- Making a Difference –

Scientific Capacity Building & Enhancement for Sustainable Development in Developing Countries

Final Report

Project Reference Number: **CBA2014-09NSY-Mathai**

Training workshop and edited volume on Green Growth and Global Environmental Change: Political Ideology, Political Economy and Policy Alternatives

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Institute for the Advanced Study of Sustainability

[CBA2014-09NSY-Mathai]

Training Workshop and Edited Volume on "Green Growth: Political Ideology, Political Economy and Policy Alternatives"

Final Report submitted to APN

OVERVIEW OF PROJECT WORK AND OUTCOMES

Non-technical summary

This project created and disseminated scientific knowledge on "Green Growth," an important strategy in contemporary global change and sustainable development policy and practice. The initial outputs of the project were a training workshop and symposium for young researchers and an edited volume from a leading international academic publisher (Zed Books). In the extension of the project, several seminars around the Asia and the Pacific were organised to discuss the contents of book with young scholars. The International Symposium on Green Growth and Global Environmental Change was successfully convened by the United Nations University Institute for the Advanced Study of Sustainability on 25th and 26th July, 2014 at UNU, Tokyo (see Appendix 1 for the program and participants, and Appendix 4 for the short report of the symposium). A total of 30 papers discussing empirical evidence testing the claims of Green Growth, debating its ideological underpinnings and their implications as a response to modernity's environmental crisis and exploring alternatives – 'if not Green Growth then what else?' – were presented. Of these, 19 were presented by young researchers (see Appendix 3 for the list of young researchers). The symposium created a valuable space for critical scrutiny of the Green Growth project. The edited volume was published in 2016. The objective of Green Growth through the Green Economy is a rapidly advancing but inadequately studied policy agenda. This project fills a crucial gap in the training of young researchers and practitioners and the literature on the subject.

Keywords
green growth, global environmental change, political economy

Objectives
The main objectives of the project were:
1. Capacity building of fifteen young researchers and policy makers, particularly from developing countries in the Asia-Pacific region, by arranging for interaction with international experts working on Green Growth and global environmental change
2. Discussion on the latest research on the green growth from a multidisciplinary perspective to help build research and policy networks
3. Publication of the reflections discussed at the workshop as an edited volume for worldwide distribution through a well-regarded press.

The objective of the extension was to disseminate further the contents of the book with young scholars from the Asia and the Pacific.

Amount received and number years supported
The Grant awarded to this project was:
US$ 40,000 for Year 1: Used ~US$ 28,000 and used US$ 12,000 for Year 2:

Activities undertaken

The two-day symposium in Tokyo in July 2014 brought together scholars and policy practitioners from around the world and young researchers and policy practitioners from the Asia-Pacific region. This was designed to produce long-term gains by enhancing scientific and policy capacity regarding green growth and its link to global environmental change. The project delivered an international symposium, and has an edited volume released in 2016. Opportunities to build the network

developed so far and further engagement of this important policy question in global environmental governance was achieved with several seminars around Asia and the Pacific in 2016.

The project successfully identified and invited more than 20 early-career researchers and policy practitioners working in this area. Of these 14 were from APN countries and 6 came from non-APN member countries. In addition the symposium included eight professors from outside Japan and four from Japanese universities as special invitees to chair select sessions and/or present papers. In all over 40 people gathered over two days to share ideas and analyses and to debate the Green Growth narrative. The project has also successfully delivered on its second objective, that of an edited volume on Green Growth by a reputed international press. Opportunities to build the network developed so far and to further engage this important policy question in global environmental governance are being explored.

The symposium unpacked the ideological basis and political economy of Green Growth and asked if it could rescue capitalism from its contradictions. The case studies discussed carbon markets in Australia, NGO activism in China, democratic deficit in the Philippines, counter-hegemonic movements in Thailand, the urban waterscape in Jakarta, rural development in India, the nature of the green wave in North Korea, the juxtaposition of scarcity and creativity in the built environment, the scope of international environmental law and the trade-offs in the Green Economy, among others.

The symposium also sought specifically to create a space to dwell on strategies for moving environmental governance beyond the technical and managerial approach, epitomised by the Green Growth discourse. It emphasized the importance of environmental governance also being a political project of empowering human-centered initiative and social movements where the normative is reclaimed as a site of political contest and creativity through deeper reliance on commons' democratic resources to deliberate norms and to negotiate a more equitable future on a shared and finite planet.

The workshop received very positive feedback from all participants.

Activities in the Extension (07/2015-07/2016)

The activities in the project extension aimed to disseminate the book and its ideas to a wider audience in the Asia Pacific region and international organizations, seminars and conferences, particularly using young researchers as organizers of the launch seminars in their organizations. This is designed to produce long-term gains by enhancing scientific and policy capacity regarding Green Growth and its link to global environmental change via knowledge production, training and wider dissemination. The first phase of the project filled a crucial gap in the training of young researchers and practitioners as well as in the literature on the subject. This regional and international activity involves collaborating with the network created during the first phase of the project to organize events to disseminate ideas and arguments contained in the book to a wider audience of young fellows.

Seminars were developed with organizational support from UNU, partnering organizations and the book's editors (see Appendix 2 for the support outside APN). Venues for these seminars included organizations that young researchers, who were invited to the symposium in Tokyo in 2014, are affiliated to. The seminars happened between March and June 2016. Not all of them involved travel or organizational costs and at least one editor was present at all the seminars. Dates and places were determined in consultation with the young researchers, editors or chapter authors (see Appendix 5).

Results

The two-day discussions in the symposium in 2014 and feedback on papers and abstracts from young researchers achieved the following results:
1) Increased capacity of young researchers and policy makers in the Asia-Pacific region to critically engage policy making related to green growth in the context of global environmental change.
2) Built a network among junior and senior scholars and policy practitioners. This network aims to create a platform for further development and ongoing engagement with Green Growth and alternatives through scientific capacity development, science-policy interfacing and awareness raising and dissemination for responding to climate change, ecosystems and biodiversity or finding resource utilization pathways for sustainable development.
3) Lasting impact in the form of an edited volume for worldwide dissemination from Zed Books, based on chapters discussed at the workshop.

The seminars around Asia and the Pacific in 2016 further disseminated the ideas discussed in the symposium in 2014, amplifying the impact of the project on young scholars in the region (see Appendix 3 for the list of young scholars).

Relevance to the APN Goals, Science Agenda and to Policy Processes

First, the focus of this project – Green Growth and Green Economy – is by definition integral to the human dimensions of global change, which in turn has implications for the four themes identified under APN's Science Agenda (p9, 3SP). What the project has done is to start with scientific facts about the Earth System and its boundaries which have been breached (e.g. Climate, Biodiversity), and to critically analyze the human dimensions driving this trend. Based on that analysis the project sought to provide and to identify lessons as well as alternatives for arranging the human dimension that can be valuable to policy. In this manner this project is directly and deeply connected to crosscutting issues, science-policy linkage and the human dimensions of global change. In doing so the project promotes and strengthens global change research. Not only does it engage the Green Growth and Green Economy policy agenda from a unique political economy perspective, it has also built a network and platform for post-project collaboration of researchers and practitioners from different parts of the world who span the range of experience from international organizations, NGOs and academia.

Second, the project contributed to the institutional agenda of APN. Many of the young researchers and policy practitioners who participated came from developing member countries in the Asia-Pacific region. Such a network contributed toward member countries' awareness of APN's activities, helped to build a sense of ownership and encouraged participation in future APN programmes. In addition the project involves partnerships with a range of stakeholders from around the world – including 10 other resource persons and collaborators. Thus, the project offered a process for wider awareness and recognition of the role of APN, both within the Asia Pacific region but also from other regions of the world.

The objective and activities carried out under this project also strengthened the research potential under CAPable. The products of the project serve to develop scientific capacity with regard to green growth in the Asia-Pacific region and beyond, the work that comprises this project and the networks that it seeks to establish serve to extend further the science-policy interface related to this topic; and finally both outputs contribute to awareness raising and dissemination.

Self evaluation

The project has successfully delivered on the three proposed project objectives: Capacity building, Creation and dissemination of knowledge on Green Growth and a book from a reputed press. The need for follow-up with the participants is crucial for the network to grow stronger and become established. This process faced challenges given unforeseen organizational changes.

Potential for further work

The book has received strong reviews from readers and participants in the seminars in 2016. The follow-up process to disseminate the book through lectures and seminars at universities and think tanks in the APN region and key stakeholders, particularly in the United Nations' scientific bodies, served an important need to engage the network that has been formed and a broad spectrum of young researchers. Some of the young scholars are interested in following up with the network through other initiatives that could continue their interest and critical thinking about green growth.

Publications

Dale, Gareth, Manu V. Mathai & Jose A. Puppim de Oliveira (Eds.) (2016). *Green Growth: Political Ideology and Political Economy.* London: Zed Books.

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4. Juan Martinez-Alier, Professor, Universitat Autònoma de Barcelona, Spain

5. Larry Lohmann, The Corner House, UK

6. Ricardo Abramovay, Professor, University of São Paulo, Brazil

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10. Adrian Parr, Chair of Taft Faculty, Director Taft Research Centre, UNESCO Co-Chair of Water, Department of Sociology & School of Architecture & Interior Design, University of Cincinnati, USA

11. Birgit Mahnkopf, Professor of Political Economy, Berlin School of Economics and Law, Germany

12. John Crowley, Team Leader for Global Environmental Change, Division of Ethics, Science and Society, UNESCO-Paris

13. Anne Posthuma, Senior Researcher at the International Institute for Labour Studies, ILO, Geneva, Switzerland

14. On-Kwok Lai, Professor, Kwansei Gakuin University

15. Kenichi Matsui, Professor, Tsukuba University

16. Dimiter Ialnazov, Professor, Kyoto University

TECHNICAL REPORT

Preface

The project contributed to the capacity building of young researchers and policy makers particularly from developing countries in the Asia-Pacific region, by arranging for interaction with international experts working on Green Growth and global environmental change. The workshop also shared and discussed the latest research on the subject from a multidisciplinary perspective and helped to build research and policy networks, as well as offer feedback on the work of the young researchers. An edited volume based on papers discussed at the workshop is currently under production by Zed Books in 2016.

