

Aspects of International Co-operation for Sustainable Development

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Abstract

Sustainable Development is by its own history, a global concept. This is a basic aspect of the whole discussion about the possibility of a sustainable future for our planet and humanity.

Therefore, we state that sustainable development requires new concepts of international co-operation based on project networks focused on the Operational Aspects of Sustainable Development, linking institutions from industrialised and non-industrialised countries. In other words, the whole International Co-operation must become sustainable in the sense that GO-Operation projects and global economic guidelines, monitored by the IMF for example, should not be in conflict.

From an academic point of view, we need to ask how we can step from theoretical and ideological discussions to a practical set of orientations capable to redirect unsustainable societal, economic, political and environmental dynamics. This is a very complex enterprise for several reasons. One of them is without any doubt, the lack of a *consistent science* for sustainability based on a new quality of integration between natural and human sciences. Important efforts, like the 1st European Dialogue Conference on Science for a Sustainable Society (Denmark, 1997), for example, have already been made.

In this scope, we would like to present the project **Amazonia21** - Operational features for managing Sustainable Development, actually in execution and founded by the EU - INCO-DC program.

The project puts together a broad group of scientists, representing six scientific institutions from four European countries (Germany, Netherlands, Scotland and Austria) and five universities from four Pan-Amazonian countries, Brazil, Venezuela, Columbia and Bolivia.

The following paper is an attempt to analyse the problem of *managing complexity* and the possibilities of such an experience from an organisational and theoretical point of view.

¹ All information about the authors available on: <http://www.amazonia21.org>

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Introduction

This article aims at a reflection on the role and the importance of the North / South co-operation efforts within the wide range process of searching for a more sustainable world. Why do we take the experience of an ongoing international co-operation project as a reference point for a reflection on quality of life, sustainability and environmental change?

We believe that the difficulties and experiences of a complex international co-operation project can work as a "laboratory" for building up structures for institutional sustainability in a global level. Within this scope, we are going to analyse the Amazonia 21 project experience as an example of how to create a new pattern of relation between North and South, aiming at a joint effort in building up a more sustainable future.

Before detailing the project and bring the matter to a more general discussion on co-operation between Europe and Latin America, it would be good to comment on the size of the challenge we are facing.

Looking for sustainability in a unsustainable world

Let's have a look at some facts. In only one year - 1998 - two European countries, France and the UK, spent together 78.3 billions of constant US\$ in weapons and maintenance of their national armies. In the same year the USA spent 251.8 billion of constant US\$ for the same purpose.

Comparing to that, the whole European Community will spend in 3 (three) years (1999-2002) 14.9 billions of ECU's (we presume that 1 ECU is nearly 1 constant US\$) for the 5th Framework Program, which already represents an increase of 4.6 % compared to the 4th FP of the EU!

But if we look now at the budget for Activity 2 (confirming the international role of Community Research) which is an investment more specifically directed to Sustainable Development, the EC will spend during 1999 to 2002, only 0.475 billions of ECU. And from that 0.210 bn ECU are destined to projects with so called Developing Countries and for the year 2000 there are only 0.080 bn ECU available for this item.

So, if we compare only the military expenditure for France and the UK in one year (1998) to the 1999-2002 budget of the 5th FP of the whole EU we observe that the second represents only 5.2 % of the first !²

Now, military expenditure is certainly one of the most unsustainable investments we can imagine, but even so it is only the tip of the iceberg. How can we evaluate economically and socially the whole amount of unsustainable activities all over the world?

² Data available on <http://www.cordis.lu/fp5/src/budget.htm> and http://projects.spree.se/milex/mex_databasel.html

Finally we would like to remember that actually approximately 80% of the world's population produces less than 20 % of the global GNP and OECD studies estimates that actually about 70% of the global capital is reproduced by financial speculation.

All these things are generally well known, but we need to recall some times, that the enormous efforts made to achieve sustainable development are still in an extremely unequal position, compared to global unsustainable activities.

Amazonia21 as example of a North-South co-operation network

Amazonia21 is one of the attempts to create a Research Network between European and Pan-Amazonian Institutions to work on Operational Aspects of Sustainable Development. Amazonia 21 is the acronym for an interdisciplinary research and training project funded by the European Union's Framework Program for Research and Technological Development, concerning Co-operation with Third Countries and International Organisations (INCO-DC, DG XII).

