



Commons Cluster of the UN NGO Major Group

IN HARMONY WITH NATURE: ACCELERATING THE ACHIEVEMENT OF THE SDGS. USING THREE CRITICAL ENTRY POINTS

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BACKGROUND

The High Level Political Forum (HLPF) earlier in 2019, highlighted impressive strides towards the Sustainable Development Goals (SDGs). It also shed light on the significant gap between the current state of affairs and where we should be to achieve the 2030 deadline.

Accelerating the Achievement of the SDGs - Critical Entry Points will be discussed during the SDGs Summit, which will evaluate progress made on the SDGs over the past 4 years. Using critical entry points, as opposed to a piecemeal approach, is a way of addressing the SDGs as an interconnected whole, thus making significant progress toward the 2030 deadline.

Determined to support UN Member States (UNMS), a call went out to the *17 Major Groups and Other Stakeholders* (the 17 portals for civil society from around the world to give input to the UN), with the request to propose critical entry points.

It soon became clear that all SDGs have three dimensions in common. They are **the environment, society and the economy**. The achievement of all of the SDGs is thus accelerated with progress in any one of these three areas. The environment, society, and the economy are thus ***fundamental critical entry points***.

Of the three, the natural environment (Nature) provides insights into patterns of relationships and processes that have gradually developed sustainably over some 15 billion years. These can be replicated and applied to society and the economy to make them more sustainable.

In what follows, please find:

A rudimentary description of the natural environment, society, and the economy as the three fundamental critical entry points and for each:

- what happens when they are able to function fully as a critical entry point;
- the consequences we are facing by neglecting them;
- a few examples of tools and means of implementation (MOI); and
- examples of inspiring actions already being taken, which can be replicated in other geographical areas

THE ENVIRONMENT AS FUNDAMENTAL CRITICAL ENTRY POINT

Introduction

Adapting and applying the evolutionary forces inherent in Nature and incorporating these into all aspects of our lives is the most powerful critical entry point we have, because Nature's forces have been active for some 15 billion years. Structures within Nature, from the microscopic to the macroscopic, can be replicated in our societal and economic structures.

Common threads include:

- The fact that of all the elements in the natural environment are interrelated;
- Cooperation is a critical component of systems and evolution;
- An ethic; where the whole serves the parts and the parts serve the whole;
- Growth in Nature is offset by decomposition and recycling of components;
- Most energy on Earth originates from the sun.

These characteristics of Nature, when applied to society and the economy, have the ability to promote sustainable development. Working in harmony with the patterns and forces inherent in Nature will create a strong foundation for the achievement of all of the SDGs. In the same way in which human beings are interconnected to Nature, so too all SDGs are connected.

Here are just some of the ways in which aligning environmental policy with Nature will directly affect 8 of the 17 SDGs:

- Promoting farming practices in harmony with Nature (ex. permaculture) will make for self-sustaining agricultural practices that produce nutritious foods. This in turn will support human health (SDGs 2 and 3);
- Protecting and restoring ecosystems will help to restore the oceans, seas, marine resources, and terrestrial systems (SDGs 14 and 15);
- The restoration of these systems will rehydrate the soil and promote CO₂ capture to help combat climate change. Systems will become more resilient, and the natural resources which promote economic growth will be enhanced (SDGs 6, 8, 13, 14, and 15);
- Using, solar, wind, tidal, etc. energy will promote the achievement of (SDG 7).

These 8 SDGs will help to form a strong foundation both for society and the economy. They also reinforce one another and therefore accelerate the achievement of these SDGs.

A Warning: The Dangers of Living out of Harmony with Nature

Introducing processes without understanding the principles of sustainable development practiced by Nature, detracts from the environment, which is indispensable to our survival. This has been happening, increasingly, since the Anthropocene Era and is endangering the survival of human beings. People are increasingly dying because of natural disasters, depleting natural resources, migration, and violent conflicts over diminishing resources. Living out of harmony with Nature undermines all of the SDGs

Means of Implementation

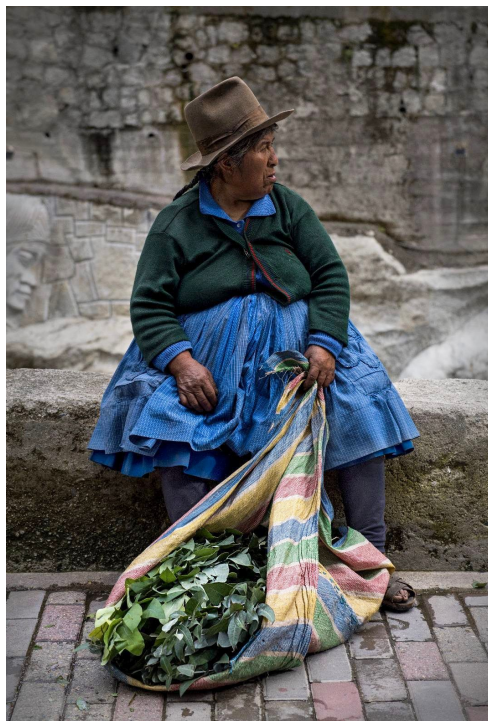
Two Tools for Transforming our World in Harmony with Nature. Integrating Nature into the Implementation of the SDGs

