

PROJECT UTTHAN

Annual Report F22

(July 2021 to June 2022)

सशक्त किसान



प्रोजेक्ट उत्थान

Project Utthan



- In northern Gujarat, more than 90% rural communities are largely dependent on agriculture and animal husbandry for their livelihoods and about 70% of them are small and marginal farmers. These are negatively impacted by the following set of problems pertaining to (a) Recurrent droughts, neglected natural resource management and increasing gap between demand and supply of irrigation water (b) Unstable production, increasing cost of cultivation, reducing net income, increasing risks in agriculture and livestock (c) Lack of post-harvest value addition, poor price realization, exploitative market, and collective actions and d) Poor information dissemination and access to govt. social inclusion schemes particularly by vulnerable sections, women, other deprived community through gram panchayats e) Poor awareness and collective action on sanitation, education and health of women and child etc.
- Recognizing the significant role that McCain India can play in the development of the region, especially in the alleviation of rural poverty, there was room for designing and adopting an institutional support system to enable small and marginal farmers to enhance their livelihoods and at the same time ensure broader stakeholder participation in the development of the area.
- It is with this motivation that McCain India explored collaboration to jointly initiate agriculture based livelihood project in 4 villages of Vijaynagar block, District Sabarkantha of Gujarat namely Khedasan, Ladivada, Joravarnagar and Bhankhra with BAIF Development Research Foundation. The Project has been aptly named as “Utthan”, meaning “upliftment”.
- Project Utthan focuses on livelihoods enhancement and Improvement in the overall quality of life of small farmers through suitable interventions. Main components of the project are as follows:
 - a) Improved Agriculture Production
 - b) Improved income form livestock
 - c) Soil & Water conservation
 - d) Improved Quality of Life

Project Utthan - Goal and Objectives

Goal: Improvement of livelihoods, health and nutrition of small and marginal farmers of 6 villages in Sabarkantha district of Gujarat

Objectives:

1. Improved income from farm activities for small and marginal farmers
2. Improved income from allied agriculture activities like livestock management
3. Improvement in health indices through improved access, affordability, and consumption of nutritious diets by small and marginal farmers.
4. Enhanced soil fertility through soil and water conservation for better agricultural productivity.

Expected Outcomes:

1. Improved livelihood options for small and marginal farmers within their own villages.
2. Prevention of migration in small and marginal farmers in search of livelihood

Sustainable Development Goals: All interventions under Project Utthan are aligned with the UN SDGs. The primary objectives of project being eradicating poverty and hunger, enhancing income through agriculture and allied activities by promoting sustainable agricultural practices, with an overarching aim of improving the overall quality of lives in socially and economically backward communities.

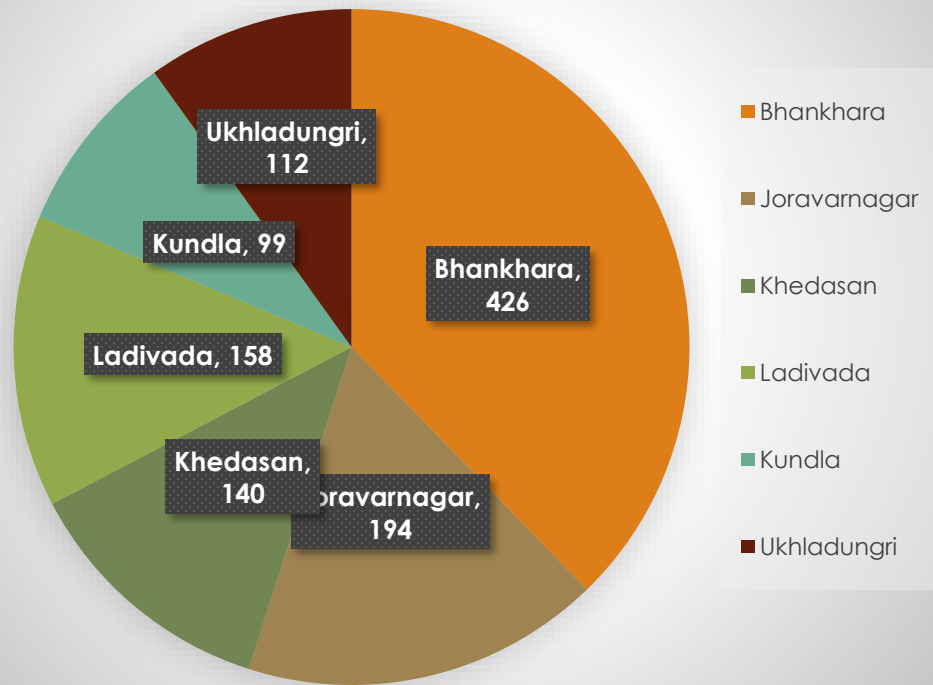


Project Utthan's Coverage

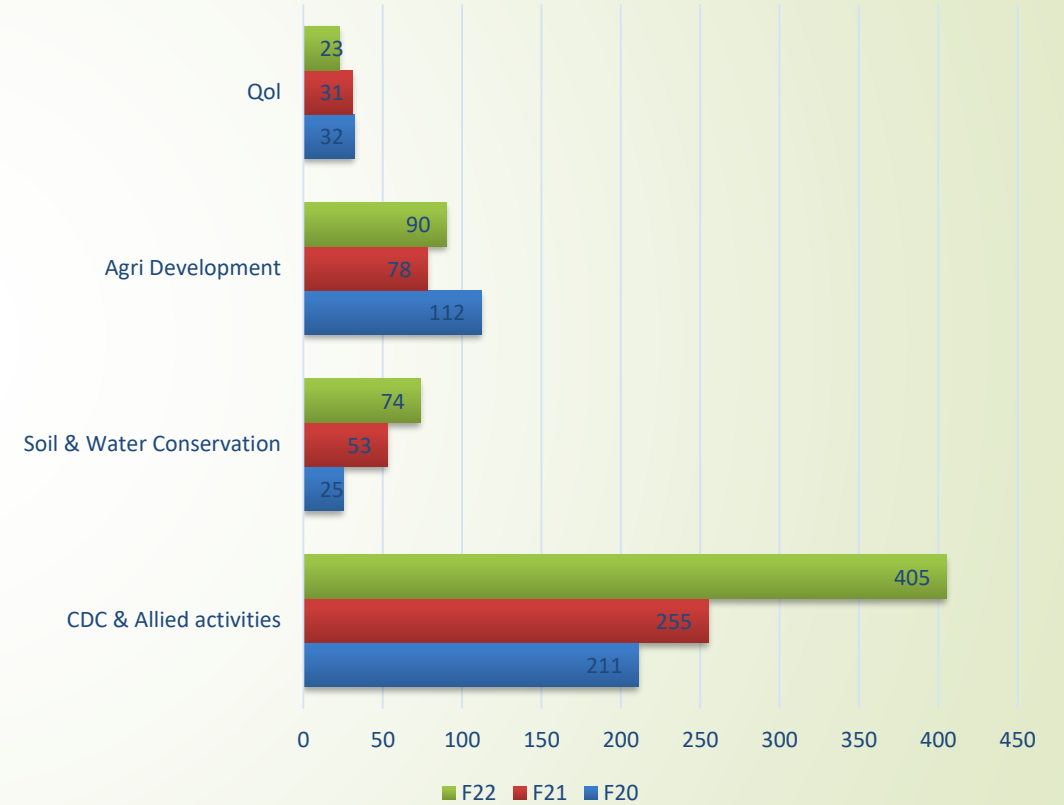
No	Village	CDC & Allied activities				Soil & Water Conservation				Agriculture Development				Quality of Life				Total Unique Families without replication
		F20	F21	F22	Total	F20	F21	F22	Total	F20	F21	F22	Total	F20	F21	F22	Total	
1	Bhankhara	97	87	134	318	12	33	16	61	61	42	35	138	5	13	4	22	426
2	Joravarnagar	42	67	49	158	3	10	3	16	22	15	6	43	8	11	5	24	194
3	Khedasan	32	32	30	94	7	5	3	20	22	12	7	45	18	6	6	25	140
4	Ladivada	40	69	42	151	3	5	0	8	7	9	8	34	1	1	0	2	158
5	Kundla	0	0	77	77	0	0	12	12	0	0	14	14	0	0	0	0	99
6	Ukhladungri	0	0	73	73	0	0	40	40	0	0	20	20	0	0	8	8	112
					871				157				294				81	1129

Coverage

Village wise Unique Families



Component Wise coverage



1. AGRICULTURE DEVELOPMENT: Improved Agriculture

- **Rationale:** Small farmers of this region follow traditional cropping practices, farming the same crops over generations using traditional farming methods. Growing the same crop across a continuous time period also makes them vulnerable to pest attacks and weaker progeny. Typically they grow some cash crops along with food grains, which is just enough to sustain them for about 9 months of the year. For the remaining time they either migrate to cities in search of work or try to find work locally as farm labour etc. After identifying the geo-social conditions of the project area, Project Utthan aims to promote the growth of improved varieties of same crops or other suitable crops so as to increase the overall production, eventually increasing the income of the small and marginal farmers from agriculture.
- On the basis of first and second year experience we have promoted demonstration base for new and high income crops like that of strawberry, mushroom and cultivation of creeper vegetable with inter crops. Project Utthan has promoted sustainable farming like tree base farming- Guava, Lemon and dragon fruit plantation. Intercropping also introduced for castor cultivation.

The major activities that were undertaken for the year of 2021-22 under the theme of agriculture development are as follows:

- ▶ Cash Crop Promotion including Tree based farming
- ▶ Agriculture trainings
- ▶ Exposure Visits
- ▶ Farm Yard Manure and demo pit training

These activities were carried out through the course of the year so as to ensure that agriculture generates sustainable livelihood for the small and marginal farmers of the area in the long term.

Agriculture development:

Intervention: Cash Crop Promotion (Castor and Soybean cultivation).

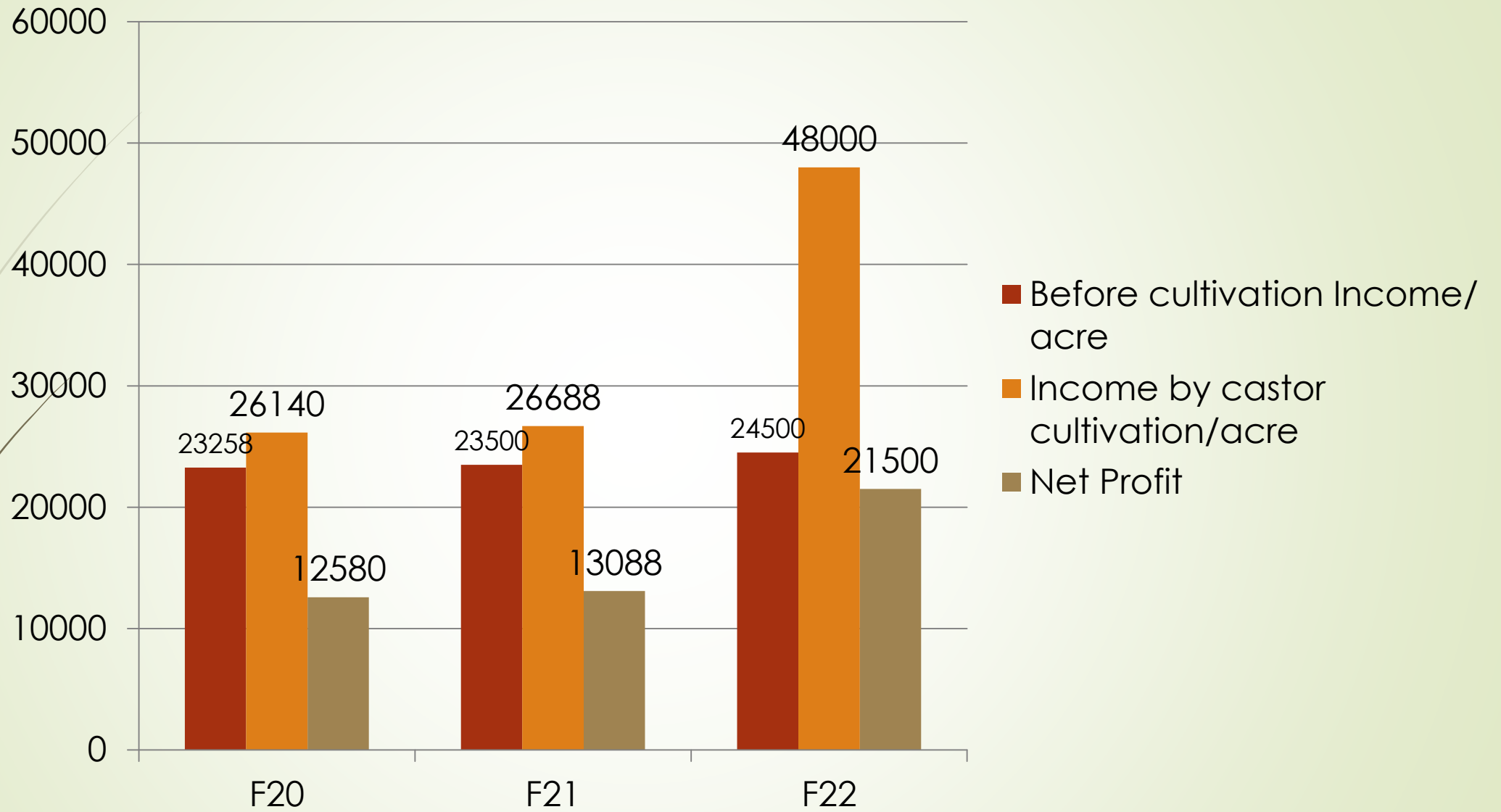
Objective:- Enhance Yield and Farmers income (short term crop) by good agriculture practices like hybrid seeds, seed treatment, proper use of fertilizers, pest control, use of bio culture etc.

