

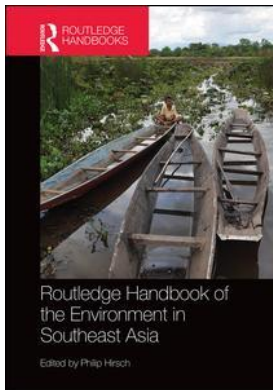
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MYANMAR

Evolving environmental governance under
a regime in transition*Adam Simpson***Introduction**

The way the environment has been historically perceived in Myanmar (Burma) is strongly linked to its turbulent and authoritarian political history (Simpson *et al.*, 2017). Concepts such as ‘the environment’ and ‘environmentalism’ have appeared relatively recently in mainstream Myanmar discourses, with traditional interpretations of nature tending to focus on exploitable natural resources. Myanmar is extremely geographically and ecologically diverse, stretching from northern snow-capped mountains through the flatlands of the central dry zone to the palm-dotted beaches of the southern tropical coasts and islands. Governance of the ecosystems in these complex environments is still in its infancy. While most countries in the world have well-entrenched laws ensuring that public participation, environmental impact assessment (EIA) and social impact assessment (SIA) are key components of any major development activities, these types of legislated requirements have historically been absent from Myanmar. Between 1962 and 2011, Myanmar was ruled by authoritarian governments that had little interest in or inclination for environmental protection or community consultation. While there existed forestry laws, including those that recognized community forests, and a Land Acquisition Act, which was meant to regulate compensation for farmers, there were no laws that adequately regulated pollution or protected biodiversity and no law existed that took a holistic approach to the management or protection of the environment overall.

This dire situation first began to shift during the quasi-civilian government of President Thein Sein between 2011 and 2016, with an Environmental Law, which had been drafted and redrafted over 15 years, finally passed in March 2012 (Government of Myanmar, 2012). The various rules and procedures that were to implement this law took several years to be finalized, with implementation of, for example, the EIA Procedures left to the newly formed National League for Democracy (NLD) government, led by Aung San Suu Kyi, from 2016. Due to these governments’ lack of experience and expertise in this area, the Asian Development Bank (ADB) assisted with the drafting of the EIA Procedures, Rules and National Environmental Quality Standards through a Technical Assistance Grant under the Greater Mekong Subregion Core Environment Program (ADB, 2014).¹ Although the ADB itself is regularly criticized for not having adequate public participation and environmental safeguards, the historical lack of any

environmental protections in Myanmar makes the standards of international financial institutions such as the ADB look relatively thorough (Simpson and Park, 2013).

Following promulgation of the Environmental Law, draft Environment Conservation Rules (Government of Myanmar, 2014a), draft EIA Procedures (Government of Myanmar, 2014b) and draft EIA Rules (Government of Myanmar, 2014c), which established the operation of the law, began circulating in Myanmar. Workshops were held with public and private stakeholders during Thein Sein's government in a consultation process that until the political reforms was entirely foreign to Myanmar. According to an environmental lawyer who was involved with the process:

the EIA Regulations do reflect best practice but there are huge hurdles to effective implementation. There needs to be a refocus on sustainable development and environmental protection to avoid further significant and long-term environmental disasters in Myanmar. A key element will be the effective participation of the community and civil society in the EIA process.²

When these regulations are finalized and implemented, they may finally initiate a process of formalized and comprehensive state-led environmental governance in the country. Even allowing for the dramatic reforms currently taking place, however, the military's traditional dominance in both the political and economic spheres is likely to limit the effectiveness of measures nominally designed to increase participation and ensure sustainability (Farrelly, 2013; Jones, 2014; 2016; Macdonald, 2013). That a country in Asia with a population of 53 million is only just initiating a package of environmental protections indicates the distance that the country needs to travel before effective environmental governance can occur (Simpson, 2015b).