Two books, with the above name, have been completed in a 3-part series, bringing together expertise from around the world on how to actually integrate a Nature-centred approach into the implementation of the UN's SDGs and targets, as is recommended above. Part One of each of the books is for reference, treating each SDG and target separately. Part Two focuses on putting Part One into practice. It contains actions that Ministries and Civil Society can take to make headway in nine separate areas: the environment, society, the economy and financing, development, education, culture, technology, policy and law, and agriculture.¹

The video: “The Heart of the Matter. A systems approach to achieving the SDGs.”²

The content is written and narrated by Fritjof Capra, PhD, world-renowned physicist and author. He shows how a knowledgeable shift from a fragmented approach to dealing with multiple goals at the same time involves shifts from quantitative to qualitative economies, Nature-based ethics and community-centred action. This further clarifies why Nature is the most fundamental critical entry point.

Effect on the Achievement of the SDGs: Both tools are designed to make progress on all of the SDGs and targets.



Aymara Woman ©Jason Angus

Empower Indigenous Peoples and Local Communities

Indigenous people make up less than 5% of the world's population, yet they manage 28% of the world's land surface, and protect 80% of the planet's biodiversity.³

These communities should be acknowledged as guardians of Nature and their perspectives on this global threat should be incorporated into national and international dialogue. The vital role of indigenous people was recognized in the 2007 UN Declaration on the Rights of Indigenous Peoples (UNDRIP). And yet, indigenous peoples continue to suffer disproportionately high levels of land insecurity, social dislocation, and violence while defending their traditional lands.

The global response to climate change requires applying the best available knowledge, and the perspectives of indigenous people can provide powerful solutions.

Indigenous peoples are not only one of the most vulnerable to impacts of climate change, but also have many of the solutions for adaptation. As family farmers, fishers, pastoralists, and forest-dwellers, indigenous peoples apply traditional methods of land management and food production which have evolved over centuries and proven sustainable and resilient.

Effect on the Achievement of the SDGs: Indigenous people are stewards of the natural environment and sources of invaluable learning. Indigenous knowledge systems contribute

¹The books can be downloaded by clicking on the following links:

http://www.allwinnetwork.net/wp-content/uploads/2018/06/Summary_Final1.5.pdf : For SDGs 6, 7, 11, 12, 15, 17

<http://www.allwinnetwork.net/wp-content/uploads/2019/06/Transforming-Our-World-Web-22-June-19.pdf> For SDGs 4, 8, 10, 13, 16 and 17

² <https://vimeo.com/capracourse/heart>

³ <https://www.nationalgeographic.com/environment/2018/11/can-indigenous-land-stewardship-protect-biodiversity/>

directly to biological and cultural diversity, food security, and ecosystem health, and thereby can impact poverty eradication (SDGs 1, 2, 3, 4, 8, 13, 14 and 15). Their participatory form of governance and approaches to conflict resolution can serve as examples of how to implement (SDGs 5, 9, 10 and 16).

Biomimicry

This approach emulates Nature's time-tested patterns and strategies. An ecosystem is a biological community of interacting organisms and their physical environment. Biomimicry is the study of how the patterns and relationships of plants, insects, and animals can be utilized to solve complex human problems. Nature has already solved many of the problems we are grappling with. Animals, plants, and microbes are the consummate engineers. The Biomimicry Institute provides valuable information on ways Biomimicry can be utilized for energy, medicine, transportation, architecture, and things like Tsunami early warning systems.⁴ While it can be applied in many areas, the most known uses of Biomimicry are seen in agriculture, where its use has brought transformative results to the quality of local environments and on the food which is produced there, all while avoiding the use of chemicals and drugs. It does this while producing equivalent yields and improving water and soil resources.⁵ Utilizing Biomimicry tools, farms and humans are able to create long term sustainable ecosystems.

Effect on the Achievement of the SDGs: Biomimicry, rooted in Nature's example, is likely to have a positive effect on all aspects of our lives to which it is applied and all of the SDGs.