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1.0 Introduction

Green growth is an important strategy in contemporary global change and sustainable development policy and practice and has been widely disseminated in Asia. The Green Economy and practice of Green Growth are integral to policy questions confronting a range of issues such sustainable economic development, biodiversity loss, climate change, etc. This is highlighted in influential publications at the interface of science and policy (e.g. UNEP, 2011), and also at venues, such as recent iterations of the International Forum for Sustainable Asia and the Pacific (ISAP). Green Growth "means fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies" (OECD, 2012: 8, also see UNDESA: 2011: v). This emphasis on fostering economic growth is situated within an acknowledgement of ecological limits, with the assertion that the "objective of the green economy is to ensure that those limits are not crossed" (UNDESA, 2011: vi, also see WCED, 1987). However, the fact is that ecological limits have already been breached (Global Footprint Network, 2011). Nevertheless, green growth advocates assert a strategy of more growth based on greater efficiency via technological innovation, arguing that productivity gains will negate overall increments in energy and material resulting from more growth. While greater productivity is on balance preferable to its opposite, because it enables doing more with less, asserting it as an adequate response to the social and environmental challenges of greater fairness on a finite planet is questionable (e.g. Wilhite & Norgard, 2004; York & Rosa, 2003, and many others). This project therefore takes the considered position that greater efficiency (technical and economic) in the throughput of matter and energy is a necessary but insufficient condition for guiding energy and resource use policies in the present context (e.g. Mathai & Parayil, 2012, among many others). Also, we are yet to understand if and under what conditions productivity increases can lead to greater fairness within evident planetary boundaries? Against this evidence, what explains modern society's abundant faith and investment in "green growth"? The workshop and edited volume discussed that question as well as ideological, political, economic and policy innovations that offer creative alternatives for people and our planet.

2.0 Methodology

The three objectives of the project pertain to capacity building, creation of new knowledge and dissemination. These objectives were realized through two main activities – an international symposium and an edited volume. The international symposium was critical to the success of this event. It created the opportunity for a group of early-career researchers and policy practitioners working in this area from developing countries in the Asia-Pacific region to interact, discuss and network with leading figures from across the world working on the 'green economy,' as well as to present and receive feedback on their own work on the links between green growth and global environmental change. The invited international experts who served as resource persons for the workshop and were also invited to share their own work. Before, during and after the workshop there was a wide set of interactions between the early-career researchers and the international experts. The extension of the project helped to disseminate even further the contents of the book to a much wider audience of young scholars in Asia and the Pacific.

3.0 Results & Discussion

The symposium created a valuable space for critical scrutiny of the Green Growth discourse. During two days the participants were engaged in a series of sessions where they were able to present their work and contribute to the overall discussions on green growth. It was also an opportunity to get feedback for improving their papers.

The discussions comprised of four plenary sessions and four parallel sessions with a total of 30 presentations (see agenda in the Appendix 1). The sessions and papers are summarized below.

PLENARY SESSION 1

1. *"The technical and socio-economic pitfalls of green growth - a reality check to avoid disillusionment"*
   Ulrich Hoffmann (Dr.habil.), Senior Trade Policy Adviser to the Director of the International Trade Division (UNCTAD), UNCTAD Secretariat, Geneva

Many economists and policy makers advocate a fundamental shift towards "green growth" as the new, qualitatively different growth paradigm, based on enhanced material/resource/energy (MRE) efficiency and drastic changes in the energy mix, with corresponding structural changes. "Green growth" advocates argue that such paradigm change would unleash new wealth creation and employment opportunities, provided that there was sufficient investment and companies had better information and supportive incentives. In other words, the concept is flawless, just the enabling conditions are lacking. "Green growth", which should be rather seen as a process of structural change, may indeed create new growth impulses with reduced environmental load, in particular at micro-economic level. But can it also mitigate climate change at the required scale and pace (i.e. significant, absolute and permanent decline of GHG emissions) at macro-economic and global level? An in-depth analysis of the technical, socio-economic and systemic constraints casts a long shadow on the "green growth" hopes and the related developmental implications for the South. The arithmetic of economic and population growth, efficiency limits related to the rebound effect and horizontal shifting of problems, governance and market constraints, as well as systemic limits call into question the hopes of de-coupling economic from GHG growth. Rather, one should not deceive oneself into believing that such evolutionary (and often reductionist) approach will be sufficient to cope with the complexities of climate change.

2. *"Social metabolism and environmental conflicts in India"*
   J Martinez-Alier (Professor Universitat Autònoma de Barcelona, Spain), L. Temper, F. Demaria (ICTA UAB)

In the late 1980s the slogan "sustainable development" tried to convince the public that economic development was compatible with environmental sustainability. Perhaps development did not mean economic growth. Perhaps it could be interpreted in a wider sense than economic growth. However, as research methods for the study of the social metabolism improved, it was realized that the march of the world economy (call it development or growth, it did not matter) was less and less environmentally sustainable. There was no dematerialization of the world economy at all. The search for energy and materials reach the farthest corners of the planet, where sometimes resistance movements arise. The debates of the 1970s on a steady-state economy or even a slightly degrowing economy in rich countries have come back. In this presentation we briefly explain the methods for counting the energy and material flows in the economy, and give -as an important example- the main results of the Material Flows for the economy of India between 1961 and 2008 as researched by Simron Singh et al (2012). Drawing on work done in the EJOLT project, some illustrations are given for India of the links between the changing social metabolism and ecological distribution conflicts, looking at clashes over illegal sand mining in India, at responses in Odisha to bauxite mining, at the ban on iron mining in Goa in 2012, at social disputes on waste management options in Delhi, and at ship dismantling in Alang, Gujarat. The aim is to show how a history of social metabolism, of socio-environmental conflicts, and of the changing valuation languages deployed by various social actors in such conflicts, could be written in a common framework. Further, we want to show in the case of India how many movements have arisen concerned with environmental justice. We see a confluence between the environmental justice movements of the South (where India's civil society has been a leader) and the "décroissance" or "post-Wachstum" movements in some countries in the North.

PLENARY SESSION 2

3. *"Not all tears are an evil". Ethical perspectives on the green economy*

John Crowley (Team Leader for Global Environmental Change, Division of Ethics, Science and Society, UNESCO)

Criticism of the notion of a "green economy" is not primarily about its ostensible content. Hardly anyone, after all, objects to the idea that processes of production, exchange and consumption could be more frugal without detracting from human welfare. What is at stake is rather the framing that the idea of a "green economy" offers of the broader problem of sustainable human needs satisfaction, combined with the implicit agenda that the framing is assumed to reflect. One strand of concern is clearly political. It focuses on the interests presumed to be served by an emphasis on pricing, technology and trade in debates about climate change, biodiversity loss, freshwater scarcity and other socio-environmental issues. A different and complementary strand of concern is ethical. It considers the values and the worldview that are implicit in the green economy agenda with a view to understanding and assessing the conceptions of responsibility, solidarity and human identity that underpin them. The latter line of analysis, which will be followed in this chapter, puts less emphasis on the political biases of the green economy than on the conceptual incoherence of subscription to it.

To put it very simply, the idea of a green economy as generally defended in international discussions constitutes a plea for sustainable development without tears. Appropriate technologies, underwritten by adequate incentives and international trade rules, could in principle remove planetary boundaries from human needs satisfaction, thereby reducing the question of sustainable development to one of justice between humans. This is true enough, if the appropriate technologies are suitably defined. But they are hypothetical, not currently available, which raises the ethical question of justifying a stance premised on waiting for their possible arrival. This is ultimately a – difficult – question about the nature and distribution of responsibility with respect to long-range effects shaped by diffuse and distended causal chains. Green economy approaches are part of a family of consequentialist framings of such problems, one common feature of which is high sensitivity to opportunity costs. They exist in tension with non-consequentialist approaches, given credence by the technical difficulties in assessing consequences, which seek to identify what it is right to do rather than what is likely to work. Unsurprisingly, the extreme form of the non-consequentialist argument is that the tears the green economy seeks to avoid are the whole point: when avoidance of future harm is radically indeterminate, atonement for past misdeeds is all we can aspire to.

The symmetry between these opposite agendas is a sign that they have more in common than they realize. They both represent attempts to evade rather than to resolve the practical and theoretical problem of responsibility, which along with the question of value constitutes the core of environmental ethics. Having specified the conceptual issues that lie behind the green economy agenda, the chapter will therefore seek to clarify what is at stake in rethinking responsibility in the face of global environmental challenges, and thereby to understand more clearly the place of a green economy in a more sustainable world.

4. *"Towards a 'tipping point' of capitalism? Reflections on the impact of 'green growth'-projects on the future of capitalist accumulation"*

Birgit Mahnkopf, Professor of Political Economy, Berlin School of Economics and Law

The chapter starts with some remarks on the multidimensional and intertwined character of different aspects of the recent global crisis which is the outcome of a fundamental contradiction inscribed into a capitalist system of reproduction. It finds its expression as the tension between a social system based on infinite economic expansion and a biosphere with finite boundaries. In the main part of the chapter arguments are presented why the contemporary crisis of accumulation (including the crisis of the financial sector) is not caused by the "mistakes" of neoliberal (de)regulation which simply can be corrected by introducing some kind of a "green" Keynesianism (including a re-regulation and tough control of financial capital. The transition to a "greener economy" at best is a method to gain more time for a thorough-going socio-economic transformation. This is due to the necessity of, firstly, high investment into low carbon technologies and infrastructures. But also "green capitalist" initiatives must

be financed by a financial sector which is transforming infrastructures into a private asset class with yields above average profits - rather than supporting a whole-scale transition to a greener economy and a solar global energy system. The chapter then turns to the EU, since the EU is one of the most important proponent of the "Green Growth"-approach. The conclusion is that a "green BAU" is not offering an exit out of the contemporary comprehensive financial and ecological crisis. Therefore we have to face the serious challenge of reshaping the economy from growth to non- or less-growth and at the same token of realising a more equitable redistribution of wealth and income and of empowering democracy by introducing into the society and the economy more participatory elements.

5. *"Ecosystem Services as a New Capitalist Nature: Strategies of Resistance"*
   Larry Lohmann (The Corner House, UK) larrylohmann@gn.apc.org

How and why is the new capitalist "nature" of ecosystem services being constructed? And why now? In what ways is this new "nature" opposed to the various anticapitalist "natures" of commons? What kinds of class struggle are involved?

This presentation takes a comparative approach to these questions by juxtaposing the new nature of ecosystem services and the "green economy" not only with the varied natures of commons but also with two predecessor capitalist natures. One of these natures is, roughly speaking, the nature of flat, geometrical space, Newtonian time and externalized nonhumans. In Europe, this nature began to be constructed around the 15th century and – together with the obligatory "blood and fire" of which Marx spoke – was part of the story of the creation of wage labor. The second nature, growing out of the first, is the world of what Jason W. Moore calls "cheap natures" fashioned and enlisted in the support of increased labor *productivity*. This world began to be built around the 16th century, over time morphing into the nature that came to be described as "resources" in the 19th century and "natural resources" in the 20th.

The first capitalist nature is the world, crudely speaking, of early estate and population surveys, hedges, clocks, early workshops and Renaissance perspective. The second capitalist nature – whose forging was also, of course, accompanied by vast quantities of blood and fire – builds on this "abstract social nature" through such phenomena as Mercator projections, new accounting procedures, printing presses, Cartesianism, imperial botanical collections, forestry, thermodynamics and genetic engineering.