This state-led environmental governance is desperately needed in Myanmar, both to address the historical environmental degradation that occurred under the economic mismanagement of the military dictatorship and due to the environmental strains being unleashed by the current political and economic reform process. In some respects, the lack of economic development in the country throughout five decades of authoritarian rule resulted in a less disastrous environmental impact on the local environment than in its neighbour, Thailand, which developed large and highly polluting heavy industries over the same period (see chapter 28 and Simpson, 2015a). Likewise, fragile coastal areas have not been degraded to the same extent as in Thailand because mass tourism remains in its infancy. In other respects, the lack of coherent environmental governance and policymaking resulted in widespread and ad hoc mining, logging and energy projects that were undertaken without regard for the adverse environmental consequences, a situation compounded by civil conflict between the central government and ethnic minorities in the mountainous and resource-rich border regions. Although upland regions, such as Kachin State in the north and Kayin (Karen) State in the east, face a plethora of environmental problems, it is deforestation from unchecked logging that is of most concern for local communities and is often blamed for increased flood events (MacLean, 2003; Tint Lwin Thuang, 2007). Likewise, large-scale, artisanal and small-scale mining put together have an enormous environmental impact due to the lack of environmental regulations, resulting in deforestation and the pollution of rivers from mine tailings. Mines are spread throughout Myanmar and produce zinc, lead, silver, tin, gold, iron, coal and gemstones, particularly jade (Global Witness, 2015). One of the biggest and most contentious mines is the Letpadaung (Monywa) copper mine in Sagaing Region, which has been the site for recent protests and conflict (AFP, 2013; Fortify Rights and International Human Rights Clinic, 2015; Smith, 2007). These unregulated exploitative activities

have had dire impacts for the environmental security of many communities in Myanmar, particularly ethnic minorities. The marginalization of these ethnic communities often only intensifies their desire to differentiate their identity from the Bamar (Burman) majority.

Myanmar's economy and society are dominated by agriculture, which accounts for half its GDP and over half its workforce (Tun Myint, 2007; Turnell and Bradford, 2013). The historical lack of an overarching land-use policy, despite the passing of recent laws (Oberndorf, 2012), together with the existence of a range of outdated, ad hoc and incoherent rules and regulations related to land management, has resulted in the abuse of land-use rights and widespread land degradation (Tin Htut Oo, 2012). At the times when the government has engaged in regulation, it has often been misguided, with a top-down counterproductive focus. Agricultural production has traditionally been controlled through directives specifying the commodities that individual farmers are to produce. These directives had more to do with the whims of the generals during military rule than with effective environmental governance, and the results were often inappropriate for a particular climate or region.

As a result of ineffective government engagement on environmental issues, it has been largely left to non-state actors to draw attention to environmental issues, with civil society providing a form of 'activist environmental governance' (Simpson, 2014). During direct military rule, however, local civil society activism was extremely limited, particularly that which challenged state authority (Doyle and Simpson, 2006). Much of this activism, such as that against hydroelectric dams on the Thanlwin (Salween) River, was therefore undertaken by an 'activist diaspora' beyond the reach of the government in border 'liberated areas' or in neighbouring countries (Simpson, 2013a).

The remainder of this chapter explores the historical and contemporary dynamics of environmental governance in Myanmar and proceeds in two main sections. The first section provides an overview of the historical challenges to environmental governance and security during the period of military rule. It adopts a critical approach to environmental security, which is intimately linked to human security (Barnett, 2001), and outlines some of the key environmental challenges Myanmar faces, particularly relating to energy policy and climate change. It also establishes the predominant forms of environmental governance during this period. The second section explores the emerging state-led forms of environmental governance and the difficulties more recent governments are facing in their implementation.

Environmental governance under military rule

In most societies, but particularly in the countries of the South, achieving human and environmental security is linked to democratic governance and the protection of human rights. There are few countries in the world where the evidence for such links has been more compelling than Myanmar. Myanmar's government from 1962 to 2011 was unequivocally undemocratic and traditionally authoritarian. The possibilities for genuine public dialogue and dissent over environmental issues were particularly constrained, and public participation in both informal and formal politics was strictly limited. The rapacious exploitation of the country's environment and natural resources by the military produced adverse impacts on the human and environmental security of the country's population, in terms of sustainable access to water, food and energy (Floyd and Matthew, 2013). McCarthy (2000, pp. 260–261) argues that there was a 'hard sell' of the country's natural resources, with little evidence of this wealth being redistributed among Myanmar's people, nor any evidence of long-term planning guiding Myanmar Investment Commission approval of foreign investment projects. In the early decades of military rule, during the period of 'the Burmese road to socialism', state authoritarianism and incompetence

depleted ecosystems while running down the economy. A precipitous fall in foreign aid following a crackdown on protests in 1988 left the economy on the verge of collapse. The previous year, the United Nations listed Myanmar as a least-developed country, a humiliating fall for a nation formerly considered one of the more prosperous in the region.

