in the production of Rice.



Kadaknath Farming



Low-cost Azolla Production



Azolla feeding to Kadaknath



Name of farmer: Mr. Jagat Ram Paikara
Address: Vill – Kurraha, Post –Hataud, Block - Kasdol,
 Distric Balodabazar

Age: 48 Years
Education: 5th
Size of land holding (in acre): 4.5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	4.50	58.00 Quintal	1,09,300.00	71,100.00
Hort. Crop 1	-	-	-	-	-
Total	-	-	-	1,09,300.00	71,100.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	4.50	76.00 Quintal	1,43,200.00	1,06,300.00	31.03%	49.51%
Field Crop 2	Chickpea	1.0	8.00	32,600.00	29,300.00	100% additional income	
Horticulture 1	-	-	-	-	-	-	-
Livestock 1	Kadakhnath Farming	150 chicks	1.38 Quintal	84,000.00	73,500.00	100% additional income	
Total				2,59,800.00	2,09,100.00		194 %

Brief: The farmer used to get annual income of Rs. 71100 from Rice Cultivation. He faced problems like Low productivity, Lack of improved variety and Lack of technical know-how etc. With DFI interventions like Scientific Rice Cultivation, Rice Fallow Pulses and Kadakhnath farming etc., he is getting annual income of Rs. 209100. In addition, there is cost saving of Rs. 1300 in the production of Rice.



Kadakhnath Farming



Low-cost Azolla Production



Custom Hiring Centre



Name of farmer: Mr. Ram Ratan
Address: Vill – Kharri, Post –Aamakhoha, Block - Kasdol,
 Distric Balodabazar

Age: 36 Years
Education: Graduate
Size of land holding (in acre): 1.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	1.0	14.00 Quintal	26,376.00	16,800.00
Field Crop 2	-	-	-	-	-
Total	-	-	-	26,376.00	16,800.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	1.0	16.75 Quintal	31,500.00	23,300.00	34.00%	55.00%
Field Crop 2	Lathyrus	0.40	3.30 Quintal	8,600.00	6,200.00	100% additional income	
Livestock 1	Kadakhath Farming	150 chicks	1.32 Quintal	79,600.00	69,000.00	100% additional income	
Total				1,19,700.00	98,500.00		397 %

Brief: The farmer used to get annual income of **Rs. 16800** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation and Kadakhath farming** etc., he is getting annual income of **Rs. 98500**. In addition, there is cost saving of Rs. 1376 in the production of Rice.



Seed Storage



Seed Treatment



Rice fallow Pulses



Name of farmer: Mr. Jageshwar Prasad Paikara
Address: Vill – Bakla Post –Borsi, Block - Kasdol,
 Distric Balodabazar

Age: 45 Years
Education: 5th
Size of land holding (in acre): 4.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	4.0	55.00 Quintal	1,03,200.00	66,400.00
Total	-	-	-	1,03,200.00	66,400.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	4.0	73.70 Quintal	1,38,100.00	1,02,400.00	34.00%	54.21%
Horticulture 1	Vegetable – Radish, Okra, Bottle gourd, Brinjal and Onion	0.20	9.00 Quintal	32,400.00	25,200.00	100% additional income	
Livestock 1	Goat Farming	3 goats	0.72 Quintal	28,800.00	22,400.00	100% additional income	
Total				1,99,300.00	1,50,000.00		126 %

Brief: The farmer used to get annual income of **Rs. 66400** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice and Vegetable Cultivation and Goat Farming** etc., he is getting annual income of **Rs. 1,50,000**. In addition, there is cost saving of Rs. 1100 in the production of Rice.



Display of Technology Video at FCC



Scientific Goat Farming – Sirohi Breed





Name of farmer: Mr. Ramhari Kanwar
Address: Vill –Kharri Post –Aamakhoha Block - Kasdol,
 Distric Balodabazar

Age: 41 Years
Education: 5th
Size of land holding (in acre): 4.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	4.0	54.00 Quintal	1,01,700.00	64,800.00
Total	-	-	-	1,01,700.00	64,800.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	4.0	72.30 Quintal	1,36,100.00	1,02,700.00	33.00%	58.48%
Horticulture 1	Vegetable – Okra, Cluster bean, Bitter gourd, Tomato and Chilli	0.50	16.50 Quintal	58,600.00	46,400.00	100% Additional Income	
Livestock 1	Kadakhnath Farming	50 chicks	0.45 Quintal	28,000.00	24,000.00	100% Additional Income	
Total				2,22,700.00	1,73,100.00		167 %

Brief: The farmer used to get annual income of Rs. 64800 from Rice Cultivation. He faced problems like Low productivity, Lack of improved variety and Lack of technical know-how etc. With DFI interventions like Scientific Rice, Vegetable Cultivation and Kadakhnath farming etc., he is getting annual income of Rs. 173100. In addition, there is cost saving of Rs. 3500 in the production of Rice.



