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AGRICULTURE AND FOOD SECURITY

Under the Patronage of His Highness Sheikh
Mohammed bin Rashid Al Maktoum
Vice-President and Prime Minister of the UAE and Ruler of Dubai

19th Edition

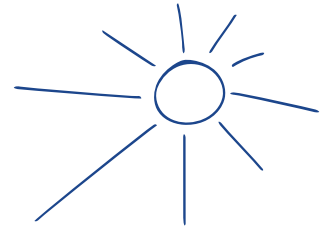
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معرض و مؤتمر دبي الدولي للإغاثة والتطوير
Dubai International Humanitarian Aid & Development Conference & Exhibition

13 - 15 March 2023
Dubai World Trade Centre

ENERGY AND AID

“Capitalising on available Resources”



The Impact of Rapidly Changing Sources and Costs of Energy on Humanitarian Aid and Development



Supply Chains and Food Security



Harnessing Resources in Pursuit of Global Health and Wellbeing



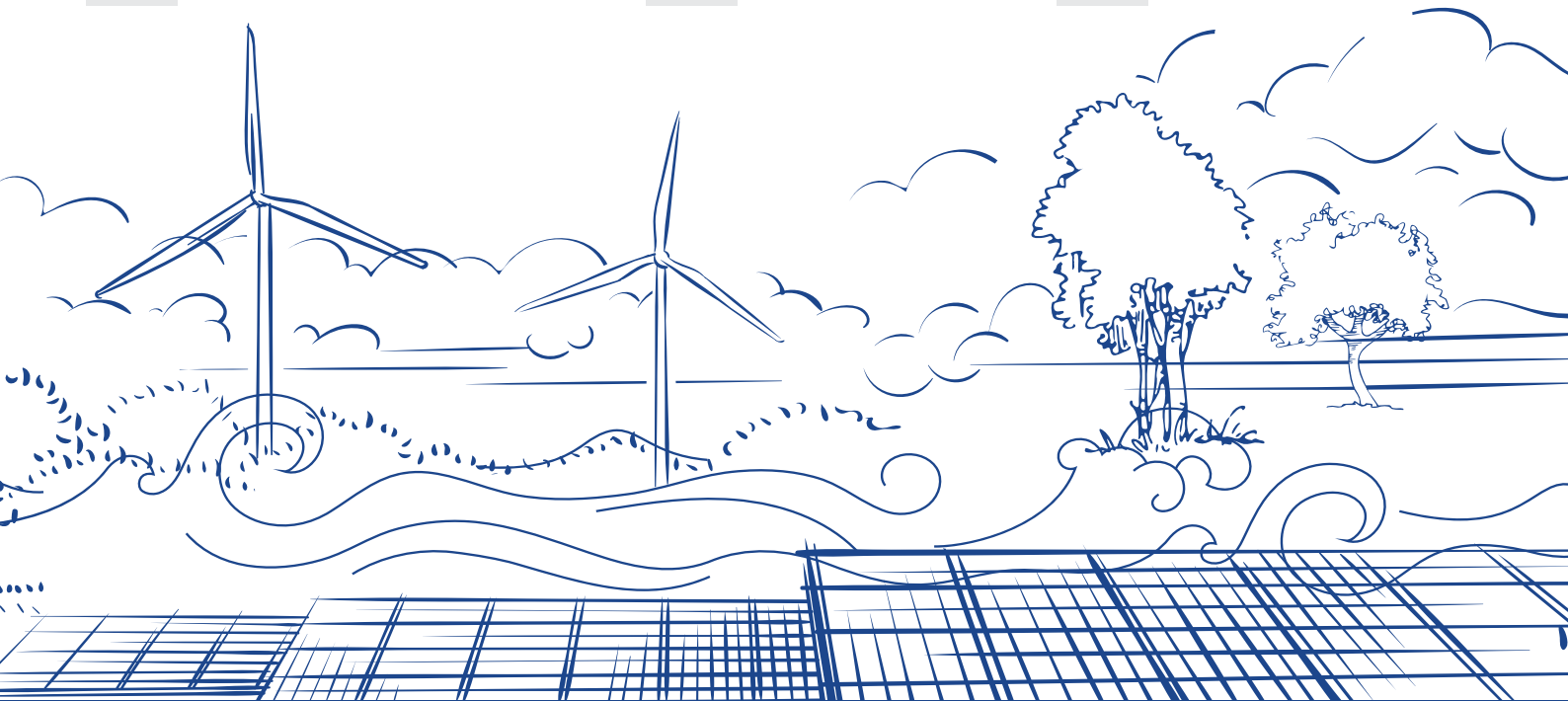
Harnessing Resources to Assist the Growing Numbers of People on the Move



Harnessing Resources for Inclusive, Equitable, Quality Education



Caring for the Planet; The Role of New Technologies



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Soil and (ground)water sampling



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27 NUANCES OF THE NEW WORKFORCE BY VIJU SWAMINATHAN

Intergenerational differences have always existed, but they were more to do with culture and lifestyle. The workplace had remained constant since the time of baby boomers except for the adoption of technology and perhaps method and style of communication.