Objective 1:		Improved income from farm activities for small and marginal farmers			
Rational:-	Land holding of Tribal families is around 1-2 acres. To increase their income from agriculture, there is need to support farmers for high yield short term crops with good agriculture practices. Farmers will get more income from the increased production.				
Plan /Achieve	Activities	Plan	Achieve	Land: Acres	Families
1.	Castor cultivation : 1 Acre /(farmer)	30	30	30.0	30
2.	Soybean cultivation (As a inter crop of Wadi) 0.5 acre per farmer	25	25	12.5	25
Benefits:	Benefits will be accrued after production and sale of yield, But experience of previous year farmers having good agriculture practices, can get good production: 900 to 1000 kgs per acre and income of Rs. 45 to 60 thousand. Due to intercrop farmer will care for the plants during care of intercrop. Fruit plants will get water from intercrop watering.				
Impact:	<ul style="list-style-type: none"> Awareness generation of Farmers on adoption of good agriculture practice. During 2020-21, progressive farmers get more income up to Rs 20000. per acre , which is more than Maize & wheat income. Increase demand of cash crop cultivation. 				
Remarks:	<ul style="list-style-type: none"> Both crops are sown during June- July 2022 so results will come after 5-9 months. 				

Production and Income data : Cash Crop Production & Income : (Yr 1 to 3)

Crop	Year	Total Farmers	Success Farmers	Total land size (Acres)	Total Yield kgs	Sale: Kgs	Total Income: Rs Actual	Home use		Average Income per Acre	Income before Intervention/acre	Net profit per acre
								Yield	- cost			
Castor	1	30	25	25	17960	17960	653520 *	0	-	26140	23258	12580
Castor	2	30	30	30	16304	16304	800650	0	-	26688	23500	13088
Castor	3	30	Crop is promoted during June 2022, yield will get during Jan-Feb. 2023 **									
Watermelon	1	05	05	05	29200	29000	132720	500	2000	26544	24000	14500
Onion & Garlic	1	20	20		4410	3310	165520	1100	40000	165520*	24000	95520
Ginger	1	20	11	0.5	0.275	00	00	220	11000	-	-	-
Strawberry	2	07	01	0.21	100	80	14500	20		69047	24000	23000
Mushroom	2	06	06		100	28	2200	72	7200			
Veg Cultivation B. Gourd	2	18	18	0.125	950	800	16000	150	6000	64000	24000	24000
Cow pea	2	07	07	0.52	295 (green)	218	8900	77green 70 (dry seed)	10920	26298	24000	14298
Turmeric	2	18	18	0.9	4200	4020	47000	180	1800	52222	28000	14500
Soybean (Inter crop)	3	25	Crop is promoted in June 2022, yield will get during Nov. 2022									
Remarks	<ul style="list-style-type: none"> Due to lockdown Rate of Castor, watermelon reduced. Due to local sale, framers get higher rate of onion & Garlic. During second year farmers good rate of Castor <p>** During Yr. 2 farmers get higher rate (48-50 Rs/ Kgs Castor) of castor and during Yr. 3 farmers get Rs. 60-70 Rs. Per kg</p>											

Castor cultivation: Year wise increased income per acre



Remarks : During 2021 -22 farmers get more rate of Castor: Rs. 60 to 70 per kgs.

Agriculture development:

Cash Crop Promotion: Intervention: 0.5 acre Fruit Plantation

Objective 1: Improved income from farm activities for small and marginal farmers						
Rational:-	<p>For development of sustainable income source for small & marginal farmers Tree base farming is a good option. Without effecting on routine farming, fruit plantation will increase farmers income up to 20 to 30 thousand from 1 acre fruit wadi. (from 4th year)</p> <ul style="list-style-type: none"> Based on the experience of previous year farmers were motivated for tree based farming They showed keen interest in exposure and training Farmers will get sustainable income source from 4th year to 20 years without affecting routine crops. 					
Plan /Achieve	Activity	Plan	Achieve	Total Land size: Acre	Total Plants	Families
	1. Mango plantation (Keshar Mango Grafts) 0.5 acre / farmers : 30 plants	25	25	12.5	750	25
Benefits:	<ol style="list-style-type: none"> Increase farmers zeal with new farming system (tree base farming with intercrop) Increased demand of fruit tree based farming and more farmers are came for inquire of tree plantation Some farmers started trial based (2-10 plants) plantation of fruit plants at their own expense. 25 farmers of Joravarnagar village planted 1300 mango plants Increase farmers farm visit which is also good for other crops. 					
Impact:	<ul style="list-style-type: none"> Other Farmers of village & nearby villages started inquiry for fruit plantation. After NABARD visit of project activities: They offered to submit proposal of 500 Fruit Wadis. 					

Mango Wadi with Inter crops: New initiatives



- Name of Farmer:- Kuldip Valji Balevia
- Village: Bhankhara Ta: Vijaynagar Dist: Sabarkantha

No	Interventions	Quantity
1	0.5 acre Mango Plantation	01
2	Agri Training	02
3	Exposure visit	01
4	Soyabean- Inter crop	0.5 acre
5	BNH-10 Grass by own investment	0.2 guntha

► Support from Uthhan:-

Kuldip participated in Agriculture exposure visit and was sensitized for tree base farming including intercrop. He also participated in training of tree base farming. He was supported by 0.5 acre Mango plantation including Intercrop for soyabean. He also planted BNH-10 grass as intercrop by own investment.

► Benefits:-

Now he has 30 mango plants as a asset which will provide long term income from 4th year onwards to 15th year. He has also planted BNH-10 grass for livestock and now has fodder security as well. During monsoon he has planned cultivation for Soyabean as a inter crop which too will generate additional income.

► Impact:-

Increased care of cops due to regular visits to his farm. Other farmers were also sensitized by this fruit plantation which increased demand for fruit plantation in the area. He now has a source for long term sustainable income.

Agriculture development:

Intervention: : 3 : Training on Agriculture development and Exposure visit

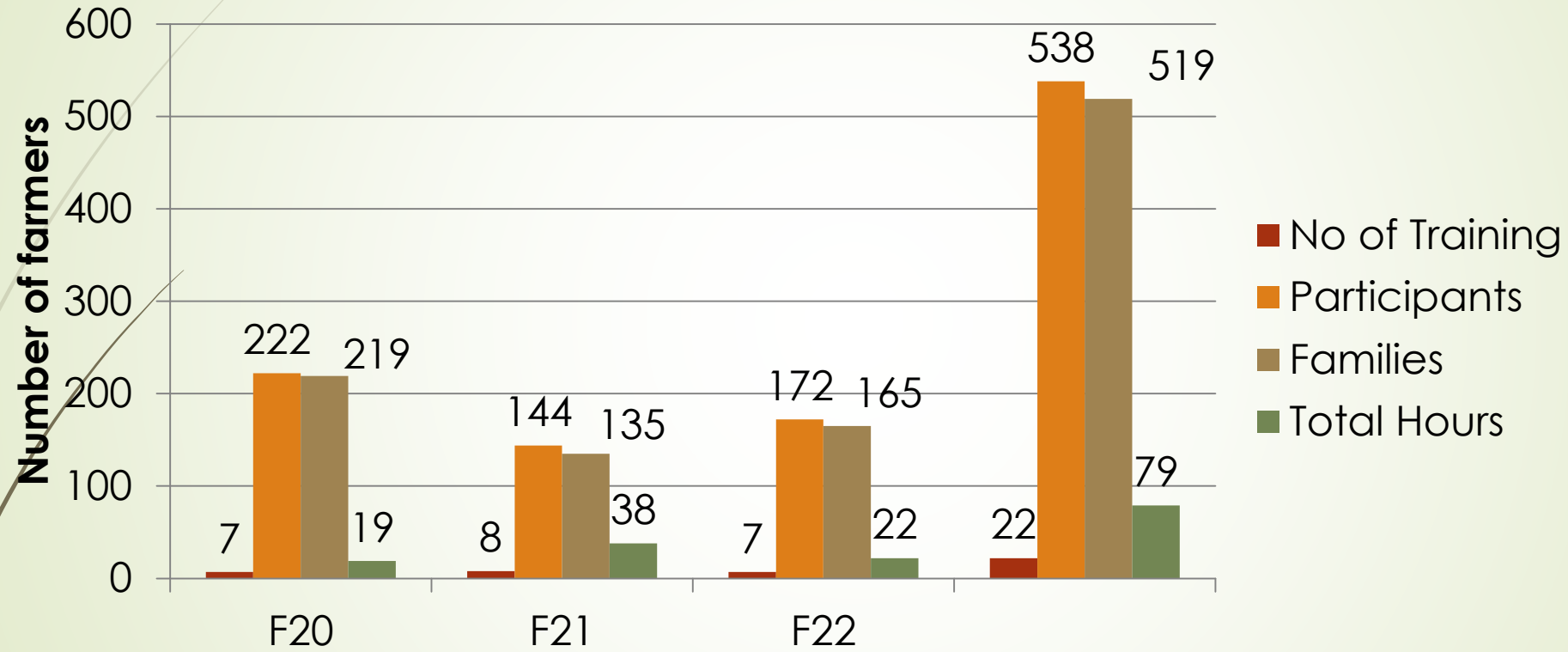
Objective 1:	Improved income from farm activities for small and marginal farmers					
Rationally:-	Capacity building is very essential part of new crops cultivation and yield enhancement. So we have planned Agriculture training for various crops. It will build confidence of farmers . Training with exposure will orient farmers for new crop cultivation. Farmer also get motivation for innovative and new crop systems. (like Mandap system, Wadi establishment, cultivation of creeper vegetables					
Plan /Achieve	Agriculture training	Target	Achieve	Participants M+ F	House holds	Training Hours
1	Vegetable cultivation by Mandva system, Intercrops	1	1	12+2=14	14	03
2	Fruit Plantation, Care of plants, Lay out etc	1	1	16+0 =16	16	03
3	Wadi development, Strawberry cultivation, People organization	1	1	48+9=57	51	06
4	Mango Plantation After Care	1	1	10+0=10	10	02
5	Turmeric processing - Powder making		1	6+0=06	06	03
6	Vegetable cultivation.		1	11+3=14	13	02
7	Soybean and Castor cultivation	1	1	55+00=55	55	03
	Total:-	04	07	158+14=172	165	22
Benefits:	<ul style="list-style-type: none"> ▪ Increase knowledge & Capacity of farmers for new cash crop cultivation like Mango, Turmeric, & vegetable cultivation. ▪ Also increase awareness on agriculture practice for yield enhancement. ▪ Accept new crop cultivation : Bottle gourd, turmeric, cowpea and spinach. 					
Impact:	<ul style="list-style-type: none"> • Increase knowledge & Capacity of farmers for tree based farming and vegetable cultivation. • Farmers started good agriculture practices which are recommended by KVK 					

AGRICULTURE DEVELOPMENT: Intervention: 3 : Training on Agriculture development



Details of Training	Yr. 3	Yr.2	Yr. 1	Total
No of training	07	08	07	22
Total no. of participants	172	144	222	458
Total no. of households	165	135	219	519
Total no. of men	158	121	121	323
Total no. of women	14	23	37	71
No. of participants adapting the training	35	64	73	172
Total Hours	22	38	19	72
Major learning's drawn	<ul style="list-style-type: none"> ▪ Making farmers understand the importance of tree based farming for extra income without affecting routing farming. ▪ Capacity and skill building for tree based farming, plant care and Inter crop. ▪ Increase awareness & capacity for Mandap based vegetable cultivation & Inter crop ▪ Sensitized farmers for inter crop cultivation. ▪ 25 farmers of Joravarnagar village planted 1300 mango plants 			

Year wise Agriculture training and Participation of Farmers



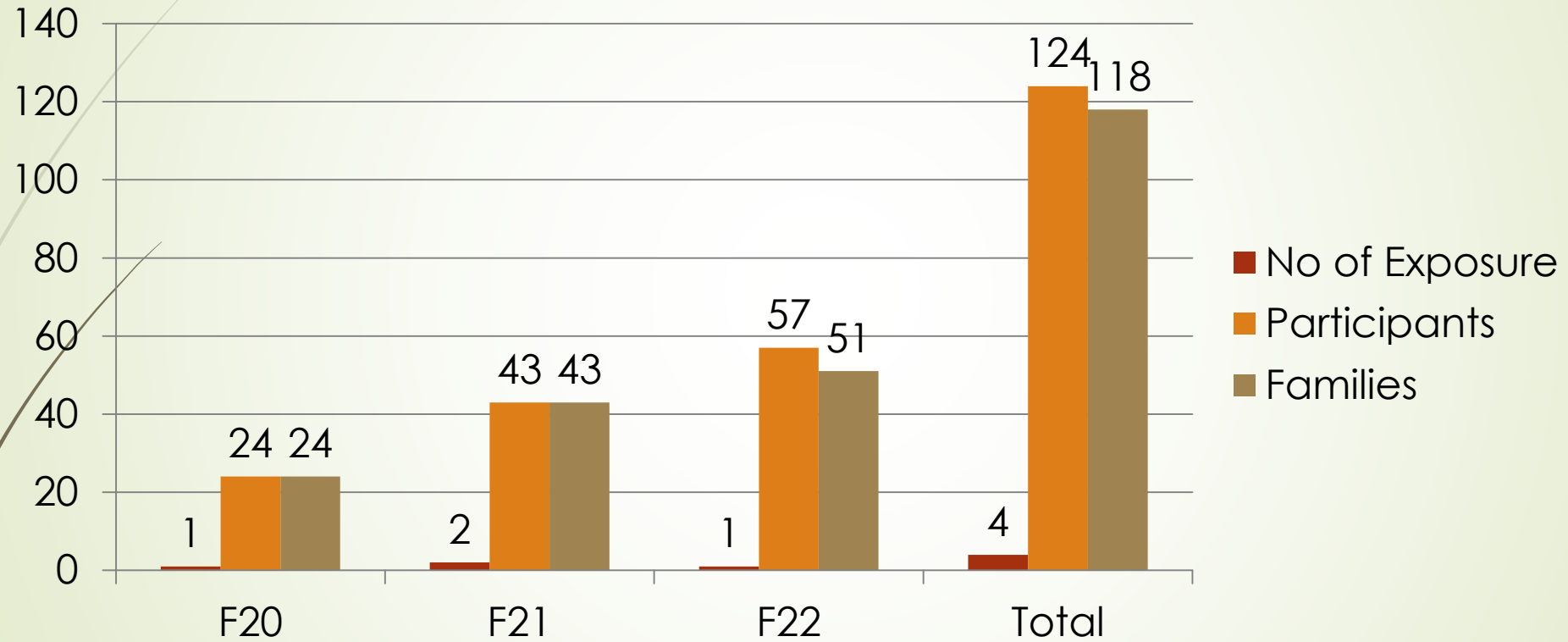
AGRICULTURE DEVELOPMENT :

