

# **"Changing unsustainable patterns of consumption and production"\***

**Edwin Zaccai**

Center of Studies on Sustainable Development  
IGEAT, Free University of Brussels

## **Summary**

"Changing unsustainable patterns of consumption and production", the title of Chapter 3 in the Plan of Implementation of Johannesburg represents a motto that proceeds from the core of sustainable development. Ten years after the Rio Conference the principles aimed at these objectives remain, for a large part, unchanged, though this topic gained in importance. No significant breakthrough have been achieved within the latest Summit. This paper traces briefly the conceptions through which this area have been phrased in UN official texts, before looking at some major difficulties that stand in the way of significant changes. Among the problems figure the wide differences of situations and potentials in the world related to these topics, and the under-estimation of their social dimensions. Among its propositions, the paper argues for a more careful assessment of the difficulties encountered by the political instruments repeatedly officially approved.

## **Key words**

Consumption, production, delinkage, social dimension, consumers, enterprises

## **1. The road to Johannesburg, in the texts**

At the United Nations Conference on Environment and Development (UNCED), the Rio Conference, the Agenda 21 has somehow innovated in defining its Chapter 4, as "Changing consumption patterns", however it is one of the shortest in this major documents. In Principle 8 of the Rio Declaration, the theme of Chapter 4 is combined with the one of Chapter 5, demography : "To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies". At Rio Chapter 4 and 5 were negotiated together, with trade-offs between both of them.

While relations between poverty and environmental degradation are underlined everywhere in Agenda 21, the first principle of action in Chapter 4 (4.3.) states that "While poverty results in certain kinds of environmental stress, the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries, which is a matter of great concern, aggravating poverty and imbalances". We find then several objectives and principles of actions devoted to a better efficiency of processes, and towards reorientations of consumer choices.

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One sentence points out also that "In many instances, this will require reorientation of existing production and consumption patterns that have developed in industrial societies and are in turn emulated in much of the world"(4.15). This stake of emulation of the patterns of affluent consumption, and its threat to at least ecological sustainability, though fundamental in a middle term perspective, is not so common in the official Rio statements. Yet it might be, since the beginning, one of the most specific topics of sustainable development considered within a global approach. There is here no mystery, for this problem has for the moment no real perspective of solution. On the one hand, we may remember the assertion made by G. Bush senior at Rio : "The American way of life is not up for negotiations", and even if leaders of other rich countries would hesitate to express themselves so bluntly, there should be no deep disagreement on this point . On the other hand, the so-called "developing countries" (as well as the "developed") have the greatest reluctance for targets which would jeopardize their economic growth. Since 1992 these difficulties have been, most of all, illustrated by the negotiations around the United Nations Framework Convention on Climate Change (UNFCCC).

At the "Rio+5" UN Conference in 1997, while the issue of trade globalization required new attention, the items of production and consumption remain present. Following European propositions, references to eco-efficiency ("Factor 4 and 10") were written out. The working program of the Commission on Sustainable Development (CSD) was influenced by an orientation on production and consumption, which may be seen as one of its specificity compared to other agencies like the United Nations Environment Program (UNEP) and the United Nations Development Program (UNDP), with which its fields of competences interfere very much (albeit with less means)

Published in December 2001, during the "Rio+10" preparations, the Report of the Secretary general includes a chapter called "Changing unsustainable patterns of consumption and production" (VIII.C). Although it starts with the kind of utopian targets of Factor 4 and 10, there is nothing really new compared to the Agenda 21. This report lists, with no priority, a set of possible measures to be taken. They include several times the use of corporate responsibility and voluntary involvement, approaches which have increased in the 90's, and to which the Secretary general himself has given a tool, the "Global Compact". A program of assistance and transfer of technology to increase industrial productivity in East and South, and also for (Small and Medium Enterprises) SME's is also called upon, as well as incentives for industrial eco-efficiency in general. Raising the quality and quantity of information about ecological (but nothing about social<sup>1</sup>) criteria is not forgotten. Lastly appear several measures to be taken by governments, with not much specification, like "tax favouring resource conservation", together with "green procurements measures" and "green national accounts".

Very little attention is paid to the difference of contexts between rich "over-consumptive" (one might say) societies, and poor societies, unless in calls to increase productivity. All in all, although the document includes some lucid and severe sentences about the lack of success of these principles and objectives in the past, there is not many elements of assessment which could shed new light about what is going to change in the future to lead to success the application of almost the same recipes, by the same operators. To take just one element in a very favourable context, the Organisation for Economic Cooperation and Development

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<sup>1</sup> Though social criteria dominate in the 9 principles of the Global compact, cited above.

