Anthropometry of Kerala female agricultural workers and design of hand tools of the region

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■ **ABSTRACT :** Women in rural India play a major role in shaping the country's economy through their active participation in agriculture. For proper design of farm equipment for women workers, it is necessary to collect anthropometric data on farm women. But not much of information is available regarding their anthropometric data. Therefore, a study was undertaken to collect anthropometric data from 120 female farm workers engaged in agriculture field activities in the age group of 19 to 65 years from Kerala, southern part of India. The mean, standard deviation, standard error of mean, coefficient of variation, relative accuracy and percentile values (5th, 50th and 95th) of each measurement were tabulated. The means of the female measurements were compared with those obtained for the agricultural workers from other parts of the country. South Indian female workers are shorter and heavier than female workers of western and north eastern part of India. The data as obtained are intended to be used for the design/design modifications of agricultural hand tools/implements/ machinery with a view to reduce drudgery and at the same time increase efficiency, safety and comfort of operators. An attempt was also made to illustrate the relevance of these data in the design of handle of hand tools from ergonomic considerations.

■ **KEY WORDS :** Farm women, Ergonomics, Anthropometric data, Hand tools, Safety

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