

COLLECTIVE ACTION, INACTION AND THE GLOBAL COMMONS

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ABSTRACT

Biological, cultural and other diversities that define humanity's common heritage are constantly under threat from globalisation. Issues around the Convention on Biological Diversity and World Trade Agreements are analysed. Why is collective action so difficult to achieve? To answer this question, institutional options to manage the commons in the age of globalisation are presented.

KEY WORDS: collective action, commons, institutions, world trade and globalisation.

INTRODUCTION

The environment and the economy are key international issues of our day. Biological, cultural and other diversities that define humanity's common heritage are constantly under threat from globalisation. Biodiversity, for example, has emerged at the centre of one of the most contentious global debates of this century. Critical to the debate are questions about how countries that are relatively endowed with biological diversity can achieve economic progress while balancing environmental and social concerns, and how equity can be built into the distribution of benefits derived from the commercialisation of natural resources obtained from biologically diverse countries. To what extent does the Convention on Biological Diversity (CBD) represent a normative basis upon which a long history of social and economic injustices that have hitherto characterized North-South relations can be addressed? Should parties to CBD cooperate or defect?

Clearly, no single or straightforward answer to these questions exists. Globalisation, of which growth in world trade and growing integration is only a part, but an important one nonetheless, is perhaps largely as a result of the removal of restrictive measures that had constricted world markets in the inter World War period (Krugman, 1995). Of course, international trade is not possible without cooperation among trading partners: The only way countries can be integrated in the global economy is through cooperation and compromise. There are several platforms on which such cooperation is built or potentially could be developed. Chief among these is the World Trade Organisation (WTO). Within the broad context of WTO, the issue of trade and sustainable development is a major global agenda. Yet, WTO and the G-8 countries (Canada, France, Germany, Italy, Japan, the Russian Federation, the United Kingdom, and the United States) and the European Union (EU) Commission have demonstrated a clear lack of resolve in the past to build a coherent global environmentally responsive framework of multilateral agreements and institutions (Cosbey, 2000).

This paper reviews issues around CBD and World Trade Agreements (WTA). Why is collective action so difficult to achieve? To answer this question, the paper gleans at the theories of collective action for explanation about cooperation or the lack of it.

Suggestions about institutional options to manage the commons in an age of globalisation are finally presented.

THEORIES OF COLLECTIVE ACTION

The theory and application of collective action is concerned with 'public' or 'collective good' (or bad). Any resource, used responsibly as though it belongs to all, is a public or collective good. In other words, it is a 'common'. However, tension between public and individual interests in the use of commons leads to tragedy. The tragedy of the commons (Hardin, 1968) is an "inefficient collective outcome" (Nabil and Hugent, 1989), which arises when cooperation breaks down.¹ Cooperation breaks down when one side or both perceive absolutely nothing to be gained from it. Such 'freedom' by individual [countries] to use [global] commons raises serious social dilemmas.

Further insight on this phenomenon is provided by the 'Prisoner's Dilemma' problem. This social model or 'game', as it is generally referred to in the literature, has a peculiar payoff matrix. In particular, the payoff is structured such that individuals "playing" the game would fare best, in total, if both cooperate, but the individual's best reward is always to defect (Felkins, 1995). Whilst an individual [country] playing the game is faced with the realization that his or her [its] best strategy is to defect regardless of the assumed decision of the other person [country], collective action is the best strategy for equity. Thus, why do countries [individuals] prefer defection to cooperation as a strategy?

Collective action literature explains countries' preference for less than equitable solutions in terms of opportunism, 'shadow of the future', information asymmetry, and exit options in the international institutional architecture. However, if non-renewable resources will eventually be used up, is tit-for-tat a better strategy than cooperation? If pollution is going to take its toll, does it make sense to 'turn the other cheek'? As with any Prisoner's Dilemma, if countries could all cooperate they would be in the best possible situation collectively. Cooperation breaks down when one side or both decides there is absolutely nothing to be gained from it. Hardin (1968) described such social dilemma as "problems that have no technical solutions". He also states "freedom in a commons brings ruin to us all" and "conscience is self eliminating".

