

# Implications of conflicts and synergies between regional and local environmental management planning

by Daniel González

## Background

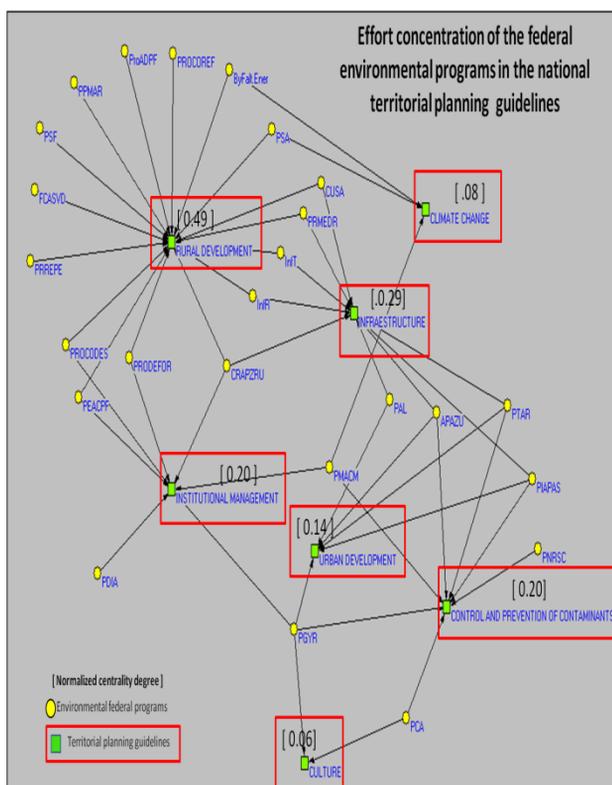
Land degradation related to land use change and inappropriate agricultural practice is increasing in Mexico. In the Cointzio catchment (630 km<sup>2</sup>), where the typical environmental degradation processes of central México are evident, regional and the local land use plans are currently implemented, according to the territorial environmental policies recognized by the existing legislation. However, we have identified spatial inconsistency between the ecological strategies among the different scales and approaches of the land use plans. In addition, the financial resources for environmental issues are insufficient in the study site area.

It is therefore necessary to identify the conflicts and synergies in the vertical structure of the institutions involved in the environmental context. This will allow us to prioritize the programs with potential positive impact in the territory, according to the local environmental demand.



T. Carlon. 2010

Severe erosion, Cointzio



Example graph at federal level. (Software: Pajek, 2010)

## Strategic approach

The main strategy for this study was to carry out a census of the implemented programs (productive, conservation, protection, mitigation or restoration) within each environmental management unit. Then these were characterized, each according to whether or not they related to the proposed strategies and environmental guidelines, stipulated or not in either the regional or the local management plan.

Using the tools and theory of the analysis of social networks, it was possible to compute an index of centrality to express the concentration of efforts in a given environmental policy by each level of the environmental authorities. The comparisons of these efforts allowed us to identify potential spatial conflict in achieving the goals of the local management plan, especially focused on actions of restoration and mitigation of degraded soils.

Gonzalez D.

Implications of conflicts and synergies between regional and local environmental management planning .

In : Geeson N. (ed.) Focus on research in Chile and Mexico. Newsletter - Desire Project, 2011, (7), p. 5.