Regenerative Agriculture and the Soil Sponge

The soil sponge is "the basic infrastructure that makes life on land possible." Research done by Didi Pershouse explains that we can address most of our major challenges through restoring the structure and function of soils. When the soil sponge fails on a small scale, local farms and small ecosystems collapse. When the soil sponge is intact and healthy, multiple beneficial feedback loops kick into high gear. Regions that regenerate the health of their soils can expect fewer floods and wildfires; less need for irrigation; better air quality; cleaner and more abundant water supplies; higher nutrient density of foods, food security; more moderate temperatures; less erosion and silting of dams; more biodiversity; less spending on infrastructure repairs; and less spending on public health and disaster recovery. The soil sponge can be restored by using soil health principles that are observed in Nature, such as no-tillage, mixed species crops, continual cover, and reintegrating animals into agricultural systems.⁶

Effect on the Achievement of the SDGs: Since this involves restoring Nature, the achievement of all SDGs are promoted, but particularly (SDGs 2, 3, 6, 9, 13, 14 and 15).

Eliminating Unnecessary Plastic

Researchers estimate that more than 8.3 billion tons of plastic have been produced since the early 1950s. About 60% of that plastic has ended up in either a landfill or the natural environment.⁷ Reducing our usage of surplus or one-off-use disposable plastic items is a

⁴ For examples, please see under Inspiring Stories below.

⁵ The following link can provide you further examples and information-<https://landinstitute.org/>

⁶ <https://medium.com/@didipershouse/why-communities-should-invest-in-regenerative-agriculture-and-the-soil-sponge-431c27c8b34b>

⁷ <https://www.unenvironment.org/interactive/beat-plastic-pollution/>

sustainable practice that we can do, especially at the consumer level.⁸ Eliminating plastic also betters public health conditions through improved sanitation, which often affects the most vulnerable populations, and by reducing waste burning, which improves air quality.⁹ Currently, plastic is causing an estimated economic loss of \$279 million each year to the fishing and shipping industry in the Asia-Pacific.¹⁰ Effective waste management would alleviate economic losses experienced by communities around the world. Making plastic products requires a massive amount of materials and energy drawn from the Earth, and reduction proves the most effective way to save natural resources and protect the environment.¹¹



Majestuosidad de la Pachamama ©Ysabel Catapang

Elimination of unnecessary plastic packaging through redesign, innovation, and new delivery models is a priority. As is investing in circular economy opportunities and other sustainable packaging.¹² Trash, packaging, and improperly disposed waste from sources on land account for 80% of the marine debris found on beaches during cleanups.¹³ Developing appropriate waste management systems can help preserve and mitigate climate change and reduce global greenhouse gas emissions by 10-15%.

Effect on the Achievement of the SDGs: By eliminating the use of unnecessary plastic, our garbage contributions will decrease, significantly promoting better health for our environment, oceans, soils, air, and human health (SDGs 3,6,10,11,12,13,14,15). Promoting a circular economy for plastics would ensure that plastic never becomes waste or pollution, reducing economic costs (SDGs 1,2,8, 9,12). Natural resources such as water and energy would be preserved (SGDs 6,7).

Inspiring Stories

Costa Rica Is Restoring Nature throughout the Whole Country

Costa Rica's forest cover decreased from 75% in 1940 to 21% in 1987, as a result of the expansion of livestock and agriculture. Faced with the need to stop the deforestation process and make greater use of the land, the country established a series of land-use and environmental-protection laws.

The Forestry Law (Law 7575 of 1996) establishes the legal and institutional framework for forest management in Costa Rica. It provides the basis for the Payment for Ecosystem Services Programme (PPSA) and REDD+. Decree 25721 of 1997 regulates the Forestry Law. An annual Executive Decree sets the different modalities for PPSA and the areas that the National Forest

⁸ <https://www.epa.gov/recycle/reducing-waste-what-you-can-do>

⁹ <https://www.niehs.nih.gov/health/topics/agents/air-pollution/index.cfm>

¹⁰ <https://www.coastal.ca.gov/publiced/marinedebris.ht>

¹¹ More information: http://wedocs.unep.org/bitstream/handle/20.500.11822/25485/plastic_alternative.pdf?sequence=1&isAllowed=y.

¹² <https://www.newplasticseconomy.org>. (For examples, please see under Inspiring Stories below)

¹³ <https://www.epa.gov/trash-free-waters/sources-aquatic-trash>.

Finance Fund (FONAFIFO) will support in each modality. These regulations fostered significant change; from 21% forest coverage in 1987 to 52.4% coverage in 2015.¹⁴

Incorporating Indigenous People in Policy Development

The Maori people, indigenous to New Zealand, are significantly involved in shaping the country's politics. Auckland's city council has an Independent Maori Statutory Board, which ensures that the Council takes into account Maori views in decision making. The city also has a Maori Strategy and Relations department, which takes care of its obligations towards the Maori.

