

Bottom-up global environmental governance; integrating indigenous knowledge into nature-based solutions¹

Following the invitation by the 'Standing Committee on Finance' to contribute on the topic of 'Financing Nature-based Solutions'² the document below has been submitted by researchers at the Institute for Global Environmental Strategies, Hayama, Japan.

The COVID-19 pandemic has caused a tremendous loss of life and brought the global economy to a near standstill. While these human and economic losses have been devastating, they have also created opportunities to build back better. For many governments, the notion of building back better implies adopting new technologies and innovative solutions to a range of sustainability challenges. Yet, the instinct to advance new and innovative approaches may

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² The Forum of the Standing Committee on Finance (SCF) was mandated by the Conference of the Parties (COP), at its 17th session, to organise a Forum. The SCF reports on the Forum in its annual reports to the COP. The SCF at its 21st meeting agreed to organise the 22nd Forum on the topic of "Financing Nature-based Solutions." The details can be accessed at: <https://unfccc.int/topics/climate-finance/events-meetings/scf-forum/the-next-scf-forum-financing-nature-based-solutions>

conceal indigenous knowledge, practices and traditions that often lie at the core of nature-based solutions.

This submission--which includes a paper maintaining that indigenous knowledge and philosophical richness can help Asia transition to a more sustainable development paths--argues for a greater focus on looking back as countries move toward a post-pandemic future. More concretely, the paper outlines why and how countries in Asia should collaborate in pooling the good practices from their indigenous knowledge, philosophies and cultural heritage to promote a sustainable pathway at local, national, regional and global levels. Toward that end, the paper introduces the new concept of 'eco-resurgence', which suggests that indigenous knowledge is key to the resurgence of ecological sustainability.

The proposal further recommends SFC to consider a multi-layered bottom-up form of environmental governance to support the adoption and spread of nature-based solutions. The proposed multi-layered bottom-up form of governance mechanism could be structured as follows:

- At the local level, it is important to recognise the linkages between the local resources and people's livelihoods, as well as the role played by indigenous knowledge in strengthening the local economy. The overdependence of local economies on global production or supply chains can lead to enormous impacts on livelihood of people as witnessed in many cases during the COVID-19 period. At local level, eco-resurgence as a concept gives focus to developing local economies and promote self-reliance.
- At the national level, clear, firm and confident national policies for mainstreaming ecological sustainability should be established as in the case of Bhutan, which has developed policies to measure Gross National Happiness. Invoking the philosophical elements ingrained in these societies that indisputably teach the population about the values of culture, nature protection and harmony have a renewed role in guiding the policymaking. This national-level dimension of eco-resurgence should give priority to elements of environmental protection in 'policy reshaping'. This also highlights that economic recovery should not rely on short-term policies to revive GDP but look to a

long-term vision that ensures a sustainable life for the environment as well as flora and fauna.

- At the regional level, especially in Asia, countries need to be encouraged to enhance mutual learning under their common nature-oriented culture. Several local and national governments have taken bold decisions to strengthen environmental governance using indigenous knowledge and beliefs. These efforts have made substantial contributions to the environment for the whole region as in the case of carbon sinks in Bhutan. The efforts of those carbon-absorbing countries should be fairly evaluated and paid for according to their sink capacity.
- There needs to be a mix of local initiatives, national policies, and inter-regional efforts to ensure that the core economic strategies in every country take into account the environmental priority desired at this time. A multi-layered bottom-up governance mechanism for promoting indigenous knowledge and traditional philosophies in protecting ecological sustainability needs to be supported by SFC. Examples from local communities and national governments that have successfully built governance structures must be recognised.

The submission is based on the paper (IGES Discussion paper) which discusses the concept of eco-resurgence in detail.

Eco-resurgence for Asia: Invoking Indigenous Knowledge and Philosophy to Shape Economic Recovery and Sustainable Living

Abstract

Learning from cultural traditions and philosophies could help place countries in Asia on more sustainable development paths. This paper argues why and outlines how countries in Asia should collaborate in pooling and promoting good practices grounded in indigenous knowledge and philosophies to mainstream sustainability at the local, national, regional and global levels. The paper introduces the concept of '*eco-resurgence*', which encompasses an overarching emphasis on indigenous, ecologically sustainable activities for the recovery of economies in the post-Covid-19 world.

