The concept of "environmental services" has become popular over the last decade and has crept insidiously into our collective consciousness without setting off the alarm bells it should have done. Environmental services provide the means of taking privatisation to a new level – a means of privatising many things that have as-yet been unavailable for privatisation: air, water and all sorts of other ecological processes. What has been undertaken so far in the name of environmental services, and what are the implications of turning such basic elements into commodities?

No, air, don't sell yourself ...

GRAIN

I don't know who you are, but
one thing do I ask of you,
don't sell yourself.

No, Air,
Don't sell yourself,
Don't let them channel you,
Don't let them run you through tubes,
Don't let them box you
Nor compress you,
Don't let them make you into pills,
Don't let them bottle you,
Take care! ...

Pablo Neruda, "Ode to the Air"

Some 50 years ago, the Chilean poet, Pablo Neruda, wrote these lines in his "Ode to the Air".

At that time, everyone took these ideas as metaphor: another example of the poet's imagination and genius. Today, in 2005, those fears imagined by Neruda have a real foundation that grows daily. The air surrounds us, allows us to breathe, messes our hair and flows freely. But along with water, the weather, the oceans and the rain, the air has become viewed as an "environmental service", another class of merchandise available for market transactions and for which all of us must pay, like it or not.

The concept of "environmental services" has become popular over the last decade. Originally coined by economists the term now appears

frequently in documents produced by governments, the World Bank and other international bodies, universities and business associations. It has also been adopted in the vocabularies of development agencies, NGOs and social organisations. Terminology and legal definitions surrounding the concepts of paying for environmental services and charging for them are still in a formative process (see box for one definition). Nevertheless, environmental services have crept insidiously into our collective consciousness without setting off the alarm bells they should have done, and have largely been accepted as obvious and unquestionable.

The idea of making payments for environmental services arose and has been strengthened as a result of specific visions and objectives. Its appeal and acceptance lies in the way the concept harmonises perfectly with the social and political context that we are living in. Understanding its roots may help us to deal with the impact environmental services could have on society, particularly in helping us to understand why there is nothing obvious or unquestionable in the concept.

Ecosystem Services (or Environmental Services)

Supply: Goods produced or provided by ecosystems such as food, water, fuel, fibre, biodiversity or natural medicines.

Regulation, or control: Services obtained by regulating or controlling ecosystem processes, such as the quality of the air, the climate, water (distribution and quality), erosion, the causes of illness, the manipulation of biological processes, risk reduction and so on.

Cultural aspects: The non-material benefits that enrich the quality of life such as cultural diversity, religious or spiritual values, knowledge (traditional or formal), inspiration, aesthetic values, social relations, a feeling of place, the values of a group's cultural patrimony, recreation and ecotourism.

Back-up, or supporting activities: The services required to produce the other services, including primary production, the formation and/or fixture of soil, oxygen production, pollination, habitat creation, nutrient recycling and so on.

Source: *An Ecosystemic Evaluation of the Millenium (2002)*, quoted in *Prisma: Compensation for Environmental Services and Rural Communities. Lessons from the Americas and critical issues for the strengthening of community strategies. El Salvador*: Research Program for Development and Environment, 2003.
http://www.prisma.org.sv/pubs/CES_RC_Es.pdf

The current situation

Latin American nations have been the pioneers in environmental services, particularly Costa Rica, but also Mexico, Ecuador and Brazil. Beyond Latin America, Australia and the Philippines are the front-runners. The fields in which the greatest practical implementation has been made are the sequestration of atmospheric carbon, the capture and storage of water, and biodiversity, and landscape conservation (primarily for tourism).

The process of establishing a scheme for the sale of an environmental service usually begins with a conservation project, an ecotourism venture or a local community water bottling enterprise. Attached to this is an emphasis on sustainable development. Most of the projects have government backing, although it is already commonplace to see initiatives started by the private sector and presented as NGO efforts.

In conservation projects, the local communities are offered annual payments for conserving given areas of forest or natural vegetation. In exchange the communities must implement a management plan defined by the government or a private agency. The community must stick to this management plan throughout the lifetime of the project; they may not use the forest or natural areas in any other way. Such management plans aim to have a "zero impact" on the environment, which means that nothing may be removed or interfered with. Ecotourism projects are also tied in a similar way to management plans. Furthermore, communities involved in these ecotourism projects must also invest in infrastructure and marketing, usually resulting in loans and debt.

