Introduction

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It is now considered essential to involve local people in order to manage natural resources effectively. Nevertheless, many problems still arouse debate. Poteete and Ostrom (2004) pointed out that the issue of the heterogeneity of agents was one of the most sensitive issues. This heterogeneity takes many forms, and, for instance, Velded (2000) identified five forms of heterogeneity:

1. heterogeneity in endowments
2. political heterogeneity
3. heterogeneity of wealth and entitlements
4. cultural heterogeneity
5. heterogeneity of economic interest.

The many forms of heterogeneity, and of the various combinations thereof, make analysing the relationships between heterogeneity and the management of natural resources a complex matter. The texts presented here are intended to contribute towards improving these analyses.

Rather than attempting to address all the possible forms of heterogeneity, we have selected texts that focus on a particular form of heterogeneity, that of socio-economic inequalities. These inequalities are, of course, closely related to political inequality in some contexts, especially when inequalities concern rights of access to resources. However, it is a fundamental form of inequality in itself, since it sometimes affects other forms of possible functionings, as defined by Sen (1992), that is to say people's opportunities to do or to be what they wish. Extending Sen's (1981) analysis of the inequality of rights, Leach et al. (1999) have pointed out that 'endowments' refer to rights and resources that people actually possess, whereas 'entitlements' concern a legitimate effective command over alternative commodity bundles. Institutions, such as formal and informal rules, then act on the opportunities for access to resources, that is to say both endowments and entitlements. In this analytical framework, unequal access to resources is one form of inequality that affects all other possible functionings.

The first three texts provided here shed light on this aspect of the relationship between inequality and natural resource management. The first text, by Ouedraogo and Ferrari concerning Burkia Faso, illuminates the impact that access to natural resources has on people's standard of living. One reason that populations located in less favourable environmental areas are poorer is simply that they do not have access to a number of services provided by natural resources. A first form of inequality emerges from this

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analysis, namely ecological or environmental inequalities. These ecological inequalities largely determine the standards of living of people, and their possibilities for future functionings.

The article of Adamczewski et al. highlights instead the fact that in a given geographical area, i.e., under supposedly identical ecological conditions, access to resources is a crucial issue. Taking the case of Mali, and in particular an area where irrigation is required to produce crops, the main challenge concerns access to irrigated plots. Access to the best land opportunities (i.e., to irrigated land) determines the standard of living that can actually be attained. The article goes on to point out that agricultural development policies in Mali have heavily favoured international investors to the detriment of local populations. In facilitating access to these plots to foreign investors, politicians have reduced the standard of living of local people, who find themselves driven out. One of the interesting findings of this paper is the reaction of local people faced by such institutional discrimination, and who are inventing new forms of cooperation by banding together to form groups of investors who can then claim access to irrigated land. Institutionally established inequalities in access are thus partially overcome by collective forms of action. Of course, access conditions also affect the management of resources, such as water and land. The valuation of land and water pumping affects the quality of resources. From this point of view, the creation of inequalities in granting favourable access to foreign investors is no guarantee of good management, because these investors rarely keep their promises with regard to land development.

In a similar spirit, the article by Koffi et al. emphasises the relationship between access to land and its agricultural use, but this time in the case of Côte d'Ivoire. In this article, the authors point out that the conditions of access to land are politically imposed. The development history of Côte d'Ivoire, through the development of cocoa farming in particular, has had a particularly great impact on forest resources. In this context, obtaining new land for cocoa production comes at the expense of forests. However, access to these lands is governed by complex land allocation rules that have been forged over time. The rules laid down by successive governments overlap informal rules governing land transfers between indigenous people, and are intended to allow immigrant populations access to land. The context of poverty in Côte d'Ivoire, which has intensified over the past twenty years, and the scarcity of productive land combined with forest degradation, have called into question the informal rules that govern land allocation between indigenous and immigrant people. In this context of unequal access due to land scarcity, the first served are inevitably better off than those who follow them, and the situation soon degenerates into conflicts between young people and the older generation; with youth demanding 'their share of the pie'. Thus, unlike in the previous article that highlights the innovations implemented by local populations facing inequalities of access, this article highlights the rise of conflicts related to these inequalities.

Of course, inequality cannot be reduced to inequalities in access to resources, whether due to environmental inequalities or institutional inequalities. These inequalities are combined with other forms of inequality, including inequality of social capital. The role of social capital has been widely demonstrated in the management of natural resources. Although one should not jump to conclusions about its benefits, given all the ambiguities that this concept can involve (Ballet et al., 2007), it is generally seen as a means of facilitating collective action in the management of natural resources. Inequalities in social capital can thus also affect resource management, and therefore the standard of living of the local people. The three papers that follow address this issue each in its own way.

The article by Randrianalijaona and Ballet highlights, in the context of Madagascar, that resource conservation policies may trigger various strategies amongst the actors involved. In other words, a given policy is adapted in local contexts according to the strategies of the actors involved. From two case studies of decentralised resource management with the participation of local populations, the article shows that social capital built up between the actor's leads to differences in access to resources in both cases. More specifically, in one case, resources are managed collectively by the community, without any apparent inequalities, but with poor efficiency. In the other case, a section of the community has monopolised resource management and reduced the access of other members of the community. Resource management is more efficient, but also leads to income inequality. In this case, the institutional inequalities generated by mechanisms of social capital in communities create access to resources, and therefore to inequality in functionings within the community.

Furthermore, with regard to the analysis of social capital, the article of Race and Sumirat highlights the fact that in Indonesia the government has established a forest management scheme in cooperation with local communities. This hybrid form of governance, shared by the state and local communities, has been a success. However, this success is mainly linked to the benefits expected by local people. Local people are actively involved to the extent that they are aware that they can make a profit, i.e., obtain an improvement in their standard of living. However, this success remains very precarious insofar as unequal power relationships between local people and external agents, including representatives of the state and private forestry representatives, affect the involvement of local populations. This article ultimately emphasises the importance that should be accorded to power inequalities in constitutive relations of social capital. These inequalities can quickly become a breeding ground for inefficiency in the management of resources due to the abandonment of projects.

In a similar vein, the article by Nyirenda and Chomba reveals the difficulties in building up relational capital involving the different actors in a protected area in Zambia. These difficulties are largely due to inequalities that generate tensions in the governance of the area. These inequalities, as in the previous paper on Indonesia, relate to power imbalances between the various actors and their economic expectations from the management of a protected area. This article also provides an additional element of reflection in discussing methods of conflict resolution. It calls for optimism, showing that even in conflict situations, solutions do exist that can resolve conflicts and promote the good management of shared and protected resources.

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