

Chapter 5 | Soft Power and Environmental Diplomacy

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Oudom is an ambassador extraordinary and plenipotentiary of the Permanent Mission of the Kingdom of Cambodia to the United Nations. He is known for his persistent and passionate commitment to sustainability and environmental conservation. Having worked closely with tens of thousands of official delegates, Oudom led a tree-planting activity with a view to creating solidarity among diplomats and supporting global reforestation, in commemoration of World Environment Day, on 3 June 2040.

To cope with the formidable challenge of climate change and environmental degradation, Oudom and high-level representatives of various states attend “The Future We Want” summit in order to promote sustainable development. During a five minute speech, Oudom shares Cambodia’s experiences in best practices in terms of reforestation and sustainable logging. Cambodia is a champion of forest management and a leading country in pushing carbon trading through utilizing drone and blockchain technologies as he sets out in his speech. He also mentions that the government has set a goal of creating a clean, healthy and green environment in the kingdom’s schools. At the end of the summit, most developed and least developed countries have voiced support for what Cambodia has done so far on sustainable forest management, further enhancing the country’s soft power.

I. Cambodia's Soft Power in 2040: Ideal Scenario

Climate change is widely agreed to be one of the major questions determining how the next two decades will play out across a myriad of topics. This rapid change is not only a source of worry but also of opportunity. There are clear, identifiable opportunities for Cambodia to increase its soft power through environmental diplomacy – specifically in relation to reforestation and sustainable logging. The primary aspects of Cambodia's ideal scenario in this area include two aspects: (i) the development of Cambodia's soft power through leading by example in environmental diplomacy and (ii) achievement of the goal of 60% forest cover and the institutionalization of fair, transparent, and effective carbon emissions trading.

Leading by example

Over the next 20 years, Cambodia will become a green state by engaging in sustainable policies that set the gold standard for environmental management. As to future prospects, Cambodia will follow an agenda involving predominantly “low politics” topics in the international arena – specifically, climate change as the mainstay of the country's foreign policy agenda. The concept of low political topics is in line with what Kurlantzick (2007) and Sevin (2017) who conceptualized this form of soft power as a form of public diplomacy. As clearly expressed in the work of Professor Joseph S. Nye, Jr., who first coined the concept of “soft power” in *Bound to Lead* published in 1990, soft power “is the ability to get what you want through attraction rather than coercion or payments.” (Nye, 2004). Soft power is integral to this chapter about defining environmental diplomacy. The term “environmental diplomacy” has a broader meaning around negotiations concerned with conflict resolution over natural resources as well as instrumental use of the environment in resolving disputes and building peace (Ali & Valdich, 2016). In other words, environmental diplomacy is the practice of advancing ecological protection by conducting diplomacy concerning environmental issues including conserving natural resources, sustainable operations and effective environmental stewardship.

At present, Cambodia is identified as a global victim of climate change (UNFCCC, 2015). Yet, by 2040, Cambodia will retain a seat at the table with other countries,

aiming to offer the best practices developed in the kingdom regarding reforestation and sustainable logging. These lessons learned can serve as a vital means for Cambodia to enhance its soft power and international perceptions of Cambodia can be reframed: from a killing field to a supporter of low-carbon society.

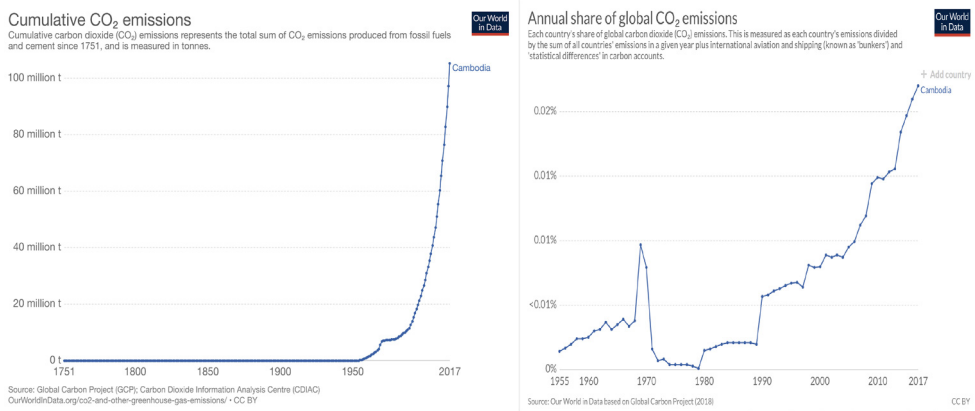
As a result, Cambodia will in 2040 act collectively with other states in diverse global and multilateral settings to achieve a global solution that will take the lead towards sustainable development via environmental politics. Moreover, environmental politics is a robust area for the performance and branding of the country, where the landscape, flora and fauna, and biodiversity are key elements of both the national imagination and international perceptions of the country. This “brand image draws upon the perception that Phnom Penh has unique and valuable lessons to teach the international community about sustainable forest management. Therefore, in 2040, Cambodia would see environmental diplomacy as the core element of its soft power strategy.

