

ENVIRONMENTAL JUSTICE: INSTRUMENTAL FOR CONSERVING NATURAL RESOURCES

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1 Introduction

Along with the need for transition towards a more sustainable model of consumption and production, the conservation of biodiversity and ecosystems services (ES) on which humanity is based represents one of the greatest challenges faced by our society.

Among the traditional strategies for conservation, like for instance Protected Areas and Community Conservation, new instruments have emerged such as Payment for Ecosystem Services (PES) as an incentive for the sustainable management and conservation of natural resources. They are intended to act as incentives for the conservation of ES, by means of creating mechanisms of payments between beneficiaries and “providers” of said resources. These mechanisms are considered to be economically more efficient than the traditional approaches of “command & control” currently rapidly expanding, among others, as an incentive for coal sequestration, curbing erosion, improving water quality and protecting agrobiodiversity (Ferraro and Kiss 2002).

Despite the theoretical advantages of said instruments, the idealised view of PES efficiency clashes with a more complex reality, where social and political aspects, including Environmental Justice, play an increasingly more important role for conservation. In an article recently published in the *BioScience* review and led by BC3 researchers (see Pascual *et al.*, 2014), we analyse, based on an extensive bibliographic review and case studies of different continents, how Environmental Justice influences the effectiveness and efficiency of instruments for conserving ecosystems.

Although in the past conservation objectives have been achieved at the expense of social aspects (e.g. the exclusion of users from protected spaces, the omission of local communities from decision-making, etc.), the study throws out broad empirical evidence demonstrating the growing importance of Environmental Justice in conserving natural resources. As we will see below, over and above ethical questions, Environmental Justice constitutes an instrumental element in achieving sustainable environmental objectives .

2 The myriad dimensions of Environmental Justice

Environmental Justice must be understood from a multidimensional perspective (Schlosberg, 2004). The distributive dimension of Environmental Justice considers the way the benefits and burdens of conservation interventions are allocated, including direct handling costs and indirect costs arising from restricted access to resources. Furthermore, Environmental Justice includes non-material aspects related to decision-making and recognition of the rights, cultural identities and values of social actors. These are conditioned by political processes and the existing social context (e.g. dynamics of power, gender and education) and influence the capacity of the interested parties to take part in the decisions that affect them; to achieve the same recognition as others; and to obtain a fair allocation of the costs and benefits of the measures adopted. In turn, all of these Environmental Justice elements condition the motivations and behaviour of human beings and are determinant for the conservation of natural resources (see Figure 1.).

The integration of Environmental Justice criteria to natural resources management has been tarnished by a penchant for economic efficiency. Thus, some of the leading voices in favour of PES consider that environmental objectives must not be confused with social objectives since the latter could compromise the economic efficiency or environmental effectiveness of these instruments (Kinzig *et al.*, 2011). From this perspective, priority is placed on the “providers” of environmental services that appear to be more effective at a lower cost, favouring, for example, the big landowners as recipients of PES in detriment to small landowners who are

Key Points

- *Environmental justice constitutes an instrumental element for conservation.*
- *Environmental Justice is based on the principles of equity, recognition of different values and inclusive decision processes.*
- *Social equity is the catalyst of ecological effectiveness.*
- *Conservation measures that ignore the social context imply higher cost and stand the risk of failure in the long term.*

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considered to be more costly or have relatively lower yields. Similarly, priority is also placed on the most bankable ES (e.g. water or coal) to the detriment of other services (e.g. cultural or religious) with no market value. As occurs in other sectors (e.g. education, health), in this context it is assumed that the market constitutes the most efficient mechanism of governance.

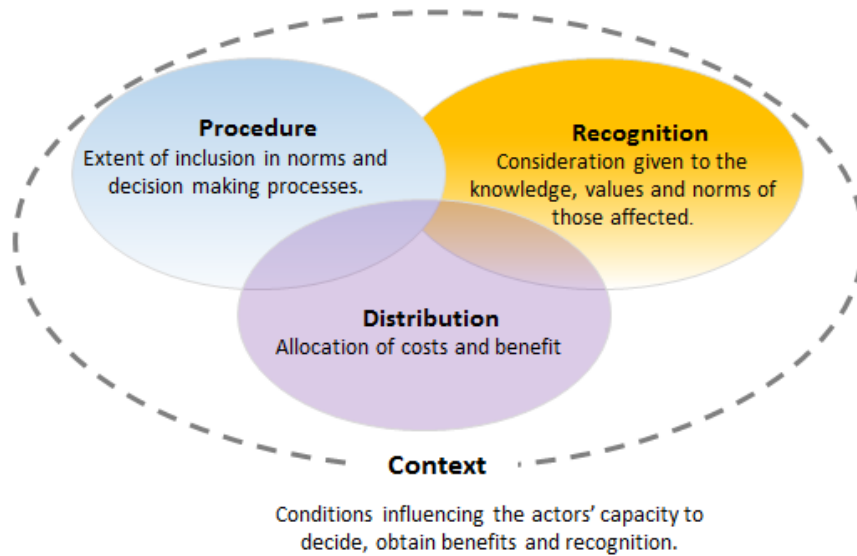


Figure 1. The myriad dimensions of Environmental Justice .

