How do we conserve take care the ecosystem

Education, Sustainability

HOW DO WE CONSERVE/TAKE CARE THE ECOSYSTEM The value of ecosystem services Through its ecosystems, planet earth provides mankind with resources such as food, climate regulation, fresh water and clean air. Without these resources, which we call ecosystem services, life on earth is not possible. Currently, we are using per annum 1. 5 times the amount of ecosystem services which the planet can provide us with sustainably. As a result of this 'overuse', the capacity of the earth's ecosystems to provide these crucial services is declining. At the same time the demand is increasing because of global population growth and increasing wealth in emerging economies. Without wanting to draw a doom scenario, it is not that difficult to predict that continuing the current global overuse and degradation of ecosystems will result in serious threats to mankind and its ability to live on the planet. Sustainable ecosystem management In this article, which is the first in a series, we will not focus on the need for change or on the threats we are facing. Instead we will briefly present the conditions for a new sustainable framework for ecosystem management. In following articles we will address the conditions in more detail, discuss barriers, describe the necessary paradigm shift, explore issues of implementation, and present ideas of several experts. The aim is to eventually come to a well balanced framework for sustainable ecosystem management, which can be summarized as: An ethical business model for sustainable ecosystem management, which includes financial, economic and social benefits for all stakeholders. Nine conditions 1. Continuity The first condition for a new framework (which is sustainable, lasting and financially strong) is to create continuity and permanence in ecosystem management. Currently,

ecosystem conservation depends largely on donations. The nature of donations is that they are one time only (or incidental). However, ecosystem management needs much more than a onetime donation. The management of ecosystems needs continuous funding, investments, attention and focus. 2. Co-operation The second condition that has to be met when establishing a new framework for ecosystem management is that it should be built on the concept of cooperation. Currently, an “ us against them" attitude exists regarding ecosystem conservation; NGO’s own the domain of ecosystem conservation and fight the (privately-owned) companies that use and destroy them. In most cases, however, a fight is not the best way to reach your goals. Cooperation and mutual goal setting can be much more effective. 3. Revenue creating The third condition for an ecosystem management framework focuses on the financial aspect of ecosystem management. When we take a closer look at the way ecosystem conservation is perceived, we will see that conserving nature is regarded a cost centre, an activity that we might need to do, but will cost us money. The result of this assumption is clear. If conserving ecosystems costs money and the destruction of ecosystems generates money, individuals, organizations and countries will opt for the option that generates money. If we want ecosystem management to be permanent, strong and competitive, it should at least become a cost neutral activity, or even better, a revenue creating activity. There should be a sound business case for ecosystem conservation, so that we will think twice before we destroy ecosystems. 4. Market In order to make a change towards a more economic driven framework for ecosystem management, it is important that we create a necessity to buy or pay for services that are

provided by ecosystems. We are in urgent need for reasons to pull our wallet. In other words, markets need to be established in which ecosystem services, such as water supply, biodiversity, medicine resources and erosion prevention, are being paid for. Therefore, establishing markets for ecosystem services is the fourth condition. 5. Regulation based on maximum The next condition is directly linked to the former one. A market can only evolve under an international set of agreements. In these agreements the possible maximum usage of a certain ecological service per annum should be fixed. In this way, ecological services can’t be used endlessly anymore. To deal with this scarcity in a fair way, regulation is needed. Regulation, and as part of that the obligation to pay for ecosystem management, is the most efficient way to establish markets within reasonable timeframes. Regulation results in a necessity for ecosystem management, while currently it is regarded as a contribution to ‘ doing good’. 6. Multi-stakeholder The sixth condition is what we call the co-operative multi-stakeholder approach. In many cases ecosystems that need to be protected are located in developing countries. Developed countries, which caused a major part of the pressure on ecosystems through over consumption and undervaluation, send funds to protect and conserve these ecosystems to solve the problem. But now it is time to turn the tables. If we would regard the local communities as the rightful owners of the ecosystem, and therefore of the ecological services, they wouldn’t be the receivers of charity money but the producers of valuable services. It would be in their interest to protect and maintain the forest, so that they can produce a package of first class ecological services with a considerable quality on the world market. Next to this, psychologically

and economically they would gain a truly independent position. In order to make all this truly successful, the management activities need to be fully aligned with all involved stakeholders. Ecosystem management measures will only last when they do not interfere with local needs, habits and plans, so close cooperation with local communities, governments and organizations is of great importance. 7. Output-oriented While becoming more market driven, ecosystem management needs to comply with certain rules that occur in markets, such as measurability of outcomes. Therefore, the seventh condition, of an ecosystem management framework, is to measure the outcome of ecosystems and ecosystem services. Once governments, organizations and individuals pay for ecosystem services, the output has to be measured. What are the measurable outcomes when an ecosystem is managed, in terms of, for example, water supply, medicinal value, carbon sequestration, biodiversity, eco-tourism, and support to food production? It will only be feasible to charge for the services provided by ecosystems if this can be assured, measured and reported. 8. Sustainable The eighth is not only a condition for ecosystem management models, but for all business models. If we are going to take a more market driven approach to ecosystem management, it needs to be done sustainably, without the focus on short-term financial results only. It is crucial that not only the short term financial benefits are taken into account, but that we focus on both short and long term financial continuity, without severe social and ecological losses. 9. Equal The final condition is what we call equality. We must ensure that everybody in the world gets his/her share of the available ecosystem services and that everybody contributes to the management of the

ecosystems that provide them. One of the risks of a market-driven ecosystem management is the unequal distribution of the ecosystem services: those who have the funds ‘ buy’ the available ecosystem, leaving others without. A new framework which includes payment for ecosystem services should avoid this from happening. With these nine conditions we do not have the illusion to have created an exhaustive list, but we have tried to set the first pillars for a new framework for ecosystem management, which will be built upon further in coming articles. Denis Slieker, The Forest Enterprise