

## Technology Transfer: Removing Bias and Restoring Balance to the "Enabling Environment"

edward hammond - the sunshine project

The technology transfer text continues to read more like a blueprint for a patent and biotech invasion of the South than a programme of work consistent with the CBD's objectives. A number of developing countries made some headway, however, in improving the draft decision on Monday, when the Chair's text (WG.2/CRP.1) came up for discussion in Working Group 2.

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and inadequate ways in which the draft decision linked technology transfer to the objectives of the Convention. At issue is ensuring that transfer, including transfer of technology related to genetic resources, is not harmful and does not work against the objectives of Convention. Important changes were proposed that should be reflected in the next draft decision.

Too few parties have paid too little attention to the technology transfer decision, a major reason why the text has arrived at this late stage with the kinds of inconsistencies and prejudices pointed out by Parties on Monday. Delegations are stretched thin by the many issues on the COP's agenda, but Monday's developments should focus more effort on improving the decision. Look for a new draft to be tabled on Tuesday, when ensuring the inclusion of amendments and going further to correct biases in the decision should be a top priority. A balanced decision is required to make technology transfer under the CBD safe and effective

One of the most amended areas of the draft decision and Programme of Work was Program Element 3, on the creation of "enabling environments" for technology transfer. The "enabling environments" text is controversial because of its imbalance against developing countries. It has been strongly criticized by NGOs because it lays the burden of creating an "enabling environment" on the South and contains paragraphs that will enable attacks on the South's law and policy instead of enabling transfers in accordance with the South's needs and the Convention's objectives.

Deregulation and drastic new requirements for intellectual property laws in the South are not an environment for technology transfer consistent with the Convention. And, unlike how the present text reads, technology transfer problems aren't just the South's. For example, wider diffusion of many types of harmful biotechnology (such as GURT's) will not support the Convention's goals. The North has other important failures in creating an enabling environment, including the denial of technology transfer through the imposition of Australia Group export controls and intellectual property laws that make technology proprietary and expensive.

On Monday afternoon in Working Group 2, developing countries came forward to address some of these problems. The Philippines proposed changes (in paragraph 3.1.2a) that will make the decision fairer for the South. Under the proposal, parties will consider not only the situation in the South; but what the North is failing to do to encourage technology transfer consistent with the Convention's goals. Peru drove this latter point home by proposing amendments to the same paragraph that make clear that technology should be transferred in accordance with the needs identified by developing country parties (and not the needs of the biotechnology industry).

The Africa Group, supported by others, voiced concern about unusual and inconsistent language on "absorption" and "adaptation" of technology, new and confusing terms which seemed to impose new burdens on the South. Africa proposed that instead of the new phrases that mysteriously cropped up in the draft decision, text should be used that was agreed to at the WSSD.

Developing countries were also concerned about the inconsistent



## **CBD urged to recognize rights of coastal fishing communities**

On Friday, a group of non-governmental, including fishworker, organizations urged the Seventh Conference of Parties to the Convention on Biological Diversity (CBD) to include in its agenda a call to recognize, protect and strengthen the rights of coastal fishing communities to access and use coastal and marine biodiversity in a responsible manner, to pursue sustainable livelihoods, and to participate in decision-making and resource management processes at all levels.

These recommendations formed part of an intervention by seventeen non-governmental and fishworker organizations<sup>1</sup> on the Conference's Agenda Item 18.2, "Thematic Programme of Work: Marine and Coastal Biodiversity". The statement called on the Parties to recognize the preferential rights of coastal fishing communities to use and access coastal and marine resources to pursue their livelihoods. It also pointed to the environmental sustainability of the traditional fishing gear used in artisanal and small-scale fisheries. The statement noted that traditional ecological knowledge systems (TEKS) have contributed to sustain both the livelihoods of communities and the integrity of ecosystems.

Recognizing such sustainable practices, the statement said, would be consistent with Article 10 (c) of the CBD, which highlights the need to "protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements."

The statement noted that there are over 200 million people worldwide who depend on inland/marine fisheries and fish farming for a livelihood. Most of them are in the artisanal and small-scale sector in the tropical multi-species fisheries of the developing world, and are among the poorest and most vulnerable sections of society. Protecting and supporting sustainable livelihoods in the artisanal and small-scale fisheries sector, the statement added, would also help achieve international commitments on poverty alleviation outlined in the Millennium Development Goals.

As "beacons of the sea", the statement noted, coastal fishing communities have taken up resource management initiatives to nurture and rejuvenate their ecosystems. They can thus become powerful allies in the efforts to conserve, restore and protect coastal and marine biodiversity.