Introduction

Learnings from cultural tradition and philosophical richness are capable of setting the Asian region on a sustainable pathway. This paper outlines why and how Asian economies should join hands in pooling in the good practices ingrained in their indigenous knowledge, philosophies and cultural heritage to promote a sustainable pathway at local, national, regional and global levels. The paper introduces a new concept of '*eco-resurgence*'¹, which encompasses an overarching emphasis on indigenous, ecologically sustainable activities for the resurgence of economies in the Post Covid-19 world.

The COVID-19 pandemic has been responsible for the most human casualties in the 21st century. The pandemic has not only exposed the unsuspecting health vulnerability of the global population but also points to the upcoming large-scale environmental implications due to the economic disruptions (Janardhanan, et al., 2020).

As countries have been scrambling to bring their national economies back to normal, several large-scale and small-scale initiatives to pump in financial resources have gained global

¹ This discussion paper is based on the concept of eco-resurgence (Janardhanan, 2020). This discussion paper is an updated version of the paper submission made to the Forum of the Standing Committee on Finance (SCF) of UNFCCC on Nature Based Solutions. The paper also has immensely benefitted from the comments given by Mr Hideyuki Mori, Prof. Hironori Hamanaka, and Mr Satoshi Tanaka. The document has been proofread by Ms Emma Fushimi.

attention. From the Global East to Global West, fiscal stimulus packages are presenting opportunities for economic revival. Large-scale infrastructure projects, policy decisions prescribing economic restructuring at regional as well as a national level are adding momentum to the revival globally.

The recovery measures spearheaded by several fiscal stimuli in Asia also highlight that the countries in the region are gearing up to uplifting their respective domestic economy. Japan's USD 2.2 trillion (Pham, 2020), China's USD 564 billion (Tang, 2020) and India's USD 266 billion (PIB, 2020) are some of the recently-announced fiscal packages that indicate massive economic recovery plans including infrastructure-oriented projects. However there are growing concerns about these massive recovery stimuli and their potential impact on the environment. Instead of focusing on such short-term economic revival, there is a need to decide a pathway that allows the Asian region to shift away from a high carbon emission intensive pathway that has been followed for several decades. The focus should be on truly nature-based solutions that are in tune with the low-carbon pathway, reflecting Asian countries' respective domestic capabilities and common goals of keeping the region green.

The term eco-resurgence (Janardhanan, 2020) is discussed in this context. Eco-resurgence is proposed as a bottom-up global environmental governance mechanism where indigenous societies, their cultural richness, and traditional philosophies play a major role in mainstreaming sustainable development and climate mitigation. Rather than top-down policy prescriptions which do not necessarily translate the real meaning of environmental actions and the corresponding economic and environmental benefits to the people, it is important to promote local ideas and cultural philosophies which are ingrained in the minds of people and thereby contribute to larger global goals. This means reversing the global sustainability governance approach from top-down to bottom-up.

Building Blocks of Eco-Resurgence

The pandemic has reminded the world that global societies and the environment are at a much greater risk than previously considered. Initiatives to 'build back better' will need to be mindful that large-scale, pan-regional economic and infrastructure projects could significantly damage domestic as well as the regional environmental initiatives, and lead to irrevocable ecological damage. For addressing long-term climate change impacts that can balance the economic goals and environmental health, the Asian region must give preference to, and take advantage of, its own enormous knowledge repository that inherently carries an architecture for sustainable living. Many of these indigenous philosophical elements within the Asian region give a greater focus on living in alignment with the environment and prioritising efforts towards strengthening the local economy. However, many of the prominent narratives on environmental concepts and sustainability philosophy in Asia are fragmented despite the presence of historical as well as cultural links across the region. The absence of a common narrative to bring together environmental principles inherent in the Asian region is probably due to the lack of interest shown by the political mainstream to learn from historical and cultural best practices and integrate such practices into policy processes. It could also be due to the fact that concepts like self-reliance and self-sufficiency at local and national levels often run against broader economic, trade and globalisation interests. The Asian region discussed

here consists of largely East Asia, Southeast Asia and South Asia which have historically established economic and trade relations and contributed to strengthen the unity in the philosophical and cultural knowledge.