(OECD), a chanter of economic instruments since decades, has recently stated that only about 2% of the GNP of the OECD (in average) come from taxes on natural resources. The majority is raised on energy, a large proportion on transport, and only a few percents (from the 2%) on other natural resources. Moreover, the OECD does not foresee major change in the short term.

It is in thus in this official context that drafts of what would become the Johannesburg Plan were negotiated in ad-hoc meetings in 2001 and 2002.

## **2. The Plan of Implementation**

The process of these negotiations has not been described as very easy and constructive by its participants, and the expectations were not very high among experts in the field. In any case, the Plan of Implementation that came out in the end is for many topics more general than the Agenda 21 which it was intended to apply more acutely. It is less redundant, but with considerable variations in the importance given to a wide range of topics.

Chapter III is entitled "Changing unsustainable patterns of consumption and production". In its ten paragraphs (§§13-22), some problems seem to offer no inspiration for further implementation, like wastes (§21), or transport (§20) (each one of them enclosed in a dozen lines), while the considerable work and dissensus on energy since Rio and Kyoto, generated the 22-fold paragraph 19. Moreover, the also quite extended paragraph 8 is also devoted to energy. Included in the chapter of "Poverty eradication", this §8 states objectives mainly relative to energy access, with little consideration about its ecological production. Last but not least, the topic of UNFCCC ratification comes back in Chapter IV, in the context of protecting the natural resources (§36). We may remind here that the absence of the President of the USA at the Summit, as well as the American retirement from the Kyoto Protocol, has focalised much of the comments and analysis before and during the Summit, at which, moreover, well prepared "coups de theatre" were put in the forefront, with countries like Russia and Canada announcing, "live" in the UN big hall their intention to ratify, with the consequence of Kyoto soon entry into force. This debate finds an important resonance with the difficult topic of renewable energy, unclosed in §19. The objective of a 10% share of modern renewable in the world energy supply for 2010, was negotiated until the end of the Summit, when it left ground for a non quantifiable commitment, but taken "with a sense of urgency" (§19.e).

Beside climate/energy, waste and transport, a forth topic is included in Chapter III, containing one of the few time-table broad objectives newly attained in Johannesburg (compared to time-table objectives included in the Agenda 21, the Millenium Summit, or major UN conventions), for it is agreed "to achieve by 2020 that chemicals are used and produced in ways that leads to the minimization of significant adverse effects on human health and the environment" (§22). Work on this subject generated series of objectives (until 22g), among which appears one of the mentions of the precautionary approach, with the immediate reference to its formulation in Principle 15 of the Rio Declaration, which is limited to environmental protection. The European attempts to mention that it was "further developed in international law", and also "to protect health and environment" have not succeeded in the document, although it seems very unlikely that one would take more precaution for the health of, say the fishes in the sea (i.e. "environment"), than for human protection (i.e. "health").

These four different topics are included in the broader statements that state the frame of Chapter IV (§§ 13-17). As in the Agenda 21, we find that "fundamental changes in the way societies produce and consume are indispensable" (§13), while it is now agreed to "Encourage and promote the development of a 10-year framework of programmes (...) to accelerate the shift towards sustainable consumption and production" (§14). The delinking reference (between economic growth and the use of natural resources) - a key notion in European and OECD sustainable development strategies - could find its way in this paragraph, as well as the eco-efficiency reference, but the "eco-labelling" reference, present in the text negotiations, was finally diluted in the broader notion of controlled information.

A major concept intended to foster the implementation of UN sustainable development at Johannesburg, was the "Type II initiatives". Above 220 "partnership initiatives" aiming at practical improvements, of all kinds and extensions, were presented. The Guiding principles, to which they adhere, and that were set before the WSSD (at the Bali PrepCom) showed useful, but not always discriminating, considering the multiplicity of interpretation of the term "partnership". What was defined in the Plan for the CSD to frame the follow up of these initiatives and other to come, remains not too detailed (§130b).

The architecture of the Plan sets the chapter on consumption and production in second place after "Chapter II : Poverty eradication", and before "Chapter IV : Protecting and managing the natural resource base of economic and social development". In the latter, we find topics directly related to production, like Agriculture (§38), and Mining (§44), or to consumption, like Tourism (§41), at present the first economic sector in the world. The implicit overall sequence between these three chapters seems to be, poverty calls for more production, and production must be accomplished with respect to the environment.

