



Effect of DFI intervention

Name of KVK: ICAR-KVK, IDUKKI

Name of farmer: Ms. Mary Thankachan

Address: Perumanoor (H), Chemmanar P.O, Udumbanchola

Age: 57

Education: SSLC

Size of land holding (in acre): 5.5 acres

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	Small cardamom	4.5 acres	18 Q	1440000	720000
Field Crop 2	Paddy	1.0 acres	20 Q	64000	49000
Total				1504000	769000

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	Small cardamom	4.5 acres	18.8 Q	2350000	1575000	4.44	118.75
Field Crop 2	Paddy	1.0 acres	27 Q	94500	72500	35.00	47.96
Total				2444500	1647500		114.24

Brief: The farmer used to get annual income of Rs.769000/-. She faced problems like Nutrient deficiency, soil acidity, Iron toxicity, Pest and diseases attack. With DFI interventions like INM, IPDM she is getting annual income of Rs.1647500/-. In addition, there is cost saving of Rs.320000/- in the production of 40 Q.



IISR Cardamom Special applied cardamom field



Fine silica applied paddy field



Effect of DFI intervention

Name of KVK: ICAR-KVK, IDUKKI

Name of farmer: Mr. Aneesh Sebastin

Address: Naduvathannil, Rajakandam P.O., Vandenmedu

Age: 46

Education: SSLC

Size of land holding (in acre): 3.5 acres

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	Small cardamom	2.5 acres	10 Q	800000	400000
Field Crop 2	Black pepper	1.0 acres	3.4 Q	204000	102000
Total				1004000	502000

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	Small cardamom	2.5 acres	14 Q	1600000	1047500	40.00	161.88
Field Crop 2	Black pepper	1.0 acres	6 Q	219000	164250	76.47	61.03
Total				1819000	1211750		141.38

Brief: The farmer used to get annual income of Rs.502000/- He faced problems like Nutrient deficiencies, Pest, Disease attack etc. With DFI interventions like INM, IPDM in Black pepper, Cardamom, he is getting annual income of Rs.1211750/. In addition, there is cost saving of Rs.462000/- in the production of 20 Q.



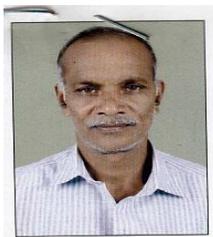
Panicle emergence observed after INM



IISR PGPR Capsule encapsulated pepper field

Effect of DFI intervention
Name of farmer: Mr. Kuriakose T.S.
Address: Thottikattil, Senapathy
Age: 57
Education: Pre degree
Size of land holding (in acre): 2 acres

Name of KVK: ICAR-KVK, IDUKKI



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	Small cardamom	1.5 acres	6 Q	480000	310000
Field Crop 2	Paddy	0.5 acre	13.2 Q	25080	17580
Total				505080	327580

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	Small cardamom	1.5 acre	8.5 Q	1062500	626250	41.67	102.02
Field Crop 2	Paddy	0.5 acre	15.7 Q	50820	43320	18.94	146.42
Total				1113320	669570		104.40

Brief: The farmer used to get annual income of Rs.327580/-. He faced problems like Pest and disease attack, nutrient deficiency etc. With DFI interventions like INM, IPDM he is getting annual income of Rs.669570/-. In addition, there is cost saving of Rs.200000/- in the production of 24.2 Q



EPN Applied cardamom field



Soil test based fertilizers applied paddy field

Effect of DFI intervention
Name of farmer: Mr. Paulose K.J
Address: Kollanopurath, Senapathy
Age: 57
Education: Pre degree
Size of land holding (in acre): 1 acre

Name of KVK: ICAR-KVK, IDUKKI



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	Small cardamom	1 acre	2 Q	259120	149120
Total				259120	149120

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	Small cardamom	1 acre	4.2 Q	506000	450000	110.00	201.77
Livestock 1	Dairy cattle	1	4500 L	189500	121500	> 100	> 100
Total				695500	571500		201.77

Brief: The farmer used to get annual income of Rs.149120/- He faced problems like Pest and disease attack, nutrient deficiency, Mastitis in cow. With DFI interventions like scientific dairy Management, INM and IPDM he is getting annual income of Rs.571500/-. In addition, there is cost saving of Rs.215000/- in the production of 4.2 Q & 4500 litre.



IISR Cardamom special sprayed cardamom field



Dairy cattle given with mastitis control measures



Effect of DFI intervention
Name of farmer: Mr. Suresh K. K.
Address: Kunnampurath, Senapathy
Age: 56
Education: 9th
Size of land holding (in acre): 1.3 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1 acre	3.5 Q	280000	93333
Field Crop 2	Black pepper	0.3 acre	0.5 Q	30000	22500
Total				310000	115833

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	Small cardamom	1 acre	4.0 Q	500000	216666	14.29	132.14
Field Crop 2	Black pepper	0.3 acre	0.9 Q	46000	37000	80.00	64.44
Total				546000	253666		118.99

Brief: The farmer used to get annual income of Rs.115833/-. He faced problems like Drought management nutrient deficiencies, pest and disease attack. With DFI interventions like PPFM spray, black pepper special application, INM, IPDM he is getting annual income of Rs.253666/-. In addition, there is cost saving of Rs.255000/- in the production of 4.9 Q.



PPFM sprayed cardamom field



IISR Black special sprayed Pepper field



Effect of DFI intervention
Name of farmer: Mr. Biju George
Address: Vellapallyil, Chemmanar
Age: 46
Education: SSLC
Size of land holding (in acre): 0.45 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	0.35 acre	1.4 Q	112000	52333
Field Crop 2	Black pepper	0.10 acre	0.2 Q	12000	9000
Total				124000	61333

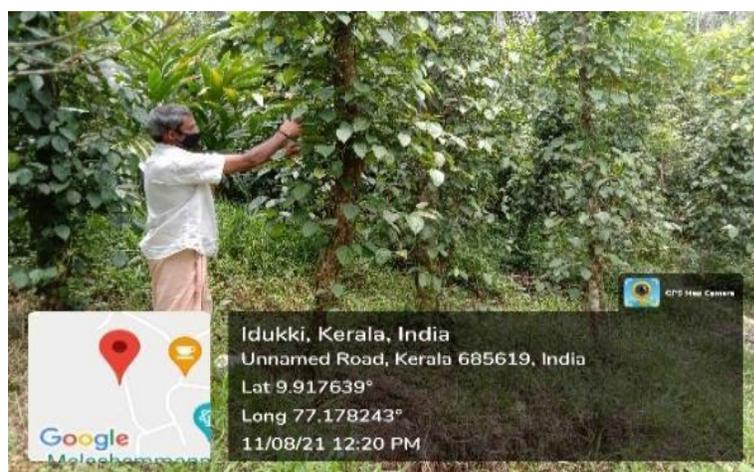
2) Status in 2020

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	Small cardamom	0.35 acre	2.7 Q	337500	112500	92.86	114.97
Field Crop 2	Black pepper	0.10 acre	0.34 Q	13600	10200	70.00	13.33
Total				351100	122700		100.06

Brief: The farmer used to get annual income of Rs.61333/- He faced problems like Pest and disease problem, foot rot disease in black pepper, Nutrient deficiencies etc. With DFI interventions like soil test based fertilizer application, cardamom special spray, introduction of new IISR Thevam variety of pepper he is getting annual income of Rs.122700/-. In addition, there is cost saving of Rs.250000/- in the production of 3.04 Q.



IISR Cardamom special sprayed cardamom field



Black pepper special sprayed pepper field



Effect of DFI intervention
Name of farmer: Mr. Bineesh George
Address: Pullatil, Rajakumari P.O
Age:41
Education: Civil Engineer
Size of land holding (in acre): 6 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	4 acres	16Q	1280000	896666
Field Crop 2	Pepper	2 acres	6.8Q	408000	206000
Total				1688000	1102666

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	Cardamom	4 acres	24.8Q	2100000	1700000	55.00	89.59
Field Crop 2	Pepper	2 acres	12 Q	820000	750000	76.47	264.08
Total				2920000	2450000		122.19

Brief: The farmer used to get annual income of Rs.1102666/- He faced problems like pest and disease attack, nutrient deficiencies and drought problems in small cardamom. With DFI interventions like PPFM spray, IISR Thevam varietal introduction in pepper, INM, IPDM he is getting annual income of Rs.2450000/- In addition, there is cost saving of Rs.325000/- in the production of 36.8Q.



PPFM sprayed cardamom field



IISR Thevam variety of black pepper

Effect of DFI intervention

Name of KVK: ICAR-KVK, IDUKKI

Name of farmer: Mr. Eldho P. T.

Address: Palal, Kulaparachal, Rajakumary

Age: 54

Education: B. Com.

Size of land holding (in acre): 1.23 acres

**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	Small cardamom	1.23 acres	2.5Q	250000	131666
Total				250000	131666

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	Small cardamom	1.23 acres	4.5 Q	562500	276500	80.00	110.00
Total				562500	276500		110.00

Brief: The farmer used to get annual income of Rs.131666/-. He faced problems like Pest and disease attack, Nutrient deficiencies. With DFI interventions like INM, IPDM he is getting annual income of Rs.276500/-. In addition, there is cost saving of Rs.140000/- in the production of 4.5 Q.



Clump rot infected small cardamom field



INM Demo field



Effect of DFI intervention
Name of farmer: Mr. Shiju V.C.
Address: Variampurath, N. R City
Age: 47
Education: Degree
Size of land holding (in acre): 3 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Black Pepper	2 acres	4 Q	240000	50000
Field Crop 2	Small Cardamom	1 acres	6 Q	1070000	685000
Total				1310000	735000

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	Black Pepper	2 acre	5 Q	200000	115000	25.00	130.00
Field Crop 2	Small Cardamom	1 acre	8.8 Q	1552000	1356000	46.67	97.96
Total				1752000	1471000		100.14

Brief: The farmer used to get annual income of Rs.735000/-. He faced problems like pest and disease attack, nutrient disorders. With DFI interventions like INM, IPDM he is getting annual income of Rs.1471000/-. In addition, there is cost saving of Rs.122000/- in the production of 13.8 Q.



IISR Pepper special applied field



ICM plot in small cardamom

Effect of DFI intervention

Name of KVK: ICAR-KVK, IDUKKI



Name of farmer: Mr. Scaria P.U.

Address: Pulinilkumthothiyil, Rajakumary

Age: 60

Education: M. Com.

Size of land holding (in acre): 5 acres

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	Small cardamom	4.0 acres	10 Q	800000	430000
Field Crop 2	Black pepper	1.0 acres	4 Q	250000	65000
Total				1050000	495000

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	Small cardamom	4.0 acre	15.0 Q	1875000	945000	50.00	119.77
Field Crop 2	Black pepper	1.0 acre	5Q	240000	101000	25.00	55.38
Total				2115000	1046000		111.31

Brief: The farmer used to get annual income of Rs.495000/-. He faced problems like less pollination and panicle setting, pest disease attack in pepper. With DFI interventions like bio fertilizer application, INM, IPDM, he is getting annual income of Rs.1046000/-. In addition, there is cost saving of Rs.368334/- in the production of 20 Q.



VAM applied Small cardamom field



INM in black pepper



Effect of DFI intervention
Name of farmer: Reji Joseph
Address: Kaippanlackal, Nettithozhu P.O Vandenmedu
Age: 50
Education: +2
Size of land holding (in acre): 1.50 Acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acres	3.60 Q	360000	240000
Total				360000	240000

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	Small Cardamom	1.5 acre	3.90 Q	546000	475000	8.33	97.92
Field Crop 2	Apiculture	15 Boxes	1.35 Q	72625	42625	> 100	> 100
Total				618625	517625		97.92

Brief: The farmer used to get annual income of Rs.240000 from small cardamom. He faced problems like drought, pest and disease management in small cardamom. With DFI interventions like introduction of bee units in small cardamom, IPDM in small cardamom, he is getting annual income of Rs.517625. In addition, there is cost saving of Rs.141000/- in the production of 5.25 Q.



Observing the field after application of PPFM



Capsule setting in PPFM sprayed field



Effect of DFI intervention
Name of farmer: Jaison Joseph
Address: 122,Oreethayil, 389, Santhanpara
Age: 41
Education: Vhse, Dairy Science
Size of land holding (in acre): 6 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	6 acre	15.36 Q	1228800	509600
Total				1228800	509600

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	Small cardamom	6 acre	22.50 Q	2700000	1200000	46.48	135.48
Total				2700000	1200000		135.48

Brief: The farmer used to get annual income of Rs.509600 from cultivating small cardamom. He faced problems like unscientific nutrient management, pest and disease management. With DFI interventions like Trainings and demonstration of Integrated nutrient management and drought mitigation programmes, he is getting annual net income of Rs.1200000. In addition, there is cost saving of Rs.120000/- in the production of 22.50 Q.



Diagnosing the pest and disease infestation in small cardamom



Application of botanical pesticide in small cardamom



Effect of DFI intervention
Name of farmer: Sabu V. K.
Address: Vadakkekudiyil, Arivilamchal, Kanakapuzha
Age: 48
Education: SSLC
Size of land holding (in acre): 2.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	2.5 acres	8.90 Q	712000	237333
Total				712000	237333

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	Small cardamom	2.5 acres	10.80 Q	1296000	482000	21.35	103.09
Total				1296000	482000		103.09

Brief: The farmer used to get annual income of Rs.237333/- from cultivating small cardamom. He faced problems like nutrient disorders and infestation of pest and diseases. With DFI interventions like training and demonstrations in nutrient, pest, disease management in small cardamom., he is getting annual income of Rs.482000/-. In addition, there is cost saving of Rs.380000/- in the production of 10.80 Q.



Observing the small cardamom field after application of PPFM



Effect of DFI intervention
Name of farmer: Appukuttan A. G.
Address: Arivilamchal, Kanakapuzha
Age: 52
Education: SSLC
Size of land holding (in acre): 4 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	4 acres	21.50 Q	1700000	573333
Total				1700000	573333

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	Small cardamom	4 acres	23.0 Q	2760000	1220000	6.98	112.79
Total				2760000	1220000		112.79

Brief: The farmer used to get annual income of Rs.573333/- from small cardamom. He faced problems like soil acidity, pest and disease attack in small cardamom. With DFI interventions like demonstrations of Integrated nutrient management and IPDM, trainings, extension activities in small cardamom, he is getting annual income of Rs.1220000/-. In addition, there is cost saving of Rs.667000/- in the production of 23.0 Q.