The relevance of environmental thoughts and philosophy from Asian countries has been recognised by many western scholars as more effective to bring solutions to environmental challenges than those in the West, where such environmental philosophy was unable to bring any convincing answers (James, 2014). Lynn Townsend White Jr in his book, “The Historical Roots of Our Ecologic Crisis”, argued that while many of western philosophies were anthropocentric², eastern philosophies reflected an environmental-centric outlook. Japan's Satoyama initiative is strongly founded in the centuries-old practices of environmental harmony; the concepts of sustainable living in India are deeply rooted in the ancient Vedic philosophy; and Confucianism and Taoist Holism that contributed to China's age-old practices of sustainability etc. are some of the indigenous conceptual elements that can lay the foundation to build an Asian collective initiative for eco-resurgence in the region.

In Japan, the intrinsic relations reiterated between the perishable and imperishable in the environment make up the cardinal element that makes society consider nature as lively as all other living beings. The environmental philosophy in the country also has deep roots in Buddhist philosophy and is closely connected to the cultural links that spread from the South. The influence of various Buddhist traditions in Japan has strengthened the perception of man-nature harmonious living as critical, and often stressed through the expression of *Mizukara* (self) being integral part of *Onozukara* (nature)³ for peaceful survival.

In the case of Indian Vedic narratives, the values attributed to air, water, fire, land and space are the manifestation of eternal-self points that all living and non-living things are interconnected and that maintaining that linkage is critical. To a great extent the Gandhian philosophy that upholds environment and nature also draws key concepts from this ancient knowledge. Though Gandhi was not seen as an environmentalist and his activities are more oriented towards politically relevant matters concerning India's independence from the British, his views in which he interconnects nature and resources have remarkable policy importance for life today. His philosophies regarding ahimsa (non-violence) and tolerance are deeply founded in ancient Indian philosophies. His opposition to globalisation, and to huge machinery that displaces opportunities for labour for the people has contributed to the concepts of *Gram Swaraj* (self-reliant villages) (Gandhi, 1963). Similarly the attributes of nature worship in Buddhism and the teachings of Buddha also highlight non-violence and protection of living and non-living things around humans. While other scriptures originated in India have mostly been familiar to the current Indian sub-continent, Buddhism has reached wider geographical regions including China, Japan, Southeast Asian regions and beyond. Buddhism is probably one of the main elements that unites the Asian perceptions of environmental ethics, more so than any other philosophies.

² The perception that the human beings are the centre of environment which also recognises human domination over other living and non-living things.

³ Bin Kimura (Kimura, 1974) has described the concept of Muzukara and Onozukara and how the linkage / 'between-ness' is an important element that expresses the man-nature relations.

Philosophical elements from China also have traditionally played a major role in setting the policy thinking of earlier environmental governance systems in the country. There is a concept of organic holism in Confucianism whereby nature and living beings are seen as a single unit rather than being viewed as different parts. The concept of naturalism and the preference given to naturalist ways of living is implied in the term *wu wei* (non-interference) which also points to living in tune with nature. Similar to those Indian philosophies which refuse to see nature as anthropocentric, Chinese traditional philosophies also follow the same perception. The Daoist perception of the relationship between humans and the environment also fundamentally questions the perceptions of 'nature as anthropocentric'.

Another striking and more recent example of how environmental values can be integrated into policymaking and how the policies can look beyond the perceptions of GDP as a measure of societal progress is visible in the case of Bhutan using Gross National Happiness (GNH) as an index. The deep roots of Bhutan's political consciousness in its cultural background is often traced as the origin of the perception of 'happiness' as the key element required by rulers to ensure well-being for the people of Bhutan. The GNH promulgated by the country in the early 1970s is linked to Bhutan's ancient unwritten legal code of Tsa Yig Chenmo established in 1629 (GNH Centre Bhutan, 2020; Givel & Figueroa, 2014) which stresses this element. Today, the concept of GNH has been widely used by many community-level institutions and organisations. In connection to Bhutan's experiences, a high-level meeting was held by the United Nations on 'Wellbeing and Happiness' in 2012. At this meeting, experts highlighted that many global problems ranging from public health to climate can be addressed by a new paradigm that shifts the economy back to its roots in natural, social, and cultural wealth (Royal Government of Bhutan, 2012).

