



WWF

REPORT

MARCH

2014

# GREEN GROWTH IN THE GREATER MEKONG SUBREGION

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## ABOUT THIS REPORT

This is a thought piece produced by WWF-Greater Mekong on behalf of and with input from our partners at 3PL (People, Planet, and Profit Leaders) – a think tank established in June 2013 to support dialogue on green economy in the Greater Mekong countries: the Asian Development Bank (ADB), the UN Food and Agriculture Organization (FAO), the Global Mechanism of the UNCCD, and the Poverty-Environment Initiative (UNPEI) of UNDP and UNEP.

The aim is to provide a general overview of green growth initiatives, across sectors and countries, at the time of publication, in the Greater Mekong. The review will be a resource for shaping smart policies and business strategies, building awareness throughout civil society, and informing donor priorities for lasting prosperity and ecological integrity in the region.

The report was produced based on research for and outcomes from New Opportunities for Natural Wealth Management: A Public-Private Dialogue on Green Growth in the Greater Mekong Subregion, held in Bangkok, June 17-21, 2013. Subsequent in-house desk-based research by WWF-Greater Mekong as part of its work on green economies in the Greater Mekong supplements content collected at the regional dialogue. Information was sourced primarily from publicly available websites and synthesis documents. A draft version was presented as a background document for the third Green Economy Green Growth (GEGG) Forum, which will focus on “*The Nexus of Energy – Water – Food for Greening and Cooperation: Moving Forward and Faster*”, to be held on 22 November 2013 in Yangon.

3PL will continue to host a dialogue and information exchange on topics laid out in the report in the Greater Mekong.

## ACKNOWLEDGEMENTS

**3PL partners** - ADB, FAO, GM UNCCD, UNEP, UNDP, UNPEI - and participants at the first regional Public-Private Dialogue on Green Growth in the Greater Mekong Subregion, 17-20 June 2013; Colleagues at WWF-Greater Mekong, WWF-International and WWF-US, Louise Gallagher, Lucy Emerton, Wayne Burton, Grandis Timber Ltd., Katie White, Stefanie Lang and Sarah Bladen.

WWF is one of the world's largest and most experienced independent conservation organizations, with over 5 million supporters and a global network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

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## For more information

– please contact:

Sarah Bladen  
Communications Director  
WWF-Greater Mekong  
sarah.bladen@wwfgreatermekong.org

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## ACRONYMS

|                   |                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------|
| <b>3PL</b>        | Public Private Partnership Leaders                                                        |
| <b>ADB</b>        | Asian Development Bank                                                                    |
| <b>AECEN</b>      | Asian Environmental Compliance and Enforcement Network                                    |
| <b>APEC</b>       | Asia Pacific Economic Cooperation                                                         |
| <b>ASEAN</b>      | Association of Southeast Asian Nations                                                    |
| <b>BS</b>         | Budget Support                                                                            |
| <b>CEP</b>        | Core Environment Program                                                                  |
| <b>CSOs</b>       | Civil Society Organizations                                                               |
| <b>CSR</b>        | Corporate Social Responsibility                                                           |
| <b>ECO-BEST</b>   | Enhancing the Economics of Biodiversity and Ecosystem Services in Thailand/Southeast Asia |
| <b>EEPSEA</b>     | Economy and Environment Program for Southeast Asia                                        |
| <b>EISEI</b>      | Extractive Industry Social and Environmental Impact                                       |
| <b>EITI</b>       | Extractive Industries Transparency Initiative                                             |
| <b>EOC</b>        | Environment Operations Center                                                             |
| <b>FAO</b>        | Food and Agriculture Organization of the United Nations                                   |
| <b>GEGG</b>       | Green Economy Green Growth                                                                |
| <b>GGGI</b>       | Global Green Growth Institute                                                             |
| <b>GMS</b>        | Greater Mekong Subregion                                                                  |
| <b>ICT</b>        | Information and Communications Technology                                                 |
| <b>InVEST</b>     | Integrated Valuation of Environmental Services and Trade-offs                             |
| <b>IUCN</b>       | International Union for the Conservation of Nature                                        |
| <b>NSDP/NDP</b>   | National Strategic Development Plan/National Development Plan                             |
| <b>OECD</b>       | Organisation for Economic Cooperation and Development                                     |
| <b>REDD/REDD+</b> | Reducing Emissions from Deforestation and forest Degradation                              |
| <b>RIF</b>        | The Greater Mekong Subregion's Regional Investment Framework                              |
| <b>SRI</b>        | Socially Responsible Investment                                                           |
| <b>TEEB</b>       | The Economics of Ecosystems and Biodiversity                                              |
| <b>UNCCD</b>      | UN Convention to Combat Desertification                                                   |
| <b>UNDP</b>       | United Nations Development Programme                                                      |
| <b>UNEP</b>       | United Nations Environment Programme                                                      |
| <b>UNPEI</b>      | UNDP-UNEP Poverty and Environment Initiative                                              |
| <b>WWF</b>        | World Wide Fund for Nature                                                                |

## GLOSSARY

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Biocapacity</b>                        | Biocapacity is shorthand for biological capacity, which is the ability of an ecosystem to produce useful biological materials and to absorb carbon dioxide emissions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Clean technology</b>                   | The term cleantech, (sometimes used interchangeably with greentech, sustainable technologies, and environmental technologies) embraces a wide range of innovative products and services that contribute both financial returns and positive environmental impacts and outcomes. A large proportion of cleantech is made up of energy-related technologies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Climate change</b>                     | A statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Corporate Social Responsibility</b>    | CSR is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Corporate sustainability reporting</b> | A sustainability report is an organizational report that gives information about economic, environmental, social and governance performance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Ecological footprint</b>               | The Ecological Footprint is a resource accounting tool used by governments, businesses, educational institutions and NGOs to answer a specific resource question: How much of the biological capacity of the planet is required by a given human activity or population?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Ecosystem services</b>                 | <p>ES consist of the flows of value to human societies as a result of the condition of ecosystem structure, process/function and extent of Natural Capital in the following areas:</p> <ul style="list-style-type: none"> <li>• <i>Provisioning Services</i> - These are the products derived from nature including food (i.e. fish, game), water, (i.e. drinking, irrigation), raw materials (i.e. timber, fibre, fertilizer), genetic resources (i.e. medicinal), medicinal resources (i.e. biochemical products), ornamental resources (i.e. pet trade, fashion, artisan material).</li> <li>• <i>Regulating Services</i> - These are the benefits obtained from the regulation of the physical, chemical and biological processes between organisms and their environments. These include the regulation of air quality, climate, erosion, pollination, biological regulation (i.e. seed dispersal), extreme event moderation, waste treatment (i.e. water purification), and soil fertility maintenance.</li> <li>• <i>Cultural Services</i> - These are the non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, inspiration, and aesthetic experiences. For example, these include, sense of place, social relations (such as differing between fishing and agrarian communities), cultural heritage, First Nations values and cultural practices, education and knowledge systems.</li> <li>• <i>Habitat Services</i> - There are two services directly linked to habitat: habitat for species (such as nurseries for migratory species), and habitats to serve as gene-pool 'protectors'. The latter refers to the necessity to maintain natural habitat to allow natural selection to take place, which is the basis for the diversity of life on Earth, and to protect existing gene pools at healthy levels.</li> </ul> |
| <b>Green economy</b>                      | An economy that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient, and socially inclusive.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Green growth</b>                       | Growth that emphasizes environmentally sustainable economic progress to foster low-carbon, socially inclusive development, while ensuring that natural assets continue to provide the resources and environmental services upon which our well-being relies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Low carbon, emissions development</b> | Low carbon development is generally expressed as low-emission development strategies (LEDS - also known as low-carbon development strategies, or low-carbon growth plans). Though no formally agreed definition exists, LEDS are generally used to describe forward-looking national economic development plans or strategies that encompass low-emission and/or climate-resilient economic growth. |
| <b>Natural capital</b>                   | Natural Capital is the extension of the economic notion of capital (manufactured means of production) to goods and services relating to the natural environment. The stock of natural ecosystems yields a flow of valuable ecosystem goods or services for the future, providing a foundation for green growth and green economies.                                                                 |
| <b>Resilience</b>                        | The ability of a system [human or natural] to resist, absorb and recover from the effects of hazards in a timely and efficient manner, preserving or restoring its essential basic structures, functions and identity.                                                                                                                                                                              |
| <b>Resource efficiency</b>               | Reducing the total environmental impact of the production and consumption of goods and services, from raw material extraction to final use and disposal.                                                                                                                                                                                                                                            |
| <b>Responsible business</b>              | Businesses seeking to minimize their negative environmental and social impacts and to maximize their positive environmental and social impacts.                                                                                                                                                                                                                                                     |
| <b>Sustainable development</b>           | Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It incorporates the concepts of economic, social and environmental sustainability.                                                                                                                                                       |

# INTRODUCTION

## Green economy, green growth and Low Emissions Development in the Greater Mekong

Economic development in the Greater Mekong Subregion (GMS)<sup>i</sup> has outpaced many other parts of the world over the past two decades with much growth fuelled by demand within the Asia Pacific for food, energy, and commodities.<sup>ii</sup> With the exception of Thailand, the Mekong countries are emerging from a process of economic transition and transformation, showing a rapid shift from subsistence farming to diversified production bases – and from centrally planned economies to more open market-based systems. By 2030 at least 50 per cent more food, 45 per cent more energy and 30 per cent more water must be secured to meet the needs of the world's population.<sup>iii</sup> Many Asian countries, particularly China and India, already find it impossible to meet domestic demands for their own natural resources. With increased integration in global and regional markets, continued growth in these countries is likely to be fuelled to a large degree by natural resource exploitation.

The GMS is the 'rice bowl' of Asia and at its heart lays the Mekong River. Winding almost 3,000 miles from the Tibetan plateau down to the South China Sea, it boasts the world's largest inland fishery – contributing 25 per cent of the global freshwater catch, providing livelihoods for 60 million people and second only to the Amazon River in terms of fish biodiversity.<sup>iv</sup> Natural Capital generates a flow of provisioning, regulating, cultural and supporting ecosystem services like clean water, climate mitigation, flood protection, renewable natural resources and storm protection. Together, these generate inputs to primary productivity, vital life support services and economic production that are critical to human well-being and economic production in the GMS, as they secure the livelihoods of a large percentage of the rural population. This is particularly important for poor women and men who rely heavily on natural resources for their livelihoods and environmental degradation is one of the major determinants of their poverty. Therefore a healthy and productive environment contributes significantly to human being and pro-poor economic development.

Mekong countries remain relatively well-endowed in natural capital<sup>v</sup>, in addition to offering cheap labour and attractive investment opportunities, but signs of pressure and stress on the region's Natural Capital are becoming more apparent alongside rapid rates of growth and market development. Escalating land, resource and infrastructure demands arising from urbanization and industrialization combined with a rapidly growing human population means that biodiversity and ecosystem services in the Mekong countries currently face unprecedented threats. At the same time, climate change is affecting ecological productivity and economic vulnerabilities in ways that may encourage even greater pressures on the natural system and cause progressively greater stresses to human and economic systems.

At the food-energy-water security nexus, food demand alone in the Mekong countries is projected to grow by between 20 and 50 per cent by 2030. A quarter of the GMS population has no access to electric energy, but this gap is predicted to close with demand expected to increase by 175 per cent between 2010 and 2025. The use of water for agriculture, energy production, and domestic and industrial use is increasing exponentially, within the GMS countries and at the regional level. Land use, particularly for agriculture, biofuels and urban settlement, and transport infrastructure, are two sectors that depend and impact particularly heavily on the GMS' Natural Capital base.<sup>vi</sup> Given the importance of Natural Capital stocks and ecosystem services in the GMS countries, as well as the international attention given to Green Economy in recent years, GMS countries have started to consider the contribution that green growth could make to the resilience of their economies and societies.

