

## List of Tables

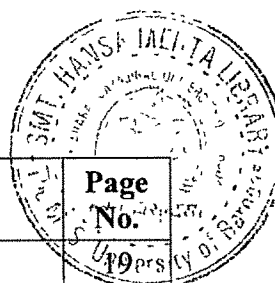


Table No.	Titles	Page No.
2.1	Rates of Organic manures commonly used in China	19
2.2	Description and definition of body measurements (US DHHS 1996)	32
2.3	Various Anthropometric surveys carried out in India.	35
2.4	Anthropometric Measurement for each Height Group (Gupta, 1968)	36
2.5	Anthropometric Data on Indian Female Workers.	39
2.6	Anthropometric Measurements : (Varghese et., al 2000)	40
2.7	Heart Rate of Male Workers in Agricultural Operations	45
2.8	Energy Expenditure of Workers in Different Agricultural Operations	49
2.9	Bad Postures Versus Probable Site of Pain	59
4.1	Personal Characteristics of Women Farmers	130
4.2	Family Characteristics of Women Farmers	134
4.3	Health problems faced by women farmers.	141
4.4	Body Discomfort Faced by Women Farmers	143
4.5	Categorization of Women Farmers on the Basis of Intensity of Body Discomfort	148
4.6	Type of Technologies/Implements used by Women Farmers while Performing Activities.	149
4.7	Posture adopted by women farmers for performing the various types of activities	153
4.8	Time spent and distance traveled by women farmers for performing various type of activity.	157
4.9	Physical fitness test of selected women farmers	161
4.10	Anthropometrics Dimensions and reach of the Selected Respondents (cm)	162
4.11	Heart rate (beats/min) of women farmers during activities with traditional and modified technology.	167
4.12	Working Heart rate (beats/min/m <sup>2</sup> ) of activities with traditional and modified technology relation to output of work.	176
4.13	Energy Expenditure (kJ/min) of women Farmer during activities with traditional and modified technology.	185

4.14	T.C.C.W (beats) of Women Farmer during activities with traditional and modified technology.	194
4.15	Muscular Stress (Grip Strength) of women farmers during activities with traditional and modified technology.	203
4.16	Postural stress (angle of deviation) of activities with traditional and modified technologies.	213
4.17	Classification of physical work according to Physiological response [Astrand and Rodhal (1986)]	221
4.18	Body discomfort experienced by women farmers while using traditional and modified technology.	223
4.19(a)	Extent of Body Discomfort during Digging of Land with Traditional and Modified Technologies.	227
4.19(b)	Extent of Body Discomfort during Leveling of Land with Traditional and Modified Technologies.	230
4.19(c)	Extent of Body Discomfort during Application of Manure with Traditional and Modified Technologies.	232
4.19(d)	Extent of Body Discomfort during Sowing with Traditional and Modified Technologies.	234
4.19(e)	Extent of Body Discomfort during Interculture with Traditional and Modified Technologies.	236
4.19(f)	Extent of Body Discomfort during Hoeing with Traditional and Modified Technologies.	238
4.19(g)	Extent of Body Discomfort during Weeding with Traditional and Modified Technologies.	240
4.19(h)	Extent of Body Discomfort during Harvesting with Traditional and Modified Technologies.	242
4.19(i)	Extent of Body Discomfort during Threshing with Traditional and Modified Technologies.	244
4.19(j)	Extent of Body Discomfort during Winnowing with Traditional and Modified Technologies.	246
4.20	Distribution of Women Farmers in Relation to their scores on Attitude scale	249
4.21	Various Parameters of physiological cost of work used for assessment of modified technologies.	250
4.22	Ergonomic Assessment of Modified Hoe	252
4.23	Ergonomic Assessment of Modified Kutla	255
4.24	Ergonomic Assessment of Modified Land leveler	259
4.25	Ergonomic Assessment of Modified Hand Scraper	261
4.26	Ergonomic Assessment of Modified Hand wheel seeder	266

4.27	Ergonomic Assessment of Modified Tubular maize sheller	269
4.28	Ergonomic Assessment of Modified Sickle	273
4.29	Ergonomic assessment of Traditional Hoe	277
4.30	Ergonomic assessment of Traditional Kudal	281
4.31	Ergonomic assessment of Traditional Sickle	283
4.32	Co-efficient of correlation between attitudes of women farmers towards acceptance of modified technology and selected variable.	287
4.33	Co-efficient of correlation between body discomfort experienced by women farmers and their selected variables.	290
4.34	Co-efficient of correlation between age and their selected variable	291
4.35	Co-efficient of co-relation between time spent and physiological cost of work (heart rate) in various activities.	294
4.36	Co-efficient of Co-relation Between distance traveled and physiological cost of work (heart rate) in various Activities	295
4.37	Co-efficient of co-relation between Heart rate and energy expenditure while performing various activities.	296
4.38	t-value showing difference between Heart rate and Energy Expenditure before and while performing various activities.	297
4.39(a)	t- value showing difference between heart rate, energy expenditure, before and after various activities.	300
4.39(b)	t- value showing difference between body discomfort, before and after various activities.	301
4.40	Two way ANOVA test calculating for physiological cost (working H.R.) with traditional and modified technology.	302
4.41	Two way ANOVA test calculating for physiological cost ( $\Delta$ H.R.) with traditional and modified technology.	303
4.42	Two way ANOVA test calculating for physiological cost (heart rate to output of work) with traditional and modified technology.	304
4.43	Two-way ANOVA test calculating for Body Discomfort before and after acceptance of modified technologies.	305