Flannery, Forests, Fuel, Fish and the Future

In his recent lecture in Port Moresby, hosted by WWF and the INA, Tim Flannery sounded an optimistic note. Observing that the world has experienced serious past environmental problems, most recently sulphur dioxide emissions causing acid rain and fluoro-carbons destroying the earth's protective ozone layer, he stated that prompt human intervention and withdrawal of the offending chemicals addressed the problem. Reflecting the Stern Report's findings, he indicated that humanity remains able and can afford to take the necessary action to prevent calamitous global warming, caused by the build-up of "greenhouse gases".

He explained that greenhouse gases pose a much larger problem than earlier pollution, involving massive emissions overloading the atmosphere, with major climatic repercussions, as opposed to small quantities of substitutable chemicals. He argued that the global community cannot afford to defer major action, both to reduce emissions and absorb (sequester) carbon from the atmosphere, and that responsibility falls particularly on countries (industries and individuals) which have generated high incomes from major resource use and emissions (including Australia), and cannot pass the buck to others.

Flannery, however, highlighted that this challenge opens opportunities for countries and industries contributing to cleaning the atmosphere, by storing carbon or replacing polluting technology with low (or nil) emissions, notably for power generation. He emphasised tropical rainforests having a critical role in absorbing greenhouse gases, and, conversely, that their destruction, as in many parts of the tropics (particularly for conversion to other land-uses - such as cattle production) has a very negative impact. PNG, as a current low greenhouse-gas producer and with extensive (if widely impoverished) rainforests, should benefit (financially) by providing a valuable service of storing carbon in natural (and sustainably managed) forests. As with supplying other saleable commodities, like coffee, villagers (and businesses) would be paid for retaining intact forests for absorbing unwanted gases and keep the world habitable.

Flannery's argument that, with extensive, reliable and affordable telecommunications (through competitive internet and mobile markets), it is possible for resource-owners to trade carbon directly with global markets, without middlemen, may seem far-fetched, but it's not so unrealistic. Technology is changing fast and the communications revolution is finally reaching PNG. In impoverished Solomon Islands solar-powered satellite internet services are being introduced into schools for education, trading and other purposes, extending the existing PFnet (HFradio-based email system). Mobiles are used extensively in remote schools in South Africa, including for banking, and in PNG carbon-trading is being undertaken by "ForCert", operating like a cooperative, supporting several FSC-certified, community-owned eco-forestry operations. Whilst initially requiring independent verification mechanisms (using companies, cooperatives or trading exchanges), once markets are more established E-Bay-style direct-trading, as suggested by Flannery, backed by satellite verification (e.g. through Google Earth) might be possible. The process must, however, establish sound credentials from the start, as Forcert is doing, rather than risk jeopardising the whole market with rogue traders.

Scientists took years to reach consensus on climate change and the role of man-made greenhouse gases. Some market were ahead of governments in seeing the need and opportunities from addressing emissions, with governments of some of the richest nations amongst the laggards. With carbon markets operating in Europe and Chicago already, governments must facilitate their development through more comprehensive and rigorous application of rules than under Kyoto, ironing out anomalies and embracing standing forests, not just recent plantings, thereby opening new opportunities and reinforcing traded carbon prices.

Another recent forum addressing resource issues was held at DWU in Madang. This brought specialists, companies, NGOs, and resource owners together from around PNG and the Asia/Pacific region, (though limited government representation). It considered how to enhance benefits from short-lived extractive industries and minimise negative social, economic and environmental impacts. Whilst focusing largely upon mineral extraction, it recognised that 'renewable resources' are often treated as extractive industries, with little effort to ensure harvesting within sustainable limits.

The forum noted the major economic contribution from mining and hydrocarbons, providing, with current high commodity prices, an estimated 29% of PNG's GDP for 2006, with K10.5 billion or about 83% of exports, and roughly 30% of revenue. Agriculture, the major economic sector, slipped to 34 % of GDP, with agricultural exports (excluding forestry and fisheries) declining to 15%, although still the second major export sector. The extractive industries also provide major contributions to provincial and local authorities, local projects and landowners. However, the mineral sector's dominance invariably distorts the national and local economy (often termed the 'Dutch disease') unless government and markets are adequately prepared and developed to restrain fiscal and exchange rate pressure, allow effective resource transfers between sectors and investment and sanitisation of funds for future use. There are inevitable economic impacts, with winners and losers, but the key is ensuring PNG manages the process, rather than being swamped by temporary surges, leaving the majority by-passed, except by negative impacts of raised expectations and foregone opportunities, particularly in non-boom sectors, where the majority are employed.

PNG's extractive industries have experienced a few major social and environmental traumas, but have largely been managed responsibly and to world standards, especially as lessons have been learnt from experience. It is critical that best international standards are applied consistently in PNG, and, as the Madang forum highlighted, regardless of the origin of the operating company .

The Madang conference urged rigorous consultation for proposed mining projects (using Mining Development Forums) being extended to a fully-transparent governance process for the mines' entire lives, as sought under the Extractive Industries Transparency Initiative (EITI). Mineral exploration and extraction have inevitable direct social, environmental and related economic consequences, particularly where there's interaction with rivers or seas. Forum participants agreed that, especially where extensive waste-dumping into coastal waters or new technology are involved (e.g. undersea mining), impact assessments must be rigorous and transparent, erring towards caution, and independent cost-benefit analysis mandatory.

These operations are, after all, planned for some the tropics' richest and most fragile marine habitats, (potentially also requiring areas to be designated 'off-limits').

For forestry and fisheries, despite these industries' financial and political clout, it is time for standards to be raised substantially and greater public oversight, locally and internationally, including through the 'PNG natural resources ombudsman' proposed at the Madang forum. Tuna stocks have been falling worldwide, and now also in the western Pacific. Few are aware of the dangerously competitive and high-tech nature of some tuna harvesting, sometimes involving dozens of jostling vessels and helicopters. Regional agreements and suitable limits must be adhered to, without companies or countries cheating, otherwise everyone will ultimately be losers, especially the main producing nations, including PNG. Slashing the huge current waste (by-catch) and avoiding breeding sites and juveniles are critical. Establishing extensive, scientifically determined, marine conservation areas, where stocks can recover, is also necessary.

Our future health, wellbeing, food security and prosperity and that of our children and theirs are at stake. Economic and environmental problems invariably impact the poor first and worst. Flannery reminded us that humans have the ingenuity and potentially the will. History has also demonstrated dreadful blunders. Many of the resource challenges, including addressing emissions, require cooperation rather than merely ingenuity and competition. Can humankind (including PNG vested interest) set aside their differences to meet the global challenges and is PNG ready to respond to associated opportunities?