Shifting to a green economy recognizes the value of nature for millions of people in the GMS, now and in the future. Many are moving forward on a green growth agenda in the understanding that this development pathway offers the potential for sustainable economic development with more equitable sharing of the gains. Currently, there are a number of unique opportunities for the transition to a green economy.<sup>vii</sup> This report focuses on some signals of policy progress on this transition, barriers to progress, and recommendations for moving the agenda forward.

# GROWING GREEN ECONOMIES IN THE GREATER MEKONG SUBREGION

Better information on changing ecosystems, socioeconomic impacts, more integrated development planning, and improved regulation for both developing and implementing environmental and social standards will lead to improved outcomes for resilient economic growth in the Greater Mekong countries.

## Economic growth, development and resilience in the Greater Mekong Subregion

In July 2011 the annual GMS Environment Ministers Meeting announced that their regional vision of a “poverty free and ecologically rich GMS” will be achieved through the development of “a green, inclusive and balanced economy, and as a first step in this transition we aim to maintain and enhance ecosystems and the services they provide.” In December 2011, at the 4<sup>th</sup> GMS Summit, countries endorsed a new ten-year strategic framework that contains many core elements of a transition to a green economy. Most recently, during the GMS 2020 Conference on Balancing Economic Growth and Environmental Sustainability held in 2012, policy-makers from all six countries, as well as development partners, gave explicit consideration to the issue of how best to bring about a balanced convergence between economic growth and environmental sustainability.

## How is green growth understood in the Greater Mekong Subregion

*Green Economy*, *Green Growth* and *Natural Capital* are all still relatively new terms to the GMS countries.

Fundamentally, green economy concepts and approaches aim to understand and emphasise the interdependencies of human systems and natural systems. The concepts behind the green economy have their roots in the political environmental movements of the 1970s and the discipline of environmental economics; but since 2008 the most prominent approaches have come to be known as *green economy*, *green growth* and *low-emission development strategies (LEDS)*. Even though each approach has a different emphasis, tools and actions, they share a common premise that well-maintained biodiversity and ecosystem services are essential to achieving development and social goals.

Each country and region – and their respective economic structure – is different. As such, each country or region will have to define what green economy ‘is’ on their own terms. *Green growth* is widely understood to be sustainable, equitable economic growth achieved through investment in the pillars of a green economy which are listed by UNEP, OECD and other organizations to include:

- Natural Capital maintenance, enhancement and/or restoration
- Sustainable infrastructure
- Resource efficiency
- Low carbon, clean technology
- Enabling resilience and adaptive capacity across human, cultural, physical infrastructure and economic systems
- Developing social and human capital and supporting equitable development outcomes

Of these terms, *Green Growth* serves to frame the discussion around the key challenges faced by the GMS:

- ***How to achieve sustainable development and combat climate change while maintaining and enhancing quality of life.*** The challenge to be addressed is how to maintain or assure environmental capacity in the face of pressures on ecosystem integrity, both natural and man-made, while also supporting the governments of the region in achieving their goal of green growth.
- ***Resilience*** has emerged as a key theme in the region.<sup>viii</sup> Ecosystem integrity determines the environmental capacity of a place to provide for the people that live there, enable livelihoods or support achievement of development goals – and to adapt to increased human pressures while continuing to supply ecosystem services to social and economic systems (adaptive capacity).



- There are some moves towards developing a ***distinct national understanding of green growth*** - for example, in Cambodia where preservation of culture has been co-opted into the green growth concept.

Some observations from participants at the regional dialogue on green growth in Bangkok from 17-20 June 2013 concluded that there is a need to communicate the necessity for greening growth in these countries so that the objectives can be clearly understood and supported by the public. Moreover, human health dimensions need to be better incorporated into the dialogue and definitions of green growth. Some awareness-raising activities have been initiated and introduced by UN agencies, ADB and World Bank, Global Green Growth Institute (GGGI) and some CSOs.

#### **Box 1. A snapshot of GMS capacity building partnerships initiatives and tools**

**GMS Green Economy Dialogue Series.** Global Mechanism/UNCCD, ADB, FAO, UNDP, the Oslo Consortium, and UNEP, alongside the Green Economy Coalition and with the support of the Government of Norway and WWF, have initiated a region-wide green economy dialogue, providing answers and sharing best practices on current initiatives and work streams related to the economic valuation of natural capital, green production, innovative financing mechanisms, and policy incentives for conservation.

**OECD: Toward green growth in emerging and developing Asia.** In the context of the 2012 East Asia Climate Partnership (EACP) programme, the OECD has engaged in a 2-year horizontal project, the overarching objective of which is to help promote green growth in selected ASEAN countries, including Lao PDR, Thailand and Vietnam (data permitting). Building on the OECD expertise on green growth, this work will follow up on the OECD Green Growth framework and the OECD Development Strategy, which will be tailored to the specificities of ASEAN economies. It will examine how green growth strategies can be best incorporated into national development plans, as well as how to enhance policy coherence and local administration capacity, through tools to design green-growth policies and monitor implementation progress.

**UNDP and UNEP Poverty-Environment Initiative.** The United Nations Development Programme and United Nations Environment Programme's Poverty-Environment Initiative (UNPEI) is a global initiative that supports country-led efforts to mainstream poverty-environment linkages into national development planning processes. PEI's main focus is on supporting countries to achieve greener and more inclusive development by integrating ecological, climate and equity concerns into national, sub-national and sectoral economic decision making and planning. Inclusive and green economy interventions are crucial to the work of PEI in the region. PEI is coordinated by a joint UNDP-UNEP regional team at the UN compound in Bangkok and has nine country programmes in Asia and the Pacific (including Lao PDR and Thailand in GMS). [www.unpei.org](http://www.unpei.org)

**Green Growth e-learning.** In response to the needs of policy makers and stakeholders in the Asia-Pacific region, ESCAP, the Asian Institute of Technology (AIT) and the Regional Resource Centre for Asia and the Pacific have partnered with the Government of the United Kingdom to offer interactive, on-line training courses related to Green Growth. <http://www.greengrowth-elearning.org/lms/mod/page/view.php?id=7>

### **Regional governance for green growth**

**Commitments from players at the higher, regional level appear to be strong, but supporting mechanisms and agreements for implementation are slow moving, missing or ineffective in many contexts. Some of the best entry points for technical work on green growth have been for national and sub-national issues to date. As the link between conservation and development is better understood, the question shifts to one of competing development goals for different GMS countries. As such, there is a need for a regional forum to support the integration of green growth in regionally consequential decisions regarding Natural Capital with a dispute resolution mechanism, transparent and accessible technical information, and opportunities for dialogue.**

Market integration between the Mekong countries is increasing as governments work toward establishing an ASEAN Economic Community by 2015. Many natural resource-based sectors in the Lower Mekong, most notably hydropower, mining and timber, are being developed and utilized on a sub-regional basis. These efforts to integrate markets and industry are being accompanied by concerted efforts to increase production of goods for export; facilitate trade flows and connectivity with heavy emphasis on the development of infrastructure such as roads, airport and railway improvements; energy projects for cross-border power supply; and tourism facilities.

Of particular importance is the ADB-led GMS Economic Cooperation Program, which places heavy emphasis on the development of infrastructure, such as roads, airport and railways, hydropower projects for cross-border

power supply, and tourism infrastructure. Institutionally speaking, subregional standards for ensuring minimum social and environmental safeguards are set through ADB working groups on environment, agriculture, energy, human resource development, transport, trade, investment and those of the Mekong River Commission.<sup>ix</sup>

Many local, national, regional and international actors have coalesced around the green economy agenda in the GMS as part of bilateral development partnerships or advocacy on green growth agendas. These agencies are, for the most part, driving the delivery of green growth through capacity building, technical support and financing.

## **Box 2. Some key coordination institutions contributing to Green Growth**

**GMS Economic Cooperation Program.** The six countries of the GMS launched a program of subregional economic cooperation—the GMS Program—in 1992 to enhance their economic relations, covering the nine priority sectors: agriculture, energy, environment, human resource development, investment, telecommunications, tourism, transport infrastructure, and transport and trade facilitation. The GMS Program, with the support of ADB and other development partners, is contributing to green growth in the GMS through the Core Environment Programme and other-related environmental initiatives.

**ASEAN Economic Community (AEC).** ASEAN Ministers meet on many issues relevant to green economies in the Greater Mekong: energy, agriculture and forest, investment, minerals, transport, tourism, ICT. Most notably, the ASEAN Mekong Basin Development Cooperation (AMBDC) was established in 1996 and meets annually, with the last meeting being the 14<sup>th</sup> Ministerial Meeting on AMBDC held in Siem Reap, Cambodia, 29 August 2012.

**APEC** is the Asia-Pacific economic forum for sustainable economic growth and prosperity in the region, whose GMS members include People's Republic of China, Thailand and Vietnam. This regional platform has dialogues on life sciences innovation and the regulation and trade of chemicals; working groups on energy, health, illegal logging and associated trade, oceans and fisheries, and human resources development; and policy partnerships on food security and sustainable development.

**Asian Environmental Compliance and Enforcement Network (AECEN).** In 2005, environmental agency leaders from 13 Asian countries established the Asian Environmental Compliance and Enforcement Network (AECEN) to promote improved compliance with environmental legal requirements in Asia. AECEN accomplishes this task through the exchange of innovative policies and practices among member enforcement agencies.

**Astana Green Bridge Initiative.** The overarching goal of the Astana Initiative, adopted in 2010, is the development of regional, interregional and intersectoral cooperation, and the creation of suitable conditions for the introduction of "green" economy principles in Europe and Asia and the Pacific.

**The Ayeyawady - Chao Phraya - Mekong Economic Cooperation Strategy (ACMECS)** is a cooperation framework established in April 2003 amongst Cambodia, Lao PDR, Myanmar, Thailand and Vietnam. The aims of the framework are to utilize member countries' diverse strengths and to promote balanced development in the sub-region.

**Mekong River Commission.** The Mekong River Commission (MRC) is an intergovernmental river basin organization established by the riparian countries of Cambodia, Lao PDR, Thailand, and Vietnam, and their development partners, to bring economic prosperity, social justice and environmental conservation to the Mekong River Basin through sustainable management and development of the river's water and related resources. The MRC's Initiative on Sustainable Hydropower (ISH) and its 1995 Agreement (founding document) supports regional consultation on mainstream hydropower development proposals, using its own [Procedures for Notification, Prior Consultation and Agreement \(PNPCA\)](#) to evaluate potential risks and opportunities associated with each proposed project. This process is still evolving, however, as member countries did not reach consensus on the Xayaburi Dam project, which is currently under-construction in northern Lao PDR. Notes from the Xayaburi PNPCA were not shared; and no forum for conflict resolution currently exists.

**National Mekong Committees.** These are coordinating bodies of the Mekong River Commission (MRC) in Cambodia, Lao PDR, Vietnam, and Thailand. These state agencies receive technical advice on joint planning, coordination and cooperation from the MRC Secretariat, the technical and administrative arm of the MRC.

The Mekong Wetlands Biodiversity Conservation and Sustainable Use Program is a joint initiative of UNDP, IUCN, the Mekong River Commission (MRC) and Global Environment Facility (GEF), developed to address the critical state of the economic, environmental and social aspects of the Mekong region.

## DETAILED CASE STUDY 1. GMS Core Environment Program

In 1992, the six countries along the Mekong River – Cambodia, People's Republic of China (PRC), Lao PDR, Myanmar, Thailand and Vietnam – formed the Greater Mekong Subregion (GMS) with the launch of the GMS Economic Cooperation Program (GMS ECP). For the past 20 years, the GMS ECP has facilitated regional investment, collaboration and integration across major economic sectors, stimulated economic growth, and helped reduce poverty in the subregion.

Rapid economic development has, however, increased pressure on the GMS natural resource capital that underpins much of the economic success. Recognizing that sustainable development in the GMS requires innovative approaches to protect and responsibly manage its shared natural resources, in 2005 the GMS ECP launched the Core Environment Program (CEP).<sup>1</sup> Since then, CEP has supported the GMS countries to achieve the shared vision of a “poverty-free and ecologically rich GMS” by helping them to mainstream sound environmental practices within key economic growth sectors and geographic landscapes.