The partners are: OAR (Austria), IFF - University Vienna (Austria), Wuppertal-institute (Germany), Free University -Berlin (Germany), IVM - Free University of Amsterdam (Netherlands), Lews Castle College (Scotland), NAEA University of Pará (Brazil), Central University of Venezuela - CENAMB (Venezuela), National University of Colombia/IMANI (Colombia), University R.G.Moreno/CIMAR, (Bolivia).

The main objectives of the project are ³:

- ◆ Knowledge transfer from the European partners to the Latin American partners,
- ◆ Testing and adaptation of instruments and methods for implementation of sustainability elaborated by the European partners for European countries,
- ◆ Elaboration of policy recommendations based on the results of field researches in the Amazon.

In our understanding, Amazonia21, as a non formally institutionalised research co-operation network, is a social system. Thus it is merely a communication system where communication as basic element and operation must be generated continuously. This communication process is influenced by two diagonal moments / forces: diabolic and anabolic forces. The first ones are facilitators for the communication and the other ones are acting as disperses of the realisation of the communication process.

The anabolic forces acting in our favour are mostly thus typically of the this kind of scientific co-operation. As most of the research networks, Amazonia21 has some specific advantages that make it different from other kinds of co-operation. In our case were considered:

- ◆ The partners, albeit in different levels, were all involved in the construction of the project,
- ◆ All of the scientists in the Latin-American institutes that work in the project had longer experience in living and working in the 'North'.

³ More details in the project homepage at: <http://www.amazonia21.org>

- ◆ The regional co-ordination for Pan-Amazonia is held by a scientist born and trained in Europe, but working for more than 20 years in Latin America. He and the other European or US born and trained members in the PAC partner institutions has an important role as 'translator' or facilitator.

Acting against these positive factors we are able to identify the diabolic forces, all the circumstances that are hindering the realisation of communication. Without entering in the specifications of our project and overcoming specific deficiencies of the partner institutes, we will discuss these communication barriers that contribute to the specific system/ environment relation that characterises every partner organisation.

Regional modernisation⁴ as challenge for sustainable development policies

Modernisation happens with the institutionalisation of the functional differentiation of the global society in the regional level. It is implemented with regional characteristics, according to the way the National State evolves within international competition. Therefore, the National State comes between the regional level and the global level, without much freedom of action because the functional differentiation of the global society defines the structures to which the National State must adapt the region in order to get admission to modernisation. Modernisation, in the regional level, happens within the structures of the functionally differentiated society and it is worth to mention that in a global society there is no co-ordination distance, nor the necessity of an evolution towards equilibrium. While in the northern countries modernisation is implemented mainly as a co-evolutionary process between organisations and the functional systems, in the southern countries organisational evolution is much more influenced by external inputs originally from the functional system where they usually work. Therefore, the form of insertion in the functional system depends, mainly, on the learning capacity and transformation capacity of the organisation. On the other hand, the indication of the necessity of transformation does not appear with the same evidence in all functional systems. Such indications are more evident in organisations working within the global economical system and less evident for organisations working within the political system. Through its segmentation in several National States, the political system has created a means to acquire several forms of National States, which is presently incompatible with its function within a global society.

The great autonomy created by the National State for its political system segments has resulted in forms of State so unable to evolve and learn that this leads them to the extreme case of reaching their own end. The abdication of some sovereignty in favour of a new political organisation form is the path chosen by National States in the European Community in order to adapt their form to the necessities of modernisation.

Latin America, in a different way, has always played an active role in the economic development process and has gone through several transition phases between democracy and dictatorship. In the case of Brazil, the constitution of a democratic State according to European tradition dates from 1988. This means that the process of structure formation for democratic participation is only now being formed. The social capital (Putnam) is weaker than in the countries of the North. This turns

⁴ For more details about the concept of regional modernisation in the Amazon see MATHIS, A. (1999): *Política de desenvolvimento sob a perspectiva da teoria dos sistemas*. In: Altvater et. al: *Terra Incógnita. Reflexões sobre globalização e desenvolvimento*. Belém. Ed. NAEA.

the formation of sustainable structures of participation into one of the main targets for the implementation of sustainable development.

