

A Methodology for the Quantitative Assessment of the Primary Social Impact of Agricultural Technologies

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ABSTRACT Present methodologies for the assessment of the social impact of agricultural technologies and their modes of extension are merely comparative or often qualitative. A hierarchical clustering based impact assessment tool is detailed in this paper. Social impacts of thirty-nine agricultural technologies extended by Krishi Vigyan Kendra (Kerala Agricultural University) were quantified using the scores based on the number of participants and the level of adoption. Common anomalies in biometric analyses caused by the numerical size of data were mitigated through transformation of data within a mode of extension into a 0-1 scale. Transformed data were given the weightage based on the level of adoption and further used in the hierarchical clustering to obtain the bi-dimensional dendrogram presenting the comparative impact of technologies as well as modes of extension.