This carving out of the document may lead to three remarks. First, compared to Agenda 21, the items of protecting sectors of the environment, joined with new topics as Tourism and Mining, are all together reduced to a much smaller place – grosso modo the Chapter IV - although they constituted the main section (III) in the Agenda 21. Inversely, and this is the second remark, the topics of consumption and production have gained wording importance, promoted to a chapter of the same statute as the one on natural resources. And thirdly, while the approach of Chapter III stays quite homogeneous for the whole world (with a few mentions of the usual simplistic distinction between developed and developing countries), there are new chapters, not at all present as such in the Agenda 21, devoted to regional approaches (Small Island States, VII; Africa, VIII; Other regional initiatives, VIII b.).

The inherent difficulty of sustainable development program at UN level – let alone the problem of consensus building on every word, and the "toothless" nature of such documents – has always been to find an architecture to combine interlinked problems and decisions. Wanting to go further than the Agenda 21 in the direction of a sustainable *development* program, not limited to the ecological dimension of development, the Johannesburg Plan has had to address this difficulty to a higher degree than before in the Rio process.

### **3. Delinking, Technologies, Consumers**

To what changes of "unsustainable patterns of consumption and production" may now lead Chapter IV ?. In countries where natural and agricultural resources are dominant, the

pressure to generate increased cash flows will probably continue to put priority on the exploitation of these resources, where there are no easy gains of productivity to be expected. In countries that are rapidly industrialising, it is technically difficult to delink the curbs of, respectively, economic growth and use of natural resources. Indeed, in the evolution of industrial development, this delinkage occurs at a point where most of the heavy investments are already made, and the share of services in the economy is taking an increasing place (Dessus, 1996). This situation affects newly industrialised countries, and can be increased by delocalisation of heavy industrial plants from the OECD. In the most economically developed countries, the delinkage may occur for some of the natural resources, but if we consider these resources in terms of quantities (and not as percentages of the economic output), many of them continue to grow (EEA 2002). The most expressive example is given by the USA, which definitely continued to raise their emissions of greenhouse gases since the Rio Conference. Many studies (for instances for the International Panel on Climate Change, IPCC) are wandering why even cost effective replacements are not put into force in affluent countries. Technology innovation to be implemented requires conditions that are multiple and slow to be met.

All in all, the impact of societies on the environment through production and consumption raises year after year, taking the environment as "source" or as "sink" (OECD 1997) and sustaining local, and sometimes international, conflicts. The projections of the GEO 3 report from UNEP (2002), are showing substantial concerns on this evolution in the future.

The main way taken to address this old known problem is to correct impacts, mostly by a better innovation and management of technologies. Trying to apply not only the Chapter IV, but other parts of the Johannesburg document, and giving concrete expression to mutual influences between them, especially in taking into account the different situations and contexts in the world, may generate progress. Though, many instruments are also old known – like technology transfer to developing countries – and far from proving enough efficiency.

Of course, another – and complementary - way to correct the unsustainable evolution would therefore be to reorient much more of production towards social needs. Here again this reasonable and easy to write principle hides of course crucial differences between situations in the world and inside countries. Many basic needs are not met because no cash flow is at disposal, and therefore no producers may be found competing to invest for these objectives. On the other hand, many desires, which are not even needs, generate considerable competition between producers working to meet them, when consumers are found able to afford for them. One could see in addition that some needs that where met for economically poor people in an informal way may have greater difficulty to do so when they become parts of the market and receive a price (Beaud 1997). The more regulation of the economy is let on initiatives of economic producers, the more it seems difficult to correct such orientations. This is one of the reasons why it is called increasingly upon the responsibilities of companies and consumers.

In the couple " consumption and production", since the Agenda 21 on, we can find the idea that in affluent societies, the consumer can and should be informed, or even educated, to push on the market towards more sustainable practices<sup>2</sup>. When we consider opinion surveys (EC 1999) we see that indeed some citizens reveal a sense that they could and should do

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<sup>2</sup> Could it be one of the reason why "consumption" is cited in the formula before "production", and was cited alone in the title of the Agenda 21 Chapter, though it is well the production stage that generate the most of the impacts and "the producer" that can manage more levers of command to minimize them than "the consumer".

something in their actions, in their way of life, to contribute to sustainable development (albeit this expression is not so widely known, and it is more in environmental or ethical terms that the reasoning goes on). In some countries, the medias took the Johannesburg Summit as an occasion to present some daily life possibilities towards ecological practices, reiterating the well known motto "think globally act locally". This kind of cultural evolution is to be taken seriously. It is limited to some parts of the world, to some fringes of societies, but it has an effect, at least as a tendency, in the orientation of some markets.

