

Statement by IUCN Director General at the 2010 Annual General Meeting of the China Council for International Cooperation on Environment and Development

The Value of Nature for China's Green Development

Beijing, China, 11 November 2010

Honourable Chairpersons, Members of the China Council, Dear Colleagues,

It is a great honour for me to address this year's General Meeting of the China Council which deals with the crucial nexus between ecology and economy in devising a new path for environmental protection in China.

This subject is extremely timely. This Council meeting comes on the heels of the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity held last month in Nagoya, Japan, which concluded with a renewed political commitment to safeguard the diversity of life on our planet.

2010 is also the year when we started to realize the full economic impacts of biodiversity loss, and the significant monetary and non-monetary value of conserving nature. This was the focus of a groundbreaking study known as TEEB — The Economics of Ecosystems and Biodiversity — initiated in 2008 and supported by a wide range of partners including IUCN.

Furthermore, it is encouraging that the Government of China is now becoming increasingly aware of the need to ensure sustainable, green growth — one that puts the environment at the heart of development efforts. Inclusion of biodiversity and ecosystem services in the policies adopted by successive People's Congress Meetings and in the five-year plans indicates strong and continuing support for such measures.

This morning, I would like to focus on how China stands to benefit from wise management of its natural assets, and how these assets can make a significant contribution to the country's development.

We all know that China is a "megadiverse" country, blessed with extraordinary biological wealth. For example, it supports over 30,000 species of higher plants — one-tenth of the world's total. Yunnan Province alone has more plant species than the entire North American continent.

Biodiversity supports a wide range of ecosystem services, anything from freshwater supply to climate control. It is, quite literally, the foundation of people's wealth, health and wellbeing.

In IUCN we say "healthy ecosystems, healthy people", and nowhere is this more true than in China. Plants and animals form the essence of traditional Chinese medicine. For example, some 11,000 medicinal plants contribute around US\$17 billion to the Chinese economy every year.

China also has the power to make a huge impact — positive or negative — on the future of biodiversity at the global scale. According to a recent report by the CCICED and WWF, China is already consuming more than twice as much as can be provided by its own ecosystems.

Maintaining species, genetic resources and healthy ecosystems – known together as biodiversity – is a crucial pillar of the green development of modern China.

Over the past three decades, China has made significant strides in stemming the loss of its rich and unique biodiversity. The results of the vast effort and expenditure made in reforestation are apparent in both cities and the countryside.

The country's nearly 3,000 nature reserves cover an impressive 16 percent of its territory. Other investments in fire control, combating desertification and enforcement of wildlife laws, to name just a few, are also beginning to show positive results.

However, as with other countries, China's 2010 targets for reducing biodiversity loss have been only partially met. The pace of change affecting the landscape of China has been extremely rapid, with multiple pressures ranging from urban sprawl to ever-accelerating climate change. One result is that biodiversity continues to be irreversibly lost and many ecosystems are becoming degraded to such an extent that they no longer deliver the vital services they once provided.

Ecosystem services generate substantial wealth for China's economy, especially in the rural areas where they provide economic benefits to those who are most directly dependent on nature, or on the flow of ecosystem services, such as farmers, fishers and foresters.

According to the latest academic research, biodiversity and ecosystem services in China contribute benefits that are at least equivalent to all other economic production as measured by GDP. The problem is that at the moment these benefits largely go unnoticed. They do not appear on the balance sheets of companies, or national GDP statistics.

While there have been some important advances in incorporating biodiversity and ecosystem services into economic and fiscal policies, such as a US\$500 billion investment in payments for ecosystem services under the present five-year plan, a greater effort is needed to ensure that these natural assets are truly part and parcel of China's Green Development.

I would like to suggest some ways these natural assets can be mainstreamed into several major sectors of China's economy. This list is far from complete. Indeed, a fair argument can be made that biodiversity and ecosystem services are relevant to ALL sectors of ALL economies.

Promote a Shift Towards Eco-Agriculture

Food security is paramount to any nation's development. For years, China has been relying upon industrialized agriculture to feed its growing urban population, often at the expense of more traditional techniques and varieties that are well suited to the different soil and climatic conditions.

This shift has had some negative impacts on ecosystems. Take rice, the staple of the Chinese diet. Studies have shown that maintaining a rich biodiversity in the rice landscape can ward off up to 95 percent of pests. However, when farmers resort to chemical alternatives such as pesticides, many

species that help control pest invasions, such as insect-eating birds and bats, frogs and dragonflies, largely disappear.

Making a shift towards more sustainable agricultural practices can improve both China's food security and biodiversity. Traditional techniques used on Chinese farms, for example involving a mixture of crops and farm animals – can help preserve the health of ecosystems. Policies that promote biodiversity in agricultural landscapes, such as payments to farmers for bee-keeping, are also worth considering. According to the TEEB report, bee-keeping generates US\$213 million annually in the small country of Switzerland, and the total economic value of insect pollination worldwide is estimated at €153 billion.

Rice terraces and other traditional agricultural landscapes are part of China's cultural heritage. Preserving these traditional landscapes, farmlands and associated woodlands will ensure a broader global recognition of their value and improve the wellbeing of the people that maintain them.