31 MAKE FARMING SEXY, MAKE IT PROFITABLE BY KIKO PANGILINAN

"Kiko" Pangilinan as he sat down with us to explore and discuss the current agricultural issues that farmers face in the Philippines, and how they link to government efforts both existing and urgently needed.

42 REGENERATIVE AGRICULTURE – SILVER BULLET? BY STEPHANIE MENDELSON

Regenerative agriculture has garnered massive global attention which only keeps growing as the world recognises how the industrial farming system is broken: ruinous for the environment and rural economy alike. Its accepted that over a third of available topsoil is already severely degraded, and that the world’s poorest people live in rural areas. Enter the dark cloud of climate change looming on the horizon, and people are looking for alternatives, solutions... that silver bullet.



56 THE FUTURE OF AGRICULTURE: 5G-POWERED SMART FARMING BY CROPIN

A wise solution to solve this is implementing technology to automate, track, and monitor agricultural processes. And with 5G all set to roll out, smart agriculture is set to take off with lightning-fast-speed data transfer.

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The Editorial Team of IMPACT is extremely happy to bring to its readers yet another insightful issue of the magazine. Beginning the year with a heart filled with hope for a future that is sustainable, with innovation promising success and breakthroughs to safeguard the planet, people and resources, we have chosen a theme that holds utmost importance, especially in the developing nations of Asia and Africa - **Agriculture and Food Security**.

With the world population crossing the 8 billion mark last year, it is critical to think about agriculture best practices that are sustainable but also address the slowly rising food security emergency. In this issue, we have different stakeholders from the sector talking about the relation between agriculture and food security, their innovations to help improve farming, impact stories, best practices, etc. We also have interviews, where founders and policy developers share their views about agriculture, how technology can help farmers, and how good policies can improve the agriculture sector.

The different viewpoints presented in this issue lays emphasis on regenerative agriculture as a sustainable farming technique, use of technology to enhance the agri-processes (both production and sales), and the elevating rates of global food security. We also stand by our commitment of bringing exclusive content for our future agents of change through this issue.

We look forward to your feedback, suggestions, recommendations, as together the **impact** of our words and your actions shall create a synergy that could transform the world of development. We hope to have your continued support and patronage.

Thank you for your valuable time!

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PARTICIPANTS

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REACH

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Thematic Sessions

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EVENTS ROUNDUP

As the COVID-19 situation across the world is still developing, some of these events might move online, or be cancelled. Please check the web site for the latest information.

*Click for more details

JANUARY:

- [1 Responsible Business Asia 2023](#)
January 5
📍 *Global*
👤 Reuters Event
- [2 Livestock Philippines 2023](#)
January 5-8
📍 *Manila, Philippines*
👤 Informa Markets in Philippine
- [3 International Conference on Hydropower](#)
January 9-10
📍 *Bali, Indonesia*
👤 World Academy
- [4 Abu Dhabi Sustainability Week 2023](#)
January 14-19
📍 *Abu Dhabi*
👤 Masdar
- [5 13th IWA International Conference on Water Reclamation and Reuse](#)
January 15-19
📍 *Chennai, India*
👤 Federation of Indian Chambers of Commerce & Industry (FICCI)
- [6 World Built Environment Forum Week 2023](#)
January 16-20
📍 *Global*
👤 Royal Institution of Chartered Surveyors (RICS)
- [7 3rd India Agri Progress Expo 2023](#)
January 20-22
📍 *India*
👤 Udan Media & Communications Pvt. Ltd
- [8 4th POWER & ENERGY Africa](#)
January 23-25
📍 *Ethiopia, Africa*
- [9 ASSOCHAM Southern Region Presents 3rd Edition CSR and Sustainability Awards 2022](#)
January 31
📍 *India*
👤 ASSOCHAM

FEBRUARY

- [10 2nd Annual Sustainability Week Asia](#)
February 7-9
📍 *Singapore*
👤 Economist Impact
- [11 1st International Seagriculture Conference Asia-Pacific 2023](#)
February 8-9
📍 *Global*
👤 DLG Benelux B.V.
- [12 India ESG Summit 2023](#)
February 10
📍 *India*
👤 India CSR
- [13 9th International Conference on Flood Management \(ICFM9\)](#)
February 18-22
📍 *Tsukuba, Japan*
👤 IAHR - International Association for Hydro-Environment Engineering and Research
- [14 ESG Summit Philippines](#)
February 20-21
📍 *Philippines*
👤 Trueventus
- [15 EvokeAG 2023](#)
February 21-22
📍 *Adelaide, Australia*
👤 AgriFutures Australia
- [16 World Sustainable Development Summit \(WSDS\)](#)
February 22-24
📍 *India*
👤 The Energy and Resources Institute (TERI)
- [17 7th IBA Asia Pacific Regional Forum Biennial Conference](#)
February 22-24
📍 *Singapore*
👤 International Bar Association
- [18 C&I Clean Energy Meet](#)
February 24
📍 *India*
👤 Mercom India Events