The first capitalist nature made it possible to begin to send land and labor through capitalist circuits, opening fundamental new vistas for accumulation. The second inaugurated the even more expansive universe of ownable, widely-circulatable units such as those traded today as tons of No. 2 Spring Wheat or Bleached Eucalyptus Kraft Pulp, or barrels of West Texas Intermediate Crude Oil. The most important resistance to, and a crucial component of, the continuing evolution of these natures has always been the refusal of capitalist labor, which is one with the defense and development of the various natures of the commons. In this sense, environmental struggles have always been labor struggles.

The 20th and early 21st centuries have seen the development of a third capitalist nature in which, in the words of Morgan Robertson, ecology appears "as an immense collection of services". Like previous capitalist natures, this one builds on what went before. In particular, it is founded on a set of late modifications to the "cheap natures" world of "resources". These include the "bloody and fiery" evolution of national parks and other protected areas as counterparts to "production forests", industrial agriculture zones and so forth; the invention of "recreation"; and later on, the emergence of explicitly environmental legislation. What is new is merely that recently, pressures have grown to bring the governance of "environmental problems" of which such phenomena are the expression more comprehensively within what Giovanni Arrighi called the "economizing logic of capitalist enterprise". Just as military protection costs were internalized by the Dutch business/state class of the 17th and 18th centuries, production costs brought within an economizing logic by the 19th century British business class, and transaction costs internalized by the vertically-integrating US business class during the 20th century, so too, according to neoliberal visionaries, the state "conservation" of the 19th century onwards and the "environmental governance" exemplified by 1970s-era regulation must now be "rationalized" by being brought within a commodity/price framework, with environmental problems

reframed as economic externalities or market failures. This does not imply a reduced role for the state (on the contrary, the state is crucial in creating and maintaining the new commodities and in pushing through the transformation of law into price), merely that the state's own practices obey more closely a commodity logic. In the achievement of this vision, again, transitional practices inherited from the later development of the second capitalist nature are crucial. These include the "natural resource management" that grew out of "natural resources"; conservation science; the wartime cybernetics and systems theories that helped give rise to "ecosystems"; and various devices for calculating biodiversity, net photosynthetic production, energy return on investment, global environmental harms, "limits to growth", "caps" and "finite biospheres". Only through such manifestations of science, art, engineering, law and so forth does it become possible to bring forth a new nature that can be liquefied, circulated and valorized in units such as "tons of CO2-equivalent", "species-equivalents" or measures of "functional lift". And only through such practices do the new forms of space and time that partly constitute the "nature" of ecosystem services, together with the distinctive forms of authority, violence and separation of humans and nonhumans with which they are inextricably entangled, come to be born.

The units that the "nature" of ecosystem services make possible function in accumulation in multiple ways that need to be explored. The rights attached to the universal units of measurement of land that 16th-century surveying helped entrench in England were ones that gave landowners a more absolute form of ownership over their estates, and the rights attached to the tonnes of No. 2 Yellow Corn that became a commodity in the US in the 19th century were rights of disposal of an increasingly widely-distributed "real abstraction". But the rights attached to, say, "tons of CO2-equivalent" or units of "functional lift" mark a somewhat new departure. Pre-eminently, they include the right to avail oneself of exemptions to environmental law. The new nature, in other words, does serve to defend labor productivity against the threat posed by existing or prospective "non-economic" environmental legislation, and in this it is similar to the "cheap natures" of the expanding resource frontier that has allowed businesses to increase competitively the productivity of labor over so many centuries. But the differences in how this is attempted need to be registered.

The purposes of a comparative approach to the capitalist nature of "ecosystem services" include clarifying what the most fundamental resistances to this nature are and suggesting where movement-building defending commons and survival against it is likely to be most strategic.

Just as English peasants in the mid-16th century were told that the new surveyors' geometry was nothing to fear since it "measure[d] all truely,/And yelde[d] the full right to everye man justely", so we are told today that the science and economics of ecosystem-service trading constitute a step toward a possible "win-win" benefiting human and nonhuman alike. Movements to keep oil in the soil are assumed to be about "caps" and "biospheric limits". *Sumak kawsay* is reinterpreted as developmentalism; the little "energies" of commons as the Energy of thermodynamics; indigenous territories as the abstract spaces invented by 16th-century European mapmakers; and pachamama as the externalized "nature" of capitalism, whose rights, it is implied, can only be defended by humans considered to be outside of it. Commons movements, meanwhile, become enticed by Ostromian notions of "natural resource management", and even many indigenous people's organizations are tempted toward countenancing the new nature as if it were congruent with their own. Such moves both underestimate the differences between one nature and another and risk separating many popular movements from their sources of strength and political alliance in struggles over the commodification of both human and nonhuman activity. If the "green" in "green economy" is not to be understood anachronistically, a wider, more nuanced perspective is essential.

PLENARY SESSION 3

6. *"The green growth trap in Brazil"*
   Ricardo Abramovay, Professor, University of São Paulo (USP)

The four main drivers of the Brazilian economy's growth today are the exportation of raw and primary materials (agribusiness products and minerals), the automobile industry, the exploitation of non-conventional sources of fossil fuels and the construction industry. This article shows how, despite the efforts made to reduce the socio-environmental impacts of each one of them by means of formal commitments and certifications, the results of their expansion lie entirely in the opposite direction to that of sustainable development. In that sense, the Brazilian economy offers a paradigmatic example of a growth model which, while admittedly being capable of hiking up income levels of the poor, produces consequences that degrade the quality of life, especially in the urban and metropolitan environments.

However successful they may be, the efforts to produce more efficient individual automobiles with lower levels of greenhouse gas emissions cannot possibly conciliate the aspirations for sustainable cities with an increase in the size of the individual vehicle fleets. The installation of new assembly plants and the tax incentives to individual automobile purchasing are features of a growth model that is incapable of leading to effective wellbeing. Similarly, in the construction industry the option to disassociate high-income and low-income buildings prevails and the effects that has on metropolitan life and landscapes have been devastating. The article sets out to give concrete examples of ways of providing mobility and housing that effectively address those problems. Likewise, regarding what UNEP refers to as the re-primarization of the Latin American economy, the wealth being produced is not associated to any more up-to-date, contemporary forms of innovation.

For each of these four drivers, merely reducing their socio-environmental impacts is not enough. Technical means are available that would enable the economy to provide mobility, housing, food and energy, not by minimizing impacts, but by regenerating the social fabric and the ecosystems which, up until now, economic growth has helped to destroy.

7. *"Steady states, green growth and the falling rate of profit"*
   James Meadway, Senior Economist, New Economics Foundation

John Stuart Mill's conception of a steady state, zero-growth economy as a "very considerable improvement on our current condition" has informed ecological economics since its inception. Mill, like Keynes, Daly and later authors conceived of a world without the imperative of growth as a time in which real human potential could be fulfilled and the demands of commercial society diminished. In stark contrast to Malthus, who claimed the limits to growth represented a necessary barrier to human fulfilment (and confirmed the necessity of inequality), Mill believed that, with wise management, the transition out of growth could be of benefit to all.

Presented as a radical alternative to both the neoclassical obsession with growth, and to the arguments of "green growth", this vision of a steady-state society can appear compelling. This chapter looks at the relationship between the long-run dynamic of growth and prospects for a stable steady state under conditions of competitive accumulation. It explores the implications of a secular decline in the rate of profit under those competitive conditions, present in David Ricardo and Karl Marx, to challenge Mill's happy conception. In particular, is proposes that Marx's development of a long-run tendency of the rate of profit to fall is best seen as not a short-run theory of crisis, but a long-run counterpoint to both the meliorist views of Mill, and Malthus' bleak prognoses. Understated in conventional readings of Marx, it brings to the fore the work of John Bellamy Foster and others in stressing the importance the labour-nature relationship for a correct understanding of Marx's development of the classic theory of profits. "Green growth", in this framing, can function over the long term if it also embodies a challenge to the distribution of wealth and property rights.

8. *"The Green Jobs Approach: Harnessing the world of work to contribute toward an environmentally sustainable production and consumption paradigm".* **Anne Posthuma** (International Labour Organization, Brazil)

Green Jobs reinforces the promotion of quality job creation in environmentally sustainable sectors and activities, and contributes to the greening of existing enterprises through skills development, entrepreneurism, social inclusion and ensuring markets for sustainable products and services. The

creation of decent work and incomes is not an automatic outcome in the shift to a green economy. For this reason, it must be emphasized that policy instruments and the institutions that implement them play a crucial role in ensuring the quality and safety of green jobs.

The growth of recycling industries exemplifies how shifting economic perspectives and societal values can lead to the creation and growth of jobs linked to environmentally sustainable practices. The growth of recycling itself is based upon a recognition that waste has an economic value (i.e. it is less expensive to recycle, reprocess and reuse), an environmental value (i.e. it involves less mining and deforestation, processing and consumption of raw resources), as well as a social value (it can generate green jobs and income generating activities linked to recycling). Governments, particularly at the local level, have realized that recycling provides important public benefits, in addition to substantial cost savings. In this context, the presentation examines the Brazilian experience in promoting the value chain of solid waste recycling through the implementation of a "bottom-up" approach to promote green jobs among waste collectors at the base of the solid waste recycling chain. This experience demonstrates that an integrated and multi-faceted approach can be put in place, whereby policies, legislation, institutions and enforcement mechanisms work together to create a set of incentives and regulations that bring scale and efficiency to an incipient recycling sector. This experience shows that precarious and informal work at the lower tiers of the recycling value chain can be integrated into the economy, to become recognized occupations, with adequate wages, safe working conditions, forms of organization and voice and social protection and with the labour entitlements of formal employment, thereby making it possible to be categorized as "green jobs". At the same time, regulations also are put in place around the supply, demand and disposal of solid waste (e.g. by stimulating recycling practices among consumers and workplaces, restricting the supply of packaging waste generated by producers and limiting the use of landfills) and sustainable behaviour is enforced in economic sectors and government (thereby creating markets for recycled inputs and products and recycling services). This case study raises the possibility - - while maintaining a realistic recognition of the challenges to be addressed - - that the Green Jobs approach can bring about a rupture with the current unsustainable and exclusionary paradigm of production and consumption, by harnessing sustainable practices and social inclusion in ways that are "de-coupled" from a dependency on rising consumption and economic growth as the key drivers.

