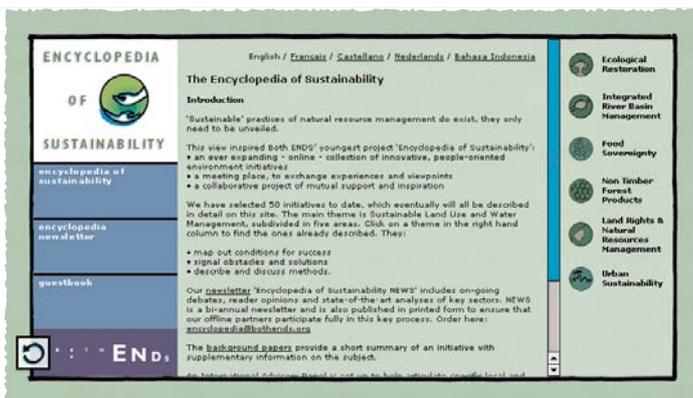


The Encyclopedia of Sustainability

Tamara Mohr

There is a growing awareness worldwide that conventional natural resource management approaches have given rise to serious problems of injustice and social conflict, and to the slow disappearance of local management systems. Many of these problems have been analysed and documented, and campaigns have been developed around them: for instance on the impacts of the Green Revolution or of large-scale agricultural production for export, or on the impacts of genetically modified organisms. Groups of concerned people have become organised to discuss, coordinate actions and campaign in order to prevent further damage and to overturn policies that promote these approaches.

Over the years, Both ENDS, a Dutch environment and development organisation that supports inspiring environmental initiatives all over the world, realised that most of the requests it received for information, or for support in fundraising and campaigning, focused on these problems. At the same time, it became clear that many of the organisations that contacted Both ENDS had been developing natural resource management initiatives using approaches based on local realities, knowledge and needs so as to preserve or restore fragile ecosystems which support local livelihoods. This showed that “sustainable” practices of natural resource management do exist; they only need to be revealed.



The Encyclopedia on the internet at <http://www.bothends.org>.

Documenting practical solutions

After extensive consultation with partners, Both ENDS and a number of other NGOs and local organisations worldwide agreed to start a long-term project, called the “Encyclopedia of Sustainability”, in support of those initiatives. This is a new instrument which supports environment and development NGOs and grassroots organisations in documenting their experiences, in capacity building and information sharing, as well as in facilitating public debate. The cases described in the Encyclopedia allow local organisations and networks to demonstrate concrete examples of solutions to environmental management problems, showing ways to achieve social and ecological sustainable development. They also aim to help generate more recognition for the many valuable initiatives that rarely get any attention.

Initiatives that are selected to be included in the Encyclopedia of Sustainability are rooted in local people’s experience and

knowledge, are managed bottom-up, and combine traditional knowledge with modern techniques. The aim is to establish a long-term working relationship with such an organisation or initiative. Thanks to the support of Oxfam Netherlands and the Dutch Ministry of Foreign Affairs, Both ENDS is able to provide financial support in the form of small grants that enable organisations to invest in activities that are not often supported by conventional donors. Some examples include: organising exchange visits, developing manuals, establishing networks or coalitions among organisations for mutual strengthening, and developing joint policy proposals based on concrete, viable initiatives.

Encyclopedia in practice

An important part of the Encyclopedia’s work is the development of a case description of around seven pages. A specific format for the case description and some advisory support is provided, but the organisations or groups formulate most cases themselves. The format not only provides the opportunity to present the highlights of an experience, but also the socio-economic and ecological context, as well as obstacles and challenges and how people respond to these. The whole documentation phase can take as much as several months to over a year, as the focus is not only on the end product, but also on the process and the discussion it raises between the documenters, local stakeholders and Both ENDS.

Documenting inspiring initiatives is an exercise in itself. It can generate discussions that contribute to the internal processes of an organisation, and about the content of their work, as well as on how to present themselves. But it is also very difficult for most organisations to clearly and briefly translate complicated processes into words, especially in relation to the socio-economic background or achievements. For the organisations or groups involved, the circumstances in which they do their work are so obvious and familiar that it is difficult to take the necessary distance to be able to explain it clearly to outsiders. The second difficulty arises because it can be hard to define exactly what can be seen as concrete achievements in an ongoing process. Another frequent challenge is the requirement to include an analysis of the economic viability of the specific initiative.

