



Sustainable Development Policy Institute

Working Paper Series no: W-09

**The Roots of Unsustainability:
Colonisation in Space and Time**

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01 April 1993



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A publication of the Sustainable Development Policy Institute (SDPI).

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Table of Contents

Abstract	1
Unsustainable Development: The Real Tragedy of the Commons	2
UNCED as a “Global Enclosures Movement”	3
The Colonisation of the Future	5
Creating Conditions for a safe “Landing”	6
Example 1 (Labour Institutions)	6
Example 2 (Democratic Institutions)	7
Example 3 (Consumption and Needs)	8
Conclusions	8
References	9

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The Roots of Unsustainability: Colonisation of Space and Time

Franck Amalric and Tariq Banuri

Abstract

This paper underlines the need to give priority to politics in order to move toward sustainability. Unsustainability is in large part a consequence of the colonisation of the commons, first by western colonizers, and then by the new independent states, in the name of modernization. Moving toward sustainability would demand giving a voice to those who have been deprived of their traditional rights over resources. There is a need to create a space for politics, but with respect to the rights of future generations, such a space cannot be created. Only self-imposed restraint can impede the colonisation of the future. This will remain impossible as long as Northern societies are organised around the idea of "always more". In the game of sustainability, the North has the ball.

Manfred Max-Neef (1982) once posed the paradoxical question to Ecuador's politicians, whether the rich or the poor were more important for the functioning of a society. If the rich were to disappear he asked, what would be the effect on the lives of the poor? Surely quite small. But what if the poor disappeared? Then the whole functioning of society would break down. Analogously, one could argue that if the poor were to disappear, the affect on the environmental crisis would be quite limited, but if the rich were to disappear the very basis of global unsustainability might also disappear. While in this essay we do not suggest anything as extreme, we do argue that the roots of global unsustainability lie in the behavior of the rich not that of the poor. As a consequence, we doubt that the current global discussions will lead to sustainability, exactly because they ignore this fundamental point.

In making this argument, we rely on a useful metaphor provided by Alain Lipietz (1992), who described the UNCED process as a global "enclosures movement" through which rights to the global commons are being allocated. We use this metaphor to argue that this assignment of rights has three problems: political, institutional and conceptual. The political problem is that today's allocation, as was the case of the earlier enclosures movement, might turn out to be inequitable and unjust, and therefore become a focus of opposition and resistance. The institutional problem is that, even if rights could be assigned fairly and democratically, not enough attention is being devoted to the creation and strengthening of institutions that can enable democratic communities to monitor and regulate the rights so created. The conceptual problem is that, even when rights to every inch of the land have been allocated, there still remains the future; and today's political problems are in part being solved, or rather being veiled, by making optimistic assumptions about the future - in effect allocating rights over more resources than can be used sustainably.

To return to North-South issues, sustainability considerations dictate on the one hand a reduction in Northern consumption levels - to make them compatible with the carrying capacity of the planet - and on the other hand an increase in *per capita* consumption in the South. The latter is needed not only on equity grounds but also because poverty itself is a major cause of environmental distress. The political question is whether there can be agreement over an allocation of rights that produces this outcome. The institutional question is whether, even with the optimal allocation of rights, the outcome can be

guaranteed by the existing system of rules; note especially that global macro-economic relations are such that reduction in Northern economic activity will lead directly to an equal or even deeper reduction in Southern consumption levels. The conceptual question is that while the historical evolution of rights over the global commons took the form of a progressive "colonization" of space, the trend today is towards what can analogously be called the "colonization of time".

The problem of unsustainability can be traced back to this process of colonization. The rights and behavior patterns created by this process have been neither socially nor environmentally sustainable. Furthermore, the process must necessarily create the problem of survival for marginal populations, and this too feeds back to the problem of sustainability. The required global compact can be seen simply as something that will stop the process of colonization, and therefore of growing unsustainability. In other words, both sustainability and survival will remain elusive targets unless this issue of global rights is met head on.

Unsustainable Development: The Real Tragedy of the Commons

The unsustainability of current modes of production and consumption is directly related to the treatment of the commons. By "commons" we mean any area with "fuzzy" rights of ownership or usufruct - village and town commons, regions inhabited by conquered and colonised populations, mineral and natural resources, and such free resources as rivers, oceans, forests, air, and the atmosphere. The colonisation of the commons has taken many forms. In most cases, customary rights of usage were usurped (or "colonised") by individuals, states (whether colonial or indigenous) or other organized groups. The *global* commons, on the other hand, were probably genuinely free (and therefore without customary rights or restraints) until the recent scarcity, created by the pressure of growing consumption, led to a move towards their colonisation, too. It must be noted here that this new process of colonisation is not being driven by population expansion, as argued by Garrett Hardin (1968), but by allowing free rein to the push towards domination of nature and human beings.

