APPENDIX IX

Table No 1: Energy Expenditure (kJ/min) during the activity of Digging of Land by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	2.278	13.222	10.494	3.364	13 540	10.176	3.841	13.54	9 699
	S_2	3.205	13.381	10.176	3 523	13.063	9.537	3.682	13.699	10.017
	S_3	3.841	12.904	9.063	4.00	12.586	8.586	4.00	13.54	9.540
	S_4	3.682	12.904	9.222	4.00	12.745	8.745	4.00	13.54	9.540
	S_5	3.682	13.540	9 858	3.205	13.381	4.661	4.159	13.222	9.068
	S_6	4.159	13.063	8.904	3.046	13.222	4.502	3.523	13.381	9.858
Mean		3.549	13.169	9.6195	3.523	13.089	7.701	3 866	13.487	9.620
		BEE = 3.646			WEE = 13 248			ΔEE = 8.9801		
T_2	S_1	4.00	13.004	9.004	4.954	13.063	8.109	3.682	12.904	9.222
	S_2	3.841	12 586	8.745	3.205	12 745	9.540	3.682	12.745	9.063
	S_3	3.682	12.427	8.745	3.523	12.586	9.063	3.523	12.745	9.222
	S_4	4.000	12.904	8.904	4.159	12.268	8.109	4.159	11.95	7.791
	S_5	3.046	12.745	9.699	3.523	12.586	9.063	3.364	13.063	9.699
	S_6	3.841	12.586	8.745	3.364	12.904	9.54	4.00	12.586	8.586
		3.735	12.708	8.973	3.788	12.692	8.904	3.735	12.665	8.930
		BEE = 3.75			WEE = 12.6883			ΔEE = 8.9356		

T_1 = Traditional Technologies.

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure.

ΔEE = Before work Energy Expenditure – during work Energy Expenditure.

Energy in replication 1

Energy in replication 2

Energy in replication 3

Table No 2: Energy Expenditure (kJ/min) during the activity of Leveling of Land by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	4.318	11.791	7.473	3 841	10.518	6 678	3.682	12 745	9.063
	S_2	3.205	11 95	8.745	4.636	12.745	8.109	4 159	12 427	8.268
	S_3	3.364	11.115	7 791	3.841	10 678	6 837	3.523	10.678	7 155
	S_4	4.00	11 95	7.95	3 841	11.473	7.632	3.523	11.115	7.632
	S_5	3.364	11 632	8.268	3.205	10.67	7.473	3.841	11.79	7.949
	S_6	4.00	11.94	7.940	4.159	11.473	7.314	4.477	11.473	2.753
Mean		3.708	11.729	8.027	3.920	11.259	7.340	3.867	11 704	7.136
		BEE = 3 8316			WEE = 11.564			ΔEE = 7 501		
T_2	S_1	4.159	10.678	6.519	4 318	10 673	6.36	4.318	10 519	6.201
	S_2	3.841	11 155	7.314	4.318	11.632	7.314	4.638	11 314	6.6757
	S_3	4 00	11.632	7.632	3 841	11 314	7.473	4.00	11.314	7.314
	S_4	4.00	11 632	7.632	4.00	11.473	7.473	3.841	11.473	7.632
	S_5	4.159	10.678	6.519	4 00	10.837	6.837	4.318	11.791	7.473
	S_6	4.159	11.632	7.473	3.682	11.314	7.632	3.523	10.996	7.473
		4.053	11.234	7.181	4.018	11.208	7.181	4.106	11.234	7.128
		BEE = 4.059			WEE = 11.22533			ΔEE = 7.1633		

T_1 = Traditional Technologies

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure

ΔEE = Before work Energy Expenditure – during work Energy Expenditure.

Table No 3: Energy Expenditure (kJ/min) during the activity of Application of manure by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	4.318	10.678	6.360	3.841	10 36	6.519	3.682	10.36	6.673
	S_2	3.841	10.042	6.201	4.318	10.201	5.883	4.519	10.36	5.841
	S_3	4 00	10 678	6.678	3.841	11 314	7.473	3 523	10 996	7 473
	S_4	4.00	10.201	6 201	4.159	10 519	6 36	3.523	11 155	7.632
	S_5	4.318	11.791	7.473	4.159	11.473	7.314	3.841	10.996	7.155
	S_6	4.00	10.201	6.201	4.159	10.519	6.36	4.477	11.791	7.314
Mean		4.079	10.598	6.201	4.159	10.519	6.36	4.477	11.791	7.814
		BEE = 4.0283			WEE = 10.7573			$\Delta EE = 6.728$		
T_2	S_1	4.318	10.36	6.042	4.00	10.201	6.201	4.318	9.883	5.563
	S_2	5 523	9.565	6 042	3.682	9.724	6.042	3.364	9.565	6.201
	S_3	4.00	10.519	6.519	3.841	10.678	6.837	4.00	10.36	6 36
	S_4	3 523	10.042	6 519	4 00	10 042	6.042	3.841	9 724	5.883
	S_5	4 00	10.36	6.36	3 205	10 201	6 996	4.318	10.042	5.724
	S_6	3.682	9.724	6.042	3.841	10.042	6.201	3.841	10.201	6.360
		3.841	10.095	6.254	3.761	10.148	6.386	3.947	9.962	6.015
		BEE = 3.8496			WEE = 10.0683			$\Delta EE = 6.2183$		

