Which framework for sustainable development in the cities of Québec?

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INTRODUCTION

The implementation of sustainable development (SD) is possible on a national scale. For instance, Québec's government has recently voted both a law (2006) and a Strategy (2008-2013) to be carried out by the public Administration. For years to come, cities will also have to participate to the province's implementation effort.

Issues regarding SD arise on a local scale, where the administrations manage convenience services. On that matter, several authors identify the local scale as the most relevant level for territorial and participative projects relating to SD (Gagnon, 2006; Theys, 2002). Therefore, it seems relevant to study existing mechanisms to implant the SD within local communities in Quebec.

RESEARCH PROBLEM

In Québec, many municipalities have already undertaken SD initiatives. Given the lack of precise guidelines from the superior levels of government, different frameworks can be used to guide their efforts, among which the Local Agenda 21, The Natural Step, the Healthy Cities program, the strategic SD planning and the territorial planning tools such as the town planning scheme. This research project compares these various frameworks and questions their applicability within Québec's municipal context.

METHODOLOGY

SD is a polysemous concept; its interpretation varies according to needs and culture of the actors involved. The various frameworks available for local SD implementation are no exception. Their characteristics depend on the designer's interpretation of the concept. When a municipality has to choose a framework, the coherence between the tool and the municipality's approach and strategy should be verified, thus a growing interest for a SD typology.

This poster aims at defining a typology for the different interpretations of the SD concept, at positioning the diverse local implementation frameworks according to their SD approach and strategy, and to allow the decision-makers to identify the most appropriate tools for implementation.

APPROACH	OBJECTIVES	KEY CONCEPTS
ECONOMICIST	Economic growth (Gagnon, 2008)	Environmental and social responsibilities are instrumented by economical tools.
ENVIRONNEMENTALIST	Integrity of the ecosystems and the biosphere (Dobson, 1996)	The natural capital is inalienable, human needs are second priority
ECOLOGIST	Development of a systematic and integrated vision (James & Lahti, 2004)	Human beings are part of ecological systems
HUMANIST	Human well-being and quality of life (Gagnon, 2008)	The equity, the social justice, the cultural diversity, the empowerment
TERRITORIAL	SD local implementation (Laganier, Villalba, & Zuindeau, 2002)	SD local implementation increases the chances of success of the approach
POLITICAL	SD integration in the decision-makings process (Lequin, 2001)	Must be done with a widened vision and collectively-defined objectives
TECHNICAL	Technical and technological innovation	The knowledge of human and natural dynamics leads to innovations which can solve SD-related issues
ETHICAL	Awareness of the values and coherence with the implemented actions (Huybens, 2009)	Promotes implementation of principles of responsibility, respect, integrity, transparency, solidarity and coherence

TOP-DOWN STRATEGY	BOTTOM-UP STRATEGY
The decision-makers identify problems and coordinate local or sector-based actions (Claval, 2006)	Local actors decide on priorities and on a SD implementation approach (Claval, 2006)
PRESCRIPTIVE STRATEGY	**VOLONTARY STRATEGY**
A third party serves as SD reference, fixes the objectives and targets and requires reporting	The approach is conceived by the organization, without external obligations
PARTICIPATIVE STRATEGY	**AUTHORITARIAN STRATEGY**
Promotes stakeholders' involvement in the decision-making process to integrate at best their aspirations, values and motivations	A sector or an individual in charge imposes the objectives, methods and priorities, with minimum participation
PRAGMATIC STRATEGY	**PLANNING STRATEGY**
SD progresses through the accumulation of initiatives and projects, according to emergencies and opportunities	The use of management tools favors an adaptive approach of continuous improvement (Villeneuve, 2007)

A SD TYPOLOGY

The typology arises from works carried out by la Chaire en éco-conseil de l'Université du Québec à Chicoutimi. It s structure is based on four main levels.

SD CONCEPTION

It relates to the actor's understanding and vision of the SD concept. It is an abstract construction that can be illustrated by a model, either static or dynamic. The SD conception is defined by the considered dimensions (social, ecological, economic, ethical, cultural, territorial, governance, etc.) and by relations existing between these dimensions (equality, hierarchical organization, subordination).

SD REPRESENTATION

It is defined by individual values and interests. It implies a definition by the actors of the major goals and objectives of SD (human development, nature conservation, social justice, etc.). The representation of an actor can evolve as its sensibilities are modified or as its reality changes.

SD APPROACH

It relates to the philosophy that influences SD actions on the organizational level, in relation with the dominant representations and the organizational context.

SD STRATEGY

It informs about the tools and modalities of SD implementation. The strategies are presented by dichotomous pairs. These terms mark two extremes in between which the real strategy of an organization is located.

	LOCAL AGENDA 21 (GAGNON, 2006)	THE NATURAL STEP (JAMES & LAHTI, 2004)	HEALTHY CITIES (HANCOCK & DULH, 1986)	TERRITORIAL PLANIFICATION TOOLS (SIMARD, 2008)	STRATEGIC PLANIFICATION (FERRAND, 2000)
DEFINITION	Multi-sector and participative process of preparation and implementation of an action plan addressing SD local stakes	Strategic and integrated planning based on the systemic analysis	Network of cities that take care of their physical and social environment	Planning of land uses according to natural and anthropological characteristics and constraints	Implementation of a SD management system centred on the adaptive approach of continuous improvement
OBJECTIVES	Endows municipalities with a SD action plan adapted to their territorial context. Favouring improvements related to the quality of life	Elaborates a list of practicable actions on the short-term, oriented on long-term sustainability	Promotes health, mobilizes the resources of the community, strengthens the citizens capacity to help and to realize their full potential	Elaborates means of regulations, interventions and land controls for municipalities	Implement a flexible, adaptive SD process allowing a rigorous follow-up
COMMON APPLICATIONS	Local communities (city, district, region, etc.)	The individuals, communities, companies, organizations	Cities and villages, local communities	All municipalities	Every type of organization
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SD APPROACH	Humanist, territorial, ecologist	Ecologist	Humanist and ecologist	Territorial, scientific and political	Variable according to the context
SD STRATEGY	Planning, voluntary, bottom-up and participative	Planning, voluntary, top-down and participative	Pragmatic, voluntary and participative	Planning, prescriptive, top-down and more or less participative	Planning and voluntary
CITIES IN QUÉBEC USING THE FRAMEWORK	Baie-Saint-Paul, Sorel-Tracy, Saint-Félicien, etc.	Rivière-du-Loup	More than 200 cities	All the municipalities, but are not inevitably oriented towards SD principles	Val-Morin, Lac, Etchemin, Trois-Rivière, Montréal, Sherbrooke, etc.

CONCLUSION

No framework turns out suitable of all situations. Every municipality has to choose according to the context, the characteristics and the stakes of their community. Therefore, it is relevant to know the main characteristics of existing SD implementation tools.

This framework characterization based on SD approaches and strategies has intrinsic limits; the typology proposes an artificial and simplified classification of a complex reality. It is, however, a relevant guide for reflection and analysis, since it allows to clarify ideas and to develop a better understanding of the SD interpretation within a municipality. This knowledge allows professionals to identify most suited tools for effective SD implementation.

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