

Supplementary Table 1 Annual rainwater harvesting and utilization in IFS from a 1000 m² catchment area

Year	Total rainfall (mm)	Water harvested (L)	Water used in IFS (L)
2019	379.6	232100	180400
2020	91.0	66000	96200
2021	281.8	178000	211986
2022	290.8	189700	211336

Supplementary Table 2 Annual utilization of harvested water (L) across various IFS components from 2019–2022

IFS Component	2019	2020	2021	2022
Fruit plants	7200	15400	24600	28640
Vegetables	140000	-	71136	70896
Dairy Unit	29000	29200	29200	29200
Azolla Unit	-	23800	28800	27600
Mushroom Unit	-	18800	42000	45000
Miscellaneous	4200	4000	20000	10000
Total	180400	96200	211986	211336

Supplementary Table 3 Economic performance of IFS components averaged over four years

Enterprise	Components	Economics (₹)			
		Total cost	Gross Returns	Net Returns	B:C ratio
Arable crops	Cluster bean	4092	10944	6852	2.67
	Moth bean	3560	10584	7024	2.97
Horticulture	Fruits	5044	1500	-3544	0.30
	Snap melon	4550	24194	19644	5.32
	Kachri	2022	6131	4109	3.03
	Tinda	2078	10688	8609	5.14
	Mateera	1977	5100	3123	2.58
Fodder (Dry/Green)	Dhaman grass	2028	3047	1019	1.50
	Fodder pearl millet	5100	23210	18110	4.55
	Azolla	1500	11973	10473	7.98
Dairy	Cattles (2)	73670	156150	82481	2.12
Compost	Vermicompost	6000	16788	10788	2.80
Mushroom	Oyster	16638	27850	11213	1.67
	Total	128258	308157	179899	2.40

Supplementary Table 4 System productivity, employment generation and water use indices for different farming systems of 3.0 ha each under rainfed conditions

Farming System	System productivity (CEY kg/ha)	Employment generation (Man-days/annum)	WUE (kg/m ³)	Water foot-print (L/kg produce)	Economic water productivity (₹/m ³)
*Cluster bean (Sole)	274	108	0.033	30009	4.04
*Moth bean (Sole)	191	96	0.025	39225	4.95
IFS	7608	285	2.498	400	62.54

*Received as rainfall (Avg. rainfall of 4 years 260.8 mm)

Supplementary Table 5 Resource recycling in IFS over the years

Farming System	Azolla (kg)	Crop stover + Fodder pearl millet+ Dhaman grass as fodder (kg)	Vermicompost (t)	FYM (t)	Mushroom spent (t)	Water (L)
2019	-	8236	-	3.5	-	-
2020	875	1341	4.50	3.3	3.46	30200
2021	1070	3160	4.43	2.9	3.56	33986
2022	956	2912	4.35	3.2	3.59	21636
Mean	967	3912	4.42	3.4	3.53	28607