Indonesia 20-years after ratifying the Convention on Biological Diversity - a status check

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WHEN THE "CONVENTION ON BIOLOGICAL DIVERSITY" (CBD) was launched in 1992, it was an important milestone for the World's conservation community and for the Global community as a whole. It was the first comprehensive far-reaching international agreement that attracted support from most nations across the Globe. For the first time in history, a majority of the World's nations acknowledged the value of biological diversity and the impending crisis if nothing was done to prevent the onslaught on the World's natural resources. Since then, the human population passed 7.15 billion in July, 2013 (Worldometer, 2014), the total excretion of CO_2 has grown more than predicted and reached 34.5 billion tons in 2012 (Boden et al., 2011; Oliver et al., 2013; Peters et al., 2012. Raupach et al., 2007), the dependency on fossil fuel is at its highest ever, the Earth's seas are getting increasingly polluted and overfished (FAO, 2011; Olden et al., 2007; Pham et al., 2014) and the destruction of tropical rainforests takes place at an unprecendent rate at all continents with tropical rainforests (Hansen et al., 2013; Hansen et al., 2010; Margono et al., 2014, 2012). In light of this, it is tempting to claim that the Rio Convention merely sputters on, and many have questioned its relevance in the 21st Century.

Whilst the adoption of the Rio Convention is a straight forwards process, the operationalization of it requires far more commitment at national and international levels. The task for each nation and the international community is monumental. For the ideas behind the Rio Convention to have real effect on the ground it requires that relevant national policies are formulated, mainstreamed and implemented. This process requires most sectors of society and governance to collaborate constructively. A policy needs a supporting legislative framework, and a responsible agency must be appointment with the mandate to implement the policy cross-sectorally. The implementation of the policy must also be supported by enforcement agencies and penal codes formulated for law-breakers. It needs to be adopted at provincial and district level too, and mainstreamed into local governance. Finally, it requires local citizens to embrace the idea and voluntarily make a concerted attempt to manage their lives accordingly. Whereas policy formulation, legal framework development and enforcement may seem daunting tasks, the biggest challenges often remain with the local citizens and transforming the current economic structure into a system that incorporates environmental and social values into overall budget evaluations. The value of, for example, "clean air" or the cost of "polluted water" is inherently difficult parameters to incorporate into the current economic system.

In a Global perspective, biodiversity conservation is an enormous task that most nations are not yet willing to commit to --- at least not at a scale that makes real positive differences. The cost of managing, for example, the World's terrestrial biodiversity sustainably is estimated at approximately US$ 80 billion annually, and only 12% is currently being committed to this task (McCarthy et al., 2012; CBD, 2012). Despite the Global community's pledged support and commitment to CBD's 2020 Aichi targets there is a huge financial shortfall if all types of habitats (e.g terrestrial, freshwater, marine) should be sustainably managed. Some of the World's largest economies continue to pursue wealth creation through extraction based economic development despite the launch of many international policy intitiatives (e.g. REDD, Climate Change, UNEP Fi).

Indonesia ratified the CBD on the 23rd of August, 1994, exactly 20 years ago. So where does Indonesia rank in a conservation conext? Has there been any meaningful commitment to the CBD and conservation progress?

Indonesia has 566 national parks, nature reserves and wildlife sanctuaries covering 360,693 km², which consist of 490 terrestrial protected areas (225,401

km^2) and 76 marine protected areas (135,291 km^2). The terrestrial protected areas include 43 National Parks, 239 Nature Reserves, 70 Game Reserves, 13 Hunting Parks, 22 Grand Forest Parks, and 103 Nature Tourism Parks. Yet, after Brazil, Indonesia has the second highest rate of primary forest loss in the World (Hansen et al., 2013; Stibig et al., 2014; Wilcove et al., 2014). Even with the Indonesian forest moratorium in place since 2011 new licenses covering approximately 5.5 million hectares have been issued by the Ministry of Forestry for various development purposes. Critics claim that 4.5 million hectares of it have been excised from areas that were originally classified for conservation and that data unavailability undermines confidence in the moratorium, highlighting transparency issues (Sloan, 2014).