Intervention: 4 : Exposure Visit: (Total Plan: 01 Achievement: 01)



Exposure Visits	Yr. 3	Yr.2	Yr. 1	Total
No of Exposure visits	01	03	01	05
Total no. of participants	57	46	24	127
Total no. of households	51	43	24	118
Total no. of men	48	23	14	85
Total no. of women	09	13	10	32
Place of Visits	1. BAIF Lachhakadi Campus 2. Village: Khataamba and Knadha (Navsari Dist) 3. Jeshingpura: (Vyara) 4. KVK Chaswad 5. Shram Mandir- Sindhrot (Vadodara)	BAIF- Lachhakadi campus BAIF – Dang- Vaghai, Jamlapada, Rambhas, Barkhandhiya, Sakarpatal villages KVK – Chaswad Shram Mabndir - Gaushala	Doodh Sagar Dairy Mehsan BAIF – Lachhakadi campus Rambhas and Vaghai KVK cbhaswad	
Major learnings drawn	Knowledge building on Tree based farming, Mandap based creeper cultivation, Strawberry cultivation, Vermicomposting, Nursery, Profitable animal husbandry and animal care. People organization,	Fruit based plantation, multilayer vegetable cultivation, importance of active participation of women, farmers group', SHGs.	Orientation of BAIF as an organization, importance of people's participation, KVK, Nursery raising and Orchard cultivation	

Exposure Visit :



AGRICULTURE DEVELOPMENT :

Intervention: 4 : FYM Training, Pit Demos and waste decomposer



No	Particulars	F22	F21	F20	G. Total
1	FYM Trainings	02	0	0	02
	Total Participants (farmers)	46			46
	McCain Field staff	14			14
2	Demo of Compost Pits	06			06
3	FYM awareness & discomposure	02			02

Benefits:

- Awareness generation of potato farmers regarding use of FYM
- Capacity building of Potato farmers regarding pit digging, filling and use of discomposure
- Awareness generation on organic farming

Agriculture development:

Intervention: 05 : Farm Yard Manure Training, Pit Demos and waste decomposer



Objective 1:	Sensitize potato growers for production & utilization of FYM for maintain soil fertility and its natural structure and health. Capacity building of potato growers on pit preparation, filling and care of FYM pits, including use of microorganism, micro nutrients for speedy composting.				
Rationality:-	Potato growers are facing problem of soil fertility, health and its natural structure. Gradually chemical fertilizers and pesticides are extent soil natural structure & fertility. This issue can be solved by FYM use. Use of FYM is a important option to maintain natural structure & fertility of land FYM also helps crops for utilization of chemical fertilizer.				
Plan /Achieve	Activities	Target	Achievement	Farmers	Families
1.	Farm Yard Manure pit demos	10	06	02	2
2.	Training on FYM Management	02	02	46 + (12 McCain staff)	46
3.	Waste Decomposer	20	02	02	02
Benefits:	<ul style="list-style-type: none"> ▪ Sensitized farmers regarding soil health, soil fertility and natural texture of land. Understand abuses of chemical fertilizer and pesticides etc. Awareness generation on organic method of soil conservation ▪ Capacity building of potato growers for FYM preparation and pit digging & filling. 				
Impact:	<ul style="list-style-type: none"> ▪ Potato growers sensitized for production and Use of FYM at own farm. ▪ Understand important of Farm waste for maintain soil texture and support to work of chemical fertilizer. 				

AGRICULTURE DEVELOPMENT



dragon fruit



Mango Plants Care



Farmers Training at Lachhakadi - BAIF



Exposure Visit at KVK chaswad



Onion Plantation- Inter crop of Mango plantation

2. Livestock Development

Given the socio-economic nature of the area and its dependence on agriculture as primary source of livelihood, livestock generates additional returns and proves to be a stable source of income which will counteract the potential downside associated with uncertainty of agricultural income. The major activities that were undertaken in the theme of livestock management are:

- Cattle Breeding Center
- Animal Husbandry training programme.
- Demo of Vermicomposting Units.
- Promotion of Sex Sorted semen.
- Exposure Visits
- Promotion of Mineral Mixture
- Fodder Demonstration.
- Animal General Health Camps.
- Chaff Cutter In Group.
- Animal Insurance.

LIVESTOCK DEVELOPMENT : Intervention: 1 : Cattle Breeding Center: Artificial insemination: Plan: 600 Achieve: 710

Conventional AI	F22	F21	F20	Total
No. of conventional AI	730	482	334	1546
No. of confirmed pregnancies	296	178	105	548
Conception Rate %	44.34	41.78 %	42.50%	
No. of calving (Male + Female)	215 (117+98)	156 (91+65)	02 (1+1)	373 (209+164)
Total families benefitted	129		02	
Families having female calf	67		1	
Total cost of female Calf (Asset) lacs	6.80	15.00	0.3	22.10
Major breeds introduced (Cow)	HF	HF	HF	
Major breeds introduced (Buffalo)	Mehsani	Mehsani	Mehsani	
Total Animal in milking during the period				
Total Milk production liters		190225.00		
Total Income from sale of milk Rs. Lacs		60.43		

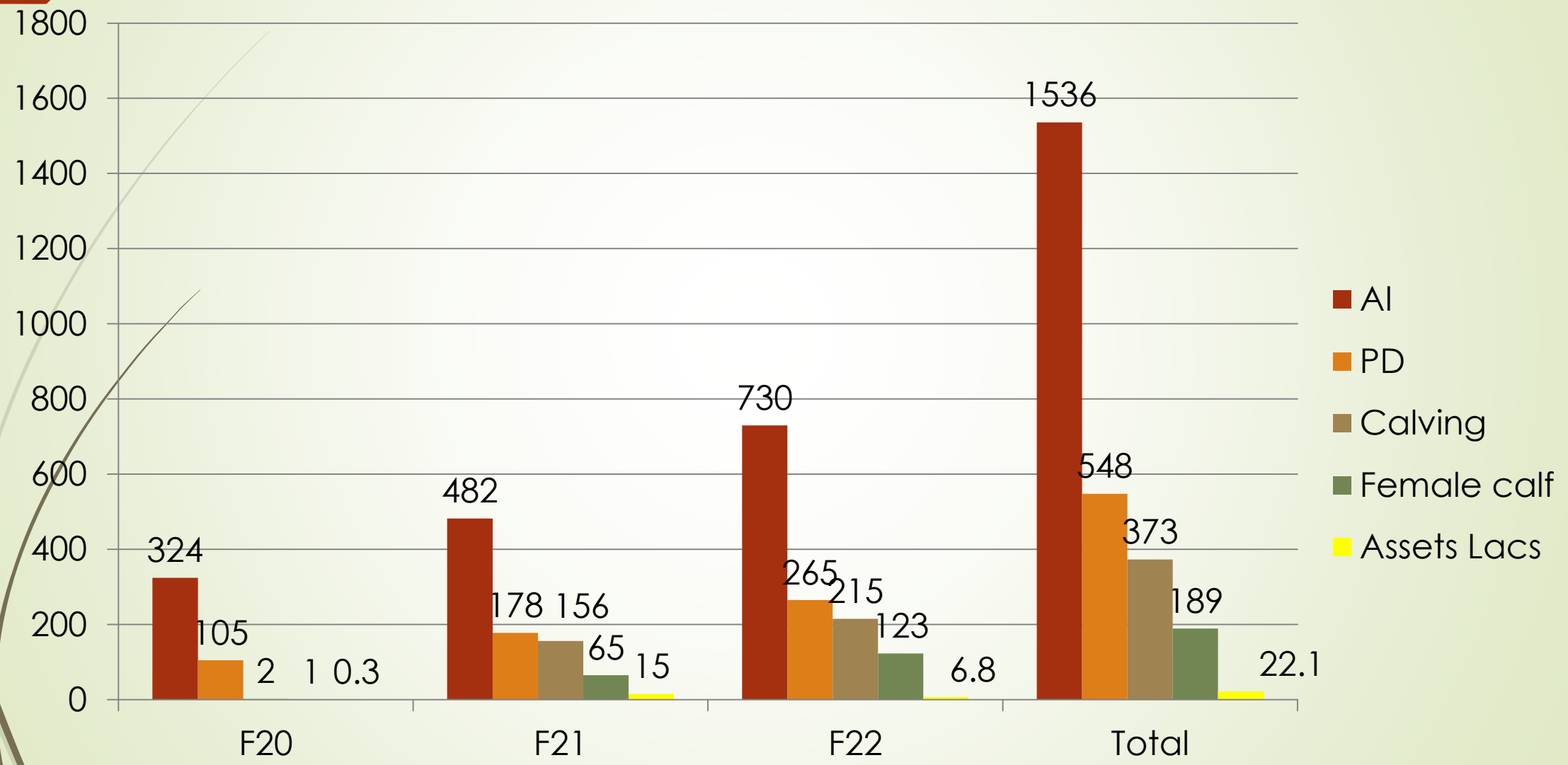
1. Total 68 farmers get 68 female calves which will provides support to farmers in future. Total cost of 68 female calf is Rs. 6.80 lacs.

Objective : 2 Improved income from allied agriculture activities like livestock

Intervention: 1 : Cattle breeding through Artificial Insemination & SS AI (Conv AI & SSS AI)

Objective 2:		Improved income from allied agriculture activities like livestock				
Rationally:-	Livestock play a very important economic, social and cultural role for rural households since they contribute to improve income and wellbeing of the family. Livestock helps with food supply, family nutrition, family income, asset savings, soil productivity, livelihoods, transport, agricultural traction, agricultural diversification and sustainable agricultural production, family and community employment, ritual purposes and social status. Hence, Project Utthan aims to improve the progeny of the cows and buffaloes, thus leading to increased milk production and reduced inter calving period.					
Plan /Achieve	Activities	Plan	Achieve	Female calf	Families having female calf	
1.	Conventional Als	600	730	97	67	
2.	Sex Sorted Semen: Als	120	120	26	21	
	Total:	720	850	123	77	
Benefits:	77 families Get 123 good quality of female Calves by 215 calving. They will be helpful to family for further income generation for long time.					
Impact:	<ul style="list-style-type: none"> • Increase confidence of community on Utthan Cattle development cent and allied activities. • So every year increased Als. 					

Progress of Cattle Breeding Center



Case Study

- Cow from village Ladivada was not able to achieve pregnancy despite of numerous efforts from the farmer.
- Farmer visited Project Utthan's office at Khedasan where she was briefed about the importance of knowledge about Mineral mixture, BNH 10 Grass and she also attended various trainings conducted by the Utthan project like Animal camp, Artificial insemination.
- Finally with the AI done through Project Utthan her cow was impregnated and now it is expected that she would start with milking two years down the line which would provide additional income to the family.



Name: Rabari Manojbhai Ramabhai
Village: Ladivada
Hamlet: Rabariwas
Family Members : 6
Land: 1 acre
Animals: 9

LIVESTOCK DEVELOPMENT :

Intervention: 2 : Promotion of Sex sorted Semen : SSS AI : Plan: 120 Achievement:- 120

Rationale : Insuring farmers for 90 % female calf by SS AI is a miracle for the farmers. Female calf will continue income for next 5-8 years and farmers get sustainable income for next 5-7 years. It supports to improves economical condition of farmer.

Target / Achieve:	Plan: 120	Achieve: 120		
Activities: Promotion of Sex Sorted Semen AI	F22	F21	F20	Total
No. of AI:	120	47	45	212
No. of confirmed pregnancies:	51	17	13	81
Conception Rate:	35.83	38.29	43.33%	36.13
No. of calving: (Female + Male)	26+0	18+0	00+0	44 (all Female)
Major breeds introduced (Cow):	HF	HF	HF	
Major breeds introduced (Buffalo):	Mehsani		Mehsani	Mehasni
Total cost of female Calf (Asset) lacs	2.60	2.70		4.40
Average cost of female calf	10000	15000		

Benefits: 21 farmers get 26 female calves. All delivery get 100 % female calves. Families will get income source after 3 years. 100 % female calves increased farmers confidence on Project work.