Attainment of 60% forest cover and the push for carbon trading

Cambodia would achieve 60 % of forest cover throughout the country over the next two decades. According to Rectangular Strategy Phase IV (2019-2023), in the domain of environmental and biodiversity protection, Cambodian government sets out strategic objectives to ensure environmental sustainability and strengthen the management of protected areas. Over the course of 2040, Cambodia will have adequate experts to conduct an environmental audit and forest assessment through promoting degrees and training pertaining to environmental protection. In addition, forest area will increase –at an average of 60%– in Cambodia with painstaking effort of all relevant stakeholders to promote the National Forest Program. More trees will be planted in deforested areas. In line with the process of planting trees, Cambodia will use high tech initiative in order to support reforestation. In economic sense, forests offer a wide range of opportunities for Cambodia in terms of recreation and ecotourism. By 2040, Cambodia’s attraction as a destination for tourism will be largely based on nature– particularly forests.

More importantly, in 2040, Cambodia would become a carbon neutral country and would push for a fair market for carbon trading. Being a carbon neutral means that Cambodia will take action to reduce greenhouse gas emissions to zero and to offset an equivalent amount of any remaining emissions. As a trend for the future, Phnom Penh would push for fair and transparent carbon trading schemes. To ensure the safety of carbon trading in the transaction cycle, blockchain technology will be used (see section 3).

Cambodia has been called one of the front runners the least developed countries (LDCs), as it has officially committed to pursuing a low-carbon resilient development agenda and thus to addressing mitigation, adaptation and development together and Cambodia has also been a leading LDC country in terms of the number of the Clean Development Mechanism (CDM) projects (Käkönen, Lebel, Karhunmaa, Dany & Try, 2014). The goal of acting as a frontrunner country in efforts to a Green Civilization is clearly stated from the National Strategic Plan on Green Growth (NSPGG) 2013-2030. This strategic plan will enhance national prestige best-known for being a country with a model of green growth in ASEAN and Asia and the Pacific regions (National Strategic Plan on Green Growth, 2013). This is coupled with a strong political willingness to take domestic action on climate change and sustainable forest management. In terms of size of economy or level greenhouse emission, Cambodia does not rank very high. Cambodia's total GHG emissions in 2017 were 105.23 million metric tons of carbon dioxide equivalent (MtCO₂e), totaling 0.02 percent of global CO₂ emissions (Our World in Data, 2019). Cambodia committed in its Intended Nationally Determined Contribution (INDC) to reduce its GHG emissions by 27% by 2030, relative to its 2010 GHG emissions, depending on international support.

Figure 1: Cumulative CO₂ emissions of Cambodia

Source: Global World in Data

II. Scenario Space and Key Factors

Environmental diplomacy in the future will largely depend on six factors:

1. International cooperation on environmental policy, also known as global factors, is highlighting the unwavering commitment of major states for fighting against climate change. Cambodia could achieve an optimistic outlook with regard to environmental diplomacy if the global effort moves in a positive direction.
2. Global tree reforestation will dictate the reforestation programs of Cambodia and how those policies are aligned with global trends.
3. New forms of environmental governance have a spillover effect on forest governance in Cambodia.
4. Laws and regulations are designed primarily to support environmental protection and in parallel with international agreements.
5. Putting best practices of sustainable forestry into practice in the context of Cambodia.
6. The adoption of technology and the transformation of education will widespread across society.

Regarding the aforementioned factors, I would like to reject international cooperation on environmental policy as a key factor due to insufficient climate finance, the withdrawal of the U.S. from the Paris Agreement and the lack of

consensus between developed and least developed countries on environmental action. In nutshell, the engagement of leaders in environmental diplomacy is dubbed as "One Step Forward, Two Steps Back".

The purpose of this section is to delve deeply into scenario space and key factors that would shape Cambodia's environmental diplomacy in 2040.

Global Factors

Let me for the sake of clarity declare here that when I say "Global Factors" throughout this essay I am explicitly referring to international cooperation on environmental policy. The global environmental crisis can create incentives for cooperation and collective actions amongst 193 states through multilateral diplomacy. In order to achieve a vision of environmental diplomacy of Cambodia in 2040, proactive international environmental negotiations and positive signs of cooperation between global actors are required.