Cultural wealth, indigenous philosophies and the richness of traditional practices of living in harmony with nature have numerous advantages to offer to the modern world. This knowledge needs to be mainstreamed at local, national and regional level and further promote at a global level as a pivotal element to guide the global processes towards sustainable development. The following section details the importance of eco-resurgence at local, national, regional and global levels and its relevance.

Eco-Resurgence: A Collective Initiative for Asia and the World

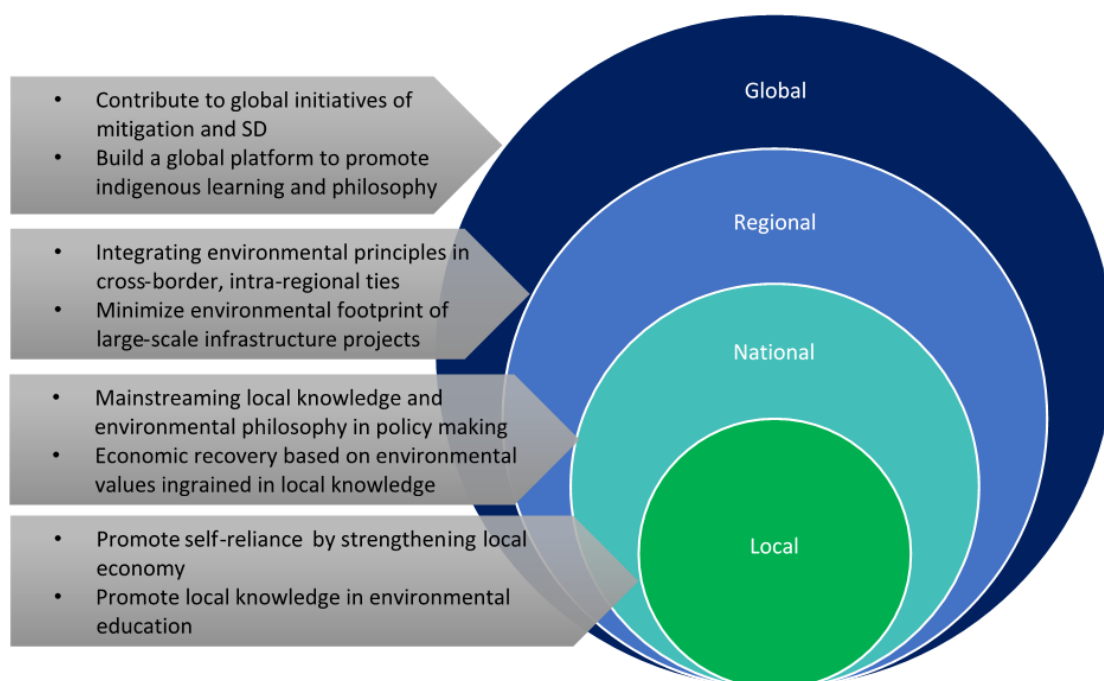
Eco-resurgence points to the need for a collective Asian initiative for incorporating indigenous principles of sustainable and harmonious living with nature, without sacrificing the benefits of modern scientific, technological and economic progress acquired by the global society over centuries, using millions of man-hours of intense learning and research.

The eco-resurgence as a bottom-up global sustainability governance approach has multi-layered dimensions. This form of governance provides a flexible conceptual framework to understand the relationships between cities, regions and national governments across mitigation and adaptation policy issues as well as across a widening range of non-state and non-governmental actors (Corfee-Morlot, et al., 2009). Often it is noted that climate change is an issue that requires integrated action at multiple levels of government and within the

spheres of politics, economics, and society. It is also important to understand that national, regional, and local governments have both distinct and complementary roles in developing climate mitigation and adaptation strategies (Schereurs, 2010) which makes multi-level governance an important. :

