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Forests, Wood and Livelihoods

Neil Byron

Paper prepared for presentation at the "Forests, Wood and Livelihoods: Finding a Future for All" conference conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, Australia, August 16, 2005

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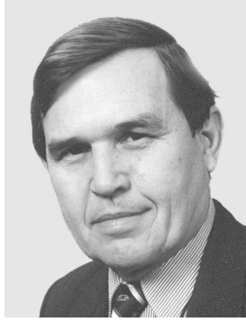

SESSION: SUMMARY ADDRESS

Forests, Wood and Livelihoods

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I cannot possibly summarise all fourteen excellent papers, by such eminent contributors, in this brief account.

Instead, I will pick up salient themes. I'm sure that, like me, you will have been struck by the range and diversity of the topics. We have had an enormous amount of information on a mind-numbing diversity of issues: from the marketing of non-timber forest products, to China's paper demand, to fire management and local community management of forests. Perhaps some of you, especially those who spent last week at the Congress of the International Union of Forest Research Organizations (IUFRO) in Brisbane, are suffering from information overload, and are having trouble 'seeing the forest for the trees'.

The themes

What were the themes permeating this conference?

1) The *integration of objectives* was a conspicuous theme: triple bottom line plus one — economic, social, environmental and governance.

DR NEIL BYRON has been a Commissioner in the Productivity Commission since June 1998, with particular responsibility for sustainable development, natural resources and the environment. Neil's career began as a forester in Central Queensland. He received a masters and doctorate in resource and environmental economics from the University of British Columbia, in Vancouver, Canada. Subsequent appointments have been with the Australian Bureau of Agricultural Economics, the Forestry School at the ANU, UN Food and Agriculture Organisation in Bangladesh, Director of the Graduate Program in Environment and Development at ANU, then Assistant Director General of the Center for International Forestry Research, in Indonesia.

Foreign Minister Alexander Downer mentioned the multi-dimensional role of forests, and the huge number of people worldwide who depend on this resource for their livelihoods. Even though many speakers were asked to discuss only commercial production issues or environmental protection issues or social issues, almost everybody mentioned all three dimensions of forestry. Trying to practise forestry without considering all of these three is simply not acceptable and is not going to work. There is no point in being highly productive if the results are environmentally and socially unacceptable. And there is no point in being socially or environmentally pure if the activities are not economically sustainable.

2) *The context is important*. We have discussed at length the subject of illegal logging and corruption. In the Solomon Islands about 10 years ago I was with a forest ranger, who was the only government employee of any department at all within a radius of 200 km. He was supervising a multi-national logging company. Eighteen and with two years of education, he did not have a bicycle or a phone or boots. He had to hitchhike to and from work on logging trucks; he lived in housing provided by the company that he supervised; and he had to buy his food at the company shop. How many aces did he have up his sleeve when he was trying to get them to obey the code of forestry practice?

In Bangladesh I can remember being out with a forest guard whose official monthly salary was enough to buy I think four — perhaps five — small bags of rice. No person could live on that for a month, let alone feed his family. Did he accept money to close his eyes when a load of logs went by? You bet! Would I have done the same thing? You bet! Not because he was a bad person or

wicked. His family's survival depended on it! But it made me wonder at the time whether the whole institutional concept that had been transplanted to newly-independent countries from the West — having large areas of very valuable government-owned forest managed by a staff of highly educated and trained public servants — was appropriate? It is a model that has worked well in the UK, North America, Australia and Western Europe. Was this really applicable in Indonesia, Southern Africa, India, Bangladesh or the Solomon Islands? You really have to wonder whether the institutional arrangements set up in the colonial era were or are consistent with the reality on the ground in those countries. Like oil, gold and diamonds, forest wealth can create a desperate scramble for cash, so the people guarding the 'treasury' need to be well resourced, well paid and well supervised.