T_1 = Traditional Technologies.

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure.

Δ EE = Before work Energy Expenditure – during work Energy Expenditure.

Table No 4: Energy Expenditure (kJ/min) during the activity of Sowing by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	3.682	10.042	6.36	3 841	9 883	6.042	4.00	9.724	5.724
	S_2	3.841	9 565	5 724	4 00	10.201	6.201	4.00	10.042	6.042
	S_3	4 159	10.36	6.201	5 113	10 678	5.565	4.318	10.837	6.519
	S_4	4.954	10 201	5 247	4.00	9.565	5.565	4.636	9.883	5.247
	S_5	3.841	9.724	5.883	4.00	10.201	6.201	4.795	9.883	5.088
	S_6	3.364	9.883	6.519	4.954	10.042	5.088	4.318	9.565	5.247
Mean		3.973	9.962	5.989	4.318	10.095	5.777	4.344	9.989	5.644
		BEE = 4.2116			WEE = 10.0155			$\Delta EE = 5.803$		
T_2	S_1	3.523	11.314	7.791	3.382	11.473	2.753	3.205	11.632	8.427
	S_2	3.205	10.678	7 473	3.364	10.201	6.837	3.841	11.314	7.473
	S_3	4.00	10.201	6.201	4.636	10.996	6.360	3.682	11.632	7.95
	S_4	4.159	10.837	6.678	4.00	11.155	7.155	3.341	11.473	7.632
	S_5	3.841	10.519	6 678	3.682	11.115	7.473	4.477	11.314	6.837
	S_6	4.159	11.632	7.473	4.318	11.95	7.632	4.00	11.791	7.791
		3.814	10.863	7.049	3.947	11.148	6.368	4.314	11.526	7.685
		BEE = 4.034			WEE = 11.179			$\Delta EE = 7.03233$		

T_1 = Traditional Technologies.

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure.

ΔEE = Before work Energy Expenditure – during work Energy Expenditure.

Table No 5: Energy Expenditure (kJ/min) during the activity of Interculture by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	4.636	11.950	7 314	3.369	11.791	8.427	4.00	11.632	7.632
	S_2	3.364	12.109	8.745	4.00	11.791	7.791	3.364	11.95	8.586
	S_3	4.159	11.791	7.632	3.205	11.632	8.427	4.954	12.268	7.314
	S_4	4.159	12.904	8 745	3.364	11.791	8.427	4.00	12.109	8.109
	S_5	4.636	12.268	7.632	4.795	11.95	3.23	4.795	11.95	7.185
	S_6	4.477	12 749	8.268	4.159	12.268	8.109	3.682	12.268	8.586
Mean		4.193	12.295	8.056	3.815	11.870	7.401	4.132	12.029	7.902
		BEE = 4.0466			WEE = 12.064			ΔEE = 7.7863		
T_2	S_1	4.313	11.473	7.155	4.195	11.314	7.119	4.00	10.678	6.678
	S_2	3.364	11.314	7.95	3.682	11.473	7.791	3.523	10.837	7.314
	S_3	3.682	11.473	7.791	3.364	10.36	6.994	3.819	10.996	7.182
	S_4	3.523	11.155	7.632	4.00	10.837	6.837	3.364	10.996	7.632
	S_5	4.00	10.996	6.996	4.318	11.314	6.996	4 00	10.837	6.837
	S_6	3.841	11.314	7.473	3.682	11.473	7.791	3.205	11.155	7.95
		3.788	11.287	7.499	3.873	11.128	7.254	3.651	10.916	7.265
		BEE = 3.7706			WEE = 11.1103			ΔEE = 33.93		

T_1 = Traditional Technologies.

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure

WEE = During work Energy Expenditure.

ΔEE = Before work Energy Expenditure – during work Energy Expenditure.