PLENARY SESSION 4

9. *Giving green teeth to the Tiger? A Critique of the Concept "Green Growth"*

Bettina Bluemling, Assistant Professor, Wageningen University, The Netherlands and Research Fellow iamo, Leibniz Institute of Agricultural Development in Transition Economies, Germany

Sun-Jin Yun, Professor, Seoul National University, South Korea

Green Growth was brought forward in 2005 at the Fifth Ministerial Conference on Environment and Development in Asia and the Pacific held in Seoul. The objective was, on the one hand, to devise a concept that "gives teeth," clarity and direction to Sustainable Development. On the other hand, the economic system was put at the center of sustainable development, as there would still be Asian countries where poverty is the most urgent problem to be resolved. South Korea under the Lee administration was the first to make Green Growth a central paradigm in its development strategy, and has been considered a "model green growth nation" by international organizations, including UNEP and OECD. In this chapter, we show, at the example of Korea, that Green Growth does not have the capacity to respond to the particular and complex problems of Asian-Pacific economies. Green Growth is an autocratically defined and implemented concept that drew its legacy from international organizations; the Four Major Rivers project, a key project of Korea's Green Growth strategy, was widely opposed and lacked legitimacy by Korean civil society. Green Growth has growth as the main focus of development, without considering equality, involvement of civil society, and the non-monetary economy which are indispensable in the development of (Asian) countries. We conclude that even if ill-defined and vague,

Sustainable Development at least provided room for discussion of which "common future" society wants. Greening the teeth of the tiger is deemed to be unable to provide it a more sustainable development pathway and direction.

10. *"Radical Alternatives to Green Growth"*
    Ashish Kothari, Kalpavriksh Environment Action Group, Pune, India

Increasing realization that economic growth is inherently unsustainable and has largely been iniquitous, and that the concept of 'green' or 'sustainable' growth is a contradiction in terms, has raised the question: is there an alternative? Can human needs and aspirations be met in other ways, that do not fall into the traps of green growth?

It is proposed that not only are such alternatives available or possible to envisage, but that we have to urgently work towards them if we are not to get locked into yet another attempt by those in power to postpone or soften the ecological collapse and social strife inherent in the economic growth paradigm. One such alternative framework, Radical Ecological Democracy, arises from the myriad grassroots initiatives at practicing alternative modes of governance, production, distribution, and consumption that have sprung up in many parts of the world. This framework encompasses direct or radical democracy, localized economies embedded in ecological and cultural landscapes and free of centralized monetary monopolies, notions of human well-being that relate to actual needs of people and to qualitative values like satisfaction and social security, and sustaining cultural diversity and exchange.

While focusing on Indian examples, the chapter will also touch on initiatives in some other parts of the world, and other globally relevant frameworks that are akin to Radical Ecological Democracy. It will also raise a few fundamental questions that need exploration, for such alternative frameworks to challenge and replace today's dominant system.

11. *"Alternatives to Green Growth? Possibilities and Contradictions"*

    Steffen Boehm, Professor and Director, Essex Sustainability Institute, Essex Business School, University of Essex; **Maria Ceci Araujo Misoczky**, Associate Professor, Management School, Federal University of Rio Grande do Sul (UFRGS), Brazil.

It is now widely understood that the 'green growth' economic policy agenda has many pitfalls: shortcomings, inconsistencies and contradictions. As many companies' CSR reports, NGOs' sustainability action plans and governments' climate change white papers, they are often not worth the FSC-labeled paper they are written on, given that they do not question at all the unsustainable bases of capitalist forms of accumulation, reproduction and economic growth.

The call for genuine alternatives has therefore become louder (if it has ever been quiet). In this chapter we will review some of the alternatives that have been practiced, mainly focusing on community- and social-movement-based alternative economic practices and projects in both North and South that promise to not only reduce the impact of these activities on the environment but fundamentally reshape social relations beyond capitalist modes of exploitation, dependency and unsustainability. Examples include: ecovillages, workers' cooperatives, community interest companies and social movement-run factories.

We would do the movement for alternative economies a disservice though if we would simply celebrate these alternatives, as some authors do. We believe there is a need to critically analyze the very working practices of these alternative economic projects and the way they are often connected to the rest of the (global) economy. While at face value these projects might look alternative (green, more sustainable, more ethical, etc), the reality is often more complex, with many contradictions at work. In this chapter we will discuss the contradictions embedded in some of these economic projects that have been labeled 'alternative', with the aim to explore the possibilities of radical economic and social transformation.

PARALLEL SESSION 1

1. *"Resources for the Future, resources for growth: How the political economy of 1975 US growth ban helped paved the way for green growth"*
   Richard Lane (U. of Sussex)

In order to critically evaluate green growth, I argue that it is first necessary to recover the frequently obscured history of the modern and politically hegemonic understanding of economic growth - a growth removed from a basis in the natural resources of the earth. I argue in this presentation that the postwar history of economic growth is key to understanding both the tenacity of growth in the popular and political imagination and the specific governance projects, such as pollution trading, that arose as a means ostensibly of protecting both the economy and the environment. This presentation investigates the role of the think tank Resources For the Future (RFF) in securing this understanding of growth in the US. This was undertaken though a series technical innovations within the nascent disciplines of resource and environmental economics. From the early 1950s onwards, RFF and the Presidential Commission that preceded it were central to the development of concept of the economy, divorced from a material basis and both capable of, and required to, grow infinitely. RFF was also key to the reconstruction of pollution as externality in the early 1970s and the subsequent development of the so-called growth ban of 1975. Events which helped establish the development of early emissions trading mechanisms; seemingly confirmed the negative impact on growth of non-market environmental regulations; and enabled economy and environment to be put together in such a way as to allow green growth.

2. *"An Overview on Development and Implementation of Energy Efficiency Policies in Vietnam"*
   Nguyen Duc Luong (National University of Civil Engineering, Vietnam)

The rapid economic development and urbanization process in Vietnam has promoted the increasing energy demand for industries, transportation, and domestic activities. All these factors have led to the fact that the demand for final energy use of Vietnam is increasing faster than its economic growth rate. Energy demand tripled over the last decade, and it is likely to triple again over the next decade if economic growth remains robust. In consequence, Vietnam will have to rely increasingly on imported energy, including coal and oil. This will also pose a challenge for the Government is to honor international commitments to reduction of greenhouse gas emission. Improving energy efficiency is by far the lowest-cost and most environmentally benign approach to meet the increasing energy demand. However, potential energy savings across the economy remain largely untapped.

Over the last decade, the Government has strengthened the policy framework on energy efficiency improvement of various end users in the economy. A number of legal documents covering the planning and implementation of energy efficiency policy and program has been approved and enforced by the Government. However, there is a gap between the planning and the implementation of energy efficiency improvement programs. This presentation aims to: (1) provide an overview on energy demand trends in Vietnam and needs to promote energy efficiency further, (2) summarize the Government efforts in the area of energy efficiency, and (3) provide the Government with suggestions and recommendations on how to implement energy efficiency more effectively in the future.

3. *Uneven development, climate change and carbon markets: The concentration and centralisation of emissions*
   Gareth Bryant (U. of Sydney)

Recently published research has calculated that historical responsibility for the carbon emissions driving climate change can be attributed to a small number of corporations and nation states (Heede 2013). This presentation develops Neil Smith's work on the production of nature, space and uneven development to explain how capitalist development has led to these socially differentiated patterns of carbon emissions. It then considers how the uneven development of emissions affects the potential efficacy of carbon markets in addressing climate change. First, the presentation outlines Marx's notion of the tendency towards the concentration and centralisation of capital and introduces Smith's distinction between the social and spatial dimensions of this process. The second section considers the

historical contribution of fossil fuels in propelling the spatial concentration and centralisation of capital by providing the productive force needed to expand the scale of production. Third, it describes the role played by the corporation as the institutional form of capital which facilitates social centralisation and concentration of ownership of carbon-intensive industry. The fourth section surveys the role of states in developing fossil fuel infrastructure through public ownership and regulating the size of corporations through competition law. Fifth, it presents empirical work which demonstrates the significant concentration and centralisation of emissions in the EU ETS among large-scale power stations and manufacturing facilities owned by a few states and corporations. The presentation concludes by arguing that the principles of social equalisation underpinning market-based climate policy are poorly suited to address the social unevenness in the production of climate change. Finally, the potential presented by the concentration and centralisation of emissions for policy alternatives, such as direct regulation, is highlighted.

4. *Quantifying the Environmental Impacts Derived from the Investment and Trade in China* **Chunmiao Cao (**School of Environment and Natural Resources, Renmin University of China**), Tao Hu (**China Program, World Wide Fund**)**

Along with the accelerated development of global economic integration, China's trade have developed rapidly, especially China has become the world's largest goods trader in 2013. We know that the investment and trade have great effects on the environment, and the question of reality is how much is the environmental impacts derived from the trade and investment in China? When macroeconomics measures a country's trade and investment, it builds balance of payments to calculate trade and investment. However, it is only from the point of the economic value. In fact, the value of the trade only covers the nominal value of the goods or services, the investment only reflects the transnational flow of the capital, and the cost of the resources consumption and environmental pollution is not included. Then, how to quantify the environmental impacts derived from the trade and investment? The presentation aims to build the international balance of the account for environment based on the resource and environment, and build balance of payments for environment to calculate balance of the account in China.

The presentation uses the input-output model and extended IPCC approach, on the basis of China's input-output table, energy and environmental statistics in 2007, to build China's balance of payments for environment, which takes the embedded CO2, SO2 and COD emissions as the environmental impact indicators, and calculate the environmental impacts derived from the trade and investment in China. The study shows that: That means China's environmental expenditure account is bigger than its environmental benefits account, so China has a balance of payments deficit for environment, and the environmental impacts derived from the trade is much bigger than that of the environmental impacts derived from the investment.

5. *Green Growth for Transforming Societies: Redefining/negotiating Urban-Rural Carbon Inequity* **Mahendra Sethi** (United Nations University & National Institute of Urban Affairs, India)

Rapid economic growth is synonymous with producing negative environmental externalities like, depletion of natural resources and bio-diversity, environmental degradation, pollution, and global warming. As societies develop, they tend to practice non-agricultural activities, commune in cities and increasingly display greater dependency on fossil fuels for their domestic, industrial, mobility and entertainment needs. World over, this differential access of resources and economic outputs has created a disparity of sorts, traditionally understood as the North-South political divide. Green growth is argued to offer an alternative paradigm for future development that is ecologically sound and fosters social equity. It is of particular relevance for societies in a transformative stage, on the upward curve of economic growth and urbanization; traditionally known to have environmental and social concerns at the bottom of their development priorities. This complex creates two fundamental inquiries at the cross-roads of green growth and global change (global warming, urbanization, etc.) that seek empirical investigation and deliberation: (a) As the world further takes a rural to urban tilt (UN reports that 7 out of 10 people will live in cities by 2050), would the ecological inequities between the rural and urban

constituencies stabilize or exacerbate in future, and (b) How could responding to carbon inequity at the local level influence/ realize greener growth for transforming societies. The research is based on spatial disaggregation of carbon throughput and energy consumption of nations world-wide against their urbanization levels. The analysis presents insights into how transforming societies could become green within the planetary boundaries while addressing inequities at the local level. The presentation concludes with a future pathway that is committed to low-carbon and high-equity growth, and will find pertinence to researchers and policy experts alike.

