An institutional analysis of agroecological systems: between practices, organizations and values

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Short abstracts:

Agroecology is broadly defined as a set of agroecosystem management practices and agroindustrial organizations accounting for sustainable impacts of food production and transformation. However, there are many ways to account for the environment. The aim of this presentation is to categorize forms of agroecology according to management practices and institutional features, in regard to the conventional system of agriculture. We used the "Efficiency-Substitution-Redesign" framework and the model of "the economies of worth" linking values and material set-up, both justifying and framing practices to highlight five agroecological behavioral archetypes. We found that (i) conventional French agriculture, generally described as a domestic model, is actually deeply rooted into industrial values, (ii) some agroecological models do not represent fundamental shortage with the conventional model, while (iii) other require a deep redesign of farming systems and even local rural systems. Implications of such findings in terms of regulation advices for decision-makers are then discussed.

Long abstract (1137 words):

Agroecology may refer either to collective action or to scientific inquiry. Yet, there is a more empirical and descriptive dimension of agroecology. In the latter sense, it may be defined as a set of agroecosystem management practices and agro-industrial organizations accounting for sustainable economic, environmental and social concerns in the processes of food production and transformation. In addition, many forms of agroecological systems do exist and this set of practices and organizations is very heterogeneous. For instance, organic farming or short distribution channels may then be considered as agroecological systems (or at least, as elements constitutive of agroecological systems). Given the boundaries of the system under study, some of them are more efficient as regard to environmental, social or economical dimensions than others. They also differ according to the extent to which they break with (or represent a mere adjustment of) the conventional system of food production, distribution and transformation. The aim of this presentation is therefore to provide a framework to analyze characteristics of various agroecological systems, and (as a result) to highlight the differences between them. We illustrate the interest of this framework through a categorization of the various forms of agroecological systems in regard to conventional agricultural practices.

The method we propose is interdisciplinary in nature. It combines knowledge from agronomic expertise to identify and qualify the types of agroecosystemic practices at stake, with a socioeconomic framework providing concepts enabling to characterize the institutional dimensions in which these practices occur.

Besides the conventional system (maximizing staple food production without environmental concerns other than those imposed by the policies), we distinguish five types of agroecological systems, ranging from those seeking to adjust conventional systems to the socio-technical context, to those breaking this trend in terms of practices, rules of organization, and values. These archetypes, primarily built on the farm level (but they may engage other levels of the agrosystems), are classified according to the 'Efficiency-Substitution-Redesign' framework (Hill and Mc Rae, 1995): (i) in the 'efficiency-based'

archetype, farmers focus on the reduction of cost production; (ii) in the 'substitution-based' archetype, the belief that increasing input efficiency and using biological inputs, leads to both economic and environmental benefits; (iii) in the 'upstream-redesign' archetype, environmental and health concerns lead farmers to change the nature of their farming systems in order to promote ecosystem services to agriculture allowing to deeply reduces synthetic inputs, and possibly organized exchange of raw resources between them (eg forage, manure…); (iv) in the 'upstream-downstream-redesign' archetype, farmers not only redesign their farming system, but in addition modify their commercialization and distribution channels, both for economic, environmental, and social reasons; and finally (v) in the 'territorial-redesign' archetype, farmers, beyond redesigning their system, consider how the multi-dimension of their agricultural activities (food production and distribution, environmental impacts, resource use, and social integration) are consistently integrated within others at local, territorial or even platenary levels to support an in-depth transition toward a sustainable agriculture.

In a second step, we used the socioeconomic model of "the economies of worth" (Boltanski and Thévenot, 1991) to characterize the institutional features of each of these archetypes. This conceptual framework enables understanding the conditions under which collective actions and the ways in which they are regulated through public policies, are possible by characterizing link between practices, modes of regulation and underlying values. It considers that (i) individual practices, behaviors, choices, or strategies are framed by rules (including political regulations) and material set-ups (including the nature of technology and the intensity of their use) (Kahneman and Tvesrky, 1984), (ii) all together, they convey meaning for individual choices, which promote collective action and (iii) collective action "holds" (in the sense of Boltanski and Thévenot, 1991) if individuals feel they are engaged in regards to shared values – that is if the values carried by the collective are compatible with their own individual values. The model establishes a link between the framing of situations and the underlying values: situations are set-up in a way to promote given sets of values (or the other way around). That is to say that, according to the situation, behaviors are oriented to meet certain values, or certain values justify the behaviors to frame situations. This model also provides a framework of 6 "pure" situations (that is of stylized figure of social order called "polity") exhumed from work of political philosophy: (i) the polity of market (A. Smith) holds on the value of wealth as a sign of social recognition; (ii) the industrial polity (Saint-Simon) holds on the value of efficiency; (iii) the polity of fame (T. Hobbes) holds on the value of renown as a sign of social worth; (iv) the civic polity (JJ. Rousseau) holds on the value of equality as regard to common good; (v) the domestic polity (JB. Bossuet) holds on loyalty; and (vi) the inspiration polity (Augustine) holds on grace as convention of imaginary. Collective actions justified and organized according to wealth creation (market), efficiency seeking (industry), public opinion (renown), guarantee of equity (civic), chain of interpersonal dependencies (domestic), or stimulation of inspiration, constitute pure models of social orders. These values are principles according to which collective actions and social orders are organized, because they built a space of equivalence between beings. Real world situations constitute mixes of these pure figures, hybridizing values in justifications people put forward when they report what they actually do, as well as in material set-ups.

We analyze archetypes of agroecological systems in regards to this framework, and in particular to (i) *the objects and material disposals*, (ii) *the beings* that are qualified in regard to the principle organizing the agroecological practices of each archetype; (iii) *the proofs* that make obvious the principles and values prevailing in a given archetype; (iv) *the space and time of deployment* of the agroecological practices; (v) *the harmonious figure of the natural order* that constitutes an archetype of organization of the agroecological practices. Each one

of these concepts offers a variety of forms of social order, according to the way in which they fit into polities. If they are consistently articulated, they allow seeing the principle (possibly built at the crossroad between two or more pure principles highlighted in Boltanski and Thévenot framework). When we cross the categorization of agroecological systems archetypes with the polity framework, we draw three main conclusions. First, conventional Western European agriculture generally described as a familial/domestic model actually appears to be deeply rooted into industrial values. Second, some strategies of agroecological redesign do not represent fundamental shortage with the conventional model, either in terms of practices and behaviors, or in terms of values that justified them. Finally, the most radical redesign archetypes imply redesign of practices, behaviors and even consciousness at the territorial and planetary levels, which requires a change of scale in the sharing of values. We discuss the implications of such findings in terms of regulation advices for decision-makers.

References

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