





WORKING PAPER

N°12/11 OCTOBER 2011 | GOVERNANCE

Twenty years on from Rio, development is still far from sustainable

Lucien Chabason (IDDRI)

AN INNOVATIVE ASSESSMENT

There is no formal assessment of the goals set by Agenda 21 during the Rio Earth Summit in 1992. The United Nations Conference on Sustainable Development (Rio+20), which will take place in June 2012, is the opportunity to take a look back at 20 years of sustainable development. The Rio Declaration of principles, aimed essentially at reconciling economic development and environmental concerns, has acquired real legal and political legitimacy. However, its efficiency, especially in terms of resource management, is still uncertain and the lack of quantified objectives or an effective monitoring body hamper its implementation.

THE DIFFICULT IMPLEMENTATION OF THE RIO PRINCIPLES

The international governance of sustainable development, as embodied by the Commission on Sustainable Development, is a failure. Indeed, sustainable development is struggling to establish itself within a holistic form of governance that effectively associates the three pillars and involves all stakeholders. And, due to a lack of clearly defined and mutually accepted criteria and procedures, the implementation of the Rio principles is encountering some serious reservations and creating a feeling of incompletion.

TOWARDS A NEW FORM OF SUSTAINABLE DEVELOPMENT

Although some of the conventions and other mechanisms set up further to Agenda 21 have produced encouraging results, and although the goal of growth to eradicate poverty has been partially achieved, pressure on natural resources is increasing. The very principle of sustainable development is being challenged, and the need for a path change is more urgent than ever. Initial discussions in the run-up to the Rio+20 Conference are giving no indication that the environment will become more than just a concern secondary to the needs of a form of development which, for the time being, is anything but sustainable. However, there is considerable scope for progress in terms of reducing the impact of human activity. The definition of critical priority sustainable development goals, similar to the MDGs, would be a step in this direction and could open up new opportunities.

Institut du développement durable et des relations internationales 27, rue Saint-Guillaume 75337 Paris cedex 07 France

Copyright © 2011 IDDRI

As a foundation of public utility, IDDRI encourages reproduction and communication of its copyrighted materials to the public, with proper credit (bibliographical reference and/or corresponding URL), for personal, corporate or public policy research, or educational purposes. However, IDDRI's copyrighted materials are not for commercial use or dissemination (print or electronic).

Unless expressly stated otherwise, the findings, interpretations, and conclusions expressed in the materials are those of the various authors and are not necessarily those of IDDRI's board.

Citation: Chabason, L. (2011), Twenty years on from Rio, development is still far from sustainable, Working papers $N^{\circ}12/11$, IDDRI, Paris, France, 14 p.

For more information about this document, please contact the author:

Lucien Chabason lucien.chabason @iddri.org

ISSN 2258-7071

Twenty years on from Rio, development is still far from sustainable

Lucien Chabason (IDDRI)

INTRODUCTION: THE CONCEPTUAL DIFFICULTY OF AN ASSESSMENT	5
1. RIO, A DECLARATION OF PRINCIPLES	6
I.I. The principle of common but differentiated responsibility	6
1.2. The precautionary principle	6
1.3. The principle of liability and compensation	7
1.4. The principle of access to information and participation	7
1.5. Transboundary movements	7
1.6. Economic and political instruments	7
2. THE RIO INSTITUTIONS	7
3. THE RIO CONVENTIONS	8
3.1. Climate	8
3.2. Biodiversity	8
3.3. Desertification	9
4. OTHER ENVIRONMENTAL ISSUES	9
4.1. Chemical substances and hazardous wastes	9
4.2. Oceans and coastal zones	9
4.3. Forests	10
4.4. Water	11
5. SOCIO-ECONOMIC ISSUES	11
5.1. Responsible patterns of production and consumption?	II
5.2. Sectoral economic approaches and sustainability	12
5.3. Poverty reduction and the MDGs	12
5.4. International aid	12
CUNCILIZION	12

INTRODUCTION: THE CONCEPTUAL DIFFICULTY OF AN ASSESSMENT

Establishing a rigorous and precise assessment of the implementation of commitments made by the international community regarding sustainable development is no easy matter, due to the very nature of the subject, and also because the major decisions made during the Earth Summit in 1992 in Rio de Janeiro (Brazil) have been supplemented by later decisions adopted to provide the necessary clarifications.