CEP is a multi-donor funded program administered by the Asian Development Bank (ADB). Phase II of CEP commenced in 2012 under an ADB Regional Technical Assistance (RETA 7987). The program is overseen by the GMS Working Group on Environment (WGE), comprising representatives from the environment ministries of the six GMS countries. The Environment Operations Center (EOC) in Bangkok acts as the secretariat to the WGE and provides coordination and technical support for the implementation of CEP.

CEP Phase II (2012 to 2016) covers four thematic components: 1. Environmental Planning, Safeguards, and Monitoring; 2. Biodiversity Landscapes and Livelihoods; 3. Climate Change; and 4. Institutions and Financing.

## National green growth roadmaps, strategies and action plans

Many governments and other stakeholders are engaged in specific capacity building work on the sub-themes or technical components of greening economies without calling it green growth or green economies. In the interest of keeping the focus firmly on overarching frameworks, this mapping identifies approaches and initiatives specifically related to green economy frameworks and does not review legal and institutional frameworks at the national level that cover the blueprint of what it takes to green national development planning holistically, i.e. sustainability policies in forestry, fisheries, agriculture; SES and environmental and social assessment regulations, specific environmental or product standards, gender and human rights policies, etc.

‘Greening’ elements need to be integrated in national frameworks, development planning and corporate activities to be able to say the region – or each country in the region – is instigating a green economy and to achieve sustainable development. There are encouraging signs that good intentions on green economy are being put into practice in GMS countries, though the move towards green growth policy-making is still in the early stages.

## GREEN GROWTH FRAMEWORKS

These steps for green growth planning have been followed by governments in the Greater Mekong countries, though each follows its own particular phasing and emphasis<sup>\*</sup>:

- 1. Vision-settling phase, to**
  - Develop a common understanding of what green growth/a green economy is and what it could enable a country to achieve
- 2. Highest level political commitment in the form of,**
  - Statement/declaration from the prime minister or president
  - Inter-ministerial consultation and coordination mechanism on green growth agenda building
  - Engagement on green economy agenda from a multidisciplinary ministry such as planning, economic development or finance
- 3. A roadmap document, formulated through wide consultation to,**
  - Establish the rationale for green economic development in the country, and a vision of what green economy can be

- Plan the process by which a comprehensive plan for transitioning to green growth in the country in the short to medium term can be realized
  - Describe the institutional structure to manage the process, including stakeholder mapping
  - Report on preliminary investigations and information gathering on green growth potential and options for action
4. **A strategy document requiring and supporting ministries to integrate specific goals and targets into their policymaking to,**
    - Establish environmental and social priorities and a concrete goal for greening the economy
    - Provide sectoral analyses and discussions for greening targets
    - Give a baseline analysis of existing legal and institutional frameworks for green growth
    - Propose a national framework for transitioning to green growth
    - Identify which measures of progress towards green growth will be used
  5. **Individual policy programs or comprehensive action plans or strategy roadmaps for policy reform/development to**
    - Provide a legislative basis for realising green growth in practice
    - Show policy analysis for addressing environmental and social priorities for green growth
    - Identify policy instruments that would reform/development priorities
    - Allocate institutional roles and responsibilities
  6. **Systems for implementation, knowledge management and sharing, including information on economic analysis of Natural Capital values, including,**
    - Choosing monitoring and evaluation systems at the national, provisional, project levels
    - Supporting and partnering in private and CSO sector outreach/enabling/capacity building
    - Funding or partnering in individual projects
  7. **Monitoring and evaluation systems, including**
    - Mainstreaming goals concretely in national development processes
    - National green accounting systems
    - Other measures of sustainability footprints

Each GMS country defines these phases differently in the specifics and are currently at different levels of execution. Some countries have decided not to pursue a single framework document or process for green growth, but pursue specific green growth objectives through individual policies.

**People's Republic of China** has long shown a particularly strong interest in the issue. PRC's operationalization of green economy approaches goes back to 2008 with the enactment of the "Circular Economy Law" in 2008.<sup>xi</sup>

**Cambodia and Vietnam** have developed green growth plans with the support of GGGI, UNESCAP, WWF and others, and have made steps towards integrating these in economic decision making, policies and market-based incentive mechanisms. In 2009, Cambodia produced a "Green Growth Road Map" and, in March 2013, continued its regional lead by releasing an accompanying strategy and instituted a green growth policy. Vietnam established a green growth strategy in 2011 and approved a Party Central Committee Resolution on Responding to Climate Change, Natural Resource Management and Environmental Protection in May 2013 that will give support to a series of policy reforms and development that will see Natural Capital mainstreamed in government decision making.

In **Thailand**, the spirit of green economy has been well established in the Self-Sufficiency Economy principle, created in the 1970s by the Royal Family of Thailand, and integrated in the national economic and social development plans. The most recent 11th NESDP (2012-2016) is strongly rooted in green economic development principles, which are integrated throughout various sectors (e.g. specific focus is given to achieving green growth through innovation and training). Thailand's climate change master plan (2012-2050) is another important umbrella policy document. There are also sector-specific policies, in energy (25 per cent reduction of energy intensity by 2030), agriculture and forestry, waste, etc. Considerable additional effort and resources are required to promote adequate operationalization

and implementation of these plans. Private sector initiatives have shown a vibrant green economy momentum, with steady growth.

**Myanmar**, in possibly the most exciting green economy development in the GMS, has made clear its intention to develop its economy with sustainability and equity standing as key principles for development. The government of Myanmar is currently formulating the first 5-year national development plan, alongside a 20-year National Comprehensive Development Plan – which are expected to reference the central themes of green growth, though no national green growth planning process has yet been established.

**Lao PDR** has expressed interest and requested assistance in creating a green economy roadmap and policies. Currently the Ministry of Natural Resources and Environment (MONRE) is working towards a “pollution control economy,” based on a pollution inventory. UNESCAP is supporting the government in its creation of a green growth roadmap, while UNDP and UNEP-FI are also helping revise the national development plan, including the integration of green growth concepts. The Lao government is committed to keeping growth at 8 per cent to meet its targets of poverty reduction and exit the MDGs by 2020 – and has called on civil society to prepare for rapid changes. OECD plans to engage in Lao PDR in late 2013 on national green growth planning.

**Table 2. Summary of Green Growth Policy Framework Building in GMS Countries, 2013**

|                                                                                       |   |
|---------------------------------------------------------------------------------------|---|
| Completed                                                                             | ✓ |
| In preparation                                                                        | ○ |
| Planned                                                                               | ⊙ |
| No specific framework but elements integrated into national policy and sectoral plans | ■ |

|                                                                  | Cambodia          | China | Lao PDR           | Myanmar | Thailand | Vietnam                               |
|------------------------------------------------------------------|-------------------|-------|-------------------|---------|----------|---------------------------------------|
| <b>Green growth national frameworks</b>                          | □                 | ■     | ○ <sup>2013</sup> | ■       | ■        | □                                     |
| Roadmap                                                          | ✓ <sup>2009</sup> | -     | -                 | -       | -        | -                                     |
| Strategy                                                         | ✓ <sup>2013</sup> | -     | -                 | -       | -        | ✓ <sup>2012</sup>                     |
| Strategy/Action Plan                                             | ✓ <sup>2013</sup> | -     | -                 | -       | -        | ⊙ <sup>2013</sup>                     |
| Inter-ministerial committee                                      | ✓ <sup>2009</sup> | -     | -                 | -       | -        | ✓ <sup>2012</sup><br>(Climate Change) |
| National Secretariat for coordination                            | ✓ <sup>2011</sup> | -     | -                 | -       | -        | ✓ <sup>2012</sup><br>(Climate Change) |
| <b>Green growth themes in frameworks and individual policies</b> |                   |       |                   |         |          |                                       |
| Maintaining Natural Capital                                      | ✓                 | ✓     | ✓                 | -       | ✓        | ✓                                     |
| Promoting resource and energy efficiency                         | ✓                 | ✓     | ✓                 | -       | ✓        | ✓                                     |
| Renewable energy and low carbon technologies                     | ✓                 | ✓     | ✓                 | -       | -        | ✓                                     |
| Sustainable production (e.g. agriculture)                        | ✓                 | ✓     | ✓                 | -       | ✓        | ✓                                     |
| Greening business and markets                                    | ✓                 | ✓     | ✓                 | -       | ✓        | ✓                                     |
| Sustainable infrastructure (Environmental Impact Assessment)     | ✓                 | ✓     | ✓                 | ✓       | ✓        | ✓                                     |
| Sustainable consumption and lifestyles                           | ✓                 | ✓     | ✓                 | -       | -        | ✓                                     |

*Compiled through consultation with WWF policy coordinators in-country, discussions held at WWF regional meetings on green economy, presentations at first regional Public-Private Dialogue on Green Growth in the Greater Mekong Subregion, 17-20 June 2013, and search of internet information. Any further information, updates and corrections are welcome.*

**Box 3. Institutions developing and supporting national strategic policy relevant for green growth in Greater Mekong countries**

**National institutions**

*Cambodia*

Ministry of Environment

Green Growth National Council/National Green Growth Secretariat

*PR China*

MEP (Ministry of Environmental Protection)

*Lao PDR*

MONRE (Ministry of Natural Resources and Environment)

*Thailand*

Natural Resources and Environment Ministry

*Myanmar*

Ministry of Planning and Economic Development

Ministry of Environmental Conservation and Forestry

*Vietnam*

Ministry of Planning and Investment

Ministry of Finance

MONRE (Ministry of Natural Resources and Environment)

ISPONRE (The Institute of Strategy and Policy on Natural Resources and Environment)

National Committee on Climate Change

**International organizations engaged in technical capacity building and financial support for green growth initiatives in Greater Mekong**

- |                                          |                                     |
|------------------------------------------|-------------------------------------|
| • ADB                                    | • SDC (Swiss Development Agency)    |
| • AUSAID (Australian Development Agency) | • SIDA (Swedish Development Agency) |
| • BMU (German Ministry of Environment)   | • UNDP                              |
| • European Communities                   | • UNEP                              |
| • FAO                                    | • UNESCAP                           |
| • GIZ (German Development Agency)        | • US State Department REO           |
| • Global Mechanism of UNCCD              | • USAID (US Development Agency)     |
| • ILO                                    | • World Bank                        |
| • JICA (Japanese Development Agency)     |                                     |
| • OECD                                   |                                     |

**Multidonor partnerships, Civil Society Organizations and Think Tanks active on green growth in the Greater Mekong**

AECEN

Astana Green Bridge Initiative

Conservation International

GGGI

Core Environment Program (CEP)

IIED

TEEB

WWF

*Note: organizations are listed in alphabetical order. This list is not exhaustive, given how many agencies are at work in the region. Any suggestions for additions to this list should be made to [louise.gallagher@wwfgreatermekong.org](mailto:louise.gallagher@wwfgreatermekong.org).*

## MAINSTREAMING GREEN GROWTH INTO NATIONAL STRATEGIC DEVELOPMENT PLANNING PROCESSES AND POLICIES

Policy and legal frameworks in the region still for the most part present an unsupportive environment for producers, consumers, and investors to factor biodiversity and ecosystem services into their choices. Large-scale subsidies still exist in the agricultural, fisheries, energy, industrial and water sectors, which encourage the over-exploitation and destructive use of land and resources. At the same time, products and markets which are based on the conservation and sustainable use of biodiversity and ecosystems tend not to receive this type of preferential treatment, being accorded a lower economic policy priority, receiving relatively less spending on research and development, facing higher tax rates, and confronting greater difficulties in accessing credit and investment funds. The bottom line is that, for many sectors, businesses, and households in Greater Mekong countries, it is more costly to act in an environmentally sustainable manner than to not. As a result, most are unwilling – and many are unable to afford – to realise green economies in practice.

