

Inequalities and the environment: an agenda for applied policy research

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Rising inequalities and environmental degradation are key public policy challenges for the decades to come. In order to tackle them both, it is necessary to understand how inequalities interact with the environment. From a social justice point of view, it is essential to adopt a holistic representation of inequalities. From an environmental point of view, inequalities must be taken into account not only for ethical but also for pragmatic reasons: environmental policies are unlikely to be successfully implemented if they do not address the social issues they raise.

Environmental inequalities are diverse, encompassing for example unequal exposure to rising sea levels, unequal effects of carbon taxes, unequal contributions to pollution or unequal access to environmental policy-making. The academic literature has explored these various challenges and contributed, along with civil society movements, to the adoption of specific policies in some countries.

Looking mainly at the work of leading international think tanks, this brief reviews through this lens the state of current policy debates on the topic, and intends to propose a draft agenda for applied policy research on environmental inequalities, as well as some insights for policymakers.

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KEY MESSAGES

- “Environmental inequalities”, or more precisely the political challenges behind this concept, are a concern for policymakers. This is largely due to the work of civil society movements and research over the past decades.
- The policy discussion, as reflected in global think tank publications, tends to focus on energy and climate-related inequalities. One should wonder whether this focus is also a reality for policymakers, with less political attention and actions to fight environmental inequalities related to local pollution, biodiversity loss, etc.
- Exposure inequalities are extensively discussed by think tanks concerning developing countries, and much less elsewhere. Policy makers in developed countries are not blind to exposure inequalities however: they are concerned by the unequal impacts of air pollution on health for example. But action still has to be undertaken to move beyond mapping and elaborating diagnostics.
- Policy-effect as well as exposure inequalities are too often treated *via* short-term solutions (i.e. building dams to face rising sea levels, or cash transfer to counter carbon tax effects), whereas solutions that address the root causes of inequalities are also needed (redefining urban planning, or directing energy efficiency strategies towards specific people or territories).
- Few countries have so far developed comprehensive strategies that encompass all types of environmental inequalities. They may however be useful to guide and increase action of all policy-making bodies. The development of policy exchange platforms between developing and developed countries on the topic of environmental inequalities, to share and discuss policy options, their limits and their effectiveness, can be an interesting way to go.

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1. INTRODUCTION

Even though the academic literature has explored various types of interactions between inequalities and the environment over the past decades (Boyce, 2002; Martinez-Alier, 2003; Laurent, 2011), and contributed to the adoption of environmental inequalities reduction policies in some countries (in the USA with a comprehensive environmental justice strategy, in India with new mining regulations for instance, or in France with regional and national health and environment plans), environmental inequalities remain a hot topic. It is then useful to ask what evolutions in public policies and in research would be required to better address the issues raised by environmental inequalities, and to deepen the shift from research on environmental inequalities to actual policy responses.

This issue brief draws from the findings of a longer study¹ which critically assesses how global think tanks integrate and discuss environmental inequalities in their publications. Even if global think tanks do not represent public policy debates in their entirety, their analyses are a good entry point to answer our question since they have a foot in the research world and the other in the policy arena. We also looked at the academic literature, media articles and op-eds, and some national policy strategies—though not as systematically as we did for think tanks. Ultimately, our analysis remains imperfect, but as such nevertheless provides stimulating insights and is a good basis to trigger further reflections.

2. THE DIFFERENT CHALLENGES BEHIND ENVIRONMENTAL INEQUALITIES

Interactions between socio-economic inequalities and the environment are diverse and complex. In order to clarify such linkages, the academic literature broke down these linkages into four different categories (Laurent, 2011):