With water-related projects, the state "recognises" the right of the communities to "sustainably" exploit a marginal portion of the water "produced by" the local source, usually for bottling, and once again in accordance with the terms of a management plan. Again, communities involved in water-related projects must also invest in infrastructure and marketing.

There are three immediate impacts on the communities involved in such conservation projects: loss of control over at least part of their territory; indebtedness, which can lead to the loss of land; and punitive financial and legal measures if they do not fulfil what is stipulated by the management plans. The potential for expropriation, marginalisation, repression, exploitation and the internal division of communities is incalculable. Such an impact on communities is shown by recent legislation in Chile (see *Box: Fishing out Chile's fisherfolk*)

Another way of establishing an environmental service is by privatising a national park. The national park is given over to a private enterprise,

Fishing out Chile's fisherfolk

The Law of Fisheries and Aquaculture of Chile[1] is one of the most aggressive pieces of legislation supporting the privatisation of natural resources in the world. Although it does not mention environmental services, it follows exactly the same principles and uses similar language. In the name of conservation, the law created transferable catchment quotas and management areas to be allocated by the government.

Local fishing communities (many of them indigenous peoples) were granted a reduced exclusive area of five miles along the coasts of Chile to fish in. Artisan fishing has been expelled from the oceans outside the five mile limit, which have been granted exclusively to industrial fishing, much of it in the hands of transnational companies. But industrial fishing is not banned from the "exclusive" 5-mile strip; catchment quotas can be allocated to industrial fishing companies if artisanal fishing organisations do not claim or use them Right from the start, the law enabled fishing corporations to control 80% of fishing resources; a figure that can easily increase as big companies claim access to the areas that artisan fishers are not using. The environmental regulations imposed on big companies are lower than those imposed on artisanal fishing, and overexploitation by industrial vessels is affecting all areas. A strict policing system has been set up, and artisanal fisherfolk can be sent to jail if they catch more than their quotas. Chilean fisherfolk organisations are demanding that coastal areas be declared disaster zones due to the extremely low fish numbers.

Coastal areas are not exclusive to fisherfolk either. Industry can claim big areas for aquaculture. In order to access to the coastal area, artisan fisherfolk must organise themselves according to governmental rules, request permission from the government, comply with a management plan sanctioned by the government and pay an annual licence that exceeds US$15 per hectare, theoretically to be used for conservation activities.

In practice, the catchment quotas and management plans have imposed serious limitations to artisanal fishing, both in area and in quantity of fish caught. That, and overexploitation by industrial vessels have created a major crisis, Fisherfolk organisations have indicated that they can no longer make a living out of fishing.[2] Even worse, the organisational structures imposed by the government have disrupted the traditional organisation among indigenous fisherfolk and in practice have taken away their rights.[3]

1 - *http://www.subpesca.cl/pagina%20juridica/page2.html*
2 - See *http://www.diariopyme.cl/newtenberg/1639/article-62265.html, http://www.cedepesca.org.ar/noticias/131204/crisis_de_la_merluza_en_chile.htm http://www.cedepesca.org.ar/noticias/011204/barcazo_bahia_lirquen.htm*
3 - The lafkenche are the indigenous fisherfolk that inhabit over 500 kilometer of coastline in southern Chile, They have actively fought the Chilean law of fisheries, indicating that "the law has left indigenous peoples without access to marine resources because their traditional and historical organizations will not be allowed to register to exploit the wealth of the sea" *http://www.mapuexpress.net/?act=publications&id=82*

or more commonly a specially created conservation NGO or foundation. These organisations or enterprises are granted the concession to administer the natural areas for lengthy periods of time in exchange for the promise to conserve them, and with the freedom to profit from their resources (see *Box: Broken hearts in Bolivia*). Often, indigenous and rural communities loose in the process, as they do not have access to the park area any longer, or their own land is declared "buffer area", thus limiting their use of the territory.

Carbon seekers

But those who have invested or have become brokers in environmental services - governments, private enterprises or NGOs - have potentially very good deals in their hands. Privatised parks or conserved areas can generate significant income through so called 'carbon credits' from bioprospecting contracts, from the conservation and storage of water which is handed under concession agreements to private enterprises[1], and from ecotourism.