- ▶ Local: Promoting self-reliance at the local level
- ▶ National: Prioritising indigenous philosophies to mainstream sustainable development goals
- ▶ Regional: Promoting common objectives while having shared pathways at the regional level to foster collective responsibility towards sustainable development.
- ▶ Global: Build a global platform to mainstream what we learn from indigenous knowledge and cultural heritage and contribute to climate mitigation at the global level

Four Dimensions of Eco-resurgence



Local level: Enhancing self-reliance of the local economy

One of the critical challenges faced by the global economy in general and by developing countries specifically, is the impact of COVID-19 on local economies. Intensified globalisation has meant that local economies have shifted away from locally-oriented markets to become an essential part of global production chains. The impact on local infrastructure and production facilities due to health vulnerabilities of the labour force have disrupted global supply chains. The COVID-19 induced supply disruptions of renewable energy equipment in China had a major impact on India's domestic renewable energy targets as the latter has been heavily dependent on China. Bangladesh's fabric industry caters to a significant share of the global fabric market despite the poor working conditions (Kabeer & Mahmud, 2004) in these establishments. Similarly, the lowest segments of production chains in the global food market (like the seafood processing units in the State of Kerala in southern India where women are working under

discriminatory working conditions (Menon, 2020)) also present the alarming vulnerability of local economies due to the impact of such pandemics or natural calamities that disrupt global networks. Informal industrial units at local levels, irrespective of the fact that they were operating independently or as part of larger corporations, have always received the least profit in comparison to the final product on the globalised market. While global corporations largely benefit by centralising profits, smaller units spread across the world remain vulnerable to even the smallest shocks in the economy.

The COVID-19 stimulus packages in several developing countries hence demand greater support for the local industries at micro, small and medium enterprise (MSME) levels. In the case of India and Japan, the respective governments have announced revival packages for the MSME sector. However, what these industries really need is assistance to break free from their over-reliance on the global supply chain and strengthen their capacity to contributing to local and national economic development. The concept of Gram Swaraj in India similar to Japan's Satoyama Initiative largely supports the strengthening of local economies and enhancing their self-reliance in order to avoid being vulnerable to external shocks.

National Level: Prioritising indigenous philosophies to mainstream sustainable development goals

The global political dynamics that emerged after the end of the Second World War in 1945 made countries overly focus on industrial production and commercial agriculture. National governments had an interest in reviving their domestic economies which had already been drained by colonial exploitation and then by further intensified globalisation. Linking local economies with global production chains and the transfer of labour without physically moving the labour force have contributed to remarkable levels of economic development. However, the repercussions have been serious. Local economies began to focus on production that often did not directly benefit the local population. Export-oriented commercial agricultural production led to unsustainable usage of land and also burdened the wildlife due to intensified deforestation. Excessive use of fertilizers and large-scale water usage posed challenges to the availability of fresh water. In the case of Asian countries, their increasing participation in the globalised economic order has posed all the above-stated challenges.

Irrespective of the forms of governance in Asian countries, national debates or discussions on environment and ecological sustainability often elevated the philosophical elements of 'harmony with nature'. However, this has not been mainstreamed into policymaking in Asian countries, which is a cause for concern. COVID-19 presents an opportunity to revive this knowledge and incorporate it into policy processes. The pandemic has led countries to rethink the development pathways that were chosen by them, so that they can gauge the extent of contributions and impact on the environment as well as the current and future generations in this planet.

Invoking the philosophical elements ingrained in these societies that indisputably teach their population the values of culture, nature protection and harmony has a renewed role in guiding policymaking. This national level dimension of eco-resurgence should give priority to elements of environmental protection in 'policy reshaping'. This also highlights that economic recovery

should not rely on short-term policies to revive GDP but look to a long-term vision that ensures a sustainable life for the environment as well as flora and fauna.

One of the most important theme for debate in today's world and a key element that prompted this paper is the economic recovery of countries. It is noted that economic recovery plans often put more pressure on the environment. Even the recently announced financial stimulus packages exhibit a hasty policy to recapture the economic loss of the past few months.