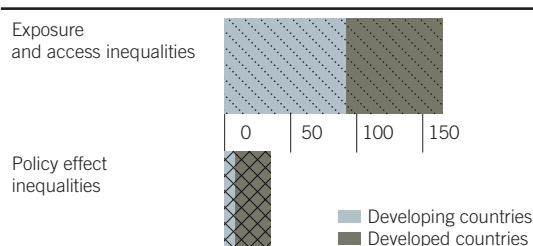
- **Exposure and access inequalities** encompass unequal access to environmental goods (such as productive land, fresh water, etc.), as well as diverging exposure and vulnerability to environmental risks, represented for example by natural hazards such as droughts. Marginalized social groups are generally more dependent than others on environmental services—and more sensitive to their degradation (Martinez-Alier, 2003).
- **Policy effect inequalities** refer to the unequal effects of environmental policies such as carbon taxes or the phasing out of energy subsidies. In developing countries, fossil fuel subsidies were initially designed to help households access cheap energy. However, it has been largely argued that such subsidies largely benefit higher income urban dwellers and constitute a bad environmental signal (Stern, 2011). Suppressing these subsidies would free revenues to invest in public projects for instance—however it may also disproportionately weigh in the budget of low-income households compared to that of high-income households (Ekins and Dresner, 2004).
- **Impact inequalities** relate to the unequal impact individuals or groups have on the environment, reflected for instance by unequal pollution levels of different segments of the population. For instance, it has been argued that certain low-income countries with high levels of domestic inequalities tend to “hide behind their poor” when it comes to defining environmental policies, i.e. they would fail to address the unsustainable lifestyles of certain segments of their population which have high environmental footprints, and only focus on the development needs of the larger segments of the population (Chakravarty and Ramana, 2011). This can be problematic, especially if high-income individuals and groups, with high polluting lifestyles, tend to drive the evolution of consumption patterns of the rest of society.
- **Policy-making inequalities** refer to the unequal access to environmental decision-making—or to the *procedural* dimension of inequality. Individuals and groups are not all equal when it comes to defining environmental policies and regulations that may impact on their living environment (Agarwal and Narain, 1999). According to several authors, the interests and needs of marginalized communities, particularly dependent on services provided by the environment, are often under represented in national environmental policies.

1. Chancel, L., Demailly, D., Sieker, F. (2015, forthcoming). Inequalities and the environment: a review of applied policy research, IDDRI, *Study* N°06/15. In this study, 250 publications since 1997, from more than 50 leading international think tanks, were reviewed.

3. INEQUALITIES AND THE ENVIRONMENT: THE STATE OF POLICY DEBATES

The global debate, as reflected in global think tank publications, focuses on energy and climate-related inequalities: i.e. on the unequal impacts of climate change related events (hurricanes, temperature changes, rising sea levels) on agriculture, settlements or infrastructures and on the impacts of energy policies on low-income households (in developed and developing countries). Topics such as inequalities triggered by biodiversity protection policies, inequalities in terms of access to environmentally protected areas, unequal exposure to chemical products or unequal access to policy-making are only a secondary focus of applied policy research. This does not reflect the relative importance of non-climate related inequalities, which are numerous, documented by the academic literature, and which also raise serious policy issues. And one should wonder whether the focus on energy and climate, observed in global think tanks, is not also a reality for policymakers, with less political attention and actions to fight environmental inequalities related to local pollution, biodiversity loss, etc.

Figure 1. Relative importance of different forms of environmental inequalities in think tanks publications



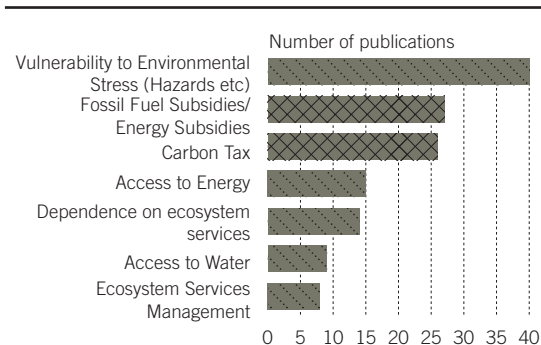
Source: authors.

- **Exposure inequalities: moving from diagnostic to action.** Exposure and access inequalities are extensively discussed by think tanks in developing countries, and much less in developed countries, while exposure to industrial hazards, climate events, or pesticides can also be highly unequal there—as academic research reveals. Policy makers in developed countries are not blind to exposure inequalities, as shown by the USA, which implemented environmental justice laws notably to identify and reduce them. However, in the USA, several administration services have not yet incorporated such objectives in their strategies (EPA, 2011). In other countries such as France progress has been made on the mapping and diagnostic of some exposure inequalities, in particular to air pollution, but how to transform such information into more sustainable and fair

urban planning, health policies or industrial regulations remains an open question.

- **How to reduce exposure inequalities: the risk of not going beyond coping strategies.** In order to tackle exposure inequalities in developing countries, the development of coping strategies (e.g. construction of a dam to protect poor populations living in flood-prone areas) is often suggested in the policy debate, especially in the work of global think tanks. Such solutions may be necessary, but fail to address the underlying causes of exposure inequalities (e.g. how could populations settle in high risk areas?). The development of coping strategies should not prevent from developing context-specific analyses of the causes of exposure inequalities—and deriving policy responses based on these analyses (e.g. enforcement of no construction zones in high-risk areas and development of alternative settlement strategies for marginalized groups, etc.).
- **The debate on policy-effect inequalities is about short-term measures only.** Measures to address unequal impacts of environmental policies generally fail to address the deep causes of such inequalities. In the case of carbon taxes or fossil fuel subsidy phasing out, cash transfers to low-income households are often suggested, in particular by global think tanks. Such an option can help households in the short run but fails to address the root causes of unequal policy impacts: inefficient energy infrastructures, household budget constraints, insufficient transportation networks, etc. Short-term compensation measures should never be thought independently from longer term transition measures. Key pending questions relate to ensuring that low-income or marginalized groups access long-term transition measures (such as household refurbishment for instance).