Luckily, life is not only gloom and doom. There are many examples of cooperation in managing common-pool resources (CPRs) such as the Trade Rules and Sustainability in the America (TRSA) described in Box 1. Unfortunately, there are equally many cases of non-cooperative behavior (see section on Recent International Experiences).

IS COOPERATION NECESSARY?

The Environmental Security Argument

McNeil and Stark (2001) have predicted that the environment will become a global security agenda because of the accelerating pace of environmental change and its increasing costs to economies and societies. "Disruptions of societies produce instability, and the environment is not an exception" (p. 3). Citing cases from

¹ For a critique of the "Tragedy of the Commons" thesis see Ostrom, Gardner and Walker (1994).

BOX 1 Trade Rules and Sustainability in the Americas

The Trade Rules and Sustainability in the Americas (TRSA) research project draws on lessons learned in the trade, environment and social debates at the WTO and in Western Hemispheric sub-regional trade integration processes, to analyze the interaction between developing trade, environment and equity regimes in the Americas from a hemispheric perspective. The project uses the so-called Winnipeg Principles for Trade and Sustainable Development and starts from the question, 'how could trade in the Western Hemisphere foster and not undermine sustainability objectives?' With guidance from a 14-person expert Advisory Council, the first research paper reviewed existing trade regimes in the Americas, and then used the Winnipeg Principles as a framework to analyze and suggest mechanisms for progress toward sustainability. The project is carried out by an interdisciplinary research team from diverse sectors of civil society across the continent to ensure that discoveries contribute to strengthening capacity in the Americas on these issues and to provide tools to increase informed public participation in current trade policy-making processes. The TRSA project takes place at a critical moment. This is the first time that such a methodology had been tested on a *potential* rather than *negotiated* trade arrangement, opening unique opportunities for innovative solutions to old problems.

Source: Segger et al (1999)

Southeast Asia, Latin America and the Caribbean, the authors argue that the environment is fast becoming a major source of conflicts.

As knowledge on links between economic growth and environmental advances, calls are increasing for a need to have parallel environmental negotiations during trade negotiations (e.g. WTA) in order to promote better environmental stewardship (Krist, 2002). A number of Multilateral Environmental Agreements (MEAs) have been developed to protect the environment in areas that are being addressed by the Market Access Negotiations. Examples include, MEAs related to the need to prevent deforestation, including the United Nations Framework Convention on Climate Change (UNFCCC), the CBD, and the Convention to Combat Desertification. Accordingly, Krist (2002) recommends that the "Market Access Agreement needs to ensure that it does not weaken the MEAs" (p. 25).

However, even countries such as Canada, which have taken the initiative to develop a framework for integrating trade and environment issues, acknowledge that it is no easy task. Whilst, potentially, trade liberalization can have a positive impact on the environment by improving the efficient allocation of resources, promoting economic growth, increasing general health and welfare and generating revenues that can be used for environmental improvement, in the absence of effective environmental policies and regulations, increased economic activity generated by trade liberalization can contribute to environmental problems (Department of Foreign Affairs and International Trade, 2001).

Thus there is need to not only cooperate in terms MEAs, but also to collaborate in research and information exchange about likely and significant environmental impacts of various initiatives. Predictably, this is easier said than done given individual country's interests to maximize benefits from trade (see discussion on Kyoto Protocol).

Global Warming

According to the Tragedy of the Commons homepage, sufficient evidence exists to suggest that there is a discernible human influence on global climate – a CPR. Mean global temperature has increased by about 1 degree centigrade since the beginning of the industrial revolution and will increase from 1 to 3.5 more degrees by the end of the next century. Although this does not seem like much, it is enough to precipitate major changes in global climate. The scientific consensus is that global warming is real and it is bad news. It will get much worse if greenhouse gases emission rates are not slowed significantly. Economic interests translate this notion into reduced consumption, a prospect that they find threatening to profits (Harding, 1995).

