**LAND ASSESSMENT FOR CAM CULTIVATION DEVELOPMENT FOLLOWING THE FAO WITH THE HELP OF THE GIS AND AHP**

**(Case study of Tan Phu commune, Tan Ky district, Nghe An province)**

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**Abstract.**

In this study, FAO's assessment of land is based on a comparison of basic information on the characteristics of the land (shown on the map of land units) with land use requirements. With the application of GIS technology, the stacking of component maps to form a map of land units, selection of land adaptation units for orange trees has been done quickly and accurately. Case study in Tan Phu Commune, Tan Ky district identified 28 units of land on the basis of overlapping 9 component maps (irrigation, elevation, slope, thick layer, fertility). The weight of the indicators is determined by the Expert choice AHP method with the first level indicator group: land characteristics (0.660), terrain (0.140), fertility (0.200) and 7 level indicators. The research identified 12 most adaptable land units (1,162,341ha), 11 medium adapted land units (1216,573ha), 4 less adaptive units (209,672 ha) and 1 non-adaptable unit adapting (0.254ha).

*Key words: Land evaluation, GIS, FAO, Tan Phu commune*