PARALLEL SESSION 2

6. *Is Green Growth Here to Stay? The Global Context and the Case of South Korea*
   Chiden Balmes (Global Green Growth Institute)

Green growth has become more than a buzzword amid the shortfalls of sustainable development in addressing the tension between the economic and environmental pillars. This presentation posits the growing global momentum for green growth given the ongoing experimentation in various countries to demonstrate its merits. While it is too early to claim that green growth as a policy approach will successfully provide the impetus toward the sustainability pathway, it is with great certainty that green growth will not be short-lived particularly in light of climate change, resource depletion, and global economic slowdown. It can even overcome changes in political leadership if it is firmly embedded within the country's domestic and foreign policy.

As a case in point, the South Korean experience is discussed, specifically how the country's institutionalization and operationalization of green growth have survived the dynamics of political transition. The continuity of green growth policy – despite its apparent deprioritization by the Park administration to distance the new leadership from its predecessor – is attributed to its strong embedment in the national governance structure, its role of promoting Korea's rep utation as a rising middle power in international relations, and the public support for Korea's green growth initiatives. Korea's experience offers valuable lessons for countries that hope to enshrine green growth as a development strategy and ensure its continuity. In the longer term, however, green growth will only endure the test of time if it can deliver its promised benefits.

7. *Democratic Deficit and Institutions of Inequality in the Philippines: The Prospects of a Green Economy for Green Growth*
   Jalton Garces Taguibao (U. of the Philippines-Diliman)

Despite the well publicized and impressive growth performance in the past three years, with a 7.2 percent growth rate in 2013 and a target of 7.5 set by the Philippine government for 2014, a careful look at the economy reveals a less impressive picture and lopsided economic growth. Data from the National Statistics and Coordination Board (NSCB), the country's policy-making and coordinating agency on statistical matters in the Philippines, bare the reality that poverty remains unchanged since 2006 with about 28% of Filipinos still poor. In December of 2013, the unemployment rate increased to 27.5 percent or about 12.1 million Filipinos, with 2.5 million joining the ranks of the jobless. In addition, corruption persists through various political administrations. The most recent is the alleged plunder of public funds through the collusion between fraudulent non-governmental organizations and several members of the Philippine senate and the House of Representatives. How does the Green economy for Green Growth initiative figure into the domestic conditions of Philippine political economy, where illusory economic growth has further distanced its supposed gains from citizens, and where a lack of political legitimacy constantly overshadowing optimistic prospects for the country? The presentation explores and qualifies the prospects and scenarios of the Green Growth initiative when appropriated to the context of the current Philippine situation by highlighting the dynamics of institutionalized inequality and democratic deficit as critical factors that are inimical to the promises of the initiative.

8. *Interrogation of Green Growth through the Second Contradiction of Capital and Contemporary Neoliberalism: A Case Study of Jakarta Urban Waterscape*
Indrawan Prabaharyaka (UNESCO-IHE)

In this presentation, I attempt to interrogate the rationalization of ideological commitments that underpin the pursuit of green growth and explain its crisis-ridden strategy under neoliberalism. Specifically, I highlight the impacts of appropriation of nature through reproduction of conditions of production and capitalized urban nature. Firstly, as the basis for the interrogation, I revisit theoretical discussions on 'the second contradiction of capital', which pinpoints 'underproduction' as the logic that allows capital circulation through the rising costs of reproducing the conditions of production. This first part is largely theoretical and serves as an introduction to the empirical analysis on the second part. Following the discussions, I offer the case study of Jakarta urban waterscape to elucidate the rising costs of reproducing the conditions of production through the failure of large-scale privatization to extend services to the poor and the latent development of small-scale private providers that are able to reach the majority of urban population. This second part is an empirical account of how populations, under the aegis of green growth, spend additional costs for drinking water delivered by small-scale private providers in form of bottled water. Finally, I conclude by reflection on the shift from 'government' to 'governance' under neoliberalism and the retreat of the state from 'provider' to 'regulator', which explains modern society's abundant faith and investment in green growth.

9. *Rethinking Policy Intervention for the Transition Towards Competitive Trade-led Green Growth*
Bhusal Bhishma (Ministry of Finance, Nepal & U. of Deusto)

A neo-classical trade-led growth model supported by rapid technological advancement and the WTO regime was instrumental to achieve higher growth and prosperity during the last few decades. However, it could not cope with new challenges such as environmental degradation, inequality, social disharmony and poor quality of life. The green growth approach is gaining momentum to overcome these issues. Since two thirds of the world's production is traded, trade in green growth regime should incorporate three fundamentals: competitiveness (economic), sustainability (environmental) and inclusiveness (social) - simultaneously to overcome or ameliorate those problems. However, the determinants of these fundamentals may debilitate each other. Through an extensive review of trade and competitiveness theories, human development and environmental sustainability literature, we: (i) develop an eclectic framework of trade competitiveness; (ii) identify elements of environmental sustainability and inclusiveness; (iii) explore various synergy areas among three fundamentals; (iv) develop a set of "adaptive strategies" and present it with a "System Framework of Adaptive Strategies for trade-led green growth transition"; (v) explain how those strategies may facilitate trade-led green growth transition when catalyzed by some policy instruments/incentives; and (vi) test the applicability of the "system framework" in the context of a low income economy like Nepal with some executive interviews at both policy and firms level. The study revealed that policy democratization and green production and trading practices help foster trade-led green growth transition despite poor institutional arrangements and insufficient policy coordination. Some green growth adaptive strategies become dormant in the absence of sufficient government incentives.

PARALLEL SESSION 3

10. *The Heart of Greenness: Putting Peoplehood at the Center of the Green Economy*
Kabir Sanjay Bavikatte (United Nations University) **Daniel F. Robinson** (U. of New South Wales)

The Green Economy spawns a range of innovative financing mechanisms for biodiversity conservation. It is based on the assumption that conservation can be successfully achieved primarily through market-based incentives. However market based incentives are only possible when ecosystem services are transformed from 'use value' into 'exchange value'. The transformation of a resource from having only use value to including exchange value requires the recognition of a specific kind of property right in common pool resources-the right to commodify and thereby alienate. The alienation of hitherto market

inalienable goods such as genetic resources and traditional knowledge throws up a range of questions relating to wellbeing or human flourishing. Such questions range from asking which goods and services should be market alienable and which should be market inalienable.

The answers to such questions depend on conceptions of personhood and peoplehood. The arguments against commodification of genetic resources and traditional knowledge are underpinned by conceptions of personhood that views such resources and knowledge as 'personal property' integral to who we are as human beings. Such views mirror similar arguments around personal property and market inalienability laboured in the context of issues such as sex work or the sale of blood. The arguments for commodification of these resources and knowledge are of the view that they are 'fungible property' and their market alienability have no adverse impacts on wellbeing. The presentation seeks to unpack the reasoning behind arguments for and against commodification of Nature in the context of the Green Economy.

11. *Growing a Green Economy: Counter-Hegemonic Attempts to Transform the Agri-Food System in Thailand*
    Prapimphan Chiengkul (U. of Warwick)

The presentation evaluates important ideas, governance structures and production-distribution practices which aim to promote sustainable agriculture and strengthen local communities in Thailand. The first part of the chapter explains how Thai localist and sufficiency ideas, which have inspired alternative development movements in Thailand such as the Alternative Agriculture Network (AAN), have potentials to transform the public's consciousness and pave ways towards a green economy. The second and third parts of the presentation then discuss important attempts by the AAN to make the agri-food system in Thailand more socially and ecologically sustainable. In addition, how local communities can create jobs and build other economic activities based on sustainable agriculture are discussed. Existing examples include community rice mills and co-operative enterprises in Surin and Yasothorn provinces in the Northeast of Thailand. The presentation also evaluates current obstacles in the promotion of sustainable agriculture and a green economy under the contemporary political economic contexts in Thailand. These include, for example, persisting belief in mainstream neo-liberal economic development model, polarised political conflicts in Thailand which divide and weakened the power of social movements, limitations of fair trade and organic markets, as well as legal and policy structures which promote corporate-led agri-food production-distribution.

12. *Greening Rural Development of India and Environmental Sustainability*
    Jyotish Prakash Basu (West Bengal State University)

A significant portion of India's population, particularly the rural poor, depends on natural resources for subsistence and livelihoods. Greening Rural Development encompasses to conservation and regeneration of ecosystems and natural resource base. It stimulates rural economies, creates jobs and helps to maintain critical ecosystem services and strengthen climate resilience of the rural poor who are amongst the most vulnerable to the impacts of climate change and natural resources degradation. Rural Development schemes of India such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Integrated Watershed Development Project (IWDP) and National Rural Drinking Water Programme (NRDWP) contribute significantly to environmental services such as conservation of water, groundwater recharge, reduced soil erosion, increased soil fertility, conservation of biodiversity, afforestation and reforestation, reclamation of degraded crop and grazing lands, enhanced leaf manure, fuel wood and non-timber forest products supply. These activities of the rural development schemes address climate change mitigation and adaptation. Given the backdrop, the presentation examines MGNREGS, IWDP, and NRDWP to understand their environmental impacts and to bring about incremental green benefits; documents good models of environmentally beneficial developmental interventions by government to draw lessons for the major rural development schemes and recommends steps that could be taken within rural development schemes to achieve incremental green results. This presentation has important policy implications for poverty reduction, climate change

mitigation, sustainable development and ecological security along with livelihood security of the poor people in India.

13. *Implications of NGO Activism on Corporate Environmental Footprints in China: Evidences of Alternative Social Reporting*
Dan Shen (U. of Essex)

Environmental and social performance evaluation has become an important criterion for corporations to improve competitiveness. It seems that taking environmental and social responsibilities has been considered as a normal routine for doing business, through reviewing environmental footprints of business via environmental audit, as well as disclosing impact of business activities on surrounding environment and communities via environmental or social reporting. However, corporate green activities and disclosures are criticised for being used as a tool of crisis management or public relations, instead of protecting the public interests and sustainability. This presentation emphasises on Non-governmental Organisation (NGO) activism, especially their social reporting, in affecting corporate behaviour towards environmental issues, as well as NGO's roles in promoting 'green' movement and alternative social accounting mobilisation in China.

Within the socio-political, economic and cultural context of China, two cases are investigated through studying conflicts between corporations and NGOs as well as implications of NGO activism on corporate green behaviour and social accounting movement. Both primary and secondary data are collected, respectively via semi-structured interviews and review of corporate and NGOs' environmental reports, with particular focuses on environmental pollution issues in Mainland China. Pursuing a critical perspective sensitive to the context of China, the presentation concludes that, NGO's alternative social reporting is a feasible attempt to effect transformative 'green' movement, especially when the state and corporations only play mild roles in interventions.

14. *Pyongyang's own "Green Wave"? : Sustainability under the Byungjin Line*
Robert Winstanley-Chesters (U. of Leeds and U. of Cambridge)

Environmental development has long been key to North Korea's self-described "revolutionary" industrial/economic strategies which were historically deployed in its navigation of the difficult terrain of international relations. Once intricately linked to the developmental framing of Soviet Communism, North Korea first found alternative routes of interchange through the Non-Aligned Movement before being forced by geo-political realignments to begin negotiation with external environmental approaches.