Is it the scale of the issue, or perhaps its excessive ambition, that discourage the regular production of a comprehensive assessment? Or, compared to the Millennium Development Goals (MDGs), are the targets set in the field of sustainable development vaguer, less concise and less coherent, and therefore more difficult to analyse with precision? In fact, Agenda 21 (the plan of action adopted in Rio in 1992) covers so many economic, social and environmental subjects that publishing an assessment would imply reviewing most of the activities of the United Nations specialised agencies, as well as those of governments and stakeholder groups.

The United Nations, which is generally highly proficient in the publication of reports that are accepted as an authority due to their quality and objectivity, does not publish a regular, systematic assessment of the commitments made during the summits in Rio (1992) and Johannesburg (2002). The only two synthesis reports available to date are: the report A/CONF.216/PC/2 of 1 April 2010 prepared by the United Nations Secretariat for the first preparatory committee for the United Nations Conference on Sustainable Development, Rio+20, which only skims over the part on the assessment; and document A/66/... of 15 August 2011, which is more substantial, but mainly concentrates on energy and development issues. The UN Department of Economic and Social Affairs, which acts as the secretariat for the Rio+20 Conference and for the Commission on Sustainable Development (CSD), proposes series of indicators and sectoral analyses, but none of this material results in systematic, comprehensive assessments providing a regularly updated overview of achievements, similar to the ones used to monitor the MDGs.

To this are added the conceptual questions raised by the production of assessments and the measurement of policy action in general. Indeed, the objectives set by the major conferences are variable in nature, especially where environmental protection is concerned: objectives relating to the quality of the environment or to the productivity of ecosystems (for example, maintaining or restoring fish stocks at levels that can produce sustainable yields, or stabilising greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous human-induced interference with the climate system); commitments regarding the level of human pressure on the environment (Strategic Plan for Biodiversity, adopted in 2010 in Nagoya).

Sometimes objectives are quantified and deadlines set (for example, establishing marine protected areas covering 10% of the world's oceans by the end of the Nagoya Strategic Plan 2011-2020); sometimes they remain vague and imprecise. Where objectives are quantified and have cut-off dates, it is easier to assess them with precision and transparency. In this respect, significant progress has been made over the 20 years since 1992. While Agenda 21 is a lengthy document of 40 chapters comprising a list of objectives and activities whose specific conditions for implementation remain hazy, and the "Rio" conventions (climate, biodiversity and desertification) are limited to rather general objectives and principles, the Kyoto Protocol (1997) contains the commitments made by the developed countries to reduce their greenhouse gas emissions; similarly, the JPOI (Johannesburg Plan of Implementation, adopted in Johannesburg in 2002) takes up the Rio targets and makes them more precise and stricter in terms of commitment levels. And the MDGs constitute a set of quantified, verifiable commitments. In addition, in September 2011 certain countries (Colombia and Guatemala) proposed that a limited set of Sustainable Development Goals (SDGs) should be adopted during the Rio+20 Conference to complement the MDGs, an initiative that could be promising.

The aim of this article is not to review the 40 chapters of Agenda 21, but to focus on the social, economic and ecological dimensions of the main themes and the methods of implementation.

1. RIO, A DECLARATION OF PRINCIPLES

The Rio Declaration¹, which follows on from the Stockholm Declaration², is a set of relatively innovative principles whose implementation has proved sometimes daring and often problematic. It places human beings, rather than nature, at the centre of sustainable development (Principle I) and asserts the sovereign rights of States to manage their own resources (Principle 2). This is therefore a far cry from the common management of the planet, especially as there is no reference here to heritage or common goods; States must nevertheless exploit their resources and achieve their development while limiting negative externalities and impacts in areas beyond their jurisdiction.

The effects of this assertion of national sover-eignty and of the priority given to development are still being felt in international climate and biodiversity negotiations, and represent a real watershed in relation to the Stockholm Conference (1972). Indeed, although it became clear in the 1980s that environmental negotiations could no longer disregard development issues, it had not been envisaged, at least by environmental non-governmental organisations (NGOs), that the Rio Summit would in fact mark the beginning of the loss of legal and political autonomy in environmental matters and their de facto subordination to development demands.

Moreover, the anthropocentric view of sustainable development driven by the Rio Declaration was confirmed in 2005 with the publication of the Millennium Ecosystem Assessment, MA, whose goal was to "assess the consequences of ecosystem

change for human well-being and the scientific basis for action needed to enhance the conservation and sustainable use of those systems and their contribution to human well-being". The popularisation of the concept of ecosystem services, and attempts at their economic assessment within the TEEB framework (The Economics of Ecosystems and Biodiversity, 2008-2010), also supported this approach.