When a new military dictatorship came to power in 1988, it offered attractive incentives for foreign investment through the Union of Myanmar Foreign Investment Law. This created a quasi-market economy that opened the door to joint ventures between state or military-backed domestic enterprises and foreign companies that were interested in exploiting Myanmar's natural resources, particularly its energy reserves (Callahan, 2009, pp. 47–48; Chenyang, 2010; Hughes, 2011, pp. 195–196; Lintner, 1990, p. 165; MacLean, 2003, p. 16; Myat Thein, 2004, p. 123). The shift towards a market economy in agriculture brought in international investors and a rapid expansion of large-scale commercial agriculture with export-oriented plantations established on land designated as 'wasteland', resulting in an increased use of chemical fertilizers and the removal of small-scale farmers – who had been protected under the previous socialist policies – from their customary land. This practice, reinforced in the Farmland Law and Vacant, Fallow and Virgin Lands Management (VFV) Law of 2012, resulted in widespread land appropriation and conflict across the country (Oberndorf, 2012, p. 3). Nevertheless, these laws contained some improvements over previous laws, including recognition of non-rotational taungya (Menziez, 1988) in upland areas as a legitimate land use rather than as a primitive agricultural activity, which was the traditional government view.³

At the same time as Myanmar shifted towards a market economy, there were some tentative initial steps at state-led environmental governance. In 1990, the National Commission for Environmental Affairs (NCEA) was formed to regulate the use of natural resources and set environmental standards, but it was severely limited by its own resources. Ten years after its formation, its budget was still only approximately US\$6,000 and although this had doubled by 2004/2005, it was still barely enough to meet the administrative costs (BEWG, 2011, p. 18; NCEA and UNEP, 2006, p. 72). At this time, it collaborated with the United Nations Environment Programme and the ADB to prepare a *National Environmental Performance Assessment (EPA) Report*, which provided useful baseline data on Myanmar's environment (NCEA and UNEP, 2006). In the absence of a clear, effective and unified legislative framework, however, the report languished on office desks while the rapacious exploitation of the country's natural environment continued unabated.

The widespread destruction of forests, mangroves and ecosystems that accompanied this activity exacerbated the impacts of natural disasters such as Cyclone Nargis in May 2008, which killed more than 140,000 people, destroyed 800,000 houses and left millions of Ayeyarwady (Irrawaddy) Delta residents, mostly ethnic Kayin (Karen), homeless and facing disease and malnutrition. The military regime's immediate response to the cyclone was to hold up visa applications for foreign aid workers and journalists and to deny entry to Western aid deliveries, leading to a massive build-up of food, medicine and disaster response expertise in Bangkok in the crucial days following the event (Fink, 2009, pp. 108–110; Larkin, 2010, pp. 8–10; Paik, 2011; South, 2009, p. 227; Vicary, 2010, pp. 214–218). These actions compounded the environmental insecurities already inflicted by the military through extensive coastal mangrove destruction, fuelled by the growth of military shrimp and fish farms, which resulted in greater flooding and devastation along the cyclone's path. In the aftermath of the cyclone, the ASEAN Secretary-General blamed this extensive mangrove destruction, which removed a natural barrier for storm surges and tsunamis, for the enormous death toll in Myanmar (Kinver 2008).

Climate change concerns emerged in the rest of the world well before the end of military rule in Myanmar. Compared with the rest of Southeast Asia, the military regime was somewhat