19 [AsiaBrake 2023 Conference and Exhibition](#)
February 26–28

📍 *Thailand*

👤 Boonyawat Teeraprawatekul

20 [Network for Education and Research on Peace and Sustainability \(NERPS\) Conference 2023](#)

February 28–March 3

📍 *Ait, Thailand*

👤 Hiroshima University

MARCH

21 [13th International Conference on Industrial Engineering and Operations Management](#)
March 7–9

📍 *Manila, Philippines*

👤 De La Salle University

22 [Asia Pacific Society for Agricultural and Food Ethics 5th Conference](#)
March 10–11

📍 *Japan*

👤 Nanzan University

23 [19th Dubai International Humanitarian Aid and Development Conference & Exhibition](#)
March 13–15

📍 *Dubai*

👤 INDEX Conferences & Exhibitions Org. Est.

24 [Asia-Pacific Association for International Education 2023](#)

March 13–17

📍 *Bangkok, Thailand*

👤 Asia-Pacific Association for International Education

25 [ASIA 2023](#)
March 14–16

📍 *Kuala Lumpur, Malaysia*

👤 The International Journal on Hydropower and Dams

26 [Asia Pacific Forum on Sustainable Development 2023](#)

March 27–30

📍 *Bangkok, Thailand*

👤 United Nation ESCAP

To include your event in this section, please email details of the event, in the format above to editor@theimpactmagazine.org

Giving High-Impact Startups a Push in Cambodia

As technology-oriented startup enterprises (tech startups) have continued to rise over the past 15 years, the Cambodian government and other stakeholders expressed their support for its influence in the country.

The tech startups' four significant areas of development emerged in the 2010s and grew from 50 in 2013 to around 300 in 2018. Agritech helped produce organic rice, while Edtech boosted the students' interest in STEM subjects by providing e-learning and disseminating STEM education. Greentech was a springboard for EnergyLab in stimulating smart solutions for energy and agriculture, while Healthtech allowed medical professionals to offer telehealth consulting services via applications.

However, challenges loom behind the promising results of tech startups in Cambodia. Some of these include limited information on rules and regulations and a need for more skills in ICT and engineering.

But to express the government's active support for the project, Cambodia Digital Economy and Society Policy Framework (2021-2035) and the National Strategic Development Plan (2019-2023) were launched. Non-government organizations were also one with the goal as they initiated coworking spaces, incubation and acceleration programs, and mentorships to expose startups to domestic and international markets. 📍



Bournvita's 'Forced Packs' Campaign

In a country like India where 82% of parents decide their child's future, Cadbury Bournvita sends a message to the parents through their 'Forced Packs' Campaign. In an attempt to awaken the society from its slumber within a conditioned mindset that 'Parents know what's best for their children', Bournvita designed its package in shapes and sizes (toilet cleaners, face cream, cooking oil, etc.) instigating parents to understand and accept the different paths and career choices of their children than the one they imagined for their children.

The campaign received mixed reactions from the people with most being confused, some interested, and some annoyed. However, this step aimed to bring attitudinal change in the society was indeed 'out of the box'! #FaithNotForce is a movement that aims to push parents to take notice of their children's true talents rather than forcing them to absorb skills they deem necessary. 📍



Plant Fibers for Sustainable Devices

Professor Junichiro Shiomi and his team from the University of Tokyo's graduate school of Engineering discovered new uses of cellulose nanofiber (CNF) by investigating the previously unknown thermal properties of the said material.

In the past, various commercial products replaced polymer-based materials such as plastics with CNF mainly due to their strength and durability. But according to Shiomi, it was only now that CNF was seen to have a 100 times higher thermal behavior and conduction than that of typical woody biomass or cellulose paper.

Shiomi and his team's discovery made way for future explorations into using CNF in engineering alternatives to some environmentally damaging polymers that were barely being considered before. They hoped that the newly discovered property of CNF could significantly reduce the consequences of discarded electronic equipment or e-wastes in heat-transfer applications. 📍



Global Poultry Feed Market to rise

With the increase in population and disposable income in developing countries, people are able to afford meat and eggs much more easily than before. According to a recent report by Future Market Insights (FMI), a market research and competitive intelligence provider, the global poultry feed market is expected to reach a market valuation of US\$ 225.7 Billion by the year 2032, accelerating with a compound annual growth rate (CAGR) of 5.5% by 2022-2032.

The report also estimates that the poultry feed market in East and South Asia will collectively exhibit a 1.5 times higher rate of growth than the rest of the world. Just like going organic and vegan has become a trend, people have become more conscious even about the meat they consume. Consumers are looking at brands they can trust, with hopes that the dairy products or meat they buy has less exposure to harmful chemicals. This has expanded the competitive landscape, in particular increasing the branded feed market. [i](#)

The Closing Window

The Emissions Gap Report 2022 shows that since the COP 26, held last year, negligible differences can be seen with regards to the estimated prediction of emissions by 2030. Despite the many pledges taken by world leaders, we are far from the Paris Agreement goal of limiting global warming to well below 2°C, preferably 1.5°C.