Impact: Families satisfaction having female calves. And also generate good opinion for project work. Farmer have

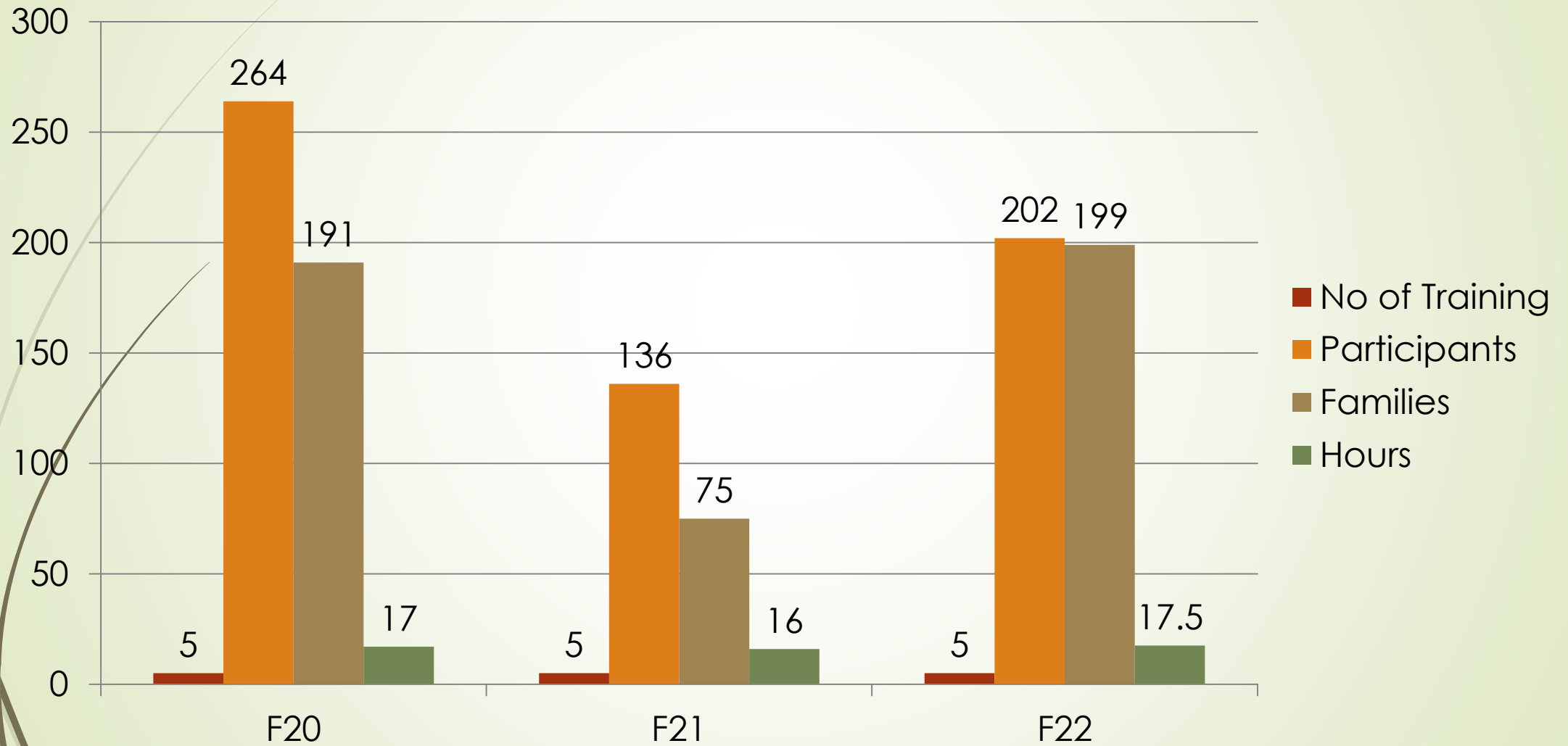
LIVESTOCK DEVELOPMENT :

Intervention: 3 : Animal Husbandry Training Programme: Plan: 04 Achievement:



Rationale	Need to increase knowledge, capacity and awareness for profitable Live stock, to improve animal health and milk production, needs training to farmers. It is also need to generate awareness about SS AI, Mineral mixture, fodder and vaccination.			
Plan / Achievement	Plan 04 Achievement: 05			
	F22	F21	F20	Total
No of training:	05	08	5	18
Total no. of participants:	202	136	264	717
Total no. of households:	199	75	191	465
No of Total Hours	17.5	16	17	50.5
Total no. of men:	16	48	74	138
Total no. of women:	186	88	190	464
Benefits:	<p>Increase awareness on animal health, milk production, cattle shed, fodder, animal insurance and nutrition and also health care of animal. Adoption of Good practices. Enhance knowledge of good practices of animal husbandry.</p> <p>Increase awareness regarding animal food/fodder and hygiene, vaccination, Artificial Insemination & Animal Insurance</p> <p>Knowledge building regarding traditional herbal medicines for common ailments etc</p> <p>Capacity building regarding vermicomposting and use of Chaff cutter</p>			
Impact:	<p>Improve knowledge of participants regarding profitable animal husbandry. Sensitize People for animal insurance by own investment. Also start to purchase and use mineral mixture by own expense. More than 35 farmers cultivated Improve Variety fodder by own expense.</p>			

Animal Husbandry Training Programme:-



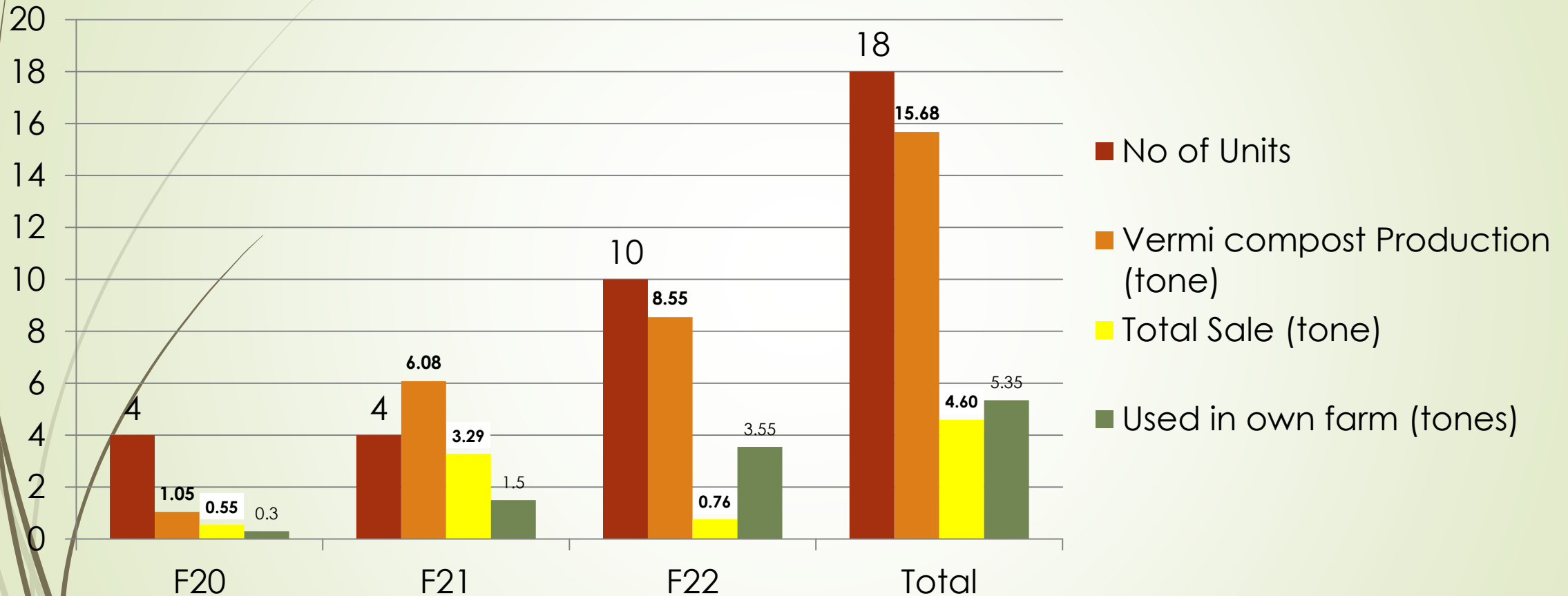
Intervention: 4 : Vermicomposting Unit

Vermicompost Units	Unit	F22	F21	F20	Total
No. of households	No	10	4	4	18
No. of unit	No	10	4	4	18
No of units established by own investment			11	00	11
Total Vermicompost produced	Kgs	8055	6085	1050	15190
Total vermicompost used in own farming	Kgs	3555	1500	300	5355
Total Vermicompost sold	Kgs	760	3299.0	550	4609
Total Vermicompost in hand	Kgs	4500	1386	200	
Price of Vermicompost per kg	Rs	5.0	5.0	3.0 -5.0	
Total Income from sale of vermicompost	Rs	00	15377	2475	17852
Income from sale of worms:	Rs.	2000	800	800	3600
Average income per family	Rs	475	809.0	618.75	

Benefits:-

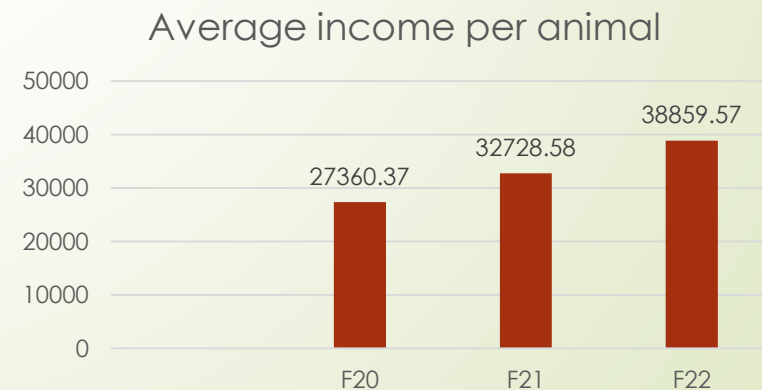
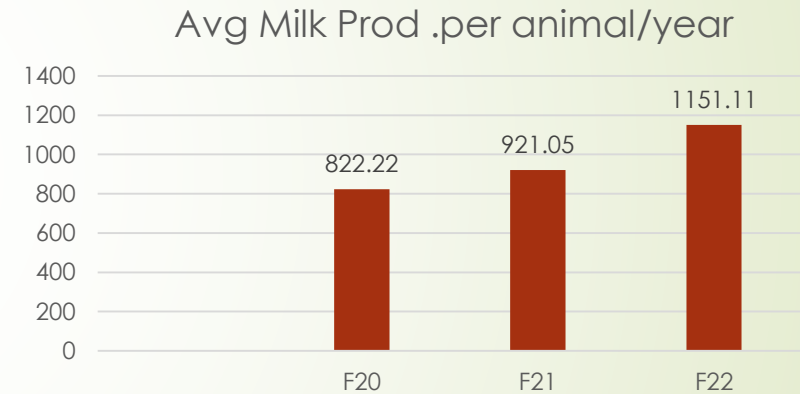
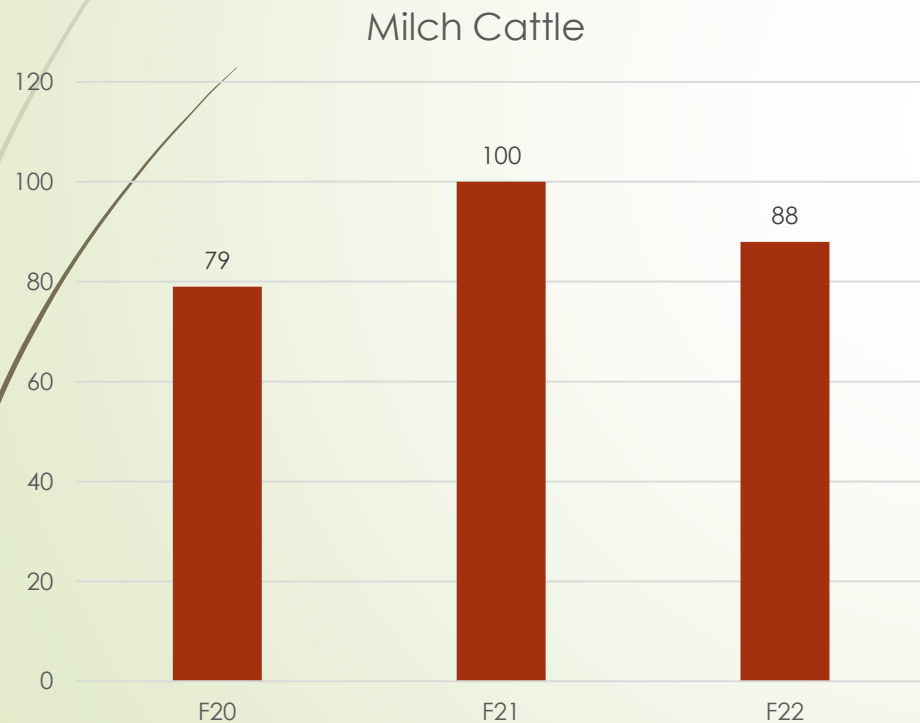
1. Supports farm soil for maintain natural texture.
2. Good quality vegetable production & benefits of organic vegetable consumption.
3. Farmers proposed for new vermicompost unit support.

