Crisis, education to sustainable development and eco-citizenship behaviours : example of ecological mobility

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The contribution deals with topic 1 « sustainable development and regional identities », specifically the first debate concerning worldwide crisis 2008-2009, the new deal of sustainable development in territories: change in problematic or contextual hiccup.

Summary: Nowadays, the countryside is increasingly a target for housing and holidays; it also becomes a ground of various initiatives and policies which casts a light on its prominent place in environmental matters. Prospective studies on country space undertaken by the DATAR points out the environmental functions of country space as well as its residential role or leisure; its sets back country space at the centre of sustainable development policies, all the more that new space shaping gives birth to new contradictions and environmental pressures
Middle mountains backgrounds are specifically facing **contradictory pressures** between, on the one hand, **protection of rural amenities and countryside viewed as a sign of major local identity**, and on the other hand t**he rise in mobility constraints resulting from economic growth and functional organization of country space**. Meanwhile, the Grenelle environmental summit, the bill concerning solidarity and urban renewal (SRU), policies pro-sustainable development, new social trends, all these factors lead to new environmental practices. Mastering mobility is a part of this problem; more and more routes sharing practices tend to reduce the use of private cars If sustainable development offers a new framework towards new car practices which could, in theory, help master mobility , it has not, up to now, succeeded in distinguishing itself from or challenging the economical context which implies increasing mobility while fostering hopes in a future "green growth".Worldwide crisis 2008-2009 –analysed through two of its consequences, the slowing pace of growth and the rising costs linked to transports – is analysed in opposition to eco-citizenship (here, "ecomobility") in terms of choice or constraints. In this respect, how do household behaviours interact between the economic reorganization of commuting and transports and the new environmental awareness ? Have the spatial and social features (and regional identities) an impact on speeches and practices?The analysis, focusing on a specific territory, will be based on data about motivations, income, environmental awareness and access to education on sustainable development.
This questioning brings significant lights on the relations between individual practices, explicit or implicit ideologies of sustainable development confronted to the economic context. It also raises the issue of links between the viewpoints of protagonists, the education to sustainable development in and outside school and the identity components of territories. The impact of "ecomobile" practices on environment and territories enables to finalize the outlook.
The contribution will span four folds: Economic standpoint of sustainable development, Impact on country territories an identity challenges, Case analysis: crisis & eco-citizenship behaviour adaptation in carpooling in a middle mountain country background,The conclusion deals with the new aspects of sustainable development in a crisis context.

Résumé: Le développement durable mise sur la cohésion des identités régionales pour assurer les conditions de son émergence, or dans le même temps elle intervient comme l'une des voies de redémarrage de l'économie locale, en élevant les territoires au statut de ressource territoriale (Landel,2006)[1]. Or, l'analyse multiscalaire montre clairement les contradictions que portent ces affirmations. La question des contradictions entre identité régionale, développement durable et croissance économique est abordée à travers **(1)** Les territoires ruraux alpins à l'échelle systémique sur le temps long, en pointant la question du développement durable dans son lien avec la croissance et les crises. **(2)** Elle est ensuite vue à l'échelle régionale en abordant spécifiquement la question de l'identité de la ruralité alpine face aux évolutions différentiées des territoires dans un contexte de concurrence accrue. La question de l'identité n'est pas vue ici au travers du prisme des terroirs ou du patrimoine, mais à travers le spectre plus large des dynamiques et structurations territoriales et ce qu'elles engendrent en terme d'identité du territoire. **(3)** L'échelle locale

ensuite, vue à partir des pratiques de développement durable, ici les opérations d'écomobilité dans le contexte de crise mondiale 2008-2009, ramène l'analyse au niveau individuel, en terme de comportements face au développement durable, mais aussi en terme de positionnement discursif des acteurs dans la représentation du développement durable et des territoires.

Keys words: eco-citizenship behaviours, education to sustainable development, crisis effect, rural areas, sustainable development, carpooling

Mots clés: comportments écocitoyens, éducation au développement durable, effet de crise, territoires ruraux, développement durable, covoiturage

Introduction

Growth , economic crisis and the birth of sustainable development

a) The issue of development

Economic development and economic growth would acquire a steady tempo only towards the end 18th century with the European industrial revolution. At the same time, plenty of pessimistic maltusian analysis would arise concerning the possibilities for human societies to increase their welfare through the increase of production. David Ricardo, one of the pioneers, with Adam Smith, of classical economy will follow a similar path. Relying on the law of decreasing productivity in agriculture, he showed that demographic pressure, which implied the cultivation of more and more less productive land would lead to an economic standstill, because this fall in productivity would cause the fall of property income investment

b) growth first, but until when?