3) *Innovation* is the third theme running through today's papers. Innovation in *new timber products*; new ways of getting timber products from species that were previously thought to be non-commercial rubbish, like making furniture out of old rubber trees; and in *non-timber forest products* (NTFPs). Hosny El-Lakany reminded us that about a quarter of the world's population falls into the category of 'forest dependent people'. Brian Belcher reminded us that many of them probably would rather not be. Being dependent on NTFPs has been frequently described by anthropologists as 'a livelihood of last resort'. If you've got no agricultural land, you've got no buffalo or livestock, you've got no skills or education and you've got no other way of making the average income of $1 a day, you go into the forest and you eke out the little you can get from a resource that nobody else wants. So either we look for ways of making forest-based livelihoods more rewarding — so you get $2 a day instead of $1 a day out of it — or alternatively we can try to help people who are in that situation to find exit strategies to other sectors, or other locations, if in fact that is what they want to do. And this is what Wunder (2005) calls 'achieving conservation by distraction'. You give the people somewhere else to go, away from the forest, and that leaves the forest to suffer less impact.

Marketing for ecosystem services is another innovation which arose repeatedly throughout the day; David Brand gave the key paper on that topic. As Sven Wunder wrote a few weeks ago in a CIFOR research paper, 'This is the most promising innovation in conservation since the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992.' That is a very brave call, but I agree with Sven and I agree with what David said. It is an exciting innovation, but there are a number of people who are also saying, 'Well, it's still very early days; we need field testing; we need to identify better the conditions under which it works;' and so on. And that is an area where again Australia (as David suggested) has some innovative, world-leading approaches, like the 'bush tender' scheme to stimulate the provision of ecosystem services on private lands.

Certification of forest products is another innovation over the last 10 years which continues to go from strength to strength.

4) The fourth theme that recurred today is *policy reform*, trying to get the institutional framework right. There may be questions of the applicability of the state forest model in countries where the value of the resource is huge in comparison to the salaries of the people who are being paid to look after the resource.

I would like to spend the balance of my time focussing on what I see as the major policy questions as they have been presented here.

International forestry

Where should international forestry be going and how can we help it get there?

I detected three key sets of questions in the presentations:

1) *Where's forestry headed globally*? Where do we think it *should* be headed? Is there an agreed vision? Russel Haines proposed an answer that most people, I believe, would readily accept:

poverty alleviation and natural resource conservation and rehabilitation through scientific support for the establishment, management and sustainable utilisation of forests, providing optimum social, economic and environmental benefits to developing countries…

This is consistent with the implicit vision of other speakers, and is a goal that I would like (for now) to take as given.

2) *How do we get there?* What is the role for international development assistance and interna-

tional research in achieving that agreed vision of the forestry world?

3) *Where does Australia fit into this?* What should we be doing in regard to how we manage our own forestry sector and in terms of helping other countries enhance and sustain their forestry sectors. Why should Australia be involved? Why should we bother?

What have we done, and what should we have done?

I am old enough to remember a number of different phases in international forestry and international forestry development assistance. At various times we focused on different pieces of this incredibly diverse and complex forestry jigsaw puzzle. We had forestry for industrialisation, to create jobs and earn foreign exchange through exports. This strategy was brilliantly articulated by Jack Westoby in 1962 at the World Forestry Congress in Madrid. In 1978, the same Jack Westoby totally changed the focus of world forestry, for a second time, to the opposite direction: forestry for local community development; social forestry; put people first; fuelwood for the rural poor; forestry for basic human needs. Forestry development was not about foreign exchange earnings and big machines that crunch and grind.

We had a focus during much of the 90s on environmental forestry. Before that there was a major focus on watershed management. Depending on the El Niño, we either had great interest or no interest whatsoever in fires. There has been a mix and match of all these topics, over the last 50 years, in most developing countries.

There was a paradigm-shifting paper by Peters, Gentry and Mendelssohn in 1989 about conserving Amazonian rainforest, arguing that it was more profitable to retain the forest than to log it, if all the non-timber forest products and all the ecosystem services were added in, and that all these non-industrial, conservation-compatible uses provided a huge benefit directly to the local people. The implication was that if it is possible to devise ways to capitalise on all these unpriced global environmental services, like biodiversity and carbon sequestration, both the social objective and the environmental objective could be achieved simultaneously. This revolutionary idea led to a multi-billion dollar investment over the last 15 years in integrated conservation and development projects (ICDPs), which are now being evaluated. The general consensus now is that few ICDPs have lived up to expectations — most achieved some local socio-economic benefits, but few achieved much extra conservation of forests.