Vermicompost Units : Production & Sale of compost:



Dairy Status: Village Khedasan

No	Year	Days	Animals C + B	Total Milk	Average Fat	Total Income Value / Lacs	Avg Milk Prod .per animal/year	Average income per animal
1	F20	366	51+28=79	64955.70	4.70	21.61	822.22	27360.37
2	F21	365	60+40=100	92105.90	4.90	32.72	921.05	32728.58
3	F22	365	45+43=88	105942.00	4.80	34.19	1151.11	38859.57

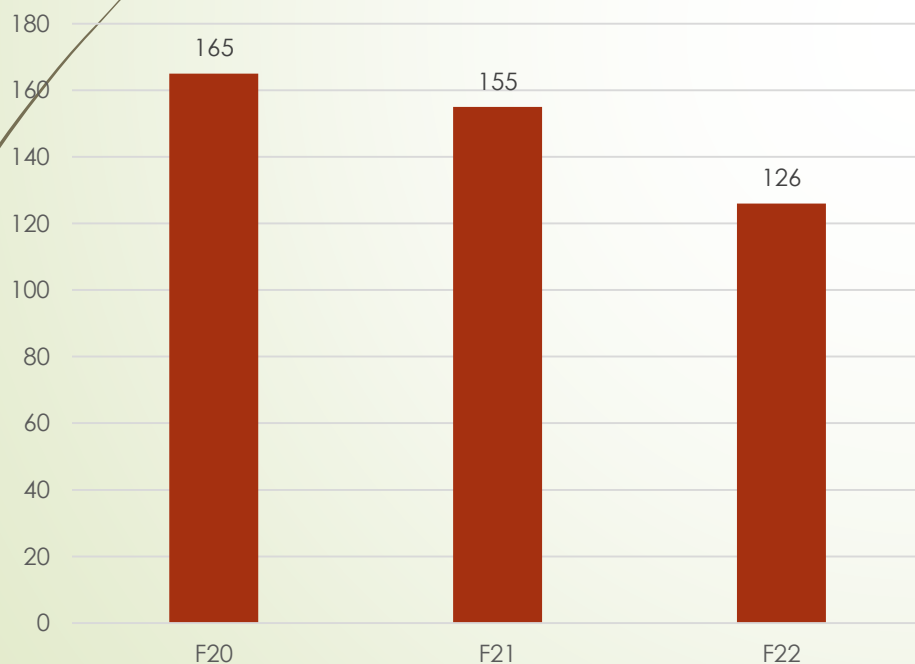


Dairy Status: Village Ladivada

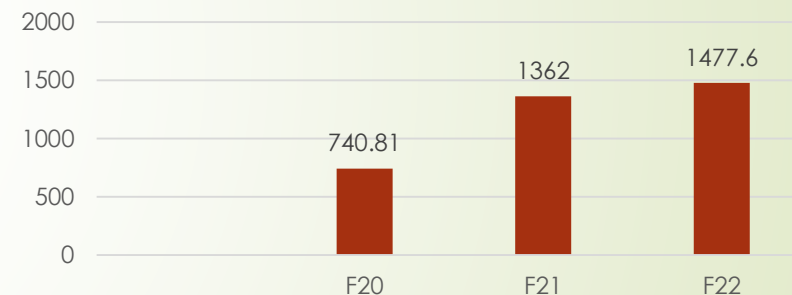


No	Year	Days	Animals C + B	Total Milk	Average Fat	Total Income Value / Lacs	Avg Milk Prod .per animal/year	Average income per animal
1	F20	366	78+87=165	122234.0	6.0	39.07	740.81	50445.11
2	F21	349	82+73=155	211115.50	3.6	75.24	1362.0	48208.37
3	F22	365	67+69=126	186175.00	4.7	62.24	1477.60	49397.75

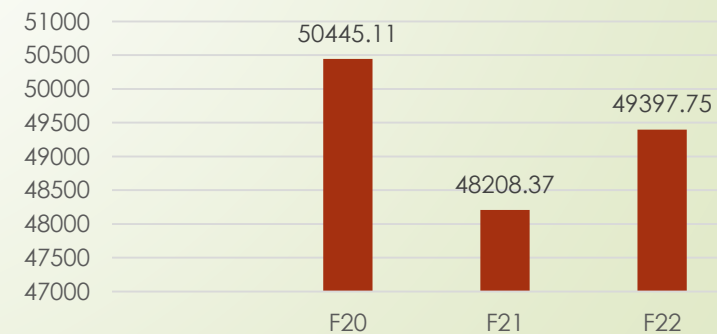
Milch Cattle



Avg Milk Prod .per animal/year



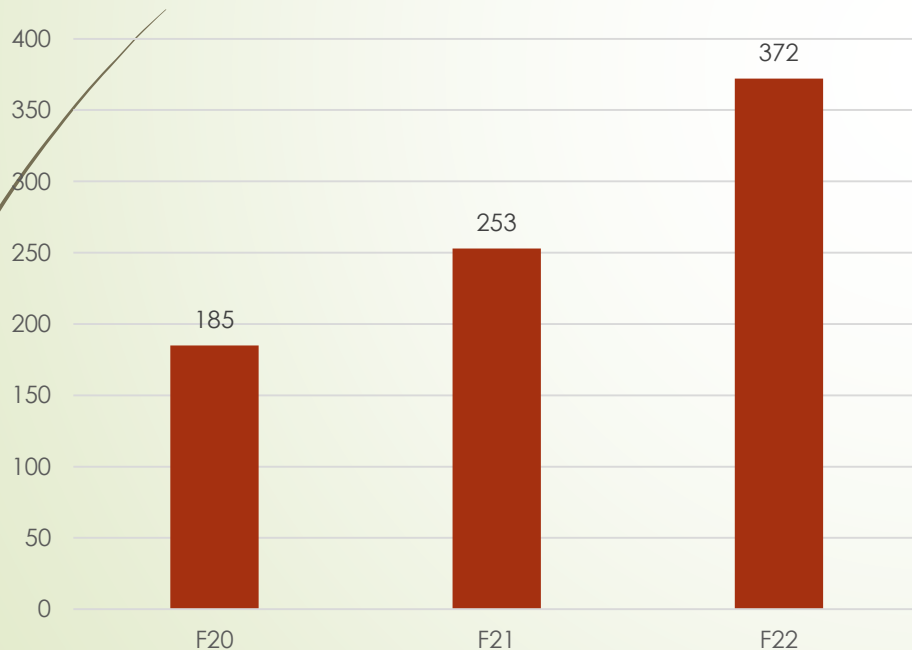
Average income per animal



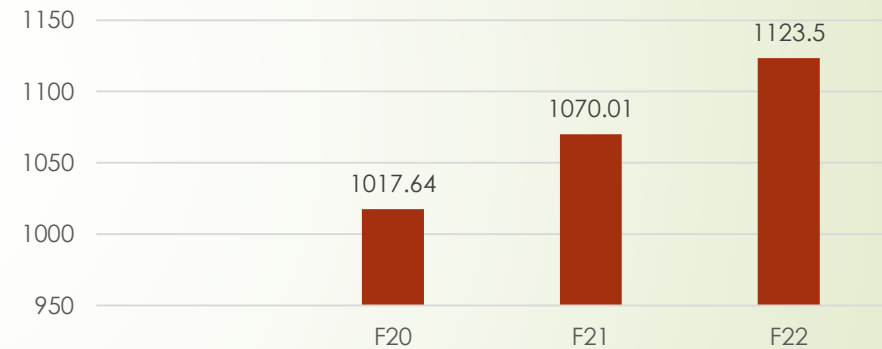
Dairy Status: Village: Joravarnagar

No	Year	Days	Animals B + C = T	Total Milk Liters	Average Fat	Total Income Value / Lacs	Avg Milk Prod / per animal/year	Average income per animal/year
1	F20	366	137+48=185	160788	5.20	58.32	1017.64	31529.0
2	F21	365	171+83=253	270713	6.90	103.99	1070.01	41106.00
3	F22	365	217+155=372	417961	7.05	158.42	1123.5	42587.86

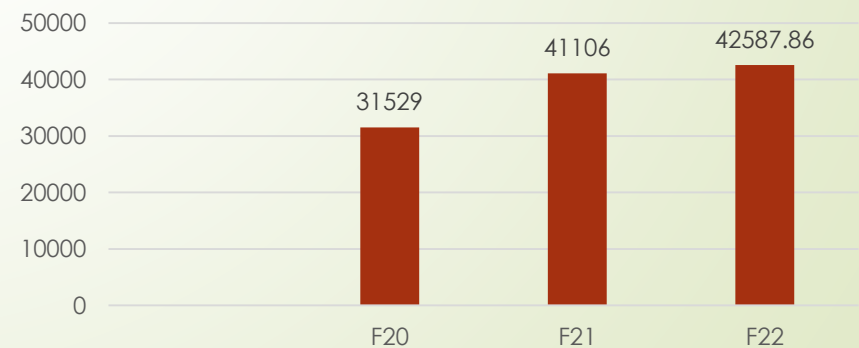
Milch Cattle



Avg Milk Production per animal/year



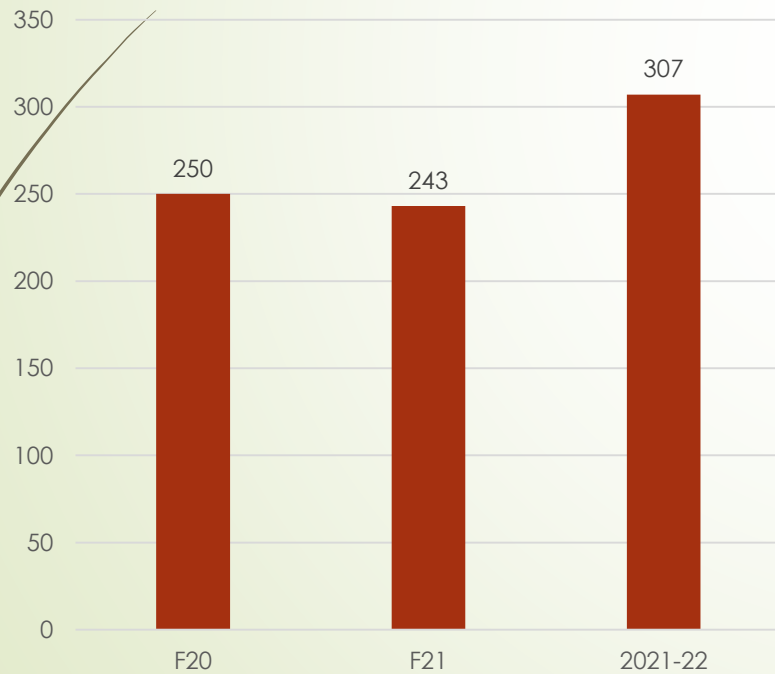
Average income per animal/year



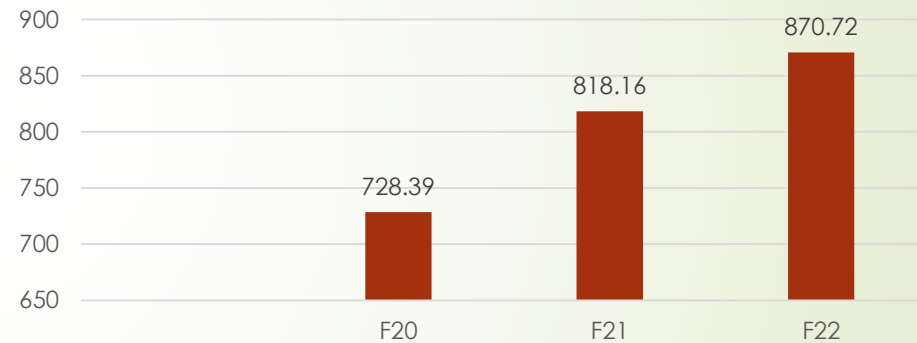
Dairy Status : Bhankhara Village

No	Year	Days	Animals B + c= T	Total Milk Liters	Average Fat	Total Income Value / Lacs	Avg Milk Prod .per animal/year	Average income per animal
1	F20	366	193+57=250	182099	4.9	651.46	728.39	26058.56
2	F21	349	186+57=243	198814.5	5.2	698.98	818.16	28764
3	F22	365	211+96=307	267313.6	5.3	900.28	870.72	29325

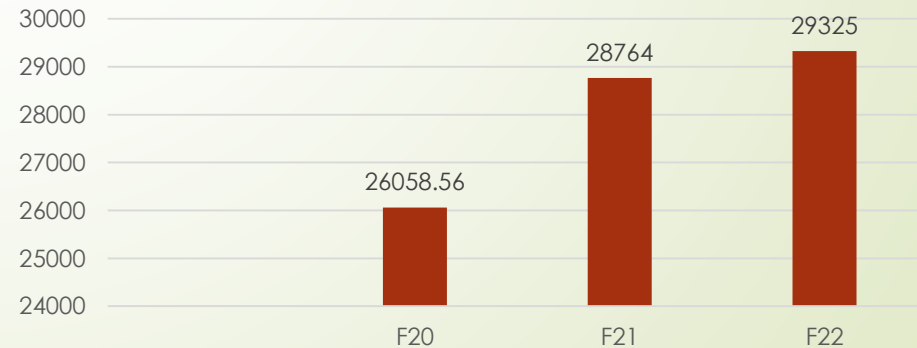
Milch Cattle



Avg Milk Prod .per animal/year



Average income per animal



LIVESTOCK DEVELOPMENT :

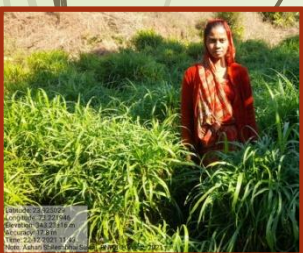
Intervention: 5 : Exposure Visit: Plan: 00 Achieve: 01