insulated from these concerns by the absence of international development assistance programmes and it continued to give low priority to such issues. Yet climate change will be one of the most significant environmental issues for Myanmar's future, because it is likely to exacerbate most existing environmental problems and also create new ones. The ADB lists climate change and pollution as two of the key risks facing Myanmar (ADB, 2012a, pp. 32–33). Myanmar is listed as one of the three countries globally most affected by climate risk in 1993–2012 (Kreft and Eckstein, 2013). Extreme climate events such as Nargis are likely to be more common and more severe, and the monsoon – upon which much of the country relies for its rice harvest – is likely to become more unpredictable. Already, Tun Lwin, the former Director General of the Bureau of Meteorology, contends that since 1978 the character of the monsoon has changed, becoming more unreliable, with the rain intensity increasing.⁴ Due to these impacts, energy and land-use policies need to consider both likely future climate variations and the impact of policies on climate change itself. Myanmar's historical contribution to climate change is quite small. Reliable figures are difficult to come by for Myanmar itself, but the estimated per capita emissions between 1960 and 2005 for two other Southeast Asian countries at a comparable stage of development, Cambodia and Laos, count for approximately 3 tons of CO₂; the amount for China is 68, with Australia and the US at 496 and 720 respectively (Biel and Muffett, 2009, pp. 10–12). Nevertheless, other Southeast Asia countries, such as Indonesia and Malaysia, have made significant contributions to climate change in recent years through deforestation and greenhouse gas emissions. To avoid exacerbating climate change, Myanmar therefore requires low carbon emission land-use and energy policies.

Despite the potentially devastating impacts of climate change on Myanmar's agriculture, its main economic sector, the government has historically shown little interest in mitigation or adaptation. Since 1992, however, it has been a signatory to the UN Framework Convention on Climate Change, Article 6 of which promotes education, training and public awareness on climate change. With Article 6 funding through the UN Global Environment Facility, ECODEV, an NGO founded by Win Myo Thu, the most prominent local environmentalist, began a project of national communication while the country was still under military rule.⁵ It organized the country's first national climate change conference while Win Myo Thu travelled the country highlighting climate change issues. He was also the climate change adviser to the NCEA, which covered all government-related climate change issues, and the national consultant for the National Biodiversity Strategy and Action Plan on conservation. He played a key role under the previous regime as an effective and respected NGO activist who was also trusted by the government.

One of the key areas relating to climate change is energy policy, but in Myanmar under military rule energy became a proxy for the ruthless exploitation and mismanagement of Myanmar's natural resources and the repression of ethnic minorities. Energy access and usage throughout the country is extremely low. Although, as with many developmental statistics in Myanmar, reliable data is unavailable, the electrification rate was estimated at 13 per cent in 2009 by the International Energy Agency (International Energy Agency, 2010) and 26 per cent in 2011 by the ADB (ADB, 2012b, p. 23). This ADB figure included an average of 16 per cent across rural areas while Yangon, the commercial capital, recorded the highest rate of 67 per cent. Even these electrification rates provide an overly optimistic picture because rationing and unscheduled blackouts are ubiquitous, even in Yangon. Outside of the major centres, electrification is limited and, in some ethnic minority regions, virtually non-existent. Total installed capacity of the grid in 2011 was 3,361 megawatts, with the energy sources being hydropower (75 per cent), gas (21 per cent) and coal (4 per cent). Due to poor maintenance of the gas and coal power plants and a lack of water during the dry season, however, the peak load during the driest months was only 1,533 megawatts. As with many other developing countries, simple biomass technologies,

such as fuelwood, charcoal, agricultural residue and animal waste, have historically provided the dominant fuel source, supplying almost 70 per cent of the country's primary energy (ADB, 2012b, p. 3).

These extreme energy shortages existed in the context of the development, over the past two decades, of the country's energy sector for exports in return for foreign exchange. Following the crackdown on protesters in 1988, Myanmar began to face a range of sanctions from Western governments that reduced its ability to trade with Western countries or receive assistance from international financial institutions (Simpson, 2013c). US and EU sanctions on investments in Myanmar were not fully installed until the late 1990s, but by that time the Yadana and Yetagun natural gas pipeline projects from Myanmar to Thailand were under way. These projects were backed by a range of transnational corporations – including Unocal (now Chevron) from the United States, Total from France and Premier Oil from the United Kingdom (which later sold its stake) – that partnered with PTTEP from Thailand and the military government's Myanmar Oil and Gas Enterprise (MOGE) (Simpson, 2007). As sanctions tightened, new Western investments dried up while China's economic dominance in the region increased; its state-backed corporations played an increasingly prominent role through investment in Myanmar's energy sector in hydropower and oil and gas (Haacke, 2010; Kyaw Yin Hlaing, 2009; Steinberg and Fan, 2012; Thant Myint, 2011).