Yet, already in 2013 there are encouraging signs that good intentions on greening Lower Mekong economies are slowly being put into practice in strategic-level policy frameworks designed to improve set priorities and enhance coordination. Wording is in place in many national development plans and is set to trickle down into the core functions of government, sectoral greening policies and initiatives, and actively incorporate knowledge into decision-making, particularly economic decision-making. Some key terms and concepts that indicate the mainstreaming of green growth into national development planning documents and processes include:

### Core components of green economies

Links development imperative to:

- Maintaining, restoring, and investing in Natural Capital
- Sustainable infrastructure
- Substitution of renewable energy and low carbon technologies
- More sustainable urban living and low-carbon mobility
- Promotion of enhanced resource and energy efficiency
- Sustainable Consumption and Production
- Greening Business and Markets
- Poverty reduction

### Elements of an enabling policy environment

The intention to:

- Generate sound regulatory frameworks
- Prioritize government investment and spending in areas that stimulate the greening of economic sectors
- Limit government spending in areas that deplete natural capital
- Employ taxes and market-based instruments to promote green investment and innovation; Green Tax and Budget Reform
- Invest in capacity building, training, and education
- Develop eco-efficiency and eco-efficiency indicators
- Strengthen environmental governance and community empowerment

*Note: This analysis was carried out by WWF-Greater Mekong with a greater emphasis on Natural Capital and environmental conservation than other components of green economies. No single concept or subset of concepts listed should be considered necessary or sufficient for a green economy. Rather, these terms and concepts, when grouped appropriately, indicate the mainstreaming of green growth concepts in a nation's guiding frameworks.*



**Table 3. Summary of Green Growth Concepts Integrated in GMS National Development Plans**

|                                                                                                          | Cambodia<br>NSDP<br>(2009-13) | China 12 <sup>th</sup><br>5 year<br>plan<br>(2011-15) | Lao PDR<br>7 <sup>th</sup><br>NSED<br>(2011-15) | Myanmar<br>Strategic<br>Plan<br>(UN) <sup>xii</sup><br>[NSDP<br>currently<br>in prep.] | Thailand<br>12 <sup>th</sup> 5-<br>year plan<br>(2011-15) | Vietnam<br>5-year<br>plan<br>(2011-15) |
|----------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------------------------------|
| <b>Green growth component</b>                                                                            |                               |                                                       |                                                 |                                                                                        |                                                           |                                        |
| Maintaining Natural Capital                                                                              | ✓                             | ✓                                                     | ✓                                               | ✓                                                                                      | ✓                                                         |                                        |
| Promoting resource and energy efficiency                                                                 | ✓                             | ✓                                                     | ✓                                               |                                                                                        | ✓                                                         | ✓                                      |
| Renewable energy and low carbon technologies                                                             | ✓                             | ✓                                                     | ✓                                               |                                                                                        |                                                           | ✓                                      |
| Sustainable production (agriculture)                                                                     | ✓                             | ✓                                                     |                                                 | ✓                                                                                      | ✓                                                         | ✓                                      |
| Greening business and markets                                                                            | ✓                             | ✓                                                     | ✓                                               |                                                                                        | ✓                                                         | ✓                                      |
| Sustainable infrastructure                                                                               | ✓                             | ✓                                                     | ✓                                               |                                                                                        |                                                           |                                        |
| Sustainable consumption and lifestyles                                                                   | ✓                             | ✓                                                     | ✓                                               | ✓                                                                                      |                                                           | ✓                                      |
|                                                                                                          |                               |                                                       |                                                 |                                                                                        |                                                           |                                        |
| <b>Enabling environment</b>                                                                              |                               |                                                       |                                                 |                                                                                        |                                                           |                                        |
| Sound regulatory frameworks                                                                              |                               | ✓                                                     | ✓                                               | ✓                                                                                      | ✓                                                         |                                        |
| Prioritising government investment and spending in areas that stimulate the greening of economic sectors | ✓                             | ✓                                                     | ✓                                               | ✓                                                                                      | ✓                                                         |                                        |
| Limit government spending in areas that deplete Natural Capital                                          |                               |                                                       | ✓                                               |                                                                                        |                                                           |                                        |
| Employ taxes and market-based instruments to promote green investment and innovation                     | ✓                             | ✓                                                     | ✓                                               |                                                                                        | ✓                                                         |                                        |

*Compiled through review of the existing national development plans and consultation with WWF policy coordinators in-country, and search of internet information. Any further information, updates and corrections are welcome.*

## Sectoral greening in the Greater Mekong

**In many respects, establishing green growth trajectories in the GMS is about doing more with less. Greening initiatives, including approaches that increase resource-use efficiency, introduce sustainable production methods, reduce pollution impacts and green whole supply/value chains, are ad hoc and scattered in the GMS with little benchmarking of progress. Still, this region – as with many others – is looking to the private sector as the main innovator, partner and implementer of green growth in practice.**

Even with fragmented policy frameworks and poor enforcement in many cases, some initiatives are underway in the key economic sectors of the GMS countries that demonstrate how green growth is being interpreted and realized by the private sector in this part of the world.

#### Box 4. List of the major economic sectors in GMS Countries, 2013

The following sectors are not necessarily present in each country in the GMS but represent a snapshot of the key economic activities across the subregion. Infrastructure development is a subregional or transboundary concern. The economies of Cambodia, Lao PDR and Myanmar are founded on agriculture and extractives, and textiles and tourism. Thailand places great emphasis on transport, logistics, and communications development, and has well developed manufacturing and service sectors. Vietnam and the Chinese provinces included in the GMS are rapidly developing industrial bases, some in sophisticated industries like biotechnology development.

a. Infrastructure in the context of land use planning and economic corridor development

- Transport infrastructure
- Energy infrastructure
- Water provision/irrigation infrastructure
- Urban infrastructure, housing
- Information and Communications Technology (ICT) infrastructure

b. Energy production, distribution, trade and consumption

c. Agriculture, Forestry, Fisheries (freshwater and marine)

d. Transport, logistics and communications (modalities)

e. Mining and minerals

f. Industry and manufacturing

- Textiles and garments
- Automobiles
- Electronics
- Rubber products
- Bioengineering and pharmaceutical, Traditional Chinese Medicine
- Chemical engineering and production
- Aluminum, iron, steel processing
- Food and beverage

g. Construction

h. Tourism and culture

i. Banking and Finance

j. Public procurement

*Source: Country national development and economic strategy documents review*

Prioritisation of sectors for interventions on greening is important for advancing green growth agendas without overburdening GMS countries and producing effective results. The following sectors are often the focus in greening discussions because of either their impact or reliance on natural systems, their importance to the current development, or their potential to support future economic growth in this region:

1. Infrastructure – Energy, transport, urbanisation
2. Agriculture, Forestry, Fisheries and other extractives
3. Industry, manufacturing – Cleaner production, sustainable production
4. Services – Tourism and financial services

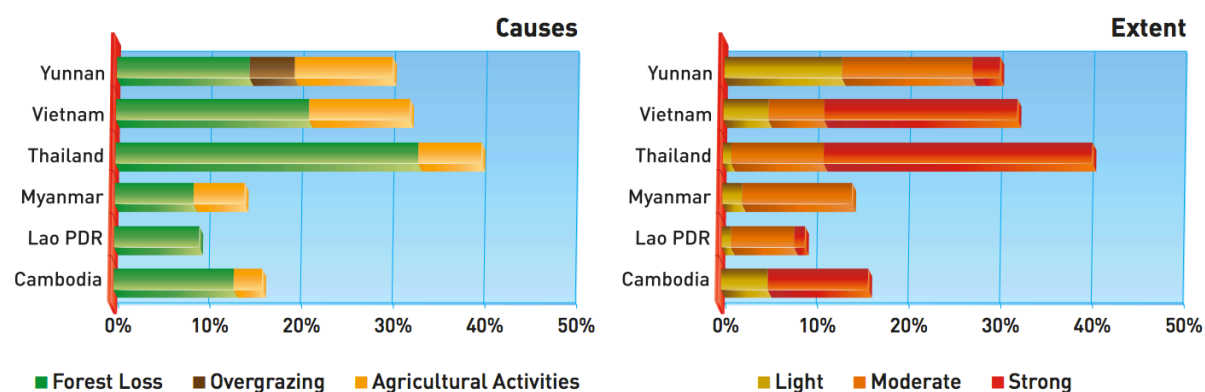
The shift from subsistence to commercial production has been driven in part by China's emergence in the last decade as a major market for GMS natural resource products and by the subregion's increased integration in other regional and global markets. Industrial production receives less focus than infrastructure or natural resource extraction in the emerging regional dialogue on green growth given the importance of natural resource sectors in the economies of many of the GMS countries and their more direct impact on ecosystems and biodiversity. However, industrial production is a crucially important sector for Vietnam, Thailand and China PDR, and a growing sector in Cambodia (particularly textile production).

Services are included as a priority in this listing, reflecting the significance of tourism in the region, and the increasing importance of Asian banks in delivering finance to businesses, in light of deleveraging in US and EU

banks. Greening in services means demonstrating awareness of the impacts posed by service sectors like tourism and leisure, retail and financial services; but also the risks that the disruption of ecosystem services could generate for these sectors. Service sectors are also important in sending messages about desired behavioural changes, in terms of lifestyles and consumption, to the general public.

It is worthwhile to note that transparency is the first step towards sustainability in the private sector – and corporate reporting is one way to achieve this. While corporate reporting among Asian companies has increased in the past decade, the private sector has generally been slow in the uptake of respective international standards, indices and other initiatives. Asian companies currently represent a mere 3.5 per cent of the Dow Jones Sustainability World Index. Often, any dialogue on CSR in the GMS misses the point that responsible, transparent practices are good strategies for creating and growing successful businesses (See Detailed Case Study 2 for further information).

**Figure 2. The causes and extent of land degradation in the GMS**



Source: UNEP (United Nations Environment Programme) and TEI (Thailand Environment Institute), 2007. *Greater Mekong environment outlook 2007*. Bangkok: UNEP; TEI. 122p. cited in [http://www.iwmi.cgiar.org/Publications/Other/PDF/Summary-Rethinking\\_Agriculture\\_in\\_the\\_Greater\\_Mekong\\_Subregion.pdf](http://www.iwmi.cgiar.org/Publications/Other/PDF/Summary-Rethinking_Agriculture_in_the_Greater_Mekong_Subregion.pdf)