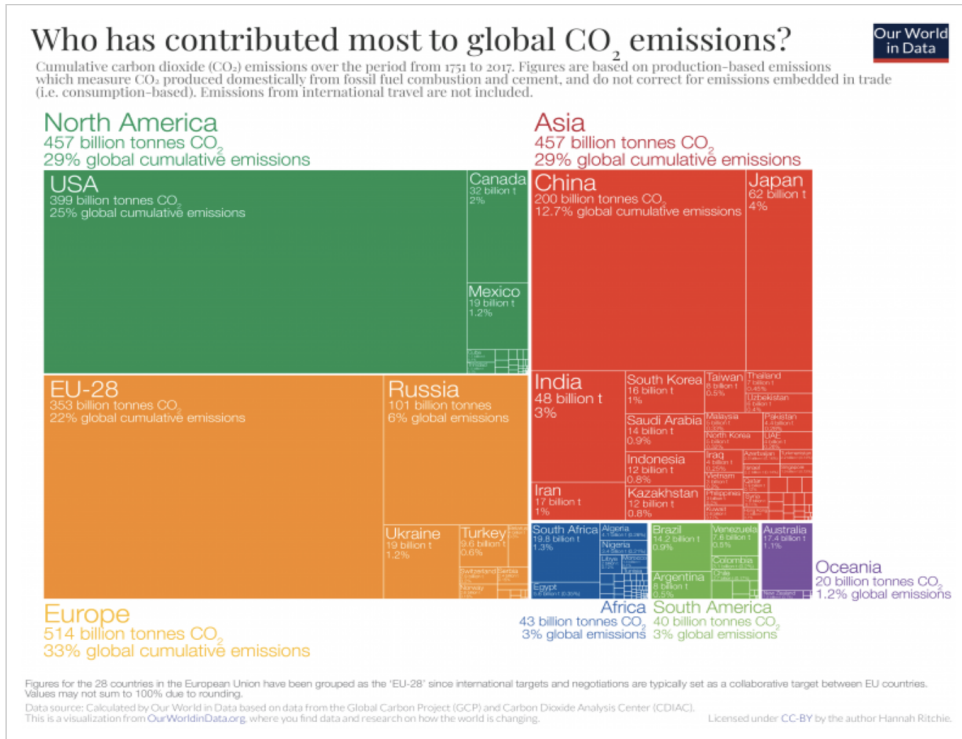
Assuming that in 2040, the global effort will be able to deliver the aggregative climate policy mechanism needed to keep within the 2 degrees target above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 Degree Celsius as committed in the Paris Climate Agreement in 2015. It deserves to say that global actions are taken to have global emissions by 2040 under which 195 countries committed to adhering intended nationally determined contributions (INDC) of each own national plan, setting targets for emission reductions and specifying pathways to meet those targets. Responding to the climate change vision, the major Greenhouse Gases (GHG) emitters, therefore, including the United States, China, the EU must comply with national regulations and international commitment regarding reduction of GHG emissions (see figure 2 below).

The Chinese position in the international climate change negotiations has shifted from a climate free-rider to a climate protector (Wu, 2016; Rauchfleisch & Schäfer, 2018). Furthermore, China has already agreed to undertake nationally determined contributions (NDCs) to mitigate its GHG emissions based on the Paris Agreement that was adopted by all the Parties, including China at COP21 in Paris on December 11, 2015, which will put China and other large developing

countries on equal foot with developed countries to combat climate change in terms of both voluntary GHGs emissions mitigation. In the ensuing years, China's rapid success in curbing its own domestic CO2 emissions deriving from an increase in renewable energy and a reduction in the production and consumption of coal (Engels, 2018). As a result of continued significant Chinese investment in renewable energy including solar, wind, and hydro technologies, China could emerge as one of the champions of climate change mitigation.

However, the US's administration withdrawal from the Paris Agreement might not be as disastrous as it seems. The U.S. cannot actually withdraw by 4 November 2020, four years after the Agreement entered into force, according to Article 28, and in light of an anticipated Biden administration (as of mid-November 2020) it is possible that the U.S. will return to the Agreement. In the aspirational scenario, a new Biden administration could cooperate with other major powers to fight for climate change. Most significantly, the European Union is the first major economy to develop a legally binding mechanism for meeting its obligations under the Paris Agreement and is making a successful transition to a low-emission economy in order to achieve climate neutrality by 2050 (European Commission, 2019). Globally, heads of government have regularly paid attention to climate change, including Cambodia. The growing complex issue of climate change is becoming regional, global and involving multiple stakeholders, thereby requiring multilateral solutions. According to John Kerry, former US Secretary of State, the only solution to climate change is multilateral. He said that: "There is no way any single county will solve it even if it wanted to by itself. All countries coming together that requires foreign engagement and it involves foreign policy" (Climate Diplomacy, 2019). Cambodia needs to engage in collective action with all countries through proactive environmental diplomacy and remain committed to the Paris Agreement. In the ideal scenario, Cambodia will expect to seek a much more enhanced status in environmental diplomacy, supported by reforestation and sustainable logging.

