

## **GEOGRAPHICAL INFORMATION SYSTEM BASED FOOD SECURITY MAPPING FOR MULLAITIVU DISTRICT OF NORTHERN SRI LANKA**

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Food security is generally influenced by many factors and can be a considered composite condition, rather than as a distinct or separate condition. Moreover, while this condition is usually associated with poverty, it is not the same thing as general income inadequacy. Rather, it is the condition of nutritional awareness, attitudes and practices. Thus, it is important to consider all these factors when food security is concerned. The method developed through this study considers household food consumption patterns in which nutritional awareness, attitudes and practices are encapsulated, household income and expenses on food.

Final food security status map reveals that the GNs targeted in Puthukuduirippu area, i.e. Visvamadu East and Visvamadu West are clearly vulnerable to food insecurity. According to the food security thresholds developed for this study, it can be concluded that, comparatively: Visvamadu East and West show lowest food security levels; Thannimurippu, Kokkuthuduwai North and Karundankerny show moderate food security levels; Kumarapuram, Semmalai East, Kokkuthuduwai Center, and Kokkuthuwai South show higher food security levels.

The final output of the study, i.e. food security status map, depicts properties of an interval variable that varies from 0 - 1000, and also has a clear definition of 'zero'. However, it does not provide thresholds to distinguish prevailing food security status of a particular community, such as if it is in a food insecurity, borderline food security or food security. This study can be further improved by taking into account recommended minimum amount of money for food for a nutritionally balanced diet and then by calculating acceptable income level by using national 'food ratio' rather than in preference to national average of rural household income.