Vegetable Production



Name of farmer: Mrs. Santara Bai
Address: Vill – Kharri, Post –Aamakhoha, Block - Kasdol,
 Distric Balodabazar

Age: 48 Years

Education: 3rd

Size of land holding (in acre): 3.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	3.0	40.50 Quintal	76,000.00	47,500.00
Total	-	-	-	76,000.00	47,500.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	3.0	50.80 Quintal	1,00,000.00	74,800.00	25.43%	57.47%
Horticulture 1	Vegetable – Pumpkin, Turmeric, Onion, Okra, Bitter gourd, Radish, Tomato and Chilli	0.50	11.00 Quintal	26,000.00	19,300.00	100% Additional Income	
Enterprise 1	Oyster Mushroom Production	1 Unit	0.36 Quintal	9,600.00	8,200.00	100% Additional Income	
Total				1,35,600.00	1,02,300.00		116 %

Brief: The farmer used to get annual income of **Rs. 47,500** from **Rice Cultivation**. She faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice, Vegetable Cultivation and Mushroom Production** etc., she is getting annual income of **Rs. 1,02,300**. In addition, there is cost saving of Rs. 3300 in the production of Rice.



Mushroom Production



Scientific Nursery Raising Technology



Name of farmer: Smt. Sunita Paikara
Address: Vill – Bamhani, Post – Hataud, Block - Kasdol,
 Distric Balodabazar

Age: 37 Years
Education: 8th
Size of land holding (in acre): 2.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	1.80	19.80 Quintal	37300.00	24800.00
Hort. Crop 1	Vegetables (Tomato, Brinjal, Onion, Chili, Radish and leafy vegetables)	0.10	3.20 Quintal	9000.00	6640.00
Total	-	-	-	46300.00	31440.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	1.80	24.30	45800.00	34200.00	22.73%	27.47%
Hort. Crop 1	Vegetables (Tomato, Brinjal, Onion, Chili, Radish and leafy vegetables) and Turmeric	0.10	8.60 Quintal	27600.00	23100.00	168.00%	55.00%
Enterprise 1	Oyster Mushroom	01 unit	42.00 kg	8400.00	6300.00	100% Additional Income	
Total				81800.00	63600.00	-	102 %

Brief: The farmer used to get annual income of **Rs. 31440** from Rice and vegetable cultivation. She faced problems like **Lack of improved variety and technical know-how** etc. With DFI interventions like **Scientific rice cultivation, Scientific vegetable cultivation and Mushroom cultivation** etc., She is getting annual income of **Rs. 63,600**. In addition, there is cost saving of **Rs. 936** in the production of Rice.



Turmeric and Vegetable production



Distribution of improved Vegetable Seed



Banana cultivation



Name of farmer: Mr. Rajkumar
Address: Vill – Khari, Post – Aamakhoha, Block - Kasdol
 Distric Balodabazar

Age: 35 Years

Education: 8th

Size of land holding (in acre): 4.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	2.5	22.40 Quintal	42200.00	30,700.00
Hort. Crop 1	Vegetables (Pumpkin, Tomato, Cauliflower Brinjal, Chili and Radish)	1.5	49.75 Quintal	189000.00	130250.00
Total	-	-	-	231,200.00	160950.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Component s	Names	Area (Acre)/No	Production (Q/Liter/ No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	2.50	26.40 Quintal	50,200.00	39,000.00	17.86%	21.28%
Field Crop 2	Chickpea	1.20	7.00	31150.00	24256.00	100% Additional Income	
Horticulture 1	Vegetable cultivation in Shade net house and open field (Pumpkin, Tomato, Bitter gourd, Cauliflower Brinjal, Chili and Radish) and Turmeric production	1.50	76.40	290400.00	212850.00	53.56%	32.00%
Livestock 1	Kadakhnath Farming	100 chicks	1.12 Quintal	62,300.00	51,200.00	100% Additional Income	
Total				434050.00	327306.00		103 %

Brief: The farmer used to get annual income of **Rs. 160950** from **Rice and Vegetable Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice and Vegetable Cultivation, Polyhouse, Chickpea and Kadakhnath farming** etc., he is getting annual income of **Rs. 327306**. In addition, there is cost saving of Rs. 300 in the production of Rice and Vegetable.