Figure 2: Cumulative carbon dioxide (CO₂) emissions over the period from 1751 to 2017⁸



Source: Our World in Data

⁸ The distribution of cumulative emissions around the world is shown in figure 2 above. The United States has emitted more CO₂ than any other country to date: at around 400 billion tonnes since 1751, it is responsible for 25% of historical emissions. The world's second largest national contributor of CO₂ is China while the 28 countries of the European Union (EU-28) – which are grouped together here as they typically negotiate and set targets on a collaborative basis – is also a large historical contributor at 22%. Many of the large annual emitters today – such as India and Brazil – are not large contributors in a historical context (Ritchie, 2019).

The Global Tree Restoration Potential

The restoration of trees remains among the most cost effective and realistic ways for climate change mitigation (Bastine et al. 2019). Global leaders must pay attention to global-scale forest reforestation. If global leaders act now, this could cut carbon dioxide in the atmosphere by up to 25%, to levels last seen almost a century ago. Bastine et al. 2019 argues that more than half the potential to restore trees can be found in six countries, namely Russia (151 million hectares); USA (103 million); Canada (78 million); Australia (58 million); Brazil (50 million); and China (40 million). Given the importance of reforestation at a global scale, environmental diplomacy can create the conditions for the sustainable use of forests in the long term. For instance, multilateral partnerships can serve as meaningful platforms for reforestation and the sustainable management of existing land.

By 2040, Cambodia, as a small nation, will proactively cooperate, capture and catalyse the agenda of global tree reforestation. For Cambodia, the RGC issued a sub-decree on the use of state land for reforestation, encouraging the participation of communities and the private sector in reforestation. According to Yasmi, Durst, Ul Haq & Broadhead (2017), the Forestry Administration has designated 96,000 ha for the development of plantations, of which 14,000 ha have been planted so far. Cambodian diplomats will therefore have to convey a clear message more convincingly than ever before with regard to the strong commitment of government to environmental benefits for present and future generations. According to Thorhallsson and Bailes (2016) highlight that a small state calls for a positive image in order to be respected and leading in particular policy fields. Therefore, Phnom Penh strongly needs to act as first movers and explicitly operate 'me first' initiatives as a proactive small state not waiting for big power decisions.

Environmental Governance

Environmental governance, by definition, refers to the means by which society shapes and determines goals and priorities pertaining to the management of natural resources (International Union For Conservation of Nature, n.d). Environmental governance involves the rules that govern human behavior in

decision-making processes as well as decision-making on its own, both formal and informal. Appropriate legal frameworks are a prerequisite for good environmental governance at international, regional, national and local level (International Union For Conservation of Nature, n.d).

The degradation of the environment has been recognized as one of the most serious threats, not just for the future of the planet and its natural resources, but also for the survival of humankind. Therefore, the new practices of environmental diplomacy need new modes of environmental governance. According to Bäckstrand., Kahn, Kronsell & Lövbrand (2010) contend that new modes of environmental governance is closely associated with a normative agenda to open up politics and make environmental decision-making more inclusive, transparent, accountable and reflexive, while at the same time effective and performance-oriented. As a part of environmental diplomacy, Cambodia must strongly support and follow the new modes of environmental governance through accelerating governance reform and improving forest good governance . The future of Cambodian soft power will be credible only if soft power signifiers and policies are consistent with environmental governance.

National Factors

The following is a sketch of national factors, including national regulations, sustainable forestry practice and cross-cutting factors.

National Regulations

The Royal Government of Cambodia has taken an action on elaborate law and policy framework to support resource governance over the past twenty years, with many components supportive of sustainable forest management.

Figure 3: Cambodia’s Policy Framework for Resource Governance

Resource Area	Resource Governance Policy
Forestry Policy	<ul style="list-style-type: none"> ● National Forest Policy: 2002 ● Forest Law: 2002

	<ul style="list-style-type: none"> ● Community Forestry Sub- Decree: 2003 ● Guideline for Community Forest: 2006 ● National Forestry Program: 2010 ● National Community Forestry Program: 2011 ● National REDD+Strategy: 2017
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Source: Author's compilation

The government has developed a number of global initiatives like Reducing Emissions from Deforestation and Forest Degradation (REDD+) and payments for ecosystem services (PES) and certification schemes like European Union-Forest Law Enforcement, Governance and Trade (EU FLEGT) for timber from sustainably managed forests. (Yurdi et al. 2017). On top of that, Cambodia is committed to following international conventions and standards such as the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification (UNCCD), the Ramsar Convention on Wetlands of International Importance, the Convention for the Protection of the World's Cultural and Natural Heritage, the International Labour Organization's (ILO) Convention No. 169, the International Tropical Timber Agreement (ITTA) and the Voluntary Guidelines on Responsible Governance of Tenure of Land, Forest and Fisheries (VGGT) among others (Yasmi, Durst, Ul Haq & Broadhead, 2017). The Government has developed a National Forest Programme 2010–2029 whereby the 10.8 million hectares of forest areas are classified into five land use categories, including protected areas, protected forests, community forests, forests under private concessions and production forests (Ministry of Agriculture, Forestry and Fisheries, 2010). Therefore, Cambodia has most of the laws and systems in place to make this move to achieve ecological diplomacy over the course of 20 years.