Observing the root grub infested cardamom field



Application of EPN in small cardamom



Effect of DFI intervention
Name of farmer: Mr. Saji George
Address: Ianthanakuzhil, Rajakumary South
Age: 50
Education: PDC
Size of land holding (in acre): 3.75 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Black Pepper	0.75 acre	2.62 Q	131000	96000
Field Crop 2	Cardamom	3.0 acre	18.0 Q	1440000	480000
Total				1571000	576000

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	Black Pepper	0.75 acre	3.50 Q	162750	127750	33.59	33.07
Field Crop 2	Cardamom	3.0 acre	22.50 Q	2700000	1070000	25.00	122.92
Total				2862750	1197750		107.94

Brief: The farmer used to get annual income of Rs.576000/-from Cardamom and Black Pepper. He faced problems like Unscientific nutrient management, Pest and Disease infestation etc. With DFI interventions like Demonstrations, Trainings, extension activities in Cardamom and Black pepper he is getting annual income of Rs.1197750/-. In addition, there is cost saving of Rs.850000/- in the production of 26.0 Q.



Observing the nutrient deficiency symptoms in black pepper



Demonstration of INM in black pepper



Effect of DFI intervention

Name of farmer: Mr. Mohannan M. K.

Address: Naramangalath, Manjakuzhi, Rajakumari

Age: 49

Education: SSLC

Size of land holding (in acre): 5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	5 acres	21.0 Q	1680000	560000
Total				1680000	560000

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	Small Cardamom	5 acres	30.0 Q	3000000	1240000	42.86	121.43
Total				3000000	1240000		121.43

Brief: The farmer used to get annual income of Rs.560000/- from cardamom. He faced problems like Drought, Unscientific nutrient management, etc. With DFI interventions like Demonstrations, Trainings, Extension activities he is getting annual income of Rs.1240000/-. In addition, there is cost saving of Rs.880000/- in the production of 30.0 Q.



Observing the plant after fertilizer application



Observing calcium and zinc deficiency in small cardamom



Effect of DFI intervention

Name of farmer: Ms. Sali Thomas

Address: Vallaserikudiyil, Kulaparachal, Rajakumary

Age: 54

Education: SSLC

Size of land holding (in acre): 1 acre 75 cents

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.75 acres	6.25 Q	874400	166666
Total				874400	166666

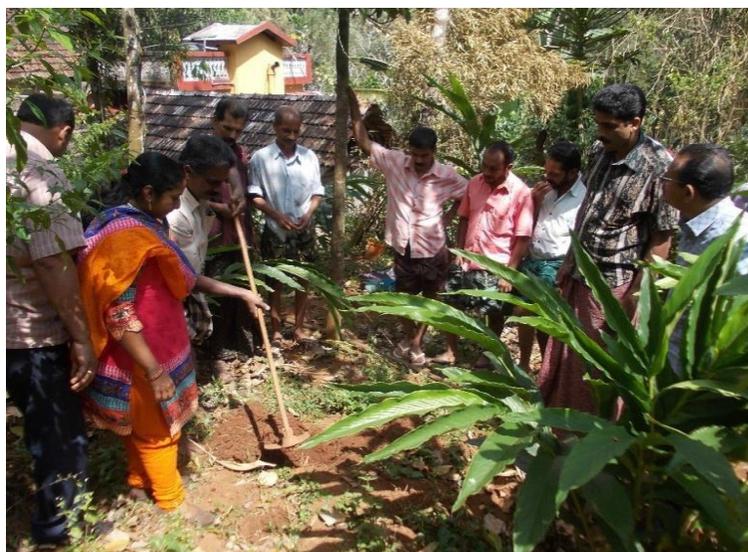
2) Status in 2020

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	Small Cardamom	2 acres	9.0 Q	900000	364000	44.00	118.40
Total				900000	364000		118.40

Brief: The farmer used to get annual income of Rs.166666/- from small cardamom etc. He faced problems like soil nutrient management, soil acidity, Disease incidence. With DFI interventions like Demonstrations, Trainings, Extension activities, he is getting annual income of Rs.364000/-. In addition, there is cost saving of Rs.292266/- in the production of 9.0 Q.



Demo field of small cardamom



Demonstration of soil sample collection



Effect of DFI intervention
Name of farmer: Ms. Jessy Benny
Address: Vettikkapalil, Kullaparachal

Name of KVK: ICAR-KVK, IDUKKI

Age: 42
Education: SSLC
Size of land holding (in acre): 1 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	Small Cardamom	1 acre	2.57 Q	205600	68533
Total				205600	68533

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	Small Cardamom	1 acre	3.5 Q	350000	176666	36.19	157.78
Total				350000	176666		157.78

Brief: The farmer used to get annual income of Rs.68533/-from small cardamom etc. He faced problems like Pest and disease, unscientific nutrient management etc. With DFI interventions like Demonstrations, Trainings, Extension activities., he is getting annual income of Rs.176666/-. In addition, there is cost saving of Rs.95933/- in the production of 3.50 Q.



Observing the nutrient deficiencies found in small cardamom



IISR Cardamom special sprayed field



Effect of DFI intervention
Name of farmer: Ms. Gracy Sunny
Address: Vettikapallil, Kulaparachal, Nettithozhu
Mobile Number: 9847859301
Age: 53
Education: 8th
Size of land holding (in acre): 0.8 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	0.8 acre	2.0 Q	160000	53333
Total				160000	53333

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	Small Cardamom	0.8 acre	3.15 Q	315000	125000	57.50	134.38
Total				315000	125000		134.38

Brief: The farmer used to get annual income of Rs.53333/- from small cardamom. He faced problems like Drought, pest and disease attack. With DFI interventions like Demonstrations, Trainings, Extension activities, he is getting annual income of Rs.125000/-. In addition, there is cost saving of Rs.103333/- in the production of 3.15 Q.



Observing the panicle initiation in small cardamom



Bio intensive pest management in small cardamom



Effect of DFI intervention
Name of farmer: Mr. Sabu
Address: Kannakapuzha, Senapathy
Age: 48
Education: SSLC
Size of land holding (in acre): 2.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2.5 acre	2.58 Q	206400	98800
Total				206400	98800

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	Small Cardamom	2.5 acre	4.50 Q	540000	210700	74.42	113.26
Total				540000	210700		113.26

Brief: The farmer used to get annual income of Rs.98800/- from small cardamom. He faced problems like Soil acidity, unscientific nutrient management, pest and disease problem etc. With DFI interventions like Demonstrations, Trainings, Extension activities, etc., he is getting annual income of Rs.210700/-. In addition, there is cost saving of Rs.252000/- in the production of 4.50 Q.



Observing the field after application IISR cardamom special



Observing the root grub infestation in small cardamom



Effect of DFI intervention
Name of farmer: Mr. Baiju E.S
Address: Arivilamchal, Senapathy
Age: 51
Education: SSLC
Size of land holding (in acre): 1 acre 60 cents

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.60 acre	2.59 Q	207200	99066
Total				207200	99066

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	Small cardamom	1.60 acre	3.65 Q	438000	247000	40.93	149.33
Total				438000	247000		149.33

Brief: The farmer used to get annual income of Rs.99066/- from small cardamom. He faced problems like Pest and disease attack. With DFI interventions like Demonstrations, Trainings, Extension activities, etc., he is getting annual income of Rs.247000/-. In addition, there is cost saving of Rs.100000/- in the production of 3.65 Q.



Observing the nutritional disorders in small cardamom



Fertilizer applied field



Effect of DFI intervention
Name of farmer: Rajendran
Address: Periyakanal
Age:60
Education:12th
Size of land holding (in acre): 2.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acre	7 Q	460000	260000
Field Crop 2	Black pepper	0.5 acre	5Q	175000	65000
Total				635000	325000

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	Small Cardamom	2 acre	12Q	820000	495000	71.43	90.38
Field crop 2	Black pepper	0.5acre	6.2Q	227500	134000	24.00	106.15
Other enterprise (Specify)	Apiculture	15 Boxes (Units)	1.5 Q	83250	47250	> 100	> 100
Total				1130750	676250		93.54

Brief: The farmer used to get annual income of Rs.325000/- from small cardamom and Black pepper. He faced problems like Root grub, Less pollination and Foot rot disease. With DFI interventions like EPN, Beekeeping, Pseudomonas application he is getting annual income of Rs.676250/-. In addition, there is cost saving of Rs.165000/- in the production of 19.7 Q.



Beekeeping in Small cardamom



IISR-Black pepper Colum methods intercrop with Small cardamom



Effect of DFI intervention
Name of farmer: Amuthan
Address: Suryanelli
Age:51
Education: ITI
Size of land holding (in acre):1.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acre	4.5Q	360000	175000
Total				360000	175000

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	Small Cardamom	1.5 acre	6.7Q	535000	368000	48.89	110.29
Total				535000	368000		110.29

Brief: The farmer used to get annual income of Rs.175000/- from small cardamom. He faced problems like Stem borer, Thrips, and Azukhal disease. With DFI interventions like Bio-intensive Pest management methods and integrated nutrient management he is getting annual income of Rs.368000/-. In addition, there is cost saving of Rs.132000/- in the production of 6.7 Q.



Bio-intensive Pest management in small cardamom field



Harvesting of green capsules in small cardamom field



Effect of DFI intervention
Name of farmer: Beno Mathew
Address: Mangathotty
Age:54
Education: 12th
Size of land holding (in acre): 1.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acre	6.4Q	744000	428000
Total				744000	428000

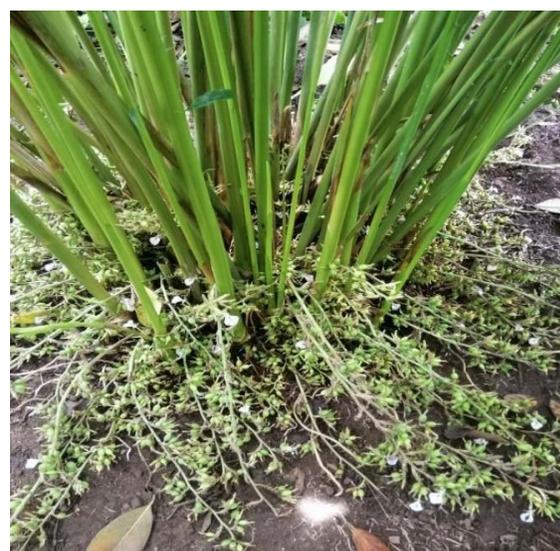
2) Status in 2020

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	Small Cardamom	1.5 acre	12Q	1320000	868000	87.50	102.80
Total				1320000	868000		102.80

Brief: The farmer used to get annual income of Rs.428000/- from small cardamom. He faced problems like Pythium and Fusarium disease. With DFI interventions like bio intensive Pythium and Fusarium management he is getting annual income of Rs.868000/-. In addition, there is cost saving of Rs.245000/- in the production of 12Q.



Pythium disease free small cardamom field



Fusarium disease free small cardamom field



Effect of DFI intervention
Name of farmer: Gurunathan
Address: Vattavada
Age: 31
Education: ITI
Size of land holding (in acre): 2 acre

Name of KVK: ICAR-KVK, IDUKKI

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.)
Hort. Crop 1	Beans	0.5 acre	12 Q	80000	32000
Hort Crop 2	Cabbage	0.5 acre	30 Q	75000	25000
Hort. Crop 3	Carrot	0.5 acre	21 Q	62000	29000
Hort. Crop 4	Straw berry	0.5 acre	28 Q	350000	205000
Total				567000	291000

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
Hort. Crop 1	Beans	0.5 acre	16 Q	112000	49000	33.33	53.13
Hort. Crop 2	Cabbage	0.5 acre	45 Q	135000	63000	50.00	152.00
Hort. Crop 3	Carrot	0.5 acre	34 Q	102000	46000	61.90	58.62
Hort. Crop 4	Straw berry	0.5 acre	51 Q	679000	519000	82.14	153.17
Total				1028000	677000		132.65

Brief: The farmer used to get annual income of Rs.291000/- from Beans, Cabbage, Carrot and Strawberry. He faced problems like Hybrid seeds, pest attack and good quality seedlings not available. With DFI interventions like introduced IIHR variety, good quality seedlings supplied, and bio intensive pest control he is getting annual income of Rs.677000/-. In addition, there is cost saving of Rs.185000/- in the production of 146 quintal.



ICM in Beans field



ICM in strawberry field



Effect of DFI intervention
Name of farmer: Arun
Address: Karunapuram
Age:31
Education: BBA
Size of land holding (in acre):2.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2.5 acre	8.5Q	765000	414000
Total				765000	414000

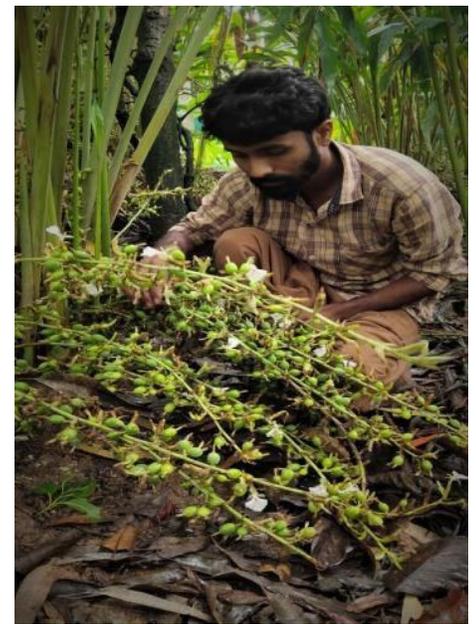
2) Status in 2020

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	Small Cardamom	2.5 acre	13.4Q	1474000	828000	57.65	100.00
Total				1474000	828000		100.00

Brief: The farmer used to get annual income of Rs.414000/- from small cardamom etc. He faced problems like clump rot and Azhukal. With DFI interventions like Bio-intensive pest management methods followed he is getting annual income of Rs.828000/-. In addition, there is cost saving of Rs.400000/- in the production of 13.4 Quintal.



