Changing Socio-Natures in South-East Asia

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South-East Asia's environment is of special relevance to the world today. This is not simply because of its particular geological and geographical history (periods of interaction and separation with Asia and Australasia, endemic speciation on the thousands of islands), its tropical forests, and its reef-lined coasts which have made it into one of the globally most bio-diverse regions (Sohdi & Brooke, 2006). In more recent human history, the geographical location of South-East Asia between China and India, Arabia, and Europe led to the early integration of its environmental resources into global trading flows, also significant to its eventual colonial subjugation by European powers (Reid, 1993). The experience as a major political fault line during the so called Cold War and subsequently, export-led agriculture and industrialisation in the region, transformed the way South-East Asian societies interacted with and exploited the environment. The environmental crisis that accompanied this economic success story is an extreme example of the challenge we face to create a sustainable future today.

This urgency of environmental change and crisis in South-East Asia has given rise to an increasing number of publications on environmental issues in the region. Rather than seeing the environment as 'nature' outside of human society, most of these writings have focussed on the changing relations between society and nature. Most authors can be located within an increasingly influential tradition of Political Ecology (Robbins, 2012) that looks at the "social relations of nature" ("gesellschaftliche Naturverhältnisse", Görg, 1999), the "social production of nature" (Smith, 1984) and "socio-natures" (Swyngedouw, 1999). At issue are how societies appropriate nature, how they thereby produce land, forest, water, and urban socio-natures, and how this reciprocally influences social relations of production, exploitation, power, and conflict.

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At one level, the changing socio-natures of South-East Asia can be seen as a result of successive waves of commoditisation processes and the "dynamic relationships between commoditization, nature, people and places" that this entailed (Nevins & Peluso, 2008, p. 2). The way in which these commoditisation processes were organised, influenced how societies and states developed. Long before colonial times, non-timber-forest-products (NTFPs) were exchanged down rivers, linking forest-based peoples in the interiors via intermediate trading centres (often at the mouth of the river) to China (Tagliacozzo, 2005). This gave rise to "dendritic systems" (Bronson, 1977; Dunn, 1975) of politically independent but mutually trade-dependent societies. Later, wars were waged over the control over NTFP extraction and trade, leading to the emergence of regionally powerful trading empires such as Srivijaya, Angkor, Ayutthaya, or Makassar.

Trade with forest and agro-forestry commodities played a defining role in the colonial interest in South-East Asia. For several hundreds of years, Portuguese, Dutch, and English trading companies waged war against Malay, Javanese, Bugis, and Moluccan peoples and each other for the monopoly over the spice trade (Reid, 1993). Nutmeg and cloves, cultivated as orchards on the Moluccas, were in such high demand that they were worth their weight in gold in London and Rotterdam. Subsequent colonial domination of the region at first took over and expanded existing NTFP trading networks, exhausting the stocks of products such as *gutta percha*, camphor, or bird's nests (Columbijn, 2006; Potter, 1997).

But the new colonial powers soon had a more far-reaching and long-term impact on the social relations of nature in the region. In particular, the colonial powers developed a timber industry that was dependent on large amounts of capital and waged labour for timber extraction and milling (Bryant, 1997; Peluso, 1992; Pye, 2005) and new systems of plantation agriculture. Sugar, tobacco, and rubber estate owners on Java and Sumatra, in the Malay states, and in the Mekong delta imported labourers from as far as China and India to clear large areas of forests and initiated small-scale agriculture for new monocultures (Breman, 1990; Brocheux, 1995; Stoler, 1995). This represented a qualitative shift from expanding market exchange to introducing capitalist relations of production, creating new landscapes of produced socio-nature.

The productions of these socio-natures were political projects that changed power relations at different scales and created new political ecologies of South-East Asia. While expanded exchange networks could be accessed by the control over trade cen-

tres, the timber industry and plantation agriculture required "territorial control" (Vandergeest & Peluso, 1995), i.e. the principle of state ownership over land and forest in a defined and mapped area. The colonial state in general and forest administrations in particular strived to exclude customary use of forest resources by the peasant population (Bryant, 1997; Cleary, 2005; Kathirithamby-Wells, 2005; Peluso, 1992; Vandergeest, 1996). Subjugating nature was a means "to improve" (Li, 2007) – a modernising and civilising project to develop the colonies. Meanwhile, dispossession of peasants for commercial plantations, new taxation systems, and labour laws created gendered systems of indentured labour for commoditised agriculture (Breman, 1990; Stoler, 1995).