1.1. The principle of common but differentiated responsibility

In the Rio Declaration, the most novel principle is the idea that in view of global environmental degradation, "States have common but differentiated responsibilities" (Principle 7). This principle was immediately taken up in the United Nations Framework Convention on Climate Change (or "Climate Convention", which entered into force in 1994), and was spectacularly applied in the Kyoto Protocol (which came into force in 2005), under which only the Annex I developed countries committed to reducing their GHG emissions. Today, the same principle continues to govern international climate negotiations, even though certain countries, such as the United States, are trying to oppose it. Despite being unquestionably equitable, it is nevertheless a factor of major difficulties in that the differentiation of responsibilities, whether synchronic or diachronic, leads to endless discussions due to a lack of clear, mutually accepted criteria.

1.2. The precautionary principle

A similar ambivalence characterises the application of the precautionary principle (Principle 15), which is already transcribed into international law (the Climate Convention, the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, the Barcelona Convention for the Protection of the Mediterranean Sea, the Treaty of Nice, etc.) and into certain national laws (France). Despite being very clear in the Declaration, this principle is subject to major differences in wording and interpretation depending on the treaty and the country, resulting in a certain amount of intellectual and legal confusion that is made worse by the lack of consensus within the scientific community and the reservations of economic circles. The lack of commonly accepted operating procedures setting out the conditions for the implementation of the principle creates a feeling of incompletion in an area where considerable progress should have been made.

i. http://www.un.org/french/events/rio92/ aconfī5ī26volīf.htm

^{2.} http://www.unep.org/Documents.Multilingual/ Default.asp?DocumentID=97&ArticleID=1503&l=en

1.3. The principle of liability and compensation

The principle of liability and compensation (Principle 13) is strongly affirmed and extended, but has not had any consistent operational application, including in the field of marine oil pollution, where the draft convention on liability linked to offshore oil activities has not been adopted. Several international agreements have been signed on the issue of liability and compensation, but have not entered into force; States are very reluctant to move forward on this point.

1.4. The principle of access to information and participation

In contrast, the *obligation to provide mutual information* in case of transboundary accidents (Principle 18) has been implemented in the context of conventions under the International Atomic Energy Agency (IAEA, nuclear accidents), the International Maritime Organization (IMO, oil pollution) and the Kiev Convention (industrial accidents).

The principle of access to information and participation (Principle 10) was significantly enhanced with the adoption of the Aarhus Convention (1998) of the United Nations Economic Commission for Europe, as well as the revision of the Barcelona Convention in 1995.

1.5. Transboundary movements

Principle 14, which discourages the transboundary transfer of harmful activities or substances, suffered a serious setback with the non-ratification of the amendment to the Basel Convention prohibiting movements of hazardous wastes to non-OECD countries.

Principle 12, which condemns trade protection measures based on environmental considerations, has been widely applied and, to date, carbon border tax projects have not been followed up. On the other hand, no multilateral environmental agreement (MEA) using trade measures has been challenged at the WTO.

1.6. Economic and political instruments

The Rio Declaration also encourages the creation and use of *economic instruments* (Principle 16, according to which the polluter pays), an incentive taken into account by the Kyoto Protocol (1997) and the Nagoya Protocol (2010), and within the framework of the World Bank promotion of

environmental taxation for developing countries; the OECD countries have considerably increased environmental taxes, and market instruments have appeared in the field of CO₂ emissions and fisheries.

The more political provisions of the Rio Declaration have had very little success. *The environment and natural resources of people under oppression* (Principle 23) are not particularly protected, and no measures have been taken to protect the environment in times of armed conflict (Principle 24), whether in international law or at the operational level, with the exception of the Red Cross guidelines for the training of the armed forces (1996).

Due to their strength, clarity and self-evidence, and in spite of their sometimes problematic scope, the Rio Declaration principles have largely penetrated international and national laws. They now need to be made more effective and the gaps remaining in liability and compensation, as well as in the right to participation, must be filled.

2. THE RIO INSTITUTIONS

The creation of the Commission on Sustainable Development (CSD, 1993) under the United Nations Economic and Social Council to monitor the implementation of Agenda 21 was the main institutional innovation in the wake of the Rio Summit. However, after much criticism, the Earth Summit of 2002 modified its operating procedures, but since then there has been a general feeling of frustration and disappointment. Some of the reasons for this failure as a strategic institution for sustainable development are: the fact that no ministries other than environmental ones are involved; the lack of interest from major agencies responsible for economic issues; and the inexistence of linkages between the recommendations of the CSD and the other UN decision-making bodies.