This presentation examines Pyongyang's adoption of "green", conservational or sustainable strategies within its framework of politics and ideology. Recent developments in the fields of power generation, agriculture and industrial production in North Korea, at least partly inspired by environmental strategy have been harnessed along with conservation and mitigation projects to reinforce the charismatic political authority of the Kim dynasty. This authority, the presentation argues is then crystallized into a set of developmental themes we might characterize as Pyongyang's own "Green Wave".

In light of these developments this presentation then reviews the implications of both Pyongyang's conservational/developmental agenda and its commitment to nuclear development, which it has declared the "Byungjin Line". Marrying environment awareness and nuclear development is of course not a strategy unique to North Korea, it is one common to shared technocratic discourses of developmental and environmental sustainability in the wider world. This presentation finally therefore considers what critical insights might be gained through analysis of these very different "green waves" and whether in fact such apparently disparate conceptual sustainabilities are really in their connections to political and ideological power, so very different after all.

PARALLEL SESSION 4

15. *Enemy within: Counter movement, carbon pricing, and green neoliberalism in Australia*
Rebecca Pearse (U. of New South Wales)

This essay tells the story of the conservative counter movement that mobilised against carbon pricing in Australia from 2010. In response to the former Labor government's carbon trading scheme, opposition to the reforms have been led by a small but vocal group of conservative political party leaders, media personalities, and public intellectuals. Over four years public opinion on climate policy has shifted, and a confused debate about the merits and pitfalls of marketised climate policy has played out. These events raise the question: How should we understand conservative counter movements targeting carbon pricing? Using the ideas of Karl Polanyi, I contend we need to consider these mobilisations with regard to an inherent contradiction within marketised climate policy, particularly in light of the regressive impacts of pricing mechanisms. There are further insights into the contradictions of "green neoliberalism" illustrated by this example.

16. *Scarcity, Creativity and Urban Futures: Accelerationist urbanism*
Deljana Iossifava (U. of Manchester)

The concept of scarcity has entered all domains of human life beyond cultural or geographic boundaries as a result of the understanding that market expansion and economic growth are not only desirable but indisputable goals in a consumer society. As one of the primary energy consumers and stakeholders in most economies, the construction industry is threatened by the potential implications of current and future resource depletion.

This presentation draws on findings from the three-year collaborative research project Scarcity and Creativity in the Built Environment (SCIBE), which explored how conditions of scarcity might affect the creativity of different actors involved in the production of architecture and urban design, and how design-led actions might improve relevant processes in the future. The presentation identifies different modes of scarcity as they become explicit in the production and inhabitation of architecture and the built environment in London and Shanghai. Illustrated on the example of research-based creative interventions, it critiques traditional neoliberal approaches to economic development as well as alternative proposals, such as spatial agency. It unpacks how scarcity is linked to specialist and non-specialist creativity, questions widely held beliefs around the rise of the creative class and interrogates the currently propagated myth that the creative industries are intrinsically compatible with sustainable development and Green Growth. Ultimately, the presentation builds on an ecological understanding of resilience to propose that we are transitioning into a new multi-dimensional equilibrium, which will radical implications for the reconfiguration of values, beliefs and the human condition.

17. *The Harnessing Role of International Economic Law: Sustainable and Inclusive Growth through Law and Development*
Lee Soo-Hyun (UNCITRAL-RCAP)

International economic law and arbitration have significant 'harnessing' roles in green growth. This research produces a framework through international law and legal mechanisms that suggests ways in which green growth represents regional Pareto optimality in the orientation of economic development of individual countries. Within market-oriented interpretations of development, have showed inclinations towards legal regimes that establish privatization and liberalization.

However, such regimes have shown to be at certain costs: the exploitation of ecosystem services and their environmental effects receive little attention, as shown through the very metric of growth in market-oriented paradigms. The lack of an appropriate 'harness' to the extent of these costs are another topic covered in this presentation. Based on such, this research examines the potential and propensities of international economic law and legal mechanisms and ways in which they can contribute to green growth and inclusive development.

A topic that is particularly evaluated in this work is judicial discretion and the way that it has been employed to maintain environmental responsibilities while encouraging green growth. An informed arbitration panel, the legal standing of transnational corporations in investment disputes and the burgeoning culture of the Calvo Doctrine come together to show that engaging in international trade does not necessarily mean a sole emphasis on improved marginal gains from trade. Mechanisms in multilateral and bilateral trade agreements or legislation related to international trade and investment can protect the 'national development of the country' and matters of public interest and social justice, which undoubtedly represent significant potential for green growth.

18. *Uncovering hidden trade---offs in the Green Economy: Biodiversity and the manufacturing, transport and renewable energy sectors*
    Alexandros Gasparatos (U. of Tokyo) and **Christopher Doll** (United Nations University)

UNEP's Green Economy report is to date the most comprehensive initiative for identifying pathways to sustainable development across the various economic sectors (UNEP, 2011). This report highlights how "greening" certain economic sectors can become an engine of growth, providing decent jobs and income. Investing in natural capital is seen as an important avenue for greening economic sectors that depend significantly on biodiversity (e.g. agriculture, forestry and fisheries). However, the contribution of biodiversity has been under-appreciated for economic sectors such as manufacturing, transport and renewable energy.

Biodiversity contributes directly to several industries falling within the energy, manufacturing and pharmaceutical sectors, yet these sectors can also have substantial negative impacts on biodiversity. For example, manufacturing and transport have been associated with the emission of numerous pollutants that can affect ecosystem health and contribute to the loss of biodiversity. This presentation will examine the links between biodiversity and three key economic sectors with green economic potential: manufacturing, transport and renewable energy. First, we identify how biodiversity contributes to these sectors. Then we employ the six drivers of biodiversity loss articulated in the MA framework to analyse how different processes within the three sectors can affect biodiversity negatively. Through this exercise we assemble a matrix of the biodiversity impacts of the three sectors as a first step for identifying the "green-economic trade-offs" associated with the sectors. The chapter concludes by offering suggestions how these impacts can be remedied and how biodiversity conservation can improve the productivity, and thus the green-economic potential, of these sectors.

19. *Economic Growth vs. Sustainable Development: A Critical View on Development of Environmental Governance in China*
    Le Bo (U. of Essex)

Due to the special historical and political roots, it is usually difficult for China, the largest developing country in the world, to make decisions on choosing economic priority or environmental priority. This presentation, by introducing a neo-Gramscian perspective, aims to investigate the different roles of government, corporation and non-governmental organization (NGO) in balancing economic growth and sustainable development in China's environmental governance. Semi-structured interviews were conducted on government officers, corporate managers and green NGOs' officers to obtain primary data. For data analysis, this presentation follows Fairclough's critical discourse analysis (CDA) to discuss the changing genres, discourses and styles of environmental governance in China as well as hegemonic changes from a wider political perspective.

This presentation concludes the genres of China's environmental governance have changed from highly prescriptive planning in the planned economy period to government supervision in the market economy period, then towards tripartite cooperation recently. Sustainable development, as the main theme of the contemporary China, has been regarded as important as economic growth and social stability by the state, the capital and the civil society in China. This presentation contributes to merge a neo-Gramscian approach with environmental governance to clarify how government, corporation and NGO engage in contests over industrial activities with environmental concerns in China.

FINAL DISCUSSION SESSION

The symposium was in broad agreement that efficiency strategies while critical are inadequate for mitigating the unprecedented scale of resource and energy throughput at the root of the social and environmental crisis. This argument was built on the basis of existing studies such as York and Rosa (2003), among others, as well as well as a global survey of the effectiveness of climate change mitigation measures presented at the conference. The second line of discussion at the symposium unpacked the ideological basis and political economy of Green Growth and asked if it could rescue capitalism from its contradictions. This rigorous theoretical enquiry into the nature of capitalism, its nature and its contradictions was supplemented with case studies from South Korea, the European Union, India and Brazil that detailed the limited success of each of these jurisdictions' extant efforts at curbing their energy and material throughput. The work of early-career researchers helped expand these empirical and theoretical discussions through case studies on a wonderfully wide range of topics, *viz.* carbon markets in Australia, NGO activism in China, democratic deficit in the Philippines, counter-hegemonic movements in Thailand, the urban waterscape in Jakarta, rural development in India, the nature of the green wave in North Korea, the juxtaposition of scarcity and creativity in the built environment, the scope of international environmental law and the trade-offs in the Green Economy, among others.

Quite uniquely so far in engagements with Green Growth, with the specific intent of discussing alternatives to the Green Growth narrative, the symposium dedicated a session to discuss strategies for moving environmental governance beyond the confines of the technical and managerial approach. This discussion drawing on cases from the India, United States, Brazil and the United Kingdom emphasized the importance of environmental governance becoming a more deeply political project, one that requires empowering human-centered initiatives and social movements. The discussion highlighted the importance of reclaiming and articulating values and norms that are ultimately the basis for policy, as a sight of political contest and creativity. While calling for deeper reliance on commons' democratic resources to deliberate and negotiate values and norms for a more equitable future on a shared and finite planet, a cautionary note was sounded about the powerful tendency of capitalism to co-op alternative initiatives.

We would do the movement for alternative economies a disservice though if we would simply celebrate these alternatives, as some authors do. We believe there is a need to critically analyze the very working practices of these alternative economic projects and the way they are often connected to the rest of the (global) economy. While at face value these projects might look alternative (green, more sustainable, more ethical, etc), the reality is often more complex, with many contradictions at work. In doing so the project has helped initiate a discussion on the possibilities of radical economic and social transformation.

4.0 Conclusions

As shown by the different presentations and papers summarized above, the projected offered a wide range of issues related to the critical thinking about green growth, which is a relevant topic in Asia and the Pacific where it gained prominence. The preparations for the Rio+20 conference included Green Economy built through Green Growth as one of the main issues in the policy discussions on global change. Indeed, this project was conceived in direct response to the Rio+20 processes and it emphasis on the Green Economy to build the "Future We Want" and the follow-up discussions on the Post-2015 Development Agenda and the Sustainable Development Goals (SDGs). The project can trace its conception to specific outputs produced by the erstwhile United Nations Institute for Advanced Studies such as Puppim de Oliveira (2012) and Mathai and Parayil (2012).

A long-standing issue in Sustainable Development discourse is the relationship between economic growth and environmental sustainability. The landmark report of the World Commission on Environment and Development, the so-called Brundtland Commission Report, noted that economic growth is feasible under conditions of increasing efficiency, enabled by growing affluence and technology development. Environmental policy and governance, over the years, has proceeded by taking this assertion as a given. Key international processes such as United Nations Framework Convention on Climate Change (UNFCCC), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), and Convention on Biological Diversity (CBD), proceed without taking a stance on this critical issue and implicitly maintain the status quo on economic growth. The latest development in this sequence, the post-Rio+20 "Future We Want" process, advocates a Green Economy, enabled by Green Growth.