Carbon sequestration (capture) and trading is currently the most common and well-known form of environmental service. The biggest polluters of CO_2 into the atmosphere is industry (especially manufacturing and power industries). Because of different regulations and agreements, industry must reduce emissions. For any company in the United States the cost of reducing emissions at the source may be up to US$150 per tonne of carbon; a company in Europe may need to invest up to US$200 for the same reduction. But companies have a different alternative: instead of actually reducing their emissions, they can pay other companies and groups, mostly from non-industrialised countries, to reduce emissions or to absorb CO_2 from the atmosphere, and account that as their own reductions. The big profit for companies is that when paying others, they pay only a fraction of what they would need to invest at home to achieve the same goal. The business of buying and selling these carbon credits has become so big, that 'carbon bonds' are sold in the stock market. Companies or groups from non-industrialised countries currently sell the reduction of carbon emissions or the absorption of atmospheric carbon at around US$10 per tonne

1 - See as an example the case of PROCUENCAS at *www.fao.org/Regional/LAmerica/foro/psa/*

Box: Broken hearts in Bolivia

Noel Kempff Park[1] is one of the largest natural parks in Bolivia and contains a great wealth of biodiversity. It is located in the northeast of the Department of Santa Cruz, on the border with Brazil. In 1995 a concession for its operation was granted to a Foundation known as Friends of Bolivian Nature (FAN-Bolivia). In 1996, thanks to a contribution of nearly US$10 million from British Petroleum, American Electric Power (the largest electrical utility in the US), PacifiCorp and The Nature Conservancy, the park was extended by more that 600,000 hectares, and now covers nearly 1.5 million hectares (about 5,800 square miles).

In exchange for their contributions, the enterprises received 51% of the carbon emissions units offset by the biological processes of the ecosystem, meaning nearly 14 million metric tonnes in 10 years. After the money invested in expanding the park this is equivalent to less than one dollar per tonne. The costs of emissions mitigation in the US is more than US$150 per tonne and more than US$200 in Europe. The American Power Company reported that its investments in ecosystems conservation allow it to mitigate the effects of carbon emissions at less than a tenth of the costs of alternative measures.

Furthermore, there are consequently many other sources of funds available to FAN-Bolivia (though significantly smaller). These are eco-tourism, bioprospecting, and the in vitro reproduction of species found in the park. Some of the proceeds are used for conservation projects in areas that neighbour the park. One of the main projects involves 45,000 hectares where various indigenous peoples already live and who are now obliged to submit to a management plan designed with The Nature Conservancy. This main objective is to produce and sell palmitos (palm hearts), though problems have already been reported in both production and sales.[2]

FAN documents identify these projects as part of an effort to reduce the conditions for potential conflicts. But several federations and confederations of Bolivian farmers and indigenous peoples have issued strong statements indicating FAN and other organisations (including WWF) "are provoking confrontations between farmers, indigenous peoples and settlers"[3]

1 - For more information visit: *http://www.ecoportal.net/content/view/full/21543*, *http://www.fan-bo.org/pnoelk.html* & *http://www.aep.com/environmental/performance/emissionsassessment/default.htm*
2 - See *http://www.fan-bo.org/comunidades.html*
3 - See the declaration of the "First National Meeting of Communities from Protected Areas" at *http://bolivia.indymedia.org/es/2003/06/1792.shtml*

of carbon, and US and EU companies thus save over 90% of what it would cost them at home. In the case of Bolivia shown in the box, the investors had a particularly good deal as they acquired these credits at only one US dollar per tonne. And they are free to account them as their own reduction of carbon emissions, or to sell them to other companies.

Assuming authority

One of the most serious concerns about these new approaches to natural resource management is the way in which governments assume the authority to grant or recognise the rights of local communities over territories that belong to them or have been under their control historically. As a result governments are empowered to take away such rights if certain conditions are not fulfilled, or to turn their rights and land to a third party including private enterprises and international NGOs. Governments also assume the right to privatise great tracts of land, much of which was taken in the first place from indigenous peoples and may be a part of the public or national heritage. The privatisation of nature, including indigenous peoples' and small farmers' land, has increased to such high levels never seen before. And environmental services are offering a new mechanism to privatise, expropriate and concentrate the ownership of land.

