

SCP as a wholistic solution to build back better (Commentary to the Celebration of the 2020 World Environment Day)

Nature is important to all life forms on earth. It provides necessary services which are vital for all lives to live and maintain healthily. Economic and social development poses risks to the well-being of the nature at the unprecedented rate. Though nature has continued replenishing, ability to keep balance and replenishing of nature is seemingly not be able to catch up with the increasing deterioration.

The 2020 World Environment Day theme is on biodiversity with "It's Time for Nature" and this global campaign highlights how humans are inextricably linked to and depend on nature for our existence and quality of life. The Convention on Biological Diversity defines biodiversity as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.¹ This can be elaborated into three main points. The first point is on variability including aspect of the relative abundance of species, the second point is on variation between species (e.g. Species richness), incorporating diversity within species (e.g. genetic diversity) and the last point is variability of ecosystems themselves at landscape scales (e.g. terrestrial, marine and other aquatic ecosystems). The link between biodiversity and ecosystems services are many and varied. Biodiversity underpins ecosystems to provide their services to support earth's system and human activities. Healthy ecosystems



and a rich biodiversity are vital for humans and its building environment to function properly and to increase resilience.ⁱ Figure shows the benefits and services the people obtain from ecosystems. Ecosystems provide a multitude of benefits and services to humanity and living organisms, starting from food, clean water and habitat protection to cultural heritage and a sense of place. Biodiversity provides support to the ecosystems in order to provide services to organisms. Biodiversity living decline represents not only an irreversible loss to the planet but also threatens humanity's life support system: the services that nature provides represent everything from the food we eat to the air we breathe.

The figure from MEA (2003) depicts relationship between 4 services that are

provided by ecosystems to support life and human well-being and determinants and constituents of Well-being and how they influence and are influenced by changes created by

¹ https://www.cbd.int/convention/articles/?a=cbd-02 CBD, Article 2, Convention on Biological Diversity, UNEP/CBD/94/1.

human activities. High levels of consumption of goods and services from the modern industrial societies have depleted natural resources. Production and extraction of these materials has severe impacts on biodiversity and ecosystem services. The Millennium Ecosystems Assessment (2005) summarized that ever-growing demands being placed on increasingly degraded ecosystems seriously diminishes the prospects for sustainable development.^{III} We are currently consuming more resources than ever, exceeding the planet's capacity for generation. In the meantime, waste and pollution grows, and the gap between rich and poor is widening. Health, education, equity and empowerment are all adversely affected.

Sustainable Consumption and Production - SCP

UNSDG defines SCP that it is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.^{iv} SCP allows all sectors to adopt its principle of "doing more with less" into their production process and empowers consumers with product information and choices to become sustainable consumers who are responsible for environment. SCP can help mitigating pressures from consumption and production place on biodiversity and ecosystems.



The European Union recently released its new growth strategy, called EU Green Deal that aims to transform member states into a fair and prosperous society, with a modern resource-efficient and competitive economy where there are no net emissions of GHGs in 2050 and where economic growth is decoupled from resource use. (EU, 2019). To achieve these aims, it is essential to increase the value given to protecting and restoring ecosystems to the

sustainable use of resources and to improving human health. Increasing demands of consumption of goods and services from industrial sectors to meet the needs and extra wants from the emerging middle class especially in Asia, which have placed huge pressure on cultivation and extraction of natural resources. At the same time, the linear economy, based on the "take-make-dispose" step, has already degraded environmental quality through unsustainable consumption and production patterns. This economy has not taken into consideration environment's carrying capacity. There is a need to apply with new economy thinking and sustainable consumption and production (SCP) as a practical solution to protect biodiversity and ecosystems in order to maintain levels of its services provision to support lives of earth, and at the same time take into consideration opportunities for economic growth. The EU funded SWITCH-Asia RPAC works on and will continue promoting sustainable consumption and production to protect nature and biodiversity. Concepts of green supply chain, green public procurement and circular economy look at closing the waste loops so that nothing is left wasted to degrade nature. Ecolabelling schemes are enhancing consumers'knowledge for them to make a better and more sustainable choice when purchasing.

Two case studies in Asia demonstrating multiple benefits from protecting biodiversity by applying SCP principles.

Current economic development patterns post increasing risks for living organism and humanity. Risks in breathing polluted air, in increasing extreme weather events, and in unexpected pandemic. People need a better and safer planet and biodiversity plays vital roles in maintaining balance and in creating livable environment for people.