If the colonial experience was a defining one in the region (Thailand – although not colonised – copying similar structural processes), a second common experience of long, protracted war recalibrated the complex interaction between political regime and environment. Anti-colonial liberation struggles merged with World War II, continuing and intensifying as proxy wars between the United States, the Soviet Union, and China, and transforming into long civil wars, creating their own brutal socio-natures. Cambodia, for example, became caught up in the American war in Vietnam, in which forests became guerrilla cover to be destroyed by intense bombing (half a million tonnes of bombs 1969-73; Kiernan, 1989) and Agent Orange. Similarly, rice fields were systematically destroyed by using the herbicide Agent Blue (Westing, 1976). Under the Khmer Rouge, agricultural production became collectivised under a war economy that prioritised rice exports to China in exchange for weapons – killing millions through overwork and starvation (Kiernan, 1996). In the subsequent civil war lasting into the 1990s, the Khmer Rouge and the Vietnam-backed forces financed their troops through extensive logging, creating a peculiar political ecology of forest destruction based on conflict and cooperation between warring parties (Le Billon, 2000, 2002).

Although the social relations of nature – particularly access to land and forests – were a major factor in the social upheavals against the colonial powers (Peluso [1992] writes of "forest-based agrarian war" in the case of Indonesia), the post-colonial nationalist governments of South-East Asia prolonged many of the principles set down by the colonial territorialisation efforts. In the name of development, colonial forestry departments were revamped and geared towards national timber industries (Broad, 1995; Bryant, 1997; Cooke, 1999; Peluso, 1992; Pye, 2005) and export networks

(Dauvergne, 1997), increasing deforestation rates across the region (Aiken & Leigh, 1992; Hirsch, 1993). The plantation economies, too, were nationalised and expanded (Stoler, 1995). In forestry and agriculture, coalitions between corporations and political elites pursued more profitable and permanent conversions such as eucalyptus and acacia pulp and paper plantations (Lang, 2002) and oil palm (Colchester et al., 2006; Marti, 2008).

Water socio-natures also became the target of national development plans. Thailand, Malaysia, Indonesia, and the Philippines systematically developed their industrial fisheries and trawler fleets, leading to overfishing and increasing conflicts with small-scale fishers (Butcher, 2004). Special development fantasies evolved around rivers. Coalitions of government planners, energy corporations, and engineers strived to subdue and control their raw and seasonally wild power with dams that promised the double benefits of energy and irrigation (Molle, Foran, & Käkönen, 2009). Meanwhile, industrialisation and urbanisation created new problems of heavily polluted urban riverscapes (Lucas & Djati, 2007).

Developmentalist strategies based on the exploitation of natural resources were implemented by authoritarian regimes of various shades. Large-scale infrastructure projects were wedded to centralised state control over resources and to the politics of repression. Suharto's New Order regime in Indonesia was a stark representation of this regional trend. The mass killings of labour and peasant activists in 1965 radically changed the social landscapes of land reform on Java (Cribb, 1990) and plantations in Northern Sumatra (Stoler, 1995), laying the ground for an unchallenged export-led industrialisation. Large-scale projects such as the Grasberg mine in West Papua were backed up by military might, while a system of large-scale timber concessions handed out to conglomerates close to the regime (Barr, 1998; Gellert, 2005) was supplied with disciplined labour by the *transmigrasi* programme (Hancock, 1997).

However, these authoritarian regimes were challenged by a wave of democracy movements that swept across the region in the 1980s and 1990s. The Peoples Power movement that toppled Marcos in the Philippines in 1986, the May 1992 democracy movement in Thailand, and the *Reformasi* movement that brought down Suharto in Indonesia in 1998 all opened up democratic space for the articulation of environmentalist critiques of the then dominant development model (Broad & Cavanagh, 1993). Politicisations over the social relations of nature often preceded these mass movements. In Indonesia, for example, *Wahana Lingkungan Hidup Indonesia*, (WALHI), a net-

work of NGOs and grassroots groups, was able to lead successful campaigns against a pulp and viscose factory on Sumatra and a planned pulp plantation in West Papua (Gordon, 1998). WALHI joined struggles by peasant and indigenous groups to form an "environmental and agrarian justice movement" (Peluso, Afif, & Rachman, 2008) that blossomed after the fall of Suharto. In Thailand, successful resistance to eucalyptus plantations and forced relocations of forest-based peoples (Lohmann, 1991; Pye, 2005) gave rise to the *Assembly of the Poor*, a network of grassroots movements that put forward an alternative development paradigm based on local sovereignty over natural resources (Missingham, 2003). In countries where democracy movements did not emerge (Laos, Vietnam), were weak (Cambodia, Malaysia), or were violently put down (Myanmar), environmental justice movements have not developed to the same extent. Anti-logging protests by indigenous peoples in Malaysia (Brosius, 1999) and Cambodia (Bottomley, 2002) remained marginalised at the national scale.