Sustainable Forestry Practice

Cambodia, as one of vulnerable countries in terms of forestry, still continues to pursue comprehensive forestry sector reforms designed to combat illegal activities and manage the forest resources for present and future generations.

To do this successfully, Cambodia needs to learn from successful countries in terms of sustainable forest management. In Cambodia, sustainable forest management is a critical component for long-term development and poverty reduction. By applying best practice from successful reforestation countries, Cambodia is able to achieve the goal of sustainability in forest management.

Cambodia could learn the following lessons from the success of each country, including the continuous support from the head of the country, investing in knowledge and involvement from relevant stakeholders. First, Cambodian government should place the importance of forest reforestation as top priority. Once forest reforestation becomes the top priority government project, national finance could be funneled continuously to the program. The case of the ROK suggests that in order for a developing country with low income level to solve forest problems, it requires strong and committed leadership along with efforts to put forest issues in the mainstream. Second, training and education of forestry will pave the way for Cambodia to achieve reforestation and sustainable logging. South Korea and Sweden are cases in point. Cambodia, however, should promote environmental subjects and train forestry experts to meet high standards. Lastly, involving a wide range of stakeholders in both planning and implementing of laws and regulations. By so doing, all relevant actors are able to share inputs and criticize specific provisions in order to improve laws and regulations.

Cross-cutting factors: Technology and Education/Training

The fourth industrial revolution will bring a plethora of technologies in modern forestry in Cambodia. Technology will improve efficiency given the fact that the forest products industry produces more with less population, less waste, less impact on the environment and less raw material input by utilizing technology (Eco-Link, 2002). The National Forest Program of Cambodia calls for the promotion of technology (Ministry of Agriculture, Forests and Fisheries, 2010). From drone technology to blockchain technology will be utilized in 2040 with a view to promoting reforestation.

In 2040, degrees and training in relation to the environment is an attractive employer, given the fact that it provides safe jobs in rural as well as urban

regions. On top of that, the appeal for climate action, climate education also raises awareness of job opportunities in a climate-smart economy. By 2030, sixty-five million jobs could be created in the process of a climate-smart economy (Sargren, Edgar, Beresford & Chevillard, 2019). This transition will produce shifts in job demand across sectors, yet also requires new skills for existing jobs. Over the next few years, robust action will be critical to ensuring that the 1.2 billion young people who will join the labour market in developing economies by 2030 – 3 million of them in Cambodia – will be enabled to contribute to and benefit from the job opportunities of a climate-smart economy (Sargren, Edgar, Beresford & Chevillard, 2019). As future-oriented, firms tend to be more environmentally friendly, those companies are progressively looking for employees who have a profound knowledge of carbon accounting, corporate social responsibility and lean manufacturing techniques (Webley, 2011). Thus, the need for education for sustainable development in universities of applied sciences is expected to increase in Cambodia. The content of the education should be developed so that it offers the starting points for development of forest products and services in line with the new trends. Forest education should be marketed to attract young people to the field. In the future, training in the forest sector should be diversified to respond to the new opportunities.

III. Policy Initiatives to achieve the vision

The road map towards the ideal scenarios in 2040 that Cambodia needs to implement holistic policies pertaining to human capital and environmental regulations.

Ecological training

The first step involves ecological training with environmental diplomats and scientists to ensure sound scientific data underpin international environmental negotiations. Ecological training aims to foster diplomatic efforts in the negotiation and implementation of multilateral environmental agreements and diplomatic practices in this field. Diplomatic training can be conducted both in the country and abroad. For instance, in 2020 the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Environment could send 10 to 20

representatives to join various conferences in Sweden, South Korea and Norway, etc.- perhaps it is a process of learning and then coming back to distill the information. In this sense, Cambodia is able to continuously adopt and learn overtime in response to change in ecological, economic and social drivers. It also promotes engagement and inspires creative efforts from partners. First, legislation, governance, and clear rules are instrumental for forest restoration. Clearly, transparent systems and avoidance of corruption have been key to progressive forestry and forest industry development in Sweden and hence clear rules and good governance have been overriding key factors for successful forest restoration in Sweden (Eriksson et al., 2018). Second, representatives of Cambodia should initiate government-led reforestation policies on the basis of the lessons learned from the Korean government --particularly the National Reforestation Programme of the ROK (Jae et al. 2014). Third, Cambodian delegation must actively engage with Norway given the fact that Norway is a front runner of Reducing Emissions from Deforestation and Forest Degradation (REDD+) and Cambodia is a part of REDD+ (Neumann & Carvalho, 2015; Brewster, 2012).