Government revenues from the energy sector began in earnest at the turn of the century as Myanmar's Yadana gas started to arrive in Thailand, providing much-needed foreign exchange for the military regime. These revenues continued to increase, with Yadana and Yetagun gas being the major source of foreign currency – approximately US\$3 billion gross and US\$1.5 billion net in 2010–2011 (Turnell, 2012, p. 146) – and constituting about 45 per cent of the country's total exports. Over that decade, however, major new energy exporting projects were established without Western participation. China's CNPC began building the Shwe gas pipeline across Myanmar from Rakhine (Arakan) State to Yunnan province and PTTEP began building the Zawtika gas pipeline to Thailand. Meanwhile, China Power Investment Corporation and its partners started building the \$3.6 billion Myitsone dam in Kachin State, which was expected to provide up to 6,000 megawatts of electricity, primarily for export to China, and the Bangkok-based Italian-Thai Development (ITD) Public Company Ltd proposed a 4,000-megawatt coal-fired power station as part of the Dawei Development Project in Tanintharyi (Tenasserim) Region, a multi-billion dollar heavy industry project on 15,000 acres of land leased to ITD at 15 cents per square metre.⁶

These, and other, projects were likely to cause a variety of environmental problems, mainly in the ethnic minority areas of Myanmar's mountainous border regions. Hydropower and natural gas are less harmful than coal in relation to climate change and local pollution, but large-scale hydropower projects in particular had dire ramifications for fisheries, downstream water security and displaced local communities. The exploitation of natural gas rather than coal or oil also had less to do with conscious government policy and more to do with the geological serendipity of plentiful reserves. For the many destitute and energy-poor (Sovacool and Drupady, 2012) communities of Myanmar, the exporting of most of these energy resources to fund ongoing authoritarian rule – and white elephants such as the new capital, Nay Pyi Taw – provided little hope for improved energy and environmental security (Simpson, 2013b). Figures extracted from the government's mouthpiece, the *New Light of Myanmar*, demonstrated that the two ethnic minority provinces that hosted the Yadana and Shwe gas pipelines, Tanintharyi (Tenasserim) Region and Rakhine (Arakan) State respectively, had the two lowest per capita levels of electricity usage in the country. Six years after the gas in the Yadana pipeline started flowing, the promises of improved access to electricity for local communities remained unfulfilled, with

usage in Yangon 114 times higher than that of Tanintharyi Region (Simpson, 2014, p. 84). These insecurities faced by ethnic minorities built on a long history of repression by the military government and resultant civil conflict (Lintner, 1999; Smith, 1999; South, 2009). The traditional strategy adopted by the Bamar-dominated military of divide and rule, compounded by the exploitation of their natural resources, only reinforced ethnic minorities' desire to promote their ethnic identity to differentiate themselves from the Bamar majority.

Under military rule, there was little opportunity for local dissent, and domestic environmental activists – particularly those based in ethnic minority areas – who questioned the necessity or rationale behind these projects were harassed by the military and its intelligence service, including with arrests and torture. As a result of this repression, and particularly the crackdown of 1988, many activists removed themselves from Myanmar proper to the 'liberated' border regions controlled by ethnic minorities, or neighbouring countries such as Thailand. In the absence of effective state-led environmental governance, this 'activist diaspora' (Simpson, 2013a), which included numerous ethnically based environmental NGOs, provided the most fertile and important environmental governance of energy projects in Myanmar during this period. These activists undertook dangerous covert research in Myanmar proper and the liberated areas to produce environmental reports and assessments, with a strong justice focus on security and human rights, which were then used to pressure corporations and Western governments to ensure that they did not invest in these destructive projects (Simpson, 2014). They did not lobby Myanmar's military government itself, rightly concluding that their submissions would not be received. All this changed, however, when a new government was installed following the national elections of 2010. Although under the 2008 constitution the military kept a tight grip on the levers of power, the new government, under President Thein Sein, began a process of political and economic liberalization that provided new opportunities for domestic environmental governance, for both the state and domestic activists.