Development in the South - Sustainability in the North

The specific formation of regional modernisation in the Amazon region, as described above, is the background where the Pan-Amazonian Countries (PAC) partners define their objects and do their work. The uncompleted functional differentiation at regional level together with an organisation whose capacities are not compatible with the common global standards, generate demands for the science system, that in regions with a high functional differentiation are addressed to specialised organisations. Thus the academic institutions in the PAC have to define their equilibrium between their specific tasks (knowledge production) and the social demands (translation of knowledge and knowledge based services that can not be provided by other organisations). For our partners this means to find an identity between two extreme positions: to be an institute of **regional planning** (communication mostly within the scientific community) or to be a **regional institute** of planning (communication mostly within the political system). This compromise will always be sub-optimal from the viewpoint of the scientific system or the political system.

For our specific research co-operation network this hybrid situation works, on one hand, positively as the access to decision makers could be facilitated and the chances that parts of our policy recommendations will be implemented are good. On the other hand, the proximity of the PAC partners with the political system creates some structural drifts for the communication process. There is a tendency in the PAC to emphasise the State as actor of social transformation; collaboration with non-governmental actors is very incipient, and mostly restricted to NGO's that are working in the social sector and that are doing a great work in formulating demands for the academic sector. These demands empowered by research results and the every day life experience create a semantic understanding of sustainable development very different from that in the European Research community.

Sustainability in so called **developed countries** is almost a search for strategies capable to transform the **current state of welfare** in something sustainable. For **developing countries**, Sustainable Development means a **way to improve welfare**. So we can say that while the **North** emphasises **sustainability**, the **South** emphasises much more **development**. The academic and social background of the partners will enforce these different visions.

For example, most of the Pan-Amazonian Institutes have a strong tradition in planing, mostly directly influenced by the political stakeholders. But there is very little pressure from the civil society, especially environmental protection movements.

This specific point requires some detailed observations. Looking for sustainability of what has been already achieved and looking for development of something still missing are two different things. And there may be a very basic conflict in the case of sustainable development, because as far as we know, there is no way to achieve welfare for everybody based on the actual global economic organisation. That's the reason why the partners of developing countries often see the idea of sustainable development in a suspicious way. They (the countries of the North) want to tell us to protect our environment and to be sustainable to maintain their high level of living standards.

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Science co-operation and sustainability

Having in mind the specific problems of the partner organisations and the different semantic uses of sustainable development, what shall be the contribution of the an international research co-operation network toward the big challenge of rendering our world more Sustainable?.

Sustainable development as a new way to organise the relation between society and nature is per definitionem a global concept. But most of the work to archive sustainability has to be done on local level. Albeit most of our acting is unsustainable, there are a lot of initiatives on local level by public and private actors to render our world more sustainable. All of these initiatives - as they are acting simultaneously - are producing, on one hand, a great variety of problem solution capacities and on the other hand a great variety of risk, as they have no control about the consequence of their actions upon other functional systems, nor upon other organisations. By linking these isolated initiatives it is possible to enforce the anabolic trends by disseminating successful solution capacities and to brake the diabolic trends by installing feed-back loops that inform the actors about the consequences of their acts. That's what we consider the principal function of international research networks for sustainable development.

This kind of network is very different from the traditional manner of North-South co-operation, where the North is seen as donor of know-how and financial resources and the South is seen as dependent of knowledge and financial resources. Knowledge transfer will continue to be a important task for the new kind of network, but transfer will no longer be unidirectional. Research networks as communication systems will only exist as long as they are able to maintain the autopoiesis of their communication. And communication - as a difference that makes a difference (Bates) - will only happens when the communication partners are open to move.

Evidently, this new kind of co-operation is still under construction, but the construction process itself is a important contribution for a more sustainable world, remembering that sustainable development needs sustainable institutions at local level and at global level.

Conclusion

The „1st European Dialogue Conference - Science for a Sustainable Society - Integrating Natural and Social Sciences" held in 1997 in Denmark, clearly pointed out the importance of a new quality of science. The civil society requires urgent answers to highly complex problems and it is also the responsibility of the academy to generate the know-how and the human capacity to build sustainable societies. This scientific knowledge needs empirical experience and worldwide diffusion of successful projects. Sustainable Development needs Sustainable Networks of Communication not only between so called developed countries but especially between the most and the least developed countries of the world! There is no sustainable development only in one continent if the rest of the world is succumbing.

International Research Project Networks are good didactic examples for Communication Networks and for global thinking and local acting, especially because all involved actors in such programs are basically co-operative and don't seek for immediate economic profit.

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