

**Comparative statement on detailed cost and benefits per ha**

<b>Sl. No.</b>	<b>Items</b>	<b>Conventional system</b>	<b>Precision Farming system</b>	<b>Remarks</b>
1	Drip and Fertigation system	-	Rs. 75,000 (5 years) Or Rs. 15,000 (annum)	
2.	Cultivation expenses			
a.	Field preparation	5600.00	7500.00	Chisel plough
b.	Nursery and planting	6000.00	12,000.00	Net house production
c.	Weeding	10000.00	6000.00	
d.	Plant protection	10000.00	8500.00	
e.	Fertilizers	8000.00	20000.00	Water soluble fertilizers
f.	Wages	10000.00	7000.00	
g.	Staking	--	60000.00 (4 Years) or 15000.00 (annum)	
	<b>Total</b>	<b>49600.00</b>	<b>76000.00</b>	
<b>A.</b>	<b>Yield</b>	<b>30 MT /ha</b>	<b>135 MT /ha</b>	
<b>B.</b>	<b>Grades</b>			
	Grade I	40 %	90 %	
	Grade II	40 %	5 %	
	Grade III	20 %	5 %	
<b>C.</b>	<b>Weight gain</b>		25 % more weight	
<b>D.</b>	<b>Water economy</b>		40 %	
<b>E.</b>	<b>Harvest</b>	10 harvest	30 harvest	

**Comparative statement on Cost of cultivation of annual Horticultural crops under conventional and Precision Farming system**

SI. No	Crops	Cost of cultivation		Yield (MT / ha)		% Yield increase over conventional system	Net income (Rs.) (at the lowest price)		Market price Range (Rs.)
		Conventional system	Precision Farming system	Conventional system	Precision Farming system		Conventional	Precision Farming	
1.	Tomato	61000.00	99800.00	50 MT	150 MT	200.00 %	39000 (@Rs.2/Kg)	275200 (@Rs.2.5/Kg)	2 – 30 /Kg
2.	Chilli	46000.00	68000.00	22 MT	35 MT	59.09 %	64000 (@Rs.5/Kg)	142000 @Rs.6/Kg)	5 – 15/Kg
3.	Paprika	49000.00	72000.00	37 MT	60 MT	62.16 %	136000 (@Rs.5/Kg)	288000 (@Rs.6 /Kg)	5 – 20 / Kg
4.	Capsicum	49000.00	72000.00	18 MT	25 MT	39.00 %	95000 (@Rs.8/Kg)	153000 (@Rs.9/Kg)	8- 25 / Kg
5.	Brinjal	50000.00	82000.00	60 MT	150 MT	150.00 %	70000 (@Rs.2/Kg)	293000 (@Rs.2.5/Kg)	2 – 30/Kg
6.	Bhendi	40600.00	62000.00	10 MT	16 MT (Off season)	60.00 %	19400 (@Rs.6/Kg)	50000 (@Rs.7/Kg)	6 – 15 / Kg
7.	Cabbage	51500.00	78000.00	75 MT	110 MT	46.00 %	173500 (@Rs.3/Kg)	252000 (@Rs.3/Kg)	3 – 10/Kg
8.	Cauliflower	51500.00	78000.00	32000 flowers	44444 flowers	38.89 %	108500 (@Rs.5/flower)	144220 (@Rs.5/flower)	5 – 15/flower
9.	Tapioca	30000.00	49000.00	30 MT	45 MT	50.00 %	54000 (@Rs.2.8/Kg)	140000 (@Rs.4.2/Kg)	2.8 – 5 /Kg
10.	Water melon	50000.00	72000.00	40 MT	60 MT	50.00 %	50000 (@Rs.2.5/Kg)	108000 (@Rs.3/Kg)	2.5 – 10/Kg