PPFM sprayed small cardamom field



Disease free small cardamom field



Effect of DFI intervention
Name of farmer: K.T. Varghese
Address: Murinjapuzha, Peermade
Age:60
Education: High School
Size of land holding (in acre): 1

Name of KVK: ICAR-KVK, IDUKKI

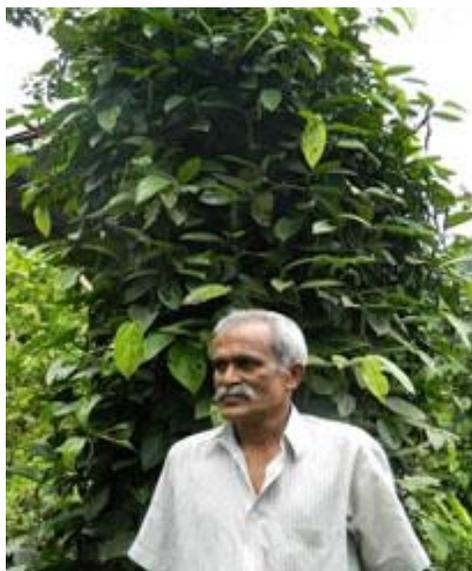
1) Before Intervention

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	Black pepper	0.5 acre	0.35Q	90000	45000
Field Crop 2	Black pepper Rooted cutting	0.5 acre	70,000 Nos	500000	
Total				590000	295000

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	Black pepper	0.6 acre	0.55 Q	175000	92000	57.14	104.44
Field Crop 2	Black Pepper Rooted cutting	0.5 acre	1,30,000 Nos	900000	500000	85.71	100.00
Total				1075000	592000		100.68

Brief: The farmer used to get annual income of Rs.295000/- from black pepper. He faced problems like foot rot disease. With DFI interventions like Foot rot resistant variety IISR Thevam introduced, he is getting annual income of Rs.592000/-. In addition, there is cost saving of Rs.592000/- in the production of 0.55 Quintal.



Foot rot resistance variety of black pepper



Farm Innovation Kumbukkal rooted cuttings unit



Effect of DFI intervention
Name of farmer: Saju P. D.
Address:Kanakapuzha Arivilamchal
Age:43
Education: 12th Class
Size of land holding (in acre): 1.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acre	5.5 Q	465000	294000
Total				465000	294000

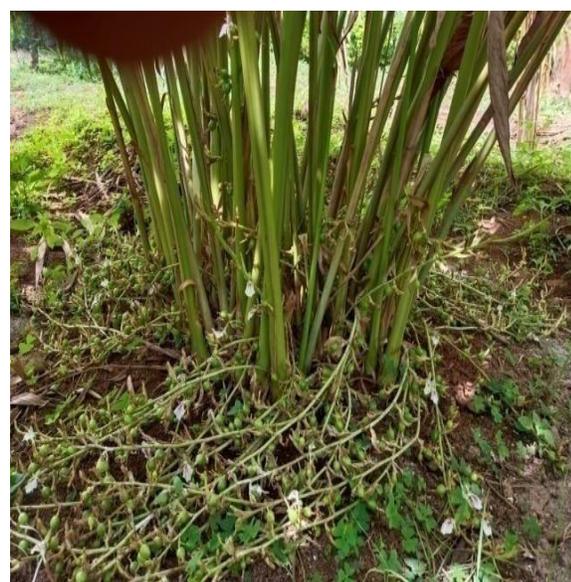
2) Status in 2020

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	Small Cardamom	1.5 acre	8.2 Q	861000	623000	49.09	111.90
Total				861000	623000		111.90

Brief: The farmer used to get annual income of Rs.294000/- from small cardamom. He faced problems like Fusarium disease. With DFI interventions like IDM in Fusarium management methods followed he is getting annual income of Rs.623000/-. In addition, there is cost saving of Rs.241000/- in the production of 8.2 quintal.



Fusarium Disease free small cardamom field



Below ETL and DI level maintained small cardamom field



Effect of DFI intervention
Name of farmer: Latheesh P.N.
Address: Kankappuzha
Age:41
Education: 12th
Size of land holding (in acre): 1.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acres	7 Q	646000	241000
Total				646000	241000

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	Small Cardamom	1.5 acres	12 Q	1155000	621000	71.43	157.68
Total				1155000	621000		157.68

Brief: The farmer used to get annual income of Rs.241000/- from small cardamom. He faced problems like Phoma and Fusarium diseases. With DFI interventions like ICM in small cardamom methods followed he is getting annual income of Rs.621000/-. In addition, there is cost saving of Rs.265000/- in the production of 12 Quintal.



Phoma and Fusarium Diseases free small cardamom field



Panicle length and Capsule size increased small cardamom field



Effect of DFI intervention
Name of farmer: Sajimon
Address: Thandel, Kanakapuzha
Age:51
Education: High School
Size of land holding (in acre):2

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acres	6.5 Q	524000	246000
Total				524000	246000

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	Small Cardamom	2 acres	8.9Q	795000	515000	36.92	109.35
Other enterprise (Specify)	Apiculture	10 Boxes (Units)	1.2 Q	55250	37250	> 100	> 100
Total				850250	552250		109.35

Brief: The farmer used to get annual income of Rs.246000/- from small cardamom. He faced problems like reduced pod setting, Root knot Nematodes and Fusarium. With DFI interventions like Bio-intensive pest management and beekeeping followed he is getting annual income of Rs.552250/-. In addition, there is cost saving of Rs.214000/- in the production of 8.9 Quintal.



Bio intensive disease and pest Management in small cardamom



Beekeeping to enhance pollination



Effect of DFI intervention
Name of farmer: Mohanan
Address: Arivilamchal, Santhanpara
Age:49
Education: 12th
Size of land holding (in acre): 2

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acres	8.2 Q	655000	325000
Total				655000	325000

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	Small Cardamom	2 acres	10 Q	1145000	723000	21.95	122.46
Total				1145000	723000		122.46

Brief: The farmer used to get annual income of Rs.325000/- from small cardamom. He faced problems like Phoma, Bacterial wilt and Stem borer. With DFI interventions like ICM in small cardamom, he is getting annual income of Rs.723000/-. In addition, there is cost saving of Rs.285000/- in the production of 10 Quintal.



Bio-intensive Pest management in small cardamom field



Bacterial wilt disease free small cardamom capsule harvested



Effect of DFI intervention
Name of farmer: Mr. Biju M. Paul
Address: Mangalath, Udumbanchola
Age: 52
Education: SSLC
Size of land holding (in acre): 1 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1 acre	3.2 Q	272000	147000
Total				272000	147000

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	Cardamom	1 acre	3.75 Q	450000	275000	17.19	87.07
Other enterprise (Specify)	Apiculture	15 Boxes (Units)	1.35 Q	74250	44250	> 100	> 100
Total				524250	319250		87.07

Brief: The farmer used to get annual income of Rs.147000/- from small cardamom. He faced problems of Soil Acidity, pest disease infestation. With DFI interventions like demonstration and trainings in in soil Health Management, IPDM and Apiculture in small cardamom. He is getting annual income of Rs.319250/-. In addition, there is cost saving of Rs.180000/- in the production of 5.10 Q.



Observation of the cardamom yield after Micronutrient application



Field visit conducted to Cardamom field



Effect of DFI intervention
Name of farmer: Mr. Sajimon V. S.
Address: Valummel, Udumbanchola
Age: 49
Education: PDC
Size of land holding (in acre): 3 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acres	5.4 Q	432000	220000
Field Crop 2	Paddy	1 acre	14.2 Q	42600	17600
Total				474600	237600

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	Cardamom	2 acre	5.90 Q	708000	458000	9.26	108.18
Field Crop 2	Paddy	1 acre	15.0 Q	60000	30000	5.63	70.45
Total				768000	488000		105.39

Brief: The farmer used to get annual income of Rs.237600 from small cardamom and Paddy. He faced problems like Iron toxicity in Paddy and Improper nutrient management. With DFI interventions like demonstration and training on application of fine silica in Paddy, Mushroom cultivation using paddy straw, and training on integrated nutrient management in small cardamom. he is getting annual income of Rs.488000. In addition, there is cost saving of Rs.1,51000/- in the production of 20.90 Q.



Soil test based fertilizer applied cardamom field



Fine silica applied Paddy field



Effect of DFI intervention
Name of farmer: Ms. Mini Jiji
Address: Chettissery, Udumbanchola
Age: 52
Education: SSLC
Size of land holding (in acre): 1 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1 acre	2.8 Q	224000	145000
Total				224000	145000

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	Cardamom	1 acre	3.8 Q	532000	357000	35.71	146.21
Total				532000	357000		146.21

Brief: The farmer used to get annual income of Rs.145000/- from small cardamom. she faced problems like soil acidity and pest disease infestation in small cardamom. With DFI interventions like on farm trail, and trainings on IPDM and soil Health management, she is getting annual income of Rs.357000/-. In addition, there is cost saving of Rs.116000 in the production of 3.8 Q.



Field visit to diagnose Zinc deficiency in cardamom



INM cardamom field



Effect of DFI intervention
Name of farmer: Ms. Shilvy Titus
Address: Parayil, Udumbanchola
Age: 40
Education: VHSE, JDC
Size of land holding (in acre): 2 acre 50 cents

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acre	4.45 Q		221000
Livestock 1	Cattle	3 nos.	6300 lit/year	170100	100100
Total				526100	321100

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	Cardamom	2 acres	4.6	632800	422800	3.37	91.31
Livestock 1	Cattle	3 no.	7500 lit	315000	247500	19.05	147.25
Total				947800	670300		108.75

Brief: The farmer used to get annual income of Rs.321100 from cardamom and dairy cattle. she faced problems like pest and disease infestation, improper nutrient management and mastitis in dairy cattle. With DFI interventions like demonstration on mastitis control, trainings on scientific nutrient management and pest disease, management in small cardamom, she is getting annual income of Rs.670300/-. In addition, there is cost saving of Rs.176200 in the production of 4.60 Q and 7500 lit.



Monitoring Disease and pest symptoms in Cardamom



Mastitis control management demo in Dairy cattle



Effect of DFI intervention
Name of farmer: Mr. K. G. Krishnankutty
Address: Koyikkal, Rajakandam P.o, Nettithozhu
Age: 51
Education: SSLC
Size of land holding (in acre): 1.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acre	3.0 Q	388680	223680
Field Crop 2	Black pepper	0.5 acre	0.45 Q	22920	10420
Total				411600	234100

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	Small Cardamom	1.5 acre	6.30 Q	759000	675000	110.00	201.77
Field Crop 2	Black pepper	0.5 acre	1 Q	62500	34000	122.22	226.30
Hort. Crop 1	Cowpea	0.5 acre	10.0 Q	40000	25000	> 100	> 100
Livestock 1	Cattle	5 nos.	13500 L	513000	329800	> 100	> 100
Total				1374500	1063800		202.86

Brief: The farmer used to get annual income of Rs.234100/- from Black Pepper and Small cardamom. He faced problems like pest attack in pepper, Disease infestation and unscientific nutrient management in small cardamom. With DFI interventions like varietal introduction of cowpea, Front line demonstration in pest management in cowpea, demonstration and trainings on mastitis control in dairy cattle and trainings on Integrated nutrient management in pepper and small cardamom, he is getting annual income of Rs.1063800/-. In addition, there is cost saving of Rs.315000/- in the production of 17.3 Q, 13500 litres.



Oestrus synchronization demonstration in Dairy cattle



Demo on Application of IISR Black Pepper spray to mitigate Nutrient deficiency disorders



Effect of DFI intervention
Name of farmer: Mr. E.K Jose
Address: Erattamundakkal, Vadanmedu
Age: 65
Education: SSLC
Size of land holding (in acre): 1 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1 acre	4 Q	320000	238000
Total				320000	238000

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	Cardamom	1 acre	4.35 Q	609000	474000	8.75	99.16
Other enterprise (Specify)	Fisheries	200 no	0.93 Q	20460	16460	> 100	> 100
Total				629460	490460		99.16

Brief: The farmer used to get annual income of Rs.238000 from small cardamom. He faced problems like Drought and attack of stem borer. With DFI interventions like drought management practices by PPFM application and demonstration and trainings on bio intensive pest management in small cardamom he is getting annual income of Rs.490460. In addition, there is cost saving of Rs.97000/- in the production of 5.28 Q.



Spraying of PPFM spray to mitigate drought in small cardamom



PPFM applied small cardamom field



Effect of DFI intervention
Name of farmer: Mr. Lalu Varghese
Address: Chirackaparambil , Nettithozhu
Age: 38
Education: PDC
Size of land holding (in acre): 2.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acre	4.2 Q	336000	211000
Field Crop 2	Black pepper	0.5 acre	2 Q	104000	49000
Total				440000	260000

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	Cardamom	2 acre	4.75 Q	665000	503000	13.10	138.39
Field Crop 2	Black Pepper	0.5 acre	2.65 Q	90100	55100	32.50	12.45
Total				755100	558100		114.65

Brief: The farmer used to get annual income of Rs.2,60000 from small cardamom and black pepper. He faced problems unscientific nutrient management, nutritional disorders, and pest-disease infestation in small cardamom. With DFI interventions like trainings, demonstrations and trails on bio intensive disease and pest management in small cardamom and black pepper, Trainings on balanced use of fertilizers, he is getting annual income of Rs.558100. In addition, there is cost saving of Rs.167000 in the production of 7.40 Q.



Addressing nutritional deficiency in small cardamom



Observing the Spike length after demonstration of IISR PGPR Capsule in Black Pepper



Effect of DFI intervention
Name of farmer: Mr. Vijaykumar
Address: Kannankarayil, Udumbanchola
Age: 49
Education: SSLC
Size of land holding (in acre): 3 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	3 acre	9 Q	800000	266000
Livestock 1	Cattle	4 nos.	6600 lit	211200	196700
Total				1011200	462700

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	Small Cardamom	3 acres	10 Q	1000000	650000	11.11	144.36
Livestock 1	Cattle	4 nos.	8400 lit	352800	288950	27.27	46.90
Total				1352800	938950		102.93

Brief: The farmer used to get annual income of Rs.462700/-from small cardamom and dairy cattle. He faced problems like disease management in dairy cattle, damping off in small cardamom and nutritional disorders in small cardamom. With DFI interventions like conducting Frontline demonstration on Dairy cattle disease like mastitis control, nutritional disorders in dairy cattle, trainings in IPDM in small cardamom, balanced use of fertilizers, he is getting annual income of Rs.938950. In addition, there is cost saving of Rs.400000/- in the production of 10 Q and 8400 lit.