### **Papua New Guinea and Malaysian Logging**

*by a coalition of PNG NGOs<sup>2</sup>*

Papua New Guinea's pristine rainforest and home to 5-7% of the earth's biological diversity is being destroyed by unscrupulous foreign logging companies – especially Malaysian companies. In the name of development, and before the economic value of forest is known, mining, oil extraction and oilpalm schemes have all contributed to its demise. But nothing is as brutal as the foreign owned logging industry. The loggers have already

<sup>1</sup> The statement was signed by the following organizations: World Forum of Fisher People's (WFFP); National Fishworkers' Forum (NFF), India; Tambuyog Development Centre, The Philippines; JALA, Advocacy Network for North Sumatra Fisherfolk, Indonesia; Penang Inshore Fishermen Welfare Association (PIFWA), Malaysia; Masfundise Development Organization, South Africa; CeDePesca, Argentina; Yadfon Association, Thailand; Sustainable Development Foundation, Thailand; Southern Fisherfolk Federation, Thailand; Instituto Terramar, Brazil; National Fisheries Solidarity (NAFSO), Sri Lanka; Bigkis Lakas Pilipinas, The Philippines; Asian Social Institute (ASI), The Philippines; International Collective in Support of Fishworkers (ICSF); Kalpavriksh, India; Forest Peoples Programme, United Kingdom

<sup>2</sup> The Statement is endorsed by the following NGOs: PNG Eco-Forestry Forum; PNG Conservation Forum; CELCOR/Friends of the Earth (PNG); Greenpeace Australia Pacific; Conservation Melanesia; Partners with Melanesians; Environmental Law Center; Bismark Ramu Group; Research and Conservation Foundation; East New Britain Sospel Eksen; Komiti; NGO Environmental Watch Group; Village Development Trust

converted at least 7 Million hectares of PNG's forests and another 2.8 Million hectares is facing the immediate threat of logging. Plunder is pillage is the name of the game for the logging industry.

Industrial logging undermines sustainable development and triggers social conflicts, poverty, disenfranchisement and other social problems. With annual harvests regularly exceeding sustainable volumes, PNG's forests are effectively being mined. Current rules and regulations in the forestry sector are rarely applied, monitoring is rarely conducted, and environmental management rules are routinely ignored causing massive and unnecessary damage to the forest and the rich biological diversity.

PNG is a "mega-diversity" country hosting 57% of the Earth's species. PNG's biogeography is extremely complex with centers of endemism across the country. A significant number of large forests areas need to be protected in order to prevent species extinction. However, no comprehensive strategy has been developed as government support and government conservation capacity is limited. Papua New Guinea does not have a formal Protected Areas Framework to conserve its biodiversity. Conservation legislation is cumbersome and no mechanisms exist for customary landowners to excise their lands from logging concessions.

The entire forest acquisition and allocation is biased towards large-scale intensive operations for log export. Any other forest use, be it strict protection or community eco-forestry is seen as a threat to the system and is actively impeded. Local communities are denied access to information and face incredible hurdles when they want to protect their forests from industrial loggers.

It is against this background that NGOs have been calling for fundamental change. There is need to build landholder capacity, create greater transparency and accountability, establish a "constrained-based" land use planning system, invest in services and community based alternative land uses, and prevent industrial logging in several biologically significant areas.

The PNG Government is unable or unwilling to enforce forestry and environmental laws and regulations as foreign loggers engaged in a culture of influencing and manipulating politicians and bureaucrats in a race to acquire new logging concessions in this lucrative industry. We believe, there is space for other creative and collaborative responses to these issues.

Therefore, we call for a moratorium on logging to allow space for creative and effective approaches. The moratorium is needed in order to review problems, design and implement effective reforms in the forest sector and to address systematic governance and development issues.

-We call upon the CBD COP 7 Ministerial Meeting to support the need to for a moratorium on logging in old growth forests in Papua New Guinea.

-We call for the rejection of logging, oil extraction and mining in and around protected areas and where there is no free and prior informed consent by customary landowners.

-We also call for the immediate ban on import of logs from Papua New Guinea. Particularly, we call on Australia, New Zealand, China, Japan and Korea to make commitments that they will ban the import of logs from old growth forests in PNG.

-Finally, we call for the PNG Government to establish a Commission of Inquiry with the support of Australia and New Zealand into illegal logging in PNG and its implication for biodiversity loss, poverty creation and regional security.