With the participation of the Maori, the Auckland City Council developed a design framework consisting of low-impact urban design and development. Integrating indigenous people's needs and perspectives into the larger society's engineering and planning ultimately harmonizes the environment and urban design. This achieves socially and culturally sensitive sustainable development in urban environments.¹⁵

Using Biomimicry for Significant Energy Savings

Architect Mick Pearce, tasked with finding a solution that would lower energy costs, studied the mound structure and internal temperature of termite mounds. He designed Eastgate, an office complex in Harare, Zimbabwe, which uses 90% less energy for ventilation than conventional buildings its size, and during construction alone saved the building owners over \$3.5 million dollars in air conditioning costs.^{16 17}

A Ban on the Production of Plastic Bags

In February 2017, UN Environment launched "Clean Seas", which engages governments, the general public, civil society, and the private sector in the fight against marine plastic litter. This is now the world's largest alliance in combating plastic marine litter. It includes 60 countries, including 20 in Latin America and the Caribbean. Others making strides include;

- Africa: Most countries have adopted a total ban on the production and use of plastic bags.¹⁸ Kenya implemented a country-wide ban of plastic bags that falls on the distributors and producers of single-use bags. Repercussions include a 4 year jail sentence or a 40,000 fine.¹⁹
- India: Declared in 2018 that it would eliminate all single-use plastics by 2022, an ambitious plan for the second-most populous country in the world.²⁰
- Peru: Approved, in December 2018, the law to gradually eliminate the use of plastic throughout the country by 2021. Peru also prohibits the entry of single-use plastic from Cultural and Natural Protected Areas, including National Museums.²¹

¹⁴ <https://thereddesk.org/countries/laws/forestry-law-law-7575-1996-costa-rica>

¹⁵ <https://www.smartcitiesdive.com/ex/sustainablecitiescollective/bright-side-indigenous-urbanization-biodiversity/1043231/>

¹⁶ <https://biomimicry.org/biomimicry-examples/>

¹⁷ Existing Biological Solutions for Problems People, Businesses, Corporations, Countries, and the World Might Be Facing. Please see the following link: <https://asknature.org/>.

¹⁸ https://www.researchgate.net/publication/257326387_Analysis_of_the_Plastic_Bag_Levy_in_South_Africa/link/5b044f9da6fdccf9e4f85b95/download

¹⁹ <https://www.bbc.com/news/world-africa-41069853>

²⁰ <https://www.downtoearth.org.in/news/waste/indian-states-implementation-of-plastic-ban-a-mixed-bag-62664>

²¹ <https://busquedas.elperuano.pe/normaslegales/ley-que-regula-el-plastico-de-un-solo-uso-y-los-recipientes-ley-n-30884-1724734-1/>

- European Union: Under the new plans, all plastic packaging on the EU market will be recyclable by 2030, the consumption of single-use plastics will be reduced and the intentional use of microplastics will be restricted. Implemented January 16, 2018.²²

Additional Resources: Two films on Living in Harmony with Nature

The Serengeti Rules: The film provides unexpected insights into how Nature works: it follows five scientists from different regions of the world who, through their research, come to the same conclusion: Nature has inherent wisdom which can transform the challenges we face on the planet: The scientific evidence demonstrates how "learning from" Nature as opposed to "managing nature" is the way to vitality of all species²³

The Biggest Little Farm: This documentary details how a couple, with little farming experience is able to restore a large segment of dead soil into a thriving, self-perpetuating ecosystem through the use of traditional farming and Biomimicry.²⁴

Both of these films focus on living in closer harmony with Nature.

SOCIETY AS FUNDAMENTAL CRITICAL ENTRY POINT

Introduction

Applying forms and principles used by Nature to the development of societies can greatly aid sustainability and empower society as a critical entry point.

Cooperation is a fundamental attribute of Nature, and similarly, societies are strengthened when collaboration is fostered. For example, incorporating marginalized communities into the job market allows them to further explore their potential while giving them the opportunity to leverage their ancestral knowledge in society. This contributes to the reduction of poverty and facilitates social cohesion. Integrating regional actors into local societies can provide more comprehensive approaches, and national institutions which work closely with civil society can help facilitate the implementation of goals at the local level.

The collaborative element which operates in Nature, when translated to society, would support the achievement of the SDGs. This nature-centric approach to society could have the following effects:

- Quality care of individuals through health and education systems for all (SDGs 3 and 4);



²² https://europa.eu/rapid/press-release_IP-18-5_en.htm

²³ <https://www.theserengetirules.com/>

²⁴ <https://www.biggestlittlefarmmovie.com/>

- Incorporation of marginalized communities into society, fostering equality supported by legal institutions (SDGs 5, 10 and 16);
- Collaboration across different sectors would allow for advancement and innovation, making more resources available to more individuals (SDGs 8 and 9).