We have had other phases when international forestry specialists and advisors have concentrated on institution building: capacity development; human resources; improved planning; forestry education; forestry research. All have been mentioned here today. All are great ideas. All are necessary. All at various times have come and gone in most developing countries.

I am not alleging that fashions come and go in forestry development assistance. My point is that donors seem to have an inability to focus on more than one dimension at a time, when in fact we are dealing with a complex multi-dimensional problem. We focussed on whatever aspect was dominant in the minds of the donors. For example, seeing the success of the Marshal Plan, foreign capital investment was prescribed to help underdeveloped countries industrialise in the 1960s. When the West had an energy crisis in 1974 (oil), the developing countries received energy programs (fuelwood plantations and more efficient wood stoves) from 1975. When the West was focussed on biodiversity conservation, it came through in aid programs. After spectacular failures of corporate governance in the West, developing countries are asked to improve their governance and transparency, including that in forestry. And so on.

As one of my very close African friends observed, somewhat cynically, 'whenever the West got a stomach ache, developing countries got a good dose of castor oil, or Epson salts, depending on the nationality of the donor.'

One of the things I have learnt by working outside of the forestry area is that often changes take time to have an effect. And often the *sequencing* of reform really matters. In hindsight it is obvious that many scientific advances and policy reforms in forestry take much longer than they do in most other sectors. And yet so often in international forestry we would try something new, wait 10 minutes (maybe a couple of months or couple of years), before concluding 'Oh well! that didn't work! Let's try something else.' We did not 'Stay the course!' in David Kaimowitz's words.

My colleague Tom Tomich at ICRAF once said to me when we were discussing this theme; 'you

know, it's like a door with five locks on it – there's no point just getting one of the locks open. You have got to get all of them open at the same time to be able to go through'. So when we had the Colombo Plan, a lot of resources went into education and human resources. That (alone) didn't solve the problem. So we won't do that any more; let's switch over to whatever's the next big thing. In fact, rather than choosing between all these different emphases, the answer was to realise that 'you have to get all of the locks open at the same time or the door doesn't open'. So not only did we often not have the patience to get one of the problems (locks) properly resolved, we gave up because we did not realise we had to resolve multiple issues simultaneously before we would see success. Much more than just being able to walk and chew gum at the same time!

Forest management, as we all know, is a very long-term investment. There are a number of prerequisites. Without economic stability, social stability, secure land tenure etc., forest management is not going to work very well, whether it be retaining existing forests or creating new ones. Have you noticed that whenever there is a crisis, forests are among the first to suffer? They are bombed because they are a hiding place for the guerrillas, the rebels or whatever. Or they're logged early to get as much cash as the government can, quickly, to fight the guerrillas or rebels. Or they're over-used and degraded by refugees from the guerrillas or rebels, desperately looking for a place to get some last-resort food in order to stay alive.

A questioner from the floor today raised the issue of the water supply in Bangladesh and the incredibly tragic perverse outcome — arsenic poisoning of millions of poor people as a result of donors trying to do the right thing, provide clean drinking water to poor rural populations by sinking tube-wells. I am reminded of the Hippocratic Oath in medicine. The first rule before interfering is: 'make sure you do no harm'. In terms of Brian Belcher's paper this morning, the comparable message for external assistance is this: 'don't take away or unintentionally damage the safety net (the subsistence foods and livelihoods from the forests that poor people can fall back on in emergencies) because you have not bothered to fully acquaint yourself with all the subtlety or nuances of how the system works, before poking around in it'.

Both Jack Westoby and Alf Leslie have frequently talked about two kinds of forestry. One defensive, holding the line, trying to stop poor rural people sliding further back into poverty, and enabling them to at least meet their basic needs. And the second: advancing, looking for forms of forestry practice that will raise incomes, create new kinds of jobs, and offer a better lifestyle, a better standard of living and education.