Table No 6: Energy Expenditure (kJ/min) during the activity of Hoeing by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	4.318	13.381	9.063	4.795	12.904	8.109	4.636	12.745	8.109
	S_2	3.841	12 286	8 745	4 00	12.427	8.427	4 318	12 268	7.95
	S_3	4 318	11.95	7.632	4.954	12 268	7 314	3.046	12.586	9 540
	S_4	4.477	12 109	7.632	3.523	12.427	8.904	3.841	12.263	8.427
	S_5	3.841	12.427	8 586	4 318	13.063	8.745	3.841	12.268	8.427
	S_6	3.682	12.268	8 586	4.318	12.586	8.268	3.841	12.109	8.268
Mean		4.079	12.403	8.374	4.318	12.612	8.294	3.920	12.374	8.453
		BEE = 4.1056			WEE = 12.463			ΔEE = 8.3736		
T_2	S_1	3.682	11.95	8.268	4.318	12.268	7.95	4.477	12.745	8.268
	S_2	4.00	12.109	8.109	3.841	11.95	7.809	4.00	11.314	7 314
	S_3	3.841	11.791	7.950	4.00	10.996	6.996	3.841	10.837	6.996
	S_4	4.00	11.155	7.155	3 364	10.996	7.632	3.482	11 791	8 109
	S_5	3 364	11.314	7.95	3.682	11.632	7.95	4.00	11.791	7 791
	S_6	3.364	10.519	7.155	4.00	11.791	7.791	3.205	11.95	8.745
		3.708	11.473	7.764	3.867	11.605	7.688	3.867	113738	7.870
		BEE = 3.814			WEE = 11.6053			ΔEE = 7.774		

T_1 = Traditional Technologies.

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure.

ΔEE = Before work Energy Expenditure – during work Energy Expenditure.

Table No 7: Energy Expenditure (kJ/min) during the activity of Weeding by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	4.159	11.115	6.956	3.523	11.473	7.950	4.00	10.996	6.996
	S_2	3.364	10.837	7.473	3.682	11.314	7.686	3.841	10.837	6.996
	S_3	4.00	10.996	6.996	4.159	10.837	6.678	4.318	10.519	6.201
	S_4	3.523	10.519	6.996	4.159	10.837	6.678	4.477	10.36	5 833
	S_5	3.841	10.201	6.36	3.523	10.996	7.473	3.205	10.519	7.314
	S_6	4.318	10.519	6.201	3.364	10.042	6.678	3.841	10.201	6.360
Mean		3 867	10.697	6.830	3.735	10.916	7.190	3.947	10.572	6.616
		BEE = 3 8496			WEE = 10.7283			$\Delta EE = 6.8786$		
T_2	S_1	4.318	10.996	6.678	4.636	10.678	6.042	4.636	10.996	6.36
	S_2	4.00	10.837	4.837	4.00	10.678	6.678	4.159	10.36	6.201
	S_3	4.318	10.996	6.678	4.954	10.36	5.406	3.841	10.36	6.519
	S_4	4.636	10.36	5.724	3.682	10.678	6.996	3.841	10.519	6.678
	S_5	3.364	10.201	6.837	3.841	10.837	6.996	4.636	10.201	5.565
	S_6	3.682	10.042	6.360	4.477	10.042	5.565	3.364	9.724	6.360
		4.053	10.572	6.185	4 265	10 545	6.280	4.079	10.36	6.280
		BEE = 4.1323			WEE = 10.4923			$\Delta EE = 6\ 24833$		

T_1 = Traditional Technologies.

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure.

ΔEE = Before work Energy Expenditure – during work Energy Expenditure.

Table No 8: Energy Expenditure (kJ/min) during the activity of Harvesting by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	3.832	10.201	6.369	3 205	10.36	7.155	3.682	10.042	6.36
	S_2	3.364	10 519	7.155	3.364	9 724	6.36	3 841	10 042	6.201
	S_3	4.00	9.883	5.883	4.318	10.201	5.883	4.159	10.36	6 201
	S_4	3.523	10.36	6.837	4.318	10.201	5.883	4.318	10.042	5.724
	S_5	3.682	10 042	6.360	3.205	10.042	6.837	4.318	10.201	5.883
	S_6	4.00	10.36	6.360	3.205	10.519	7.314	3.841	10.519	6.678
Mean		3.733	10.227	6.494	3.602	10.174	6.572	4.026	10.201	6.174
		BEE = 3.787			WEE = 10.20			ΔEE = 6.4033		
T_2	S_1	3.682	9.565	5 883	3.364	9.883	6.519	3.841	9.883	6 042
	S_2	3.364	9.724	6.360	3.364	9.565	6.201	3.682	9.724	6.042
	S_3	3.832	10.36	6.528	4.00	9.883	5.883	4.159	10.201	6 042
	S_4	3.364	9.724	6.36	3.682	10.042	6.360	4.318	9.724	5.406
	S_5	4.477	9.565	5.088	3.364	9.724	6.360	4.00	9.883	5.883
	S_6	4.00	10.042	6.042	3 364	9.883	3.523	3.523	10.201	6.678
		3.786	9.830	6.043	3 523	9.830	6.307	3.920	9.936	6.015
		BEE = 3.743			WEE = 9.8653			ΔEE = 6 1216		

T_1 = Traditional Technologies

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure.