RECENT INTERNATIONAL EXPERIENCES

The Kyoto Protocol

The Kyoto Protocol to the UNFCCC was negotiated in Kyoto in December 1997. The text of the Convention was adopted at the United Nations Headquarters, New York on the 9 May 1992; it was opened for signature at the United Nations Conference on Environment and Development, held in Rio de Janeiro from 4 to 14 June 1992. The objective of the Kyoto Protocol is to impose binding greenhouse gas (GHG) emission targets for the world's industrial economies to be achieved by the period 2008-2012.

While the fixed targets for emission by Annex I countries (i.e. western and former eastern industrial economies) had been agreed, but not ratified by key countries, in the spring of 2001, the United States defected from the Kyoto Protocol. Although the issue of regime sustainability in developing the Kyoto approach to climatic change had received little attention (McKibbin and Wilcoxon, 1999), the Bush administration's strategy was widely criticized for being unilateralist.

Development Box

The International Center for Trade and Sustainable Development (ICTSD) reports that ever since the Seattle Ministerial Conference, developing countries have sought to introduce a 'development box' that would allow them more flexibility in implementing the Agreement on Agriculture. In an informal paper submitted to the February 2002 Special Session on agricultural negotiations, nine developing countries (Cuba, Dominican Republic, El Salvador, Honduras, Kenya, Nigeria, Pakistan, Sri Lanka and Zimbabwe) proposed the creation of a 'development box' focused on measures that would enhance food security and safeguard the livelihoods of rural communities (ICTSD, 2002).

They clearly spelled out that the proposal applied only to developing countries, and was designed to enhance flexibility rather than prescribe specific policies. Its aim was to respond to developing countries' need to: protect and enhance their food production, capacity, particularly in key staples; safeguard employment opportunities for the rural poor; and protect small/marginal farmers from 'an onslaught of cheap imports'. Among the key elements of the proposal was that basic food security crops, i.e. 'crops which are either staple foods in the country concerned or other crops

which are the main sources of livelihood for low-income and resource-poor farmers', should be exempted from reduction commitments (ibid).

In the Doha Declaration, ministers agreed that "special and differential treatment for developing countries shall be an integral part of all elements of the negotiations on agriculture and shall be embodied in the Schedules of concessions and commitments and as appropriate in the rules and disciplines to be negotiated, so as to be operationally effective and to enable developing countries to effectively take account of their development needs, including food security and rural development" (paragraph 13). At the February meeting, however, few WTO Members showed any enthusiasm for a significantly enhanced special and differential treatment regime (ibid).

RECIPE FOR COOPERATION

The role of selective incentives and overcoming of free-rider problems is key to explaining success of collective action. Incentives may take the form of positive or negative sanction to reward or punish cooperation or lack of it. Since 'tit for tat' is the most stable of strategies in the Prisoner's Dilemma, cooperation should be rewarded and defection punished (The Ethical Spectacle, 1995). Other factors that are likely to enhance the prospects of collective action include availability of political entrepreneurs (Hardin, 1982) and psychological attitudes such as relative provision among group members (Scheman, 2001).

Nabli and Nugent (1989) suggest, "success in collective action may also be affected by the tolerance on the part of other groups [nations], and by the quality of communication and organisational skills and the knowledge of the 'technology of collective action' among group members and particularly among the leadership" (p. 1338). The implication is that the absence of the above factors is a recipe for no cooperation. Let us look at each one of these in detail.

The Role of Incentives

Whilst a 'tit-for-tat' might be the most stable strategy, in dealing with global commons (e.g. climate) this raises severe contradictions. Ideally, compromises must be made to achieve sustainability. But since this is not going to happen in a world ridden with self-interested [individuals] countries, what is required is a fair and strong system, one that rewards cooperation and punishes defection. As the 9-11 twin tower events taught us, the shadow of the future is very long and defection only breeds defection and death. In this world, **Tit for Tat** is the best strategy available.