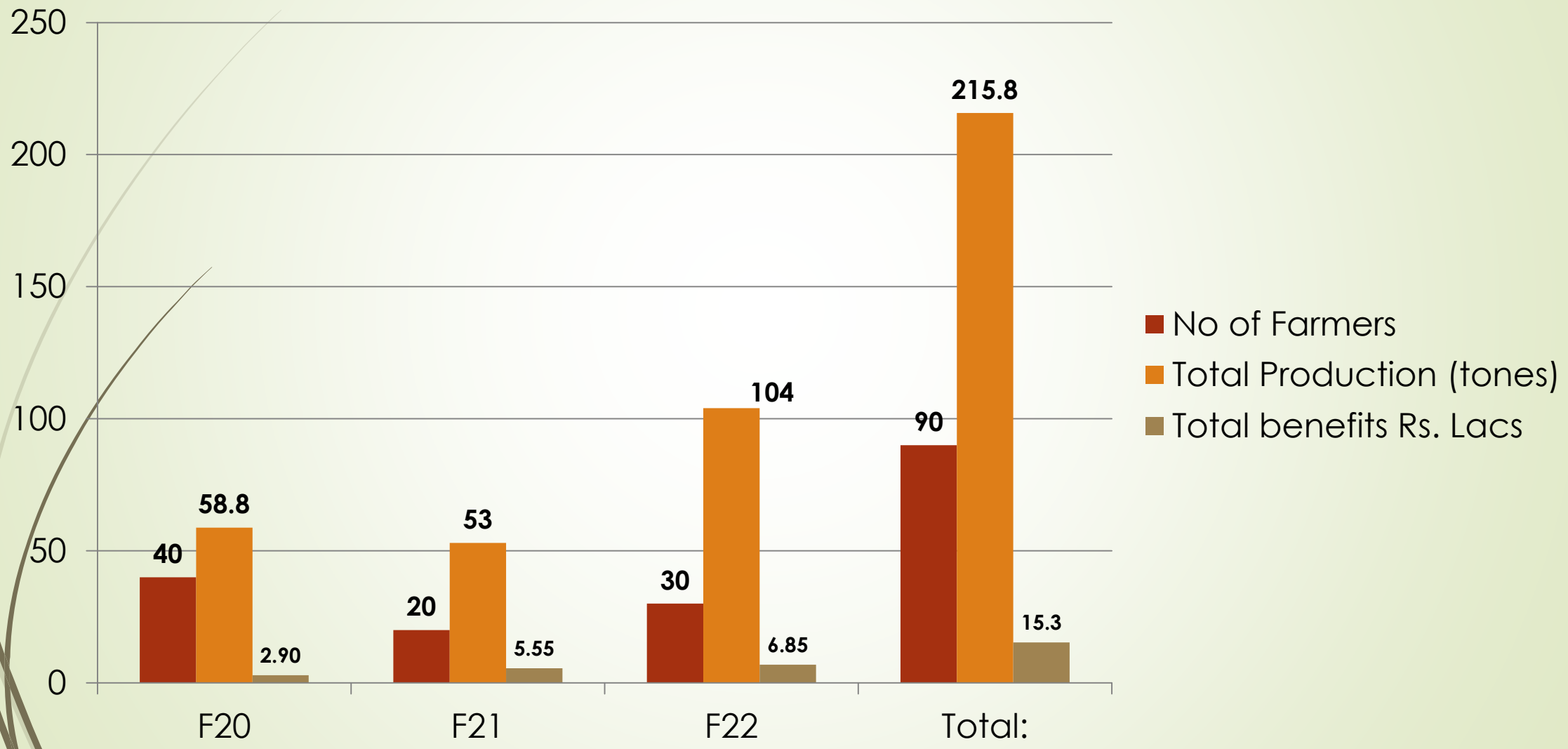
Exposure Visits	F22	F21	F20	Total
No of Exposure visits:	01	01	02	04
Total no. of participants:	57	37	81	175
Total no. of households:	51	34	73	158
Total no. of men:	48	24	22	93
Total no. of women:	09	13	35	57
Major learnings drawn:	Awareness regarding good practices , Animal food, water vaccination, herbal medicines, disease prevention and treatment, Insurance etc	Role of Dairy in farmer development, Milking care, Ideal crib, Identification of animal diseases, Home base disease care, Effective traditional practices	Role of Dairy in farmer development, Milking care, Ideal crib, Identification of animal diseases, Home base disease care, Effective traditional practices	

Intervention: 6 : Fodder Demonstration Plots

Fodder Demonstration Plot	F22	F21	F20	Total
Fodder Variety	BNH-10	BNH-10	BNH-10	
No. of households	30	20	40	90
Sustained rate	100 %	100 %	82.5	100
Total land covered under the intervention	1.5 acres	0.5 Acre	1.06 acres	3.06
Total land covered per household	2.0 Guntha (0.05 acre)	2.0 Gunthas	1.28 Gunthas	
Earlier source for fodder procurement	Outside of village	Outside village	Outside village	
Average procurement per household	1-3 tones dry fodder (Rs. 8 to 15 thousand)	2 trailer (approx. 1500-3000 kgs)	2 trailer (approx. 1500 -3000 kgs)	
Fodder production per household (Average)	3.4 tones	2.650 Tones	1.960 tones	
Advantages of BNH-10 over conventional varieties	Reduced farmers drudgery by one time sowing & Annual availability, reduce outside purchase,	Increases the fodder consumption of livestock Improves animal health Increase in milk production	Increases the consumption Improved animal health Increase in milk production Reduce outside purchase	
Acceptance by Other Farmers	50Farmers planted BNH-10 Grass in 0.5 acre by own expense 9 Farmers from 8 non project villages also cultivated Grass	Total 39 farmers cultivated BNH - 10 grass by own investment.	11 Farmers	100
Savings per house hold Rs.	8500	8000	7840	



Fodder Demonstration & Production of Grass



Intervention: 7 : Animal Health camps

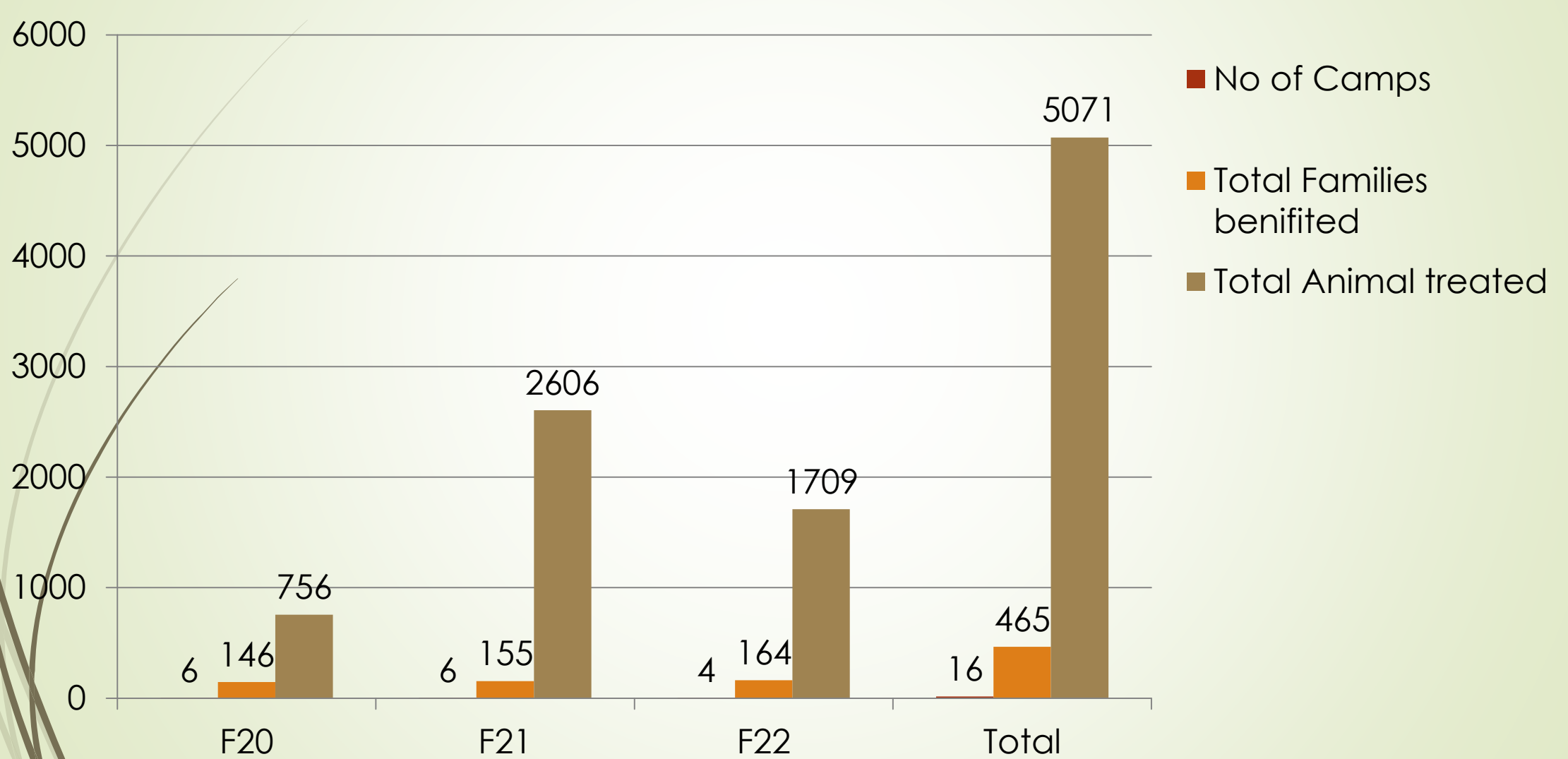
Rationale : In rural areas, endemic, production-limiting diseases are continually present which tend to make livestock raisers vulnerable to external shocks, which keeps them in poverty. Although the government has infrastructure and resources to address such issues, they are most often not enough and fail to reach remote areas, like Khedasan. So Project Uththan organizes Animal Health camps at village level to diagnose diseases and also to spread awareness regarding the preventive measures and care to be taken for the cattle.

Target / Achieve	Plan of Animal General Health Camps: 04 Achievement : 04			
Health Camps	F22	F21	F20	Total
No. of health camps:	04	06	06	16
No. of animals treated:	1709	2606	756	5071
No. of households:	164	155	146	465
Major diseases cured:	Worm Infestation Infertility and repeat breeding, ECT parasites, Malnutrition, Infection,	Worm Infestation, EXT parasites, Malnutrition, Infertility, Repeat breeding,	Worm Infestation, ECT parasites, Malnutrition, Infertility	

Benefits: 164 Farmers received Door step service for 1709 animals and saving of Money and time. Increase awareness regarding animal diseases and its treatment important. Proper treatment and received suggestions for prevention of diseases and nutrition awareness. 22 Animal treated for Infertility and Some animals having chronic disease received treatment. Good linkage established with government department.

Impact: Sensitized farmers for animal health and increase inquiry for treatment of animals. No major outbreak seen during the year due to vaccination. Adoption of good practices for maintaining their health, benefits of mineral mixture, etc. They have adopted such practices at the household level which are advised by doctor.

Animal Health Camps



Live stock Development :

Intervention: 8 : Promotion of mineral mixture

Rationale : Dairy cattle require a number of dietary mineral elements for normal body maintenance, growth and reproduction. Deficiency of minerals impairs metabolic functions, which affects the growth in young calves and milk production and reproduction efficiency in adult animals. Supplementation of minerals through mineral mixture is of paramount importance, in order to maintain productivity of animals. In order to provide cattle with certain nutrients and additional nutrients, mineral mixture is produced by BAIFF at Urullikanchan Research Station which has proven to be useful after series of experiments lead by experts of the field.

Mineral Mixture (1 kg packet)	F22	F21	F20	Total
Total mineral mixture promoted under the project kgs	375	200	200	775
Promotion of mineral mixture by 100 % cost of farmers	77			77
No. of households	237	159	92	488
No. of households adapting mineral mixture regularly	174	140	58	372

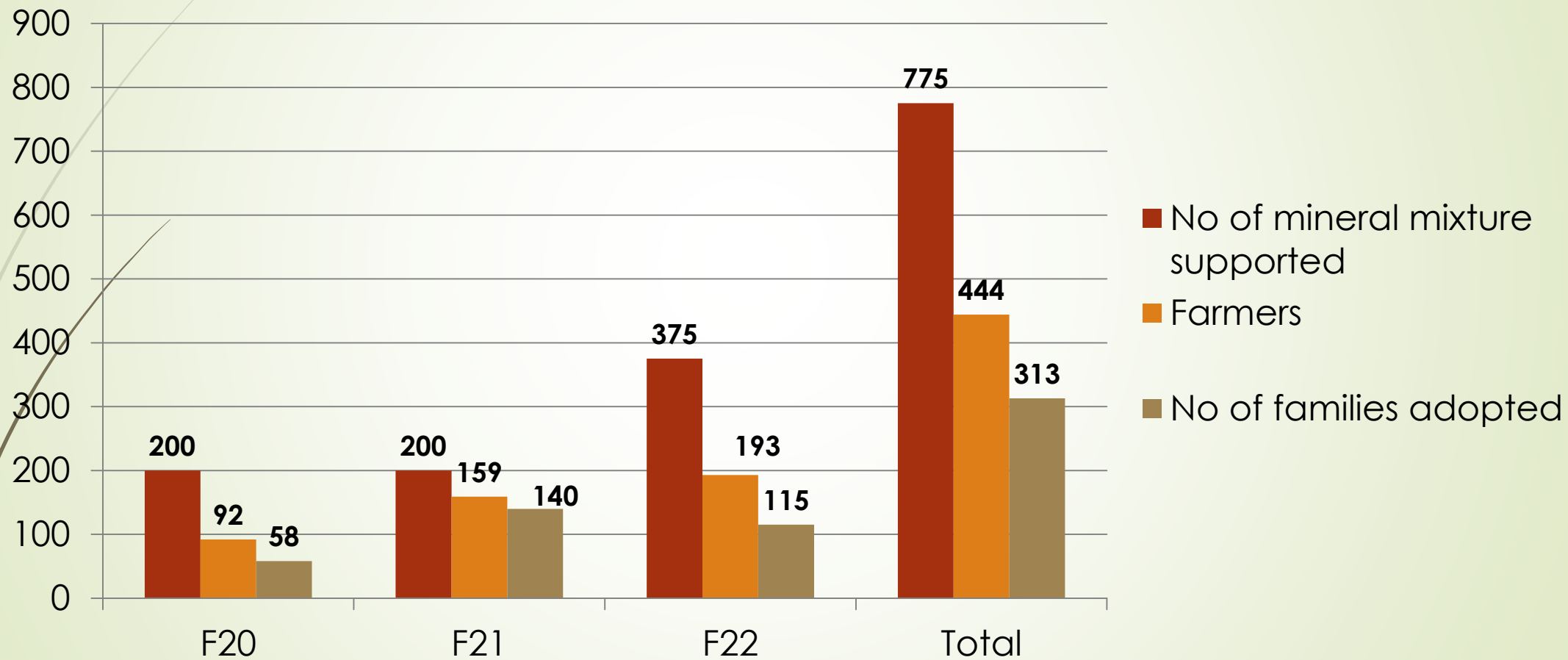
Benefits of Mineral mixture

- 1. Improve animal's health and immunity.**
- 2. Healthy calf delivery.**
- 3. Enhance milk production.**
- 4. Home base availability – Saving time and travel expense.**
- 5. Increase awareness regarding animal health and nutrition**

Impact: Sensitization of Farmers regarding animal Health. Improve Animal health and milk production. Improve health of calves. 77 F families purchase by 100 % own cost.