Case Study I: ECOSYSTEM RESTORATION AND COMMUNITY EMPOWERMENT through Creating Shared Value. Forest landscape restoration project in the north of Thailand.

By Central Tham and Central Group www.Centraltham.com



In the 72 years that Central Group has been in business, the concerns for the communities and the ecosystems we all depend on has never been far from their thoughts. Sustainability in the sense of resilience has been part of the mindset. Central Group has transformed its CSR strategy into "creating shared value (CSV)", aligning with the four pillars sustainability framework, People, Prosperity, Planet and Peace & Partnership. The critical environmental problems contributed to the unsustainability in all aspects are "deforestation" and "degraded ecosystem". There problems are well exemplified in the northern of Thailand, where predominantly watershed forests with high biodiversity values, has been long facing with mono-agricultural conversion, primality maize plantation for animal feed, which have led to the large-scale deforestation, ecosystem degradation, soil erosion, air pollution, and socio-economic problems, such as crumbling local economies and failing local food system. Without action, the cycle of debt and misery will continue for the small-scale farmers, the environmental problems will continue to be encroached upon. in 2018, the conservation initiative "Forest Restoration", under the Planet pillar program, has been piloted in around 75 hectares of

degraded land, in the Northern provinces of Thailand, including Chiangmai, Chiangrai and Nan provinces. Central Group has formed multi-level strategic partnerships with leading organizations from various sectors. This includes a strong partnership with WWF (Thailand), the Bank for Agriculture and Agricultural Cooperatives (BAAC), and Thai Organic Agricultural Innovation Foundation (TOF) and local community-based organizations, to establish and implement a solution model called FLR349 fund "Three Forests, Four Benefits" under the "Sufficiency Economy Philosophy" of His Majesty King Bhumibol Adulyadej, which helps to restore the degraded land along with development of value chains. The project supports the small-scale farmers escape from the cycle of misery by developing value chains, supply chains, and a marketplaces for the products grown in the pilot sites in order to ensure demand and long-term sustainability. Building community resilience through livelihood strategy such as agroecology, forest restoration and sustainable agriculture, and enhance self sufficient in terms of food production and local food chain development. With the Central Group's reach, FLR349 was able to create a market place for organically grown products from the project sites, helping to generate demand and income. Currently, products from the project sites can be found in many of Central Group's retail store and market, including TOPS supermarkets, and Jing Jai Market and Good Goods, which are the flagship urban farmers' markets and communities' products of Central Group, respectively. The smallholder farmers income has increased by 40% comparing to original level before they joined the project. Based on this FLR349 model, Thailand Development and Research Institute (TDRI) has conducted a research in 2019 on social return on investment (SROI) and the result shows that the SROI from this project is 8.367, in other words, each one baht invested in the "FLR349", it generates the social benefits of 8.367 Thai baht. In addition, a traceability and monitoring platform will be developed by end of 2020 to link up stakeholders along the supply chain, enable them to access information and remote sensing data regarding the food supply chain, make donations to support the operation, track progress of the reforestation efforts. Through these collective efforts, there has been collective impacts from the project. With nearly 1,400 total participants being involved and over 400 hectares of monoculture land already converted in the project as of May 2020, and it is on track to scaling up forest landscape restoration and transformation towards sustainable agriculture to a target of 8000 hectares in degraded watershed forest areas by 2030. The growing of mixed perianal crops without the use of dangerous agrochemicals will enable conditions where smallholders can become self-reliant all year round, especially in terms of health and income generation. The value chain created will help empower communities to uplift their livelihoods, reducing inequality, rejuvenating local economies, while also restoring the local food system so the population will no longer need to source food from elsewhere. The young generation who left the rural areas will have incentive to return home as more sustainable local jobs are created. The project outcomes will also have direct positive impacts on the urban population through its ecosystem services, such as the provision of water supply and purification, and food security. This will be serving as a "strong and proven" solution model to replicate and scale up to one million of hectare of watershed forest areas in Thailand, where they are currently faced severe biodiversity lost, deforestation and land degradation due to unsustainable agriculture practice, and climate impacts.