The implementation and mainstreaming of the CBD concepts does not always progress optimally in Indonesia. However, serious actions are being taken to meet the 2020 Aichi Biodiversity Targets. *In situ* conservation is carried out through the establishment of conservation areas, such as biosphere reserves, wildlife sanctuaries, national parks, ecotourism parks, forest parks and hunting parks. Coverage of these areas increased from 7.628 million ha in 1981 to 27.968 million ha in 2007 (MoE, 2009). Community-based forestry projects, covering 2 million ha, have also been established, and despite vast tracts of land being developed into palm oil estates, a significant portion of these are also being set aside as "high conservation value" areas. Furthermore, *ex-situ* conservation activities have increased the number of species of flora and fauna being successfully bred in captivity from 171 species in 2006 to 416 species in 2008 (MoE, 2009).

Breeding species in captivity is in itself a poor measurement for conservation success, however. Instead, the Ecosystem Approach is being used to develop a programme for the conservation and management of marine and fish resources. Management plans have also been approved for more than 100 conservation areas, while others are still being developed. Several regencies have been designated as conservation areas realising that these play a vital role in regional development.

Many conservation initiatives are based in the 2003 "Indonesian Biodiversity Strategy and Action Plan (IBSAP)" that was developed with a focus on achieving five goals: 1) to encourage changes in attitude and behavior of Indonesian individuals and society, as well as in existing institutions and legal instruments, 2) to apply scientific and technological inputs, and local wisdom, 3) to implement balanced conservation and sustainable use of biodiversity, 4) to strengthen institutions and law enforcement, and 5) to resolve conflicts over natural resources. Currently, Indonesia is in the process of updating the IBSAP (2003) to 2020. The intention is for the updated IBSAP to be mainstreamed into sectoral policies, plans and programmes through its integration in the Medium-term National Development Plan (2014-2019). The updated IBSAP will also include elements for monitoring and evaluating implementation at the national and local levels. The one issue that has received criticism is that the IBSAP remains a voluntary concept that provinces and districts can chose to accept or reject.

Considering Indonesia's diverse cultural heritage, economic challenges and vast territory, it is not surprising that conservation progress has been slow. Policy implementation lacks behind, too many management plans collect dust on shelves in offices and the majority of Indonesia's national parks and protected areas are considered "paper parks". Yet, important policies are being institutionalised to guide sustainable development processes, and an increasing amount of resources is being allocated for environmental and biodiversity management. "Green" technology and innovation is encouraged and supported, and economic initiatives are set in motion that aim to transform Indonesia's economic framework from classic "extraction based" into a "resource-based" system. Indonesia has also seen a surge in international education being offered for its citizens. One of the most visionary developments is the establishment of the Indonesia Learning Center (ILC) by American conglomerate General Electric in collaboration with three Indonesian state enterprises: Pertamina (state oil & natural gas mining company), PLN (government-owned electricity company), and Garuda Indonesia (the national airline of Indonesia). The ILC intends to provide leadership-training courses both for internal employees and external customers according to World famous Crotonville's curriculum and learning experience. Senior faculty members at Crotonville, New York, are brought to Indonesia to deliver leadership training to the nation's current and future talents. Since good leadership is essential to good governance, Crotonville's entering into Indonesian education and corporate governance promises very positive development prospsects for the nation.

One of the major challenges for the incoming President will be to continue to support the processes of economic change and transformation. His cabinet and advisers must be able to set aside conventional economic approaches that continue to propose economic deficiencies are best fixed with the same problems that created them. At the current Global economic slowdown, Governments across the World institute various conventional economic mechanisms (e.g. lower interest rates; public bail-outs) to encourage public and

coporate spending. In reality, it is like pretending there is consumer demand for various goods even if there is none. At the onset of the 21st century the incoming Government must be steadfast and refrain from the temptation to follow conventional economics and not attempt to combat budget deficiency by creating more depth.

With a population of 230 million citizens, urban planning plays a significant role in biodiversity conservation too. It is tempting to solve urban housing deficiency by setting up standardised concrete buildings, because these can be erected rapidly and rationally. This approach, however, remains rooted in an utopian belief that "livability" can be calculated according to mathematical and economic models. At a planning level, it is easy to subscribe to mapping urban development according to functionality, vis-a-vis separate housing estates, working areas and recreational areas from each other. Whilst it may have economic merits, it creates a one-dimensional environment that rarely meets modern urban citizens' demands for livelihood diversity and experience.

There remain substantial biodiversity challenges for Indonesia in the immediate and long-term future. However, the nation has made a commendable beginning and, despite many challenges, Indonesia lives up to its CBD-responsibilities to a much larger degree than most of its peers.

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