The report states that urgent system-wide transformations alone can deliver the required results by 2030, unless we cut emissions by 45% to avoid global catastrophe. It warns that we are not on track to achieve the Paris Agreement goals and that global temperatures can reach 2.8°C by the end of the century. [i](#)

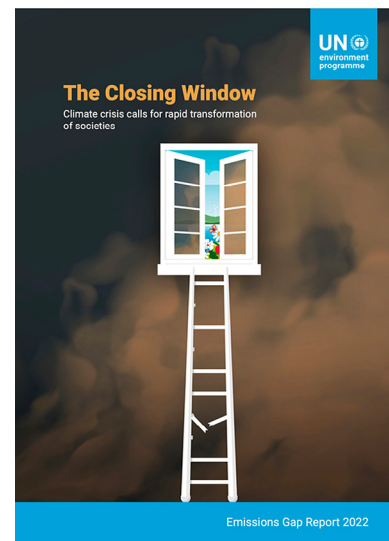


Photo Courtesy of Microsoft Blogs

Closing the Sustainability Skills Gap: Helping businesses move from pledges to progress

A joint effort between Microsoft and Boston Consulting Group (BCG) was recently launched to help global businesses mobilize their pledges to combat the climate crisis through sustainable actions with promising results.

In line with their efforts to communicate the urgency of the matter, Microsoft published a report detailing the result of their study on businesses at the forefront of sustainability, innovation, and change. Alongside BCG, they surveyed 250 employees working jobs committed to sustainability and found new job categories emerging.

The report's findings suggested that businesses worldwide are confronting a significant skills gap as sustainable jobs continue to evolve. As a result, they proposed a three-step plan to unseal it – developing shared understanding through better data, upskilling the workforce through sustainability knowledge and skills initiatives, and preparing the next generation of the digital workforce through sustainability fluency education. [i](#)



Agriculture is the greatest and fundamentally the most important of our industries. The cities are but the branches of the tree of national life, the roots of which go deeply into the land. We all flourish or decline with the farmer.



Bernard Baruch

ZERO HUNGER AND ENSURING SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS



Between the years of 2014 and the beginning of COVID-19, there had been a gradual but consistent rise in the number of people who were going hungry and experiencing food insecurity

2014

COVID-19

The prevalence of undernourishment climbed to around



9.9%
in 2020

720 million to 811 million

hungry people around the world in the year 2020.

**increase of 161 million from 2019 data*



UN reports that

2.3 BILLION TONS OF FOOD

are lost or wasted annually.



One-third of this occurs in the food production stage.

IN THE YEAR

2020

320 million people

In developing countries and low-income countries didn't have enough access to food

By 2030, the level of food wasted globally is expected to rise.

more than 30%

of the world's population would face some level of food insecurity, whether it be mild, moderate, or severe.

An approximate of

2.4 billion

People did not have regular access to a quantity of food that was sufficient for their needs

NUMBERS

The current annual rate of decline, which is

2.1%

2x

To reach

3.9%

in order to meet the target of a 5% reduction in the no. of stunted children

2025

This target was set in order to meet the goal of reducing the number of children who are stunted by a minimum of one standard deviation.

COLLABORATION

broaden the scope of collaboration as a strategy for accomplishing the goal

TARGET 12.1

**10
YEAR**

Implement 10-year sustainable consumption and production framework

2030

End hunger by 2030, and provide safe, nutritious, and enough food year-round.

END HUNGER

Top 3 Countries to waste so much food



CHINA

having a population of 1.426 billion people, the amount of food wasted exceeds **91 million tons.**



INDIA

similarly, a total of 1,413,681,182 people resulted in **68 million tons** of food wasted



UNITED STATES

largely **8 million tons** of food wasted

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Suga, M. (2015, January 7). Goal 2: Zero Hunger. United Nations Sustainable Development; United Nations: Sustainable Development Goals. [https://www.un.org/sustainabledevelopment/hunger/Sustainable consumption and production](https://www.un.org/sustainabledevelopment/hunger/Sustainable%20consumption%20and%20production). (2015, January 13). United Nations Sustainable Development; United Nations: Sustainable Development Goals. <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>



WHAT WE DO

At ASSIST Creativelab, we solve communication, visibility and knowledge management needs of development stakeholders and their interventions! We drive equitable development through impactful outreach - from design to implementation and monitoring.

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we connect

Your advocacies are our motivation.

we co-create

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developed

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300+
sectors

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Green Coffee Goals: Nestle says Asian markets are key link in achieving new sustainability plan



Photo Courtesy of Food Navigator Asia

When it comes to coffee consumption, Nescafe is always at the top of the market. As the brand continues to prove the worth of its name, Nestle has recently launched a project to use 100% sustainably-sourced coffee in several markets where most of its products are being produced.

Green Coffee Goals, as named by the brand, aims to achieve 20% regenerative agriculture by 2025 and 30% greenhouse gas emission by 2030. Nestle will invest 1 billion USD for the project to yield significant benefits at least 8 years from now.