Nevertheless it may prove deceiving to rely too much on consumer action, for several reasons. Consumers may act only on limited segments of their consumption, not only because relevant information is often too complex to be used in daily practices, but also because it seems unlikely that a consumer will accept to lose a part of his/her advantages. Therefore the changes will massively be limited to what the market may offer, in a competitive manner, and with convenience advantages or, at least, with no loss. Moreover, trade regulations - crucial items in the Johannesburg document that may have the greater influence on production and consumption - are quite severe against limitations, new prescriptions, or sometimes even information, as we may see in the impossibility to address "eco-labelling" in the Plan, as mentioned above. Today there is a tendency among authorities to move towards more "sustainable product policies", one of the reasons being trying to build on consumer preferences for sustainable products (and also to consider the whole cycle of the product, not only the production stage). Nevertheless these policies are slowed down by difficulties of interference with market and trade regulations. Command and control instruments are seen as old fashioned, and are disputed for being not cost-effective enough. Economic instruments, though recommended in their principle both by economists and great business councils (see OECD, and the World Business Council for Sustainable Development, WBCSD) are contended in every single case where they lead to economic "losers", even if both the input on the long term and on society as a whole may be beneficiary. It is this context that leads to a greater call to voluntary initiatives and corporate responsibilities of enterprises.

#### **4. Social dimensions of consumption and production**

Like other sustainable development plans and principles, the Plan aims to "promote the integration of the three components of sustainable development — economic development, social development and environmental protection — as interdependent and mutually reinforcing pillars" (Plan, §2).

Consumption and production are indeed issues with indissoluble social "components". Consumption as a way to raise one's quality of life (that should not be identified with wealth (Redclift 1999)). Production at least as a jobs provider. Moreover, both consumption and production are key factors of social differentiation inside and among societies. Still the reassertion of the three components of sustainable development, that is solemnly set out in the §2 above, and also coming back several times in the last parts of the Plan, does not seem to bring the social dimension to be sufficiently treated in Chapter IV (while the economic and ecological dimensions are, for their part, well present)

The timid but innovative allusions in the Agenda 21 to a possible reconsideration of the concepts of wealth and prosperity (4.11) in their linkages with consumption have disappeared. In the whole Plan the word "social" is often used as one of the criteria of choice for several

political objectives or decisions, as for instance, "environmentally sound, socially acceptable and cost-effective" (here for energy technologies). It looks as if deep social changes coupled with consumption evolutions are considered almost only through "poverty" issues. To give priority to poverty alleviation, in all of its aspects (here mainly material) is quite relevant. But the considerable changes in way of life, the cultural overthrows, the modifications of social conditions, that encounter hundreds of millions of people in the world, and that are linked with consumption and production as means of living, are not considered as such.

To take just one essential and practical issue, the consequences relating to employment of the massive reorientations of production and consumption that are called upon, are not considered in the text. The word "employment" appears five times in the document, two times in a general sense (§6d; §120bis), two times for categorizations promotion (women, indigenous, urban poor) (§6e; §120bis), and once in a call for the necessary respect of working conditions standards (§9b). This last point stands as a significant outcome in the Plan, and other conditions appear in this respect (§11; §12; §45d; §47j), that will surely lead to some consequences.

Nevertheless it should be noted that it is the Millenium Declaration that is cited as having promoted the objectives "to eliminate poverty, improve social conditions and raise living standards and protect our environment" (§76). "Improve social conditions" and "raising living standards" constitute other topics than "poverty" (moreover defined by official institutions) and are rarely developed in UN sustainable development programmes, Rio included, should it be in consumption topics or elsewhere.

## **5. Way forward ?**

We are conscient that this sketched analysis is formulated at a fairly general level. The hard working negotiators and lobbyists have to deal with given limited contexts, and political opportunities. The push to the forefront of sustainability mottos at Johannesburg, for a few days or weeks before the anniversary of the world security shaking on Sept 11, has had a virtuous influence, furthermore with an agreed text that did not dismantle the multilateral efforts defined a decade ago. Nevertheless we do not believe that many participants at the Summit would consider that the agreed text on "changing unsustainable patterns of consumption and production" will generate a major impulse compared to the challenges that are set.

It remains also quite impossible to formulate new propositions in a few lines, knowing the resistance that the "real world" situations and processes offer to a proclaimed political change. We would however plea for much deeper analysis of the reasons why the political instruments that are continuously called upon to make this problem better off have so much difficulty to enter into force and so limited effect. We would argue for much more differentiated approaches for regions and problems, being aware of the limitations of mottos and catch-all principles. The regional approaches start to be present in the Plan, and the local conditions appear implicitly in the impact assessment of policy instruments that are called upon for numerous problems. But one should see also that the globalization processes bring in, in many cases, threats to the differentiation of situations. Also it is necessary for impact assessments to be coupled with possibilities to actually correct the negative impacts detected, sometimes at the price of changing, upstream, some principles of action.