This reductionist view of natural resources management in purely economic terms clashes with reality. In it, the social and political aspects intrinsic to the management and use of natural resources condition conservation efforts. Thus, for example, initiatives such as REDD+, developed under the auspices of the United Nations for reducing carbon emissions from deforestation and forest degradation, have been obliged to integrate social criteria to their programmes in view of indigenous community protests. The pioneer PES programme in Costa Rica for forest conservation initially designed according to criteria of economic efficiency now incorporates criteria of equity in order to correct the inequalities generated (Porras 2010). The SocioPáramo programme in Ecuador incorporates rural poverty indexes in order to define priority areas for conservation (Bremer *et al.*, 2014).

3 Environmental justice and conservation of natural resources

The examples given above are a small example of the growing importance of Environmental Justice in planning and managing natural resources. Nevertheless, the extent and channels by which the myriad dimensions of Environmental Justice influence conservation objectives remain in place as a source of argument between academia, professionals and managers (e.g. Corbera and Pascual, 2012).

The study we have developed (Pascual *et al.*, 2014), shows the main channels (distributive, recognition, participation) through which Environmental Justice can generate opportunities and risks that affect the effectiveness of instruments for conservation (see Figure 2). The study identifies cases in which the PES have been capable of: supporting those at greatest disadvantage and generating the equitable distribution of the benefits (Bremer *et al.*, 2014); promoting inclusive decision-making processes; strengthening the local management of resources. However, it shows examples where instruments for conservation have generated negative effects on equity (Porras 2010). These may be associated to lack of recognition of the parties affected; barriers to inclusive participation in decision-making and/or restrictions of access to the resources necessary for subsistence of the populations affected. Furthermore, these negative impacts are aggravated when the risks are perceived as irreversible or irreparable, for example, due to the loss of ancestral rights and intra-community conflicts. In other cases the measures taken for conservation generate unequal impacts. Thus, for example, incentives to foster carbon sequestration may improve the living conditions of a segment of the local population but exclude women and those with no land from these benefits (Corbera *et al.*, 2007) .