Diagnosing the calcium deficiency found in small cardamom



Diagnosing the nutritional disorders in dairy cattle



Effect of DFI intervention
Name of farmer: Ms. Shaiby Saji
Address: Valummel, Udumbanchola
Age: 39
Education: Degree
Size of land holding (in acre): 8 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	8 acres	28 Q	2240000	750000
Total				2240000	750000

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	Cardamom	8 acres	29.5 Q	4130000	1580000	5.36	110.67
Total				4130000	1580000		110.70

Brief: The farmer used to get annual income of Rs.750000/- from small cardamom cultivation. He faced problems like Unscientific nutrient management, Fusarium problems and drought management issues in cardamom. With DFI interventions like trials and demonstrations and trainings on EPN application, and bio intensive pest disease management in small cardamom she is getting annual income of Rs.1580000. In addition, there is cost saving of Rs.200000 in the production of 29.50 Q.



Observing the root growth after the application of fertilizers



Observing the capsule setting after the application soil test based fertilizers



Effect of DFI intervention
Name of farmer: Raveendran Nair
Address: Chempakasseril, Rajakandam P.O Vandenmedu
Age: 62
Education: Degree
Size of land holding (in acre): 4 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	3.5 acre	7 Q	1440000	480000
Hort. Crop 1	Banana	0.4 acre	111.5 Q	278750	143750
Livestock 1	Cattle	10 nos.	15500 L	816000	436400
Total				2534750	1060150

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	Cardamom	3.5 acres	14.7 Q	2800000	1825000	110.00	280.21
Hort. Crop 1	Banana	0.4 acre	266.6 Q	566500	366500	139.10	154.96
Livestock 1	Cattle	10 nos.	32800 L	1209600	875680	111.61	100.66
Total				4576100	3067180		189.32

Brief: The farmer used to get annual income of Rs.1060150 from Cardamom, Banana, Cattle. He faced problems like pest and disease management, unscientific nutrient management, lack of improved variety in banana, pest and disease attack in Banana. With DFI interventions like demonstrations, trails and trainings on IPDM and INM in small cardamom and Banana, and, he is getting annual income of Rs.3067180/-. In addition, there is cost saving of Rs.1215000/- in the production of 241.3 Q & 32800 litres.



Observing the nematode infestation in small cardamom



Demonstration on spraying of mastitis control



Effect of DFI intervention
Name of farmer: Danny Augustine
Address: Vevam Plackal Pottankad PO
Age: 42
Education: PREE DEGREE
Size of land holding (in acre):5.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	4 acres	8 Q	1036480	596480
Field Crop 2	Pepper	1.5 acres	1.35 Q	68760	31260
Hort. Crop 1	Ginger	1 acre	20 Q	300000	150000
Livestock 1	Cattle	3 Nos.	13500 L	432000	228000
Livestock 2	Goat	4 Nos.	4 Nos.	18000	13000
Total				1855240	1018740

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	Cardamom	4 acre	16.8 Q	2024000	1800000	110.00	201.77
Field Crop 2	Pepper	1.5 acre	3 Q	187500	102000	122.22	226.30
Hort. Crop 1	Ginger	1 acre	45 Q	700000	365000	125.00	143.33
Livestock 1	Cow	4	44000 L	908000	508900	225.93	123.20
Livestock 2	Goat	5	9 Nos.	40000	27000	125.00	107.69
Total				3859500	2802900		175.13

Brief: The farmer used to get annual income of Rs.1018740/- from Agriculture and Allied activities. He faced problems like Nutrient disorders, Root grub, and Foot rot disease. With DFI interventions like Bio- intensive Pest management methods, micronutrient sprays and scientific dairy cattle management, he is getting annual income of Rs.2802900/- In addition, there is cost saving of Rs.765000 /- in the production of 64.8 Q of Cardamom, Black pepper, Ginger and 44000 liters of Milk.



Farm visit in animal Husbandry field



Fusarium disease free small cardamom field



Effect of DFI intervention
Name of farmer: Felbin George
Address: Angaliyath
Age: 37
Education: SSLC
Size of land holding (in acre):2.25 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1.25 acres	2 Q	259120	149120
Field Crop 2	Pepper	0.5 acre	0.45 Q	22920	10420
Livestock 1	Cow	3 nos.	5200 L	230400	147800
Livestock 2	Goat	4 nos.	4 nos.	18000	13000
Total				530440	320340

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	Cardamom	1.5 acres	4.2 Q	506000	450000	110.00	201.77
Field Crop 2	Pepper	0.5 acre	1 Q	62500	34000	122.22	226.30
Livestock 1	Cow	3 nos.	10800 L	453600	370000	107.69	150.34
Livestock 2	Goat	5 nos.	9 Nos.	40000	27000	125.00	107.69
Total				1062100	881000		175.02

Brief: The farmer used to get annual income of Rs.320340/- from Agriculture and Allied activities. He faced problems like more pest disease attack, soil acidity and mastitis problems in dairy cattle. With DFI interventions like Bio-intensive Pest management methods, soil test based fertilizer applications and scientific dairy cattle management to control mastitis, he is getting annual income of Rs.881000/-. In addition, there is cost saving of Rs.319250/- in the production of 5.2 Q of Cardamom and Black pepper.



Farm visit in animal Husbandry field



Fusarium disease free small cardamom field



Effect of DFI intervention
Name of farmer: Johnson Mathew
Address: Kudumba kuzhiyil house
Age:54
Education: SSLC
Size of land holding (in acre):2.25 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1.25 acres	2.5 Q	259120	149120
Field Crop 2	Pepper	1 acre	0.9 Q	45840	20840
Livestock 1	Cow	2 Nos.	5200 L	259200	104000
Total				564160	273960.00

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	Cardamom	1.5 acres	4.2 Q	506000	450000	68.00	201.77
Field Crop 2	Pepper	1 acre	2 Q	125000	68000	122.22	226.30
Livestock 1	Cow	3 Nos.	10800 L	453600	252500	107.69	142.79
Total				1084600	770500		181.25

Brief: The farmer used to get annual income of Rs.273960 from Agriculture and Allied activities. He faced problems like Root grub, foot rot in pepper and mastitis in cattle disease etc. With DFI interventions like Bio-intensive Pest management methods, introduction of IISR Thevam foot rot resistant variety, he is getting annual income of Rs.770500/- In addition, there is cost saving of Rs.341000 in the production of 6.2 Q of Cardamom and Black pepper.



Farm visit in animal Husbandry field



Fusarium disease free small cardamom field



Effect of DFI intervention
Name of farmer: K. C. Thomas
Address: Kunjarakkattu house
Age: 53
Education: SSLC
Size of land holding (in acre):2 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1 acre	2 Q	409000.00	210000.00
Field Crop 2	Pepper	1 acre	0.90 Q	45840.00	20840.00
Livestock 1	Cow	3 nos.	10800 lit	540000.00	324000.00
Total				994840.00	554840.00

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	Cardamom	1 acre	4.5 Q	821000.00	473460.00	125.00	125.46
Field Crop 2	Pepper	1 acre	2 Q	125000.00	68000.00	122.22	226.30
Livestock 1	Cow	4 no.	28000 lit	1200000.00	720000.00	159.26	122.22
Total				2146000.00	1261460.00		127.36

Brief: The farmer used to get annual income of Rs.554840. He faced problems like drought management problems in small cardamom and nutrient disorders in dairy cattle. With DFI interventions like scientific dairy cattle management, bio intensive pest management methods PPFM spray, he is getting annual income of Rs.1261460/-. In addition, there is cost saving of Rs.430700 in the production of 6.5 Q of cardamom and black pepper.



PPFM Sprayed small cardamom field



Cattle fed with nutrient supplements



Effect of DFI intervention
Name of farmer: Manu Joseph
Address: Niravathur parambil
Age: 40
Education: PRE DEGREE
Size of land holding (in acre): 2.50 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Pepper	2 acre	1.8 Q	91680.00	41680.00
Livestock 1	Cow	1 no.	1500 lit	48000.00	36000.00
Total				139680.00	77680.00

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	Pepper	2 acres	4 Q	250000.00	136000.00	122.22	226.30
Livestock 1	Cow	1 no.	3100 L	100800.00	76000.00	106.67	111.11
Total				350800.00	212000.00		172.91

Brief: The farmer used to get annual income of Rs.77680. He faced problems like root grub, less pollination and foot rot disease etc. With DFI interventions like varietal introduction of IISR Thevam variety against foot rot and EPN application, he is getting annual income of Rs.212000/-In addition, there is cost saving of Rs.70000 in the production of 4 Q of cardamom and black pepper.



Foot rot resistance variety of black pepper



Farm visit in animal Husbandry field



Effect of DFI intervention
Name of farmer: Kunjamma Joseph
Address: Chirackkal
Age: 70
Education: SSLC
Size of land holding (in acre):1 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Black pepper	1 acre	0.90 Q	45840.00	20840.00
Livestock 1	Cow	3 nos.	10800 lit	540000.00	324000.00
Total				585840.00	344840.00

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	Black pepper	1 acre	2 Q	125000	68000	122.22	226.30
Livestock 1	Cow	5 no.	28000 lit	1200000	720000	159.26	122.22
Total				1325000	788000		128.51

Brief: The farmer used to get annual income of 344840. He faced problems like fusarium in small cardamom and mastitis in dairy cattle. With DFI interventions like bio intensive disease management methods and scientific dairy cattle management he is getting annual income of Rs.788000. In addition, there is cost saving of 150000 in the production of 2 Q of black pepper.



Farm visit in animal Husbandry field



Pythium disease free small cardamom field



Effect of DFI intervention
Name of farmer: Nimmy Sino Jose
Address: Puthettu house
Age: 40
Education: SSLC
Size of land holding (in acre):1.25 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	Tapioca	1.25 acres	50 Q	25000	17000
Livestock 1	Cow	1 no.	1500 L	48000	36000
Livestock 2	Hen	4 nos.	800 Nos.	4800	2880
Total				77800	55880

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	Tapioca	1.25 acre	110 Q	55000	39500	120.00	132.35
Livestock 1	Cow	1 no.	3100 L	100800	76000	106.67	111.11
Livestock 2	Hen	10 nos.	2000 Nos.	16000	8600	150.00	198.61
Total				171800	124100		122.08

Brief: The farmer used to get annual income of Rs.55880/-. He faced problems like mosaic disease, less yield in tapioca and mastitis in dairy cattle. With DFI interventions like bio intensive disease management methods and scientific dairy cattle management, he is getting annual income of Rs.124100/- In addition, there is cost saving of Rs.55000/- in the production of 110 Q of tapioca.



Animals undergone mastitis control measures



Farm field of Sree Pavitra variety of tapioca



Effect of DFI intervention

Name of KVK: ICAR-KVK, IDUKKI

Name of farmer: Shaji P. M.
Address: Payattukala nirappel
Age: 46
Education: SSLC

Size of land holding (in acre):2 acres

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	Pepper	0.5 acre	0.45 Q	22920	10420
Field Crop 2	Cardamom	1.5 acre	2 Q	80000	65000
Livestock 1	Cow	3 Nos.	5200 lit	230400	147800
Total				333320	223220

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	Pepper	0.5 acre	1 Q	62500	34000	122.22	226.30
Field Crop 2	Cardamom	1.5 acre	4 Q	440000	400000	100.00	515.38
Livestock 1	Cow	3 nos.	10800 L	453600	370000	107.69	150.34
Total				956100	804000		260.18

Brief: The farmer used to get annual income of 223220. He faced problems like Pythium and fusarium in small cardamom and quick wilt in pepper. With DFI interventions like bio intensive disease management methods and pseudomonas application, PPFM Spray and EPN Technology, he is getting annual income of Rs.804000. In addition, there is cost saving of 320560 in the production of 5 Q of cardamom and black pepper.



Pythium disease free small cardamom field



Farm visit in animal Husbandry field



Effect of DFI intervention
Name of farmer: Moly Jose
Address:Kunjarakkattu house
Age: 63
Education: SSLC
Size of land holding (in acre):1.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1.5 acres	2 Q	259120	149120
Livestock 1	Goat	4 nos.	4 nos.	18000	13000
Total				277120	162120

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	Cardamom	1.5 acre	4.2 Q	506000	450000	110.00	201.77
Livestock 1	Goat	5 nos.	9 nos.	40000	27000	125.00	107.69
Total				546000	477000		194.23

Brief: The farmer used to get annual income of Rs.162120/-. He faced problems like nutrient deficiency in small cardamom and drought management in small cardamom. Due to less price during 2019 the pepper crop has been replaced by small cardamom. With DFI interventions like bio intensive pest management methods, Integrated nutrient management, soil test based fertilizer application, and pseudomonas application, he is getting annual income of Rs.477000/-. In addition, there is cost saving of Rs.180000 in the production of 4.2 Q of cardamom.



Fusarium disease free small cardamom field



Farm visit in animal Husbandry field



Effect of DFI intervention
Name of farmer: Philomina joy
Address: Kunjarakkattu house
Age: 61
Education: PREE DEGREE
Size of land holding (in acre):1 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Pepper	0.5 acre	0.45 Q	22920	10420
Livestock 1	Cow	3 nos.	5200 L	230400	147800
Livestock 2	Hen	10 nos.	1700 Nos.	10200	6120
Total				263520	164340

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	Pepper	0.5 acre	1 Q	62500	34000	122.22	226.30
Livestock 1	Cow	3 nos.	10800 L	453600	370000	107.69	150.34
Livestock 2	Hen	15 nos.	3900 Nos.	31200	16000	129.41	161.44
Total				547300	420000		155.57

Brief: The farmer used to get annual income of Rs.164340/-. He faced problems like pest and disease, nutrient deficiency. With DFI interventions like INM, IPDM, he is getting annual income of Rs.420000. In addition, there is cost saving of Rs.173525/- in the production of 1 Q of black pepper.