The mineral mixture provides additional nutrients that are required for the cattle which are not present in their day-to-day diet. It also increases the appetite of cattle if they are eating less than prescribed.

Mineral Mixture Support: (Each 1 kg packet):-



Intervention:9 : Group Chaff cutter

Rationale: On the experience of 15 families of Ambika SHG we have planned one chaff cutter of SHG of khedasan village. Women Ambika described benefits of chaff cutter such as Increase fodder consumption, reduction of wastage, Improve health of animals and increase milk production up to 0.5 to 1.0 liter. Eventually use chaff cutter is provides many benefits to farmers including drudgery reduction.

No	Particulars	F22	F21	F20	Total
1	Formation of women self help group	01	01	01	03
2	Support of Chaff cutter	01	01	01	03
3	Total Members	12	15	15	42
4	Families	12	15	15	45
5	Families using chaff cutter (3chaff cutter)	12 + 3	17 +3	17+3	46 + 9
6	Total Grass cutting : tone	98.97 (by 3 chaff cutter)	8.60	2.17	41.77

Benefits

1. Increase self help group mutual confidence
2. Skill development of women for management of small intervention.
3. Animal get processed fodder so increased consumption and milk production including health improvement of animals.
4. Reduce wastage fodder .
5. Other farmers also demand and 3 families purchase chaff cutter by own investment.

Impact:- Capacity building of SHG women for chaffing the fodder, Maintenance of machines and books of record. Saving of fodder ad improved health of animal including increase of milk production.

Intervention: 10 : Animal Insurance

Rationale:- One of the great success stories of rural India is its dairy sector. This is where resource-poor, small and marginal farmers, as well as landless labourers, have contributed to make the country the largest milk producer in the world. However, the risk coverage of milch animals continues to be largely ignored. For a farmer who does cattle rearing, his cattle are his biggest asset. Concept of animal insurance is not that popular in rural India and whenever cattle dies due to unavoidable circumstances, farmer suffers a huge financial loss.

Animal Insurance	F22	F21	F20	Total
No of live stock insured	30	29	30	89
No of Animal insured by own cost	12	14		25
No. of households	30	29	30	89
Total Deaths of Animal	-	05	0	05
Death claim	-	05		05
Claiming amount	44333.0 (Avg.)	Rs. 26,600 per animal	Rs. 26,600 per animal	
Premium paid by participant	(20 %) Rs. 200/ participant	Rs. 5800 (Rs 200 per animal per household)	Rs. 6000 (Rs 200 per animal per household)	
Premium supported by the project	80 %	Rs. 63718 (Rs. 2197 per animal per household)	Rs. 65,914 (Rs. 2197 per animal per household)	
Criteria of household selection	Small and marginal farmers with limited or no landholdings	Small and marginal farmers with limited or no landholdings	Small and marginal farmers with limited or no landholdings	
Amount received by claim Rs. (total)		125000		125000



Livestock training



Health Camp



Fodder Demo



Mineral Mixture



Animal Insurance



Chaff cutter

3. Natural Resource Development : Soil & Water Conservation

Some of the initiatives that were designed so as to ensure water availability all round the season are as follows:

- Irrigation Pipe support.
- Group bore well
- Masonry Field outlet.
- Trench cum bunds
- Well Recharge
- Promotion of Drip.
- Tree plantation

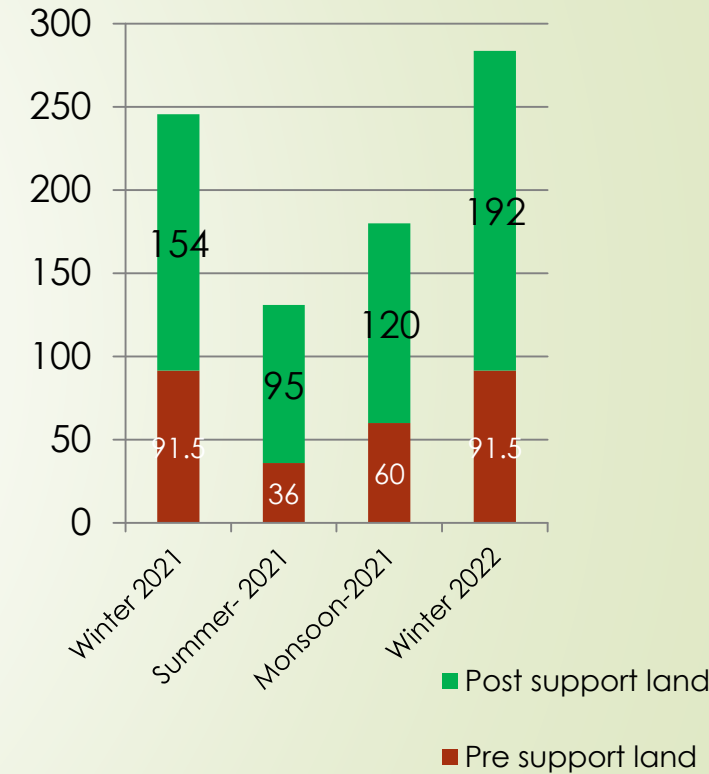
These initiatives has helped in reduction of water usage in turn reducing drudgery especially for women folk.

Intervention: 1: Water lifting Pipes

No	Particulars	F22	F21	F20	Total
1	Total Farmers	39	60	20	119
2	Number of Pipes	755	1200	400	2355
4	Increase land irrigation acres	100	55	34	

Irrigation Pipes support : Land Irrigation by pipe support (acres)

Year	Monsoon 2020	Winter 2021	Summer 2021	Monsoon 2021	Winter 2022
Farmers	20	80	80	80	80
Irrigation before support : Land (Acres)	36	91.5	36	60	91.50
Irrigation after support: Land Acres	70.50	154	95	120	194
Increased Irrigation Land:	34.50	62.5	59	60	102.5
Crops during season	Maize, Cotton Castor Soybean	Wheat Maize G.Nut Gram Grass Cotton	Mug G.Nut Grass	Maize, Cotton Castor Soybean	Wheat Maize G.Nut Gram Grass Cotton
Approx total production kgs	Survey is on going				
Approx Income kgs					



Case study: Improved Income by Irrigation Pipe support:



Name of Farmer: Mukeshbhai Kakvaji Dodiya
Intervention: Irrigation Pipe support
Quantity: 20 pipes (6 Meters each: Total: 120 Mts.
Village: Joravarnagar
Ta: Vijaynagar Dist: Sabarkantah
Total Members of HH: 06

➤ Introduction:-

Mukeshbhai Dodiya is a marginal farmer having 4 acres of land at Joravarnagar village. He has a bore well and is cultivating 2 acres of land. Due to the unavailability of a water lifting facility, he has to leave 2 acres of land uncultivable during winter and summer every year.

➤ Support from Uthman:-

During 2021, he was supported with 20 irrigation pipes.

➤ Benefits:-

With this pipe, his cultivable land increased from 2 to 4 acres. Now he is cultivating 4 acres of land. During winter, he cultivated wheat in 3.5 acres and got 4200 kgs yield worth Rs. 1,05,000. He also cultivated 0.5 acres of maize and got 600 kgs yield. His production is doubled. Now his income is going double from last year. He is happy with this support.

➤ Impact:

Mukeshbhai now has a sustainable source of irrigation and now he will get more income from his land.

He also supported 2 other farmers for irrigation of their 2-acre land without any rent.

NATURAL RESOURCE DEVELOPEMENT :

► Intervention 2: Group Bore well : Plan: 02 Achieve: 02



No	Particulars	F22	F21	F20	Total	
1	Farmers Groups	01	02	02	05	
2	Total Members	10	16	16	42	
1	Group bore well with lifting devices	02	01	02	05	
2	Land irrigated by Group (acres)	15 (by 10 farmers)	-	-	15	
Production & Income data:						
	Crops and Area	Farmers	Production kgs	Total Cost Rs.	Total cost of yield	Remarks
3	Wheat : 4.5 acres Castor * : 4.0 acres Fodder : 3.0 acres	04 03 (seed plot) 03	6300.0 2100 seed & 200 g 15 tones	157500.0 250000.0 45000.0	34888 64500 15000	* 4 acre Castor destroyed by deer
	Total : 11.5	10		452500.0	45250	
4	Benefits:	<ul style="list-style-type: none"> ▪ Increased area under irrigation ▪ Increased cropping intensity. ▪ Improve income up to Rs. 15000.0 ▪ Easy received drinking water ▪ Group management skill developed 				

Group Bore well – Bhairavnatha Khetivadipani Farmers group



➤ Introduction:

Due to failure of bore well combined with drop in water table, many Farmers have been facing water scarcity during winter and summer seasons in Bhankhara village even for drinking water. Due to which they had to take water on rent from other farmers either on 33 % of their yield or at 50 Rs. Per hour. So to overcome this issue they requested Utthan for support of Bore well and Lifting devices.

➤ Support from Utthan:-

As per Utthan project's guidance they formed Farmers group (Bhairavnath khetivadipani Farmers group) and recommended for Group bore well and lifting devices. By the project, Group supported for Bore well and lifting devices during march 2022.

➤ Results:

During the summer season, more than 10 acres of land was covered under this Group well. Three farmers cultivated fodder and vegetables from the water of this bore well. As a result of which problem of water for farming and drinking was solved. During last 3 years they had not cultivated any crop during summer but now they started with cultivation during summer as well. During the summer season 3 farmers cultivated fodder in 3 acres and they got fodder security. Three farmers got 6 tones (Rs. 24000 cost) of fodder during March - June 2022.

Impact:

Increased area of cultivation. Water security for farming as well as for drinking water. Members are happy with Utthan's intervention. Big planning of next season farming and it will further increase families income.

Group Bore well with lifting devices : Crop Cultivation



NATURAL RESOURCE DEVELOPEMNT :

Intervention: 3 : Masonry Field Outlets: Plan: 10 Achievement : 05

No	Particulars	F22	F21	F20	Total
1	Total Farmers	01	21		22
2	Tranches cum bunds (Cu. mts)	73	749	00	722
3	Land covered under T cum Bunds (acres)	2.0	26		08
4	Crops cultivated during Rabi: Farmers sowing area Wheat: 03 3.0 acres	Production 4200 Kgs 2500 Kgs	Total Cost of Yield 105000.0 7500.00 125000.0		
5	Per acre income		25000.00		
6	Benefits: <ul style="list-style-type: none"> Reduced soil erosion Improved cultivable Land Improved crop productivity 				

Intervention: 4 : Open Well Recharge : Plan: 04 Achievement: 04

No	Particulars	F22	F21	F20	Total
1	Total Farmers	04	04	04	12
2	Installation of well recharge system	04	04	04	12
3	Land covered (Acres)	08	08	10	26
4	Total Water recharge (during Last monsoon)				
5	Benefits: <ul style="list-style-type: none">▪ Improve ground water table▪ Increase water in bore well s near well recharge system.▪ Increase availability of Water from bore well up to 1 to 2 months.▪ Increase irrigation area.				

NATURAL RESOURCE DEVELOPEMNT :

- Intervention 5 : Tree Plantation (Fruit plantation for Potato growers)
- Plan: 200 trees, Achievement: 250 trees Farmers: 24

Tree Plantation	F22
Villages	05 (Ukhladungri, Kundlakampa, Dholivav, Vajepur,
Total Farmers Involved	24
Total Household	24
Per farmer tree plantation	10 (Mango grafts, Guava, Sapota, custerd apple, Lemon (each-2 plants)
Total plantation	250 Plants
Benefits	<ul style="list-style-type: none"> ▪ Awareness Generation regarding tree based farming in potato growers. ▪ Other farmers also enquired for fruit plants plantation.

NATURAL RESOURCE DEVELOPEMNT :

Intervention 6: Promotion of Drip Irrigation System

No	Particulars	F22
1	Total Farmers	10
2	Demo of Drip of 0.5 acre farm	10

Benefits: (use of drip will start in next season)

- Reduced water utilization
- Increased area brought under irrigation
- Multi cropping possible over a longer period of time .