The post war rebuilding in Europe, the economic growth of the thirty years of economic boom (1945-1973) and the competition between Eastern and Western blocks would change the context. The « religion » of growth : as long as productivity was up, the other factors join up and there's no reason for the process to stop. Meanwhile, the « third world » under development sharpens a North/South confrontation; new thesis on unequal development (Samir Amin,1973[2]) or on « neo-colonialism » : underdevelopment for some was the result of the development of others. Many voices started criticising the religion of growth, the most prominent publication being, the Meadows[3] report « Limits to Growth » in 1972 . Its publication coincides with a wave of social unrest in the sixties. the collapse of the Bretton-Woods monetary system and the energy crisis (1973) which would spark a sever recession. The motto is now « no more waste » energy is to be saved, not by changing the economic pattern but, conversely in order to preserve it ! Some theoretical steps forward would lead to think development in a different way by including in economic calculations processes excluded before (theory of « common welfare » externalization …). All these ideas would culminate in a new concept « sustainable development ».

c) Sustainable development : a moral material and world wide must

The Bruntland report is often considered as the birth of sustainable development. It rests on two points: 1) economic growth is faced with limits: limits ressources, environment, and overpopulation …2) conditions must be found to protract our economic model . We must tend to ecoefficiency thanks to which the productive system uses less and less ressources by production recycles its waste, its by products in a better way… The Bruntland report is meaningful in that respect : « in order to meet the basic needs we must not only ensure economic growth in the underdeveloped countries but make sure that the poorest ones have their fair share of the resources which enable this very growth »[4] (introduction).
Among the supporters of sustainable development, many suggest to continue development under the concept of a model which multiplies world inequalities, ransacked natural resources and excludes entire nations .

The study of a specific problem : mobility in local development can work as a indicator for these contradictions and /or incertainties.

1. Back to local scale impact on alpine rural territories and identity crises

a) Growth and processes of territorial differentiations : some impacts on alpine rural life

In times of growth, territories are bound to adapt to competition and comparing assets; urbanization goes together with a massive destructuration of many sectors, many agricultural ones. Mountain spaces, up to then productive in terms of local people needs become non competitive under economic pressures;

productive activities weaken; the history of rural territories is stongly connected to world economic growth.

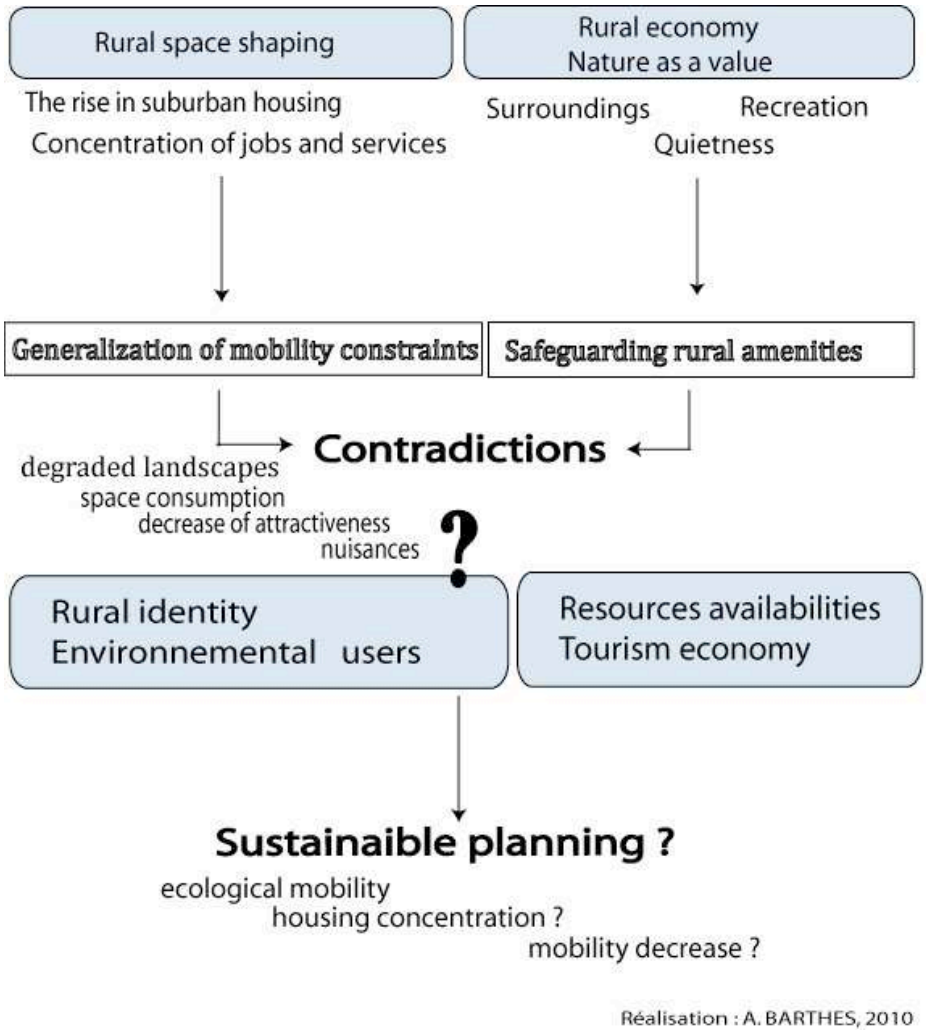
b) Crisis in productivity, identity shift