Farm visit in animal Husbandry field



Pythium disease free small cardamom field



Effect of DFI intervention
Name of farmer: Sajimon T.P.
Address: Thekkadiyil, Chemmanar P.O, Melechemmanar
Age: 46
Education: plus 2
Size of land holding (in acre): 2 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1.0 acres	4 Q	320000	160000
Total				320000	160000

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	Small cardamom	2.0 acres	7 Q	1050000	350000	75.00	118.75
Total				1050000	350000		118.75

Brief: The farmer used to get annual income of 160000/-. He faced problems like Nutrient deficiency, soil acidity, Iron toxicity, Pest and diseases attack etc. With DFI interventions like INM, IPDM he is getting annual income of 350000/-. In addition, there is cost saving of 30000/- in the production of 7 Q.



Clump rot affected field



IPDM Intervention plot



Effect of DFI intervention
Name of farmer: Mr. Eldose Cheriyan
Address: Edakkeriyil, chemmanar
Age: 50
Education: SSLC
Size of land holding (in acre): 2.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	2.5 acres	8 Q	640000	300000
Total				640000	300000

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	Small cardamom	2.5 acres	9 Q	1125000	600000	12.50	100.00
Total				1125000	600000		100.00

Brief: The farmer used to get annual income of 300000/-. He faced problems like Nutrient deficiencies, Pest, Disease attack etc. With DFI interventions like INM, IPDM in Black pepper, Cardamom, he is getting annual income of 600000/-. In addition, there is cost saving of 212000/- in the production of 9 Q.



Nutrient deficient plot



INM plot



Effect of DFI intervention
Name of farmer: Mr. Basil Abraham
Address: Edakkat(H), Kulaparachal P.O, Rajakumary
Age: 38
Education: SSLC
Size of land holding (in acre): 3.0acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	3.0 acres	6 Q	480000	240000
Total				480000	240000

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	Small cardamom	3.0 acres	7 Q	1050000	525000	16.67	118.75
Total				1050000	525000		118.75

Brief: The farmer used to get annual income of 240000/-. He faced problems like Nutrient deficiency, soil acidity, Iron toxicity, Pest and diseases attack etc. With DFI interventions like INM, IPDM he is getting annual income of 525000/-. In addition, there is cost saving of 200000/- in the production of 7 Q.



Cardamom field – disease infected



ICM field



Effect of DFI intervention
Name of farmer: Ms. Beena Aji
Address: Varakkil, Kullaparachal, Rajakumary
Age: 38
Education: PDC
Size of land holding (in acre): 1.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1.5 acres	5Q	400000	195000
Total				400000	195000

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	Small cardamom	1.5 acres	6 Q	900000	390000	20.00	100.00
Total				900000	390000		100.00

Brief: The farmer used to get annual income of 195000/-. He faced problems like Nutrient deficiencies, Pest, Disease attack etc. With DFI interventions like INM, IPDM in Cardamom, she is getting annual income of 390000/-. In addition, there is cost saving of 250000/- in the production of 6 Q.



Immature capsule shedding in cardamom



INM plot with application of micronutrients



Effect of DFI intervention
Name of farmer: Mr. Shibu C. M.
Address: Choodamanayil, Rajakumary
Age: 39
Education: Pre degree
Size of land holding (in acre): 3.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	3.5 acre	5.4 Q	432000	208000
Total				432000	208000

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	Small cardamom	3.5 acre	6.9 Q	1035000	417500	27.78	100.72
Total				1035000	417500		100.72

Brief: The farmer used to get annual income of 208000/-. He faced problems like Pest and disease attack, nutrient deficiency etc. With DFI interventions like INM, IPDM he is getting annual income of 417500/-. In addition, there is cost saving of 200000/- in the production of 6.9 Q.



Nutrient deficient field



INM plot with IISR cardamom special spray



Effect of DFI intervention
Name of farmer: Mr. Benny Mathew
Address: Vattamkandathil, Rajakumary
Age: 47
Education: Degree
Size of land holding (in acre): 7.0 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	7 acres	14 Q	1120000	530000
Total				1120000	530000

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	Small cardamom	7 acres	15.5 Q	2325000	1052500	10.71	98.58
Other enterprise (specify)	Apiculture	10 boxes (units)	0.35	14000	10000	> 100	> 100
Total				2339000	1062500		98.58

Brief: The farmer used to get annual income of 530000/-. He faced problems like Less capsule formation due to reduced pollination, nutrient deficiencies, pest and disease attack etc. With DFI interventions like INM, IPDM and introduction of honey bee boxes to increase the capsule setting in small cardamom he is getting annual income of 1062500/-. In addition, there is cost saving of 500000/- in the production of 15.5 Q.



INM in cardamom



Apiary in small cardamom



Effect of DFI intervention
Name of farmer: Shiny Saju
Address: Thundampurathu House
Age: 52
Education: PREE DEGREE
Size of land holding (in acre):5.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	4 acres	8 Q	410000	210000
Livestock 1	Cow	3 Nos.	8800 L	388800	177000
Livestock 2	Hen	40 Nos.	7200 Nos.	43200	25920
Total				842000	412920

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	Cardamom	4 acres	16.8 Q	825000	473460	110.00	125.46
Livestock 1	Cow	5 Nos.	18000 L	756000	356000	104.55	101.13
Livestock 2	Hen	95 Nos.	17100 Nos.	136800	82080	137.50	216.67
Total				1717800	911540		120.75

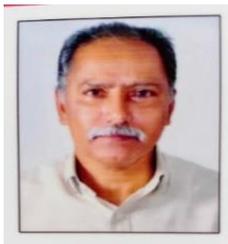
Brief: The farmer used to get annual income of Rs.412920/- from Agriculture and Allied activities. She faced problems like Mastitis disease, Low milk yield and egg production. With DFI interventions like prevention and control of mastitis and scientific nutrition and vaccination schedule she is getting annual income of Rs.911540/-. In addition, there is cost saving of Rs.425000/- in the production of 16.8 Q of Cardamom and other dairy & poultry sector.



Prophylactic controlled of Mastitis disease of dairy cattle



Scientific feeding and disease management of Poultry



Effect of DFI intervention

Name of KVK: ICAR-KVK, IDUKKI

Name of farmer: Paulose Abraham

Address: Nadappel House

Age: 61

Education: SSLC

Size of land holding (in acre):2.25 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	Cardamom	1.25 acre	3 Q	140000	115000
Field Crop 2	Pepper	0.5 acre	0.45 Q	22920	10420
Hort. Crop 1	Hen	50 Nos.	9000 Nos.	54000	32400
Total				216920	157820

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	Cardamom	1.50 acres	6.3 Q	460000	255000	110.00	121.74
Field Crop 2	Pepper	0.5 acre	1 Q	62500	34000	122.22	226.30
Hort. Crop 1	Hen	105 No	18900 Nos.	151200	90720	110.00	180.00
Total				673700	379720		140.60

Brief: The farmer used to get annual income of 157820 from Agriculture and Allied activities. He faced problems like incidence of Ranikhet disease and low egg production. With DFI interventions like scientific nutrition and timely followed vaccination of poultry he is getting annual income of Rs.379720. In addition, there is cost saving of Rs.226000 in the production of 7.3 Q of Cardamom and poultry sector.



Prophylactic controlled of Ranikhet disease of Poultry



Balanced nutrition and management field of poultry



Effect of DFI intervention

Name of KVK: ICAR-KVK, IDUKKI

Name of farmer: Biju Soman

Address: Maniyattu house

Age: 39

Education: 7th

Size of land holding (in acre):3 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	Cardamom	1.25 acres	4.5 Q	325000	218000
Livestock 1	Hen	60 Nos.	10800 No	64800	38880
Total				389800	256880

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	Cardamom	3 acres	10 Q	895100	470100	122.22	115.64
Livestock 1	Hen	120 Nos.	21600 Nos.	172800	103680	100.00	166.67
Total				1067900	573780		123.36

Brief: The farmer used to get annual income of 256880 from Agriculture and Allied activities. He faced problems like nutrient deficiency, soil acidity in small cardamom, incidence of Ranikhet disease and low egg production. With DFI interventions like Soil health management practices, INM, scientific nutrition and timely followed vaccination of poultry, he is getting annual income of Rs.573780. In addition, there is cost saving of Rs.295900 in the production of 10 Q of Cardamom.



INM Plot of small cardamom field



Scientific nutrition & Health management of poultry



Effect of DFI intervention
Name of farmer: Eldhose

Name of KVK: ICAR-KVK, IDUKKI

Address: Vettikkuzhiyilil house
Age: 46
Education: Pre Degree
Size of land holding (in acre):2 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	Cardamom	1.5 acres	2 Q	500000	215000
Field Crop 2	Pepper	0.5 acre	2.5 Q	87500	51500
Livestock 1	Cow	2 Nos.	5200 L	259200	104000
Total				846700	370500

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	Cardamom	1.5 acres	4 Q	828000	473000	100.00	120.00
Field Crop 2	Pepper	1 acre	4.5 Q	165000	120000	80.00	133.01
Livestock 1	Cow	3 Nos.	10800 L	453600	252500	107.69	142.79
Total				1446600	845500		128.21

Brief: The farmer used to get annual income of Rs.370500/-. He faced problems like Occurrence of mastitis in dairy cattle. With DFI interventions like scientific disease management methods and ITK methods to control mastitis, he is getting annual income of Rs.845500/-. In addition, there is cost saving of Rs.275000/- in the production of 8.5 Q of cardamom, black pepper and allied dairy sector.



Prevention & control of Mastitis of dairy cattle



Infectious disease controlled Dairy cattle



Effect of DFI intervention
Name of farmer: Joshy P. G.
Address: Pilathottathil House
Age: 47
Education: SSLC
Size of land holding (in acre): 5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1 acre	2 Q	409000	210000
Livestock 1	Cow	3 Nos.	10800 L	540000	324000
Livestock 2	Hen	40 Nos.	7200 No.	43200	25920
Total				992200	559920

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	Cardamom	1 acre	4.5 Q	821000	473460	125.00	125.46
Livestock 1	Cow	5 Nos.	28000 L	1200000	720000	159.26	122.22
Livestock 2	Hen	135 Nos.	24300 No	194400	116640	237.50	350.00
Total				2215400	1310100		133.98

Brief: The farmer used to get annual income of 559920. He faced problems like occurrence of mastitis disease in cattle & incidence of Ranikhet in poultry etc. With DFI interventions like nutrient deficiency in small cardamom, scientific nutrition and prophylactic control measures for mastitis disease, he is getting annual income of Rs. 1210100. In addition, there is cost saving of 380000 in the production of 4.5 Q of cardamom and AH sectors.



Cardamom special applied small cardamom field



Prophylactic controlled of Mastitis disease of dairy cattle



Effect of DFI intervention
Name of farmer: Joys Joseph
Address: Athickal House
Age: 50
Education: 7th
Size of land holding (in acre):1 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Black pepper	1 acre	2.2 Q	290000	127100
Livestock 1	Cow	3 Nos.	10800 L	378000	178000
Livestock 2	Hen	38 Nos.	6840 Nos.	41040	24624
Total				709040	329724

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	Black pepper	1 acre	3.5 Q	387000	265160	59.09	108.62
Livestock 1	Cow	4 Nos.	24000 L	1008000	432000	122.22	142.70
Livestock 2	Hen	145 Nos.	26100 Nos.	208800	125280	281.58	408.77
Total				1603800	822440		149.43

Brief: The farmer used to get annual income of Rs.329724/-. He faced problems like incidence of mastitis disease in cattle & Occurrence of Ranikhet disease in poultry. With DFI interventions like Prophylactic management of mastitis and Ranikhet disease, he is getting annual income of Rs.822440/-. In addition, there is cost saving of Rs.290700/- in the production of 3.5 Q of black pepper & other AH sectors.



Mastitis disease controlled dairy field



Vaccinated against Ranikhet disease field



Effect of DFI intervention
Name of farmer: Jayisy Soy
Address: Valliyakunnel house
Age: 43
Education: Degree
Size of land holding (in acre):1.50 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1 acre	2Q	460000	215000
Livestock 1	Hen	48 Nos.	8640 Nos.	51840	31104
Total				511840	246104

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	Cardamom	1 acre	4.2 Q	782000.00	450000.00	110.00	109.30
Livestock 1	Hen	115 Nos.	20700 Nos.	165600.00	99360.00	139.58	219.44
Total				947600.00	549360.00		123.22

Brief: The farmer used to get annual income of 246104, she faced problems like incidence Ranikhet and Pullorum disease of poultry and less production of eggs in poultry. With DFI interventions like inclusion of nutrient supplements for enhancing egg production and prevention & control of Ranikhet disease in poultry by proper vaccination, she is getting annual income of Rs 549360. In addition, there is cost saving of 293260 in the production of 4.2 Q of cardamom and allied AH sector of



Prophylactic controlled of Ranikhet disease of Poultry



Poultry with increased egg production



Effect of DFI intervention
Name of farmer: Sherin Reji
Address: Parayil House
Age: 40
Education: Pre Degree
Size of land holding (in acre):2 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Pepper	1 acre	0.9 Q	45840	20840
Field Crop 2	Cardamom	1.5 acre	2 Q	228000	103000
Livestock 1	Goat	4 Nos.	6 Nos.	80000	48000
Total				353840	171840

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	Pepper	1 acre	2 Q	125000	68000	122.22	226.30
Field Crop 2	Cardamom	1.5 acre	4 Q	540000	212000	100.00	105.83
Livestock 1	Goat	6 Nos.	14 Nos.	156000	99000	133.33	106.25
Total				821000	379000		120.55

Brief: The farmer used to get annual income of Rs.171840/-. She faced problems like reduced flowering and pod formation in small cardamom, poor growth performance and low body wt. and less milk production in goat. With DFI interventions like, application of flowering hormones and INM practices in small cardamom scientific nutrition and disease management methods and additional feeding of goats with nutrients, she is getting annual income of Rs.379000/-. In addition, there is cost saving of Rs.90000/- in the production of 6 Q of black pepper, cardamom & allied AH sector of Goat.



