

L 11 A Conference focused on Truly Valuing Nature

I would to have attended this conference and am proud to think it was held in Wellington. The initiative for the Valuing Nature conference, organised by the Government's Natural Resources Sector and Victoria University in association with the Sustainable Business Council, came from last year's Transit of Venus Forum.

Introduction

Markets tend to ignore adverse effects on the environment but ways to change this are gaining traction. Recently, Victoria University's Professor Charles Daugherty opened Wellington's Valuing Nature conference by saying "it's the economy and the environment, stupid" (a version of Bill Clinton's statement twenty years earlier Bill Clinton once said it was "the economy, stupid"). Some excerpts from the Conference follow (with thanks to Rebecca Priestly, science writer for our weekly magazine, The NZ Listener).

As a crucial first step, speakers at the conference agreed to acknowledge the economically invisible services that nature provides to humanity. "All of nature – whether it's farmland, forests, coral reefs, wetlands or mountains – provides what we call ecosystem services," says Sir Robert Watson, a professor of environmental studies at the UK's University of East Anglia. Nature doesn't just provide products we can use – fish from the sea, firewood and medicines from forests, drinking water from rivers – on a global scale but also regulates our climate, air quality and water quality. "But in almost every country in the world, since time immemorial, we've taken for granted that nature provides most of these services free of charge," says Watson. "And what we've done, especially in the past few decades, is massively change our natural ecosystem by maximising the provisioning services that have market value and ignoring those services that are equally important to human well-being but don't have market value."

Markets ignore ecosystem services because you can't buy or sell nature. You can't put a price on a cloud or a bee, but you can assess the value of the services nature provides, says Pavan Sukhdev, the New Delhi- and New York-based study leader of the Economics of Ecosystems and Biodiversity (TEEB) project.



The cost of losing the pollination services provided by bees – under threat from colony collapse disorder – is estimated at US\$200 billion a year.

The Amazonian rainforest puts 20 billion tonnes of water a day into the atmosphere. Some of this water falls as rain in the Rio Plata basin, where the agricultural sector is worth US\$240 billion a year. Newly planted mangroves in coastal Vietnam have saved annual dyke maintenance costs of US\$7.3 million.

But these services, provided by natural ecosystems, are not taken into account in any current measure of gross domestic product (GDP), which counts only goods and services produced and sold. Correspondingly, the negative effects of business activities on natural capital are largely ignored.

And it's not just coal-fired power stations and aluminium smelters that have bad effects. The way we grow food and the kind of food we eat are a major part of the global problem, says Sukhdev. "The total value of beef that's sold from Latin American cattle ranching is approximately US\$16-17 billion. The total negative impact – in other words, the costs of doing that business – is, according to our estimates, US\$300 billion. That's economic stupidity, why would you do this?"

BUSINESS AND GOVERNMENT SHOULD LEAD

The ideas TEEB is promoting are beginning to gain traction with governments around the world. All European Union countries and India are working towards including natural capital in their national accounts.

In his address to the Valuing Nature conference, Conservation Minister Nick Smith acknowledged that alongside GDP we need "regular comprehensive

environmental reporting that tells us the state of our natural capital". Legislative reform before Parliament aims at consistency in reporting across different councils, he said. At a national level, the Department of Conservation is moving towards a new system for monitoring and reporting biodiversity. "We can't make good choices if we don't know what we are losing."

But policies – and governments – can take a long time to change.

"On the business side, I think we've made faster progress," says Sukhdev. In the TEEB for Business Coalition, such businesses as Puma, Ernst & Young, and Deloitte are working alongside environmental non-governmental organisations, the World Bank and the United Nations, all with the same intention. "We must measure the externalities of business, manage them, disclose them and reduce them. We need to make people and businesses more aware of their footprints, to see the real footprint of food and how miserably we manage that, to see the real footprint of energy and how miserably we manage that. We can do better."

Some companies are already starting to do better. Starting in 2011, sportswear company Puma has disclosed its negative environmental effects "in painstaking detail", says Sukhdev. By factoring in such things as greenhouse gas emissions, land-use change, air pollution and waste generation, Puma found the cost of its annual environmental impact was almost as high as its profits. The company is now looking for ways to make its supply chain more environmentally friendly, including replacing leather with a recycled polyester product.

GETTING GLOBAL COMPANIES ON BOARD

Expat New Zealander James Griffiths is natural capital managing director of the World Business Council for Sustainable Development, which represents 200 member companies. For these companies, says Griffiths, recognising natural capital is mainly about managing risk.