Territories lose their productive function and become « dormitories » with an exclusive housing role. Landscapes are hugely altered, mainly in valleys, where cottages gnaw at the available space. Road networks become an ever present feature and traffic increases tremendously ; these factors cause an identity crisis, an increasing gap between the perception of rural values, suburban realities and related quality of life, once admitted that rural characteristics have to be preserved.

c) Mastering mobility in the long rrun: economic issues and identity of alpine rural areas

DATAR[5] reinstates country life at the core of sustainable development policies; in as much as new development schemes and the astonishing rise in countryside housing (DATAR, 2003)[6] involve chief environmental pressures. Environmental, assessments are disastrous; the generalisation of mobility challenges the survival of friendly surroundings, a starting point to country « second life ». Also, Alpine countryside can only be viable if they're attractive on a housing and tourism point of view but they stand as producer and consumer of nature. Ensuring a proper future of the countryside implies both to anticipate on housing proliferation and to master mobility.

Diagram 1: What is at stake about sustainable planning applied to rural identities



2. *Teaching sustainable development ; taking into account territorial identities*

Recapturing the identity of Alpine territories is the key to its attractiveness, itself a factor of growth. Indeed, sustainable development projects are mobilised towards this goal. Our point is to cross examine this intention, through a casework analysis ; means of transports is relevant because their generalisation is a prime factor of countryside decay and the loss of rural identity. We have therefore based our research on an analysis of drivers and commuters behaviours in order to identify the links with the impacts of the 2008/09 crisis. The discursive analysis of education to sustainable development will set the matter of behaviours in a wider frame implying territorial identities. How are they mobilised ? What about contradictions between sustainable development and identity crisis ? What do they produce in fact ?

a) Crisis aspects and eco citizenship behaviours: interactions? A casework

The research relies on data collecting about practices, intentions, motives, difficulties and judgments of two distinct samples, each of 100 people[7]. One concerns the project « ecomobility for school », the second labelled « carpooling services ». These data are complemented by a speech analysis of all the bulletins (18 pages) published around these projects, the method used being « social representations of sustainable development » (Moscovici, 1961)[8]

b) Individual behaviours related to money shortage & awareness to sustainable development

The first assumption : the crisis influences transport behaviours.*
Diagram 2: The changes in the carpooling data for *2008 follow the prices of fuel*