Prophylactic measures of vaccination schedule for prevention of contagious disease of goats



INM Plot of Small cardamom



Effect of DFI intervention
Name of farmer: Sophy Paulose
Address: Kodithottathil house
Age: 56
Education: Pre Degree
Size of land holding (in acre):1.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1 acre	2 Q	259120	149120
Livestock 1	Hen	58 Nos.	10440 Nos.	62640	37584
Total				321760	186704

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	Cardamom	1 acre	4.2 Q	506000	450000	110.00	201.77
Livestock 1	Hen	105 Nos.	21000 Nos.	151200	90720	101.15	141.38
Total				657200	540720		189.61

Brief: The farmer used to get annual income of 186704. she faced problems like, Pest and Disease attack in Small cardamom, low body weight and reduced egg production in poultry. With DFI interventions like Bio intensive pest and disease management practices in small cardamom scientific nutrition and disease management methods, nutrient supplement supply to poultry she is getting annual income of Rs.540720. In addition, there is cost saving of 261400 in the production of 4.2 Q of agriculture and allied sector of AH.



IPDM Plot of Small cardamom



Prophylactic controlled of Ranikhet disease of Poultry



Effect of DFI intervention
Name of farmer: Jhony V. S.
Address: Chetticheriyil house
Kerala
Age:49
Education: PREE DEGREE
Size of land holding (in acre): 2 acres 68 cent

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	2 acres	4 Q	518240	298240
Livestock 1	Cow	3 Nos.	10800 L	453600	252500
Total				971840	550740

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	Cardamom	2 acres	8.4 Q	1012000	900000	110.00	201.77
Livestock 1	Cow	6 Nos.	21600 L	907200	505000	100.00	100.00
Total				1919200	1405000		155.11

Brief: The farmer used to get annual income of 550740. He faced problems like occurrence of mastitis disease and low milk production. with DFI interventions like scientific nutrition and disease management methods for prevention of mastitis disease, he is getting annual income of Rs.1405000. In addition, there is cost saving of 415000 in the production of 8.4 Q of agri. sector and allied sector like dairy cattle.



Mastitis disease controlled dairy field



Need based nutrition management field

**Effect of DFI intervention****Name of farmer: Mr. Antony Baby****Address: Potail (H), Kurvila city P.O, Rajakumary****Kerala****Age:59****Education: SSLC****Size of land holding (in acre):1.5acre****Name of KVK: ICAR-KVK, IDUKKI****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	Cardamom	1.5 acre	5 Q	400000	195000
Total				400000	195000

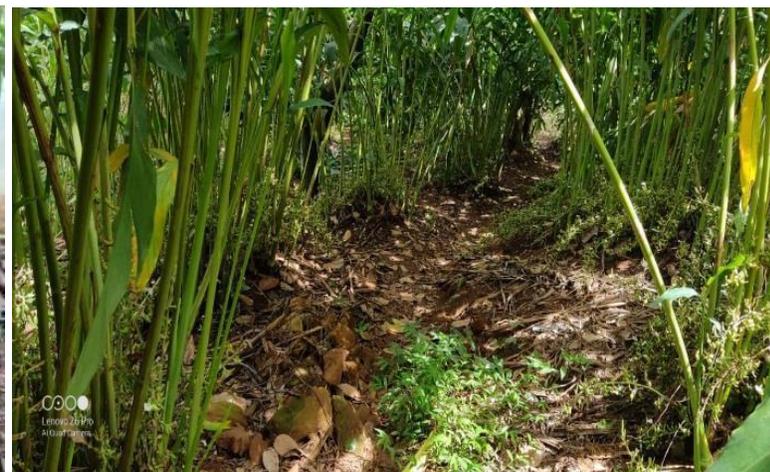
2) Status in 2020

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	Cardamom	1.5 acre	9 Q	1350000	395000	80.00	102.56
Total				1350000	395000		102.56

Brief: The farmer used to get annual income of 195000/-. He faced problems like pest and disease attack, nutrient deficiencies etc. With DFI interventions like INM, IPDM he is getting annual income of 395000/-. In addition, there is cost saving of 200000 in the production of 9Q.



Disease infected cardamom field



ICM plot



Effect of DFI intervention
Name of farmer: Mr. Geevarghese T.U.
Address: Thoppil (H), Rajakumary
Age: 61
Education: SSLC
Size of land holding (in acre): 5.0 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Black Pepper	1 Acre	3.5 Q	210000	125000
Field Crop 2	Small cardamom	4 acre	8.0 Q	640000	320000
Total				850000	445000

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	Black Pepper	1 Acre	4.0 Q	260000	280000	14.29	124.00
Field Crop 2	Small cardamom	4 acre	9.5 Q	1425000	612500	18.75	91.41
Total				1685000	892500		100.56

Brief: The farmer used to get annual income of 445000/-. He faced problems like Pest and disease attack, Nutrient deficiencies etc. With DFI interventions like INM, IPDM he is getting annual income of 892500/-. In addition, there is cost saving of 350000/- in the production of 13.5 Q.



INM in cardamom



INM in Black pepper



Effect of DFI intervention
Name of farmer: Micheal
Address: Suryanelli
Kerala
Age:41
Education:Degree
Size of land holding (in acre): 5.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	5.5 acre	6.25 Q	3250000	1900000
Total				3250000	1900000

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	Small Cardamom	4.5 acre	11.10 Q	9665000	6115000	77.60	221.84
Total				9665000	6115000		221.84

Brief: The farmer used to get annual income of Rs.1900000/- from small cardamom etc. He faced problems like Root grub, and nematode infestations. With DFI interventions like EPN, Pseudomonas application, etc., he is getting annual income of Rs.6115000/-. In addition, there is cost saving of Rs.2115000/- in the production of 11.10 Q of Cardamom and Black pepper.



ICAR-IIHR-Arka Microbial Consortium applied small cardamom field



Field Day was conducted ICAR-IISR-AMC applied small cardamom field



Effect of DFI intervention
Name of farmer: Sankar
Address: B.L. Ram
Kerala
Age:33
Education:
Size of land holding (in acre):7 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	5.5 acre	6.0 Q	960000	375000
Field Crop 2	Black Pepper	1.5 acre	1.2 Q	360000	149000
Total				1320000	524000

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
Hort. Crop 1	Small Cardamom	5.5 acre	9.7Q	1335000	768000	61.67	104.80
Horti. Crop 2	Black pepper	1.5 acre	1.69	507000	329000	40.83	120.81
Total				1842000	1097000		109.35

Brief: The farmer used to get annual income of Rs.524000 /- from small cardamom and Black pepper. He faced problems like Stem borer, Thrips, Azukhal and Foot rot. With DFI interventions like Bio-intensive Pest management methods followed, etc., he is getting annual income of Rs.1097000 /-. In addition, there is cost saving of Rs.495000 /- in the production of 11.39 Q.



GAP in Small cardamom field



AESA based IPM in Black pepper field at B. L. Ram



Effect of DFI intervention
Name of farmer: Rajendran
Address: Santhanpara
Kerala
Age:54
Education: 12th
Size of land holding (in acre): 25

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	25 acre	11.4Q	1764000	925000
Total				1764000	925000

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	Small Cardamom	25 acre	19.0Q	2920000	1900000	66.67	105.41
Total				2920000	1900000		105.41

Brief: The farmer used to get annual income of Rs.925000 /- from small cardamom etc. He faced problems like Pythium and Fusarium disease etc. With DFI interventions like Pythium and Fusarium management etc., he is getting annual income of Rs.1900000 /- In addition, there is cost saving of Rs.327000 /- in the production of 19Q.



IIHR-Arka Microbial Consortium Demonstrated
 Small cardamom field



Fusarium disease free small cardamom field



Effect of DFI intervention
Name of farmer: Ramamoorthy
Address: Kanthalloor
Kerala
Age:31
Education: 12
Size of land holding (in acre):1.5

Name of KVK: ICAR-KVK, IDUKKI

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	Straw beery	0.5 acre	28 Q	550000	295000
Total				550000	295000

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	Straw berry	0.5 acre	41 Q	879000	619000	46.43	109.83
Total				879000	619000		109.80

Brief: The farmer used to get annual income of Rs.295000/- from Strawberry etc. He faced problems like Hybrid seeds and good quality seedlings not available etc. With DFI interventions like introduced IHR variety and good quality seedlings supplied, etc., he is getting annual income of Rs.619000/-. In addition, there is cost saving of Rs.304000/- in the production of 41 quintal.



PM field of Straw berry



AESA based IPM in Straw berry field



Effect of DFI intervention
Name of farmer: Srinivasan
Address: Pethotty, Santhanpara
Kerala
Age:43
Education: Degree
Size of land holding (in acre):11

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2.5 acres	8.5Q	765000	412000
Total				765000	412000

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	Small Cardamom	2.5 acres	13.4Q	1474000	864000	57.65	109.71
Total				1474000	864000		109.71

Brief: The farmer used to get annual income of Rs.412000/- from small cardamom etc. He faced problems like clump rot and Azhukal etc. With DFI interventions like Bio-intensive pest management methods followed, etc., he is getting annual income of Rs.864000. In addition, there is cost saving of Rs.400000/- in the production of 13.4 Quintal.



PPFM applied small cardamom field



Spraying of PPFMs to small cardamom field



Effect of DFI intervention
Name of farmer: Shyji Mathew
Address: Kadukkacity
Kerala
Age:40
Education: Degree
Size of land holding (in acre): 5

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	5 acres	10 Q	1450000	679000
Total				1450000	679000

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	Small cardamom	5 acres	24 Q	2445000	1569000	140.00	131.08
Total				2445000	1569000		131.08

Brief: The farmer used to get annual income of Rs.679000 /- from small cardamom, etc. He faced problems like Phoma, Fusarium wilt and Stem borer, etc. With DFI interventions like ICM in small cardamom etc., he is getting annual income of Rs.1569000/-. In addition, there is cost saving of Rs.571000/- in the production of 24 Quintal.



ICAR-IIHR-AMC applied small cardamom field



Small cardamom Harvested from the field



Effect of DFI intervention
Name of farmer: Binoy
Address: Nariyampara
Kerala
Age:51
Education: 12th Class
Size of land holding (in acre): 4.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	4 acres	4.5 Q	465000	294000
Total				465000	294000

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	Small Cardamom	4 acres	8.9 Q	961000	623000	97.78	111.90
Total				961000	623000		111.90

Brief: The farmer used to get annual income of Rs.294000/- from small cardamom, etc. He faced problems like Fusarium disease etc. With DFI interventions like IDM in fusarium management methods followed etc., he is getting annual income of Rs.623000 /-. In addition, there is cost saving of Rs.241000/- in the production of 8.9 quintal.



AMC applied Demo small cardamom field



Below ETL and DI level maintained small cardamom field



Effect of DFI intervention
Name of farmer: Don Thomas
Address: Panniyarkutty
Kerala
Age:
Education:
Size of land holding (in acre):1.5 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acres	7 Q	646000	241000
Total				646000	241000

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	Small Cardamom	1.5 acres	12 Q	1155000	521000	71.43	116.18
Total				1155000	521000		116.18

Brief: The farmer used to get annual income of Rs.241000/- from small cardamom. He faced problems like Phoma and Fusarium diseases etc. With DFI interventions like ICM in small cardamom methods followed, he is getting annual income of Rs.521000/-. In addition, there is cost saving of Rs.265000/- in the production of 12 Quintal.



Phoma and Fusarium Diseases free small cardamom field



Panicle length and Capsule size increased small cardamom field



Effect of DFI intervention
Name of farmer: Abin Jose
Address: Kumily
Kerala
Age:31
Education: High School
Size of land holding (in acre): 2 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acres	5.5 Q	524000	246000
Total				524000	246000

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	Small Cardamom	2 acres	8.9Q	795000	512000	61.82	108.13
Total				795000	512000		108.13

Brief: The farmer used to get annual income of Rs.246000/- from small cardamom. He faced problems like Root knot Nematodes and Fusarium, etc. With DFI interventions like Bio-intensive pest management followed etc., he is getting annual income of Rs.512000/-. In addition, there is cost saving of Rs.214000/- in the production of 8.9 Quintal.



IPM field of small cardamom



AMC applied Demo small cardamom field



Effect of DFI intervention
Name of farmer: Vengateshan
Address: Santhanpara
Kerala
Age:41
Education: Degree
Size of land holding (in acre): 27

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	7 acres	11.5 Q	955000	525000
Total				955000	525000

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	Small Cardamom	7 acres	22 Q	2145000	1123000	91.30	113.90
Total				2145000	1123000		113.90

Brief: The farmer used to get annual income of Rs.525000/- from small cardamom, etc. He faced problems like Phoma, Bacterial wilt and Stem borer, etc. With DFI interventions like ICM in small cardamom etc., he is getting annual income of Rs.1123000/-. In addition, there is cost saving of Rs.485000/- in the production of 22 Quintal.



Bio-intensive Pest management small cardamom field



Bacterial wilt disease free small cardamom capsules



Effect of DFI intervention
Name of farmer: Kriss Kuirakose
Address: Vandiperiyar
Kerala
Age:49
Education: 12th
Size of land holding (in acre): 2

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	5 acres	12 Q	1550000	749000
Total				1550000	749000

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	Small Cardamom	5 acres	21 Q	2445000	1569000	75.00	109.48
Total				2445000	1569000		109.48

Brief: The farmer used to get annual income of Rs.749000/- from small cardamom, etc. He faced problems like Phoma, Bacterial wilt and Stem borer, etc. With DFI interventions like ICM in small cardamom etc., he is getting annual income of Rs.1569000/-. In addition, there is cost saving of Rs.571000/- in the production of 21 Quintal.



Integrated Pest management in small cardamom field



AMC applied dry cardamom



Effect of DFI intervention
Name of farmer: SreeKumar
Address: Vandanmedu
Kerala
Age:38
Education: Degree
Size of land holding (in acre): 5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	5 acres	7.0 Q	721000	435000
Total				721000	435000

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	Small Cardamom	5 acres	12.2 Q	1625000	873000	74.29	100.69
Total				1625000	873000		100.69

Brief: The farmer used to get annual income of Rs.435000/- from small cardamom, etc. He faced problems like Phoma, Fusarium wilt and Stem borer, etc. With DFI interventions like ICM in small cardamom etc., he is getting annual income of Rs.873000/-. In addition, there is cost saving of Rs.285000/- in the production of 12.2 Quintal.



