



## Quality Score of Municipal Management in Environment

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### Abstract

In this paper was used a model of the Item Response Theory (IRT) to estimate a quality score of municipal management environment. The database of the Survey of Basic Municipal Information of the year 2013 was used for the model fit, considering 19 items related to actions/planning in the environmental area. The score was estimated for the Brazilian municipalities that have implemented an initiative on sustainable consumption area. It was possible to identify what items that more contribute to improve environmental management in municipalities, with emphasis on the implementation in partnership of the following actions: *Collective educator, Green Room, Circuit Green Screen, Children and Youth Conference for the Environment and environmental sustainability of the institutions public, such as the Environmental Datebook in the Administration-A3P*. The three cities with better environmental management were: Quixeramobim-CE, Fortaleza-CE and Itaguaje-PR. The 19 municipalities that presented the lowest score in environmental management are distributed in the five Brazilian regions: Northeast, with 11 municipalities, South with 4 municipalities, Central West region with 2 municipalities and the North and Southeast with only one municipality.

**Keywords:** item response theory, quality score, environment.