Table 1. Priority greening concerns in the economic sectors of the GMS 2013

| Sector                                                                                                                                                                                                | Priority greening concerns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Moving forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. INFRASTRUCTURE</b><br><ul style="list-style-type: none"> <li>• Transport</li> <li>• Energy</li> <li>• Communications</li> <li>• Urban/municipal services</li> <li>• Flood management</li> </ul> | <ul style="list-style-type: none"> <li>– Moving rapidly towards integrated spatial planning and implementing social and environmental safeguards</li> <li>– Final equity and environmental outcomes of major development initiatives as a measure of progress and success on green economy</li> <li>– Role of ‘green infrastructure’ as a technology choice</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>– Broad spectrum Social and Environmental Safeguards integrated into ADB’s regional financing and investment frameworks and national environmental impact assessment regulations – where they exist and are well implemented</li> <li>– RIF investments subjected to multi-criteria assessment and spatial analysis undertaken by the GMS Environment Operations Center. The RIF is expected to be endorsed at the 19th GMS Ministerial Conference in Lao PDR in December 2013.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>Development-environment trade offs generally favour economic development outcomes in the GMS. A trend of continued Natural Capital degradation is emerging in this region as a result of infrastructure development. This must be reconciled before this region can declare that it is truly on the path to sustainable economic development.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>2. EXTRACTIVES</b><br><ul style="list-style-type: none"> <li>• Agriculture</li> <li>• Fisheries</li> <li>• Forestry</li> <li>• Mining and minerals</li> <li>• Gas, coal and oil</li> </ul>         | <ul style="list-style-type: none"> <li>– Countries in the region are following a path of intensification, specialization, and increased mechanization</li> <li>– Greening challenges include land and labor rights; overuse and mismanagement of agrochemicals, and lack of transparency of agricultural land use; forest loss and degradation of remaining areas; clearance of mangroves for aquaculture; pollution from chemicals in both agricultural and freshwater fisheries; water management (effective irrigation); and the impacts on food prices from biofuel production</li> <li>– Though at various stages of development, mining is potentially the biggest issue in terms of environment-development trade offs and green growth in the GMS</li> </ul> | <p>The following solutions are being introduced with varying levels of success in GMS countries:</p> <ul style="list-style-type: none"> <li>• Controlling pests and diseases while reducing overuse of plant protection and fertilizer products through <b>integrated-pest management</b></li> <li>• <b>Social and finance support structures</b>, i.e. insurance schemes, planning for disasters/disaster risk reduction, that improve producer security and reduce pressures for production expansion</li> <li>• <b>Increasing productivity sustainably</b> through intensification, crop/livestock/fish nutrition and diversity, land management, irrigation practices and water management in rain-fed farming</li> <li>• <b>Pollution control standards and technologies</b>, for example air pollution standards and water treatment technologies</li> <li>• <b>Market transformation schemes</b> including organic agriculture, Fair Trade, Forest Stewardship Council, Aquaculture Stewardship Council, and Marine Stewardship Council.</li> <li>• <b>REDD readiness preparations</b> for national schemes seeking biodiversity co-benefits where</li> </ul> | <p>Agriculture and freshwater fisheries are major opportunities for decent rural livelihoods and greening of development in many of the GMS economies. It is an important though dwindling contributor to GDP in many of these countries – Cambodia (34.7%), Lao PDR (26%), Myanmar (38.8%), and Vietnam (21.5%) – employing 30 to 40% of the GMS labor force particularly in underdeveloped rural areas. Even in Thailand where it contributes to 8.6% of GDP, it employs 38.2% of the Thai labor force.</p> <p>The prevalence of greening in this sector is difficult to determine. Data is missing on market share of certified products, indicators of scale for technological upgrade projects, etc.</p> <p>Much capacity building is ongoing, but there is less large-scale conversion to green approaches in agriculture, forestry and fisheries management.</p> <p>Though small-scale producers are recognized as key, they are not typically the current focus</p> |

| Sector                                                                        | Priority greening concerns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                              | Moving forward                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>REDD+ is being pursued</p> <ul style="list-style-type: none"> <li>• <b>Investment law reviews</b> in Lao PDR and Myanmar</li> <li>• <b>Sustainable agricultural production standards</b> in Thailand</li> <li>• <b>Corporate environmental reporting and accounting</b></li> </ul>                                                                                                                                                                | <p>for greening interventions.</p> <p>It is important to note that work done outside the formal economy will be essential to wholesale sectoral greening.</p> <p>Short-term interventions will not be sufficient.</p> <p>Many international mining companies are partnering with local subsidiaries opening up potential to engage in mining in the GMS on an international platform and in the home countries of mining multinationals.</p> |
| <b>3. INDUSTRY AND MANUFACTURING</b>                                          | <ul style="list-style-type: none"> <li>– Reducing intensity of natural resource use and waste/pollution generation, reducing greenhouse gas emissions, occupational health and safety and workers rights, and the more classic pollution control and production standards regulatory questions</li> <li>– Corporate social responsibility towards suppliers, workers, customers and local communities</li> <li>– Producers supplying environmental goods and services, including for renewable energy, waste recycling and resource recovery, and environmental advisory services</li> </ul> | <p>The following solutions are being introduced with varying levels of success in GMS businesses:</p> <ul style="list-style-type: none"> <li>• Resource efficiency, mass balance</li> <li>• Cleaner production</li> <li>• Environmental management technologies</li> <li>• Energy efficiency schemes</li> <li>• Market transformation through green product and service lines</li> <li>• Corporate environmental reporting and accounting</li> </ul> | <p>In the absence of a fully effective legal framework for environmental management in vulnerable emerging states it is vitally important that industry voluntarily exercises its social and environmental responsibility.</p> <p>Supply chain greening and other market transformation measures are emerging, but need policy support to scale up.</p>                                                                                      |
| <b>4. SERVICES</b><br>• <b>Tourism</b><br>• <b>Retail</b><br>• <b>Finance</b> | <ul style="list-style-type: none"> <li>– Promoting and verifying environmental, occupational health and social standards in eco label schemes, particularly in the context of ASEAN integration.</li> <li>– Given the vulnerability of Southeast Asia to climate change, incorporating climate relevant criteria into existing eco-labels</li> <li>– Consumer awareness raising to drive demand</li> </ul>                                                                                                                                                                                   | <p>The following solutions are being introduced with varying levels of success in GMS countries:</p> <ul style="list-style-type: none"> <li>• Regulation on ecolabel certification in Vietnam</li> <li>• Green government procurement in Thailand</li> <li>• Market transformation through green product and service lines <ul style="list-style-type: none"> <li>• Corporate environmental reporting and accounting</li> </ul> </li> </ul>          | <p>Capacity building for the NGO and media sectors would increase public information and awareness, and create informed, constructive and systematic bottom-up pressure for procedures and standards guiding investment flows towards sustainable business models.</p>                                                                                                                                                                       |

## Box 5. Quick examples of sectoral greening in the GMS in 2013

### INFRASTRUCTURE

The **Global Green Growth Institute (GGGI)** in Cambodia is piloting rural entrepreneurship projects, focused on the development of green business incubators for renewable (particularly solar) energy production.

**General Electric (GE)** is testing biogas options in the region; specifically in Cambodia, they are working to turn rice husks into energy using gas engine technologies. <http://www.gereports.com/light-from-rice/>

**Yunnan Shenyu New Energy Corporation** reforests degraded land with the woody, oil-based *Jatropha* species, with the dual mission of rural energy production and poverty reduction. The company currently employs 9,060 families to dig, plant, and harvest *Jatropha* plants, and provides technical support and plant varieties to local farmers to grow *Jatropha* on their own land.  
<http://investing.businessweek.com/research/stocks/private/snapshot.asp?privcapid=38989022>

**The Institute of Industrial Energy, Federation of Thai Industries** is reducing its current energy dependence and costs (currently 35.5% of the national consumption and approximately 18% of GDP) by realising gains from energy efficiency. The “**Logistics and Transport Management Program (LTM)**” aims to improve energy efficiency in the Thai transport sector. Created by the Institute of Industrial Energy (IIE) under the Federation of Thai Industries (FTI) and the Energy Policy and Planning Office (EPPO) under the Thai Ministry of Energy (MOE), the program is designed to especially help small and medium businesses by implementing methods and knowledge in four areas: (1) engineering and technologies, (2) management, (3) task force, and (4) driving logistics and transport, related to energy.

**ICAFIS (The International Collaborating Centre for Aquaculture and Fisheries Sustainability)** is the sustainability arm of Vietnam’s Fishery Society (VINAFAIS). ICAFIS is currently working with Vietnamese *Pangasius* producers to achieve ASC (Aquaculture Stewardship Council) certification, which allows access to global markets, often better prices, and longer-term business security. ICAFIS is also the national coordinator for the EU-founded Farmers in Transition (FIT) Fund to help shrimp farmers finance a transition towards responsible production. The program is supported by a co-funding mechanism, whereby private sector and donor participants provide finance to producers, allowing them to upgrade to sustainable production standards; the benefits are shared.

### AGRICULTURE, FORESTRY, FISHERIES AND OTHER EXTRACTIVES

**Green Net Cooperative** is a Thai-founded social enterprise, focused on helping small farmers in the region participate in organic agriculture and fair trade value chains. With approximately 1,200 member producers, Green Net’s products, including coffee, cashews, cotton, and rice, are sold in European, Canadian, and Asian markets – and demand continues to grow despite the global recession. Part of IFOAM and WFTO, and a registered cooperative under the Thai Ministry of Agriculture and Cooperatives since 1993, Green Net ensures the health of the environment through practices such as shade-grown coffee, as well as the health of its members through retirement planning services.

**Stora Enso** is a paper, biomaterials, wood products and packaging producer that sources renewable materials in 35 countries. In Lao PDR, Stora Enso, with support from UNDP, works closely with communities in UXO-ridden regions to clear the land of unexploded bombs and build agricultural capacity. Allowing farmers to plant crops between rows of Stora Enso trees ensures farmers are working in UXO-free fields. Stora Enso also offers farmer trainee programs, supporting villagers to self-manage and take ownership of company operations.

The **Global Forest Trade Network (GFTN)** is a WWF-lead partnership, linking more than 300 companies, communities, NGOs, and entrepreneurs in 30+ countries. Driving demand for sustainable timber, the GFTN helps ensure sustainable supply chain management of timber products worldwide.

**The WWF Sustainable Rattan Project in Cambodia, Lao PDR, and Vietnam**, funded by IKEA, DEG and the EU (2009-2011), supports responsible rattan management and improves the lives of villagers working in the sector through alignment with Forest Stewardship Council (FSC) and other international concepts, such as Cleaner Production. These schemes ensure the elimination of harmful chemicals used in traditional rattan

processing, less waste, and allow greater market access for villagers' craftsmanship. Since 2008 the project, in cooperation with the Lao National Chamber of Commerce and Industry (LNCCI), the Artisans' Association of Cambodia (AAC), and Vietnam Cleaner Production Center (VNCPC), has introduced cleaner production to 220 rattan processing small and medium-sized enterprises (SME); started the Rattan Association of Cambodia; and worked directly with 5,500 villagers in 80 communities in the region on management and harvesting techniques. So far approximately 1,142 hectares of rattan forest have been FSC certified in Laos – with another 4,585 hectares inventoried and waiting for final approval. This is the first and only FSC-certified rattan forest to date.

**Conservation International (CI) - Cambodia and Grandis Timber Ltd.** have partnered to support socially and environmentally sustainable commercial land investment in an Economic Land Concession (ELC) in Cambodia. Through CI's field assessments and ongoing management of areas of High Conservation Value, Grandis is now positioned to be the first timber company in Cambodia to receive Forest Stewardship Council (FSC) certification. A Community Engagement Master Plan will accompany ongoing protection and rehabilitation of degraded areas within the ELC.

**Hunan Weimingchuanglin Bio-energy Co., Ltd.** works in rural provinces in Yunnan, China to reforest degraded areas, relying on its continued research into biotechnologies (species' adaptability to dryland conditions, increased yield and length of productivity) to ensure profits through conversion to biofuels. In addition, the company collects undergrowth species for potential medicinal uses. The company supports rural development by providing employment ('green jobs' that simultaneously conserve nature) and plans to scale up its current annual production (50K tons of biodiesel, 10K tons of gasoline, and 30K tons of alcohol hydrocarbon fuel).

**Royal Tree Services Ltd. is a Yangon (Myanmar)-based** forestry and environmental services company that helps conserve and regenerate the country's forests (departmental plantations, community forests and private plantations) to meet growing timber and pulp demand as industry picks up in the nation. Dealing in teak, eucalyptus, rubber mango, and agar wood species, the company's success reveals that barriers to entering the responsible forestry sector in Myanmar are low - and that opportunities to support rural development and awareness of conservation needs through income generating activities are high.

**Syngenta**, a Swiss-founded chemicals company, specializing in seeds, pesticides, biotechnology and genomic research, is working closely with rural potato farmers in Vietnam to increase their crop yields. Syngenta's global strategy is to "put the grower first" by working to remove immediate barriers, such as inadequate R&D, poor knowledge transfer, and lack of market access in many rural areas; as well as tailoring its own biotechnological and resource-efficient products to local environments. This aspect of their global strategy is key to the company's ability to profit. Syngenta partners with many NGOs, such as the Rainforest Alliance, to bolster its on-the-ground capabilities, and is a strong advocate for partnerships between the public, private, and civil sectors.