Figure 2. Geographical focus of exposure and policy effect inequalities



Source: authors.

- **A lack of analysis and action on the unequal access to environmental policy-making?** The Environmental Justice Atlas (EJAtlas, 2015) provides a mapping and description of “environmental justice” conflicts all over the world and shows the existence of numerous inequalities in terms of access to environmental decision making, for instance in the development of landfill sites in the USA or the construction of dams in Ethiopia. Policy-making processes are often criticised for not integrating local communities, especially marginalized communities. Despite some progress observed in India for example, it seems that the proliferation of participatory mechanisms has not been able to ensure that marginalized population can really access these mechanisms on an equal footing with other stakeholders, and that they can really impact decision-making (CGDD, 2014). How to ensure the effective participation of all, be it in developed or developing countries, remains a political challenge.
- **There is an interest in data on the impact of different categories of households on the environment.** According to some global think tanks, such information can be used from an ethical point of view, to assess and/or reveal the responsibility of specific groups of the population in environmental degradation that impacts others. It can also help to address other forms of environmental inequalities: data on pollution levels of specific groups of individuals can help to better identify the drivers of unequal and unsustainable resource consumption and can contribute to designing more effective environmental policies. Further developing such data is key, as well as clarifying the policy demand they will answer and ensuring that data can effectively be used to serve policy.

4. CONCLUSION

Our analysis, based mainly on the publications of global think tanks and on some complementary research, is only a partial glance at some of the policy discussions at the intersection of inequality and environmental challenges. However, we believe it is a good basis to engage into a wider discussion on the scope and the limits of current environmental inequality reduction strategies and policies.

A positive insight from this issue brief is that “environmental inequalities”, or more precisely the political challenges behind this concept, are already a policy concern. However, we think there are several pitfalls in current policy debates. Non-climate related inequalities tend to be overlooked, and exposure inequalities in industrialised

countries seem to raise lower interest among policymakers. Moreover, policy-effect as well as exposure inequalities are too often treated *via* short-term solutions, which do not address the root causes of inequalities. Beyond the representation of environmental inequalities, applied policy research is often short of policy tools and instruments to reduce environmental inequalities in the long run.

Finally, one may wonder whether there is, or not, a need for a policy framework that encompasses all types of environmental inequalities, despite their differences. This is what the US have done for example, although the effectiveness of its comprehensive policy framework has still to be further explored. Several countries—in the EU for instance—have plans against specific forms of environmental inequalities, but the reduction of all forms of environmental inequalities is not an overarching ambition. An integrated policy framework, as comprehensive as possible, may well be useful to guide and increase action of all policy-making bodies. The development of policy exchange platforms between developing and developed countries on the topic, to share and discuss policy options, their limits and their effectiveness can be an interesting way to go. ■

Agarwal, A., Narain, S. (1999). Making water management everybody's business: water harvesting and rural development in India. IIED.

Boyce, J.K. (2002). The Political Economy of the Environment. Edward Elgar Publishing.

CGDD (2014). Programme Concertation Décision Environnement. Apport de 20 projets de recherche (2008-2013), Références. Commissariat Général au Développement Durable, Paris.

Chakravarty, S., Ramana, M.V. (2011). The hiding behind the poor debate: a synthetic overview. Handb. Clim. Change India Dev. Polit. Gov. Oxf. Univ. Press New Delhi 218–229.

Chancel, L., Demailly, D., Sieker, F. (2015, forthcoming). Inequalities and the environment: a review of applied policy research, IDDRI, Study N°06/15.

Ekins, P., Dresner, S. (2004). Green taxes and charges: reducing their impact on low-income households. Joseph Rowntree Foundation.

EPA (2011). Plan EJ 2014. Washington, D.C.

Laurent, É. (2011). Issues in environmental justice within the European Union. Ecol. Econ. 70, 1846–1853.

Martinez-Alier, J. (2003). The environmentalism of the poor: a study of ecological conflicts and valuation. Edward Elgar Publishing.

Sterner, T. (2011). Fuel Taxes and the Poor: The distributional consequences of gasoline taxation and their implications for climate policy. Routledge Journals, Taylor & Francis Ltd.