

A collaborative monitoring concept for developing cities. Methodological ap- proach and realization of an urban observatory.

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**Joint Areas
of Case Studies:**

East Africa
Horn of Africa
West Africa
South-East Asia
South Asia
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Central America
and Caribbean
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Summary

Cities in developing countries are experiencing a considerable demographic growth. This makes their development difficult to foresee and plan, all the more so since technical and financial means are lacking to provide public management. Furthermore, the political context is affected by power and responsibility imbalances among the different actors. This situation has direct repercussions on the land-use, through classical syndromes of bad development: large informality, precarious settlements, lack of infrastructure, low efficiency of the public investments, environmental degradation, etc.

To analyze the processes of management in developing cities, we refer to two complementary models. On the one hand, to urban governance, a reading grid for the transformation of territorial public action. It focuses on the stakeholders and their interrelationships, on the balance of power and responsibilities, and on the capacity of the local entities to manage their decentralized responsibilities. On the other hand, to a systemic analysis, based on a meta-model of the auto-organizing systems, applied to the land-use management.

The modeling of the urban management processes shows an important deficiency at the coordination level, between the various actors that intervene in the land-use: the communication platform are missing and no common diagnosis or strategies are guiding their operations. It also shows that the solution does not pass through the imposition of a land-use plan, but through the collective development of a strategic view of the city, made through an intensification of the networking.

This research work starts from the potential of the information systems, of the land management techniques, and of the participative methods. It proposes a concept of monitoring for developing cities, based on the integration of two elements: a collaborative urban observatory, and a forum that brings together the urban management stakeholder. Therefore it conceives and connects several methodological modules:

- a specific GIS, made up from data and indicators for the management of developing cities;
- a systemic model, to analyze the complementarity among the different indicators;
- an observatory computerized interface, making easier the access to the information (the Urban Monitor©);
- an implementation method for the monitoring system, within the urban processes, in the form of a succession of management workshops, run within a consultation forum;
- finally, a model of dynamic land management, which integrates the information and the participation for a improvement of the urban governance.

The concept is applied to the city of Thies (Senegal), following an iterative approach, alternating the development of the tool with the application and with the validation. Between huge demographic growth and lack of technical and financial means of the managers, this conurbation is representative of numerous medium-size developing cities.

The presented analysis shows that the elaborated monitoring system offers essential functionalities to its users, for information and communication: first, a land-use database, relevant in regard of the management priorities, second, an networking platform for the stakeholders, and third, indicators for the decision support and monitoring. The improvement of the diagnosis allows them to realize more opportune and more effective projects.

The instrument integrates a forum of the land-use actors, for its implementation within the management processes. Thus, it allows strengthening the data exchange and the coordination. The monitoring tool also serves as support to the consultation, providing clear elements on the land-use. The diversity of the participants ensures the quality of the data and the diversity of the points of view on the urban development. At a holistic level, the actors draw up strategies of development and of land-use planning, which take into account the claims of each other. Being mutually reinforced, information and participation offer then good conditions for a coherent management and for the harmonization of the interventions on the land.

The research is based on a dynamic and spatial vision of urban management. It integrates original tools, adapted to the contextual specificities. It opens up interesting perspectives in the fields of collaborative land-use management and in the implementation of good governance, as well as for the realization of real urban observatories for urban management support.