Currently, Nestle is prioritizing the upgrade in coffee production (regenerative culture) in seven markets, namely Vietnam, Indonesia, Brazil, Mexico, Colombia, Côte d'Ivoire, and Honduras, with plans to expand globally in the future. This major step up from the brand could inspire other coffee producers to make a similar move. Through Nestle's initiative to go green, the global market would soon realize that sustainably-sourced coffee is not impossible to achieve. [i](#)

Ecovocado could be a greener alternative to 'green gold'

According to the World Economic Forum, eleven billion pounds of avocado are consumed annually in global households. The fruit earned its nickname, the golden green, because of this.

Although avocado is famous for several health benefits, growing the fruit has significant environmental consequences, like an excessive need for water and forest clearing to make way for avocado trees.

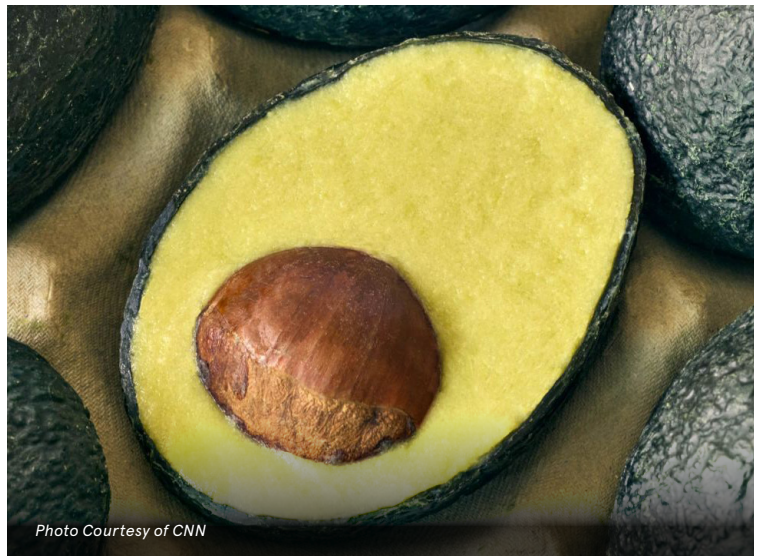


Photo Courtesy of CNN

In completing her Material Futures Master's degree at Saint Martin's Ast school, London-based researcher Arina Shokouhi developed a unique alternative to the fruit in collaboration with Nottingham food scientist Jack Wallman. Together, they named their product, ecovocado.

The ecovocado is made with beeswax and natural food coloring containing spinach and charcoal powders to mimic real avocado peel. Its meat has a broad bean base, apples for freshness, cold-pressed rapeseed oil for creaminess, and a pit of chestnut or hazelnut.

As potential investors laid eyes on Shokouhi's product, she hopes that ecovocado will soon make a name in the market for its health benefits both to the human body and the environment. The ecovocado is not a genius invention for nothing. Its existence was well thought of, from its flavor to its benefits. If the product finally hits the market, every child, adult, and elder in a family will surely enjoy it alongside mother nature. [i](#)

Cyber attacks: Why ag-tech innovation could be an 'easy' target for hackers to threaten food supplies

Through the years, researchers have been commending the strive for technological innovations in powering global food security improvements. The continuous effort in digital agriculture showed significant benefits in monitoring crops, plants, the environment, water quality, and soil moisture.

However, such innovation could come with a cost. Dr. Saeed Rehman, a researcher from Flinders University, warned that ag-tech sectors are prone to cyber-attack, especially since it does not take adequate precautions like other corporate defense sectors. If such an attack takes place in the future, the fruits of lessened labor that modern farmers are reaping in the present day may be replaced by worse consequences. Hence, this observation should be addressed so proper protective measures against ag-tech can be employed as early as possible.



Photo Courtesy of Food Navigator Asia

As Dr. Raehman emphasized that the possible side-channel attacks specific to ag-tech applications and other vulnerabilities must not be overlooked, researchers recommend investing in strengthening the cyber-security of agriculture-specific applications. This could avoid severe effects on the general population in terms of food supply, labor, and flow-on cost. ⓘ



Photo Courtesy of World Economic Forum

ROADMAP TO A HEALTHIER FUTURE

The challenges caused by the pandemic and inflation appears to have rendered food security and health irrelevant. However, the World Economic Organization's Food and Agriculture Organization knows just what to do!

World Economic issued a roadmap last January to assist nations in expediting and developing inclusive innovation to satisfy the requirements of all players in the food system, promising health and food security to be attained by everyone. The plan acknowledged innovation as one of the factors that would enable the transformation of the food systems, in line with the principles of the UN's Food Systems Summit. The roadmap created by the FAO and Forum contains strategies and actions to boost innovation, with a strong emphasis on how important it is to be accessible and all-inclusive. One way to achieve this is to establish multi-stakeholder food innovation centers and by looking into the regulations that prevent agricultural innovation from being scaled up. ⓘ

BALANCED DIET, BALANCED CLIMATE

A balanced diet must include protein-rich meals to promote a healthy lifestyle. However, while protein is essential to human health, the manufacturing of it has an adverse environmental impact. Reportedly, the manufacturing of proteins currently accounts for almost 50% of all emissions from the food chain. Fortunately, Solar Foods already has a response for that.