The Encyclopedia focuses on six main themes: Food Sovereignty, Ecological Restoration, Integrated River Basin Management, Land Rights and Natural Resource Management, Non Timber Forest Products and Urban Sustainability. The final case descriptions include pictures, website links, information on the organisation, and suggested reading materials. They are published on Both ENDS’ website in Spanish, English, French and Indonesian, and are used in several ways. Hard copies are distributed among related groups and used for an international audience, at conferences and to provide input during policy discussions. Some organisations use their case description as a background paper for fundraising.

What follows shows two of the cases included in the Encyclopedia: the first looks at a successful biological pest control initiative in Bolivia, where “bio-regulators” are used as a viable, and now officially recognised, alternative to using agrochemicals. This example also highlights the role of the women involved as the main agents for change. The second example

Box 1. Objectives of the Encyclopedia

The overall objectives of the Encyclopedia are: to offer adequate support for local/regional natural resource management initiatives within the framework of the Encyclopedia based upon a common understanding of local/regional priorities; to exchange such experiences and lessons with other NGOs and grassroots organisations; and to bring these examples to the attention of policy makers and other sectors as a means to gain recognition and influence policies. The Encyclopedia of Sustainability encompasses three Phases: Phase I (1998-2000) aimed to develop and test the approach and to identify and document a range of strong initiatives. Phase II (2001-2003) focused on expanding the range of initiatives and to support organisations in strengthening their cases. Phase III (2004-2006) aims at promoting policy reform by presenting a convincing body of evidence which shows that locally rooted sustainable strategies for development are often viable and superior to conventional non-sustainable approaches.

describes the Analog Forestry model, a method to restore deforested land, the implementation of which has been documented in two different ecosystems (Ecuador and Sri Lanka).

Biological pest control

In Bolivia, the intensive and irrational use of synthetic fertilizers, pesticides, fungicides and herbicides are a constant hazard to soil fertility and productivity, to the quality of food products, and the health of the population. At the same time, indigenous crops have been replaced by various high yielding species promoted during the Green Revolution. The high susceptibility of these market-oriented crops to pests and diseases, coupled with the growing resistance of pests to chemicals, has alarmed farmers because of the significant losses they have seen in their harvests. International manufacturers of agro-chemicals and “commercial” and genetically modified seeds only try to increase the farmers’ dependency on these inputs.

Therefore, fifteen years ago, the Bolivian NGO PROBIOMA decided to establish a bio-regulator diagnosis and production centre. This centre is developing the mass production of “bio-regulators”, promoting the natural balance already existing in nature, but which has worsened and/or been lost by the excessive use of agro-chemical products. This technique is based on the use of over 300 fungus and nematode species that are capable of controlling over 40 pests and diseases in more than 38 crops. This initiative is the first in Bolivia and one of the first in Latin America. They also succeeded in officially registering bio-regulators in Bolivia.

The transfer of bio-regulators to farmers is carried out in field demonstrations to local farmer organisations. To this end, a strategy was designed to cover different areas and regions by involving facilitators. A facilitator is someone external to PROBIOMA, who is trained in the use of biological control agents. The facilitator covers a particular area which is not always within PROBIOMA’s area of influence; he or she receives a percentage of the revenue for the sale of products. Using this strategy, around 3000 farmers were reached during five years of transfer efforts and covering an area of over 70 000 hectares in Bolivia. Biological control is now also being applied by the soya bean industry in Bolivia on an area of

40 000 hectares, with a subsequent performance improvement of 15 percent.

Restoration of degraded lands

The Neo Synthesis Research Centre (NSRC) was established as a non-profit organisation to facilitate research, and is based in the village of Mirahawatte, in the Uva Basin of Sri Lanka. Their primary concern has been to develop methods of land management which reduce erosion, permit soil formation, enhance water quality and biodiversity, and provide farmers with a source of income. Since its establishment, NSRC has worked with scientists, students, agriculturalists and government representatives from Sri Lanka as well as other countries. NSRC hopes to reverse the trend of global forest loss and environmental degradation through education. The power of the market place is also used to bring about changes in land use patterns that are sensitive to social, economic and ecological conditions.

Analog Forestry is the name for one particular model of agroforestry and sustainable ecosystem management being promoted by NSRC. This provides options for restoring deforested and degraded land, while at the same time offering people new sources of food, income and other essential needs. Analog Forestry systems are an imitation of the architectural structure and function of the original forest vegetation. The Analog Forestry system was developed by building on a blend of local traditional knowledge and modern science. It recovers and values indigenous knowledge, creating systems that are familiar to traditional societies. At the same time, they can meet the present needs of local communities, in terms of maintaining biodiversity while providing food and income to their increasing populations.