Scientific Turmeric Cultivation



Protected cultivation



Scientific Vegetable Cultivation



Name of farmer: Smt. Ram Bai
Address: Vill – Bamhani, Post – Hataud, Block - Kasdol,
 Distric Balodabazar
Age: 45 Years
Education: 8th
Size of land holding (in acre): 4.20 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	4.0	52.40 Quintal	98,000.00	64,000.00
Total	-	-	-	98,000.00	64,000.00

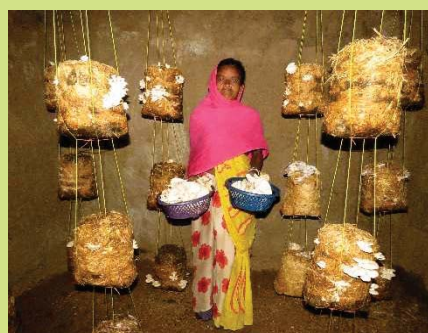
2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	4.0	70.30 Quintal	1,33,000.00	101,400.00	34.62%	58.44%
Field Crop 2	Lathyrus	0.50	3.30 Quintal	8,600.00	6,200.00	100% Additional Income	
Hort. Crop 1	Vegetables (Pumpkin, Tomato Brinjal, Onion, Okra and Chili) and Turmeric	0.20	4.60 Quintal	15,500.00	12,400.00	100% Additional Income	
Enterprise 1	Oyster Mushroom Production	01 unit	54.00 kg	10,400.00	8,300.00	100% Additional Income	
Total				1,67,500.00	1,28,300.00		100.47 %

Brief: The farmer used to get annual income of **Rs. 64,000** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of alternative livelihood option and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation, Rice Fallow Pulses, Vegetable cultivation and Kadaknath farming** etc., he is getting annual income of **Rs. 1,28,300**. In addition, there is cost saving of **Rs. 1400** in the production of Rice.



Scientific Nursery Production



Oyster Mushroom Production



Scientific Nursery Production



Name of farmer: Mr. Umend Ram
Address: Vill – Kharri, Post – Aamakhoha, Block - Kasdol,
 Distric Balodabazar

Age: 46 Years
Education: 5th
Size of land holding (in acre): 5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	5.0	68.20 Quintal	128500.00	84000.00
Total	-	-	-	128500.00	84000.00

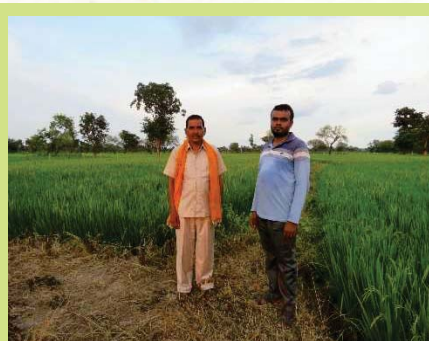
2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	5.0	88.50 Quintal	1,66,800.00	1,25,000.00	29.77%	48.81%
Field Crop 2	Chickpea	2.0	14.20	52,600.00	48,800.00	100% Additional Income	
Field Crop 3	Lathyrus	1.0	5.30	11,200.00	9,400.00	100% Additional Income	
Livestock 1	-	-	-	-	-	-	-
Total				2,30,600.00	1,83,200.00		118%

Brief: The farmer used to get annual income of **Rs. 84000** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation and Rice Fallow Pulses** etc., he is getting annual income of **Rs. 183200**. In addition, there is cost saving of Rs. 2700 in the production of Rice.



Exposure Visit



Scientific Rice Cultivation



Training activity



Name of farmer: Mr. Sheshnath
Address: Vill – Kharri, Post – Aamakhoha, Block - Kasdol,
 Distric Balodabazar

Age: 52 Years
Education: Graduate
Size of land holding (in acre): 6.5 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/ Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	4.0	51.00 Quintal	96,300.00	65,200.00
Hort. Crop 1	Vegetable (Brinjal, Pumpkin, Tomato, Okra, Bitter gourd and Onion)	2.5	57.20 Quintal	2,01,400.00	1,52,500.00
Total	-	-	-	2,97,700.00	2,17,400.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	4.0	72.20 Quintal	1,40,400.00	1,10,300.00	51.57%	29.53%
Field Crop 2	Lathyrus	2.0	14.50 Quintal	34,600.00	27,200.00	100% Additional Income	
Field Crop 3	Chickpea	2.0	14.60 Quintal	53,600.00	43,000.00	100% Additional Income	
Hort. Crop 1	Vegetables (Pumpkin, Tomato, Brinjal, Onion, Okra and Chili) and Turmeric	2.5	72.50 Quintal	3,23,296.00	2,57,000.00	-	68.52%
Total				5,51,896.00	4,37,500.00		100.78 %

Brief: The farmer used to get annual income of Rs. 217400 from Rice and Vegetable Cultivation. He faced problems like **Low productivity, Lack of alternative livelihood option and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation, Rice Fallow Pulses and Vegetable cultivation** etc., he is getting annual income of Rs. 437500. In addition, there is cost saving of Rs. 1000 in the production of Rice.