ΔEE = Before work Energy Expenditure—during work Energy Expenditure.

Table No 9: Energy Expenditure (kJ/min) during the activity of Threshing by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	3.682	9.088	5.406	3.364	9.565	6.201	3 841	9.724	5.883
	S_2	3.841	9 406	5.565	3.205	9.724	6.519	4.477	9.883	5.406
	S_3	4.636	9.565	4.929	3.841	9.883	6.042	4.00	9.883	5.883
	S_4	3.841	9.883	6.042	4.318	9.565	5.247	3.523	10.042	6.519
	S_5	3.841	10 042	6.201	4.477	10.042	5.565	4.477	9.883	5.406
	S_6	4.00	9.247	5.247	3.682	9.088	5.406	3.523	10.201	6.678
Mean		3.973	9.538	5.565	3.814	9.644	5.83	3.973	9.936	5.962
		BEE = 3.92			WEE = 9.706			ΔEE = 5.7236		
T_2	S_1	4.00	9.247	5.247	4.318	9.247	4.929	4.00	8.770	4.77
	S_2	3.682	9.088	5.406	3.046	8.611	5.565	3.841	9.088	5.247
	S_3	3.523	8.611	5.088	4.154	9.088	4.934	3.523	8.611	5.088
	S_4	3.841	8.770	4.929	3.523	8.611	5.088	3.682	8.770	5.088
	S_5	3.682	8.452	4.770	3.364	8.293	4.929	3.682	8.770	5.088
	S_6	4.00	8.929	4.929	3.841	8.611	4.770	3.841	8.611	4.770
		3.788	8.849	5.061	3.707	8.743	5.035	3.761	8.77	5.008
		BEE = 3.752			WEE = 8.7873			ΔEE = 5.0346		

T_1 = Traditional Technologies.

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure.

ΔEE = Before work Energy Expenditure – during work Energy Expenditure.

Table No 10: Energy Expenditure (kJ/min) during the activity of Winnowing by Women Farmers with traditional and Modified Technologies.

Treat-ment	Subjects	BEE_1	WEE_1	ΔEE_1	BEE_2	WEE_2	ΔEE_2	BEE_3	WEE_3	ΔEE_3
T_1	S_1	3.364	8.77	5.406	3 682	8 77	5.088	3 523	9.088	5.565
	S_2	3.841	9 724	5 883	4 159	9.883	5.724	3 841	9.247	5.406
	S_3	4 00	9.724	5 724	3.682	9 565	5.883	3.364	9.406	6 042
	S_4	3 364	8.77	5 406	3.523	9.406	5.883	3.841	9.247	5.406
	S_5	4.00	9.883	5.883	3.523	9.724	6.201	3.682	9 565	5 883
	S_6	4.318	9.088	4.77	4 477	8 929	4.159	3.841	9.724	5.883
Mean		3.184	9.3265	5.512	3.841	9.379	5.489	3.682	9.379	5.697
		BEE = 3.56			WEE = 9.361			ΔEE = 5.566		
T_2	S_1	3.364	8.77	5.406	3 841	8.611	4.770	3.841	8.452	4.611
	S_2	4.00	8.611	4.611	4.159	8.77	4.611	3.369	9.088	5.724
	S_3	3.364	8.452	5.088	4.477	9.247	4.769	3.205	8.77	5.565
	S_4	3.364	8.770	5.406	4.00	9.247	5.247	4.159	9.406	5.247
	S_5	4.159	9.406	5 247	4 138	8.452	4 314	3.523	9.088	5.565
	S_6	3.523	8.611	5.088	3.841	8.77	4.929	4.318	9.088	4.176
		3.041	8.770	5.141	4.076	8.849	4.773	3.735	8.982	5.148
		BEE = 3.6173			WEE = 8.867			ΔEE = 5.02606		

T_1 = Traditional Technologies.

T_2 = Modified Technologies.

BEE = Before work Energy Expenditure.

WEE = During work Energy Expenditure.

ΔEE = Before work Energy Expenditure – during work Energy Expenditure.