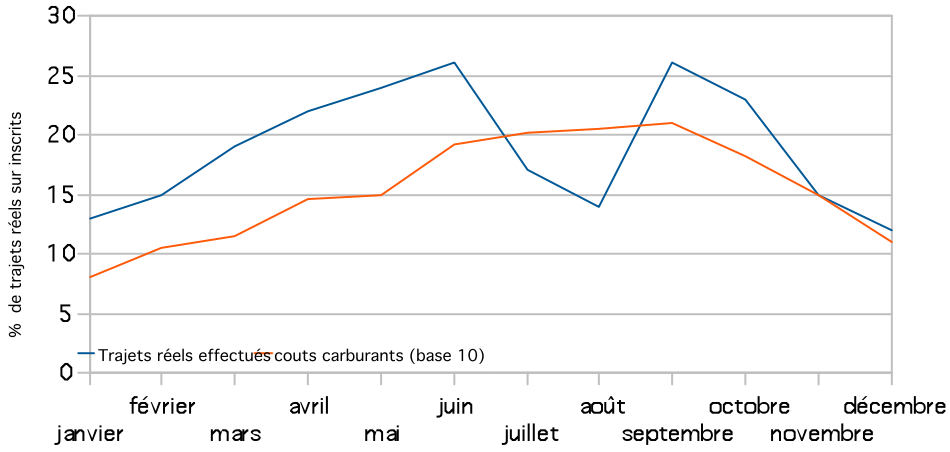
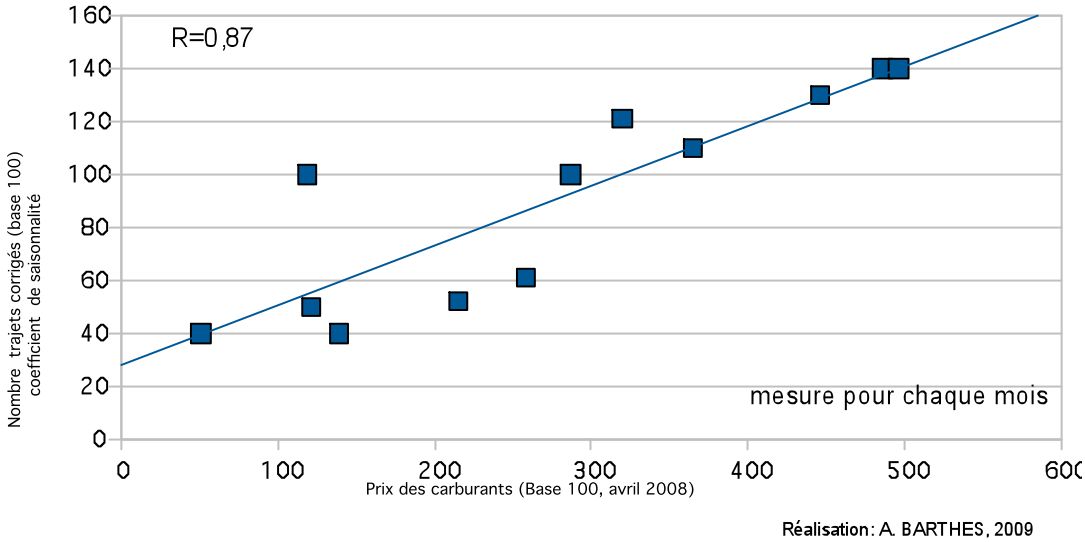


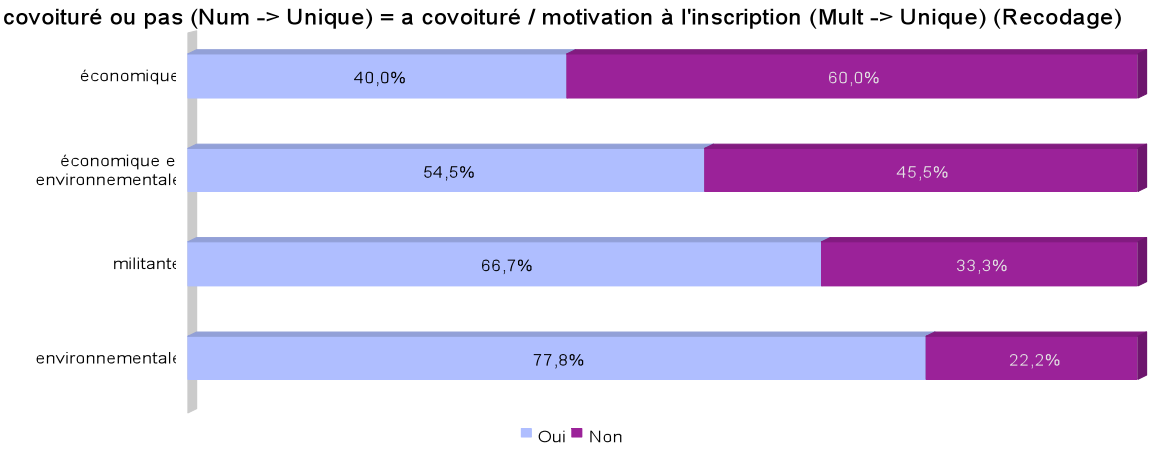
Diagram 3: *Correlation between carpooling and fuel prices*