An eco-friendly, protein-rich meal generated from energy, air, and water mixed with bacteria has been developed by food technology startup Solar Foods. Electricity is applied to water to cause bubbles of hydrogen and carbon dioxide that have been taken from the air to release. Solein is actually 100 times more environmentally friendly than any animal- or plant-based option in terms of water consumption, efficient land use, and greenhouse gas emissions attributable to the production processes utilized to create this protein-rich powder. ⓘ



Photo Courtesy of Dezeen



“E-Commerce the new Agri-Marketing Platform”

Interviewed by Reysha Ruiz and Ragini K R

A critical component that farmers lack expertise in is commerce. Using technology to aid them in this process, thus making their task easier and much more profitable is what Mayani's founders have experimented with, through their e-commerce platform in the Philippines.

According to one of its 7 founders, Mr. J. T. Solis, Mayani is built around the vision of empowering smallholder farmers and fisherfolk through technology. Within the Philippines alone, there are about 10 million smallholder farmers and 1.5 million fisherfolks, and Mayani's vision is to make sure that they are able to uplift their life, boost rural transformation, and build a lot of innovations in the sector so that the farmers and fisherfolks can lead better lives.

iMPACT had the chance to talk with two of Mayani's founders, also CEO, Mr. J. T. Solis, and Chief Farmer, Mr. Ochie San Juan. Below are selected excerpts from the interview.

Q: What is the ground reality and challenge that you encountered while starting?

A: Mr. Juan - Mayani was actually founded and organized in order

A: to help the farmer associations in western batangas. The farmers there knew how to farm and knew how to cultivate, but most of their challenges were around marketing their produce. Aside from that, marketing partnerships, they usually experience difficulties in the source of the farm inputs, specially the funding, to get sufficient funds for their farm operations. Because for the past years, most of the farmers are financed by the large sugarcane plantation in the area and most of them are locked in with the traders or even with the sugar central, and even the landowners. They are at the mercy of these institutions, wherein they are the one who provide the funding and input, and at the end of the day they usually grant very little income from their farm practices. Even though they have their own little farm, a portion of land, as a tenant they are obliged by the government through the Department of Agrarian Reform that they can have a tillable minimum of 1,000 as the tenant. But most of them also have their personal properties, but marketing them profitably is the biggest challenge basically.

Q: How were you able to expand your operations and increase visibility over such a short period of time?

A: The Malaruhatan Family Farm Association is essentially a cooperative, organized group of farmers in Western Batangas, which is a lowland region with a lot of lowland crops like squash, eggplants, etc. So what we did, we initially started, we put up an agri-commerce platform, mayani.ph, which is our first tech product that would allow urban householders or consumers to order online the freshly harvested produce from the farmers.

Shortly before that we actually started with a Viber group. We set-up a Viber group, asking neighbors and households, 'would you be interested in buying lettuce? The harvest of our farmers is coming this week and we are harvesting this friday. We could deliver it to you on Saturday.' So for almost a year we were focussing on the B2C segment, the direct to consumer segment, and then

A: we started looking also into B2B or institutional buyers. And then the lockdown happened, in 2020, March 17 2020 when the President declared a lockdown. So all of sudden we have about, in Manila we have about 30 million people who need food. There has to be a continuity in the supply chain from rural farms to urban tables. So we started working with some large supermarket chains. They started reaching out to us because they heard of our advocacy, especially in the news. During the height of the lockdown, a lot of farmers lost their traditional sales channel, the traditional direct market places were down, the traditional public markets were down. They had no one to sell to, it was a lockdown. So mobility challenges, logistics, transportation. And being in that business, we didn't actually have any challenge at all, because we had food passes, specially issued by the Inter-Agency Task Force for COVID. So, we were able to accommodate distress calls coming from different farmers from across the Philippines. Because of this a lot of institutional buyers became aware, word got out, so we started working with Waltermart, one of the largest community supermarket chains in the country. Then, we started working with Robinsons, creating economies of scale.

Q: What features did you have in mind while developing your solution?

A: For us it is all about having an agile mindset. When it was COVID, height of the lockdown, mobility of consumers and shoppers were restricted. So it was all about a question of how do you provide them safety from the confines of their homes, convenience, and at the same time delivering quality at scale. So, when we put a huge focus on the B2C side during that lockdown, but at the same time because a lot

A: of consumers were actually wary of where their food comes from. The partnership we had with DTI (dept of Trade and industry) was very very helpful in terms of legitimizing and ensuring that somehow there is government support, there is backing, and we are really sourcing from our community farmers across different regions, as supported and facilitated by DTI. So that matters a lot, that element of trust, the trust factor. So we made sure that it was a seamless, frictionless checkout for all our customers. We also collaborated with GrabPay. So, the thing that largely changed during the lockdown, everybody wanted cashless, nobody wanted to be handling cash because COVID was spreading. So, we teamed up with Grabpay specifically and G-cash, we did a tripartite partnership with them and DTI to be able to provide that seamless and cashless payment option to all our consumers while rewarding them as shoppers. And that also increased our discoverability in terms of Mayani branding, in getting the word out that we are a farm to table player and we are here to help both farmers and consumers.