Political Entrepreneurship

Politics [politicians] and entrepreneurship [entrepreneurs] is a natural oxymoron. However, faced with the prospects of an unprecedented oil crisis (Kerr, 1998), and in the absence of 'technical solutions', we have to scout for 'political entrepreneurship' wherever it might be found. Unfortunately, "the future has no shadow for politicians" (The Ethical Spectacle, 1995).

Political discourse usually avoids discussing, or simply denies, the long-term consequences of the decisions being advocated. Though a surprisingly large percentage of political decisions may bring about someone's death, almost never is it conceded. Those who advocate for globalization might honestly say that they believe

the deaths this will cause are relatively unimportant, an acceptable trade-off for the benefits of a free market; but they never actually say this. They simply deny there will be deaths, as do the advocates of terrorism. Instead of a cost benefit analysis, the grossly oversimplified claim is that any given decision is all benefit, no costs. And thus the future can have no shadow.

Honest discourse about consequences promotes the shadow of the future, forcing politicians into cooperation with the public and eliminating the benefits of defection. But, to get there from here, the public must acquire a longer memory for responsibility and consequences (ibid).

Poverty and Environment

Since the 1980s, sustainable development has evolved into a complex, multifaceted concept that seeks to balance economic growth, environmental protection, social equity, and citizen participation in decision-making (WCED 1987; World Bank 1992). Economic growth is necessary for political stability and for raising standards of living, which, in developing countries, means poverty reduction. Poverty alleviation is thought to have positive effects on the environment because poor people put great strains on natural resources, pasture, water, and forests. Yet economic growth alone will not suffice to restore environmental quality or to cover the livelihood concerns of poor people.

The costs of economic growth (health hazards of pollution, climate change, biodiversity loss, and resource scarcity) must be incorporated into economic decision-making and not just treated as 'externalities'.² Unfortunately, concern for economic growth does not adequately address the issues of combating poverty and bringing about social equity (Silva, 2001). As a consequence, there is no basis for positive 'psychological attitudes'. The issue of poverty has so far not been adequately addressed beyond declarations of intentions such as the "Millennium (International) Development Targets" pronounced by the Organization for Economic Cooperation and Development (OECD) countries. The international trade regime is still very unequal; in spite of appeals by developing countries, industrialized countries continue to pursue protectionist policies much to the disadvantage of African countries.

THE ARCHITECTURE OF COOPERATION

So far, we have established two things: that cooperation is very difficult to achieve in the real world and that, collective action is absolutely necessary in dealing with global commons. Following Axelrod's celebrated work *The Evolution of Cooperation* (1984), there has been a rapid growth in modelling by game theorists. Much of this development has been devoted to discovering conditions under which cooperation could be initiated and sustained.¹ Without claiming to summarize this enormous and rich literature, it is clear that at the minimum, countries will have to make compromises if they expect constructive engagement. This is not surprising given the character of the global commons. Excluding or limiting potential beneficiaries from using CPRs is a nontrivial problem due to the sheer size of their physical attributes, the additional benefits from exclusion, or placing restriction on use are calculated to

² See Olson et al (1999) for a detailed discussion of the externality generated whenever resource users appropriate from the commons.

be less than the additional cost from instituting a mechanism to control use. Basic constitutional, legal or institutional considerations or norms, issues of fairness, ethics, and so on may preclude exclusion as an option (Ostrom et al, 1994).

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ⁱ North (1990) argues that "there is a vast gap between the relatively clean, precise, and simple world of game theory and the complex, imprecise, and fumbling way by which human beings have gone about structuring human interaction.... Human interaction is clearly more complicated than the can be encompassed in (sic) simple behavioural assumptions. Although game theory demonstrates the gains from cooperating and defecting in various contexts, it does not provides us with a theory of underlying costs of transacting and how those costs are altered by different institutional structures" (p. 15).