Other institutional changes have nevertheless proved more successful, including:

- better integration of environmental concerns by the major agencies, such as the World Bank, UNDP and FAO;
- the decision to make the Global Environment Facility (GEF) permanent, and the extension of its field of intervention;
- a better structuring of water and ocean issues within the UN;
- a modest consolidation of UNEP;
- the active involvement of regional economic commissions;
- the development of structures dedicated to assessments and science/policy interfaces (establishment of the IPCC, creation of IPBES) and

the improvement of the quality and credibility of international environmental assessment mechanisms.

At the national level, as they were invited to do by the JPOI, many States have worked to structure the sustainable development function within their governance. Some have created interministerial coordination mechanisms, while others have established linkages between environment and sustainable development. The changing nature of these structures reveals the difficulty of building a form of governance capable of conducting holistic policies.

Consensus about the shortcomings of the international governance of sustainable development is sufficient to ensure that the issue was identified as one of the two themes of the Rio+20 Summit under the heading "the institutional framework for sustainable development".

3. THE RIO CONVENTIONS

Certain fields have been the subject, whether at Rio or afterwards, of a convention providing the international community with a tool for negotiation, funding or specific monitoring and a means of setting more operational objectives.

3.1. Climate

While Agenda 21 is relatively hazy on climate issues, the Climate Convention contains a clear objective, that of "stabilising greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous human-induced interference with the climate system", which resulted in 2010 in Cancún in an objective to limit average temperature rise to 2°C by 2100. The Convention rapidly became the major forum for negotiations on the global environment and sustainable development, given the major influence climate issues have on the different aspects of development. From this point of view, the Climate Convention has proved highly successful, one of the main reasons for this being the credibility and precision of the work of the IPCC, which has provided a robust scientific basis.

As regards the results obtained, under the Kyoto Protocol (1997) the emissions of Annex I countries (developed countries and transition economies) fell from 15 billion tonnes in 1990 to 13.9 in 1998. This is a positive outcome, due largely to the collapse of the socialist bloc economies immediately after 1990, and to the efforts of the European countries which, for the most part, are complying with their Kyoto commitments. These results could have

been even better if the United States had committed to the application of the Kyoto Protocol, which it did not ratify, and if major countries such as Japan and Canada had met their commitments. But this fall in CO₂ emissions in developed countries has been more than negated by the increase in emissions from developing countries, which rose over the same period from 6.8 to 16 billion tonnes. In total, global CO₂ emissions rose by 38% between 1990 and 2008. The consequences of this increase were clearly described in the 4th IPCC report in 2007: rising global temperatures, accelerated melting of glaciers and a reduction in sea ice extent, an upsurge in extreme weather events (floods, droughts, etc.), sea level rise, negative impacts on agricultural production, and so forth. The objective of the Climate Convention has not therefore been met, and all of the commitments made in Copenhagen (2009) and Cancún (2010) on a voluntary basis (more than 110 countries have officially notified their emissions reduction/limitation targets) will not be enough to limit temperature rise by the end of the 21^{st} century to $+2^{\circ}$ C. In this context, climate negotiations are in danger of focusing increasingly on adaptation to climate change and its funding, which would implicitly sanction acceptance that the convention has partially failed.

Climate negotiations thus perfectly illustrate the progress made and difficulties encountered in the implementation of a convention imbued with the Rio concepts: on the one hand, progress converning financing, effective encouragement for the promotion of renewable energy, and inventiveness in terms of implementation mechanisms; but on the other hand, difficulties in agreeing on a common level of responsibility, especially if the historical dimension of environmental degradation is taken into account. The Climate Convention is therefore both an exceptional inclusive process that illustrates the systemic approach of sustainable development, and an example of the difficulty of mastering the complex, multi-dimensional approaches it involves.

3.2. Biodiversity

Another major Rio convention, the Convention on Biological Diversity (CBD), has provided a more scientific and systematic basis for environmental questions, covering all living resources and connecting nature to development issues. The application of the CBD has long suffered from the very general nature of its objectives, from a lack of scientific support and political interest, from failure to understand its added value, and from the fact that it has been overshadowed by the Climate Convention.