The SDGs strategically support the strengthening of societies. Strong, harmonious, inclusive, and happy societies have the capacity to strengthen all of the SDGs, when these are in harmony with Nature.

Warning

A country's greatest asset, besides its natural environment, is its people. Where social well-being rests on unsustainable practices with regard to the natural environment, natural resources will become degraded and/or depleted. This will increase the rate of climate change, and harm agriculture, thus undermining health and frustrating poverty alleviation (SDGs 13, 14, 15, 1, 2, and 3). Increasing population, poverty, and inequality will undermine the capacity to build and maintain society (SDG 3, 4, 5, 6, 7, 11, and 16).

Means of Implementation

Universal Access to the Internet (SDG target 9c)

Approximately half of the world's population currently has access to the internet. Today, the Internet connects people across social strata and borders. It is one of the greatest resources which can help close the gap between rich and poor, and can facilitate the implementation of each one of the Sustainable Development Goals. Internet access has been declared a human right by the United Nations.²⁵ Lack of Internet literacy is often cited as a challenge. This could be resolved fairly easily and inexpensively by facilitators from each Nation receiving training from the UNO via web-based meetings. They would in turn be able to pass on their skills to others in their country. Internet Access Centers could be placed within walking distance from every community. Gradually, Internet literacy and use is likely to spread throughout the Nation.

Effect on the Achievement of the SDGs: Internet access can help individuals across multiple sectors, from farmers to medical practitioners across the globe. It is a tool which can promote education at all levels and long distance services. It can help close the gender gap, build the economy, and give individuals access to the growing sharing economy. It can also be used to build infrastructure for water and waste management and energy and industrial development, thus enhancing human settlements. Progress on all of these fronts will accelerate progress toward achieving the whole 2030 Agenda, including the eradication of poverty.

Global Ecovillage Network

One of the biggest challenges is providing access to basic services to those living in smaller rural communities, where across multiple issues, the need is perhaps the greatest. One promising means to address and meet these needs would be to establish and fund the development of regional Resource and Service Centers, coupled with bio-regional community based development programs - such as are being developed by the Global Ecovillage Network (GEN). Each Center could service a number of villages, neighborhoods, or a small grouping of towns. Each center would provide access to multiple resources across the most needed sectors in that bio-region.²⁶

²⁵ United Nations **report internet access is a human right pdf**

²⁶ Trainings are available via: <https://ecovillage.org>

Effect on the Achievement of the SDGs: Ecovillages are a way of empowering people at the grassroots to develop and maintain inclusive communities in harmony with one another and with Nature. Encouraging their formation in all human settlements as a way to make them more sustainable. They promote the implementation of all of the SDGs.

National Conversations

Policy has the power to shape society. In considering the most effective policies, the perspectives of each sector of society can be invaluable. Carrying out consultations with



Fish Market ©Phil Schreyer

different social groups can provide insights needed to address some of the most pressing problems.

Conversations, with those from the most marginalized groups to those of the most esteemed professionals, can provide perspectives on problems and effective solutions at all levels. This not only aids in addressing social problems, but it also promotes inclusivity by involving all sectors of society in the process of policy creation. Participation can be encouraged through the education system, the media, via the Internet and social media, and through existing social service centers and

programs. Hosting national conversations is a collaborative tool which constructs systems that operate for everyone, replicating patterns in Nature.

Effect on the Achievement of all of the SDGs: All of the goals can be fully achieved with the informed and voluntary participation of a country's people.

Improved Data Collection

GIS (Geographic Information System) collects data at the grassroots level, providing accurate and inclusive information, allowing for the effective and just implementation of SDGs. This system embraces whole populations in providing accurate data from the grass roots up, allowing for a more accurate analysis and better public access to information.

The investment in strengthening data monitoring, and accountability mechanisms, has the power to mitigate countless social ills. This can further national capacity in building awareness and raising support for civil society and other stakeholders. It will require active participation, facilitating coordinated and integrated implementation.

Effect on the Achievement of the SDGs: Accurate data collection is fundamental to reaching each of the SDGs and measuring their achievement.

Inspiring Examples

Costa Rica's Inclusive Policy Development

In 2013, a national consultation was held, consisting of four steps:

1. Workshops with excluded or vulnerable populations, such as people living in poverty, indigenous people, people of African descent, LGBTQ;
2. Then consultations were held with the business sector, trade unions, and the public sector to elicit proposals to boost the country's development;
3. Thematic workshops were then held with specialists on issues such as education, health, poverty and inequality security, employment, etc;
4. The last stage consisted of a survey of the national population to identify characteristics, proposals, and priority solutions for the country's development;

As a result, 7 national priorities were established (equality, equity and access to opportunities; universal access to high-quality services; education for human development; productive development and job creation; security, co-existence and access to justice; environmental sustainability and risk management; democratic governance); and 39 measures identified to achieve these priorities. All of these came from the population.