Environmental governance under a 'new' regime

In Thein Sein's inaugural address to the country's new parliament on 30 March 2011, he indicated that the new government was prepared to listen to a more diverse range of voices in society and to oversee greater political and economic freedoms. Initially, observers and activists were somewhat sceptical, having heard similar statements from the military before, sometimes just preceding a crackdown, but as the year progressed it became clear that new levels of openness were being permitted. The campaign to protect the Ayeyarwady River against the Myitsone dam and other hydropower developments, which had been conducted underground during military rule, gradually became public with a well-publicized visit by Aung San Suu Kyi to a public art exhibition promoting the river. On 30 September 2011, Thein Sein's six-month anniversary in power, he made the stunning announcement that, in response to community environmental concerns over the project, the Myitsone dam would be suspended for the remainder of his five-year term. This was an unprecedented acknowledgement by the government that it would no longer *automatically* force through large-scale environmentally destructive development projects that were strongly opposed by the community. This decision gave local activists more confidence that they could challenge existing developments, and in January 2012 the Dawei Development Association, a newly formed NGO promoting 'green development', held a protest on the beach near the proposed site of the Dawei Development Project. Later that month, the government announced the cancellation of the Dawei 4,000-megawatt coal-fired power station.⁷ This announcement further reinforced the view that local communities

and domestic environmental groups would now be able to influence some development decisions, particularly those related to the export of energy.

Despite this optimism, and the increasingly visible campaigns by domestic environmental activists, the Shwe gas pipeline was completed in May 2013 and gas started flowing to Yunnan in China in July. In addition, the Zawtika gas pipeline to Thailand was completed in 2014. Nevertheless, the government, having been brought in from the cold by Western governments, was displaying an openness that indicated that real change was occurring. In April 2013, daily newspapers showed up on Myanmar's street corners for the first time in five decades, allowing relatively free reporting of the debates over environmental governance. In May, Myanmar sent a delegation, sponsored by AusAID, to Australia for conferences on Mining for Development and the Extractive Industries Transparency Initiative (EITI), which included environmental activists as well as the Ministers for Mines and Energy and civil servants. This was the first time that the ministers had been in such close contact with activists for an extended time and the Minister for Mines, Myint Aung, was particularly interested in foreign academics' views on the Shwe Gas Project.⁸ Although significant renegotiation of the Shwe gas contract was considered unlikely, given its intense importance to China's energy security, the Minister announced to parliament two months later that the contract for the Letpadaung (Monywa) copper mine had been re-negotiated to provide more favourable terms for the government and local communities at the expense of China's Wanbao Mining Ltd, although activists maintained that local communities had still not been consulted (AFP, 2013).

Consideration of environmental impacts in development decisions within Myanmar's government is quite new, reflected in the formation, in 2012, of the first ministry with this designated responsibility, the Ministry of Environmental Conservation and Forestry. With the help of the ADB, the Environmental Conservation Law and its associated rules and regulations do, as noted above, reflect 'best practice', but the application of the rules will only occur when new developments are proposed. Their efficacy will be dependent on the ability and integrity of responsible ministers and civil servants, so it will be some time before they are truly tested. Environmental groups have had some input into these laws, but their progress through the parliament into law was still relatively opaque, reflecting the government's historical lack of civil society input. New laws on land use, such as the Farmland Law and the Vacant, Fallow and Virgin Lands Management Law, were pushed through parliament relatively quickly in 2012 and have been criticized by groups such as the Food Security Working Group's Land Core Group as providing 'weak protection of the rights of smallholder farmers in upland areas [and] remain[ing] designed primarily to foster promotion of large-scale agricultural investment' (Oberndorf, 2012, p. iii). While the emerging legislative process surrounding these laws is a vast improvement on Myanmar's previous efforts, the government still has much work to do to provide a leadership role in effective environmental governance.

Conclusion

Historically, environmental governance in Myanmar has been largely the domain of transnational environmental activists, as the Myanmar government under military rule had few laws that promoted environmental protection, and those that existed were applied in an ad hoc manner and were broadly ineffective. The political and economic transformation that is currently underway in Myanmar has allowed more recent Myanmar governments, with the help of international organizations, foreign governments and civil society, to begin a process of integrated state-led environmental governance for the first time. Aid agencies such as AusAID and the United Kingdom's DfID have rapidly expanded their aid programmes in Myanmar and,

having bypassed the state until 2011, they now work with the state to provide much-needed international expertise in environmental and natural resource governance, as well as health and education. Parts of the government have shown a hitherto unknown willingness to work closely with civil society actors through processes such as the EITI, which requires significant transparency of revenue flows within the extractive industries.