Without any real scientific basis or indicators, the Biodiversity Convention and the JPOI set the objective of achieving "by 2010 a significant reduction of the current rate of biodiversity loss". By 2005, the work of the Millennium Ecosystem Assessment and the sectoral reports (fisheries, endangered species) published by FAO and the International Union for Conservation of Nature (IUCN) challenged the CBD, showing the impossibility of meeting such an objective and proposing new avenues to explore, such as that of coneptualising, categorising and measuring the quality of ecosystem services. It should be acknowledged that the CBD had the honesty to admit that this target would not be met, whatever the partial indicators used, and that it approached the Nagoya Conference in 2010 as a learning experience in terms of the content of the 2010-2020 strategy and with the goal of reformulating targets (including, for example, those aimed at limiting socio-economic factors that impact biodiversity). Although the global objective has not been reached - and it is difficult to see how it could be given the Convention's lack of means and political authority, as well as the limited commitment of member countries - there have however been some positive achievements: the adoption of the Cartagena Protocol on Biosafety (2000), and the Nagoya Protocol on Access and Benefit Sharing (2010); the IMO Convention on Ballast Water (2004); the agreement in principle on the creation of an Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), which should contribute to the objectives of the convention; considerable progress in terms of protected areas, with 16 million km² in 2000 compared to 8 million in 1980 (despite a serious lack of protection for marine areas); and the adoption by more than 160 countries of national strategies for biodiversity, pursuant to the decisions of the convention.

Furthermore, the 2011-2020 strategy adopted in Nagoya (2010) sets targets for limiting the socioeconomic drivers of biodiversity loss. However, although curbing production, consumption and regional planning trends is a key condition for the success of this strategy for biodiversity, the United Nations failed, on the occasion of the 19th session of the CSD (May 2011), to adopt the programme on "Protection and sustainable consumption", which is just one illustration of the inconsistencies observed within the international governance of sustainable development.

3.3. Desertification

The Convention to Combat Desertification was adopted in 1994 and entered into force in 1996. But this crucial subject has not been made a priority

by many countries, and the convention remains marginal in relation to the climate and biodiversity conventions.

Some progress in both the treatment of this issue and the results obtained must nevertheless be noted. The Convention to Combat Desertification adopted: a strategic plan for 2008-2018, and around 100 national action plans; and a system for monitoring commitments. Furthermore, the GEF validated the integration of this theme (the only specific JPOI recommendation on this subject). Finally, significant improvements have been observed in the field, with an increase in vegetation in the eastern Sahel region for the 1983-2003 period, albeit still fragile.

However, the lack of international community interest in soil protection and desertification issues remains patent.

4. OTHER ENVIRONMENTAL ISSUES

4.1. Chemical substances and hazardous wastes

The sustainable management of chemical substances was an important subject during the Rio Summit, which took place just a few years after the accidents in Bhopal (India, 1984) and Seveso (Italy, 1976). In this field, time-bound targets were set (in 2000, then reiterated by the JPOI in 2002) concerning the creation of mechanisms for the assessment and sustainable management of such products. The Stockholm Convention on Persistent Organic Pollutants was adopted in 2001. The United Nations Environment Programme (UNEP) set up the Intergovernmental Forum on Chemical Safety (1994) and an inter-agency coordination mechanism, and also adopted a cluster mechanism for the management of conventions on chemicals and hazardous products. And the regulation on the management of chemical substances, REACH (which entered into force in 2007), is a European response to the recommendations of Agenda 21 and the JPOI.

4.2. Oceans and coastal zones

Chapter 17 of Agenda 21 on the protection of the oceans, seas and coastal areas is undeniably original in its global approach, but relatively vague in terms of objectives. It was clarified in Johannesburg in 2002, but with limited ambitions. From an institutional viewpoint, there has been progress on two levels with the creation of UN Oceans,

an internal coordination structure of the United Nations agencies, and the establishment of the Informal Consultative Process on the Law of the Sea, which brings together States, United Nations agencies and NGOs for an annual review of international maritime issues.

It is within the framework of the Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction, created in 2004 (United Nations General Assembly resolution 59/24), that the issue of the protection of high seas biodiversity has moved forward in recent years. Progress has also been made in the field of international environmental law through the strengthening of regional systems: the adoption of the OSPAR Convention in 1992; the creation of the NOWPAP programme (Northwest Pacific Action Plan) in 1994; the revision of the Barcelona Convention in 1995; the signing of new IMO conventions, especially on ballast water and the recycling of ships, in 2004; and the intensification of regional cooperation with the active support of the GEF. The JPOI had also planned to set up a regular scientific assessment process for the marine environment by 2004, but this has fallen well behind schedule and should now be launched

However, many problems persist:

- land-based pollution remains at a high level, as shown by the dramatic expansion of "dead zones" or the recent discovery of plastic seas, despite the adoption of new protocols within the framework of the regional seas (Abidjan in 1981, Cartagena in 1983, and Nairobi in 2010) and the global programme to prevent land-based pollution (1995);
- coverage of the marine environment by protected areas has remained below 1% and the objective of creating a representative network of marine protected areas by 2012, set by the JPOI, has not been reached;
- the Regional Seas Programme has not been strengthened and cooperation with regional fisheries organisations only works relatively well within the North-East Atlantic framework (OSPAR);
- the JPOI objective of restoring degraded fish stocks to levels that can produce sustainable yields by 2015 is not on track³;
- the fight against illegal and unregulated fishing has been ineffective;