The Australian role

Why might Australian forestry and foresters have a role to play in this international development assistance and international forestry research?

Many Swedish, Canadian and Tanzanian friends have asked me why there seem to be so many Australians running around international forestry — in all the big international agencies, or working on the ground in dozens of countries for small local NGOs, for aid donors, for church groups, foreign companies etc. I don't think that it is just because they are such charming, good looking blokes and sheilas. I think much of it comes back to Australian forest history that has actually shaped the way Australian foresters think about the role and potential of forestry.

A number of contributors, including David Kaimowitz and Ian Bevege, have looked at how Australia's history of forestry sector development has informed the way we think when Australian foresters go to work in Asia, Africa, Latin America, etc. For the first hundred years, we over-exploited the best forest resources we had: jarrah, red cedar, hoop pine etc., exporting the timber all round the world. In the second hundred years we have had to find smarter ways of managing what we had left. We have had to look for new technologies, to make better use of what we had. Even if the rest of the world thought it was impossible, for example, to make high quality printing and writing paper out of eucalypts, Australians did it. To saw fast-grown young eucalypt trees into high-quality furniture grade wood? Everybody knew this was impossible, but Australian foresters did it. We found new resources, new species, new silvicultural systems. We introduced new species and domesticated them in Australia. We moved away from the hunter-gatherer approach to forests, 'managing instead of mining' in David Kaimowitz's words. And we are still looking for better ways to integrate social, economic and environmental benefits of forestry and to minimise the downsides.

Such a history is not very different from that which many other countries are grappling with now — the Philippines and Thailand were specifically mentioned today. I'm not saying that Australian forestry has all the answers — in fact, I would argue quite vigorously that we have as much to learn from international collaboration as those we are helping. But I do think we have distinct advantages over many developing countries. Civil society, the rule of law, an independent judiciary, respect for property rights and contracts, and low levels of Korruptsi, Kollusi and Nepotismi (as these are called in Bahasa Indonesia).

So why should Australia be involved? The answer is the triple bottom line: commercial, environmental and social.

Commercial — We have heard of the rapidly expanding markets in China and India today from Rob de Fegely, Steve Midgley and Ian Bevege. Because of major reforms of economic policy, the latent demands of consumers and industries in those countries have been unleashed as their purchasing power has increased through deregulation, access to global markets and trade liberalisation. Hundreds of millions of people can now afford the timber, paper and NTFPs they previously wanted but could not afford. We can sell some more forest products — perhaps significantly more — and we can sell expertise. We can sell technologies. But, by being involved, we can almost certainly learn some new tricks that will pay back here at home, often improving our own practices and technologies.

Environmental justification — Taking Australian native forests out of production and managing them for conservation will almost surely improve biodiversity conservation and ecosystem services here in Australia. But as a result of that, we have put increased pressure on the biodiversity of Southeast Asia and the Pacific — PNG and Indonesia immediately spring to mind — and other countries around the world. It is possible that in better looking after our own natural environment we have had strongly negative and perverse effects somewhere else. So if we are thinking globally we have to be concerned about environmental outcomes for our neighbours. Demands for forest products from China and India could each be even greater than Japan's was in the period 1960–2000. In retrospect, one can see the enormous effect that Japan's demand for imported wood products had on the forests in countries throughout Southeast Asia and the Pacific — Thailand and the Philippines have already been mentioned. Where will the wood come from to satisfy these demands, given the depletion that has already occurred, and that it may be decades — if we start now! — before plantation resources can effectively substitute for logging natural forests in the tropics? Increasing scarcity probably will encourage greater efficiency in resource use, greater recycling and use of substitute products, but it also has made stealing logs from natural forests even more lucrative and tempting for some. This puts still greater pressure on under-manned and poorly protected national parks in many countries.

Likewise at the *social* level, you could argue that it is in Australia's geo-political interests to have greater peace, security and prosperity worldwide and especially in the Asia–Pacific region. But most of all, whether you call it altruism, humanity, sense of justice, religious beliefs or a little voice that tells you what's the right thing to do, the case for effective development assistance for poor rural people in neighbouring countries is very strong.