In Southern countries, the degradation of natural resources - land, water, air - is directly related to their transformation from community to state property. This has, on the one hand, led to the erosion of participation and cooperation of the population in regulating use, and on the other hand to the transfer of rights to an agency (i.e. the state) that has often been unable or unwilling to compensate for this loss of regulation. The erosion of cooperation takes place partly because of the denial of local participation, and partly because legislation transforming common property into state property often alienates local populations by denying many customary right of usage. This has been documented most extensively in the case of forests where (presumably because of difficulties of regulation) local populations were abruptly forbidden to exercise their customary rights to graze their animals and collect fuel wood and fodder, as well as edible roots. Thus, almost overnight the guardians of the forests were transformed into poachers and destroyers. Many writers, see e.g. chapter 8 by Grazia Borrini, claim that local restoration of sustainability will be impossible without restoration of local rights in the commons.

At the global level, the problem is somewhat different. The "global commons" (atmosphere, oceans) are characterized by the customary rights and restraints. Until very recently as mentioned above, these have been viewed as free goods. Here, the problem is not to restore some set of customary rights, but to establish rights and responsibilities over a diminishing resource. However, these will have to be both enforceable and legitimate.

The transformation of the commons can be divided into three stages: "colonisation", "enclosures" and "legitimization". Historically, such resources or areas were governed by customary rules of behavior, but often not by formal laws. The first step in the process of transformation is generally the erosion of these customary restraints on usage, and the increased exploitation of the commons, usually by outsiders. This would correspond, for example, to the entry of colonial powers into Asia, Africa and the Americas.

In the second phase, when the conflict between potential new users becomes too costly, "legal" rights vested in these users begin to emerge, often accompanied by the formal expropriation of the usage rights of the customary (i.e. old) users. The classic example is the "enclosures" movement in England, which would not have been possible without the disenfranchisement of the peasant population. Similarly colonising powers made implicit or explicit agreements respecting each others' areas of control. Similar too is the transformation, in the post-colonial period, of local common property into national or state property in the Second as well as the Third World. Paradoxically, the creation of explicit property rights may hasten the colonisation of the commons, because as property rights in more and more areas become explicit, the pressure to find new "soft" frontiers becomes more intense.

Be that as it may. On the other side of the fence, this process has been accompanied by what has been described elsewhere as the de-responsibilisation of local populations (Amalric and Banuri 1992), or as the "learned helplessness of developing societies" (Zaman and Zaman 1991). Only when the consequent non-cooperation and resistance of those whose usage rights have been expropriated becomes too problematic, does one observe the gradual emergence of a search for legitimacy, usually by redefining and extending rights of usage, and returning areas or countries to local control (i.e. de-colonisation), but in such a manner as to maintain, as much as possible, the open access of the ex-colonial powers to the natural resources.

The recounting of this history, albeit in such a heuristic form, demonstrates three points. First, the discovery that there is no such thing as a free resource must lead to the invention of ways of imposing self-restraint upon use. In other words, since history is one of exploiting soft frontiers, mechanisms have to be created that place limits upon such exploitation. Second, in the case of local resources, these limits would be neither feasible nor acceptable without the cooperation and participation of local populations. And third, in general an allocation of rights and limits that is not viewed as fair and equitable will not be socially and politically sustainable.

UNCED as a "Global Enclosures Movement"

In the metaphor of Lipietz (1992) the UNCED represents a global enclosures movement, seeking to establish rights over the global commons - the atmosphere, the forests, biological diversity. The parallel to the original enclosures movement is even stronger. This has been pointed out forcefully by Agarwal and Narain (1991). Since the discussions take existing use patterns as the norm, the resulting agreement must necessarily confer more legal rights precisely to those countries (i.e. the North) that have overused the global commons. The interest of sustainability lies in ensuring that the allocation of rights is both legitimate and equitable. Another way of stating this is that at the global level the second phase of colonisation, that of "enclosures", has been reached. But this will not be sustainable unless it takes into account the question of legitimacy and justice.