11.	Musk melon	56000.00	76000.00	22 MT	34 MT	55.00 %	54000 (@Rs.5/Kg)	128000 (@Rs.6/Kg)	5 – 25/Kg
12.	Ribbed gourd	42000.00	74000.00	20 MT	30 MT	50.00 %	38000 (@Rs.4/Kg)	76000 (@Rs.5/Kg)	4 – 15/Kg
13.	Bottle gourd	42000.00	74000.00	40 MT	66 MT	65.00 %	78000 (@Rs.3/Kg)	157000 (@Rs.3.5/Kg)	3 – 15/Kg
14.	Cotton	35000.00	60000.00	20 Q	30 Q	33.33 %	35000 (@Rs.3500/Q)	54000 (@Rs.3800/Q)	3500 – 8000/Q
15.	Gherkins	48000.00	72000.00	20 MT	35 MT	42.86 %	72000 (@Rs.6/Kg)	208000 (@Rs.8/Kg)	6 – 12 / Kg
16.	Turmeric	45000.00	70000.00	5 MT	8 MT	37.50 %	55000 (@Rs.2000/Q)	90000 (@Rs.2000/Q)	2000-4000/Q
17.	Coriander	32000.00	48000.00	87000 bundles	125000 bundles	43.68 %	55000 (@Rs.1/bundle)	77000 (@Rs.1/bundle)	1-2/bundle
18.	Banana	56000.00	115000.00	75 MT	110 MT	46.67 %	319000 (@Rs.5/Kg)	655000 (@Rs.7/Kg)	5-12/Kg
19.	Sugarcane	75000.00	99000.00	150 MT	250 MT	66.67 %	75000 (@Rs.1/Kg)	151000 (@Rs.1/Kg)	1000/MT
20.	Chrysanthe mum	55000.00	78000.00	20 MT	25 MT	25.00 %	245000 (@Rs.15/Kg)	297000 (@Rs.15/Kg)	15-25/Kg
21.	Golden rod	77000.00	97200.00	15000 bunches	25000 bunches	66.67 %	73000 (@Rs.10/bunch)	177800 (@Rs.11/bunch)	10 – 14/bunch
	<b>Average</b>	<b>49600.00</b>	<b>76000.00</b>						

**Director of Extension Education &  
Nodal Officer (TNPFP)**

**Table 1. Comparative statement on cost of cultivation of annual horticultural crops under conventional and precision farming system**

SI. No.	Items	Tomato		Chilli		Paprika		Capsicum	
		Conventional system	PF system	Conventional system	PF system	Conventional system	PF system	Conventional system	PF system
1	Drip and Fertigation system	-	Rs. 75,000 (5 years) Or Rs. 15,000 (annum)	--	15000.00	--	15000.00	--	15000.00
2.	Cultivation expenses								
a.	Field preparation	6000.00	7500.00	6000.00	7500.00	6000.00	7500.00	6000.00	7500.00
b.	Nursery and planting	7000.00	12,800.00	7000.00	12800.00	8000.00	15000.00	8000.00	15000.00
c.	Weeding	10000.00	6000.00	10000.00	6000.00	10000.00	6000.00	10000.00	6000.00
d.	Plant protection	12000.00	8500.00	12000.00	8500.00	12000.00	8500.00	12000.00	8500.00
e.	Fertilizers	8000.00	20000.00	6000.00	13200.00	8000.00	15000.00	8000.00	15000.00
f.	Wages	13000.00	10000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00
g.	Staking & other expenses	5000.00	60000.00 (3 Years) or 20000.00 (annum)	--	--	--	--	--	--
	<b>Total</b>	<b>61000.00</b>	<b>99800.00</b>	<b>46000.00</b>	<b>68000.00</b>	<b>49000.00</b>	<b>72000.00</b>	<b>49000.00</b>	<b>72000.00</b>

**Table 2. Comparative statement on cost of cultivation of annual horticultural crops under conventional and precision farming system**

SI. No.	Items	Brinjal		Bhendi		Cabbage		Cauliflower	
		Conventional system	PF system	Conventional system	PF system	Conventional system	PF system	Conventional system	PF system
1	Drip and Fertigation system	-	Rs. 75,000 (5 years) Or Rs. 15,000 (annum)	--	15000.00	--	15000.00	--	15000.00
2.	Cultivation expenses								
a.	Field preparation	6000.00	7500.00	6000.00	7500.00	6000.00	7500.00	6000.00	7500.00
b.	Nursery and planting or sowing	7000.00	13000.00	12000.00	15000.00	10000.00	15000.00	10000.00	15000.00
c.	Weeding	10000.00	6000.00	5600.00	4000.00	10000.00	6000.00	10000.00	6000.00
d.	Plant protection	10000.00	9000.00	5000.00	3000.00	12000.00	9000.00	12000.00	9000.00
e.	Fertilizers	7000.00	14000.00	6000.00	12500.00	8500.00	16000.00	8500.00	16000.00
f.	Wages	10000.00	7000.00	6000.00	5000.00	5000.00	5000.00	5000.00	5000.00
g.	Staking, transport & other expenses	--	10500.00	--	--	--	4500.00	--	4500.00
	<b>Total</b>	<b>50000.00</b>	<b>82000.00</b>	<b>40600.00</b>	<b>62000.00</b>	<b>51500.00</b>	<b>78000.00</b>	<b>51500.00</b>	<b>78000.00</b>

**Table 3. Comparative statement on cost of cultivation of annual horticultural crops under conventional and precision farming system**