An historical perspective

Why have environmental services appeared today with such force? If privatisation is the goal, why not merely promote more forcefully existing mechanisms to privatise the land and water in the hands of native peoples and campesinos? History offers some insight. The second half of the 1970s and the 1980s were times of worldwide economic crises and unstability. Signals went up around the planet pointing to an end to the era of promising every last person a share in the welfare generated by capitalism. Capital profits could not continue to grow endlessly if existing social and labour standards and rights were respected; that entailed costs that capital was not willing to pay

The solution found by capitalist philosophers is what we call "neo-liberalism"[2] today. Since the existing rules did not permit the continued growth of profits, the rules needed to be changed. To this end, a number of new measures were introduced, first by a few governments and then globally through multilateral organisms such as WTO and WB, including:

2 - The basis of this ideology was intially developed in the School of Economics of the University of Chicago, under the leadership of Milton Friedman. Its first practical application took place in Chile under Pinochet, and was later implemented by the governments of Margaret Thatcher and Ronald Reagan. Starting 1992, it was imposed worldwide through WTO. It is callled "neo-liberalism" because it seeks to restate a new ("neo") form of the old philosophy of Adam Smith, which is total freedom ("liberalism") for capitalists to increase capital control and profits (*http://grain.org/jargon/?id=80*).

a) Increasing the levels of worker and employee exploitation;
b) Granting *carte blanche* to capital, especially to large capital, so it can seek the most effective ways of getting the greatest returns from its investments; and
c) Obliging people all over the planet to consume more.

Those of us who depend exclusively upon our own labour to earn a living have suffered the effects of the first two processes. We are seeing net wages and salaries are decreasing despite an ever increasing level or productivity; growing and permanent unemployment; labour insecurity and the loss of labour and social rights; massive bankruptcies in agriculture and the steady disappearance of campesino and native peoples' farming systems; bankruptcy of small- and medium-sized enterprises; systematic aggression against social organisations; concentrations of corporate power that would have violated the law only 20 years ago; monopolies in almost all sectors of the economy, including in those activities that we depend upon directly for survival; and so on and so forth. But it is the final process, the obligatory involvement of people in the cycles of consumption that has, perhaps, most deeply affected our lives.

Obligatory consumption has taken two main paths. On the one hand, there is the obliged indebtedness of nations that, among other things, has submerged all of the non-industrialised world in a permanent state of foreign debt and, on the other hand, there is the consumption of "services". Until well into the 1980s, national governments were among the primary suppliers of what today we call "services". Then there was an orchestrated attack against the public sector and the dogmatic imposition of privatisation, with the excuse that it guaranteed welfare, efficiency and quality. But privatisation is nothing more than the obligation to pay a private company for something that previously was not charged for or what was paid for by the general population, theoretically at least according to an 'ability to pay' basis. A wave of privatisation began - and continues to spread - all over the world, involving education, housing, drinking water, electricity, transportation, communications, health and pension funds. For the latter two alone, a country's population must deliver 15-30% of their income to the private sector. Looking back, there is no doubt that beginning in the 1980s the profits of big business and the transnational companies have grown enormously, even when the economy in general, and salaries in particular, have remained stable or decreased.

For capitalists , that has not been enough. Having opened the floodgates of privatisation, the objective has become "full coverage". What is sought today is the full privatisation of the planet.

Intellectual property as the first general test

The rise of biotechnology confirmed that the living resources of the planet are an unending source of wealth and welfare. Until then, a large proportion of that wealth was available to the peoples of the world, without any need for market intervention. From an industry point of view, this situation had to be corrected, and one of its first tools to do this was intellectual property.

When negotiations began in 1986 on the General Agreement on Tariffs and Trade, which finally led to the creation of the WTO, few would have predicted that one of the demands pursued most fervently by the US government would concern intellectual property. Its slogan was "without exceptions", meaning that intellectual property should not apply simply to industrial inventions and intellectual works but also to living things and knowledge, particularly but not exclusively through the granting of patents. The negotiators demanded a legal framework that would allow for the ownership of seeds, plants, animals, micro-organisms, genes and technical and scientific information.