Q: How does your process ensure or bring sustainability?

A: I think overall, right, we work directly with farmers and fisherfolks, that already speaks volume on the sustainability agenda that we have. For one, by being able to optimize the supply chain by taking out the middlemen, minimizing the number of hands that would have to change in order for food to arrive at people's tables. We are also able to minimize carbon emissions, in terms of farm to consumer route. But at the same time, we are able to more specially boost the social metrics that we are always tracking, such as the attributable rise in farmer income. I think those



A: are concrete things we are doing, and those are progress in strides, towards sustainability, and keeping up with our sustainability commitments. Also, one thing we value has always been sustainably caught seafood. So we've been helping out a lot of fisherfolks specially from Region III, Zambales Regions, Busuanga in Palawan in collaboration with Better Seafood Philippines, to make sure that the fish that we distribute downstream is sustainably caught, fully traceable, comes from a transparent value chain, and was not in any way part of IUU, Illegal Unreported Unregulated fishing.

As such Mayani is an inspiration to all the young start-ups in the e-commerce sector, for they have shown that success is achievable when farmer well-being, customer satisfaction, sustainability and the right technology forms the center of your solution.



Mayani is an organization that aims to improve smallholder farmers' lives by changing how people buy their food through e-commerce. Today, their tech solution is the Philippines' fastest-growing farm-to-table platform with over 70,000+ farmers, 11,000+ B2C customers, and a solid B2B portfolio including the likes of Shell, Robinsons, WalterMart, Kopiko, and others.

AgriSagana



Cargill Philippines, in collaboration with the Asia Society for Social Improvement and Sustainable Transformation (ASSIST), has launched the Agri-Sagana Project in Cagayan and Isabela to empower farmers and cooperatives in the corn supply chain increasing agricultural yields, improve their standard of living, and contribute to the country's food security.

The Philippines has been coping with the "perfect storm," which the Department of Agriculture (DA) defines as a mix of the COVID-19 epidemic, African Swine Fever, and geopolitical tensions. Continuing to harm the agriculture industry, resulting in disastrous consequences such as job loss and "shackling" of food supply chains. Food security

measures, as highlighted by President Ferdinand Marcos, Jr., are critical demands that must be prioritized in response with global crises that expose global food access challenges. To further address this concern, President Marcos met with Cargill officials on his September visit to the United States to explore how to attain food security and self-sufficiency, as well as strategies to enhance agricultural output in the Philippines by empowering smallholder farmers.

As a result of low agricultural production investments, inefficient harvesting procedures, and inadequate post-harvest processing facilities, the marketable maize output of Smallholder farmers has continuously dropped over time. Corn growers also became vulnerable to unpredictable

weather patterns, which can devastate harvests. As a result, 34.3% of maize farmers are impoverished, compared to the national average of 21.6%, according to a Philippine Statistics Authority analysis.

Building a more sustainable, food-secure Philippines amid crises, as stated by Cargill Philippines Country President Sonny Catacutan during the interview, can be complex, but it is possible through focused, collaborative, and sustained efforts to improve farmer productivity and value chain resilience. Cargill is firmly dedicated to harnessing the potential of agriculture, helping our farmers, and attaining food security for Filipinos as part of our mission to nourish the globe.



In the spirit of sagana, a local term meaning “bountiful,” the Agr!-Sagana project’s purpose is to bring bountiful agricultural opportunities to corn farmers located in Cagayan and Isabela through established pathways – training and capacity development initiatives, development of an inclusive business process, and provision of infrastructure support for environmentally-sound agricultural practices.

The Agr!-Sagana project seeks to empower 10 cooperatives and 8,000 corn farmers, the majority of whom will be female, with the implementation of a Corn Academy and a Virtual Coop Training Hub to develop good agricultural practices, business, and

financial literacy among participating farmers. Further training will be provided on crop quality management control, specific to Cargill’s requirements, while establishing the contact, connect, collaborate approach to ensure corn farmers’ increased access to markets.

The project also intends to transform existing post-harvest facilities into enhanced eco-smart post-harvest facilities, with over 500 to 1,000 farmers projected to gain from improved corn quality through the use of sustainable and environmentally-sound drying systems.

Moreover, Commercial Leader Joseph Liwag expressed his enthusiasm in partnering with ASSIST for the Agr!-Sagana project, which will connect Filipino corn farmers with the right solutions and opportunities that will have far-reaching and sustainable impacts for their families and communities to advance farmer livelihood further.