'Green growth' represents the reconstruction of political discourse in face of ecological challenges and environmental movements. It encompasses approaches ranging from geo-engineering mega-projects to routine 'efficiency strategies.' By such means, it promises to stem the environmental crisis and mitigate its consequences whilst simultaneously addressing social challenges of destitution and disempowerment. It is a project with a utopian charge, depicting a path to the future that, thanks to scientific insight, engineering sophistication and managerial smartness, is capable of redressing the accumulated harms of the 'old' industrial paradigm. At the same time, at least in its mainstream variants, it claims to embody a sober realism: the route toward a sustainable future need not stray outside the institutional and normative territory of the current political economic prevalent ideas.

At face value green growth appears impervious to critique. Yet objections have been levelled against it from several different directions. This project gave a platform to a variety of its critics. Common to all is a concern that green growth agendas tend to buy into the illusion that techno-economic fixes and improvements in the management of markets will enable the path of endless growth to continue, in harmony with the environment. Some focused upon the question of climate change. Several questions were examined by the participants in the project: Is global economic growth, however 'green,' compatible with capping a rise in the planetary average temperature at two degrees Celsius above the pre-industrial level? If the required reductions in carbon emissions cannot be achieved through a declining carbon intensity of production, then the green growth project, far from being 'realistic' would be a utopia, a mirage that serves only to flatter the ability of existing power structures to tackle ecological challenges. Participants focused attention upon those power structures themselves. Green growth exemplifies the incorporation of environmental narratives into "the modernization project," with critical attention devoted solely to the "'end-of-pipe' consequences of current social relations to the environment," i.e. the pollutive excretions of modern industrialism, to the exclusion of the social organism from which they flow, with its corporate energy systems, class differences that generate "capitalist expansion and community fragmentation," and strikingly inegalitarian patterns of wealth distribution. The problematic centres upon the accumulation of capital, which necessarily demotes the relationship between humanity and nature to a subsidiary concern, while it puts "neoliberal governmentality" in the frame, a mode of power that elevates capital accumulation to "a principle of

governance," with green growth understood not as merely "another instance of the misuse of state or corporate power" but as a strategic initiative to elevate principles of economic competition to the guiding mechanism of humanity's interaction with the natural environment. Green growth stands for a new mode of human engagement with the environment, with nature reconceived as a type of capital, a collection of tradable ecosystem services that are mobilized to defend productivity gains, minimize costs of capital expansion, and stave off crises of reproduction. Just as in earlier eras the commodity labour-power was unbundled from the human activity of commoners (or slaves) and made ownable and transferable so, in the dawning era of the green economy, carbon-cycling capacity and other ecosystem services are to be unbundled from the activities of the earth and made circulatable and accumulable.

In fact the Green Economy and Green Growth discourse has evolved out of the Ecological Modernization "movement" that started in the 1970s and went on to influence deliberations of the World Commission on Environment and Development and the resulting landmark "Our Common Future" report that essentially defined the phrase Sustainable Development. In subsequent decades boosted by most national governments and international organisation, these ideas have proceeded to shape mainstream environmentalism. They have however taken on little in the way of critical reflection. Why economic growth? What sort of society is organised around it, and to what ends? In the post-2008 (i.e. post-Great Recession) period, Green Growth enjoyed a powerful revival of interest, but a variety of erstwhile critical currents have also arisen that address these questions and seek to inject them into the Green Growth debate. Our project advanced this critical engagement to inform policy in a more holistic manner to avert the problems of proceeding on a policy course that is not rigorously scrutinized. This workshop, book project and the post-project green growth platform we envisage, brings this vision to life. (Excerpted in significant measure from Dale, Mathai and Puppim de Oliveira (2016)).

5.0 Future Directions

This project helped to create and disseminate critical scientific knowledge on "Green Growth," an important strategy in contemporary global change and sustainable development policy and practice. It brought together scholars and policy practitioners from around the world and young researchers and policy practitioners from the Asia-Pacific region, as well as disseminated even further the results through the project extension. This has produced and will produce long-term gains by enhancing scientific and policy capacity regarding Green Growth and its link to global environmental change. Opportunities to build the network developed so far and further engage this important policy question in global environmental governance are being explored, as some of the young scholars want to lead an initiative to further investigate green growth initiatives.

An immediate follow-up step after the book was published was dissemination of the book through lectures, seminars at universities and think-tanks in the APN region and key stakeholders, and particularly in the United Nations and scientific bodies. Ultimately, our goal is to create a platform for the continued engagement with environment and sustainable development governance policy to arrive at a balance between technical and normative processes.

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Appendix 1 – Program and participants of the Symposim in Tokyo in 2014

Agenda/Program

Supported by Asia-Pacific Network for Global Change Research

http://www.apn-gcr.org/

International Symposium on Green Growth and Global Environmental Change

United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)

July 25th and 26th, 2014

Tokyo, Japan

Symposium Schedule

Day 1 - July 25th 2014 (Friday)

10:00 – 10:30 - *Registration*

10:35 – 10:40 – *Welcome remarks* - **Kazuhiko Takemoto**, Director, UNU-IAS

10:40 – 11:10 – *Introduction* - **Gareth Dale**, **Manu V. Mathai**, and **Jose A. Puppim de Oliveira**

11:10 – 11:20. Coffee/Tea Break

11:20 – 12:50 – Plenary Session 1 (Each presenter has 20-25 minutes + 15 minutes Q&A)

Chair: Gareth Dale (Brunel University)

Discussant: Jose Puppim de Oliveira (UNU)

1. *The technical and socio-economic pitfalls of green growth: A reality check to avoid disillusionment* **Ulrich Hoffmann** (UNCTAD)
2. *Social metabolism and environmental conflicts in India* – **J. Martinez-Alier**, **L. Temper**, **F. Demaria** (Autonomous University of Barcelona)

12:50 – 13:50. Box Lunch at UNU 2nd Floor Reception Hall

14:00 – 16:10 – Plenary Session 2 (Each presenter has 20-25 minutes + 15 minutes Q&A)

Chair: Jose Puppim de Oliveira (UNU)

Discussant: Gareth Dale (Brunel University)

3. *Not all tears are evil! Ethical perspectives on the green economy* **- John Crowley** (UNESCO)
4. *Can green growth rescue capitalism from its own contradictions? A critical assessment of the ´green growth´ approach - with a special focus on the European Union* **- Birgit Mahnkopf** (Berlin School of Economics and Law)
5. *Ecosystem Services as a New Capitalist Nature: Strategies of Resistance* **- Larry Lohmann** (The Corner House)

16:10 – 16:40. Coffee/Tea Break

16:40 – 18:55 - Parallel Sessions 1 & 2
(Each presenter has 15 minutes + 10 minute Q&A)

Parallel Session 1 (Elizabeth Rose Hall)

Session Chair: Gareth Dale (Brunel University)

Discussant: Prof. On-Kwok Lai (Kwansei Gakuin University)

1. *Resources for the Future, resources for growth: How the political economy of 1975 US growth ban helped paved the way for green growth* -- **Richard Lane** (U. of Sussex)

2. *An Overview on Development and Implementation of Energy Efficiency Policies in Vietnam* -- **Nguyen Duc Luong** (National University of Civil Engineering, Hanoi)

3. *Uneven Development, Climate Change and Carbon Markets: The Concentration and Centralisation of Emissions* -- **Gareth Bryant** (U. of Sydney)

4. *Quantifying the Environmental Impacts Derived from the Investment and Trade in China* -- **Chunmiao CAO** (Renmin U. of

Parallel Session 2 (Committee Room 3)

Session Chair: Jose Puppim de Oliveira (UNU)

Discussant: Prof. Dimiter S. Ialnazov (Kyoto University)

1. *Is Green Growth Here to Stay? The Global Context and the Case of South Korea* -- **Chiden Balmes** (Global Green Growth Institute)

2. *Democratic Deficit and Institutions of Inequality in the Philippines: The Prospects of a Green Economy for Green Growth* -- **Jalton Garces Taguibao** (U. of the Philippines-Diliman)

3. *Interrogation of Green Growth through the Second Contradiction of Capital and Contemporary Neoliberalism: A Case Study of Jakarta Urban Waterscape* -- **Indrawan Prabaharyaka** (UNESCO-IHE)

4. *Rethinking Policy Intervention for the Transition Towards Competitive Trade-led Green Growth* -- **Bhusal Bhishma**

China) & **Tao Hu** (WWF, China Program)

(Ministry of Finance, Nepal & U. of Deusto)

5. *Green Growth for Transforming Societies: Redefining/negotiating Urban-Rural Carbon Inequity* – **Mahendra Sethi** (United Nations University & National Institute of Urban Affairs, India)

19:00 – 20:00. Catered dinner at UNU 5th Floor reception area behind Elizabeth Rose Hall

Day 2 - July 26th 2014 (Saturday)

10:00 – 12:10 Plenary Session 3 (Each presenter has 20-25 minutes + 15 minutes Q&A)

Chair: Manu V. Mathai (UNU)

Discussant: Jose Puppim de Oliveira (UNU)

6. *The green growth trap in Brazil* - **Ricardo Abramovay** (U. of Sao Paulo)
7. *Steady states, green growth and the falling rate of profit* - **James Meadway** (New Economics Foundation)
8. *The Green Jobs Approach: Harnessing the world of work to contribute toward an environmentally sustainable production and consumption paradigm* - **Anne Posthuma** (International Labour Organization) (Skype)

12:10 – 13:00. Box Lunch at UNU 2nd Floor Reception Hall

13:10 – 15:35 - Parallel Sessions 3 & 4
(Each presenter has 15 minutes + 10 minutes Q&A)

Parallel Session 3 (Elizabeth Rose Hall)

Session Chair: Manu V. Mathai

Discussant: Prof. Kenichi Matsui (Tsukuba University)

1. *The Heart of Greenness: Putting Peoplehood at the Center of the Green Economy* -- **Kabir Sanjay Bavikatte** (United Nations University) **Daniel F. Robinson** (U. of New South Wales)

2. *Growing a Green Economy: Counter-Hegemonic Attempts to Transform the Agri-Food System in Thailand* --

Parallel Session 4 (Committee Room 3)

Session Chair: Gareth Dale

Discussant: Dr. Jose Puppim de Oliveira

1. *Enemy within: Counter movement, carbon pricing, and green neoliberalism in Australia* -- **Rebecca Pearse** (U. of New South Wales)

2. *Scarcity, Creativity and Urban Futures: Accelerationist urbanism* -- **Deljana Iossifava** (U. of Manchester)

Prapimphan Chiengkul (U. of Warwick)

3.
4. *Greening Rural Development of India and Environmental Sustainability* -- **Jyotish Prakash Basu** (West Bengal State University).