The US position seemed absurd to most governments at that time. India, Mexico, Malaysia, Brazil, Ethiopia and the Scandinavian countries were actively and vehemently opposed, and were supported with the tacit approval of many others. But nearly 20 years later, using economical and political pressure and threats, the US has managed to fully impose its position, and has even improved on it.

Environmental services as the final assault

Intellectual property rights have moved the privatisation agenda forward in leaps and bounds, but under the WTO, they do not permit the privatisation of everything - not even of all living things. To claim something as property under the new rules of intellectual property it is necessary to at least recognise and describe a plant, an animal, an organism or a gene. What about all the living elements that are as yet unknown or whose functions are not explicitly known? What about oil, minerals, water, air, oxygen, rain, or the capacity of dead organisms to decompose and purify the air and regulate the climate? It was not

possible to privatise them by claiming intellectual property rights; it was necessary to seek another solution.

The justification was developed slowly, but effectively. The privatisation of mineral and oil deposits was justified as part of a bigger attack on the public sector for being inefficient and inadequate. Then an attack was mounted against not only the state but everything that was public and collective. By using supposed environmental justification, it was stated again and again that the only thing that human beings take care of is their own property and that therefore the only way that the environment would be cared for would be for it to belong to someone. The 1980s and 1990s witnessed many efforts from sociologists and psychologists to provide a scientific foundation to those claims.

In 1993, the World Bank forcefully launched a new concept – natural capital – to support this new approach:

"*The capital of an economy is its stock of real goods, with the power to produce further goods (or utilities) in the future. This definition of capital would probably be acceptable to most economists. Viewed as such, capital would comprise land, which in classical economic thinking is considered a separate factor of production, for land would qualify as part of the stock of real goods, capable of producing further goods. It is but a short step to extend this definition to nature, both as a source of raw materials and as a receptor of wastes generated in the course of economic activity.*"[3]

Only ten years later, the definition of natural capital is more fully developed and blunter:

"*Natural capital includes all the familiar resources used by humankind: water, minerals, oil, trees, fish, soil, air, etc. But it also encompasses living systems, which include grasslands, savannas, wetlands, estuaries, oceans, coral reefs, riparian corridors, tundra, and rainforests.*"[4]

In other words, we do not live on the earth but rather on a sphere comprised of "natural capital". The new concept is central from the point of view of progress in capitalism, but, given its vague and broad definition, it could include almost anything. It suffices to be an element of nature that produces "*new goods*". Thus the sun is natural capital; it is the energy released by it that allows all of the production of new goods on earth. Secondly, and unlike concepts such as "*natural resources*", "*nature*", "*public property*", and "*reserves*", there is no doubt that capital is by definition a piece of private property and transferable, something that can be bought and sold to the highest bidder. And thirdly, all capital is also by definition available for exploitation, and thus we have gained a fundamental key to allowing the privatisation of the world.

In 1997 a key concept was developed with regard to the privatisation of natural areas and ecosystems in general, and published in Nature magazine[5] and in the book Nature's Services.[6] The terms used originally were "*ecosystem services*" or "*natural services*", but the term that has become popular is "environmental services".

The new term is defined even more broadly and vaguely than "*natural capital*" and thereby covers everything imaginable. For example, "*atmospheric regulation*" is the ability to keep air quality at breathable levels, and is considered today to be an environmental service. Therefore, each time we take a breath we must remember that we are not simple breathing, but we are "*receiving a service*" - and we are talking about something so basic that it has never been considered necessary to define it as a fundamental right that should merit respect. The same occurs when it rains, when we are not affected by flooding, when we contemplate the landscape, enjoy the sunlight or the shade, or whenever we do anything related to nature. That means that every moment of our lives we are receiving an "*environmental service*". And as those who promote these concepts tell us, we are talking about life support processes.

The concept of "*environmental service*" is inherently bound to that of "*natural capital*" and nothing to do with caring for nature and life. Rather, the concept is about privatisation and exploitation and, above all, making payments to those who have claimed property rights over that "capital". And payment is obligatory because we might deny ourselves the purchase of a television or a hamburger, but we cannot deny ourselves the act of breathing.

