

EQUITY IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

Note for UN-GSP

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1. INTRODUCTION

The introduction of the concept of Sustainable Development (SD) was seen as a profound paradigm-shift by many analysts, activists and policy-makers, as it brought environmental concerns to the centre-stage of development. The Brundtland Commission report is of course best known for its defining statement: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Equally important is the clarification that follows: "the concept of 'needs', [refers to] in particular the essential needs of the world's poor, to which overriding priority should be given". The report, which provided a sense of global acceptability to the concept of SD, based its considerations on the argument that development was not possible in the long run without protecting the environment. It simultaneously recognized that environmental degradation was further impoverishing people (World Commission on Environment and Development, 1987). The conception of sustainable development in the report gave a high priority to poverty alleviation and to equitable development, arguing that "a world in which poverty and inequity are endemic will always be prone to ecological and other crises" (p.43) and that "long before these are reached, the world must ensure equitable access to the constrained resource" (p.45).

In spite of this originally broad-based formulation, the deployment of the concept of SD in practice has been marked by significant weaknesses.

First, in the process of the further diffusion of the concept and its apparent general acceptance, the dimensions of equity and poverty alleviation tended to be de-emphasized (Lélé, 1991). Even in the final report itself, the original term "Sustainable and Equitable Development" (Jacobs *et al.*, 1987) which was current in the discourse, was truncated to just sustainable development.

A second, related, weakness in the entry of SD into the mainstream discourse, was that several multilateral finance and development institutions, important bilateral aid agencies, as well as many national governments, continued to privilege economic growth in GDP terms as the focus of development. This trend continues despite the parallel and growing realisation that national income is only a partial measure of development that matters and that such growth can co-exist with a wide range of inequalities including widening income disparities. Subsequently, the Millennium Development Goals brought back some focus on issues other than economic growth, but they gave short shrift to environment itself (Drexhage and Murphy, 2010).¹

¹ Environment has become only 1 of 8 goals, and the specific targets set under this goal are very weak, to say the least.

Third, by using the term 'sustainable' as if it captured all aspects of 'environmental soundness', the mainstream conception of SD has perversely narrowed the basis of environmentalism itself. In the post-Brundtland era, the environment appears to matter because, and only to the extent, that it sustains certain set of economic processes or lifestyles. Thus, for instance, conservationists are now forced to emphasize the 'services' that biodiversity provides, because the intrinsic value of biodiversity is not easy to relate to the idea of development.

A fourth limitation is that by focusing on "sustaining" something, which by default becomes the 'current, already perilous state of the environment', developing countries and the poor within them are unconsciously condemned to remain where they are. Sustainability is equated with 'no further transformations of the natural landscape', a frozen concept with no room for transformative social action on nature and society itself. However, poverty eradication across the developing world and sharp and rapid increase in human well-being, both fundamental aspects of equity, would require transformative action, on a large scale that is entirely non-equilibrium in character.

Even as the operationalisation of the SD concept has suffered from these weaknesses, another major shortcoming in practice has been the restriction of considerations of SD to developing countries. In the context of developed nations, sustainability has been limited to an aspirational goal, or limited strictly to local environmental considerations, or reduced to purely an individual lifestyle question. Sustainability as a global goal, for the developed as well as developing nations has been in the main ignored, and a key component of the issue, viz., the natural resource footprint of the developed nations, has been largely sidelined.

Some of this is undoubtedly due to the origins of the sustainability perspective (in a pure resource constraint sense) in the idea of the "limits to growth". In this perspective, that in any case downgrades equity concerns and whose conceptual signature is alarm at the prospects of the drive of the world's poor to achieve material well-being, clearly the onus is on the late-comer to make do with such resources as are available without little responsibility on those who consumed it in an earlier era.

Thus, there is a clear need to re-iterate and clarify the links between equity and justice on the one hand and sustainability, SD, and environmentalism on the other. We argue in this paper that, firstly, equity and justice are an integral part of many kinds of environmentalist thinking, and need to become more so. Secondly, even with a broad commitment to SD and poverty alleviation, the question of sustainability cannot be engaged with meaningfully, without the clarification of issues related to distribution and access to resources. We begin by briefly defining equity and justice, then outline conceptually the links between equity and sustainability. We then examine these links in the specific context of common pool resources, first using Hardin's pasture as a simple

local-level common-pool resource, and then examining the implications for a more complex global common-pool resource such as the climate system.