Réalisation: A. BARTHES, 2009

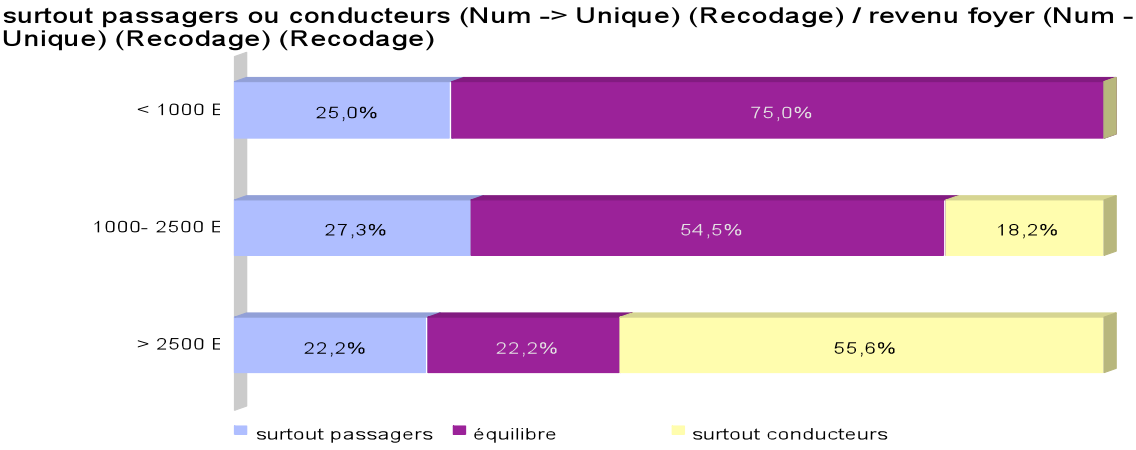
Second assumption: though the underlying motivation for carpooling is mainly money, it's not the starting point .

Diagram 4: *Car-poolers with environmental motives practice more than those with money motives*



This is partly due to the fact that high incomes people set a daily « ritual » with their own car, which low income people don't. it leads to a sort of collective transport system to which the low income individual must cope with. In fact, carpooling hardly makes up for deficiencies in public transports.