The importance of the word "services"

"Services" is a vague economic term with broad applications, and includes goods and processes that are not strictly productive, but which are a working part of the economy: highways, communications, banking, advertising, and so on. In practice, it has been sufficient to call something a service for it to be considered such from an economic and legal point of view. The reason why we talk

3 - Salah El Serafy, In Toward Improved Accounting for the Environment, a symposium organised by UNSTAT and the World Bank. World Bank Report 11989, 1993.
4 - Paul Hawken, Amory Lovins and Hunter Lovins, Natural Capitalism: Creating the next industrial revolution. Rocky Mountain Institute, 2003. *www.natcap.org*
5 - Robert Costanza et al, "The value of the planet's ecosystem services and natural capital", Nature Vol. 387, p 253-260.
6 - Gretchen Daily, ed, Nature's Services: Societal dependence on natural ecosystems, Island Press, 1997.

about "environmental services" today, rather than "environmental processes" or "environmental functions" is because the concept of services fits perfectly with the possibilities for maximising the earnings generated by obligatory consumption:

a) Unlike a product that we buy and pay for just once, a service must be paid for each time it is used. Once again, as Hawken states: "An economy based on a service-and-flow model could also help stabilise the business cycle, because customers would be purchasing flows of services, which they need continuously, rather than durable equipment that's affordable only in good years".[7] How long can you hold your breath?

b) Environmental services have a captive market that is constant, endless and free of capital depreciation.

c) The concept allows the claim to ownership of not only tremendous components of the planet Earth, but also of intangible elements such as the regulatory capability of ecosystems.

d) Because they are intangible, services can be consolidated or broken down into separate parts freely and according to the criteria of the seller. For example, a business could sell "weather control", but it would be much more profitable to sell individual packages of "the right amount of rain", "equable temperatures", "the absence of floods", "the absence of extreme temperatures", "freedom from drought", "perfect summers", "beautiful springtimes", "the absence of storms", "tolerable winds", and so on. The creation of new "services is limited only by the entrepreneurial imagination.

The importance of the context

The most natural reaction to all of this is that it is absurd. And it is. Deeply so. But that has not stopped a legal and institutional framework being built around environmental services. Key implementing tools are the WTO agreements, and particularly the latest generation of so-called 'free trade' agreements being peddled by the US, the European Union and Australia. These fail to define what a 'service' is, so anything imaginable could be permitted. Here lie the foundations for claims to ownership of vast territories belonging to native communities, for submitting all of humankind to the processes of obligatory consumption, and for guaranteeing profits with full protection to transnational corporations.

Such documents and agreements are just the tip of the iceberg. Ideological arguments continue to present all sorts of justifications to support these measures, veiling their impact and introducing changes gradually so as to neutralise the normal reactions of rejection. Governments are playing a central role here, as well as a number of influential NGOs that have committed considerable resources and effort to convince politicians, bureaucrats, local leaders and communities, of the convenience of selling environmental services. See the Box: Active in Environmental Services.

So what can we do?

One of the most urgent tasks is to take the veil off the economic objective and the ideological underpinnings of environmental services, and understand that there is absolutely no way of 'compensating' native communities for centuries of preserving the earth's ecosystems. Equally important is to remind ourselves that, despite years of ideological efforts, the privatisation of the planet remains unacceptable to the great majority of human beings. Although we are confronting an economic model that is increasingly brutal and aggressive, brute force is not a sign of strength. In the last ten years, many people have become disillusioned by the neo-liberal argument. Social organisations are recovering and movements are building to establish autonomies, and to confront and disarm the strategies described above. These are signs that with hard work and determination, we can move towards a world in which, to quote other verses of Neruda's same "Ode to the Air":

The day will come
When we free
The light and the water,
Earth, humankind,
And all for all
Will be like you are.

7 - Paul Hawken, Amory Lovins and Hunter Lovins, Natural Capitalism: Creating the next industrial revolution. Rocky Mountain Institute, 2003. *www.natcap.org*

Box: Active in Environmental Services.

There are quite a few well-known NGOs, institutions and intergovernmental organisations involved in environmental services and there are numerous projects and examples. Here we scratch the surface and show just a few of those who are especially active:

Worldwide Fund for Nature (WWF): As an example see, "The Water Fund Model. Motagua-Polochic System, Guatemala. A novel environmental Payment Scheme with the Private Sector" at *www.wwfca.org/php/proyectos/agua/fondo02eng.php*. WWF has also published a series of booklets and studies on Payment of Environmental Services (PES).