Fusarium disease free small cardamom field



Below ETL level of Thrips maintained small cardamom field



Effect of DFI intervention
Name of farmer: Sivasankar
Address: Vattavada
Kerala
Age:34
Education: 12th
Size of land holding (in acre): 2

Name of KVK: ICAR-KVK, IDUKKI

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	Strawberry	0.5 acre	27 Q	320000	165000
Total				320000	165000

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	Strawberry	0.5 acre	40 Q	652000	331000	48.15	100.61
Total				652000	331000		100.61

Brief: The farmer used to get annual income of Rs.165000/- from Strawberry etc. He faced problems like good quality seedlings not available and Snail and Slug problems, etc. With DFI interventions like introduced good quality seedlings supplied and Snail and Slug management, etc., he is getting annual income of Rs.331000/-. In addition, there is cost saving of Rs.185000/- in the production of 40 quintal.



AESA based IPM in straw berry field



Effect of DFI intervention
Name of farmer: Ambika
Address: Arivilamchal
Kerala
Age:49
Education: 12th
Size of land holding (in acre): 1.5

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acres	5.5 Q	511000	305000
Total				511000	305000

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	Small Cardamom	1.5 acres	8.5 Q	925000	620000	54.55	103.28
Total				925000	620000		103.28

Brief: The farmer used to get annual income of Rs.305000 /- from small cardamom, etc. He faced problems like Phoma, Bacterial wilt and Stem borer, etc. With DFI interventions like ICM in small cardamom etc., he is getting annual income of Rs.620000 /-. In addition, there is cost saving of Rs.185000 /- in the production of 8.5 Quintal.



Bio-intensive Pest management small cardamom field



PPFM applied small cardamom field



Effect of DFI intervention
Name of farmer: Chandrasekharan
Address: Kanakapuzha
Kerala
Age:53
Education: 12th
Size of land holding (in acre): 2 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acres	6.0 Q	525500	275000
Total				525500	275000

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	Small Cardamom	2 acres	10 Q	1045000	691000	66.67	151.27
Other enterprise (Specify)	Apiculture	15 Boxes (Units)	0.52 Q	26000	18500	> 100	> 100
Total				1071000	709500		151.27

Brief: The farmer used to get annual income of Rs.275000 /- from small cardamom, etc. He faced problems like thrips, Stem borer, and less capsule setting due to reduced pollination. With DFI interventions like ICM in small cardamom, apiculture unit introduction for increasing the pollination, he is getting annual income of Rs.709500/-. In addition, there is cost saving of Rs.265000 /- in the production of 10.52 Quintal.



Beekeeping in small cardamom plantation



EPN applied small cardamom field



Effect of DFI intervention
Name of farmer: Abin Jose
Address: Mangathotty
Kerala
Age:30
Education: Degree
Size of land holding (in acre): 6

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	6 acres	11.2 Q	1011000	515000
Total				1011000	515000

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	Small Cardamom	6 acres	18.5 Q	1957000	1103000	65.18	114.17
Total				1957000	1103000		114.17

Brief: The farmer used to get annual income of Rs.515000/- from small cardamom, etc. He faced problems like Phoma, Bacterial wilt and Stem borer, etc. With DFI interventions like ICM in small cardamom etc., he is getting annual income of Rs.1103000/-. In addition, there is cost saving of Rs.515000/- in the production of 18.5 Quintal.



Integrated Pest management in small cardamom field



PPFM applied small cardamom field



Effect of DFI intervention
Name of farmer: Sivan
Address: Kanakapuzha
Kerala
Age:51
Education: 12th
Size of land holding (in acre): 2 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	2 acres	5.91 Q	832000	412000
Total				832000	412000

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	Small Cardamom	2 acre	9.75 Q	1214000	826000	64.97	100.49
Other enterprise (Specify)	Apiculture	10 Boxes (Units)	0.35 Q	20000	15000	> 100	> 100
Total				1234000	841000		100.49

Brief: The farmer used to get annual income of Rs.412000 from small cardamom, etc. He faced problems like Phoma, Bacterial wilt, Stem borer, and less capsule setting due to reduced pollination. With DFI interventions like ICM in small cardamom, IPDM in small cardamom, apiculture unit introduction for increasing the pollination, he is getting an annual income of Rs.841000. In addition, there is cost saving of Rs.285000/- in the production of 10 Quintal.



Beekeeping in small cardamom field



Bio-intensive Pest management small cardamom field



Effect of DFI intervention
Name of farmer: K.S. Ramesh
Address: Kanakapuzha
Kerala
Age:46
Education: 12th
Size of land holding (in acre): 1.75

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.75 acre	4.0 Q	510000	294000
Total				510000	294000

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	Small Cardamom	1.75 acre	9.20 Q	1321000	619000	130.00	110.54
Other enterprise (Specify)	Apiculture	20 Boxes (Units)	0.7 Q	350000	260000	> 100	> 100
Total				1671000	879000		110.54

Brief: The farmer used to get annual income of Rs.294000/- from small cardamom, etc. He faced problems like Phoma, Root grub and Stem borer, etc. With DFI interventions like ICM and Beekeeping in small cardamom etc., he is getting annual income of Rs.879000/-. In addition, there is cost saving of Rs.285000/- in the production of 9.9 Quintal.



Root grub management small cardamom field



Beekeeping in small cardamom field



Effect of DFI intervention

Name of KVK: ICAR-KVK, IDUKKI

Name of farmer: Thulaseedharan

Address: Kanakapuzha

Kerala

Age:55

Education: 12th

Size of land holding (in acre): 2 acres

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	Small Cardamom	2 acres	6.2 Q	744000	325000
Total				744000	325000

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	Small Cardamom	2 acres	8.6 Q	1345000	753000	38.71	131.69
Total				1345000	753000		131.69

Brief: The farmer used to get annual income of Rs.325000/- from small cardamom, etc. He faced problems like fusarium wilt and Stem borer, etc. With DFI interventions like ICM in small cardamom etc., he is getting annual income of Rs.753000/- In addition, there is cost saving of Rs.256000/- in the production of 8.6 Quintal.



Microbial Consortium preparation & small cardamom field



Fusarium free small cardamom field



Effect of DFI intervention
Name of farmer: Rajesh
Address: Kanakapuzha
Kerala
Age:51
Education: 12th
Size of land holding (in acre): 1.5 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small Cardamom	1.5 acres	7.0 Q	822000	400000
Total				822000	400000

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	Small Cardamom	1.5 acres	10 Q	1004000	831000	42.86	107.75
Total				1004000	831000		107.75

Brief: The farmer used to get annual income of Rs.400000/- from small cardamom, etc. He faced problems like Phoma and Bacterial wilt, etc. With DFI interventions like ICM in small cardamom etc., he is getting annual income of Rs.831000/-. In addition, there is cost saving of Rs.231000/- in the production of 10 Quintal.



Integrated Pest management in small cardamom field



Effect of DFI intervention
Name of farmer: Mrs. Lilly Siby
Address: Kulaparachal P.O., Rajakumary
Kerala
Age: 43
Education: SSLC
Size of land holding (in acre): 5.5 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	4.5 acres	18 Q	1440000	720000
Field Crop 2	Paddy	1.0 acres	20 Q	64000	49000
Total				1504000	769000

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	Small cardamom	4.5 acres	18.8 Q	2350000	1575000	4.44	118.75
Field Crop 2	Paddy	1.0 acres	27 Q	94500	72500	35.00	47.96
Total				2444500	1647500		114.24

Brief: The farmer used to get annual income of Rs.769000/-. She faced problems like Nutrient deficiency, soil acidity, Iron toxicity, Pest and diseases attack. With DFI interventions like INM, IPDM she is getting annual income of Rs.1647500/-. In addition, there is cost saving of Rs.320000/- in the production of 45.8 Q.



Bio-intensive Pest management small cardamom field



Organic fertilizer applied cardamom field



Effect of DFI intervention
Name of farmer: Mrs. Saradha Roy
Address: Panakkal H, Rajakad
Kerala
Age: 46
Education: Pre Degree
Size of land holding (in acre):2 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1.5 acres	2.5 Q	388680	223680
Field Crop 2	Pepper	1 acre	0.90 Q	45840	20840
Livestock 1	Cow	2 nos.	5200 L	259200	104000
Poultry	Hen	50 nos.	9000 nos.	54000	32400
Total				747720	380920

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	Cardamom	1.5 acres	6.3 Q	759000	675000	152.00	201.77
Field Crop 2	Pepper	1 acre	2 Q	125000	68000	122.22	226.30
Livestock 1	Cow	3 nos.	10800 L	453600	252500	107.69	142.79
Poultry	Hen	110 nos.	19800 Nos.	158400	95040	120.00	193.33
Total				1496000	1090540		186.29

Brief: The farmer used to get annual income of Rs.380920/-. She faced problems like fusarium and foot rot disease. With DFI interventions like bio intensive pest management methods like pseudomonas application, IPDM Practices she is getting annual income of Rs.1090540/-. In addition, there is cost saving of Rs.330700/- in the production of 8.3 Q of cardamom, black pepper and allied AH sectors.



Farm visit in AH field



Fusarium disease free small cardamom field



Effect of DFI intervention
Name of farmer: Mrs. Lovely Mathew
Address: Rajakumary
Kerala
Age: 46
Education: Pre degree
Size of land holding (in acre): 3.5 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	2.5 acres	5 Q	647800	372800
Field Crop 2	Black pepper	1 acre	0.90 Q	45840	20840
Total				693640	393640

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	Small cardamom	2.5 acres	10.5 Q	1265000	1125000	110.00	201.77
Field Crop 2	Black pepper	1 acre	2 Q	125000	68000	122.22	226.30
Total				1390000	1193000		203.07

Brief: The farmer used to get annual income of Rs.393640/- She faced problems like Nutrient deficiencies, Pest, Disease attack etc. With DFI interventions like INM, IPDM in Black pepper, Cardamom, she is getting annual income of Rs.1193000/- . In addition, there is cost saving of Rs.350000/- in the production of 12.5 Q.



Pest management applied small cardamom field



INM plot of cardamom field



Effect of DFI intervention
Name of farmer: Mrs. Divya Nisanth
Address: Kallumkarayil H, Udumbanchola
Kerala
Age: 40
Education: Pre degree
Size of land holding (in acre): 1 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1 acre	2 Q	259120	149120
Total				259120	149120

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	Small cardamom	1 acre	4.2 Q	506000	450000	110.00	201.77
Total				506000	450000		201.77

Brief: The farmer used to get annual income of Rs.149120/-. She faced problems like Pest and disease attack, nutrient deficiency, Mastitis in cow. With DFI interventions like scientific dairy Management, INM and IPDM she is getting annual income of Rs.450000/-. In addition, there is cost saving of Rs.161000/- in the production of 4.2 Q.



IISR Cardamom special sprayed cardamom field



Dairy cattle given with mastitis control measures



Effect of DFI intervention
Name of farmer: Mrs. Mary Baby
Address: Kulapaarachal, Rajakumary
Kerala
Age:43
Education:12th
Size of land holding (in acre): 1.3 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1 acre	2 Q	259130	150120
Field Crop 2	Black pepper	0.3 acre	0.5 Q	30000	16500
Total				289130	166620

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	Small cardamom	1 acre	4.2 Q	507000	451000	110.00	200.43
Field Crop 2	Black pepper	0.3 acre	1.2 Q	46000	37000	140.00	124.24
Total				553000	488000		192.88

Brief: The farmer used to get annual income of Rs.166620/-. She faced problems like Drought management nutrient deficiencies, pest and disease attack. With DFI interventions like PPFM spray, black pepper special application, INM, IPDM she is getting annual income of Rs.488000/-. In addition, there is cost saving of Rs.155000/- in the production of 5.4 Q.



ICM plot of cardamom field



Panicle length and Capsule size increased small cardamom field



Effect of DFI intervention
Name of farmer: Thomas Varghese
Address: Kattuvilayil H
Kerala
Age: 42
Education: Pre degree
Size of land holding (in acre): 2 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Pepper	0.5 acre	0.45 Q	22920	10420
Livestock 1	Cow	3 nos.	5200 L	230400	147800
Total				253320	158220

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	Pepper	0.5 acre	1 Q		34000	122.22	226.30
Livestock 1	Cow	3 nos.	10800 L	453600	370000	107.69	150.34
Total				516100	404000		155.34

Brief: The farmer used to get annual income of Rs.158220/-. He faced problems like Pythium and fusarium in small cardamom and quick wilt in pepper. With DFI interventions like bio intensive disease management methods and pseudomonas application, PPFM Spray and EPN Technology, he is getting annual income of Rs.404000/-. In addition, there is cost saving of Rs.180000/- in the production of 1 Q of black pepper and allied sectors of AH.



Mastitis disease free dairy cattle field



Farm visit of INM cardamom field



Effect of DFI intervention
Name of farmer: Mr. Thomachan
Address: Vettikappillil house
Kerala
Age: 43
Education: Degree
Size of land holding (in acre): 1.50 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1 acre	2 Q	259120	149120
Field Crop 2	Pepper	0.5 acre	0.45 Q	22920	10420
Livestock 1	Hen	10 nos.	1700 Nos.	10200	6300
Total				292240	165840

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	Cardamom	1 acre	4.2 Q	506000	450000	110.00	201.77
Field Crop 2	Pepper	0.5 acre	1 Q	62500	34000	122.22	226.30
Livestock 1	Hen	15 nos.	2550 Nos.	20400	11600	50.00	84.13
Total				588900	495600		198.84

Brief: The farmer used to get annual income of Rs.165840/-. She faced problems like root grub, less pollination and foot rot disease etc. With DFI interventions like bio intensive pest management methods, EPN application, she is getting annual income of Rs.495600/-. In addition, there is cost saving of Rs.165000/- in the production of 5.2 Q of cardamom, Pepper and allied sectors of AH.