SI. No.	Items	Tapioca		Water melon		Musk melon		Ribbed gourd	
		Conventional system	PF system	Conventional system	PF system	Conventional system	PF system	Conventional system	PF system
1	Drip and Fertigation system	-	15000.00	--	15000.00	--	15000.00	--	15000.00
2.	Cultivation expenses								
a.	Field preparation	6000.00	7500.00	6000.00	7500.00	6000.00	7500.00	6000.00	7500.00
b.	Nursery and planting	5000.00	6000.00	10000.00	13000.00	14000.00	17000.00	8000.00	14000.00
c.	Weeding	8000.00	5000.00	10000.00	7000.00	10000.00	6000.00	8000.00	6000.00
d.	Plant protection	2000.00	3000.00	8000.00	6000.00	8000.00	6000.00	8000.00	6000.00
e.	Fertilizers	3000.00	7500.00	8000.00	13500.00	8000.00	13500.00	7000.00	15000.00
f.	Wages	6000.00	5000.00	8000.00	6000.00	8000.00	6000.00	5000.00	4000.00
g.	Staking & other expenses	--	--	--	4000.00	2000.00	5000.00	--	6500.00
	<b>Total</b>	<b>30000.00</b>	<b>49000.00</b>	<b>50000.00</b>	<b>72000.00</b>	<b>56000.00</b>	<b>76000.00</b>	<b>42000.00</b>	<b>74000.00</b>

**Table 4. Comparative statement on cost of cultivation of annual horticultural crops under conventional and precision farming system**

SI. No.	Items	Bottle gourd		Cotton		Gherkins		Turmeric	
		Conventional system	PF system	Conventional system	PF system	Conventional system	PF system	Conventional system	PF system
1	Drip and Fertigation system	--	15000.00	--	15000.00	--	15000.00	--	15000.00
2.	Cultivation expenses								
a.	Field preparation	6000.00	7500.00	6000.00	7500.00	6000.00	7500.00	6000.00	7500.00
b.	Nursery and planting or sowing	8000.00	14000.00	6000.00	9000.00	8000.00	10000.00	10000.00	14500.00
c.	Weeding	8000.00	6000.00	6000.00	4500.00	7000.00	6000.00	8000.00	6000.00
d.	Plant protection	8000.00	6000.00	7000.00	6000.00	9000.00	7500.00	8000.00	6000.00
e.	Fertilizers	7000.00	15000.00	5000.00	13000.00	7000.00	15000.00	8000.00	16000.00
f.	Wages	5000.00	4000.00	5000.00	5000.00	6000.00	6000.00	5000.00	5000.00
g.	Staking & other expenses	--	6500.00	--	--	5000.00	5000.00	--	--
	<b>Total</b>	<b>42000.00</b>	<b>74000.00</b>	<b>35000.00</b>	<b>60000.00</b>	<b>48000.00</b>	<b>72000.00</b>	<b>45000.00</b>	<b>70000.00</b>

**Table 5. Comparative statement on cost of cultivation of annual horticultural crops under conventional and precision farming system**

SI. No.	Items	Coriander		Banana		Sugarcane		Chrysanthemum	
		Conventional system	PF system	Conventional system	PF system	Conventional system	PF system	Conventional system	PF system
1	Drip and Fertigation system	-	15000.00	--	15000.00	--	15000.00	--	15000.00
2.	Cultivation expenses								
a.	Field preparation	6000.00	7500.00	6000.00	8000.00	8000.00	10000.00	6000.00	7500.00
b.	Nursery and planting or sowing	6000.00	6000.00	8000.00	32000.00	12000.00	17500.00	15000.00	17000.00
c.	Weeding	6000.00	4500.00	8000.00	5000.00	8000.00	6000.00	8000.00	6000.00
d.	Plant protection	6000.00	4000.00	10000.00	7500.00	10000.00	8500.00	10000.00	8500.00
e.	Fertilizers	4000.00	8000.00	10000.00	34500.00	10000.00	16000.00	9000.00	18000.00
f.	Wages	4000.00	3000.00	6000.00	5000.00	6000.00	5000.00	7000.00	6000.00
g.	Staking & other expenses	--	--	8000.00	8000.00	21000.00	21000.00	--	--
	<b>Total</b>	<b>32000.00</b>	<b>48000.00</b>	<b>56000.00</b>	<b>115000.00</b>	<b>75000.00</b>	<b>99000.00</b>	<b>55000.00</b>	<b>78000.00</b>



**Table 6. Comparative statement on cost of cultivation of annual horticultural crops under conventional and precision farming system**

SI. No.	Items	Golden rod	
		Conventional system	PF system
1	Drip and Fertigation system	-	15000.00
2.	Cultivation expenses		
a.	Field preparation	6000.00	7500.00
b.	Nursery and planting	30000.00	30000.00
c.	Weeding	10000.00	8500.00
d.	Plant protection	10000.00	8000.00
e.	Fertilizers	11000.00	20000.00
f.	Wages	10000.00	8200.00
g.	Staking & other expenses	--	--
	<b>Total</b>	<b>77000.00</b>	<b>97200.00</b>