- the programme to protect coral reefs has produced meagre results⁴;
- the high seas suffer from a lack of regulations (marine genetic resources, environmental impact studies, etc.) as well as from insufficient monitoring and surveillance;
- the absorption of anthropogenic carbon dioxide causes ocean acidification that is liable to seriously impact marine biodiversity;
- finally, no international measures have been taken to control offshore oil drilling, which is affecting ever deeper areas; indeed, this issue is not included in the JPOI.

4.3. Forests

After the non-inviting declaration on forests, adopted at the Rio Summit, the Johannesburg Summit set non-quantified objectives for the fight against deforestation and sustainable forest management. Since no legal instruments were adopted in Rio, forests have become the subject of informal consultations within the United Nations (United Nations Forum on Forests, UNFF, 2000), which have made it possible to promote voluntary initiatives such as certification. The UNFF has fostered the development of national sustainable forest management policies and the production of national reports, and its work served as the basis for the adoption of a non-binding instrument for sustainable management by the United Nations General Assembly (UNGA) in 2007. Further to the work of the UNFF, in 2006 the United Nations Economic and Social Council also adopted a set of forest management objectives for 2015, within the framework of the MDGs. One of these objectives is to "reverse the loss of forest cover worldwide", a reduction that reached 1.3 million km2 between 1990 and 2005 at a rate of 0.2% per year, with the greatest losses occurring in Indonesia and Brazil.

Continuity is thus seen in negotiations, helping to strengthen a more incentive-driven United Nations mechanism in a field in which the decision was made not to adopt a legally binding instrument. Time will tell whether or not this approach is successful as, after 30 years of the fight against deforestation, pressure on forests has certainly diminished, with clearing falling from 16 million hectares per year for the period 1990-2000 to 13 million for 2000-2010, but it remains intense and could soon affect the temperate regions, tempted to use this source of renewable energy. It should

^{3.} According to the MDG report of 2011, the proportion of overexploited, depleted or recovering fish stocks increased from 10 to 33% between 1970 and 2008, and the decline of fisheries continues.

^{4.} According to the CBD Global Biodiversity Outlook published in 2009, the rate of living coral cover in the Caribbean fell from 28% in 1992 to 8% in 2002, and 35% of mangroves have disappeared over the last 20 years.

nevertheless be noted that the area of forests with protected status has considerably increased, especially in Brazil and Gabon.

Furthermore, experiments underway show that it is not yet certain that the REDD+ mechanism (United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries), and more generally payments for forest ecosystem services, are an appropriate response to the pressure on forests.

4.4. Water

Agenda 21, which is aimed at the sustainable management of resources and the common management of transboundary basins, also advocated access to water and sanitation for all by 2025. The JPOI detailed these objectives, insisting on the need for the efficient use of resources, and confirmed the principle of the Global Water Forum (the first was held in Marrakech in 1997).

The MDGs specifically address access to water, with the goal of halving, by 2015, the proportion of the population without access to safe drinking water. The 2011 report indicates that the target for safe water should be met, though one in ten people may still be without access in 2015. However, the situation remains critical for sanitation, which is sorely lacking for 2.6 billion people⁵.

From an institutional viewpoint, the creation of UN Water in 2003 prompted the emergence of a common vision of the application of water issues at the international level, and the United Nations Convention on uses of shared watercourses, signed in 1997, represents progress in terms of the management of transboundary waters, even if it has not yet entered into force.

However, the use of water resources increases regularly, leading to unsustainable scenarios in many countries, especially in the southern Mediterranean and in Asia. Shortages have increased in the major cities in developing countries, and the development of irrigation is hampered as a result. The issue of water is likely to symbolise the unsustainable nature of development in the future.

5. SOCIO-ECONOMIC ISSUES

Agenda 21 encouraged economic growth as a factor in improving living conditions and reducing poverty. In the context of the 1990s, which saw the creation of the WTO (1995), it made world trade

5. See the United Nations MDG Report, 2011.

and market access for developing countries a key to this growth. It advocated lower trade barriers and generalised tariff preferences for developing countries, and condemned the use of environmental standards as tools for protection as well as the subsidies granted by rich countries to their agriculture.