Case Study II: Green Tourism in Wuzhizhou island, Sanya, China https://www.chinadaily.com.cn/china/2017-12/05/content_35220619.htm

Wuzhizhou island is located in Haitang Bay, approximately 30 kilometers northeast of Sanya, The island is 1.48 square kilometers with 5.7 kilometers of coastline, and has an irregular butterfly shape. There are more than 2000 kinds of plants. In October 2016, it was rated as a 'five A' scenic spot by the state. Since its establishment, the scenic spot has taken "standardized management and excellent service" as its management focus, explored and established a green mode of coordinated development of ecological environment protection and scenic spot, and achieved good social and economic benefits. It has become a resort for Hainan tropical island ecotourism vacation and leisure. It has been selected as the "Zero Waste Tourism Scenic Spot" by local government, with aims to implement the main responsibility of enterprises and spread the concept of ecological and environmental protection to tourists. Wuzhizhou island is a closed island. The environmental



management department in the scenic spot, which is responsible for cleaning up all kinds of solid wastes. There are about 400 waste bins in the scenic spot, and through which all the waste will be collected, and then transported to the sorting center for sorting then sent to different recyclers or disposal plant. The kitchen waste generated by hotels and restaurants in the scenic spot is be transported to the temporary storage point of kitchen waste. The garden waste is be broken and composted after collection and used as fertilizer for the scenic spot. The beach and sea drift waste will be cleaned by the staff regularly equipped with special vessels and good at diving. The authority has promoted sustainable tourism through many measures such as "promotion of the ownership" to every employee. They communicate protection of the environment. For example, every employee will pick up the waste on the ground when found, and they dissuade the unsustainable behaviors of tourists. The community practices the principles of 3R to manage solid waste and promote environmentally sound management such as used oil generated from boats maintenance will be stored in the designated location and regularly recovered. For the disposal of waste water, the facility is installed with A total of 20 million RMB has been invested in the construction of four sewage treatment equipment, and regular maintenance and repair are carried out every year to ensure that the treated reclaimed water meets the environmental protection requirements of water for landscaping in the scenic spot, realizing zero discharge of sewage in the scenic spot, and protect the ecological environment of the surrounding ocean. Lastly, to protect tourism by restoring marine ecological environment and increasing marine biodiversity, The Marine ranch project was launched in 2011 to install in the artificial reef into sea floor in Wuzhizhou island to naturally attach marine microorganisms, phytoplankton and benthos. By 2018, the ecosystem of artificial coral reef has been restored obviously. There are more than 120 species of coral, shellfish, algae and other organisms attached to the artificial coral reef. The restored sea environment will promote tourism, such as diving, fishing and other activities with ecological, social and economic benefits.

Relevance to COVID19

COVID-19 has exposed the vulnerability of global systems to protect the environment, health and economy, demonstrating that there are no individual solutions to a global crisis. But the pandemic has allowed us to revisit our relationship with nature and provided the opportunity to build back better on a planetary scale. ^v The gravity of this pandemic gives us a renewed recognition of the interconnection between societies and nature. To build back better, smarter use of natural resources is key. From the way we generate wealth, to the way we live, move, and eat, we must shift to a new paradigm of resource use that is socially equitable, economically resilient, and environmentally healthy. ^{vi}

Way forwards:

In line with the launch of EU Green Deal, on 20th May the European Commission adopted a **new** <u>Biodiversity Strategy</u> aiming at tackling the five main drivers of biodiversity loss, such as unsustainable use of land and sea, overexploitation of natural resources, pollution, climate change and invasive alien species. Adopted in the heart of the COVID-19 pandemic, the strategy is a central element of the EU's recovery plan, crucial to preventing and building resilience to future outbreaks and providing immediate business and investment opportunities for restoring the EU's economy. This new strategy proposes to establish binding targets for EU countries to restore damaged ecosystems and rivers, improve the health of protected habitats and species, bring back pollinators to agricultural land, reduce pollution, green our cities, enhance organic farming and other biodiversity-friendly farming practices, and improve the health of European forests.

The EU-funded SWITCH-Asia II programme aims at supporting the development of green economy and the transition towards a low-carbon, resource-efficient and a more circular economy in Asia promoting economic growth while decoupling it from environmental degradation. The SWITCH-Asia Regional Policy Advocacy Component (RPAC), implemented by United Nations Environment Programme (UNEP), is designed to strengthen the dialogue at regional, sub-regional and national policies on Sustainable Consumption and Production (SCP) and thereby contributing to green growth and reduction of poverty in Asia. The RPAC will seek opportunity to include this message through activities such as celebration of world Environment Day to highlight EU's support and determination to lead by example in **tackling the global biodiversity crisis because Biodiversity is also a priority of the EU's external action** and an integral part of efforts to meet the United Nations Sustainable Development Goals.