More importantly, according to Yui and Saner (2007) argue that training should include quality assurance (QA) as an integral part of employees/diplomats to develop competencies which in turn contribute to the organizational performance of their respective Ministry of Foreign Affairs. In addition, diplomatic training needs to apply ISO 10015. ISO 10015 offers easy-to-use guidance on how to organize diplomatic training in an efficient and effective manner. Following the definition, ISO 10015 defines training as a four-step process, namely, Analyse-Plan-Do-Evaluate (Yui and Saner, 2007).

A paradigm shift of environmental education

In terms of education, transformation in learning towards sustainability requires the commitment of faculty and academics. With strong efforts, motivation and innovative ideas, modification in content and methods can occur (Sargren, Edgar, Beresford & Chevillard, 2019). Curriculum reform and its reorientation towards sustainability is a prerequisite for Cambodia to embrace environmental diplomacy. According to Mulder et al (as cited in Leal Filho, Brandli, Kuznetsova

& Maria Finisterra do Paço, 2015) remark that the convergence of both strategies --whole curriculum reform and individual specialised courses have been recommended as beneficial for embedding sustainable development in universities. By 2040, environmental education and education for sustainable development will be included in the mandatory curriculum across the nationwide in Cambodia. Therefore, both high schools and universities in Cambodia will provide a new vision to students in order to gain knowledge, skills and competences related to sustainability, including the development of critical thinking, future envisioning and systematic thinking.

Pedagogically, in order to improve environmental educational outcomes, a two-tiered learning strategy will be developed for incorporation into curriculum and individual specialized courses. First, schools will make online resources on the topic available to students and teachers. These include good practice exchange videos with examples of integration of education for sustainable development in the curriculum. These activities are aimed at providing professional training not only focused on sustainable development concepts and principles but also on appropriate teaching methods and approaches. Second, sustainable learning environments, such as eco-schools or green campuses, allow educators and learners to integrate sustainability principles into their daily practices and facilitate capacity-building and competence development, and value education in a comprehensive manner. With this in mind, teachers should encourage students to do fieldwork.

Embracing the digital technologies

Cambodia needs to embrace innovative ways to increase the forest cover. New technologies have enormous potential to increase tree productivity and reduce costs. Cambodia will use technologies to foster reforestation in two ways. First, to help Cambodia gain reward for reforestation, the innovation of drone technology will pave the way for Phnom Penh to plant one million trees every year, contributing to efforts to address deforestation and promoting sustainable forest management. The new planting system comprises a planting UAV, a mapping unmanned aerial vehicle (UAV), and machine learning software. The method is fully automated and promises to be a form of reforestation that is

much cheaper and faster. Drones can plant up to 35,000 seeds in a day and can be operated in areas that are inconvenient for human trees to reach (Marshall, 2018). Drone technology represents a significant change from current tree-planting techniques, which include planting by manual and delivering dry seeds by air. Hand-planting is slow and costly, whereas spreading dry seeds leads to low uptake rates.

It additionally presents a chance to assist countries meet their environmental obligations (European Commission, 2016). Second, in order to realize a sustainably managed wooded area of 12,700 hectares or 10 million trees in 2040 by using blockchain technology towards reforestation is feasible. This mechanism was already implemented in Paraguay through a group of German entrepreneurs (TreeCoin, n.d). To support reforestation efforts, the Cambodian government needs to adopt the TreeCoin project. TreeCoin project's sustainable reforestation will help Cambodia to meet the country's demand for timber and form a natural habitat that will protect indigenous people for years to come. These technologies have huge implications for all facets of human life and potentially also for forests, forest landscapes and forest-dependent communities

Expanding community forests

In order to achieve reforestation and sustainable logging in 2040, expanding community forests is required. The goal of expanding community forests is to promote sustainable management of forest resources. The Forestry Administration of Cambodia has the purpose of transferring two million hectares of state public forests to communities, a transfer representing approximately 20 percent of the nation's forests (Poffenberger, 2013). Yet, an assessment made in 2002 estimated that up to 8.4 million hectares of Cambodia's forestland could be suitable for community forests (Fichtenau et al. 2002). Over the past decade, community forestry has made great progress in terms of policy and legal endorsements from the government and expanding financing from development agencies. If this trend continues, the area under community forest could expand rapidly (Poffenberger, 2013). Two important determinants of expanding CF's long-term success in Cambodia will be outlined.