The government established three central pillars as starting point; boosting economic growth and creating quality jobs; fighting poverty and reducing inequality; and being an open, transparent and efficient government, fighting corruption. They have since seen improvements in sustainable social and economic development, along with strides in organic agriculture and technology.²⁷

Progress Being Made in Providing Universal Access to the Internet

The Report by the UN Specialized Agency, International Telecommunications Union, and the United Nations Office of the High Representative for the Least Developed Countries (OHRLLS), shows that Landlocked Least Developing Countries (LLDCs) and Small Island Developing States (SIDs) are achieving universal and affordable Internet access.²⁸ The reports provide insights into the great strides that LDCs have made in regard to internet access, information and communication technology access, and addressing severe structural impediments to sustainable development in LDCs and Lowlying Small Island States. Several LDCs are also on track to largely achieve SDG Target 9.c by 2020. Rwanda, a land-locked nation, already has universal access to the Internet.

Delhi Promoting Female Entrepreneurship

The Patrada Project is based in Delhi and has been developed to help women refugees from Afghanistan. It was created by students from the Kikori Mor College of the University of Delhi and supported by ENACTUS, a global partnership of universities and businesses. Marginalized Afghan women in Bhogul were enabled to become more self-sufficient through training. They learned to create biodegradable bowls, which were highly marketable in food outlets, cafes, and bakeries. This has helped reduce the demand for plastic equivalents.

Ghana Supports Collaboration of Scientific and Local Communities

Marine conservationists Neil Davis and John Flynn were determined to protect nesting sea turtles and their eggs from poachers. Taking into consideration the societal dynamics, they connected with local village chiefs about the problem, and were able to recruit a dedicated

²⁷ Costa Rica's Voluntary National Review in June, 2017

²⁸ https://www.itu.int/dms_pub/itu-d/opb/ldc/D-LDC-ICTLDC-2018-PDF-E.pdf

team of locals to conduct nightly beach patrols. They were also able to meet with and educate fishermen on how to release the turtles caught in their nets, which were previously sold to be butchered. This collaboration between the scientific community and the local community saved 800 adult turtles. In addition, more than 500 of these turtles received flipper tags for data collection and tracking.²⁹

Lima Supporting Economic Development in Rural Communities

The "Pampa Libre" community located north of Lima, Peru has learned to craft reusable handmade products. Artisan women are trained periodically by "Plastic-Free Perú NGO" and the Program "Manos Peruanas", to ensure quality and market adaptation. They are provided production material and receive the majority percentage of profit. This allows local families, which generally do not have education or basic services, to support themselves economically, and helps this marginalized community, that had been neglected in larger national development plans, to become better integrated into the Peruvian society.³⁰

THE ECONOMY AS FUNDAMENTAL CRITICAL ENTRY POINT

Introduction

The endless pursuit of economic growth, as measured by Gross Domestic Product (GDP), is a key driver of social inequality, the unsustainable use of resources, environmental degradation, and climate change. When economic decisions are made without consideration of society and the environment, the foundation is jeopardized. Unlimited economic growth cannot be sustained in a world with finite resources. Production, growth, and decay are features inherent in Nature. Economic systems inspired by Nature are, in fact, increasing in use worldwide as the more mainstream forms used in the global economy begin to show their limitations.



Freighter ©Andi Graf

Nature-inspired economic systems include social solidarity economies that are based on sharing and cooperation; circular economies, which are based on recycling; and cooperatives, which mimic ecosystems.³¹ A strong economy, rooted in well-integrated equitable societies, that are in harmony with a thriving natural environment, will significantly accelerate the achievement of all of the SDGs, as follows:

- They will promote inclusive and sustainable economic growth and industrialization (SDGs 8 and 9);

²⁹ http://www.wildseas.org/Wildseas/Who_we_are.html

³⁰ <http://www.plastic-freeperu.com>

³¹ according to the Worldwatch Institute

- The strength of the economy will make for the potential to have better infra-structure for the delivery of education, water and energy, and for improving human settlements (SDGs 4, 6, 7 and 11);
- And all this will greatly further the prospects of complete poverty eradication (SDG 1).

A Warning

Where the economy is unsustainable, the achievement of *all* SDGs is endangered. The greatest contributor to an unsustainable economy is its decoupling from environmental and social health; the whole foundation upon which every economy rests. Continuing unlimited growth in a world where resources are limited, will only further deplete Nature by infringing on natural ecosystems both on land and in the oceans. The debt-based financial system that dominates much of the industrialized world economy today is fostering overproduction, overconsumption, excessive carbon dioxide emissions, and disastrous climate change.