The goals have been largely met, in the sense that after 1990, the rate of growth in emerging economies and developing countries in general was consistently more than twice the global average and three times that of the advanced economies. The very rapid development of world trade is one of the major factors of this progress, and the share of the developing countries in this trade is increasing every year.

This growth has been facilitated by the creation of the WTO, the signing of numerous bilateral agreements and the lowering of the average rate of customs tariffs since 1996, in particular in favour of goods from the least developed countries. Even if, contrary to the recommendations of the JPOI, the multilateral trade negotiations launched in Doha in 2001 (known as the Development Round) have not reached a conclusion, liberalisation is largely underway in favour of goods from developing countries. And although the question of agricultural subsidies is still unresolved, the reduction in subsidies for agricultural exports from wealthy nations has become a reality.

At the same time, the extraordinary development of world trade is having a considerable impact on the environment.

5.1. Responsible patterns of production and consumption?

This is undoubtedly the chapter of Agenda 21 whose outcome has proved the least substantial, even though radically changing patterns of production and consumption is a key condition for the achievement of its objectives. Considered as a high priority by the JPOI, this programme has been the subject of lengthy preparations since the Johannesburg Summit, but the CSD failed to adopt it during its 19th session in 2011. This is therefore a serious failure.

Globally, since 1980, the use of non-renewable natural resources has risen at a slower pace than the increase in global GDP. Nevertheless, despite this preliminary decoupling, the increase in GDP, which more than doubled between 1980 and 2006, has resulted in pressure on resources that continues to grow, and is now causing higher prices for raw materials, fossil fuels and agricultural products.

However, numerous local initiatives and ventures have been set up to respond to this question,

through procurement policies, certification, environmental taxes, voluntary labelling, fair trade, local Agenda 21 programmes, educational action and, finally, consumer awareness. But according to the World Business Council for Sustainable Development (WBCSD, 2008), technical progress and eco-efficiency will not be enough, and real changes in lifestyles and consumption patterns will need to be made.

5.2. Sectoral economic approaches and sustainability

Since the Earth Summit, action has focused on agriculture and energy as major challenges for development; but these two sectors have nevertheless proved to be a tangle of contradictions that are difficult to unravel.

Thus, in developing countries, it is essential to develop access to energy, especially electricity, in order to reduce poverty and improve health and living conditions. But it is also necessary to limit growth in carbon emissions from fossil fuels and to better manage river hydroelectric projects, which result in population displacements and interference with river ecosystems. Yet dam construction is beginning again in Asia and Latin America.

In the agricultural sector, growing demand for food from a population that has risen in 10 years from 6 to 7 billion people will need to be satisfied, and under-nourishment eradicated, while reducing the environmental impact of modern agriculture by preventing the conversion of forests to agricultural land and land degradation.

Whereas the promotion of more sustainable energies, especially through the development of renewables, has benefited from the dynamics generated by the Climate Convention, the question of agriculture has long been neglected. For example, the share of ODA allocated to agriculture fell from 18% of total assistance in 1970 to 4% in 2009.

The same contradictions can be seen for transport and tourism, which are vital to development, but have a major impact on the natural environment. The theme of the green economy, which will be addressed during the Rio+20 Summit, is the opportunity to re-examine these sectoral subjects with greater coherence and ambition.

5.3. Poverty reduction and the MDGs

Poverty reduction is one of the Agenda 21 priorities. The same applies to the JPOI which, adopted after the Millennium Summit (2000), reaffirms the goal of halving by 2015 the proportion of people whose income is less than one dollar per day,

who suffer from hunger, or who have no access to safe water.

According to the United Nations MDG Report 2011, the world is on track to meet the poverty reduction target, the poverty rate having fallen from 45% in 1990 to 27% in 2005. Likewise, the goals regarding drinking water (but not sanitation) should be met. Considerable progress has been made for certain health targets (combating malaria, tuberculosis and HIV) and education. But wide gaps remain in relation to goals for the nutrition of the poorest children, their education, slums, living conditions in rural areas and women's access to paid work; in addition, the goal of halving the proportion of people who suffer from hunger is not likely to be met, the situation remaining critical in most of sub-Saharan Africa and parts of southern

5.4. International aid

Agenda 21 estimated the amount of official development assistance (ODA) needed for the implementation of its activities at 125 billion dollars. The JPOI, with the MDGs, set at 0.7% of the GDP of the advanced countries the funds that should be allocated to development and, with the Monterrey Consensus (2002), invited the countries of the Clubs of Paris and London to pursue debt relief measures.