Biodiversity is critical to achieving the Sustainable Development Goals (SDGs) outlined in the 2030 Agenda for Sustainable Development. Biodiversity and ecosystems feature prominently across many of the SDGs and associated targets. Biodiversity contributes directly to human well-being and development priorities. Biodiversity is at the centre of many economic activities. Globally, nearly half of the human population is directly dependent on natural resources for its livelihood, and many of the most vulnerable people depend directly on biodiversity to fulfil their daily subsistence needs. 2020 WED celebration encourages all stakeholders to recognize the importance of biodiversity and to highlight important linkages between sustainable use of natural resources and human well-being especially safety and quality of life. Increasing threats to the health of humans and ecosystems is at an alarming rate and calling for more sustainable action-oriented policies from different authorities for a better and safer life. SCP principles contribute substantially to poverty alleviation and transition towards low-carbon and green economies.

Note:

- The SWITCH-Asia RPAC, funded by European Union (EU) through UNEP Regional office for Asia and the Pacific is constantly working in the region to promote sustainable use of natural and environmental resources with careful attention to potential trade-offs among economic, environmental and social objectives through Sustainable Consumption and Production (SCP). The concept is to ensure sustainable consumption and production practices necessarily entails to respect the biophysical boundaries of the planet and to reduce current global consumption rates in order to fit with the biophysical capacity to produce ecosystems services and benefits. (SDG12)
- 2. World Environment Day (WED) is the United Nations' principal vehicle for encouraging worldwide awareness and action for the environment and engaging more people to take necessary actions. Held annually since 1974, the Day has also become a vital platform for promoting progress on the environmental dimensions of the Sustainable Development Goals. With the United Nations Environment Programme (UNEP) at the helm, over 150 countries participate each year. Major corporations, non-governmental organizations, communities, governments and celebrities from across the world adopt the World Environment Day brand to champion environmental causes.
- 3. Timeline of SCP : In 1972, the UN Conference on the Human Environment stated: "In our time, man's capability to transform his surroundings, if used wisely, can bring to all peoples the benefit of development and the opportunity to enhance the quality of life. Wrongly or heed- lessly applied, the same power can do incalculable harm to human beings and human environment." Since then, a number of important milestones have taken place with regards to Sustainable Consumption and Production. (this will be designed to be a more presentable illustration)



1972: Limits to Growth

"To achieve this change would mean that the globe's people establish their status, derive satisfaction, and challenge themselves with goals other than ever-increasing production and ever-accumulating



1987: UN World Commission on Environment and Development

"Perceived needs are socially and culturally determined, and sustainable development requires the promotion of values that encourage consumption standards that are within the bounds of the ecologically possible and to which all can reasonably aspire."



1992: UN Conference on Environment and Development "The major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries..."



2002: World Summit on Sustainable Development

"Encourage and promote the development of a framework ... in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production"



2003: Launch of the Marrakech Process on Sustainable Consumption and Production

A coalition of willing countries working to promote sustainable consumption and production, especially through policy guidelines and in emerging economies



2012: UN Conference on Sustainable Development

After nearly a decade of moving ahead without formal agreement by all UN countries, the Marrakech Process 10-Year Framework of Programmes (10YFP) is adopted as one of the few successes of a controversial Rio+20 Summit.



2015: Sustainable Development Goals (SDGs) adopted *Goal 12 calls to "ensure sustainable consumption and production*

vi https://wedocs.unep.org/bitstream/handle/20.500.11822/32287/COVIDIRP.pdf?sequence=1&isAllowed=y

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ⁱ https://www.unenvironment.org/explore-topics/resource-efficiency/what-we-do/cities/biodiversity-and-ecosystems

ⁱⁱ Science for Environment Policy (2015) Ecosystem Services and the Environment. In-depth Report 11 produced for the European Commission, DG Environment by the Science Communication Unit, UWE, Bristol. Available at:

http://ec.europa.eu/science-environment-policy

ⁱⁱⁱ Ecosystems and human well-being: A Framework for assessment/Millennium Ecosystems Assessment, 2003 <u>https://www.millenniumassessment.org/documents/document.48.aspx.pdf</u>

^{iv} <u>https://www.un.org/sustainabledevelopment/sustainable-consumption-production/</u>

^{*} https://www.unenvironment.org/news-and-stories/story/building-back-better-why-we-must-think-next-generation