## Scientists Urge UN to stop bottom trawling

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Over 1000 of the world's foremost marine scientists released a strong statement calling on governments and the UN to act swiftly to protect the imperilled biological diversity of vulnerable deep-sea ecosystems. The statement was released simultaneously at the Summit for Life on Earth, the meeting of the UN Convention on Biological Diversity (CBD) in Kuala Lumpur, Malaysia and the annual meeting of the American Association for the Advancement of Science (AAAS) in the USA.

The Scientists urge the United Nations to establish a moratorium on the most destructive fishing method: bottom trawling on the High Seas. They urge individual nations and states to ban bottom trawling to protect deep-sea ecosystems wherever coral forests and reefs are known to occur within their Exclusive Economic Zones. They urge them to prohibit roller and rockhopper trawls, which allow fishermen to trawl on the rough bottoms where deep-sea corals are most likely to occur. Governments are urged to support research and mapping of deep-sea coral and sponge communities. And they ask governments to establish effective, representative networks of marine protected areas that include deep-sea coral and sponge communities.

Scientists have recently discovered undersea coral forests and reefs scattered throughout the cold and deep ocean waters of the world. Some corals resemble "trees" up to 10 meters tall; others form dense thickets. Hundreds or thousands of species live in these cold-water coral forests and reefs, leading scientists to call them the "rainforests of the deep." But even before scientists can find them, deep-sea coral ecosystems are being destroyed by commercial fishing, especially bottom trawling.

Deep-sea bottom trawlers are fishing vessels that drag huge nets with steel weights or heavy rollers along the seafloor to catch Deep Water fish species. The trawls smash corals and sponges and rip them from the seafloor.

"Bottom-trawling in the deep-sea is like clear-cutting a pristine ancient forest. Each trawl destroys everything in its path. In the interest of catching a few fish, hundreds of species –some of which have not even been identified – are destroyed," said Thilo Maack of Greenpeace. "Governments at the Convention on Biological Diversity must pass a resolution recommending that the United Nations General Assembly adopt an immediate moratorium on high seas bottom trawling and put an immediate halt to this destructive activity."

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## Can We Spare a Drink of Water For Thirsty Protected Areas?

*by Christopher E. Williams, WWF*

Big Bend National Park, Cañon Santa Elena, and Maderas del Carmen are adjacent protected areas clinging to both banks of the Rio Grande/Rio Bravo River. Together, they straddle the border of the U.S. and Mexico, making up almost a million hectares of unspoiled Chihuahuan Desert habitats. Ecotourism in the three protected areas fuels the local economies on both sides of the border.

Today, the flow of the Rio Grande/Rio Bravo as it moves between the parks is generally so low that the once thriving river-rafting industry there is all but dead. Fish and mussel species in the river are declining, and forests along the banks, home to hundreds of resident and migratory bird species, are under ever greater stress. Where did the water go? Some has been lost to drought, but much is diverted to cities, farms and industry upstream, where a tremendous amount is lost to leakage and evaporation.

This scenario is threatening or already exists in protected areas all over the world. From the tiny San Pedro Conservation Area in Arizona to the mighty Serengeti in Africa, diversions upstream are threatening to choke the life out of protected areas that are havens for biodiversity and vital economic assets for local people.

Yet, despite the growing crisis, the Conference of the Parties to the CBD have largely ignored it. The Chair's draft of the Protected Areas Programme of Work is silent on the issue. Despite considerable encouragement, no Party has come forward with a proposal to include language in the programme of work calling for adequate allocation and reservation of water, and minimum standards of quality, timing, and distribution, to maintain the viability of protected areas. The single reference to adequate allocation for inland water ecosystems was struck from that programme of work.

Issues of water allocation in an increasingly water-stressed world are extremely sensitive. It is understandable that Parties shy away from such a potentially emotional and politically-charged issue. But water allocation for protected areas should not be seen as an added burden on water supplies. Rather, the issue should be addressed in the larger context of national integrated water resource management strategies, in which protected areas can play their parts as sources and purveyors, as well as consumers, of freshwater.

But first, Parties must face the issue, and pledge to work together to provide a cool drink of water to the world's thirsty protected areas.

### **Today's lesson:**

**"It isn't pollution that's harming the environment. It's the impurities in our air and water that are doing it" – Governor George W. Bush**

# Look Ma, It's a Fish!™

Excerpts from an article by Anil Netto, *Aliran Monthly* 2003:10

As rising demand for fish puts pressure on global supply, more developing nations are turning to aquaculture or farmed fish. But like other farmed animals and crops, farmed fish has also become a target for controversial genetic tinkering - and ultimately, for ownership claims on genetically "improved" breeds.

