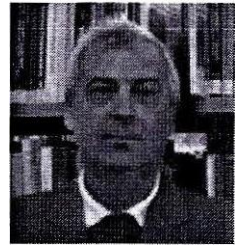


APOIA-NovoRural -Integrated sustainability indicators with emphasis on intensive periurban agriculture

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A System for weighted environmental assessment of rural activities (APOIA-NovoRural) is proposed as an adequate method for promoting the environmental management of rural activities, as well as for checking their conformity with defined eco-certification objectives. The APOIA-NovoRural consists of 62 multi-attribute indicators, formulated toward the systemic assessment of rural activities at the rural establishment scale, according to five sustainability dimensions: i) Landscape ecology, ii) Environmental quality (atmosphere, water and soil), iii) Socio-cultural values, iv) Economic values, and v) Management and administration. Evaluations are performed by quantitatively and analytically assessing the effects of the rural activities on each and every indicator, and automatically calculating the impact indices, according to appropriate

weighting factors. The impact indices are expressed as utility values (0-1, with the conformity level modeled at 0.7) for each indicator, the aggregated dimensions and the integrated sustainability index. Information required for filling out the systems' scaling checklists are obtained in field surveys, instrumental analysis and data on the managerial history provided by the farmer. The impact indices are finally aggregated by mean utility value for the sustainability dimensions and the integrated assessment for the establishment. A module of the indicator set has been adapted for intensive periurban agriculture. For further details on the methodology, the full set of indicators, and access to the operational system, please refer to Rodrigues *et al.* Environmental Impact Assessment Review, 2010.