President Thein Sein announced Myanmar's intention to join the EITI in December 2012. One of the first activities required to start the compliance process was the formation of a Multi-Stakeholder Group (MSG), which manages the EITI in each country, with equal votes between civil society, industry and government. The Myanmar Development Resource Institute (MDRI), which was the original designated national EITI coordinator (a responsibility now being transferred to the Ministry of Finance), sees the Myanmar EITI (MEITI) as a vehicle for getting tripartite cooperation between these and other actors, rather than as a 'stand-alone process'.⁹ As trust-building activities, these processes provide opportunities not only to improve environmental governance across the country but also to facilitate the evolving peace process, which is intimately tied to the equitable sharing of natural resources.¹⁰ Nevertheless, decades of authoritarian rule and disinvestment in education and effective institution-building in the country have left government administration in a parlous state. Although the first MSG finally met on 8 February 2014, there was a sense of chaos in the MEITI Office in the lead-up to the meeting as the designated dates shifted to and fro.¹¹ The meeting was eventually held in Naypyitaw on a Saturday, leaving the participants virtually stranded in the capital with no afternoon flights back to Yangon. The problem of inflated expectations throughout the country in relation to what the EITI can achieve compounds the difficulties facing the MEITI team. The EITI, while beneficial in some respects, will be far from a panacea for natural resource governance in Myanmar.¹²

Despite the election of an NLD government in 2015, the ability of Myanmar's government and bureaucracy to provide effective environmental governance is still limited by its lack of experience in this area and the residual distrust of communities, ethnic groups and activists, but the transition to more democratic modes of governance has begun. The extent of Myanmar's dismal record on environmental governance was indicated, however, at the launch of the Resource Governance Index by the Revenue Watch Institute (now the Natural Resource Governance Institute) (2013) at the 2013 EITI Global Conference in Sydney. As the Minister for Mines looked on, the Index was unveiled, revealing that Myanmar ranked last out of 58 resource-rich countries in terms of the quality of governance in the extractive sector, with a score of 4 out of 100. There are therefore enormous environmental challenges facing both Myanmar's society and the post-2015 NLD government. Underpinning all the social and environmental challenges it faces, moreover, is the threat of climate change, which has the potential to inflict devastating environmental damage across the country, requiring community and civil society participation and engagement in mitigation and adaptation through key policy areas such as land use and energy.

Notes

- 1 Senior Environmental Safeguards Specialist, Asian Development Bank, email to the author, 13 February 2014.
- 2 Matthew Baird, environmental counsel, email to the author, 18 February 2014.
- 3 Ohnmar Khaing, Coordinator, Food Security Working Group, interview with the author, Yangon, 22 June 2012.
- 4 Tun Lwin, former Director General, Bureau of Meteorology, interview with the author, Yangon, 9 May 2011.

- 5 Win Myo Thu, Managing Director and Founder, ECODEV, interviews with the author, Yangon, 5 January and 10 May 2011.
- 6 Winston Set Aung, Deputy Minister, Ministry of National Planning and Economic Development, interview with the author, Nay Pyi Taw, Myanmar, 29 April 2013.
- 7 Bobo Aung, activist with Dawei Development Association, interview with the author, Yangon, 26 April 2013.
- 8 Myint Aung, Union Minister, Ministry of Mines, Republic of the Union of Myanmar, interview with the author, Sydney, 23 May 2013.
- 9 Zaw Oo, Director of Research and Programs and Leader MEITI, Centre for Economic and Social Development, Myanmar Development Resource Institute, interview with the author, Sydney, 23 May 2013.
- 10 Aung Naing Oo, Associate Program Director, Myanmar Peace Centre, interview with the author, Yangon, 13 June 2013.
- 11 Min Zar Ni Lin, Research Associate and Deputy Leader, MEITI, Centre for Economic and Social Development, Myanmar Development Resource Institute, interview with the author, Yangon, 3 February 2014.
- 12 International Adviser to MEITI, position funded by UK Department for International Development through the World Bank, interview with the author, Yangon, 4 February 2014.

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