These challenges to authoritarian natural resource regimes coincided with wider transitions of neoliberal globalisation. For South-East Asian environments, this meant a new wave of commoditisation embedded within political regimes that emphasised a mix of privatisation, 'good governance', and 'self-management' (Li, 2007; Nevins & Peluso, 2008). New appropriations of nature, be it "aquarian capitalism" (Fougères, 2008) of aquaculture and live reef fisheries, national parks and conservation services (Hall, Hirsch, & Lee, 2011), bio-diversity and genetic information (Colchester, 1996), or 'carbon stocks' link different actors along the "friction of the commodity chain" (Tsing, 2005, p. 51). The new decentralised but globalised political ecologies that this creates "complicate conservation" (Dove, Sajise, & Doolittle, 2011), leading to processes that cannot be captured by a dichotomy between local and indigenous conservation versus central, capitalist exploitation. Rather, shifting alliances create new politicised paradoxes of development and environment at different scales (Forsyth & Walker, 2008; McCarthy 2006, 2010).

The papers in this special edition of the Austrian Journal of South-East Asian Studies are located firmly within this recent phase of ambiguous transition. In a first set of articles on forest politics in Indonesia, Anu Lounela looks at how the pent-up social anger at the injustices under Suharto led to peasant mobilisations and land occupations. She explains the sources of authority which a local Javanese leader draws on to challenge state policies on land and forests. Also on Java, Ahmad Maryudi shows how this kind of community resistance against state control over forests became

co-opted and bureaucratised within a community forestry scheme. The forest user groups that were officially sanctioned by the state forest company *Perhutani* are a good example of the now dominant 'self-management' environmental governance regime. Cathrin Bullinger and Michaela Haug discuss the unintended consequences of the decentralisation policy in the *Reformasi* era. The combination of centralised timber industry and localised concession-granting political power led to an upsurge in logging activities and to reassertion of centralised power by the Ministry of Forestry.

The Ministries of Forestry of several South-East Asian countries are key players in a new commodity which is currently being produced within the global climate regime: carbon. The UN mechanism *Reducing Emissions from Deforestation and Forest Degradation* (REDD) aims to sell carbon stocks 'saved' by preventing deforestation on an emerging carbon market. In their interview with Prof. Rachmat Witoelar, the Indonesian President's Special Envoy for Climate Change and Executive Chair of the *National Council on Climate Change*, Till Plitschka and Irendra Radjawali explore why REDD is the key component of Indonesia's climate change mitigation programme. In a second interview, Chris Lang from the website REDD Monitor explains some of the dangers of REDD. The production of a new and lucrative commodity could lead to powerful groups (state agencies, timber companies, carbon brokers, international NGOs) appropriating carbon stocks to the detriment of indigenous peoples and their use of forests. The kind of stakeholder alliance that has come to typify the new REDD socio-natural landscapes across the region – conservation NGOs, carbon trading companies, and government agencies – also run the REDD project in Cambodia discussed by Donal Yeang. However, Donal Yeang argues that given the right conditions, REDD projects can be designed in such a way that supports local communities' rights to land and forest resources.

This kind of 'sustainable rural development', but in a very different context, is also the focus of Amalia Rossi's article on the Royal Projects in Northern Thailand. She shows how projects that used to aim to integrate communist-leaning ethnic groups into the Thai cultural mainstream are now being recalibrated along King Bhumibol's "sufficiency economy philosophy" to win over Thaksin-supporters to the royalist camp. Marina Wetzlmaier's article on the impact of mining in the Philippines reminds us that neoliberal development does not only rely on fuzzy stakeholder self-management but also on old-fashioned violence. Mining was liberalised in the Philippines in the 1990s, but state support of foreign investment has led to conflicts

between indigenous peoples and small-scale gold miners and to armed resistance against large-scale mining.

The last group of articles looks at changing waterscapes from different perspectives. Erik Cohen's auto-ethnography of the 2011 flood in Bangkok offers a very personal insight into how the middle-class segment of the city reacted to the flood. The extent of the flooding was itself a highly politicised event and connected to previous modernist waterscape development in Thailand. This theme is taken up by Carl Middleton who explores how Thailand's energy sector has shifted its dam-building activities to the Mekong region after social and environmentalist movements in Thailand successfully prevented the further expansion of dams nationally. He shows how a "transnational nexus" of Thai banks and engineering companies have financed and built dams in Laos and Myanmar, raising issues of trans-border environmental justice. Finally, the photo essay by Martin Lukas, Julia, Irendra Radjawali, Michael Flitner and Oliver Pye on the Kapuas River in West Kalimantan visualises its "conflict-laden multi-functionality". It points to the spatial dynamics inherent in the transformation of the social relations of nature across South-East Asia that connect the urban and the rural in new and diverse ways.

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