"All businesses impact on ecosystems and ecosystem services, and all businesses depend on them as well, so if there's a change in functionality, in availability, then that poses big business risks. At the moment, these risks are off the balance sheet, or way down the supply chain, so they're somebody else's problem.

"But if you've got billions of dollars of assets at risk, you need to deal with natural capital risk issues as much as you deal with political risk and foreign exchange risk. And what we've found with global companies is they get into this space from a risk perspective, but will pretty quickly start looking at it in terms of business opportunities."

Griffiths has just been at a Tropical Forest Alliance 2020 workshop in Jakarta, where workshop participants saw heavy smoke from fires raging through Indonesian rainforest, which is being felled for fibre for packaging pulp and cleared to make way for palm oil plantations. He's working with global companies to help use their US\$25 billion or more of annual procurement to improve their practices, and it wasn't hard to make them see that informed consumers don't want to buy products linked to burning down rainforests.

“If you’ve got a strong consumer brand that is worth three times annual sales – maybe a \$2 billion brand of ice cream – why would you jeopardise that brand value for 10c worth of packaging or 2c worth of palm oil that is from the wrong source?” Griffiths says.

WHAT CAN NEW ZEALAND DO?

Griffiths is not coming to New Zealand just for the conference – he’s here to recruit. Most of his member companies have a bigger annual turnover than New Zealand’s entire GDP. “Most of our companies start at a \$2 billion turnover. If New Zealand was one of our members, it would be our 31st largest.”

Only a few New Zealand companies are large enough for membership of the World Business Council for Sustainable Development – Fonterra is an obvious contender – but what these large global companies do relate very well to what New Zealand as a country might do, says Griffiths.

“When you think about New Zealand’s economy, and the drivers of our development, it’s export-focused. Tourism, agriculture, forestry and fisheries account for a very significant proportion of exports and GDP.

“But does New Zealand understand the true value of its natural capital? Are we investing in our landscapes and seascapes at a sufficient level now and to preserve or expand them in the future? Because that’s what people pay for.

“When I came back to New Zealand for the Rugby World Cup, I brought six couples from my village in Switzerland and they were just blown away by the landscape – there’s nothing else like it. Do people appreciate the value we have in those landscapes and seascapes?”





Agriculture is just as dependent on natural capital, he says. “So how well are we managing our wetlands and our water quality and soil productivity, because these underpin our ability to grow products. Or to say it another way, what’s our level of investment in these core ecosystems?”

Given the increasing population, the challenge is to ensure people continue to have access to food, fibre and biofuel while maintaining an ecological balance, says Griffiths. “New Zealand is a competitive exporter, but do we have the capacity to be a sustainable exporter? Can we verify the claims we make about being ‘clean and green’ or ‘100% Pure’?”

Victoria University’s Professor Jonathan Boston says the Government – despite its willingness to embrace the “100% Pure” brand, and Nick Smith’s promises of improved environmental reporting systems – has so far chosen the economy over the environment. In a panel discussion on the economics of ecosystems and biodiversity, Boston warned about the impact on natural capital of the Government’s “severe weakening of the Emissions Trading Scheme, vigorous endorsement of onshore and offshore mining with no mention of carbon capture and storage, reduced public funding for the Department of Conservation, huge investment in new roads rather than public transport” and proposed changes to the Resource Management Act designed to fast-track major projects.

FUTURE IMPLICATIONS

At this Gisborne gathering, focused on fulfilling Sir Paul Callaghan’s vision of New Zealand “as a place where talent wants to live”, a clear message came through that a healthy economy depended on a healthy environment.

The general agreement of conference speakers and delegates was that it’s time for all players – government, local councils, business and voters – to link the environment and the economy and to not consider one without the other.

Watson thinks scientists’ role is “to let people know the future implications of our current actions. Then it’s up to civil society, working with the Government and with the private sector to pick more sustainable pathways.

“If people say the most important thing to us is producing food and short-term economic gain and we don’t care if we lose our biodiversity, that’s a decision of civil society and government and the private sector.”

NATURE AT RISK

The region-sectors with the 10 worst environmental impacts, according to the Economics of Ecosystems and Biodiversity (TEEB) initiative, are:

- greenhouse gas emissions from coal power generation in East Asia;
- land use effects from cattle ranching in South America;
- greenhouse gas emissions from iron and steel mills in East Asia;
- water impacts from wheat farming in South Asia;
- greenhouse gas emissions from coal power generation in North America;
- greenhouse gas emissions from cement manufacturing in East Asia;
- land use impacts from cattle ranching in South Asia;
- water impacts from rice farming in South Asia;
- air pollutants from coal power generation in North America; and
- water impacts from water supply in South Asia.