**Extractive Industry Social and Environmental Impact (EISEI) Network.** Organized by a group of NGOs, the aim of this network is to promote and sustain dialogue among affected communities, government ministries, and the private sector in a way that enables all stakeholders to benefit from the development of extractive industries in Cambodia. <https://www.facebook.com/pages/Extractive-Industry-Social-and-Environmental-Impact-EISEI-Network/114998621919200>

**The Extractives Industry Transparency Initiative (EITI)** is currently under consideration in Cambodia and Laos, and Myanmar has made a commitment to join, but no countries are participating in this scheme as of yet. <http://eiti.org/>

The **Canadian Trade Commissioner Service** has issued an investment guide to Vietnam with guidance on social and environmental responsibility. <http://www.tradecommissioner.gc.ca/eng/document.jsp?did=91398&cid=539&oid=595>



**Australia–Myanmar Partnership for Reform**, which was announced during President Thein Sein’s visit to Australia in March (\$20 million, 2013–2015), will help Myanmar to develop its mining sector in a way that is equitable and environmentally sustainable, and that maximises benefits for Myanmar’s people. The partnership will also support Myanmar to strengthen democratic institutions, promote human rights, advance the rule of law, and improve economic governance. <http://www.usaid.gov.au/HotTopics/Pages/Display.aspx?QID=1139>

**The Sustainable Rice Platform (SRP)** is a multi-stakeholder initiative convened by UNEP and the International Rice Research Institute (IRRI), with participation from global private sector value chain actors, government agencies and NGOs. SRP’s primary goal is to improve smallholder livelihoods and food security in rice-growing countries of the GMS and other Southeast Asian countries by developing practical guidelines, standards, tools and indicators for sustainable rice value chains. SRP’s members are currently researching alternative incentive mechanisms to promote broad-scale adoption of sustainable best practice. SRP is especially concerned with enhancing resource efficiency, mitigating GHG emissions and other environmental impacts associated with rice cultivation, such as burning of crop residues. <http://www.sustainableice.org>

## INDUSTRY AND MANUFACTURING

**UNIDO-UNEP National Cleaner Production Centres** are present in China (Regional Office) and Vietnam (National Office). The role of this cooperation is to raise awareness of the benefits and advantages of Resource Efficient & Cleaner Production through in-plant assessments and demonstration projects, provide financing and technical information for industry, including SMEs, and policy advice to governments.

**Siam Green Business Initiative: Green Products.** SCG is committed to the research and development of environmentally friendly products and services under the SCG eco value label in order to meet the needs and expectations of consumers. In 2009, there were 87 products that were certified by the SCG eco value label. In addition, SCG is also continually involved in identifying new opportunities such as the development of products for its Green Building initiative.

[http://www.scg.co.th/en/05sustainability\\_development/environment.html](http://www.scg.co.th/en/05sustainability_development/environment.html)

**UNEP Switch-Asia** is a programme funded by the EU that aims to contribute to the economic prosperity and poverty reduction in Asia through promoting sustainable consumption and production. It focuses on small and medium sized enterprises and provides support in three strategic areas: policy support, networking and funding projects as demonstration projects to build a portfolio of case studies to learn from. SWITCH-Asia aims to develop and demonstrate good practice on sustainable consumption and production in areas such as greening supply chains, eco-design, sustainable consumption, and policies to support SCP.

<http://www.switch-asia.eu/>

## SERVICES

**Wild Asia Responsible Tourism Awards** is the only tourism award of its kind in Asia. Established by Wild Asia in 2006 with a small grant, it is now a mainstream event, comprising workshops and an annual awards ceremony. This annual award aims to recognize accommodation operators and tour operators who are making a positive difference for our environment, people, cultures and traditions, the very things that make a holiday experience distinct. Award winners and finalists have demonstrated responsibility through sustainable management best practices. [http://www.wildasia.org/main.cfm/RTI/About\\_RT\\_Awards](http://www.wildasia.org/main.cfm/RTI/About_RT_Awards)

**SCP for Low Carbon Economy: Green Public Procurement and Eco-Labeling.** The objectives of the project are:

- The existing eco-labels in Thailand and in selected countries in Southeast Asia are expanded to cover climate protection criteria
- The Green Public Procurement in Thailand is strengthened
- The new Green Public Procurement strategies in Thailand are disseminated to other selected countries in Southeast Asia

<http://www.thai-german-cooperation.info/eco-labelling.html>



## DETAILED CASE STUDY 2: CORPORATE SOCIAL RESPONSIBILITY IN GMS COUNTRIES<sup>1</sup>

Positive CSR trends are apparent in China, Thailand and Vietnam, driven by common incentives like greater market access, enhanced brand reputation and respect, and the use of CSR as a recruitment and retention strategy. Positive discussions on CSR topics are emerging in Myanmar, as suggested by the CSR Asia report (2013); however, less emphasis on the subject exists in Cambodia and Lao PDR.

The Global Reporting Initiative (GRI), a non-profit organization that develops and disseminates one of the world's most prevalent CSR reporting tools, cites that in 2011-2012 **206** major Chinese companies, financial institutions, and industrial conglomerates reported using GRI's own and other corporate reporting methodologies. In Thailand, **134** companies reported; in Vietnam only **4** reported. While no companies reported in Myanmar, according to GRI, CSR Asia published a *Report on Responsible and Inclusive Business in Myanmar* (2013) – a guide to help ensure new business enhances national sustainable development. The report cites that companies responsibly investing in Myanmar will build up six forms of capital: economic, political, legal, technological, social, and environmental. Successful companies will also include low-income populations in their value chains through employment and/or access to goods and services, as well as business linkages.

GRI currently lists no companies having reported in 2011-2012 in Cambodia or Lao PDR; however, the United Nations Industrial Development Organization (UNIDO) cites 7 Cambodian and 4 Lao companies as current leaders in green technologies and business practices in 2012-2013, and a commitment from the Lao Ministry of Industry and Commerce to enhance green growth.

CSR ASIA measures the state of corporate social responsibility among major companies operating in the Asia Pacific region, using the following six indicators: governance, codes and policy; CSR strategy and communication; marketplace and supply chain; workplace and people; environment; and community and development. However, these frameworks – along with requirements and other voluntary initiatives set by governments and stock exchanges, particularly in China – are still largely viewed as Western-focused.

**CSR in Asia must be shaped by Asian challenges and the priorities of Asian stakeholders if it is to be relevant and effective.**

According to GRI's 2011-2012 data, corporate environmental reporting is most common in the energy and utilities, financial services, aviation, food and beverage, automotive, and telecommunications sectors.

There is recognition, particularly from the financial sector, that there are huge risks and opportunities in Asia related to environmental, social and governance (ESG) issues. New indices and ratings are now tracking the performance of companies in the region based on ESG indicators.

| Hierarchy of approaches to CSR                             | Global   | GMS      |
|------------------------------------------------------------|----------|----------|
| 6. "Best in Class" CSR (Building sectoral level solutions) | Very few | -        |
| 5. CSR++ (Lobbying for new, better standards)              | Very few | Very few |
| 4. CSR+ (Responsible business going beyond standards)      | Few      | Few      |
| 3. Basic CSR (meeting the standards)                       | Majority | Some     |
| 2. No CSR (trying to reduce standards)                     | Few      | Many     |
| 1. No CSR (potentially breaking rules/regulations)         | Very few | Many     |

Adapted from <http://www.panda.org/?7587/Corporate-Social-Responsibility->

## Empowered civil society

*“Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.”*

- Rio Declaration, Principle 10

While the Rio Declaration is considered a “soft law” agreement, Principle 10 reflects the broad consensus of governments that the rights to access information, participate in decision making, and access justice are essential to addressing environmental issues fairly and effectively. Based on this premise, GMS will need an empowered civil society, including both NGO and media actors, with the full ability and resources to investigate and analyze private investment and business operations that have significant anticipated social and environmental impacts. It is generally accepted that increased participation in environmental decision-making can improve policy implementation. Therefore, greater participation of civil society in this respect can build on greater understanding of who is the target group. NGOS, besides having a role to alert the public about potential problems, need support to professionalize their voicing of constructive criticism, proposing alternative solutions and citing good practice from around the globe. Furthermore, the media’s understanding and sustained intelligent coverage of the Corporate Social Responsibility (CSR) and Sustainable Development agendas is a necessary precondition for real progress.

## Available information for green growth decision-making

There is a critical lack of “hard” data and evidence of the role that healthy ecosystems and sustainable resource use play in the transition to sustainable economies. As a result, many decision-makers – private sector and public – remain unconvinced of the benefit of adopting sustainable use and conservation of biodiversity and ecosystem services (natural capital) as a foundation for green growth.

Knowledge of ecosystem functioning is necessary but not sufficient. Communicating economic dependency and risk to business from ecosystem service loss is key if behavior is to be changed so that green growth can be realized in practice. There is an increasing amount of information on the socioeconomic contribution of ecosystem services in GMS countries, but it is often omitted from or irrelevant to decision-making even when of reasonable quality, either because the research has been conducted at too narrow a scale to be useful to decisions being made around land use change in the region; because it is unpublished (in the case of many NGO studies); or because it is shared amongst a narrow group of researchers and organizations.

Valuation of often “free” – and therefore undervalued – goods and services delivered by ecosystems is necessary if the returns on investment in maintaining Natural Capital in sustainable economy building are to be fully understood. Ecosystem service valuation and national green accounts are being seen as a fundamental component of driving policy frameworks and corporate accounting and reporting measures that will contribute to greening economies in the region. Information availability for economic values of biodiversity and ecosystem services often ‘hit and miss’ in this region; and what information is available is often not relevant at the scale of decision-making. But information does exist: Box 7 lists some regional initiatives on valuation and national green accounting in the GMS.

#### Box 6. An overview of active valuation of ecosystem service initiatives in GMS countries

**The Economics of Ecosystems and Biodiversity (TEEB):** is a global initiative, hosted by the United Nations Environment Program (UNEP), to draw attention to the global economic benefits of biodiversity. TEEB is focusing on country level implementation and national studies, with China and Vietnam among its focal countries. **ASEAN Centre for Biodiversity (ACB)** is running a program of TEEB work in the ASEAN region, facilitating high-level dialogues among ASEAN member countries, providing a clearing house for valuation information and facilitating technical training.

**Enhancing the Economics of Biodiversity and Ecosystem Services in Thailand/Southeast Asia (ECO-BEST):** ECO-BEST is developing and applying The Economics of Ecosystems and Biodiversity (TEEB) in Southeast Asia. Its primary focus is on national and field-level activities in Thailand and Lao PDR, and it is also working to build capacity, awareness, information exchange and dialogue among GMS and ASEAN countries.

**The OSLO Consortium** is a global partnership of leading research and academic institutions, international organizations and UN agencies engaged in the development of innovative solutions for sustainable land use. Members are international leaders in the fields of environmental science, policy, and development, with access to a network that puts them at the forefront of international cross-disciplinary cooperation. The OSLO's work in GMS countries is ongoing, with economic valuation of land studies underway in Vietnam and Cambodia.

**The Economy and Environment Program for Southeast Asia (EEPSEA)** supports training, local capacity building, and research in environmental and natural resource economics with the goal of strengthening policy. The program uses a networking approach to provide financial support, meetings, resource persons, access to literature, publication avenues, and opportunities for comparative research across its nine member countries (Thailand, Malaysia, Indonesia, the Philippines, Vietnam, Cambodia, Lao PDR, China, and Papua New Guinea). EEPSEA is supported by the International Development Research Centre (IDRC); the Swedish International Development Cooperation Agency (Sida); and the Canadian International Development Agency (CIDA). EEPSEA's structure consists of a Sponsors Group comprising its three donors, an Advisory Committee, and a small secretariat in Singapore.

**Natural Capital Project/InVEST** is a family of tools to map and value the goods (e.g., food) and services (e.g., water purification, recreation opportunities) provided by nature. InVEST enables decision-makers to assess the tradeoffs associated with alternative choices and identify areas where investment in Natural Capital can enhance human development and conservation in terrestrial, freshwater, and marine ecosystems. InVEST is being developed and operated by the Natural Capital Project (NatCap) – a partnership between Stanford University, the University of Minnesota, The Nature Conservancy and the World Wildlife Fund.