"*The first step in promoting stewardship of natural resources is to assign natural resources and the services they provide their true value.....The next step is making environmental services more marketable.....Creating environmental markets is the third step in developing stewardship programs.*"

In "*Paying for environmental stewardship: Using markets and common-pool property to reduce rural poverty while enhancing conservation*", John D. Shilling and Jennifer Osha, Macroeconomics for Sustainable Development Program Office, World Wildlife Fund. *Technical Paper: Economic Change, Poverty and the Environment*. January 2003, From: *www.panda.org/downloads/policy/shilling.pdf*

Conservation International (CI): For example, CI-Brazil describes a partnership with various corporations, such as DuPont Brazil, and identifies PES as one of their activities - http*://conservation.org.br/programas/?id=98*.

" Relax - we're from Conservation Inc."

World Conservation Union (IUCN): IUCN supports or is part of programmes such as RUPES (Rewarding the Upland Poor for Environmental Services) in Sri Lanka, Philippines, Thailand, Vietnam, Indonesia, India, China and Nepal. The following website provides many more details. *http://www.worldagroforestry.org/sea/Networks/RUPES/*).

Through the Water and Nature Initiative, (implemented in t least 15 countries) IUCN is also working with the government of Tanzania to design a payment for environmental services scheme. Full details available on their website: *http://www.waterandnature.org/news/05FebEcon.html*

The Nature Conservancy (TNC): The Nature Conservancy clearly identifies "*market incentives for conservation*", and PES as part of their central strategies. The same web site indicates "*Examples of recent projects can be found in Chiapas, Mexico; Lago de Yojoa, Honduras; Quito, Ecuador, and Sierra de la Minas, Guatemala*". TNC is also part of the PES initiative in the Noel Kempf National Park in Bolivia.
For more details see: *http://nature.org/aboutus/howwework/conservationmethods/conservationfunding/*

International Institute for Environment and Development (IIED): IIED runs an "*Environmental Economics Programme*" (*http://www.iied.org/eep*), within which it runs a project named "*Markets for Environmental Services*".

"*The aim of this project is to promote the provision and maintenance of environmental services in ways that reduce poverty and improve livelihoods... IIED aims to develop and test a general framework for analysing the environmental and poverty impacts of market-based approaches to environmental protection.*"

World Resources Institute (WRI): WRI have presented policy proposals to make the marketing of environmental services more efficient and attractive. The WRI has also been involved, amongst others, with the Millenium Ecological Assessment Initiative (MA). This initiative aims to assess environmental services at a global scale, and its marketing is one of the lines of actions to be explored as part of "strategic recommenrdations". See *http://www.maweb.org/en/Products.EHWB.aspx#downloads*

World Bank: The World Bank has a strong policy of promoting PES around the world. A brief description of such activities by the Bank can be seen at *http://www.fao.org///wairdocs/lead/x6154e/x6154e07.htm*.

United Nations Food and Agriculture Organisation (FAO): FAO has published several documents regarding PES. In one of them, "Payment Schemes for Environmental Services in Watersheds" (see *http://www.fao.org/docrep/006/y5305b/y5305b01.htm*) it can be read as the first line of its summary: "*Payment schemes for environmental services (PES) are flexible, direct and promising compensation mechanisms*", and later on: "*PES systems present a series of advantages and opportunities* [emphasis by the authors] *which make them a promising mechanism to improve the conditions of water resources in watersheds*"

Global Environmental Facility (GEF): is the main funding mechanism through which the World Bank implements its environmental policy.

Tropical Agriculture Research and Higher Learning Centre (CATIE): CATIE provides technical support to different projects that include PES. The insitute has also created a "Group on the Socioeconomy of Environmental Services" dedicated to research and teaching on this topic. The group identifies PES as one important area of work. See *http://catie.notlong.com*

Others: Support also comes from various regional banks, foundations like Ford, Rockefeller and Summit, and business organisations like the Ford Motor Company, Coca Cola, and American Electric Power (see, for example, the list of almost 40 corporate partners of The Nature Conservancy at *http://nature.org/joinanddonate/corporatepartnerships/leadership/members.html*). Many other intergovernmental agencies are also involved such as the United Nations Environment Programme, and the United Nations Development Programme.
For all these and more links, visit http://grain.org/go/env