First, one source stated that “proving strong community rights to community forests over natural resources because the community may have long term interest in maintaining resources” (personal communication, August 19, 2019). It has been shown that these forests and the carbon they store are better protected over time if indigenous people have full land rights to control forest territories. Second, extending the 15-Year Term for CFs and simplifying the process of applying community forests (Maningo, 2014 & F. Lambrick, personal communication, September 17, 2019). In addition, Lambrick (personal communication, September 17, 2019) argued that:

“In order to improve forest governance by 2040, we need to increase the amount of community forests cover in Cambodia and simplify the process of applying CFs and make it much longer term because at the moment it is short term (15 years). So, we need a much longer period for communities to manage those forests.”

Therefore, the government’s expansion of CF should be implemented in areas of high-value forest such as Prey Long, where communities derive significant subsistence and monetary benefit from the forest through sustainable use.

Regular Environmental Audits

By 2040, ecological audit will become an essential tool in the management and monitoring of environmental and sustainable development programs. By definition, it involves tools and procedures that are used to evaluate any activity which can have environmental impacts (DeSanto, 1999). A team composed of individuals with expertise in forestry, ecology and soil science will provide support to the auditor (EPA Victoria, 2005). The scope of audit includes manufacturing, mining, forest industries, land development, research and development, and any other activity which may affect the environment (DeSanto, 1999). The ecological audit is audited at least once every five years in order to ensure sustainable forest management.

To ensure that ecological audit is properly set up and effectively maintained, systematic approach is needed. There are four stages including checklists, field surveys, standardized questionnaires and observation. The purpose of this

management report/environmental audit report is therefore to make known the findings of the audit regarding the management of forestry resources in the country. More importantly, Lambrick (personal communication, September 17, 2019) said that:

“environmental auditors need able to safety and make the result of auditing transparent and if they find any corruption or any laundering timber or they find that timber is being transported from protected areas, they need to have a power to denounce that but also they need to be protected.”

By so doing, Cambodia will have well-trained environmental auditors and huge volumes of forest data will be generated and collected in the future.

Private Sector Participation

The response to climate change is expected to continue shaping economic growth patterns in most countries and influence decision-making as well as policy-making processes. The private sector will play an important role in at least two ways—in terms of providing finance, and in developing technology to capture, store and reuse of CO₂ (Global Diplomatic Forum, 2019). Therefore, private sector initiatives, new sources of finance for green projects and the financial mechanism will assist the countries to achieve their expected contributions. The private sector can support sustainable economic activity by putting environmental health before profit and monetary gain. Private sector actors must play a critical role in promoting greener economies. Opportunities include developing business models that emphasize legality and transparency (for example, subscribing to FLEGT or similar initiatives); adhering to best management practices including those formalized through certification schemes such as Forest Stewardship Council. Interest in concepts of corporate responsibility, while still relatively undeveloped in the GMS, is increasing; consumers from outside the region can assist by demanding assurances of best practice (WWF, 2013).

In the future, private sectors will play an active role to upgrade ecological diplomacy of Cambodia. At present, Cambodia's National Forest Program and National REDD+ Strategy demonstrate the importance of private sectors to

ensure sustainable forest management (National Forest Program, 2010 & Ministry of Agriculture, Forestry and Fisheries & Ministry of Environment, 2017). According to Tolisano, J., Nguon, P. & D. Chhun (2016), the involvement of private sectors in sustainable forest management is very low. Therefore, by 2040, harmonized private sectors management of forests will stress on reforestation and sustainable logging. In order to be successful, the private sector should further engage with multi-stakeholder diplomacy like the Alliance of CEO Climate Leaders and Technology Facilitation Mechanism and public-private partnerships (Global Diplomatic Forum, 2019).

For Cambodia, the government released a sub decree on the use of state land for reforestation that encouraged communities and the private sector to take part in reforestation activities. The private sector is encouraged to participate through the Forestry Law and Policy Statement. Similarly, Sub-Decree 26 of 2008 stipulates private sector investment in forest rehabilitation. Particular effort has been made to engage the private sector in these discussions, including the European Chamber of Commerce in Cambodia. However, the government needs to identify potential private sectors for possible collaborative ventures involving sustainable forest-based enterprises.