**World Bank WAVES.** WAVES (Wealth Accounting and Valuation of Ecosystem Services) helps countries build and implement environmental accounts and raise awareness about their uses in economic decision-making. In Vietnam, the World Bank helped compile a forestry environmental account, based on the international SEEA standard, and build technical capacity of GSO for implementation. This forest account will measure changes in forest stocks, based on forest type, location, tree species, and other indicators.

**Conservation International and Partners.** Boston University is working in association with Conservation International and through funding from the MacArthur Foundation on a collaborative effort to understand pathways of ecosystem service change in Cambodia. The goals of the work are to support sustainable decision making and also identify pathways by which people in Cambodia may successfully adapt to some of the changes taking place using InVEST, Multiscale Integrated Model of Ecosystem Services (MIMES) and the associated user interface MIDAS.

## Financing green economy transitions in the GMS

**Financing the transition to green growth means that funds should both flow to sustainable, responsible businesses and divest from activities that threaten natural capital. A key question for the GMS is how to guide private investment given that the bulk of investment flows in this region now come from the private sector.**

**Public finance.** Development partnership funding is playing an important role in capacity building, but is less important when considered as a percentage of overall finance flows in the GMS region. While budget support does take place, most Overseas Development Assistance (ODA) tends to be directed towards specific projects or programme outcomes. National public funding is scarce, particularly in the least developed countries in the region.<sup>xiii</sup> The UNDP Climate Public Expenditure and Institutional Review (CPEIR) and Public Environment Expenditure Review (PEER), both supported by UNPEI, can serve as tools to help GMS countries review current climate and environment expenditures from both domestic and external sources of finance and identifying ways in which climate and environment-related expenditures can be tracked through time. Cambodia and Thailand have recently completed the CPEIR with the aim to improve prioritisation, efficiency and effectiveness of all public resources in support of climate adaptation and mitigation.

**Public-Private Partnerships (PPPs)** are seen as an important part of the solution to financing transitions to green growth in the Greater Mekong region, but are not advanced in practice as of yet. Those schemes in existence or development are typically large scale and often transport and energy infrastructure related, but there are calls emerging to explore small scale, localized solutions to renewable energy financing.

**Impact investing, or Socially Responsible Investment** is an emerging innovation in the traditional finance sector in the Greater Mekong countries, but one that is still primarily led by the not-for-profit or inter-governmental organisations as opposed to the private sector. It is nonetheless an exciting prospect. Shujog, ImpactMark and the UNCDF are some good examples from within the region.

**Payments for Ecosystem Services (PES).** Pilot PES schemes exist, or are emerging, in all of the Lower Mekong countries. However, they have only been legislated for in Vietnam, where they are specifically covered by law. Despite the lack of related legislation, in Cambodia, Lao PDR and Thailand it is clear that there is a great deal of interest among government and the NGO community in scaling up site-specific PES efforts, and establishing some kind of national institutional, legal and funding framework that could guide the further development of PES across the country. This process is no doubt being expedited by the emergence of REDD/REDD+ across the region, which is demanding that these issues are addressed – although the extent to which carbon finance can, or will, be “bundled” with payment for other ecosystem services is not yet clear. All four countries are still in the process of finalising REDD/REDD+ structures and arrangements. The review of experiences from the region underlines the fact that almost all of the current PES efforts focus on forest ecosystems, primarily on watershed and biodiversity services in particular. There remains a significant gap in PES relating to freshwater wetlands and marine and coastal ecosystems, despite the economically important (and potentially marketable) services these provide. In this sense the Lower Mekong region varies little from the rest of the world, where forest ecosystem services – and particularly forest watershed services – have long dominated PES systems.

**Biodiversity offsets** are predicated on a recognition of the value of ecosystem services, and the need to offset the costs of ecosystem service degradation or loss through the restoration or maintenance of equivalent services elsewhere. There are schemes in early stages of development in all of the Lower Mekong countries. In Thailand the Siam Cement Group is engaged in the restoration and reforestation of exhausted quarry areas, and in Lao PDR (See box 8) and there are now several examples of individual hydropower schemes providing environmental funding in order to offset or compensate for damages caused on-site, and/or to secure environmental services in the watersheds that they depend on. In Vietnam, a national programme on biodiversity offsets is under development, and it is envisaged that a policy on biodiversity offsets will be developed. The Ministry of Environment and Natural Resources has recently submitted a draft policy on environmental compensation to the government, and the legal framework on biodiversity offsets also draws on Article 75 of the Biodiversity Law No. 20/2008/QH12. Work on developing a national biodiversity offset programme is being supported by Forests Trends’ Business and Biodiversity Offsets Programme.

#### **Box 7. Biodiversity offsets by Siam Cement Group in Thailand and the hydropower sector in Lao PDR**

In Thailand, the Siam Cement Group is engaged in an active corporate environmental and social responsibility programme which includes biodiversity offsets. These operate mainly through the rehabilitation and revegetation (using local species) of limestone quarries. In collaboration with the Ministry of Forestry, Department of Fundamental Industry and Mining, and the Faculty of Forestry at Kasetsart University, Siam Cement has launched a project on quarry rehabilitation and biodiversity conservation by constructing check dams to increase soil moisture, conducting biodiversity surveys, and carrying out monitoring activities.

In Lao PDR, both the Nam Theun 2 and Theun-Hinboun Expansion hydropower projects are piloting mechanisms for sharing revenues or investing funds in environmental management. The World Bank-funded Lao Environment and Social (LEnS) project was designed as a complementary activity to the Nam Theun 2 project, including social and environmental activities to address the cumulative impacts of river basin development in the Nam Theun-Nam Kading river basin. In addition, the Theun 2 project has undertaken to provide direct funding for the Nakai-Nam Theun Watershed Management and Protection Authority of US\$1 million a year for the duration of the concession period (31 years), including funds for management of Nakai Nam Theun NPA and two corridor areas.

Under a slightly different structure (and working through an international NGO, Wildlife Conservation Society), funding is being made available from the Theun-Hinboun Expansion Project for the development and implementation of a catchment biodiversity development and protection plan in Nam Gnouang watershed.

Based on these models, several other new hydropower projects are also discussing modalities for the contribution of funds towards land and resource conservation in the catchments in which they operate.

*Source: forthcoming WWF report on ecosystem service values in the Lower Mekong countries*

## CONCLUSIONS AND RECOMMENDATIONS

The green growth agenda has taken off in this part of the world largely because transitioning to green growth is a real possibility in the GMS – a part of the world still rich in the Natural Capital that is a fundamental pillar of green economies. But losses of ecosystems and their integrity are also a notable trend, showing that the “development versus environment” model of economic growth still dominates. Much work remains to be done to truly see the divisions between economic, social and environmental goals dismantled – and realistic alternatives developed that prove investment in the environment creates long term added value for society. Now is the time to understand the current needs – and opportunities – and to focus efforts on assisting the players who are working to advance green growth in the GMS to work better together.

### Five key challenges to greening growth in the Greater Mekong

The overarching challenge highlighted in the Lower Mekong Countries is how to maintain or assure environmental capacity – the ability of ecosystems to continue supplying ecosystem services to social and economic systems – in the face of change: or in the current jargon, how to maintain resilience or the capacity of systems to absorb disturbances and reorganize them so as to still retain essentially the same functions, structure, identity and feedbacks.

Despite progress, green growth remains limited in terms of comprehensive policy frameworks in the GMS and producing on-the-ground results. Some key challenges include:

1. To communicate what successful green growth means in practice to make the case for change to policymakers and the wider public ‘outside’ the green growth and green development community, including a specific demonstration of the contribution of Natural Capital conservation to economic, social and development goals.
2. To coordinate action on achieving green growth at regional, national, sub-national and community levels.
3. To integrate green economy approaches in the core functions of GMS governments, following through on the linkages between environment and development, including establishing indicators to monitor progress in implementation.
4. To set economic, environmental and social policy targets that allow a responsible private sector to thrive. The financing need is enormous and far surpasses available public funds. The lack of financial resources prevents the scaling up of innovative solutions. Incentivizing private sector investment is crucial.
5. To increase transparency both in a) how companies are asked to tender and b) how companies report on their social and environmental impacts. As with other parts of the world, small to medium-sized enterprises (SME) find the cost of assessments and reporting prohibitive; thus, data on corporate reporting is currently available only for major businesses and industry leaders. These obscure practices make it difficult to target specific areas for change.

### Some recommended goals

- **Make green economy concrete and scalable.** Rhetoric is in place in many national development plans but this needs to trickle down so that green economy is inclusive and shown to produce benefits for people and economies on the ground.
- **Focus on key priorities.** There is a risk of wasted effort and lost efficiency given the many local, national, regional and international actors that have gathered around the green economy agenda in the GMS. This is a dynamic area of work in Greater Mekong countries with a myriad of actors and initiatives. Each risks becoming overly focused on individual parts of the puzzle and not on how the people who will implement green economy in practice may be overwhelmed.
- **Translate Natural Capital conservation into green growth outcomes.** Natural Capital is an essential – but often overlooked – foundation for green growth. The positive results for social, environmental and economic



development goals from conserving and managing ecosystem integrity must be made tangible to public decision-makers, business leaders and the general public.

- **Assess the materiality of ecosystems, environmental and social impacts on private sector operations in the GMS** and look for new private sector solutions created here – in this region, for this region – to strengthen the business case for responsibility and investment in maintaining natural systems.

## What can we do? The opportunity to advance green growth in the Greater Mekong

To conclude, this synthesis offers a few thoughts on the opportunities for different actors in greening growth in the Greater Mekong at bigger scales than have been seen to date. Green growth is widely understood to be economic growth achieved through investment in greening measures, but it must also be recognised that green growth is:

**A shared vision mainstreamed in national development planning processes** – unless it is a common goal for a nation, green growth can not be a pathway to a green economy. Moreover, environmental policies on their own are just that: environmental policies. But if linked with development and economic priorities, then they can be described as enabling policies for green growth. Strategic policy planning for green growth, triple bottom line approaches and integrated reporting can help actors see these impacts, but this requires greater linking up, sharing information and speaking with one voice.

**A mutually supportive, coherent policy framework that recognizes the multiplicity of actions required to green growth** – standalone policies can not be considered as a positive step towards green growth because concerted action is what is required to make a transition from “business as usual” to green growth.

**Dialogue and action across public, private and civil society sectors** – the solutions are not just top-down policy solutions, but will rely on bottom-up realization in communities and businesses.

### The public sector

**Commitment to clear, consistent policy.** Sending strong, consistent signals as to key priorities for social and environmental targets via green growth, green economy policy frameworks, and ensuring capacity building within government so that these policies can fully be integrated in the business of government, i.e. in the national development planning processes and documents. Finance plays a role, but a primary driver for green growth is the enabling conditions in policy and legislative frameworks. The role for responsible governments is to set out the standards for business and level the playing field to increase incentives for responsible business and investment.

**Smart policy mechanisms.** Removing perverse incentives and instituting positive ones, such as policies to encourage the sustainable use of ecosystem services through a range of policy, price and market mechanisms, should be integrated into government structures and private sector practices and norms.

**Measuring impacts.** For efficiency, it is important to measure the impact of policy and private interventions as well as checking that a nation or region as a whole is moving in the right direction. Indicators can also be used as priority setting mechanisms and include an emphasis on inclusive outcomes for development.

### The private sector

**Work with government and CSOs on strategic greening of particular sectors.** Private and CSO actors need to focus on identifying which sectors have the biggest leverage potential for scaling up their greening activities, and which ones would have the greatest impacts on achieving the green development goals of the GMS. Which sectors would give quick results, have big knock-on or multiplier effects, and represent important gains in competitive advantage from sustainability practices? Private sector leaders are well positioned to act as advisors to government in that respect.

**Look beyond the company to have big impact.** Business leaders can have great influence on both policy and consumer choices. However, stewardship means going beyond creating shared value within individual company structures and taking a leadership position on greening issues if that influence is to be realized.