Diagram 5: To Drive or not ? Inequalities in carpooling



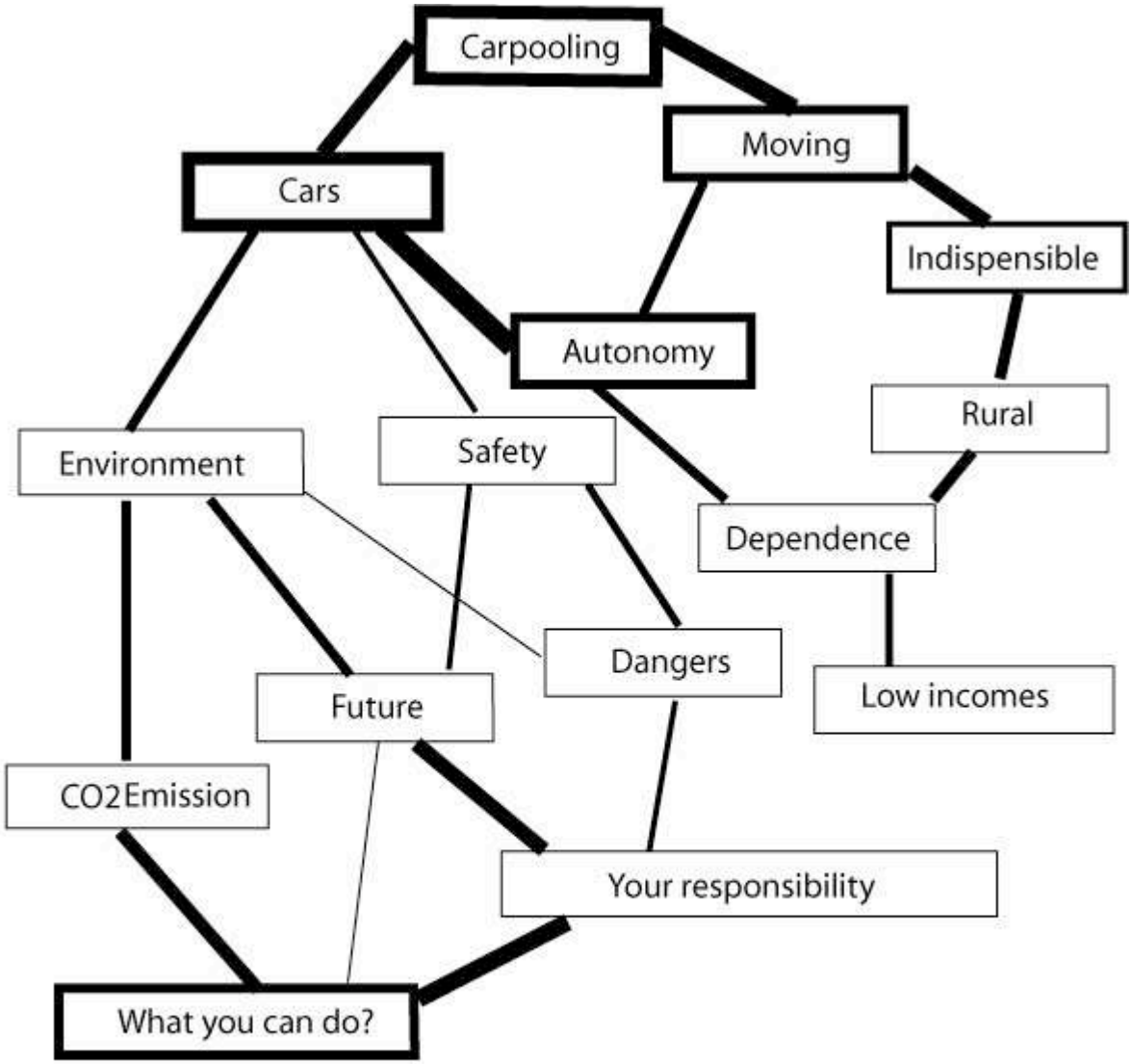
To sum up, the crisis has shown a rise in carpooling but it remains the ground of wealthier ones. Sustainable development hereby fulfils its strategic goal : improving the quality of growth (Bruntland report, chapters on strategic imperatives), but it remains plagued by a strong social inequality ; How are environmental issues taken into account ? How sensitive are the contradictions between the growth of transports, the environmental issues and the rural identity question ?

c) Misperception of issues from a speech analysis

Starting from a very wide environmental approach, we come to individual responsibilities, then to a rather normative trend in behaviours ; stepping from one field to another implies some ideological focalisations and inference pressures ; these, in turn, allow a social representation enabling changes in behaviours. Moliner (1996)[9] stresses that such processes prevent people from having a broad outlook of the topic. The method to identify social representations was set up by P. Vergès. (Vergès P., 2001)[10]

Diagram 6: *Social outlook and sustainable development issues in the information bulletins « eco citizenship mobility*

for schools»



The strong link between « car » and « self-sufficiency » is obvious, dependence being linked not to car use but low income and the rural characteristics of the district; in that case autonomy means what I intend to preserve (I'm only a driver), dependence is what I try to avoid (I reduce my expenses by inviting other carpoolers to join me) while safeguarding my ecological consciousness;. The word « environment is also linked to car but as well to « future » and to some extent to responsibility. This stream of thoughts allow to settle quietly in carpooling with an ethical and environmental good conscience.

Conclusion: The path from a very broad and somewhat hazy theoretical framework (sustainable development) to the concrete analysis of social practices by local people seems to reveal two categories of facts.
On the one hand, it shows all the value of the geographical information system (more widely of the territory intelligence tools) to understand the living strategies on a precise territory.
On the other hand it brings to light a number of key contradictions both in the speeches themselves and between speeches and practices.

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