Economic recovery plans favouring the health of the environment as well as the wellbeing of society are critically important. Surprisingly many fiscal recovery plans reflect that economic recovery is set to favour those industries which already have demonstrated negative impacts on the environment. Examples include India favouring huge investment in the coal sector and allocation of coal mines even to private sector (PIB, 2020) which could catalyse rampant exploitation of the environment, and Japan which is directing stimulus plans to revitalise industry with JPY 11.6 trillion earmarked to extend loans to small and mid-sized firms (Reuters, 2020). Such examples may have adverse impacts on the environment. It is important for governments to consider how to ensure that recovery plans are in tune with environmental health in the long term. The current recovery plans only present a cosmetic reflection of green recovery, while the direction of key investments indicate that the net result will be higher emissions and more environmental damage. A green recovery that prescribes short-term and long-term steps towards shifting the economic trajectory will remain as weaker proposals without specific action-oriented commitments. Countries need to prioritise green resurgence, and ensure bottom-up policy processes whereby the voices of local communities and sub-national entities are taken into account when fine tuning recovery policies.

Regional Dimensions: Shared Goals and Common Objectives

Ecological sustainability needs to be among the pivotal elements governing regional cooperation. One of the major questions that arises in the context of the debate on self-reliance is its potential challenge to enable cooperation among countries in the globalised world. It also presents a picture that conflicts with the trade, economic relations as well as the benefits of the networked world. The objective of the concept of eco-resurgence is not to conflict with these established norms of international relations, but to serve as a reminder that every policy and every step human beings take in terms of economic development has an impact on the environment we live in. It also reminds us that the exploitation of ecological wealth and natural resources needs to be in tune with the larger concept of promoting ecological sustainability and protecting the intergenerational transfer of resources.

The regional dimensions also highlight what steps countries can take, individually or jointly, as part of a regional framework. It is important to look at ways to ensure that one country's policies and economic as well as strategic ambitions are not undermining the sovereignty of another country's environmental interests. It has also been pointed out that large-scale infrastructure projects need to adhere to environmental integrity within borders and with other countries. In order to achieve this, countries need to be conscious of the fact that prioritising environmental wealth is not only in the interest of the present-day world, but is

also in tandem with opportunities for future generations. The regional dimension of eco-resurgence focuses on a two-step approach. First, it is vital to promote regional-level discussions for mainstreaming what is learnt from the elements of environmental philosophy in various countries and societies that have proven advantages to offer to the present-day world. Second, we need to ensure that economic, trade and technology collaborations keenly prioritise environmental integrity. It is important to prioritise policy attention to trans-border air, water and land pollution that is often a fallout of domestic as well as trans-national economic and trade activities. Similarly, plans for trans-border infrastructure development need to ensure ecological wealth and environmental health are given utmost importance, starting from the planning level. Mechanisms need to be built around the governance system to ensure that we can overcome legal loopholes and administrative delays that weaken Environmental Impact Assessments (EIA) of large-scale trans-border projects. Similarly collaboration in the technology, innovation and market within the Asian region must prioritise ecological sustainability in all possible aspects. The policy prescriptions made above are not aimed at confronting and obstructing opportunities offered by bilateral or regional trade and economies ties, but rather they highlight the need to gradually incorporate key principles of ecological sustainability.

Global dimensions: What can Asia contribute to the global climate mitigation?

The scientific evidence on global warming has presented alarming pictures of the climate impacts which span geographical borders and cause damage to planetary boundaries. Global warming is set to fundamentally and irreparably change our economic, demographic and ecological space. This could lead to a civilizational disaster, causing permanent damage not only to the environment but also to human-made physical infrastructure across the world, as well as damaging the scientific progress achieved by countries and harming cultural diversity. Despite a global level understanding of this scientifically-evidenced fact, real efforts towards achieving the mitigation goals of 1.5 degrees or even 2 degrees abysmally fall short of targets. GDP-based economic growth ambitions and political differences continue to pose additional challenges to global efforts on climate mitigation. What can environmental philosophies and cultural underpinnings of the Asian debates do in order to strengthen global climate mitigation?

There needs to be a mix of local initiatives, national policies and inter-regional efforts to ensure that the core economic strategies in every country must take into account the environmental priority desired at this time.