## Civil society organizations

**Constructive pressure and support.** Advocate for better solutions, alternatives and positive ways to work in partnership with diverse stakeholders with solid research that sets out the case. Continue to work with international agencies, government, and the private sector to reduce the vulnerability of the poorest communities.

**Support the citizen.** Educate and inform for improved public awareness and influencing consumer demand.

**Facilitate the dialogue.** Civil society has a key responsibility to ensure that green growth is achieved in an inclusive way. Dialogue is required specifically to get conflicting sectors together to discuss joint solutions.

## What does success look like?

Though green economies and growth have many interpretations, the concepts fundamentally ask us to consider what it is that we should expect from development at a minimum. One conclusion is that while it is necessary to consider financial gains, it is not sufficient to think of this alone when objectives include improving the quality of life, social equity and securing long term drivers of economic growth. There is a need to make visible the role that sustaining natural resource production, environmental quality and ecosystems – or taken together, Natural Capital – play in achieving development priorities. Green growth must include multiple outcomes for social, cultural, economic development and environmental goals, demonstrating that there are possibilities to work on these goals jointly. In this context, actors and sectors working together in a paradigm of partnership and equality jointly determining what is success and the best interventions to move forward towards societal goals.



## ENDNOTES

- <sup>i</sup> According to the ADB definition, the GMS countries are Cambodia, People's Republic of China (PRC, specifically Yunnan Province and Guangxi Zhuang Autonomous Region), Lao People's Democratic Republic (Lao PDR), Myanmar, Thailand, and Vietnam. This report takes a broader definition than the ADB, however, because it discusses national level policies and examples of green growth from China that can not be separated out to just the two special zones of Yunnan and Quanyi Provinces of China.
- <sup>ii</sup> National average annual gross domestic product (GDP) rates are between 5%–10% in most GMS countries. Between 2000 and 2009, GDP of the subregion as a whole grew at an average rate of over 9.5% (Asian Development Bank <http://www.gms-eoc.org/uploads/resources/149/attachment/2.Greater-Mekong-Subregional-Profile.pdf>, accessed 1 October 2013).
- <sup>iii</sup> UN Secretary-General's High-Level Panel on Global Sustainability (2012) *Resilient People, Resilient Planet: A future worth choosing*, available at <http://www.un.org/gsp/gsp/report>. Accessed 12 June 2013.
- <sup>iv</sup> At least 1,100 freshwater species swim the waters of this mighty river including the last remaining populations of the Irrawaddy dolphin, giant freshwater stingray which can weigh up to 1,300 pounds, and the Mekong giant catfish. WWF-Greater Mekong website <http://worldwildlife.org/places/greater-mekong>, accessed 1 October 2013
- <sup>v</sup> The geographic region encapsulates 16 of the WWF Global 200 priority ecoregions, and habitats for an estimated 20,000 plant species, 1,300 fish species, 1,200 bird species, 800 reptile and amphibian species, and 430 mammal species. Notable species include the Javan rhino, Irrawaddy dolphins, and Mekong giant catfish.
- <sup>vi</sup> ADB (December 2012) *GMS Atlas of the Environment - 2nd Edition*, <http://www.gms-eoc.org/uploads/resources/149/attachment/2.Greater-Mekong-Subregional-Profile.pdf>, accessed 25 September 2013; ADB, 20 February 2012, *Green Development Key to Growth in the Mekong Region*: <http://www.adb.org/news/green-development-key-growth-mekong-region?ref=countries/gms/news>, accessed 25 September 2013
- <sup>vii</sup> The United Nations and Asian Development Bank note that "Asian and Pacific countries have made green policy commitments and investments that just five years ago would have been unimaginable. This nascent transformation is marked by perceptible changes in awareness, attitudes, markets and technologies, making green growth and transition to a green economy more economically and politically feasible than ever before". ADB and UNEP (2012) *Green Growth, Resources and Resilience: Environmental Sustainability in Asia and the Pacific*, <http://www.unescap.org/publications/detail.asp?id=1484>. Accessed 10 June 2013.
- <sup>viii</sup> The theme for the annual Asia-Pacific Economic Cooperation (APEC) meetings in 2013 was: "Resilient Asia Pacific: Engine of Global Growth". <http://www.apec.org/> It is also an important theme for ASEAN planning more broadly <http://www.adbi.org/asean.2030/>, and when considering specific threats, as the Asian Cities Climate Change Resilience Network [http://www.arup.com/Projects/Asian\\_Cities\\_Climate\\_Change\\_Resilience\\_Network.aspx](http://www.arup.com/Projects/Asian_Cities_Climate_Change_Resilience_Network.aspx)
- <sup>ix</sup> For more information please consult the proceedings and webpages of the recent meetings of the working groups:
- 10th meeting of Working Group on Agriculture (<http://www.gms-eoc.org/resources/WGA-AM10>);
- 14th Meeting of the Working Group on Transport (<http://www.adb.org/publications/proceedings-fourteenth-meeting-gms-subregional-transport-forum>);
- 19th Meeting of the Working Group on the Environment (<http://www.gms-eoc.org/resources/WGE-AM19>);
- 10th Meeting of the Working Group on Human Resource Development ([http://www.adb.org/sites/default/files/WGHRD-10\\_SOP.pdf](http://www.adb.org/sites/default/files/WGHRD-10_SOP.pdf));
- <sup>x</sup> This list was produced from a review of the following documents:
- OECD *Green Growth and Developing Countries: A Summary for Policy Makers* June 2012, available at: <http://www.oecd.org/dac/50526354.pdf>, last accessed 29 October 2013.
- OECD (2012) Green Growth as a national project in China, Kenya and Korea Chapter in *Development Cooperation Report 2012: Lessons in Linking Sustainability and Development* 12 November 2013, available at: <http://www.oecd-ilibrary.org/>, last accessed 29 October 2013.
- Mohammed, E.Y., Wang, S. and Kawaguchi, G. (2013) *Making growth green and inclusive: the case of Cambodia* OECD Green Growth Papers, 12 August 2013, available at: <http://www.oecd-ilibrary.org/content/workingpaper/5k420651szzr-en>, last accessed 29 October 2013.
- Government of Cambodia (2009), *National Green Growth Roadmap Cambodia*, Government publication.
- Government of Cambodia (2013) *National Strategic Plan for Green Growth 2013-2013*, Government publication.
- Government of Cambodia (2013) *National Policy for Green Growth*, Government publication.

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GGGI (2013) *Annual Report 2012: Cambodia*, Global Green Growth Institute, available at: <http://gggi.org/cambodia-green-growth-planning/>, last accessed 29 October 2013.

ASIA LEDs *Vietnam: Key Policies to Promote Green Growth*, available at: [http://lowemissionsasia.org/sites/default/files/pdf\\_file/DSDS\\_Green%20Growth%20Session\\_Vietnam\\_FINAL.pdf](http://lowemissionsasia.org/sites/default/files/pdf_file/DSDS_Green%20Growth%20Session_Vietnam_FINAL.pdf), last accessed 29 October 2013.

Government of Vietnam (2012) *Vietnam Green Growth Strategy*, Government publication.

*Progress on the Viet Nam Green Growth Strategy*, G20 Development Working Group Presentation, Moscow July 2013, Vietnam Ministry of Planning and Investment and Vietnam Ministry of Finance. Available at: <http://www.oecd.org/media/oecdorg/directorates/developmentco-operation/directoratedcd-dac/environmentanddevelopment/Session%20II%20-%201%20-%20Vietnam%20%20-%20by%20Ms%20Trinh%20and%20Ms%20Nhungs.ppt>, last accessed 29 October 2013.

Government of Vietnam (2013) *Vietnam Party Resolution on Active response to climate change, strengthening resource management and environmental protection*. Description available at: <http://www.monre.gov.vn/v35/default.aspx?tabid=675&CateID=54&Code=NRYS127107>, last accessed 29 October 2013.

Presentations at *New Opportunities for Natural Wealth Management: A Public Private Dialogue on Green Growth in the Greater Mekong Subregion*, held in Bangkok, 17-21 June 2013 <http://www.capacitybuildingoslo.com/media/>

<sup>xi</sup> OECD (2012) Green Growth as a national project in China, Kenya and Korea Chapter in *Development Cooperation Report 2012: Lessons in Linking Sustainability and Development* 12 November 2013, available at: <http://www.oecd-ilibrary.org/>, last accessed 29 October 2013.

<sup>xii</sup> United Nations UN Strategic Framework 2012-2015 United Nations Country Team in Myanmar (October 2011):7 Available at: [http://unic.un.org/imucms/userfiles/yangon/file/UN\\_Strategic\\_Framework\\_for\\_Myanmar\\_2012-2015.pdf](http://unic.un.org/imucms/userfiles/yangon/file/UN_Strategic_Framework_for_Myanmar_2012-2015.pdf)

<sup>xiii</sup> Overview from a presentation by Mr. Juhern KIM, GGGI. <http://www.slideshare.net/juherkim/accelerating-bottomup-approach-on-green-growth-and-ecoinnovation>

# THE WWF NETWORK\*

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## WWF Offices

|                          |                  |                                            |
|--------------------------|------------------|--------------------------------------------|
| Armenia                  | Guyana           | Solomon Islands                            |
| Azerbaijan               | Honduras         | South Africa                               |
| Australia                | Hong Kong        | Spain                                      |
| Austria                  | Hungary          | Suriname                                   |
| Belgium                  | India            | Sweden                                     |
| Belize                   | Indonesia        | Switzerland                                |
| Bhutan                   | Italy            | Tanzania                                   |
| Bolivia                  | Japan            | Thailand                                   |
| Brazil                   | Kenya            | Tunisia                                    |
| Bulgaria                 | Laos             | Turkey                                     |
| Cambodia                 | Madagascar       | Uganda                                     |
| Cameroon                 | Malaysia         | United Arab Emirates                       |
| Canada                   | Mauritania       | United Kingdom                             |
| Central African Republic | Mexico           | United States of America                   |
| Chile                    | Mongolia         | Vietnam                                    |
| China                    | Mozambique       | Zambia                                     |
| Colombia                 | Namibia          | Zimbabwe                                   |
| Cuba                     | Nepal            |                                            |
| D.R. of Congo            | Netherlands      | <b>WWF Associates</b>                      |
| Denmark                  | New Zealand      | Fundación Vida Silvestre (Argentina)       |
| Ecuador                  | Norway           | Pasaules Dabas Fonds (Latvia)              |
| Finland                  | Pakistan         | Nigerian Conservation Foundation (Nigeria) |
| Fiji                     | Panama           |                                            |
| France                   | Papua New Guinea |                                            |
| French Guyana            | Paraguay         |                                            |
| Gabon                    | Peru             |                                            |
| Gambia                   | Philippines      | *As at January 2014                        |
| Georgia                  | Poland           |                                            |
| Germany                  | Romania          |                                            |
| Ghana                    | Russia           |                                            |
| Greece                   | Senegal          |                                            |
| Guatemala                | Singapore        |                                            |

# Greater Mekong green economy

100%  
RECYCLED



## US\$4 BILLION

Retail value of Mekong River fisheries estimated at more than US\$4 billion annually

## 60 M

The Lower Mekong River provides the main source of food for 60 million people



## +US\$55 BILLION

The value that could be added cumulatively to the combined economies of Cambodia, Laos, Thailand and Vietnam by 2035 through implementing green economic growth policies that maintain natural capital over and above the value added by 'Business as Usual' economic development

## 80%

The Greater Mekong's natural capital directly supports 80 per cent of the region's population by providing vital ecosystem services



#### Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

[panda.org/greatermekong](http://panda.org/greatermekong)

The Greater Mekong region is one of the biologically richest places on the planet; its varied natural resources support the livelihoods and well-being of millions of people in mainland Southeast Asia. WWF-Greater Mekong – on the ground in Cambodia, Laos, Myanmar, Thailand and Vietnam – is working to conserve the region's biodiversity and build a secure and sustainable future for people and wildlife.