2. DEFINING EQUITY AND JUSTICE

The idea of equity is a complicated one and the discourse on equity is vast. The terms 'equity', 'fairness' and 'justice' are often used interchangeably (Konow, 2003), although they involve subtle differences. For the purposes of this paper, we use the term equity to encompass a range of ideas:

- At the very least, an equality of opportunity to achieve one's potential
- Equal share of benefits for relevant stakeholders in specific contexts (equity of outcomes)
- At the macro-level, reduced disparities in income and wealth.
- More generally, a 'fair' distribution of benefits and costs of a particular public policy, or a fair allocation of public funds, resources, spaces, including natural resources.
- Positive discrimination and redistribution to right historic wrongs or in favour of systematically disadvantaged groups, including disadvantages of economic, social, gender and other positions in society.
- Equity of process, i.e., empowerment to enable access to information, fair representation, meaningful participation in decision-making, bargaining and effective remedy
- Equity between nations, or international equity that operates in the realm of inter-societal relations
- Global equity on the basis of identities that transcend national boundaries, such as gender, membership of an indigenous community or the particularly vulnerable in some form.

It is intuitively clear that a one-sided emphasis on any single one of these aspects considerably distorts the meaning of equity, though there is a significant literature that often privileges one of these aspects to the exclusion of the others. All of these dimensions come into play when we consider the links between equity/justice and sustainability/SD.

In general, an emphasis on equity highlights the importance of good governance, redistribution of income and wealth, empowerment, participation, transparency and accountability. Thus, while different groups will often have different ideas about what constitutes 'fairness' or 'justice', equity enables diverse groups to have their voices heard in these debates in specific contexts. Equity – of opportunity, outcome and process – therefore underpins the capacity of people (and especially marginalized groups) to gain control over resources and institutions that affect their lives,

3. RELATIONSHIP BETWEEN SUSTAINABILITY/SD AND EQUITY/JUSTICE

Conventionally, equity and justice are seen as ‘social’ issues, as ‘red’ issues, while the environment is characterised as distinct from these, as a ‘green’ issue, thereby suggesting that they are disconnected, separate realms. Even in the SD debate, the tendency is to introduce equity as an separate concern, as in talk about the “triple-bottom line” of the ‘economic, social and environmental’ or in terms of ‘productivity, equity, sustainability’ (see, e.g., PANNA, 2009; IWMI, 2005).

But this characterization is misleading in many ways. Environmental concerns overlap with equity and justice on both normative and instrumental grounds. Sustainability itself has a shade of justice, while environmentalism historically has had an even closer nexus with equity and justice than sustainability-ism (Lélé, 1994; Agyeman *et al.*, 2002).

The questions of equity and sustainability are closely linked in a number of ways.

- a) If SD is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”, then in effect it is a plea for inter-generational equity. (Pezzey, 1989; Howarth and Norgaard, 1993).
- b) For many people, environmentalism also includes fair treatment or respecting the rights of non-human living organisms, those who are sentient but do not have a voice. These include not just the Deep Ecologists (Naess, 1973), but many other groups. While there is a tendency amongst some animal rights activists and deep ecologists to focus on the rights of non-humans at the cost of social justice (Guha, 1989), most would agree that fairness to non-humans follows fairness within humanity.
- c) Most important and obvious, environmental issues include situations where the current actions of one actor negatively affect the current well-being of someone else. These are the typical ‘externalities’, or more specifically, unidirectional spatial externalities, of air or water pollution going downwind or downstream. The central issue is not the loss of some ‘aggregate benefit’ to society (inefficiency) as the economists would frame it (Fisher, 1981) or the inability to continue this activity into the future (unsustainability). The central issue here is the *unfairness* of such a situation — it is not *fair* that one person, even while pursuing a legitimate livelihood, should negatively affect the health of another person (Lélé, 1998;1994).² Many of the battles in developing countries today are over such negative externalities of developmental activities, whether it is mining, dams, or factories. While some of these

² And it really does not matter what the social positions of the polluter and pollutee are, although in practice it is often the case that the polluters are also from the socially and economically more powerful segments of society, which is why they are able to get away with the polluting activity.

protests are cast in 'sustainability' terms, such as the sustainability of a dam in the face of heavy soil erosion and siltation, and others highlight the likelihood of a net loss to society if a proper benefit-cost analysis is done, the core issue is still one of the fairness — how fairly are benefits and costs of such projects distributed.