IISR Cardamom special sprayed field



Farmers field visit at AH field



Effect of DFI intervention
Name of farmer: Mrs. Linta joy
Address: Keerumkunnel H, Rajakumary
Kerala
Age: 43
Education: Pre degree
Size of land holding (in acre): 1 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1 acre	2 Q	259120	149130
Total				259120	149130

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	Small cardamom	1 acre	4.2 Q	507000	449000	110.00	201.08
Livestock 1	Dairy cattle	3 Nos.	4500 L	189500	121500	> 100	> 100
Total				696500	570500		201.08

Brief: The farmer used to get annual income of Rs.149130/- She faced problems like Pest and disease attack, nutrient deficiency, Mastitis in cow. With DFI interventions like scientific dairy Management, INM and IPDM she is getting annual income of Rs.570500/-. In addition, there is cost saving of Rs.220600/- in the production of 4.2 Q & 4500 L.



Organic cardamom field



Dairy cattle given with mastitis control measures



Effect of DFI intervention
Name of farmer: Mrs. Siby Binoy
Address: Puthenpurackal H, Panakkaracity Rajakumary
Kerala
Age: 60
Education: Pre degree
Size of land holding (in acre): 4 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	3.0 acre	6 Q	777360	447360
Field Crop 2	Black pepper	1.0 acre	0.9 Q	46000	21840
Total				823360	469200

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	Small cardamom	3.0 acre	12.6 Q	1518000	1350000	110.00	201.77
Field Crop 2	Black pepper	1.0 acre	2 Q	127000	69000	122.22	215.93
Total				1645000	1419000		202.43

Brief: The farmer used to get annual income of Rs.469200/- She faced problems like less pollination and panicle setting, pest disease attack in small cardamom and pepper. With DFI interventions like bio fertilizer application, INM, IPDM, she is getting annual income of Rs.1419000/-. In addition, there is cost saving of Rs.670000/- in the production of 14.6 Q.



Fusarium infected small cardamom field



IPDM plot of cardamom



Effect of DFI intervention
Name of farmer: Thomas Sebastian
Address: Vadakkethu, Valliyathovala
Kerala
Age: 62
Education: Pree Degree
Size of land holding (in acre):5.5 acre

Name of KVK: ICAR-KVK, IDUKKI

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	Cardamom	1 acre	2 Q	259120	149120
Field Crop 2	Pepper	1.5 acre	1.35 Q	68760	31260
Hort. Crop 1	Ginger	1 acre	20 Q	300000	150000
Livestock 1	Cattle	3 nos.	13500 L	432000	228000
Livestock 2	Goat	4 nos.	4 nos.	18000	13000
Total				1077880	571380

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	Cardamom	1 acre	4.2 Q	506000	450000	110.00	201.77
Field Crop 2	Pepper	1.5 acres	3 Q	187500	102000	122.22	226.30
Hort. Crop 1	Ginger	1 acre	45 Q	700000	365000	125.00	143.33
Livestock 1	Cattle	4 nos.	44000 L	908000	508900	225.93	123.20
Livestock 2	Goat	5 nos.	9 Nos.	40000	27000	125.00	107.69
Total				2341500	1452900		154.28

Brief: The farmer used to get annual income of Rs.571380/- from Agriculture and Allied activities. He faced problems like Nutrient disorders, Root grub, fusarium, and Foot rot disease. With DFI interventions like Bio-intensive Pest management methods, micronutrient sprays and scientific dairy cattle management, he is getting annual income of Rs.1452900/-. In addition, there is cost saving of Rs.650000/- in the production of 52.2 Q of Cardamom Black pepper, ginger and 44000 litres of Milk.



Fusarium disease free small cardamom field



Farm visit in animal Husbandry field



Effect of DFI intervention
Name of farmer: Xavier Joseph
Address: Ettaonnil, Melechemmanar
Kerala
Age: 65
Education: plus SSLC
Size of land holding (in acre): 3.5 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	2.0	4 Q	320000	160000
Field crop 2	Black Pepper	1.5	4.2 Q	300000	125000
Total				620000	285000

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	Small cardamom	2.0	6.5 Q	625000	542500	62.50	239.06
Field crop 2	Black Pepper	1.5	8.0 Q	320000	200000	90.48	60.00
Total				945000	742500		160.53

Brief: The farmer used to get annual income of Rs.285000/-. He faced problems like Nutrient deficiency, soil acidity, Iron toxicity, Pest and diseases attack etc. With DFI interventions like INM, IPDM he is getting annual income of Rs.742500/-. In addition, there is cost saving of Rs.200000/- in the production of 13 Q.



Clump rot affected field



INM plot



Effect of DFI intervention
Name of farmer: Mr. Joy Abraham
Address: Nadappel, Melechemmanar
Kerala
Age: 65
Education: SSLC
Size of land holding (in acre): 3 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1.5 acres	3.5 Q	280000	140000
Field Crop 2	Black Pepper	0.5 acre	3.0 Q	180000	130000
Field Crop 3	Paddy	0.5 acre	3.0 Q	17500	12500
Total				477500	282500

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	Small cardamom	1.5 acres	6.0 Q	600000	417000	71.43	197.86
Field Crop 2	Black Pepper	0.5 acre	5.0 Q	225000	155000	66.67	19.23
Field Crop 3	Paddy	0.5 acre	5.0 Q	20000	15000	66.67	20.00
Total				845000	587000		107.79

Brief: The farmer used to get annual income of Rs.282500. He faced problems like Nutrient deficiencies, Pest, Disease attack etc. With DFI interventions like INM, IPDM in Black pepper, Cardamom, he is getting annual income of Rs.587000/-. In addition, there is cost saving of Rs.220000/- in the production of 16 Q.



INM Small cardamom plot



INM Paddy plot



Effect of DFI intervention
Name of farmer: Mr. Sunil Francis
Address: Ollikkara(H), Melechemmanar
Kerala
Age: 46
Education: SSLC
Size of land holding (in acre): 30 cents

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	30 cents	1.5 Q	120000	75000
Total				120000	75000

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	Small cardamom	30 cents	2.9 Q	312500	176250	93.33	135.00
Total				312500	176250		135.00

Brief: The farmer used to get annual income of Rs.75000/-. He faced problems like Nutrient deficiency, soil acidity, Iron toxicity, Pest and diseases attack etc. With DFI interventions like INM, IPDM he is getting annual income of Rs.176250/-. In addition, there is cost saving of Rs.60000/- in the production of 2.9Q.



Cardamom field – disease infected



ICM field



Effect of DFI intervention
Name of farmer: Mr. Dasan V. K.
Address: Vellaikudam, Melechemmanar
Kerala
Age: 57
Education: SSLC
Size of land holding (in acre): 2 acre 30 cents

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	2.0 acres	3 Q	240000	120000
Field Crop 2	Paddy	0.3 acres	1.8 Q	7200	3500
Total				247200	123500

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	Small cardamom	2.0 acres	4.9 Q	500000	250000	63.33	108.33
Field Crop 2	Paddy	0.3 acres	3.5 Q	12000	5500	94.44	57.14
Total				512000	255500		106.88

Brief: The farmer used to get annual income of Rs.123500/- He faced problems like Nutrient deficiencies, Pest, Disease attack etc. With DFI interventions like INM, IPDM in Cardamom, she is getting annual income of Rs.255500/-. In addition, there is cost saving of Rs.132000/- in the production.



Immature capsule shedding in cardamom



INM plot with application of micronutrients



Effect of DFI intervention
Name of farmer: Mr. Siby Scaria
Address: Vallummel, Melechammanar
Kerala
Age: 50
Education: SSLC
Size of land holding (in acre): 3.0 Acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	3.0 acres	4.5 Q	360000	175000
Total				360000	175000

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	Small cardamom	3.0 acres	5 Q	625000	359000	11.11	105.14
Total				625000	359000		105.14

Brief: The farmer used to get annual income of Rs.175000/-. He faced problems like Pest and disease attack, nutrient deficiency etc. With DFI interventions like INM, IPDM he is getting annual income of Rs.359000/-. In addition, there is cost saving of Rs.120000/- in the production of 5 Q.



Nutrient deficient field



INM plot with Nutrient application



Effect of DFI intervention
Name of farmer: Mr. Siby Mathew
Address: Vellathinanickal (H), Kulaparachal P.O.
Kerala
Age: 40
Education: Degree
Size of land holding (in acre): 1.5 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1.5 acre	2.5 Q	200000	160000
Total				200000	160000

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	Small cardamom	1.5 acre	5.0 Q	625000	322000	100.00	101.25
Total				625000	322000		101.25

Brief: The farmer used to get annual income of Rs.160000/- He faced problems like Pest and disease attack, nutrient deficiency, in cardamom and Black pepper etc. With DFI interventions like INM and IPDM he is getting annual income of Rs.322000/-. In addition, there is cost saving of Rs.150000/- in the production of 5.0 Q.



Disease infected plant



INM plot



Effect of DFI intervention
Name of farmer: Mr. Shinto Mathew
Address: Parayil, Kumbhapara
Kerala
Age: 40
Education: SSLC
Size of land holding (in acre): 1.5 Acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1.5 acre	4 Q	320000	160000
Total				320000	160000

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	Small cardamom	1.5 acre	6 Q	750000	325000	50.00	103.13
Total				750000	325000		103.13

Brief: The farmer used to get annual income of Rs.160000/-. He faced problems like Less capsule formation due to reduced pollination, nutrient deficiencies, pest and disease attack etc. With DFI interventions like INM, IPDM and introduction of honey bee boxes to increase the capsule setting in small cardamom he is getting annual income of Rs.325000/-. In addition, there is cost saving of Rs.120000/- in the production of 6 Q.



Disease affected plot



INM in cardamom –spraying of micronutrients



Effect of DFI intervention
Name of farmer: Mr. Haridas C. T.
Address: Chirapurathu, Mukkudom P.O., Idukki
Kerala
Age: 56
Education: SSLC
Size of land holding (in acre): 2.0 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Black Pepper	0.5 acre	1.9 Q	95000	60000
Field Crop 2	Small cardamom	1.5 acre	10.5 Q	840000	280000
Total				935000	340000

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	Black Pepper	0.5 acre	3.0 Q	129270	94270	57.89	57.12
Field Crop 1	Small cardamom	1.5 acre	15 Q	1800000	600000	42.86	114.29
Other enterprise	Mushroom Production	0.001 acre	20 Q	80000	64000	> 100	> 100
Total				2009270	758270		104.20

Brief: The farmer used to get annual income of Rs.340000/- He faced problems like nutrient deficiencies, pest and disease attack in small cardamom and black pepper. With DFI interventions like INM, IPDM in small cardamom and black pepper, and introduction of Oyster mushroom production unit to increase income, he is getting annual income of Rs.758270/-. In addition, there is cost saving of Rs.368270/- in the production of 38 Q.



Oyster mushroom production unit



INM plot of Black pepper



Effect of DFI intervention
Name of farmer: S. Manoj kumar
Address: Geethalayam, Thottikanam, Idukki
Kerala
Age: 45
Education: SSLC
Size of land holding (in acre): 0.25 acre

Name of KVK: ICAR-KVK, IDUKKI

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.)
Livestock 1	Cow	9 no	54000 L	1620000	875000
Total				1620000	875000

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
Other enterprise	Mushroom Production	0.25 acre	75 Q	2250000	1975000	> 100	> 100
Total				2250000	1975000		

Brief: The farmer used to get annual income of Rs.875000/- He faced problems like infertility and mastitis problem in dairy cows. With DFI interventions like introduction of Oyster mushroom production unit, spawn production and value addition to increase income, he is getting annual income of Rs.1975000/-. In addition, there is cost saving of Rs.970000/- in the production of 75 Q of mushroom.



Oyster mushroom production unit



Harvested oyster mushroom



Effect of DFI intervention
Name of farmer: Sebastin John
Address: Chudankuzhiyil, Suryanelli P.O, B. L. Ram
Kerala
Age: 53
Education: Plus Two, SSLC
Size of land holding (in acre): 5 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	3.0	12 Q	960000	480000
Field crop 2	Black Pepper	2.0	3.0 Q	180000	59000
Total				1140000	539000

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	Small cardamom	3.0	20 Q	2400000	1200000	66.67	150.00
Field crop 2	Black Pepper	2.0	5.0 Q	225000	130000	66.67	120.34
Total				2625000	1330000		146.75

Brief: The farmer used to get annual income of Rs.539000/-. He faced problems like Nutrient deficiency, soil acidity, Iron toxicity, Pest and diseases attack etc. With DFI interventions like INM, IPDM he is getting annual income of Rs.1330000/-. In addition, there is cost saving of Rs.500000/- in the production of 25 Q.



Black pepper field



INM plot



Effect of DFI intervention
Name of farmer: Mr. Nimal Mathew
Address: Suryanelli P.O., B. L. Ram
Kerala
Age: 35
Education: BA
Size of land holding (in acre): 3 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	1.5	13.0 Q	1040000	520000
Field Crop 2	Black Pepper	1.5	3.0 Q	180000	145000
Total				1220000	665000

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	Small cardamom	1.5	20.0 Q	2400000	1200000	53.85	130.77
Field Crop 2	Black Pepper	1.5	5.5 Q	247500	195000	83.33	34.48
Total				2647500	1395000		109.77

Brief: The farmer used to get annual income of Rs.665000/- He faced problems like Nutrient deficiencies, Pest, Disease attack etc. With DFI interventions like INM, IPDM in Black pepper, Cardamom, he is getting annual income of Rs.1395000/-. In addition, there is cost saving of Rs.500000/- in the production of 25.5 Q.



Black pepper field



INM plot



Effect of DFI intervention
Name of farmer: Mr. Mathew Joseph
Address: Ellickal house, Chemmannar P. O., Chemmannar.
Kerala
Age: 64
Education: SSLC
Size of land holding (in acre): 5 acres

Name of KVK: ICAR-KVK, IDUKKI

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	Small cardamom	3 acres	12 Q	960000	482312
Field Crop 2	Black pepper	2 acres	3 Q	180000	58000
Total				1140000	540312

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	Small cardamom	3 acres	21 Q	2625000	1252000	75.00	159.58
Field Crop 2	Black pepper	2 acres	5.5 Q	247500	140000	83.33	141.38
Total				2872500	1392000		157.63

Brief: Farmer used to get annual income of Rs.540312/- from small cardamom and black pepper with DFI interventions like INM, IPDM in small cardamom and black pepper, he is getting annual income of Rs.1392000/-. In addition, there is a cost saving of Rs.500000/- in the production of 26.5 quintal.



INM black pepper field



Observing nutrient deficiency in cardamom