This last requirement runs against mainstream economic theory. In a seminal article, Nobel Laureate Ronald Coase (1960) argued that the failure of the market to regulate the production of public (or

common) goods arises from the absence of property rights to the good or the resource. Coase's solution is to create explicit property rights. As long as these are explicit, it does not matter in whom the rights are vested. However, there are three reasons why Coase's solution may not be applicable to a dynamic world, and why it would matter whether the rights are vested in an individual, a community, or a state. First, if the rights are not viewed as legitimate and equitable they will not be politically sustainable. Not only would there be an absence of the acquiescence of local populations that is necessary for the enforcement of rights, but there would be an incentive for affected groups or countries to oppose and transform the situation.

Second, if the social interest lies in ensuring that natural resources are not degraded, it is essential that rights are vested in those who share this concern. This is the main reason why writers on scientific forestry (e.g. Fernow 1902) argued in the nineteenth century that control of forests should be vested in governments or perpetual corporations, i.e., in entities with a sufficiently long time horizon. While the individual's incentive may be to, say, cut down a forest and invest the money in a better paying financial instrument, this will generally not be in the social interest.

Third, it is important to ensure that whoever has rights over a resource also has the capacity to manage and protect the resource. In the absence of this capacity, individuals will be tempted to transform the resource into a form (e.g. a financial asset) that they are capable of managing. These considerations may lead us to rule out individual ownership of public goods; they may also disqualify most Southern governments. More importantly, they may lead to the necessity of creating some form of effective collective organization, one that will be legitimate, have a sufficiently long time horizon, and have the ability to manage the resources.

The upshot is that the discussion of global sustainability must begin with the explicit treatment and analysis of rights, empowerment and legitimacy. Neglecting to bring these issues into the discussion is tantamount to acquiescing in the "Enclosures Movement circa 1992". At the global level there is a need to talk about the allocation of rights over the global commons in a manner that is equitable and socially sustainable. At local levels, it means the restoration of community rights over the local commons. More generally, it means that we have to think of a way of preventing the spread of colonisation.

It was possible to have soft frontiers as long as the avidity of individuals, states or other organized groups could be kept in check through customary or legal restraints. Once these checks become ineffective, it makes sense to clarify and establish rights over every single inch of territory so to speak. However, even when every inch has been allocated there will still remain problems. The first problem is that if the allocation is not legitimate or just, it will not be socially sustainable. The second problem is that if the allocation is not followed by the evolution of appropriate institutions of resource management, it will not be environmentally sustainable. The danger is that environmentally and socially unsustainable allocations will be legitimized by invoking yet another soft frontier: time.

The Colonisation of the Future

Unlike spatial frontiers, the time frontier is intrinsically soft. It is not limited by physical or political boundaries, but depends in essence on people's conception of the future. Hence, unlike spatial frontiers which are embedded in the reality of the present world, the time frontier is defined in an imaginary world. Whose shape depends crucially on how optimistic people are about the future, especially about the progress of science, and on how much people *need* to be optimistic.

The crux of the matter is that the use of time cannot follow the same transformation as the other commons. The enclosure of time as advocated by some authors is crucially confronted with two problems¹. First, since future generations cannot be empowered, it is impossible to construct a political solution based on the sharing of rights. Second, given the uncertainty surrounding the global crisis, it is also impossible to construct a technocratic solution. Unlike local environmental degradation (which is often highly visible and the consequences of which can be assessed, monetized, and taken into account through cost/benefit analysis) the consequences of global stress on the environment - greenhouse effect, depletion of the ozone layer, loss of biodiversity - are to a large degree uncertain, and therefore cannot be subjected to a cost/benefit analysis (Marglin 1991; Lipietz, *ibid.*). This makes it virtually impossible to arrive at a technocratic consensus. Even if some broad agreement on the enclosure of time could be reached (for example an agreement on global emissions of CO₂), speaking of legitimacy of such an agreement, which is the necessary condition for sustainability, would clearly be devoid of meaning. The only viable solution that remains is to live in the presence of a soft frontier while avoiding trespassing it. But for this to be possible, the right conditions must be met.

One could compare economic growth to a means of transportation, which would take society from a state characterized by scarcity to one in which the "*economic problem may be solved*" (Keynes 1963, p. 336). The classic metaphor was provided by Walt Rostow (1960), who implicitly compared economic growth to a plane, which would take-off towards self-sustained development under the right conditions. However, one particularity of a plane is that, unlike other means of transportation, it cannot cruise at just any speed. A plane flies only above a minimum speed. Reduce the speed and it will crash. There is, of course, the old idea, known as Kondratieff's cycles, that crashes are inherent to capitalism, and that in the long run, they may have a beneficial effect. Needless to say that the price of crash today would certainly be beyond anything we can imagine; let us remember that the last crash found its regeneration in the Second World War. But there is today a fundamental difference, which is that we are not dealing here with the sustainability of capitalism as such, but with the sustainability of capitalism within the biosphere. Unlike Kondratieff's crashes, which destroy one plane so as to permit building a new and even bigger one, what may be destroyed now is the possibility of building not only planes, but even any alternative to planes.