Regional approaches and difficulties to meet huge differences in production and consumption conditions and possibilities among the world population, might then probably lead to a greater multiplicity of differentiated objectives or commitments (for instance at the European level), than the ones allowed in a global consensual program. As analysed before in relation with Agenda 21, more work could probably be done to carefully define sets of actions, at specific levels and with specific actors that may lead to series of changes, even though they would not be unclosed in a general sustainable development plan.

Considering the possible roles of the enterprises, it also has to be better explained why the "Changing course" motto, delivered for instance by the BCSD at Rio (and then the WBCSD 2002), came out to be for a large part reiterated, though updated, at Johannesburg, with no sufficient proven changes compared to the voluntary commitments. We also have tried to question the range of possibilities of consumers reorienting the market toward a more sustainable production.

In our view two interlinked ways should be pointed out to advance the goals of sustainable consumption and production at an accelerated rate. On the one hand, policy instruments should promote, far more than they are now, eco-efficient technologies (adapted of course to problems and circumstances). In the long run these are the only passports to a sustainable footprint of humanity on Earth. On the other hand, cultural changes are needed to reconsider the role of the ever-increasing consumption of goods and services in the quality of life (even more than technologies, this topic contains many declinations, impossible to explicit here).

Against these changes there will always be a variety of resistance, one being the questions set on sustainable development objectives themselves : are these not overrated, a kind of luxury, economically misplaced objectives ? To reply to these doubts as well as to prioritise the objectives it should be given more attentions to the many situations where the increase in the use of materials leads to conflicts or wars, and to the evident decreases in human health and wealth occurring in many places because of pollution factors. In doing this the analyses must not limit themselves to natural and physical data : one can die of hunger nearby sufficient (but not affordable) food, one can be ill because of pollution in a country richly endowed with natural spaces. That is to say that the functioning of production factors, of economy, trade, employment, and the possession or control over these factors have to be given the greatest importance, and fundamentally, in many ways be modified. The question comes then not only to the difficult ways of designing such changes, but also to detect the social and political forces and impulses that can sustain them.

Some challenges that international sustainable development programs are declaring to face, being social, ecological or economical, are of an order of magnitude that in fact has not been tackled successfully before. It is true that "developed" societies have experienced tremendous changes in the past century, an evolution that theoretically proves that considerable human-led changes are possible. But the major difference between regional industrial or post-industrial developments that have occurred, and a worldwide program of reorientation and distribution in a sustainable way, is that in the latter a global concerted action has to be set up and work. The Johannesburg Plan, as many global development programs before, is deeply limited by the fact that, though many efforts have been unfolded,



in much too many cases we are still searching adequate means to implement the ethical evidence of sustainable development.

## References

- Beaud M. (1997), *Le basculement du monde*, La Découverte, Paris
- Dessus B. (1996), *Energie, un défi planétaire*, Belin, Paris
- Economic and Social Council (2001), *Report of the Secretary General. Implementing Agenda 21*, United Nations, E/CN.17/2002/PC.2/7, New York, 19/12/2001
- European Communities (1999), *What do European think about the Environment ?*, Office for Official Publications of the European Communities, Luxembourg
- European Environmental Agency (2002), *Environmental signals 2002 - Benchmarking the millennium*, Copenhaguen
- Barbault R., Cornet A., Jouzel J., Mégie G., Sachs I. and Weber J. (2002), *Johannesburg, Sommet mondial du développement durable 2002. Quels enjeux ? Quelles contributions des scientifiques ?*, Ministère des Affaires étrangères et Direction de la coopération scientifique universitaire et de la recherche, Paris,
- Organisation for Economic Cooperation and Development (1997), *Tools for sustainable Development*, OCDE, Paris
- Redclift M. (1999) "Sustainability and Sociology : Northern Preoccupations", in Becker E. and Jahn Th. (dir.), *Sustainability and the social sciences*, Zed Books, London- New York, pp. 59-73
- United Nations Conference on Environment and Development (2002), *Agenda 21*, United Nations, New Yorks
- United Nations Environment Program (2002), *GEO : Global Environment Outlook 3*, UNEP-Earthscan, London
- United Nations World Summit on Sustainable Development (2002), *Plan of Implementation*, Advance unedited text, 4 September 2002
- World Business Council for Sustainable Development (WBCSD) (2002), *Walking the Talk : The Business Case for Sustainable Development*, Earthprint, Stevenage
- Zaccai E. (2002), *Le développement durable. Dynamique et constitution d'un projet*, PIE-Peter Lang, Bern-Brussels