Conclusion

Forests, forestry and forestry research will not single-handedly eliminate poverty and injustice across any country. They will not bring to an end mis-government, corruption or anarchy. In fact, I have argued that the rule of law, well-defined property rights and well-functioning markets are prerequisites to successful sustainable forest management. These are not attributes that societies can achieve afterwards, as a result of sustainable forest management. But international forestry programs based on sound bio-physical and socio-economic research can ensure that very poor rural people in and around forests do not become even worse off and do have opportunities to significantly improve their standard of living, while maintaining the forest such that it continues to enhance their quality of life and provide local and global ecosystem services.

What do we have to do? As David Kaimowitz said this morning 'Stay the course!'. There are no quick fixes. There is no one magic silver bullet that will fix everything overnight. We have to get all the prerequisites in place. If there was a quick fix, we would not be standing here, still wondering after 30 years of international forestry research and development action, 'Why hasn't it all been fixed yet?'

We have to simultaneously think about the effects of economic policies at the sector level and the effects of other sectors (agricultural subsidies, road-building subsidies etc.). Getting the legislation right; getting the education, training and research frameworks and institutions right. Getting the national-scale social structures right — through the forest law enforcement and governance program, for example. We need to better understand the local micro-social structures because these community organisations are nearly always informal and nearly always invisible to outsiders. As Peter Kanowski said, 'adaptive learning and adaptive co-management is so important'. N.C. Saxena wrote a scathing view of community forestry in India which he titled 'You participate, I decide.'

So we have to stay the course, we have to hang in there. There's no silver bullet.

I have a headache as a result of trying to synthesise everything today. I feel that I have only 64 kb of on-board memory and I am grappling with 8 Mb of problem… insufficient capacity!

But I'm inspired by what has already been achieved in international forestry.

I'm daunted by the challenges still ahead.

I'm excited by the opportunities.

Yes, the challenges are enormous. Why should we take the challenge?

All I can do is quote Sir Edmund Hillary, when asked why he climbed Sagarmatha, 'because it's there, and it has to be done'.

References

Peters, C.M., Gentry A.H. and Mendelssohn, R.O. 1989. Valuation of an Amazonian rainforest. *Nature* **339,** 655–656.

Westoby, J. 1962. The role of forest industries in the attack on economic underdevelopment. [Keynote address to World Forestry Congress, Madrid]. In Westoby, J. 1987. *The Purpose of Forests: Follies of Development*. Blackwell, Oxford, pp. 3–70.

Westoby, J. 1978. Forest industries for socio-economic development. [Keynote address to World Forestry Congress, Jakarta]. In Westoby, J. 1987. *The Purpose of Forests: Follies of Development*. Blackwell, Oxford, pp. 241–254.

Wunder, S. 2005. *Payments for Environmental Services: Some Nuts and Bolt*s. CIFOR Occasional Paper No. 42, CIFOR, Bogor, 24 pp.

Other Crawford Fund Publications since 1994

Tribe, D.E. 1994. *Feeding and Greening the World: The Role of International Agricultural Research.* CAB International, Wallingford, in association with the Crawford Fund for International Agricultural Research, Parkville. xiii + 274 pp. ISBN 0 851 98920 9

Lawrence, Janet (ed.) 1994. *A Profit in Our Own Country.* Record of a seminar conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, 17 May 1994. ACIAR Monograph No. 30, 139 pp. ISBN 1 86320 119 X

Falvey, F.J. 1996. *Food, Environment, Education: Agricultural Education in Natural Resource Management.* The Crawford Fund for International Development and the Institute for International Development, Parkville. xv + 261 pp.
ISBN 0 646 26363 X

Haldane, Julie (ed.) 1996. *Global Food Security: Implications for Australia.* Record of a seminar conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, 28 May 1996. ACIAR Monograph No. 42. 76 pp.
ISBN 1 86320 193 9

Lawrence, Janet (ed.) 1997. *Partners in the Harvest.* Record of a seminar, 'NGOs, scientists and the poor: competitors, combatants or collaborators?', conducted by the Crawford Fund for International Agricultural Research and World Vision Australia, Parliament House, Canberra, 8 April 1997. ACIAR Monograph No. 47. iv + 98 pp. ISBN 1 86320 206 4

Anon. 1998. *Sharing the Best-kept Secret — National Support for International Agricultural Research.* Conference report. The Crawford Fund for International Agricultural Research and The Rockefeller Foundation. 6–10 April 1998. The Crawford Fund, Parkville.16 pp.