Means of Implementation

Social, Solidarity Economies (SSEs)

This ethical approach to economic development shifts away from the GDP as the sole indicator of a healthy economy, and prioritizes the welfare of the people and planet. The U.S. Solidarity Economy Network uses five principles, Solidarity, Cooperation, Mutualism; Equity in all dimensions (e.g., race, ethnicity, nationality, class, and gender, etc.); Participatory Democracy; Sustainability; and Pluralism. Like any healthy ecosystem, the SSE flourishes when these principles are used interconnectedly.

SSE's develop a Partnership Economy whereby individual people offer their talents or resources they have developed for free. The financial element is removed, and value is mutually exchanged. The social solidarity and Partnership Economies are expanding rapidly, especially with the help of the Internet. They tend to promote cooperation, social cohesion, benevolence, well-being, and economic progress.

Effect on the Achievement of the SDGs: These economic structures aim to build strong infrastructure for the delivery of healthcare, education, water and sanitation, transportation systems, and electricity. All of which support human settlements, thereby strongly promoting the achievement of (SDGs, 3, 4, 6, 7, 9 and 11). They promote justice for all, which includes gender equality (SDGs 16, 5, and 10). SSEs also promote a knowledgeable and well-educated work-force which in turn promotes inclusive economic growth (SDGs 4, 8 and 9).

A Commons Approach and Cooperatives

Commons are groups of people who jointly manage resources, share in decision making, and in the fruits of their common labour. Cooperatives are commons that are run for profit. There are currently 2.6 million cooperatives with one billion members worldwide, generating annual revenues of USD 3 trillion, and make up 250 million jobs (12% of jobs in G20 countries).³² They also tend to do well in times of economic downturn, since they operate collaboratively. Cooperatives and commons generally contribute part of their profits to their communities. The

³² <https://www.ica.coop/en/cooperatives/facts-and-figures>

economic solutions which they foster can apply to several sectors, including farming, fishing, credit unions, banks, cooperative insurers, retail, and medical insurance. Commons also come in the form of organizations which steward information and innovation for the common good. Some examples are;

- *The Foundation for P2P Alternatives* functions as a clearinghouse for open/free, participatory/p2p and commons-oriented initiatives. It aims to be a pluralist network to document, research and promote peer to peer alternatives.³³
- *Public Knowledge* is a Washington, D.C.-based public interest group defending citizens' digital rights by promoting innovation, the rights of consumers, and stopping legislation that would slow technology innovation, shrink the public domain, or prevent fair use.³⁴
- *ETC Group (Action Group on Erosion, Technology and Concentration)* is a commons dedicated to the conservation and sustainable advancement of cultural and ecological diversity and human rights. They support socially responsible developments of technologies useful to the poor and marginalized.³⁵

Effect on the Achievement of the SDGs: In all sectors, cooperatives tend to provide economic growth and decent jobs, while respecting the needs of people, society and the environment. They can be seen as a powerful means which makes use of all three fundamental critical entry points and strengthen the achievement of (SDGs 1-7, 9,11, 16 and 17).

Redirect Fossil Fuel Subsidies and Phase out all Un-Sustainable Subsidies

An article in The Guardian reveals that switching 10-30% of fossil fuel subsidies to clean energy would pay for the global transition to renewable energy. IISD just did a study showing that switching subsidies to renewables would trigger a quick transition towards 100% renewables.³⁶ It would also lower the price points of renewable energy, making it accessible to more people. Currently, fossil fuels get more than three times the amount of annual financial support as clean energy, according to the IISD. The phasing out of subsidies is lagging, yet has great potential to enact real change. Not only can switching subsidies initiate the movement towards global sustainable energy, but it has the potential to make green energy more affordable than fossil fuel, and more accessible to lower income communities.³⁷

Establishing an agreement and intergovernmental processes for phasing out all un-sustainable subsidies is essential. Practices which harm the environment must stop receiving financial reward, or else it will only continue. Ensuring that all pension funds and government procurement are targeted, would spring many into action achievement of the SDGs. No capital investments should support un-sustainable means of producing energy.

Effect on the Achievement of the SDGs: It would help to combat climate change and unsustainable patterns of consumption and production (SDGs 12 and 13). It conserves natural resources, and makes energy more affordable to all members of society (SDGs 7, 10, 14 and 15) and, thereby strengthening all three fundamental critical entry points.