Improved Vegetable Seeds



Training um Exposure Visit



Scientific Pumpkin Production



Name of farmer: Mr. Dhanshyam Singh Kamalvanshi
Address: Vill – Bakla Post –Borsi, Block - Kasdol,
 Distric Balodabazar

Age: 32 Years
Education: 10th
Size of land holding (in acre): 1.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	1.0	14.20 Quintal	25,000.00	17,500.00
Total	-	-	-	25,000.00	17,500.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	1.0	18.60 Quintal	33,100.00	24,800.00	31.00%	41.71%
Livestock 1	Kadakhnath Farming	100 chicks	0.87 Quintal	56,800.00	45,500.00	100% Additional Income	
Total				89,900.00	70,300.00		301 %

Brief: The farmer used to get annual income of **Rs. 17,500** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation and Kadakhnath farming** etc., he is getting annual income of **Rs. 70,300**. In addition, there is cost saving of Rs. 00 in the production of Rice.



Plantation of Mango Plant



Application of Trichocard



Turmeric Production with fruit plants



Name of farmer: Mr Shushil Kumar Paikara
Address: Vill – Bakla Post –Borsi, Block - Kasdol,
 Distric Balodabazar

Age: 30 Years
Education: 8th
Size of land holding (in acre): 7.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	7.0	88.00 Quintal	1,69,500.00	1,08,000.00
Total	-	-	-	1,69,500.00	1,08,000.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	7.0	120.60 Quintal	2,26,900.00	168,400.00	37.00%	56.00%
Horticulture 1	Vegetable – Cowpea, Okra, Cluster bean, Bitter gourd, Tomato and Pumpkin	0.65 (Field and Terrace)	17.50 Quintal	66,300.00	56,000.00	100% Additional Income	
Total				2,93,200.00	2,24,400.00		108 %

Brief: The farmer used to get annual income of **Rs. 108000** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice and Vegetable Cultivation** etc., he is getting annual income of **Rs. 2,24,400**. In addition, there is cost saving of Rs. 3000 in the production of Rice.



Vegetable Cultivation in Terrace Gardening



Name of farmer: Mr. Ramcharan Patel
Address: Vill –Kharri Post –Aamakhoha Block -Kasdol,
 Distric Balodabazar

Age: 31 Years
Education: 8th
Size of land holding (in acre): 1.0 acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Rice	1.0	16.00 Quintal	27,200.00	18,800.00
Total	-	-	-	27,200.00	18,800.00

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Field Crop 1	Rice	1.0	19.80 Quintal	37,900.00	29,400.00	23.75%	56.38%
Horticulture 1	Vegetable – Brinjal, Tomato,Chilli and Cucurbits	0.15	5.30	18,600.00	12,000.00	100% Additional Income	
Livestock 1	Kadakhath Farming	70 chicks	0.65 Quintal	39,200.00	33,900.00	100% Additional Income	
Total				95,700.00	75,300.00		300%

Brief: The farmer used to get annual income of **Rs. 18,800** from **Rice Cultivation**. He faced problems like **Low productivity, Lack of improved variety and Lack of technical know-how** etc. With DFI interventions like **Scientific Rice Cultivation, Vegetable Cultivation and Kadakhath farming** etc., he is getting annual income of **Rs. 75,300**. In addition, there is cost saving of Rs. 0.00 in the production of Rice.



Rice Cultivation



Kadakhath Farming



Vegetable Cultivation

Awards Received



Mr. Chhabu Lal Paikara received "Innovative Farmer Award 2019" from Dr. Trilochan Mohapatra, DG, ICAR.
Mr. Bharat Paikara and Mrs. Rajkumari Patel received "Innovative Farmer Award 2019-20" from Dr. P. K. Ghosh

Seed to seed support under Farmer FIRST



Crops: *Lathyrus*, Chickpea, Mustard, Lentil, Linseed, Vegetables and Rice