- d) This environmental (un)fairness also often overlaps with pre-existing socio-economic inequities. Very often, the polluters are better off than the pollutees: such as industries polluting rivers whose waters are consumed by poor farmers, or dams destroying livelihoods of poor fisherman downstream. In such situations, one would say that the social justice question overlaps with the environmental unfairness — instead of giving special consideration to poorer sections, the policy to go ahead with such projects would lead to a double disadvantage. The 'environmental justice' movement in the USA for instance has highlighted the double-disadvantage problem in the preferential siting of hazardous industries in the neighbourhoods where socially and economically marginalized groups reside. (Bullard, 1990).
- e) Environmentalism also highlights the need for equitable access to natural resources and environmental sinks. This is an area in which environmental and social concerns overlap fully, because the equitable distribution of the socio-economic benefits from the use of natural resources depends critically on how initial rights to resource use are granted.³ Equally efficient distributions of rights to resources may lead to very different outcomes in terms of equity.
- f) Environmental degradation aggravates poverty, and thereby accentuates inequity in society. Where the poor are directly dependent on natural resources such as forests for firewood, pastures for grazing or scarce water resources for survival, the degradation or destruction of these ecosystems hurts the poor the most. The rich are likely to have moved away from such direct dependence on ecosystems to the use of fossil fuels. The rich can also offer to purchase technologies or to access resources from further away (Pearce, 1988; Nadkarni, 2000).
- g) Finally, in many cases, equity may enhance sustainable resource use. Several analysts have argued that a fair allocation of resource rights is more likely to result in individuals and communities cooperating in the collective management of the resource (e.g., Gadgil, 1987). More recent literature, however, suggests that this relationship may be more complex (Baland and Platteau, 2002); in some situations, inequality can still ensure collective action.

³ Note that equitable access may take different shapes and nuances depending upon the context. For a local resource such as a pasture, this might be equal access to all users, i.e., all graziers. But those with historical rights of use might claim precedence over those who came later. Those with more cows may say they "need" a larger area to graze in. In the case of water rights, many nations give rights as per prior beneficial use.

In short, the links between sustainability and equity are multi-dimensional and mutually reinforcing. Sustainability itself means justice to future generations. And it is impossible to imagine a situation where a case is made for inter-generational equity while underplaying intra-generational equity (Anand and Sen, 2000).

As we have noted earlier, environmental soundness or environmentalism as a concept is broader than sustainability, because it explicitly includes environmental fairness—both in distribution of impacts of resource use and in the access to resources, even if the dimension of inter-temporal equity had not always been explicitly incorporated. And of course there is the oft-highlighted practical dimension that a more equitable allocation of resource rights is more likely to generate the cooperation necessary for sustainable management of common pool resources.

Social justice and equity go one step beyond this concept—they explicitly demand additional attention for instance to historical inequities and the current socio-economic positions and abilities of both pollutees and polluters. In general, they demand attention to historical inequities and discrimination, and also to the initial allocation of resource rights and opportunities. Thus, bringing together sustainability and equity also infers the need for transformation of social relations, redistribution of rights and resources, and policy approaches which address social, economic and environmental concerns simultaneously and holistically

4. EQUITY, SUSTAINABILITY AND COMMON POOL RESOURCES

At the core of environmental problems lies the problem of externality: decisions taken with a narrow, short-term self-interest in mind have adverse consequences over space, time and sectors. A subset of such problems can be classified as “common pool resource” problems, where the externalities are symmetrical⁴ and resources are can be depleted (Stevenson, 1991). Multiple actors can use a ‘resource’, each user affects others through such use, and unregulated self-interested use by each actor can lead to depletion for all.