Photo: Furare

Reforestation project at the Information Centre in Los Bancos, Ecuador. One of the projects documented and included in the Encyclopedia of Sustainability.

Impact of the Encyclopedia

Based on the documentation of the success story on biological control methods in Bolivia, support was found for a responsible management program for soya bean products, which involves 2000 small soya bean producers. In addition, more experiences on organic soya bean production are being documented, while support has been obtained for the documentation of research into the opportunities for biological control as a means to restore degraded and contaminated soils. Another result of the inclusion of PROBIOMA's case in the Encyclopedia, is the frequent visits to the PROBIOMA website by many organisations and corporations from all over the world seeking information about the biological control of different crop pests and diseases. The impact of soya bean production is an important issue on the advocacy agenda of both PROBIOMA and Both ENDS, which acts as the secretariat of the Dutch Soy Coalition. PROBIOMA's practical work contributes to the discussions on responsible soya bean production in South America and to the ongoing struggle against the use of genetically modified organisms.

The distribution of the case studies on Analog Forestry contributed to generating interest in the technique and to the formation of the International Analog Forestry Network, which offers the opportunity for groups to exchange experiences as well as seeds and seedlings. This network also organises training for groups interested in learning about Analog Forestry, and is setting up an international system for certification of forest garden products. They are also promoting the model to as many governments, NGOs, research institutes and other interested parties as possible.

In Sri Lanka, Both ENDS is collaborating with the Dutch government, various local organisations, a public partner and a commercial tea estate in scaling up the Analog Forestry method to plantation level. "Rainforest tea" will be produced, sold and labelled as "ecologically sustainable, socially sound and economically viable".

Influencing policy-makers

It is difficult for grassroots organisations and NGOs to obtain scientific attention or political support and funds. For example, in crop pest management, where such organisations promote Integrated Pest Management techniques, mainstream activities tend to receive whatever donor aid may be available. In the face of dominant lobby groups with strong inside interests (e.g. commercial contractors, politicians) ecological alternatives often meet with doubt, prejudice or even opposition.

Besides strengthening development work at the local, regional or national level, the aim of the Encyclopedia of Sustainability is also to join forces at the international level and to convince policy makers. For instance, representatives from two countries promoted the Analog Forestry model at international gatherings. After a presentation at the UN conference on desertification in 2005, the government of Zimbabwe showed great interest in supporting the replication of Analog Forestry projects in dryland

areas. The Cuban government also wants to start large scale Analog Forestry implementation to restore degraded lands. In Sri Lanka, the Government Water Board now supports a large scale Analog Forestry project with local farmers, in order to clean the ground water for drinking wells and large water reservoirs for city water consumption. In addition, a system of certification of forest garden products was successfully set up and forest products have entered the local and international market. The model is also used in areas hit by the tsunami, for restoring natural barriers and increasing food security for vulnerable groups.

Over the years, advocacy efforts based on cases documented in the Encyclopedia have led to the development of joint project proposals such as one on river basin management, in which organisations worldwide present innovative, locally initiated basin management strategies, that show how bottom-up, ecosystem-based approaches can be repeated and scaled up to effectively influence decision-making at national and basin level. Both ENDS has also joined several Encyclopedia partners in preparing and presenting their work and views at international meetings such as the World Water Fora, the World Summit on Sustainable Development, and several Conferences of Parties of the UN. Both ENDS also facilitates networking among similar initiatives or helps groups to inspire others to replicate their work. This leads to the establishment of coalitions and networks residing in different countries or even continents. Examples are the International Analog Forestry Network, the Association for Responsible Mining, and the Non Timber Forest Products Exchange Programme, aiming at the exchange of information and experiences and at strengthening local initiatives related to this issue in Southeast Asia. Support from Both ENDS can, however, also result in cooperation between local groups, such as in the case of the Legal and Environmental Advisory Forum in Bastar, a southern district of Chattisgarh State in central India.

The Encyclopedia project is an ongoing activity and this documentation of initiatives plays an important role in other projects and programmes of Both ENDS. On many occasions, it forms the basis of our work, as we recognise the value of the documentation process itself as well as the necessity to be able to make use of documented experiences in many circumstances. Writing your work down and analysing what you do increases the visibility of your work and views. One of the challenges that remain is how to document initiatives in such a way that it will convince policy makers and will catch the attention of other players in the field. ■

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More information:

- Association for Responsible Mining: <http://www.communitymining.org>
- Non Timber Forest Products: <http://www.ntfp.org>
- PROBIOMA: <http://www.probioma.org.bo>

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