

Evaluating sustainability at the communal level

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In Switzerland, local communities are encouraged to apply the sustainable development principles in Agenda 21. An essential question for city planning and management is : With more than 40 chapters, Agenda 21 offers many possibilities for actions. How to establish priorities in a coherent way?

This research aims at developing a straightforward tool, usable at the communal level, to determine the socio-economic and environmental impacts of various alternatives in order to set sustainable development priorities.

Each city has its own social structure which influences local practices. These practices affect sustainable development performances. The link between practice and performance can be made with flow analyses and Input/Output analyses. Input/Output methodology enables to estimate environmental and economical impacts – including employment – with the same framework. The main problem in Switzerland is the lack of accurate and detailed statistical data. Swiss matrixes with regional satellites are currently being estimated on the basis of other countries data.

The first case studies - different wood valorization projects - calculated with adapted American data and compared with traditional Life cycle Assessment, show that the approach is interesting and worth deepening.