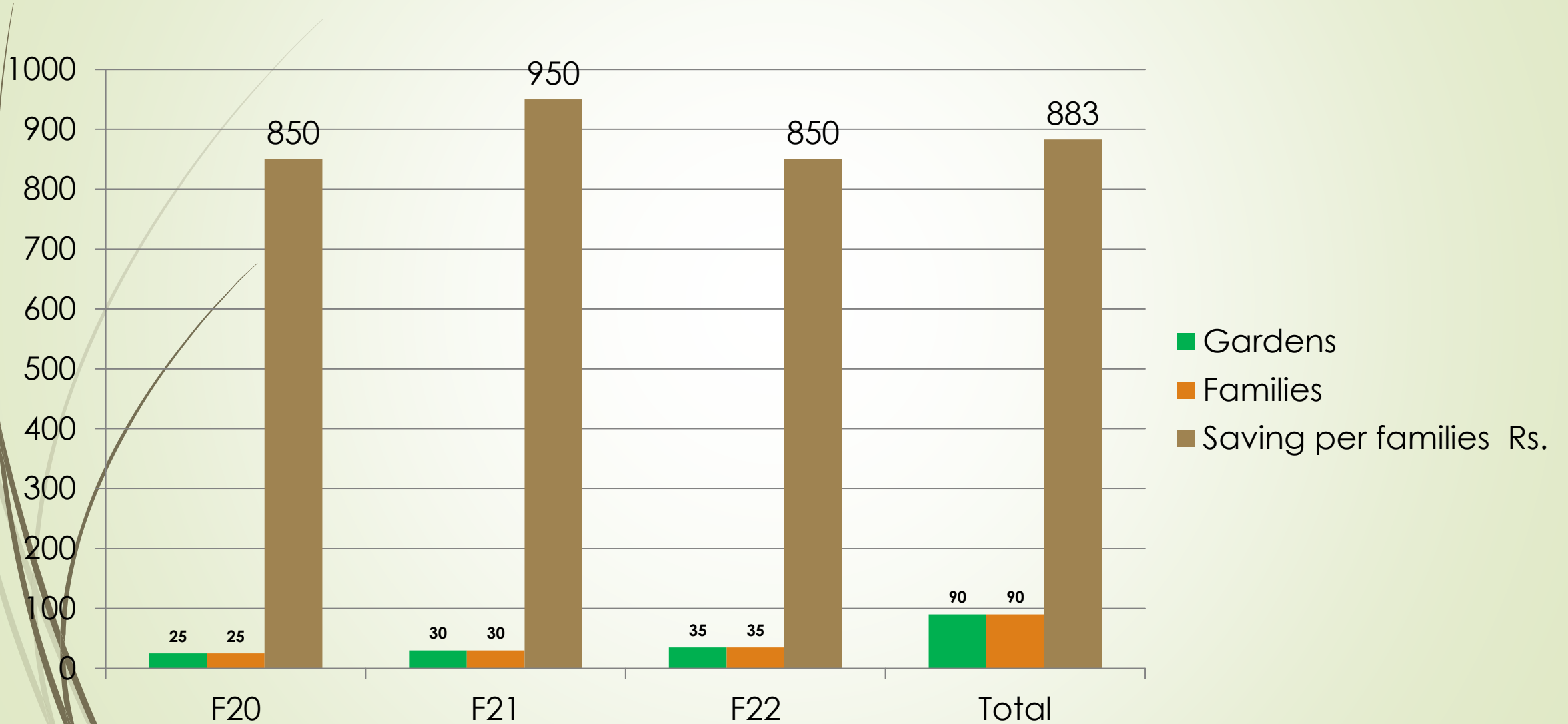
QUALITY OF LIFE & PEOPLE ORGANIZATION

- Nutrition Garden
- General Health Camp
- Formation & Capacity building of People organization.
- Micro Enterprise
- Educational Infrastructure Up grade

Intervention: 1 : Nutrition Garden : Total Plan: 23 Achievement: 35

Nutrition Garden	F22	F21	F20	Total
No. of units	35	30 (15 families partially supported)	25	90
No. of households	35	29	25	87
No. of households consuming regularly	35	29	25	87
Vegetables promoted	Gourd, Spongy gourd, Okra, Beans, Chilly, Tomato, Brinjal, Turmeric, Yam, Colocasia	Coriander, Fenugreek, Spinach, Brinjal, Carrot, Radish, creeper vegetables.	Coriander, Fenugreek, Spinach, Brinjal, Carrot, Radish	
Tubers				
Fruits Plants	Guava, Lemon, Custard apple, Sapota (each 2 plants/farmer)	Guava, Lemon, Papaya, Custard apple, Sapota, Drumsticks	Mango, Guava, Lemon, Papaya, Custard apple, Drumsticks	
Total savings	890	Rs. 950	Rs. 880	
Outcomes	<p>Increased vegetable consumption and reduced expense on vegetable purchase.</p> <p>Farmers of first year started getting yield of Guava</p>	<p>Increased availability and consumption of Green Vegetables at household level and diversification of vegetables</p> <p>Increased fruit consumption</p>		

Nutrition Garden : (Home base saving)

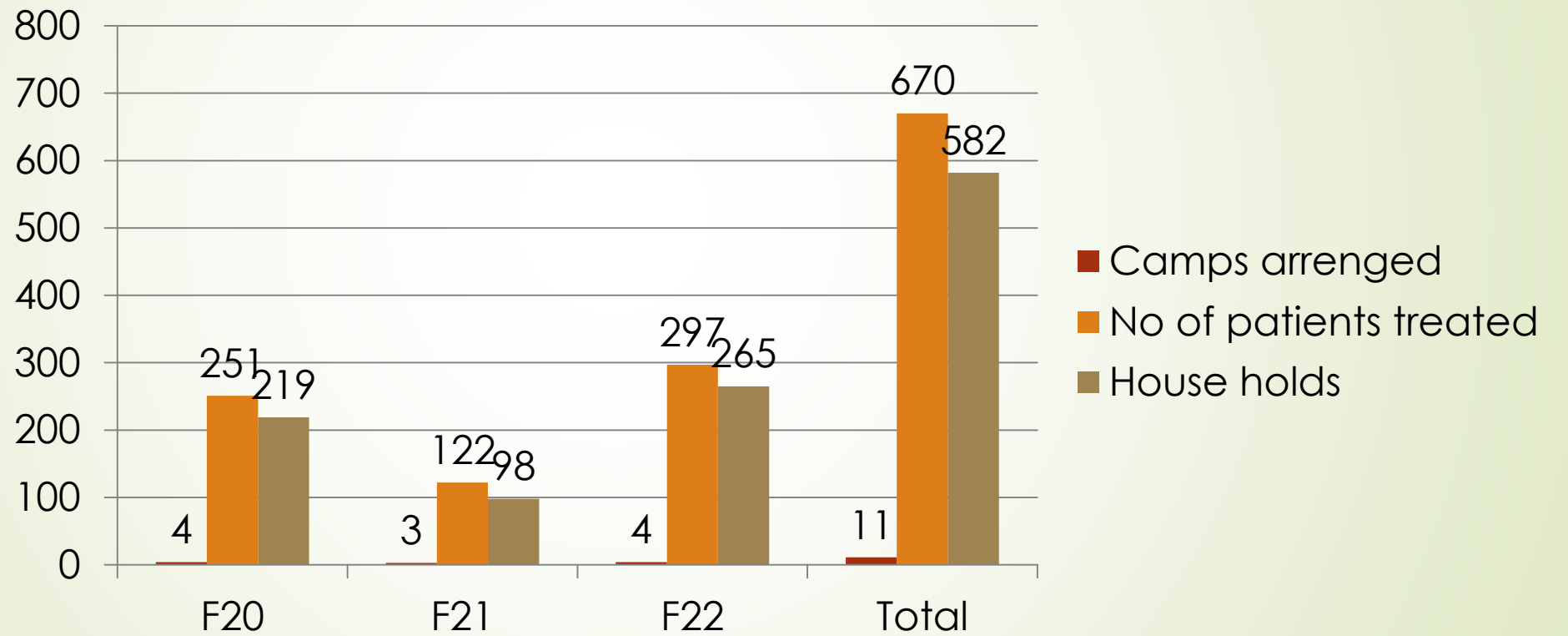


Human Health Camps	F22	F21	F20	Total
No. of health camps	04	03	04	11
No. of men	137	15	76	228
No. of women	160	107	175	442
Total treated cases	297	122	251	670
No. of households	265	98	219	582
Major diseases treated	Anemia, Joint pain, Common cold and coughing, Worm Infestation, Skin Problem			

Benefits:-

- People / students get medicines at village level by free of cost including doctor guidance.
- Students also understand preventive majors of common ailments.
- Students get health education.

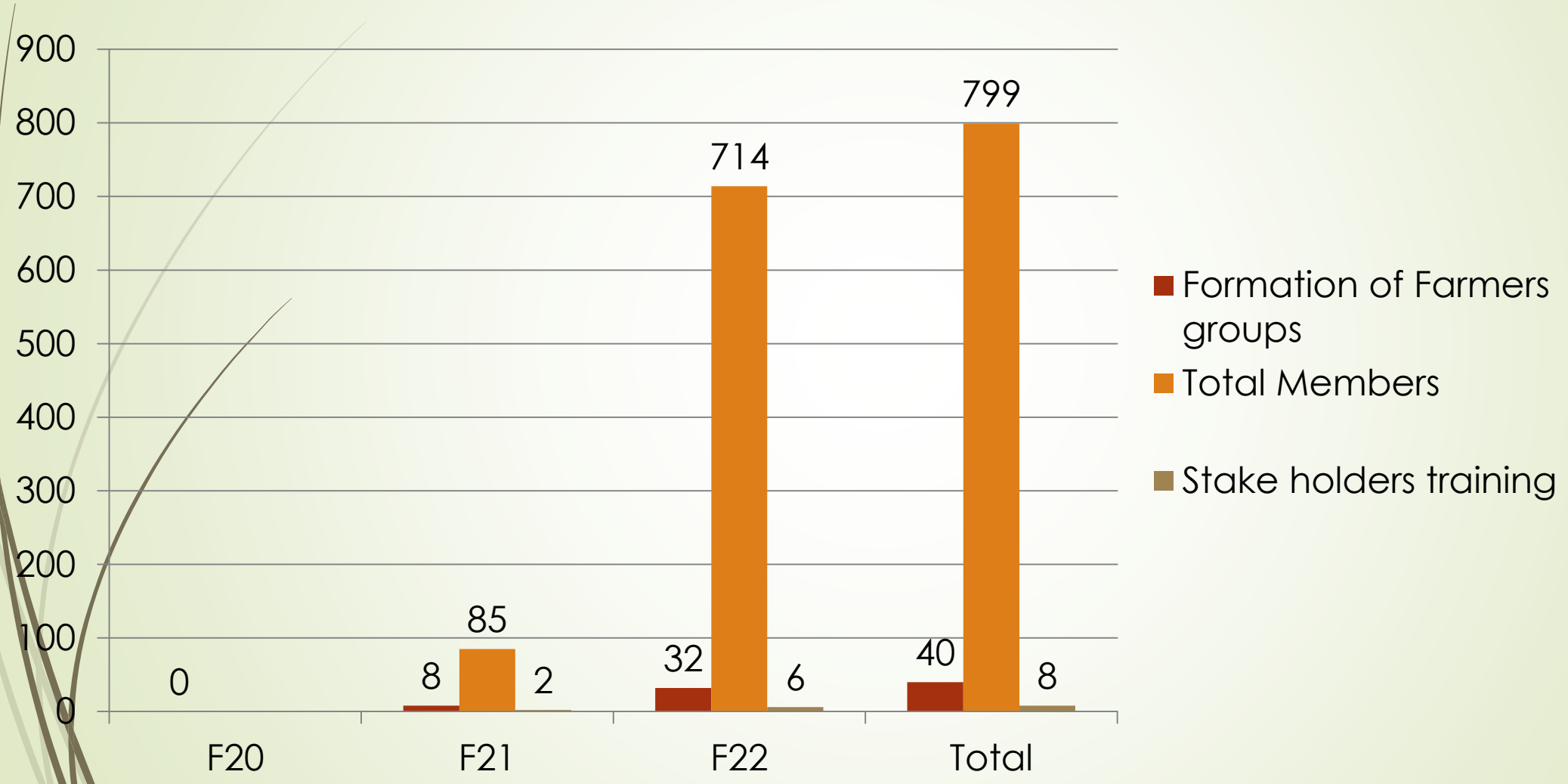
Human Health Camp



Intervention: 3. Formation and Capacity building of People organization :

Formation of People organization:	F22	F21	F20	Total
Target of Farmers Group Formation (annual)	28	12	0	40
No. of farmers groups formed	32	08	0	40
No. of men groups	20	06	0	26
No. of women groups (SHG)	01	02	0	03
No. of households	714	85	0	799
Training of Pos	06	02	0	08
Training Details:- <ul style="list-style-type: none">▪ General training of Group formation, objectives and future plan.▪ Group management, Saving credit.▪ Record keeping: Day book, Stock register, Muster, Bill and receipt etc▪ Capacity building on mahua laddu preparation and Turmeric processing.▪				

People Organization: Farmers Groups



QUALITY OF LIFE

Intervention:-4 Microenterprise Development for Farmers' groups

Name of Microenterprise :	MAHUA Flowers's Laddu Prod.	Turmeric Powder Making
1. Name of Farmers groups:	1. Ambika Women Self Help Group	2. Shivshakti Farmers Group
2. Village	Bhankhara	Bhankhara
3. Total members	10	06
4. Participated members in training	10	05
5. Training Arranged	01	01
6. Processing training :	1. Mahua Laddu	2. Turmeric Powder
7. Total Production plan & Achieve	Plan: 500 kgs : Achieve: 25 kgs	Plan: 65 kgs Achie: 68 kgs
8.Sale and Income:	15 Kgs Rs: 9000	25 Kgs Rs. 5000.0
8. Benefits:-	1. Orientation of Farmers group on commercial production. 2. Capacity building of Group members for production and management 3. Get experience of local retail sale.	
Remarks:	1. Both group received order from McCain	

Quality of Life:-

Intervention: 5 : Educational Infrastructure upgrade

Particulars	F22			F21	F20	Total
No of Infrastructure Upgrade	01	02	03	01	01	05
Village	Kundla	Joravarnagar	Ukhla dungri	Bhankhara	Ladiwada	
Detail of Upgrade	School water supply scheme	Inst. Class room roof sheets and inside color	Inst of Blocks at Dairy compound	Classroom water proofing- 3 Const. of Shed and repairing of floor, Outer side color	Water proofing of classroom-1 Girls sanitation unit-1 Outer side color	
Benefits	<ol style="list-style-type: none"> 1. Water leakage problem solved and now student can study in monsoon as well. 2. The Shed constructed is used for conducting morning prayer, serving Mid day meal, study, cultural programme & village meeting. 3. Girls provided good facility of washroom. 4. Clean and hygienic environment provided to the schools. 5. Easy availability of water at all the important places in the school. 6. Due to new roof of classroom , now student study in separate room. 					

Convergence with various agencies

Convergence	F22	F21	F20
Dist Live stock department	LN2, Health camp, Deworming, Vaccination Animal Insurance Travis	LN2, Health camp, Deworming, Vaccination Animal Insurance	LN2, Health camp, Deworming, Vaccination
Horticulture dept.	Horticulture orientation trg Fruit plantation & Veg. cultivation	Fruit plantation & Veg. cultivation	
KVK- Khedbrahma & Deesa	Farmers Training Onion saplings	Farmers training Strawberry cultivation	Farmers training
RSETI- BoB CSR	Bamboo Training		
Nalkantha vikas trust- Dist: Ahmedabad	Date leaf craft training Bamboo craft – equipment support		Tulsi plantation
VIKSAT- Kheroj	Turmeric Processing		

Thank You

सशक्त किसान



प्रोजेक्ट उत्थान