The architecture of the global climate regime presents a detailed framework including mitigation action plans, finance and technology transfer, an inclusive mechanism of bringing multiple stakeholders on board, and an approach towards taking stock of any actions and progress. The key elements of the Paris climate agreement as well as the framework and architecture (including key elements ranging from long-term goals to a global stocktake) need to explore opportunities to learn from the rich examples of indigenous knowledge. The use of one such concept that exemplifies this approach is the Talanoa Dialogue, which originates from the native philosophy that encapsulates concepts of 'inclusive, participatory, transparent

dialogue process' to motivate and find solutions. The fact that diverse societies and indigenous communities still hold the cardinal solution to climate change and environmental health needs to be understood by the larger global community and replicated in the global climate mitigation dialogue.

Again, this recommendation is not aimed at side-lining the existing climate mitigation architecture or negotiation framework, but to ensure that the local voices towards better and efficient solutions to global risks are heard by the wider international communities and replicate the good practices. The currently established Facilitative Working Group (FWG) of Local Communities and Indigenous Peoples' Platform (LCIPP) (UNFCCC, 2019) as part of the global climate mitigation initiative platform will need to be given its due importance. The indigenous and local philosophies have always prioritised the weather, environment and natural resources, with utmost priority in their respective traditional social governance mechanisms. This often ranges from recognising to respecting the roles of intergenerational resources in the environment. In some countries environment and natural resources have been given enormous legal protection. Ecuador attributing legal rights to the environment as a person (Kendall, 2008), and Bhutan's approach using happiness as the measure of the progress of the society (ADB, 2016) are some of the striking examples of indigenous concepts gaining global attention.

Building Eco-resurgence in Asia

Eco-resurgence should not be viewed as a concept in conflict with the existing global initiatives supported by scientific evidence that could positively contribute to the wellbeing of the environment and the global population. Instead, it provides an opportunity for subnational and local value systems to collectively contribute towards strengthening mainstream global initiatives. Eco-resurgence requires a detailed, coordinated approach in terms of garnering local knowledge, assimilating those elements that can positively contribute to strengthening global sustainability initiatives, shape national policies that reflect good practices from this knowledge and implement those policies on a global scale. Examining the potential of indigenous sustainable practices will be the first step. Irrespective of the political, social and economic differences, the Asian region is connected through elements of cultural practices that uphold the region's unity in diversity. The first task will be to ensure that the indigenous knowledge prevalent among communities at local, national and regional levels are mapped based on their potential and suitability.

Changing the existing narratives to reorient the predominance attributed to industrial and economic development at the cost of the environment is critically important. Renewed attention must be focused on strengthening local economies and enhancing their self-reliance to meet food production, employment and environmental protection. Prevalent concepts such as transition towns, permaculture, promotion of local currency and learnings from the local value systems etc. can offer remarkable long-term environmental benefits in strengthening societies

Conclusion

The COVID-19 induced economic lockdown and other emergency measures pose a double-edged challenge to Asian countries (Janardhanan, et al., 2020). On the one side, several large-scale energy development and climate mitigation initiatives have been affected as external supply chains are disrupted. On the other, fiscal stimulus packages focusing on industrial development and conventional energy sectors planned by many countries will be putting huge pressure on the environment. Eco-resurgence is discussed in the context that the double-edged challenge posed by post- COVID-19 economic recovery is already forming as a central concern in the region. Fossil fuel-intensive economic growth models and high GHG emissions have been posing a remarkable level of threat to the environment and ecosystem. The thrust of the eco-resurgence is to highlight the need for reviving philosophical heritage, cultural values and local knowledge in facilitating the resurgence of economies at local, national and regional level in Asia, as these are deeply ingrained in the concept of harmonious living and reflect this in the global scene to promote sustainable development. Eco-resurgence as a bottom-up global environmental governance architecture involves subnational level entities, national governments and regional groupings and can be used to map key concepts, good practices and indigenous philosophies thereby presenting an alternative pathway to achieve the goals of sustainable development.