Circular Economy

³³ <http://p2pfoundation.net/>

³⁴ <http://www.publicknowledge.org/>

³⁵ <http://www.etcgroup.org/>

³⁶ <https://www.iisd.org/gsi/news-events/reforming-subsidies-could-help-pay-clean-energy-revolution-report>

³⁷ <https://www.theguardian.com/environment/2019/aug/01/fossil-fuel-subsidy-cash-pay-green-energy-transition>

A circular economy has the potential to form a fully sustainable economy. This economic structure minimizes waste and maximizes the use of resources. The circular economy could reduce up to 99% of waste from some industrial sectors and 99% of greenhouse gas emissions, combating climate change. As Nature lets nothing go to waste, this operates as a Nature-centric system. The profits from business activities could then be spent on transitioning to more sustainable practices within their business sector, either;

- in response to government or shareholder mandates and/or regulations,
- as demanded by customers, or
- as enabled through the use and application of progressive taxes placed on ownership and use of valuable and/or scarce natural or non-renewable resources.

Effect on the Achievement of the SDGs: This would align the economy with Nature by reducing waste, benefitting two of the three fundamental critical entry points, and thus has a powerful positive effect on the achievement of all of the SDGs.



Crowdfunding and Crowdsourcing for Sustainable Development

Crowdfunding is the practice of funding a project or venture by raising monetary contributions from a large number of people, typically via the internet, for a common service, project, product, investment, cause, and/or experience. There are reward-based crowdfunding, equity-based crowdfunding, and credit-based crowdfundings.

The crowdfunding model is fueled by three types of actors: the project initiator;

individuals or groups who support the idea; and a moderating organization (the “platform”) that brings the parties together to launch the idea. This billion dollar industry serves as a funding alternative, sourcing from an online community rather than from traditional employees or suppliers.

Effect on the Achievement of the SDGs: Crowdfunding fosters creativity, social cohesiveness and economic growth. Provided the things funded are not in discord with Nature, crowdfunding enhances all three fundamental critical entry points and is thus a powerful tool for promoting the achievement of all of the SDGs.

Inspiring Examples

Kalundborg Symbiosis

Industrial symbiosis is where the by-product from one enterprise is used as a resource by another. This practice parallels Nature’s ecosystems as an economic system. Through local collaboration, public and private enterprises buy and sell residual products from one another, gaining economic benefits while supporting the environment.

Kalundborg Symbiosis is the world’s first industrial symbiosis, and has been in operation for 40 years. It has also inspired others to replicate the practice, which can be adopted in small or

large companies. Kalundborg Symbiosis reduces cost, lowers emissions, generates growth with less resources, and creates more competitive enterprises.³⁸ It enhances and mimics Nature and strengthens the economy by making more available for less.

Grameen Fund, Bangladesh - Women's Fund.

This fund provides small loans to impoverished women. They support small to medium business ventures, which generate jobs and support local communities. Once these are repaid, other women's projects are funded. This strengthens local economies and societies.

KENYA: Blue Growth- FAO.

Blue Growth initiative-FAO, helps create thriving fishing and coastal communities. 59.6 million people work directly in fisheries and aquaculture, and about 200 million are employed throughout the entire value chain.³⁹ FAO is a strong supporter and partner in the creation of thriving fishing and coastal communities. The initiative promotes and protects the essential ecosystems and biodiversity of the “Blue World” for the benefit of communities that depend on fishing and their related industries for their food and livelihoods.

INDIA: HelpUsGreen

More than eight million tons of flowers are thrown into the Ganges River every year, along with the toxic pesticides and insecticides that are used to grow them. HelpUsGreen Company is responsible for collecting the flowers and turning them into incense. Help Us Green gives marginalised women the chance to earn livelihoods through collecting temple ceremonial flowers tossed into the Ganges and turning them into sustainable incense. By working directly with the temples near the Ganges River, the company has reused 2,753 tons of flowers and has prevented around 275 kilograms of pesticide residues from reaching the river. The company currently supports 79 women, but Agarwal has the ambition to raise the number to 5,000 by 2020. They received a UN Climate Action Award.⁴⁰ This project exemplifies the resourcefulness employed by a circular economy, as it finds use in our resources instead of wasting them.

Conclusion

All the examples are taken from information received from the international community in the first few weeks of this initiative. We welcome information as to what else is being done, and as well as any tools or inspiring stories you would be willing to share with us.⁴¹ Because we know that supporting and building on each others' solutions is the fastest way to achieving the 2030 deadline.

The SDGs aim to form an inclusive and sustainable global community, which flourishes in a prosperous and resilient economy in harmony with Nature. We recognize that sustainability practices must be developed with the consideration of the cultural, social, and economic context of each state. Ultimately, working with Nature, not against it, must be a global priority.

³⁸ <http://www.symbiosis.dk/en/>

³⁹ <http://www.fao.org/family-farming/detail/es/c/1104855/>

⁴⁰ <https://www.unenvironment.org/news-and-stories/story/colourful-solution-flower-waste>

⁴¹ Please submit all tools, examples, and stories to **Taede Veenstra, Taedev@gmail.com**