

# **ARE THERE RELATIONS BETWEEN LOCAL GOVERNANCE, LOCAL DEVELOPMENT AND FINANCIAL COMPENSATION FROM HYDROPOWER PLANTS? A CASE STUDY FROM BRAZIL.**

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Abstract:

## Introduction

In Brazil hydropower plants are responsible for almost 80% of electric energy generation. Regardless the idea of renewable energy, this's an activity associated to many impacts, like consequences associated to the river blocking, impacts over fauna and flora, greenhouses emission, deprivation of relocated people, etc. (WCD, 2000). Besides the acknowledge of the impacts, hydropower still one of the sources with higher investments in Brazil, especially due to the idea of development related to the construction of infrastructure projects (GIMARAES, 2003). More than impacts, a hydro project is associated to changes in the dynamics and characteristics of social, economic and environmental dimensions of a territory (RÍO and BURGUILLO, 2009).

Usually this territorial reconfiguration is associated to local development by the government agents and private investors, which associated a local development to the financial compensation that municipalities receive as soon as a plant starts to operate. Municipalities that receive financial compensations are the ones directly affected, which had part of their lands flooded or any other infrastructure built up in the territory. However, the coverage impact area is not restricted to these municipalities. Many municipalities that also suffer with the existence of a hydropower plant do not receive financial compensation.

To verify the role of financial compensation over the local development, it was compared two groups of municipalities that are under influence of four hydropower plants located in Brazil. Indicators of development were selected and then compared according to the group of municipalities with or without the financial compensation.

Indicators were selected pursuing to represent a complex concept of development , compound by economic, social and environmental dimensions, according to definitions presented in Sen (2000), which defines development as the capacity to satisfy human needs and also to environmental protection (SACHS, 2002).

Another dimension to be highlighted is the institutional. It also will be analysed if municipalities' governance structure has a relation to the variability of indicators. According to North (1990), institutions are considered the society formal rules that are expressed by laws and conducts codes that regulate human activity, chasing a collective rationality to avoid individualists' behaviours.

As follows, the present work tries to respond if financial compensation paid to the municipalities has a positive effect over municipalities' development and also if the institutional structure has a relation with the allocation of financial compensation for the citizens' benefit.

#### Methodological approach and preliminary results

Indicators selected were: to social dimension: life expectancy index and educational index, for economic dimension: incoming index and occupation index, and to environment dimension: number of people with access to water, number of people with access to sewage system, volume of sewage treated and volume of industrial waste disposal. Variation was calculated for all indicators in an interval of 2000 and 2010, values obtained were transformed to percentage then, Mann Whitney statistical test was applied to identify if there was difference between both groups for each indicator. Results have shown no difference at all.

Seeking to understand if there is any factor that responds to a better or worse performance from the municipalities, for each dimension analysed there will be an indicator of governance. For social variables of governance are number of educational council existents, public investment in education, number of health council existents and public investment in health. For the economic: the existence of participatory budgeting and existence of programs which support first employment, and for environmental , number of environment council existents, existence of a municipal fund for the environment, existence or elaboration process of local agenda 21 and existence of specific legislation about environmental. The selected variable first will be transformed into indices, which will allow an analysis of the existence or not of a correlation between municipalities with good indices of local governance and municipalities that have a positive variation in development indicators.

#### References

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