Legalization of logging and Improvement of Forest Governance

Realizing a desirable future –and avoiding catastrophic outcomes – is plausible for Cambodia if legalization of logging and improvement of forest governance are implemented. Legalization of logging would help minimize illegal logging when it entrusts local people with ownership and control of forest resources and maintains a monitoring role for government agencies –particularly strengthening forest governance. First of all, legalization of logging would pave the way for sustainable logging. Following this, sustainable logging will adopt a clear-cutting method as the preferred logging method. According to Lundmark, Josefsson & Östlund (2017), clear-cutting is used to clean up the forest and to replace such stands with new forest that is more productive and fast growing. For instance, sustainable logging involves only mature trees while leaving the immature ones to continue growing. Therefore, Cambodian government requires every plot for logging to be inspected by an officer from the Forestry

Administration who would then identify the trees allowed for harvesting. In the case of forest plantations in the tropics, a system of 10-year cutting and replanting rotation is commonly practiced (Sasaki et al., 2016)

Second, adopting and implementing effective and strong forest governance is a prerequisite for adopting legal logging. This is in line with what Lambrick said “ If the forest governance is really improving, legalization of logging would be a good idea.”(personal communication, September17, 2019). Cambodia forest national program (2010) also acknowledged the importance of forest governance as the ability of the government to enforce the law, respond to threats and impacts, operationalise forest policies and implement plans based on transparent and accountable systems. Moreover, the Third Asia-Pacific Forest Sector Outlook Study claims that the state of forests and forestry in the Asia-Pacific region in 2030 and 2050 will largely be shaped by the quality of forest governance. With good governance – predicated on mutually supportive and cooperative relationships among government, the private sector and civil society – forests will be better managed; the economic and environmental benefits derived from forests will be shared equitably among stakeholders; and forests will be integral to solutions to challenges such as climate change, hunger and malnutrition, poverty and threatened water supplies (FAO, 2019).

III. Business as Usual: describing the alternative - what if there were no interventions?

The Business as Usual scenario assumes that without the uptake of appropriate intervention, Cambodia environmental diplomacy won't be achieved by 2040. At a global level, if Cambodia stay committed to in its Intended Nationally Determined Contribution (INDC) to reduce its GHG emissions by 27% by 2030 (USAID, 2017), Cambodia won't become a net zero emission country, given the fact that Phnom Penh cannot achieve ecological balance between activities that emit climate pollution and processes that reduce the impact of that pollution to zero or close to zero. Moreover, regarding the global commitment of reforestation, Cambodia in its business-as-usual scenario will continue to plant forests to meet the target, approximately 2,829,322 trees (The Trillion Trees Campaign, n.d). Although Cambodia is assumed to have made considerable

progress in terms of reforestation, the number of trees planted is relatively small compared to other countries in the world (The Trillion Trees Campaign, n.d). Against this backdrop, Cambodia has not yet become a fully-fledged for large-scale biological sequestration --especially through reforestation-- due to the absence of Cambodia in Bonn Challenge and New York Declaration on Forests.⁹

The BAU scenario uses environmental governance to measure the future of Cambodian soft power through forest governance and national regulations. Cambodia has seen only slow improvements in forest governance. Based on the current trend, a failure to improve forest governance may bring dire consequences for Cambodia, including continued forest loss, the further marginalization of forest-dependent communities and conflict. For example, Gritten et al. (2019) argue that forest governance in Cambodia is defined as failing. In this context, the status of forest governance is a main issue driving the fate of Cambodian forests. Efforts to improve forest governance will continue in many countries in the Asia Pacific region in the BAU scenario, including strengthening efforts to combat the illegal trade of timber and wildlife products. Stakeholders will increasingly participate in decision-making and benefit sharing in light of continued domestic and international pressure.

Moreover, policies, rules and regulations aimed at protecting trees under the control of forestry administration and the Ministry of Environment are being implemented in order to ensure sustainable forest management. However, continued unsustainable resource extraction practices - particularly forests - could seriously affect the future of ecological diplomacy of Cambodia. The projection of forest futures in the Asia-Pacific Region indicates that there will be a decline in forest area in Cambodia in 2030 (FAO, 2019). Apart from

⁹ Bonn Challenge, launched in 2011, the aim of which is to restore productivity on 150 million ha of degraded and deforested land by 2020 and on 350 million ha of degraded land by 2030 using landscape approaches. The New York Declaration on Forests (NYDF) is a voluntary and non-binding international declaration to take action to halt global deforestation. It was first endorsed at the United Nations Climate Summit in September 2014.

unsustainable forest management, poor forest governance may undermine the projection of soft power via ecological diplomacy.

Despite a few flaws as mentioned above, the Cambodian government has made an initial commitment to push for better climate and environmental education. Over the next 20 years, the business-as-usual scenario assumes that the rate of students enrolling in education for sustainable development will increase - primarily due to the demands of job opportunities of a climate-smart economy. Lack of awareness as to the promotion of environment-related education would yield far-reaching consequences to the development of ecological diplomacy. On the one hand, a recent backlash against globalization could slow technology transfer in the forest sector in Cambodia. The scaling up of technology in the forest sector is uncertain in Cambodia given the fact that Cambodia has relied on and will continue to depend on developed countries to transfer certain advanced technologies to help reforestation schemes.

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