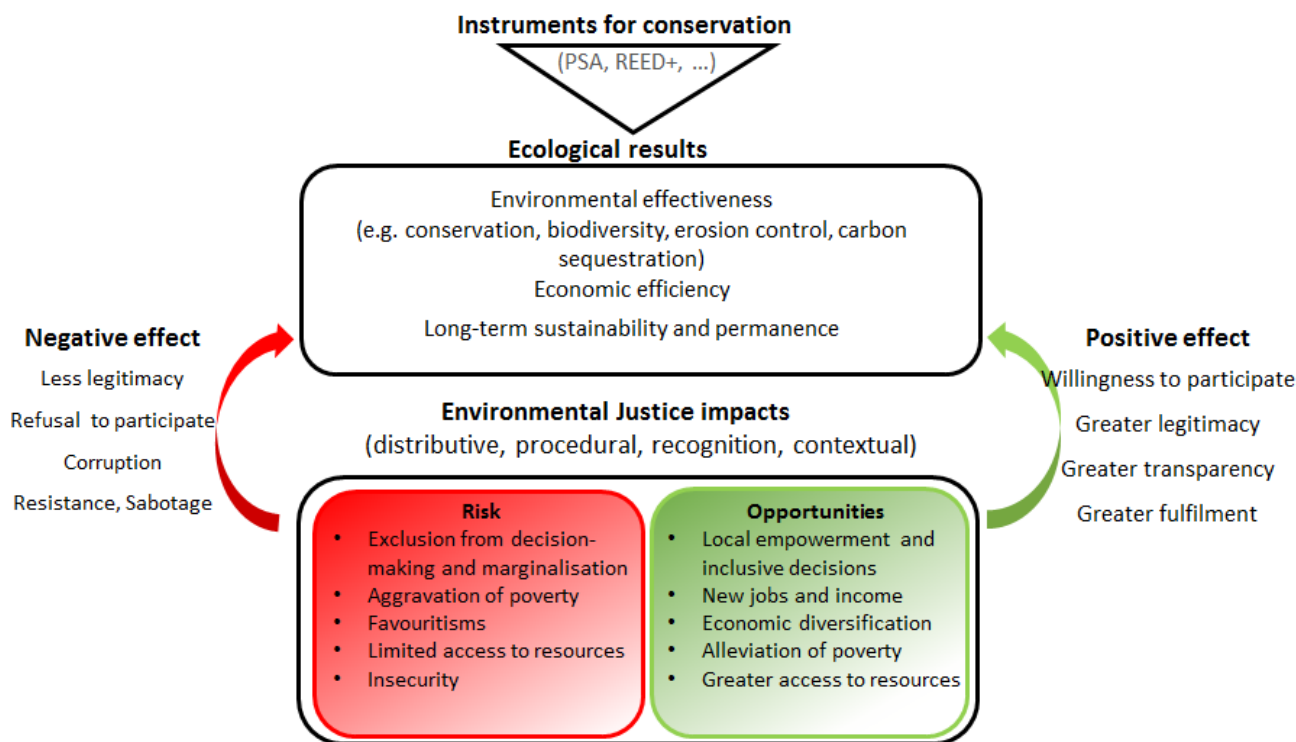


Figure 2: Feedback between instruments for conservation, Environmental Justice and ecological results. Instruments for conservation generate a series of impacts on the distributive, recognition and procedural aspects of Environmental Justice which in turn benefit or damage the ecological results pursued by means of the opportunities and threats generated (adapted from Pascual *et al.*, 2014)

Paradoxically, we find wide empirical evidence that shows us how these impacts of Environmental (in)Justice can affect the functioning and result of instruments for conservation (see the green and red trajectory in Figure 2). We therefore note that greater local autonomy with regard to monitoring and performing initiatives for conservation is linked to greater legitimacy of the projects and closer observation of the regulations that benefit ecological results. Similarly, the equitable distribution of benefits and inclusive decision processes reduce conflictive situations prejudicial to the environment. In fact, these factors may hold greater relevance than the amount of payments made for success of the conservation programmes. On the contrary, evidence shows that initiatives with negative impact on Environmental Justice generate situations of risk for the conservation of ES. These situations of injustice can unleash negative reactions that detract from legitimacy of the project; they reduce willingness to participate in them and give rise to a series of socio-ecological conflicts that can undermine the desired ecological results by means of failing to respect regulations, sabotage, protests and contract cancellations.



Protests in favour of Indian rights and against REDD on the Global Day of Action for Climate Justice, Durban, South Africa (photograph: courtesy of PhotoLangelle.org)

In the long term, these negative feedback effects also imply lower economic efficiency due to the additional costs they involve. This is precisely what happened with a number of initiatives in the REDD+ programme, where threats to Environmental Justice have generated the resistance of indigenous communities, farmers and environmental justice movements at local and international level, slowing down and even paralysing numerous projects (see photograph)

CONCLUSIONS

This study shows that instruments for conservation that do not take account of Environmental Justice criteria are at greater risk of failure, may lead to adverse ecological impacts and prove to be more inefficient in the long term. On the contrary, approaches that include Environmental Justice from the moment of their conception as a core element of conservation policies, will have much more of a chance of benefitting from positive feedback flows between conservation and the wellbeing of the people affected, thereby reducing situations of conflict and improving the ecological objectives sought, even if it does mean additional initial cost.

This is why we believe it is necessary to integrate environmental justice aspects to instruments and initiatives for conservation, and to establish the necessary means for their safeguard. An integrating approach such as this would make it possible to view the changes generated by implementing measures for conservation as regards relations between different social groups, and between the latter and the environment. The affected parties should also be empowered to consider their options and to contribute to decision-making in line with the principles of Free, Prior and Informed consent. This would imply greater recognition of the diversity of values and identities associated to the nature and the integration of inclusive participatory processes to decision-making. Likewise, cases where conservationist objectives can be met without taking account of Environmental Justice, such as protected areas that deny its livelihood to the local population, should be critically evaluated, putting moral and regulatory criteria before economic motives.

Lastly, we believe that greater collaboration is required between social and environmental sciences in order to better understand the synergies and barriers that exist in achieving compatibility between ecological objectives and criteria of Environmental Justice and economic efficiency. This requires not only greater knowledge, but greater space for research between different disciplines and the strengthening of interactions between the political and scientific sphere leading to improved understanding of how interventions for conservation are influenced and conditioned by human behaviour and existing social norms .

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