Teaching a Man How to Fish... Sustainably

Fish provide an extremely important source of protein in the diet of most Chinese, with average per capita consumption of over 26 kilograms per year. At the moment, however, many important fisheries are close to collapse through overexploitation, pollution and alien species invasions.

Chemical run-off is threatening more than half of Chinese lakes, while extensive "dead zones" plague important fishing areas along the coast. Almost all water bodies are infested with invasive alien fish and crustaceans escaping from fish farmers, even in nature reserves. Several formerly important commercial species of native fish are now locally extinct. One-third of the country's freshwater systems are polluted so badly that they are not even suitable for fish.

The precarious situation facing the future of fishery in China is, sadly, mirrored around the world where most commercially valuable fish stocks are over-exploited to the extent that they underperform by US\$ 50 billion annually.

One way of dealing with this global problem is through the establishment of marine and freshwater protected areas, as well as "no-take" zones. For example, in the Yangtze River, fish stocks have been declining over the past decades. Here, a moratorium of a few years on all fishing could be both feasible and beneficial in the long run, as the river now accounts for only a tiny fraction of China's fish production. Besides, according to Chinese experts, compensation payments would only be required for some 100,000 people.

China's oceans and coasts play a vital role in socioeconomic development and improvement of public health and welfare. The marine economy is one of the fastest growing sectors of the Chinese economy.

The Nagoya Biodiversity Summit set a new ambitious global target for marine protected areas by 2020, which represents a tenfold increase over the roughly 1 percent of oceans currently under protection.

Experience from various parts of the world has demonstrated that protecting some areas of the sea greatly enhances the total production of fish, by providing them a sanctuary where they can breed and grow.

By strengthening its current network of marine reserves, China would make a wise investment in the future health and productivity of marine ecosystems.

Water for Nature, Water for People

China's wetlands and water resources deliver a vast range of benefits to both people and wildlife. The Yangtze River flood plains are important stopovers for several globally threatened birds, such as the Siberian crane—a revered symbol of morality and good fortune across Asia.

The rivers arising on the Qinghai-Tibetan Plateau provide essential ecosystem services for over 2 billion people. They range from watershed protection to hydroelectricity generation to provision of water for irrigation, drinking and industrial use.

With only seven percent of the world's freshwater and one-fifth of the world's population, China faces an impending water crisis. Climate change will further exacerbate the country's water scarcity. The role of ecosystems in supporting China's water supply is critical, and requires collaboration of numerous agencies dealing with agriculture, water management, pollution control and conservation.

One promising measure is the steady increase in sites designated by China under the Ramsar Convention. China has designated 37 such sites, covering over 3 million hectares, which will now be managed according to the top international standards for wetland conservation and sustainable use.

“Environmental flows”, which refer to water provided within a river or wetland to maintain ecosystems and the benefits they provide for people, could also be part of the solution for restoring freshwater ecosystems back to health. One such initiative is getting off the ground in the upper Yangtze River, and the *eFlow* approach should be promoted and up-scaled in all of China's river basins.

More forests, but which kind of forests?

Reforestation has been an area of major investment in China. It is one of the few countries in the world where forest cover has increased over the past decade. Today, there are more trees being planted in China than in the rest of the world combined.

The value of forest conservation to the country's economy vastly outweighs that of timber. It has been estimated that deforestation in China in the second half of the 20th century cost almost twice the value of timber in lost ecosystem services. The forestry sector needs to build up an understanding of the many ecosystem services provided by natural forests.

Healthy, natural forests – with their great genetic diversity – are important allies in the fight against climate change. Not only do they store up to 60 percent more carbon than plantation forests, but they

are also far more resilient to the impacts of a changing climate. They also provide many co-benefits, such as disaster prevention, making China's investments in forest conservation both wise and profitable.

Conversely, monoculture – or single-species – forest plantations are biodiversity deserts. Yet foresters in China still much prefer to make new plantations, seeking the larger budgets that are provided for new plantations rather than protecting natural forests.

By compensating foresters for protecting natural forests, for example through “payment for ecosystem services” schemes, both people and the environment stand to gain.

Tackle Climate Change

Finally, I would be remiss if I didn't mention perhaps the greatest threat to global development efforts today: climate change. We must work towards a political solution to protect our climate, our livelihoods and our natural world as we know it.

Achieving deep cuts in global greenhouse gas emissions is clearly a priority. China is already making major investments in moving towards a low-carbon economy.

At the same time, we need to adapt to the inevitable changes which are already underway. Healthy ecosystems can play a major role in helping people adapt to the adverse impacts of climate change.

Many adaptation initiatives have focused on costly human-made infrastructure and technologies to build climate resilience, ignoring natural responses to climate change, which are often cheaper and more sustainable.

Ecosystem-based adaptation recognises the many services nature provides for free and aims to strengthen them in order to build long-term, cost-effective resilience to climate change.

Towards a Harmonious Society

Allow me to conclude my presentation with a quote by Chinese Philosopher Laozi “天人合一” (Tiān rén hé yī), which means that humans are an integral part of nature – a concept that remains as relevant today as it was back in ancient times.

As China has become a leading economic and political power, it has the opportunity to be a leader in Green Development as well.

By valuing and conserving nature, China can improve the wellbeing of its people, achieve greater prosperity, and move closer to realising its vision of a harmonious society.

IUCN, the world's largest environmental network, stands ready to assist China in this quest.