Hence, although a take-off first evokes a flight, it also creates the necessity of thinking about a landing. That a landing will eventually have to take place is evident: anyone having any notion of exponential functions will agree that a steady growth rate (of let's say one percent) during an infinite time in a finite world is just a ridiculous idea. Hence economic growth, as we experience it today, will stop, be it tomorrow or in century or more. Convinced modernists will argue that the necessity of more growth is so urgent that it would be waste of time to start thinking about the landing; just as one does not expect a ten-year old child to worry about his retirement. This is clearly the view taken by the Brundtland Commission (WCED 1987). There are others, however, who see in environmental constants or in social disruptions signs that it is high time to think about the end of the growth era (Meadows 1972; Meadows 1992; Hirsch 1977; Daly and Cobb 1990). In this view the realization of long-term objectives for sustainable development will necessitate the creation of favorable conditions for a transition between the unfettered economic growth experienced today and something more sustainable. In other words, conditions for a

¹. The current debates on the issue has focused on the question of how much the present should take into the account the future, hence on the definition of the frontier. If one requirement of sustainable development is that "the current generation should not prosper at the expense of the next generation", it is also noted that if the sacrifice for the present generation to follow a sustainable path is large, "then it is wholly legitimate to look at the trade-off between present and the future and decide on the best evidence available" (Pearce 1991, p. 13).

safe landing must be created, at least so that a "landing" can be thinkable. Most of the chapters of this book are concerned with creating these conditions.

It is not economic growth *per se* that we view as the central issue. The problem is that modern societies have become enslaved to economic growth; thus people's perception of the future and of the environmental burden transmitted to future generations is biased by the need to be optimistic.

Creating Conditions for a Safe "Landing"

The point is quite simple: the different prescriptions for sustainable development (see e.g. WCED 1987) are not mutually compatible in the present institutional setting. For instance, the long-run objective of reducing the level of consumption in the North, (and thus a slowdown of economic growth) poses two types of problems. First, it would lead immediately to a reduction of consumption in the South, which would contradict other objectives of sustainable development. Second, the slowdown of economic activity in the North would jeopardize some existing institutions, the efficiency of which depends crucially on the persistence of economic growth. Hence, these institutions would be in conflict with the political will needed for sustainable development.

The path towards sustainable development needs, therefore, not only new institutions to cope with global crises (as is one of the objectives of the UNCED process), but also an assessment of the compatibility of existing institutions with the long-run objectives. However, in contrast to a large body of literature focused on institution building in the South (e.g. Banuri 1992; Banuri and Holmberg 1992), we wish to focus mainly on the need for a transformation of institutions in the North. Just as it is argued that new institutions are needed in the South to cope with population growth, that is for people's desire for large families, we argue that Northern people's "hunger for more" (Shames 1986) is in part due to inadequate institutions. This approach is quite similar to the "regulation" school of which the basic hypothesis is that "economic adjustments cannot be disentangled from social relationships and values, political and economic rules of the game, and more generally the web of interrelated institutions" (Boyer 1992, p. 12). But whereas the "regulation" school focuses on the lack of institutions as a constraint to economic development, we see in the existence of pro-growth institutions the main impediment to a reduction of consumption in the North.

Example 1: Labour Institutions

It is Keynes' major contribution to have argued that equilibrium in the labour market depends on the level of investment, which in turn depends on subjective factors. Expectations of a higher demand due to economic growth leads to investment, which in turn lead to economic growth and the fulfilment of prior expectations.

The point is that labour institutions have been designed around the expectation of economic growth and therefore around two central principles. First, that economic growth will lead to full employment, and thus solve the possible conflict between the employed and the unemployed; and second, that economic growth will benefit everyone, thereby alleviating the conflict inside the firm between profits and wages.