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References

- ADB, 2016. *Gross National Happiness in Bhutan: 12 Things to Know*. [Online]
Available at: <https://www.adb.org/news/features/gross-national-happiness-bhutan-12-things-know>
- Corfee-Morlot, J. et al., 2009. *Cities, Climate Change and Multilevel Governance*, Paris: OECD.
- Gandhi, M. K., 1963. *Village Swaraj*. 1 ed. Ahmedabad: Navajivan Publishing House.
- Givel, M. & Figueroa, L., 2014. Early Happiness Policy as a Government Mission of Bhutan: A Survey of the Bhutanese Unwritten Constitution from 1619 to 1729. *Journal of Bhutan Studies*, 31(Winter), pp. 1-21.
- GNH Centre Bhutan, 2020. *History of GNH*. [Online]
Available at: <http://www.gnhcentrebhutan.org/what-is-gnh/history-of-gnh/>
- James, G. A., 2014. Environment and Environmental Philosophy in India. In: J. B. Callicott & J. McRae, eds. *Environmental Philosophy in Asian Traditions of Thought*. New York: Sunny, pp. 3-23.
- Janardhanan, N., 2020. Eco-resurgence. *Energy Review*, 2(6), pp. 1-3.
- Janardhanan, N., Ikeda, E. & Ikeda, M., 2020. *Impact of COVID-19 on Japan and India: Climate, Energy and Economic Stimulus*. [Online]
Available at: <https://www.iges.or.jp/en/pub/covid-19-impact-japan-and-india-climate-energy-and-economic-stimulus-20200522/en>
- Kabeer, N. & Mahmud, S., 2004. Globalization, gender and poverty: Bangladeshi women workers in export and local markets.. *Journal of international development*, pp. 93-109.
- Kendall, C., 2008. *A new law of nature*. [Online]
Available at:
<https://www.theguardian.com/environment/2008/sep/24/ecuador.conservation>
- Kimura, B., 1974. *Hito to hito to no aida: seishinbyōri-gakuteki Nihon-ron (Between person and person: Pathological Analysis of Japanese Human Relationship)*. 2 ed. Chiba: Kobundo.
- Menon, N., 2020. *Mobility as Capability: Women in the Indian Informal Economy*. Cambridge, UK: Cambridge University Press.
- Pham, S., 2020. *Japan's economy just got another \$1 trillion shot in the arm*. [Online]
Available at: <https://edition.cnn.com/2020/05/27/economy/japan-economic-stimulus-coronavirus/index.html>
[Accessed 28 May 2020].
- PIB, 2020. *Finance Minister announces Government Reforms and Enablers across Seven Sectors under Aatma Nirbhar Bharat Abhiyaan*. [Online]
Available at: <https://pib.gov.in/PressReleasePage.aspx?PRID=1624661>
[Accessed 28 May 2020].

PIB, 2020. *Finance Minister announces new horizons of growth; structural reforms across Eight Sectors paving way for Aatma Nirbhar Bharat*. [Online]

Available at: <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1624536>

[Accessed 29 May 2020].

Reuters, 2020. *Factbox: Key spending in Japan's second stimulus package of \$1.1 trillion*.

[Online]

Available at: <https://www.reuters.com/article/us-health-coronavirus-japan-stimulus-fac/factbox-key-spending-in-japans-second-stimulus-package-of-1-1-trillion-idUSKBN2330GG>

[Accessed 29 May 2020].

Royal Government of Bhutan, 2012. *Defining a New Economic Paradigm: The Report of the High-Level Meeting on Wellbeing and Happiness held at the United Nations*. New York, Royal Government of Bhutan, pp. 48-49.

Schereurs, M. A., 2010. Multi-level Governance and Global Climate Change in East Asia. *Asian Economic Policy Review*, 5(1), pp. 88-105.

Tang, F., 2020. *China coronavirus stimulus: what measures have been used to combat the economic impact of Covid-19?*. [Online]

Available at: <https://www.scmp.com/economy/china-economy/article/3083268/china-coronavirus-stimulus-what-measures-have-been-used>

[Accessed 28 May 2020].

UNFCCC, 2019. *Facilitative Working Group of the Local Communities and Indigenous Peoples Platform*. [Online]

Available at: <https://unfccc.int/LCIPP-FWG>

[Accessed 2 June 2020].

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