Some major debt cancellations have been granted, especially to the LDCs. From 2000 to 2008, debt service as a percentage of exports from developing countries fell from 12.5% to 3.4%. The impact was particularly positive for the LDCs and island nations. Public debt has become a rich country problem. Furthermore, the global volume of ODA has evolved positively, rising from 0.22% to 0.32% of GDP of wealthy countries between 1996 and 2010, in other words 128 billion dollars for 2010, an unprecedented amount. Even if the formal commitments made during the international summits, including the G8, have not been met by most developed countries, ODA progressed considerably right up to the onset of the financial crisis of 2007-2008, which led the OECD countries to cap their commitments. The emerging countries, for their part, are beginning to implement ODA programmes.

CONCLUSION

Although the summits in Rio and then Johannesburg attempted to assert the necessity and feasibility of demographic, economic and social development compatible with the protection of the global environment, the outcome is unconvincing. The changes underway are extremely alarming for the climate, biodiversity, the marine environment and the use of land, forests and freshwater. The economic development model encouraged in the early 1990s has undoubtedly produced results in terms of economic growth and improvements in living conditions for some sectors of the population in developing countries, but, as indicated by the United Nations Secretary-General in his first report for Rio+20 (2010), "the environmental pillar is perhaps where progress has been the slowest... Globally, the pressure on ecosystems continues to increase".

Is this due to the fact that the objectives adopted in Rio and then Johannesburg were not ambitious enough? Is it the weakness and fragmentation of environmental institutions at the national and international levels? Or is it down to the absence of vision and determination to implement the major changes in levels and patterns of consumption that are nevertheless essential to the effective protection of the environment? The fact remains that the emerging countries are reproducing the economic and regional development models adopted by the rich countries; models that the latter relentlessly strive to defend.

Discussions in the run-up to the Rio+20 Conference are giving no indication that the environment will become more than just a concern secondary to the needs of a form of development which, for the time being, is anything but sustainable.

However, there is considerable scope for progress in terms of reducing the impact of human activity: moving towards a lower-carbon economy; more ecological agriculture; less brutal tourism; more sustainable fishing; and better managed forests, all in the context of global governance that truly integrates the concept of sustainable development and guarantees stakeholder participation, while bearing in mind the MDG methodology. This is the challenge that the Rio+20 Conference can still take up. And in a certain sense, the joint initiative of Colombia and Guatemala proposed in September 2011, namely the definition of priority and critical sustainable development goals, would be a step in this direction and could open up new opportunities.

Twenty years on from Rio, development is still far from sustainable

Lucien Chabason (IDDRI)

IDDRI'S PUBLICATIONS

- S. Treyer *et al.* (2012), "Powerful International Science-Policy Interfaces for Sustainable Development", IDDRI, *Policy Briefs* N°06/12.
- N. Bakkour, B. Martimort-Asso, N. de Paula Domingos, T. Voituriez, "What reasonable ambition for Rio+20?", IDDRI, *Policy Briefs* N°03/12.
- C.-A. Sénit (2011), "Compromising on a climate regime: on the importance of perceptions", IDDRI, Working Papers N°09/11.
- L. Tubiana *et al.* (2011), "Now is the Time! Why 'Rio+20' must succeed", German Development Institute [available at www.iddri.org].
- S. van den Hove, L. Chabason (2009), "The Debate on an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services", IDDRI, *Working* Papers N°01/09.

Publications available online at: www.iddri.org



Given the rising stakes of the issues posed by climate change and biodiversity loss, IDDRI provides stakeholders with input for their reflection on global governance, and also participates in work on reframing development pathways. A special effort has been made to develop a partnership network with emerging countries to better understand and share various perspectives on sustainable development issues and governance.

For more effective action, IDDRI operates with a network of partners from the private sector, academia, civil society and the public sector, not only in France and Europe but also internationally. As an independent policy research institute, IDDRI mobilises resources and expertise to disseminate the most relevant scientific ideas and research ahead of negotiations and decision-making processes. It applies a crosscutting approach to its work, which focuses on five threads: global governance, climate change, biodiversity, urban fabric, and agriculture.

IDDRI issues a range of own publications. With its *Working Papers* collection, it quickly circulates texts which are the responsibility of their authors; *Policy Briefs* summarize the ideas of scientific debates or issues under discussion in international forums and examine controversies; *Studies* go deeper into a specific topic. IDDRI also develops scientific and editorial partnerships: among others, *A Planet for Life. Sustainable Development in Action* is the result of collaboration with the French Development Agency (AFD) and The Energy and Resources Institute (TERI), and editorial partnership with Armand Colin for the French edition, *Regards sur la Terre*.

To learn more on IDDRI's publications and activities, visit www.iddri.org



www.iddri.org