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## **AN APPLICATION TO SUSTAINABILITY USING EFFECTIVE FACTOR ANALYSIS**

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**Abstract:** Sustainability is a modern concept term used in various situations. In this study an attempt is made to evaluate on the sustainable nature of agriculture. Even though several theoretical concepts and indices have been developed and suggested worldwide, a very few field studies have been undertaken to measure sustainability of different systems. In this study, a pioneering attempt has been made to develop sustainability index and to measure the sustainability level of any wet land farm. This index is expected to serve as an effective tool to measure the level of any farm after appropriating the relevant crops and animal activities in the area. The two main effective factors involved in this concept are the economic factor involving money and the ecological factor concerned with environment. Moreover, the study ascertained that sustainability levels between diversified and non-diversified farm system in terms of the above factors and it will be analysed in Thambiraparani region of Tirunelveli and Thoothukudi districts. A multi stage sampling technique was followed.

**Keywords and Phrases:** Sustainability, effective factors, factor analysis, diversifies farm system, non-diversified farm system.

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