14:25 – 14:35 Coffee/Tea Break

5. *Implications of NGO Activism on Corporate Environmental Footprints in China: Evidences of Alternative Social Reporting* -- **Dan Shen** (U. of Essex)

6. *Pyongyang's own "Green Wave"? : Sustainability under the Byungjin Line* -- **Robert Winstanley-Chesters** (U. of Leeds and U. of Cambridge)

3. *The Harnessing Role of International Economic Law: Sustainable and Inclusive Growth through Law and Development* -- **Lee Soo-Hyun** (UNCITRAL - RCAP)

14:25 – 14:35 Coffee/Tea Break

4. *Uncovering hidden trade-offs in the Green Economy: Biodiversity and the manufacturing, transport and renewable energy sectors* -- **Alexandros Gasparatos** (U. of Tokyo) and **Christopher Doll** (United Nations University)

5. *Economic Growth vs. Sustainable Development: A Critical View on Development of Environmental Governance in China* -- **Le Bo** (U. of Essex)

15:35 – 16:00 Coffee/Teabreak

16:00 – 18:10 – Plenary Session 4 (Each presenter has 20-25 minutes + 15 minutes Q&A)

Chair: Jose Puppim de Oliveira (UNU)

Discussant: Manu V. Mathai (UNU)

9. *Giving green teeth to the Tiger? A Critique of the Concept "Green Growth"* - **Bettina Bluemling** (Wageningen University) & **Sun-Jin Yun** (Seoul National University) (Skype)
10. *Radical Alternatives to Green Growth* - **Ashish Kothari** (Kalpavriksh) (Skype)
11. *Alternatives to Green Growth? Possibilities and Contradictions* - **Steffen Boehm** (U. of Essex) and **Maria Ceci Araujo Misoczky** (Federal University of Rio Grande Do Sul) (Skype)

18:10 – 19:00 – **FINAL DISCUSSIONS**: Session for summarizing the event and for the contributors and editors to discuss the status of the book *Green Growth: Political Ideology and Political Economy* (with Zed Books) and further feedback on the chapters.

19:00 – 20:00. Catered dinner at UNU 2nd Floor Reception Hall

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Appendix 2 – *Funding sources outside the APN for the first year of the project*

Contributions from the project proponent's institution included:

1. Venue and hospitality (monetized value of in-kind contributions):

☐ Elisabeth Rose Hall, UNU, Tokyo, for two days: $5000.00 (Rental rate for non-UNU clients)
☐ Cleaning fee for Elisabeth Rose Hall: $300.00
☐ Coffee (100 people): $212.00
☐ Lunch (30 people): $450.00
Sub-total: **US$5,962.00**

2. Personnel cost (monetary):

☐ Salary for UNU proponent and UNU collaborator (2 people, ½ day a week for one year, two weeks intensive): $14,000.00
☐ Salary for Brunel University collaborator (1 person, ½ day a week for one year, two weeks intensive): $12,000.00
☐ Salary for UNU project management person (1 person, ½ day a week for one year): $4,200.00
Sub-total: **US$30,200.00**

3. Funding for non-APN members

☐ The Daiwa Anglo-Japanese Foundation: **£3,000 (~ US$ 4,750)**

Total: US$ 40,912.00

Appendix 3 - List of Young Scientists

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Glossary of Terms

Include list of acronyms and abbreviations

Appendix 4 - *Symposium report*

ASIA-PACIFIC NETWORK FOR GLOBAL CHANGE RESEARCH

Exploring the Promises and Pitfalls of Green Growth

The International Symposium on Green Growth and Global Environmental Change was convened by the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) on 25-26 July 2014 at UNU, Tokyo. The symposium was supported by a grant from the APN under its CAPaBLE Programme, a small grant from the Daiwa Anglo-Japanese Foundation, and a fellowship from the British Academy. The event brought together researchers and policy practitioners at various stages in their careers and representing diverse intellectual interests and ideological orientations.

Resource persons and participants of the international symposium.

It created an important space, much appreciated by participants and guests, to scrutinise the promises and pitfalls of Green Growth — an idea that has acquired considerable traction in national and international environmental policy deliberations after the Rio +20 conference. Authors from 17 countries and various international organisations (UNU, UNCTAD, UNESCO, ILO, UNICITRAL and the Global Green Growth Institute) presented a total of 30 papers discussing empirical evidence testing the claims of Green Growth, debating its ideological underpinnings and their implications as a response to modernity's environmental crisis and exploring alternatives.

The central idea of Green Growth is that technological innovation supplemented by market allocation of resources and some state regulation can assuage the ecological and social impacts of open-ended economic growth and its attendant energy and resource throughput confronting environmental governance today. Based on empirical evidence presented, the symposium took the view that such "ecological modernisation" strategies whilst important and necessary are also insufficient to adequately contain the impacts of energy and material throughput – the "social metabolism" – arising from open-ended economic expansion. Case studies included papers from South Korea, the European Union, Brazil, India as well as a global survey of climate change mitigation measures.

Complementing these cases, other papers queried and clarified the neoliberal ideological underpinnings of Green Growth and explored the scope of these policy mechanisms to rescue capitalism from its contradictions. Cases discussed carbon markets in Australia, NGO activism in China, democratic deficit in the Philippines, energy efficiency in Vietnam, counter-hegemonic movements in Thailand, the urban waterscape in Jakarta, rural

development in India, the nature of the green wave in North Korea, the juxtaposition of scarcity and creativity in the built environment, the scope of international environmental law and the trade-offs in the Green Economy, among others.

Further historical and ideological interrogation suggested that rather than offering grounds for containing expanding commodity frontiers and the externalisation of their social and ecological impacts, Green Growth strategies represent a further iteration in the production of capitalist nature that has proceeded since the 15th century. Failing to recognise this and implicitly excusing these policy mechanisms from critical scrutiny for a nuanced understanding of their location in capitalist production renders them capable of diluting creative, commons-based, and noncapitalist alternatives in response to modernity's environmental crisis.

Discussion session on green growth.

Turning to the question of "if not Green Growth, then what else" brought forward a hopeful yet realistic assessment of creative initiatives from around the world. Papers questioned the monolithic sanctity accorded to the concept of "property" and hence opened up the possibility of multiple nuanced relationships of social production and reproduction that restricted the imperatives of capitalist production to one among many social drivers. Other papers detailed social initiatives from around the world seeking to build "hybrid cultures" while also pointing out their risks of being co-opted by the dominant capitalist relationships.

An insight that drew wide acknowledgment is that efficiency strategies, which constitute the core of the "ecological modernisation" project, are a necessary but insufficient condition for environmental governance. Responding to such limitations, scrutiny of the ideological underpinnings of Green Growth highlighted contradictions implicit in it embodying another iteration of the production of capitalist nature. Faced with this reality, the symposium pointed to environmental governance that moved beyond the technocratic realm and empowered humancentered initiatives and social movements where the normative is reclaimed as a sight of political contest and creativity through deeper reliance on commons' resources to democratically deliberate norms and negotiate a more equitable future on a shared and finite planet.

The symposium opened up valuable space to critically scrutinise Green Growth and to consider creative responses to its contradictions. The relative novelty of such an opportunity was highly appreciated by many of the participants. The second output under this grant from the APN is a co-edited volume tentatively titled "Green Growth: Political Ideology and Political Economy" expected in 2015, with Zed Books.

Download: Green Growth Tokyo Symposium Programme_25_26July_2014

Related information

UNU Publication: *Green Economy and Good Governance for Sustainable Development: Opportunities, Promises and Concerns* (UNU Website; Amazon)

Feature on UNEP/Green Growth Knowledge Platform http://www.greengrowthknowledge.org/news/exploring-promises-and-pitfalls-green-growth

By: Dr. Manu V. Mathai, project leader of CBA2014-09NSY-Mathai

Retrieved from: http://www.apn-gcr.org/2014/08/07/unu-hosts-symposium-on-green-growth-and-global-environmental-change/

Appendix 5 – Places, dates and supporters of the seminars between March and July 2016.

Organizer	Affiliation	Place	Dates (2016)	Support from local organizers	APN support
Basu Jyotish Prakash	Lecturer, Department of Economics	Kolkota, University of West Bengal	25-Mar	Local Expenses, venue and organization	RT Ticket Bangalore-Kolkota, terminals
Doll Christopher	Research Fellow, UN University (UNU-IAS)	UN University, Tokyo	30-Mar	Venue and organization	RT tickets Boston-Tokyo, terminals
Indrawan Prabaharyaka	Researcher, Water Research Node, Indonesia	Jakarta, Indonesia	31-Mar	Local Expenses, venue and organization	RT Bangalore-Jakarta, terminals, per diem
Taguibao Jalton	Assistant Professor, Department of Political Science	The University of Philippines, Diliman and Political Science Assoc of the Philippines	01-Apr	Some local expenses and venue	tickets Tokyo-Manila-Bangkok, terminals
Chiengkul Prapimphan	Assistant Professor	Thammasat University, Bangkok, Thailand.	05-Apr	Some local expenses and venue	Ticket Manila –Bangkok,
Jose A. Puppim de Oliveira	UNU-IIGH and MIT-UTM Visiting Scholar	City University of Hong Kong	08-Apr	Venue, organization and local expenses	0
Jose A. Puppim de Oliveira	UNU-IIGH and MIT-UTM Visiting Scholar	Massachusetts Institute of Technology	06-May	Venue and organization	0
Gareth Dale	Brunel University	Dublin City University	10 May		
Jose A. Puppim de Oliveira	UNU-IIGH and MIT-UTM Visiting Scholar	World Resources Institute, Washington D.C.	20-May	Venue and organization	RT-ticket Boston-Washington, per diem, terminals, 1 night

Jose A. P. Oliveira	UNU-IIGH and MIT-UTM Visiting Scholar	United Nations, NY	24-May	Venue and organization	RT ticket Boston-NY, per diem, terminals, 1 night
Sun Jin Yun	Professor at the Seoul National University	National University of Seoul, Republic of Korea	10-Jun	Local Expenses, venue, 2 RT tickets in Asia and organization	RT ticket London-Seoul,terminals, per diem, 2 nights, and visa expenses
Chen Xi	WWF-China	Beijing, China	07-June	Venue and organization	RT train tickets Shanghai-Beijing, hotel and per diem
Gareth Dale	Brunel University	Gyeongsang National University	13 June		
Iris Borowy and Gareth Dale	College of Liberal Arte, Shanghai University	Shanghai University	15-Jun	Venue and organization	RT ticket Seoul-Shanghai, per diem, terminals, 2 nights
Dimiter Ialnazov	Professor	Kyoto University, Japan	20-Jun	Travel, local Expenses, venue and organization	One day hotel, per diem, terminals
Sethi Mahendra	National Institute of Urban Affairs	Habitat Centre, New Delhi, India	16-Jul	Venue and organization	RT tickets Bangalore-Delhi, Pune-Delhi, per diem, terminals, 1 night