Garrett Hardin highlighted this problem as the ‘tragedy of the commons’, subsequently more accurately characterised as the tragedy of open access to common pool resources. He used the example of a pasture and a group of shepherds who graze their sheep in the pasture, and pointed out that ‘rational economic decisions’ by each shepherd would lead to overgrazing of the pasture. While Hardin’s solution was either privatization or state control, others have pointed out to the need for a more nuanced approach, given truly common-pool resources cannot be privatized. Collective agreement and enforcement by the resource users themselves through well-designed

⁴ When externalities are asymmetrical, they result in the standard ‘pollution’ problem, where upstream polluters affect downstream pollutees.

institutional arrangements could be another approach (Ostrom et al., 1999), leading to sustainable use (what economists call inter-temporal efficiency). In the pasture example, shepherds could agree to limit the number of sheep they graze to a level that represents a win-win for all.

But characterizing the pastoral commons simply as a common-pool sustainability problem hides several important dimensions of the problem. Knowing the 'carrying capacity' of the pasture in terms of the total number of sheep that can be sustainably grazed is only one dimension. Who should graze how many of these sheep, i.e., what should be the initial allocation of grazing rights across shepherds? Who qualifies as a user in the first place? What happens if a household not historically involved in grazing wants to start now? If overgrazing is occurring and cutbacks are required, who should cut back how much? Is past grazing and therefore past contribution to degradation relevant to how costs of pasture restoration should be allocated? Is the wealth of the shepherd relevant to this?

In most analyses of the commons that start with Hardin's formulation, there seems to be an implicit assumption that all shepherds are identical, all have equal flock sizes and each can contribute equally to degradation or restoration. Hardin's formulation also sidesteps the question of who is a legitimate rights-holder in the commons. The analytical focus is on efficiency, not equity. But given that the solution, even within this framework, involves the conversion of an open-access resource into a common property resource, the initial assignment of rights becomes absolutely critical.

Moreover, in real-world situations, decisions about allocations of rights and responsibilities, of benefits and costs have to be taken at every step: who protects, who invests in technology to regenerate, how is heterogeneity in the resource (e.g., variations in quality of the pasture) to be addressed, etc. And clearly, initial disparities in wealth, power, and prestige of the users significantly influence the way the institutions of common pool resource management are structured and function.

The role that economic considerations exert in critically re-dimensioning concerns of equity in the context of sustainability, or more generally the environment, is worth remarking upon. Law, for instance, is not a powerful a force in diluting equity and if anything legal studies appear to offer greater purchase in pursuing equity (see, e.g., ILA, 2002).

5. THE CLIMATE COMMONS AND EQUITY

All these issues are relevant to climate change, that is in some sense a ``perfect storm'' in sustainable development. In many ways, climate change is the archetype of a global common-pool resource management problem. The global climate system is non-excludable because it is well-mixed and nobody can put up walls and protect 'their' atmosphere from being 'dirtied' by someone else's emissions. And it is depletable in that any CO₂ entering the

atmosphere (or more precisely the atmosphere-oceans-land system) reduces its ability to absorb additional CO₂. 'Sustainability' in this context is defined as maintaining the total quantum of CO₂ in the atmosphere below some threshold, which in turn requires limiting the total global quantum of CO₂ emissions below a certain level. Equity here seems orthogonal to sustainability: whichever way one shares the permissible level of emissions across different countries or emitters, the total is what matters for sustainability. But closer examination reveals complexities.

Firstly, the impacts of crossing the sustainable climate threshold (or even approaching it) are not as evenly distributed, even if the greenhouse gases are well-mixed globally. Small island states will suffer devastation from sea-level rise, whereas larger nations might suffer relatively much less damage, and landlocked nations even less.

Secondly, there is a question of unequal present emissions, and subsistence versus luxury emissions. Thirdly, there is a question of who contributed to degrading the global commons by past emissions. Fourthly, there is a question of inequality in other endowments (technology, financial capital, infrastructure, institutions) and current stage of development. Not surprisingly then, the idea of equal cutbacks across all nations has hardly found favour.