Brown, A.G. (ed.) 1999. *Sustainable Forest Management*. Proceedings of the Hermon Slade International Workshop, Melbourne, 30 November – 4 December 1998. The Crawford Fund, Parkville, Vic. vi + 71 pp.
ISBN 0 643 06316 1

Slater, H. 1999. International agricultural research: a fertile field for global progress. *Agricultural Science* **12**(3)**,** 29–32.

Cadman, Hiliary (ed.) 2000. *The Food and Environmental Tightrope*. Proceedings of a seminar conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, 24 November 1999. ACIAR Monograph No. 63, 154 pp.
ISBN 1 86320 279 X

Crawford Fund 2000. *Food, Water and War: Security in a World of Conflict.* Record of a conference conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, 15 August 2000. ACIAR Monograph No. 173, 114 pp.
ISBN 0 64245 023 4

Brown, A.G. (ed.) 2001. *Prosper or Perish: Asian Poverty and the Australian Economy*. Record of a conference conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, 28 June 2001. iii + 58 pp. ISBN 1 875618 67 8

Brown, A.G. (ed.) 2002. *Pathways to Sustainable Forest Management.* Proceedings of the second Hermon Slade International Workshop, Ubud, Bali, 5–8 June 2001. The ATSE Crawford Fund, Parkville, Vic. iv + 88 pp. ISBN 1 875618 72 4

Brown, A.G. (ed.) 2002. *Food for the Future: Opportunities for a Crowded Planet*. Record of a conference conducted by the ATSE Crawford Fund, Parliament House, Canberra, 8 August 2002. The ATSE Crawford Fund, Parkville, Vic. iv + 88 pp. ISBN 1 875618 74 0

Crawford Fund 2003. *A Catalyst for Change: International Agricultural Research:* An Introduction to the ATSE Crawford Fund. The Fund [Parkville, Vic.] 16 pp.

Brown, A.G. (ed.) 2003. *The Livestock Revolution: A Pathway from Poverty?* Record of a conference conducted by the ATSE Crawford Fund, Parliament House, Canberra, 13 August 2003. The ATSE Crawford Fund, Parkville, Vic. vi + 86 pp.
ISBN 1 875618 77 5

Brown, A.G. (ed.) 2004. *Fish, Aquaculture and Food Security: Sustaining Fish as a Food Supply*. Record of a conference conducted by the ATSE Crawford Fund, Parliament House, Canberra, 11 August 2004. The ATSE Crawford Fund, Parkville, Vic. iv + 85 pp.
ISBN 1 875618 82 1

Nairn, M.E., Henzell, E.F. and Williams, M.J. 2004. *Building on Success*. Report and recommendations of an independent review of the ATSE Crawford Fund, March 2004. ATSE, Parkville, Vic. 98 pp.

The ATSE Crawford Fund 2005. *Healing Wounds: An Australian Perspective.* Research that rebuilds agriculture after conflicts and natural disasters. The Fund, Parkville, Vic. 14 pp.

The ATSE Crawford Fund 2005. *Report 1 January 2004 to 30 June 2005.* The Fund, Parkville, Vic. 25 pp.

The Crawford Fund newsletter, *Highlights*, is available from the Fund's website or in printed form. In 2005, an issue was published in April.

The publication below discusses the global setting for international agricultural research. The website of the Cooperative Group for International Agricultural Research (CGIAR) (http://www.cgiar.org/) provides other information.

Alston, J.M., Pardey, P.G. and Taylor, M.J. (eds) 2001. *Agricultural Science Policy: Changing Global Agendas*. John Hopkins University Press, Baltimore, 285 pp. ISBN 0 8018 6603 0