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## **Prioritization of areas for Crop–Livestock–Forest Integration technology transfer.**

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This paper will explore the implications of using multi-criteria analysis (MCA) and geographical information systems (GIS) along with strategic planning forecasting tools to map priority areas for crop–livestock–forest integration (CLFI) transferring technology actions (TT). Although it is usual works with MCA in GIS, there is no established approach to the definition of objectives, guidelines and criteria. Thus, we chose to use the strategic planning for it. The steps of this work were developed with TT and CLFI professionals of whole country. Which allowed us to identify and validate the guidelines and the criteria and drawing the thematic integration model of the evaluation with participatory approach. Thus, the guidelines were defined focused in strategic TT questions. And each criterion was conceived having its spatial representation in mind. After being validated, criteria were weighted through Analytic Hierarchy Process (AHP). Thus, the integration model was developed for representing how experts would use these criteria to select areas for TT. The use of strategic tools allowed the core of the problem and the goal to be clearly and objectively identified. Additionally, it enabled us to elaborate the strategic review of CLFI TT context and guiding the expert panel focused in the issue itself. Furthermore, reducing the subjectivity in the guidelines and criteria definition. Additionally, we conclude that the use of strategic planning tools allow for conflict resolution between research goals and experts' ideologies. Finally, this study gives an alternative methodology for spatial evaluation that allows the participation of non-experts in GIS. As a result of the spatial analysis, we identified that 82% of the agricultural area in Brazil are in accordance to CLFI TT criteria. From which, it offers the following areas of priority classes for TT in the CLFI: 41,5% with high; 28,8% with average; 18,7% with low and 13,8% with very low.