The first principle applies more readily to countries which emphasize static efficiency (fluidity in the labour market, e.g. the United States, Canada, and the United Kingdom (Boyer, *ibid.*). By contrast,

countries emphasizing dynamic efficiency (some rigidities with the risk of high levels of unemployment, e.g. Japan, Germany) rely more on social consensus grounded in the second assumption. Reliance on growth, however, plays the same role in the two cases. In the former it is the potentiality of expansive growth (or growth in a spatial sense) that gives it legitimacy; in the latter case, it is the belief in "intensive" growth (growth through technical improvement and gains in competitiveness) that legitimizes wage rigidities and higher levels of long-run unemployment. This difference is hardly surprising since in the United States, Canada or even the United Kingdom, development has historically taken the form of expansion in space. In contrast, in continental Europe and in Japan (especially in Germany and Japan after their defeat in the Second World War) space was soon perceived as limited, and technical innovation had replaced it as the favoured direction for further expansion.

The German or Japanese models may seem attractive in a time when spatial growth reaches its limits, but one can doubt the replicability of these models at a global level, mainly because their success coincides with large trade surpluses, which in turn mean large deficits for others (i.e. an unsustainable condition).

Example 2: Democratic Institutions

For Nobel Laureate Milton Friedman (1962) the case for competitive capitalism is that it creates economic freedom while at the same time promoting political freedom because it separates economic power from political power. K. Polanyi (1944) had also noted this separation, but he denounced it as the foundation of economic uncertainty (and not freedom) leading to man's addiction to economic activities. In this line, the crucial question, raised by Bowles and Gintis (1986), is why voters do not elect governments to implement extensive redistributive policies. After all, at least fifty percent of the voters (assuming that all adults have the right to vote) would necessarily benefit from an extensive redistribution scheme.

The answer to this paradox lies in the existing consensus in democratic Northern countries around economic growth. In short, it is the prospect of redistribution through economic growth that alleviates the tension arising from economic inequality and political equality, which Bowles and Gintis (ibid.) call the Keynesian accommodation. The corollary is that economic growth is necessary for preserving the separation between economic and political power. Growth is not just an outcome of a particular framework, but plays an active role in stabilizing this framework.

Example 3: Consumption and Needs

Straightforward neoclassical theory would have it that as people get richer, they would wish to consume more leisure and therefore to work less. By contrast, the experience in developed countries is one in which the "hunger for more" is insatiable. The French sociologist Baudrillard (1970) even argued that overconsumption and waste are structural components of capitalism. One explanation proposed is that consumption is, in essence, competitive, or that at least an ever increasing part of consumption is competitive by nature (see also Veblen 1899).

The point is that the very goal of economic growth, the satiation of needs, cannot be attained as long as economic growth does not alleviate the sense of scarcity but in contrast exacerbates it. Hence one

objective of the transition process must be to reexamine profoundly the link between consumption and needs.

Conclusion

There are basically two issues: one is the organization of the North itself, the other is North-South domination. As for the first issue, there is an inner contradiction in speaking about Northern sustainability. This is because "Northern", inasmuch as it stands for the political and economic organization of "developed" countries, is built on unsustainability. This is in part what this chapter has tried to argue by considering colonisation as an essential property of Northern societies. It notably challenged the commonly held view (at least among economists) that the establishment of rights over global commons would be sufficient to ensure sustainable development. Three major problems have been discussed: the question of legitimacy of these rights; the possibility of regulating the rights created; the insufficiency of this approach on matters concerning a trade-off between present and future.

The need for rights is a consequence of the colonialistic behavior of modern societies. However, in our view, the establishment of rights will be insufficient to curtail the environmental crisis if it is not accompanied by a restructuring of institutions that have been built in and for the context of unrestrained growth. The issue is not between more or less economic growth. The issue is to be able to choose between different paths.

The second issue reverts back to the first one, because even the very form of North-South domination depends upon what is perceived as being in the interest of the North. One of the lessons of the breakdown of the Soviet Empire is precisely that the South was, and is, demarcated along the lines of Northern interests. As well-documented by Ruffin (1989), that which falls outside of these interests also falls outside of the South, which tends to be divided into two zones. One could be called the buffer zone in which the North will remain very present for strategic reasons - access to natural resources for instance. The other will eventually become the land of "the new barbarians", in which the North will have less and less interest, and thus less influence. A number of countries and regions of the world already fall into this category: Sudan, Afghanistan, a large part of Peru and Nigeria, and inner cities, including those of Northern countries, like New York and Los Angeles.

It is not relevant in these conditions therefore to speak of Southern sustainability. The North has set the rules, which carry within them the germs of unsustainability and the South, or at least most of it, can only abide by them in its effort to survive. The North has the ball.

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