Does this mean that equity is a necessary or sufficient condition for a sustainable climate treaty? In a purely environmental sense it may not seem so. After all, it is quite possible for better endowed players to use their power to impose an unequal treaty that is still climate effective. However it is evident that in a wider reading of sustainability, inclusive of political and economic considerations, such a climate regime would be unsustainable and is unlikely to be even effective.

It is also possible that an equitable treaty can be climate ineffective: an equitable sharing of the mitigation burden may be agreed upon, but the overall mitigation is simply inadequate to prevent CO₂ concentrations crossing the threshold.

But clearly, if one is committed to sustainable and equitable development, to poverty alleviation, and to fairness as a general principle, then from all these perspectives a fair allocation of the mitigation burden, of rights and responsibilities is essential. And it is possible that a fair treaty may lead to a broadly acceptable and enforceable treaty.

Note that in the case of climate change, full equity in the sense of a fair allocation of the global atmospheric commons cannot be attained at all, since the earlier degradation of the resource has rendered equity impossible to achieve without sacrificing sustainability. It is clearly important that the unfairness of this situation be acknowledged. Without this first step, it is unlikely that those who will suffer the consequences of this unfairness will be prepared to undertake any further action.

6. GLOBAL JUSTICE AND INTERNATIONAL EQUITY:

The climate question brings to the fore another dimension of equity that is the source of some tension even among those who are agreed in the significance of equity. And this tension emerges directly from the local aspect of sustainability that has dominated thinking on SD prior to the era of climate change. The equity and sustainability perspective undoubtedly contributes positively to the work on vulnerability and adaptation, especially in the way it draws attention to the rights of those who are not responsible for the problem but are nevertheless profoundly affected by it. It is also unexceptionable that such equity concerns are grounded in the specific analysis of the potential harm that is caused to communities in their specific ecological and socio-economic setting, and such analyses undoubtedly strengthen an important aspect of the equity-sustainability nexus.

However, a potential source of confusion arises when analogous concerns of equity are echoed by nations themselves in the pursuit of a fair international climate treaty. Where do the rights of individuals or collectives at the local level stand in relation to the rights of nations?

To many it may look as if climate change would require, as in an earlier era when the nuclear issue was growing into the world's most intractable political issue, limiting national sovereignty so as to ensure justice to those vulnerable to climate change. In this view, global justice trumps the issue of justice at the inter-societal level. Superficially, it appears that all societies have carbon profligates as well as those whose emissions are limited and who are not responsible for the problem, though the exact proportions of the two may vary.

At the same time, equity between nations is undeniably an issue. There is a clear divide between those whose responsibility (even in purely physical terms) is far greater than those whose responsibility is far less and the divide is precisely on the basis of nation states. The number of those

The implicit tension between global justice and international equity is also evident in the process aspect. International equity is clearly privileged since by the very nature of the negotiating process nations have a key role to play, Yet increasingly as the weight of the climate issue bears down, global equity must also be addressed. No nation can afford to ignore either, but nor are the two in any way entirely fungible.

Global justice and international equity are distinct (see Sen 1999 for an illuminating discussion) and it is clear that on the climate question both aspects have their own distinctive roles to play. Not the least of the reasons is that global action for climate change mitigation and adaptation will be inseparable from national action on climate change, and that both national institutions as well as institutions that cut across national boundaries need to be involved to successfully tackle the problem.

7. CONCLUSION

It is the argument of this note that in the context of the human-environment nexus the relationship between equity and sustainability is inseparable from the individual nature of either of the two. Historically it is the relationship with equity, justice and fairness that has driven the undoubted appeal of the slogan of environmental protection and later sustainable development.

And yet in practice there has been a weakening of resolve in keeping equity at the centre of considerations of the environment. Sustainable development has been in danger of lapsing into a slogan for all seasons while in operational terms there has been a narrowing of vision in the substantive content of sustainability, precisely by displacing or conflating equity criteria with other narrower views of efficiency or feasibility.

Almost twenty-five years after the first invitation to consider the fashioning of our common future in our common home, the issue of climate change in particular, and other such global challenges, offer another opportunity to renew this vision. The melding of equity and sustainability needs to be an integral part of this renewal.

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