Genetically modified (GM) rainbow trout, carp, tilapia and abalone are now being developed around the world. Cuba, for instance, is involved in GM tilapia. But since GM food has been suffering setbacks in the market, scientists have also been stepping up efforts to produce genetically improved breeds of fish. Saying that their work has nothing to do with GM, these scientists use biotechnology means such as sex manipulation, polyploidy, hybridisation and genetic changes.

These also make the fish more amenable to patenting than the more traditional selective breeding, say some researchers. "The trend towards the patenting of fish genetic resources, and even the patenting of new breeds of fish is accelerating," observed researcher Anna Rosa Martinez, in a study commissioned by the Chennai- and Brussels-based International Collective in Support of Fishworkers (ICSF).

She noted that researcher noted that the expectations of long-term productivity increases from the use of fish genetic resources have led to the extension of property rights over them in a process that parallels that of plant genetic resources for agriculture. Some of the other implications of farmed fish also raise ethical concerns, activists say. These include the potential loss of biodiversity, the threat of contamination of wild fish by farmed fish, and the outbreak of disease.

Much attention has focused on a species of fish known as tilapia, which is widely regarded as ideal for breeding. They grow fast, waste little food, and require little attention. Tilapia are said to be similar to rats in their ability to adapt and can take advantage of whatever they find to feed on - and that is precisely why they can pose risks to the balance of natural ecosystems.

In a collaborative initiative of the International Centre for Living Aquatic Resources Management (ICLARM), now known as WorldFish Centre, Wild Nile tilapia was collected from rivers in Egypt, Ghana, Senegal and Kenya. Together with four Philippine commercial strains, these were crossed to establish a broad genetic platform for the later selection programme run by the the Genetically Improved Farmed Tilapia (GIFT) project. In 1998, after six generations of selective breeding, the rights to the fish, which had shown 85 percent improved growth compared to wild tilapia, were handed over to the non-profit GIFT Foundation International Inc (GFII). GFII was set up to "continue the research, market the fish, and use the revenues generated to further research work on tilapia".

A Norwegian biotechnology company, Genomar ASA, started a collaborative research programme with the GFII in 1999. "GenoMar then resumed all commercial rights to the GIFT foundation fish and received a copy of all the latest families," said Morten Hoyum, vice president and chief operating officer of GenoMar, responding to queries from IPS.

GenoMar has introduced state-of-the-art DNA "tagging" of the fish in its breeding scheme and is now developing the 14th generation, said Hoyum. GenoMar has maintained the full genetically diverse platform and has also done extensive research on saline tolerant fish that can be utilised in brackish water, he added.

The Worldfish Centre's assistant director-general (international relations), Modadugu V Gupta, clarified that the GIFT is being given to any government that requests it. "GenoMar can claim that what they are developing started with the GIFT fish; they are further improving it under their name," Gupta told IPS, when asked why the commercial rights had been transferred to a private firm. "Likewise, many other countries which received the germplasm or fish from us are continuing their own research, further improvement. The GIFT fish is still in the public domain," he insisted.

Hoyum agrees that the WorldFish Centre, with headquarters here in Penang, has the rights to the fish. This fish, however, "was just ordinary (Generation 9 GIFT tilapia) fish that has been available in the Philippine market as fingerlings as well. The same fish was also provided to the Bureau of Fisheries and Aquatic Resources in the Philippines."

But Hoyum asserted that, according to the spirit of the agreement with GenoMar, Worldfish Centre "should not use the fish for commercial activities but would be free to use it for scientific and research purposes". Genomar has already entered into commercial ventures using the trademark name GenoMar Supreme Tilapia in the Philippines, Brazil and China, a major market. Gupta, who is also on the board of GFII, declined to furnish a copy of the agreement between GFII and GenoMar, describing it as "confidential".

As a member of the Consultative Group on International Agricultural Research (CGIAR), an association of public and private members supporting a system of 16 international food and environmental research centres, Worldfish Centre has endorsed the group's intellectual property rights (IPRs) policy. The CGIAR says it is promoting the transfer of intensified production systems for the benefit of the poor, noted Martinez, but "its IPR policy is highly controversial".

On one hand, she observed, it was designed to prevent others from obtaining intellectual property rights on genetic resources as collected and provided by gene banks. On the other, it allows for the "defensive patenting" of in-house developed technologies and products. "It legitimates the patenting of genetic resources," she said.

"The CGIAR should not be involved in assisting the privatisation of common goods - such as fish stocks - removing them from continued free access by fisherfolk," Patrick Mulvany, food security policy adviser of the Intermediate Technology Development Group, told IPS. ITDG is a British-based group promoting the use of sustainable use of technology to reduce poverty. "As a public research body the CGIAR should insist that the products of its research remain in the public domain," he added. - IPS