As stated by ASSIST’s Executive Director, Francis Macatulad, ASSIST will continue to work with Cargill Philippines to provide new capacity-building opportunities that address the needs of smallholder farmers. Recognizing that the Agr!-Sagana initiative would considerably assist other rural areas. As a result, it is hoped that similar rich agricultural opportunity initiatives would be replicated and expanded in other farming communities and regions across the Philippines.

Paul Vincent Balao, Regional Corn Coordinator of the Department of Agriculture Region II, has also expressed his gratitude to Cargill Philippines and ASSIST for choosing Cagayan and Isabela as the first two provinces to execute the Agr!-Sagana initiative. The ministry is dedicated to assisting with the effective execution of this initiative seeing that it has the potential to be replicated in other provinces around the region.





INSIGHT AND CONTINUOUS MONITORING ARE ESSENTIAL TO MAKE BETTER USE OF

SOIL AND WATER RESOURCES

It's an easy mistake to make, thinking that our water resources are endless. After all, it falls from the sky, flows in our rivers and lakes, and is stored in the ground beneath our feet. But the truth is that fresh, good quality water is scarcer than we think. It is threatened by many factors, such as human activities, industry, climate changes, and salt intrusion. Sustainable use of surface and groundwater begins with insight. In the quantity; how much do we have, and how much can we use, as well as quality; can it be used safely?

Since our establishment in 1911, Royal Eijkelkamp has been developing solutions for the sampling and analysis of both soil and water to help provide these insights. Motivated by the Sustainable Development Goals, we deliver our products and training all over the world.

Groundwater monitoring in Sri Lanka

For many countries water usage is a continuous challenge due to periods of droughts, floods, and poor health caused by poor quality water. In order to improve public health, Sri Lanka has taken great steps towards a safer and more sustainable use of water through monitoring. In 2017, Royal Eijkelkamp was awarded a project in this Southeast Asian country which was kicked off in 2018. The Sri Lankan Ministry of Irrigation and Water

Resources Management requested the installation of a groundwater monitoring network in various regions, consisting of no less than 190 monitoring sites. The network's main objective: to gather real-time data that will help the government mitigate the increasing scarcity and contamination of groundwater. The country faced a variety of water-related challenges, mainly an increasing groundwater scarcity. A

growing population with higher water demands, but also a large variety of users, creates fluctuations in the level, quality and composition of the groundwater. In addition, the different climate zones in Sri Lanka call for a customised approach. In the dry zones, for example, residents can be affected by chronic kidney disease caused by the high salinity, arsenic and mercury content of water.

Continuous data stream for insight

Continuous monitoring of water quality and quantity parameters can help the government to identify critical levels and take measures when necessary. Royal Eijkelpkamp's one-stop-shop approach provided support from start to finish. From the preliminary site investigation and the drilling of boreholes prior to installation of the monitoring wells, to setting up a control room where the data can be studied, and training of the local project executors. The aim is that, once the project is finished from our side, the Sri Lankan government has all the resources and know-how available to independently continue their groundwater monitoring activities.

Water isn't the only global resource that's in danger; our soils are also affected by climate, use of industrial chemicals, and intensive monoculture farming. Add soil degradation and compaction to the mix and it becomes clear that at the current rate, our soils will not be able to sustain enough agriculture to feed our ever-growing global population.

Higher agricultural production on the same amount of land

The Philippines, a country heavily dependent on agriculture, has steadily seen its crop yield decrease in the past years exactly because of these issues. Natural disasters, exacerbated by climate change, and the degradation of natural resources have caused the Philippines to lose their leading position in the agricultural industry. A challenging situation in more ways than one, as around 30% of the local labour force works in the industry.

The country is now presented with the challenge to boost their farming productivity, but without the possibility to expand the square footage. This means that more crops need to be grown on the same amount of land, which requires a smarter and more efficient approach to food production. This all begins in the soil: insight in the properties of both soil and water helps to make plans for improvement and optimisation. In our latest project, in close collaboration with ASSIST Asia, Royal Eijkelpkamp supplies both technology and expertise to help local farmers generate these insights and use them to their advantage. Based on the necessary data on soil and water characteristics, actions can be taken to improve soil and water efficiency and make better use of the soil and water available.



Photo caption: Drilling for the monitoring wells



Photo caption: Installing the monitoring well



Royal Eijkelpkamp has a wide range of capabilities in its aim to become the world's preferred supplier of solutions, including one-stop-shop solutions, for soil and water projects in the areas of Land Degradation, Food Security, Urbanization, Pollution, Land Development, and Natural Resources. With their existing soil and water expertise and experience, they have served to elevate projects, from field measurement equipment to smart sensing and sampling, and from Edelman augers to sonic drilling machines.

Partners for Progress

They say “first impressions and lasting impressions,” and the phrase is hardly debatable when it comes to nonprofits. Since a nonprofit’s success largely depends on the impression it creates on stakeholders, a website that reflects the nonprofit’s soul is necessary to make a great impression. Especially with the world becoming more digitized since the Covid-19 pandemic, a website can be thought of as the first meeting between your nonprofit and its supporters—a meeting that can either make or break the bond between them. It’s important, therefore, to make this meeting a memorable one.

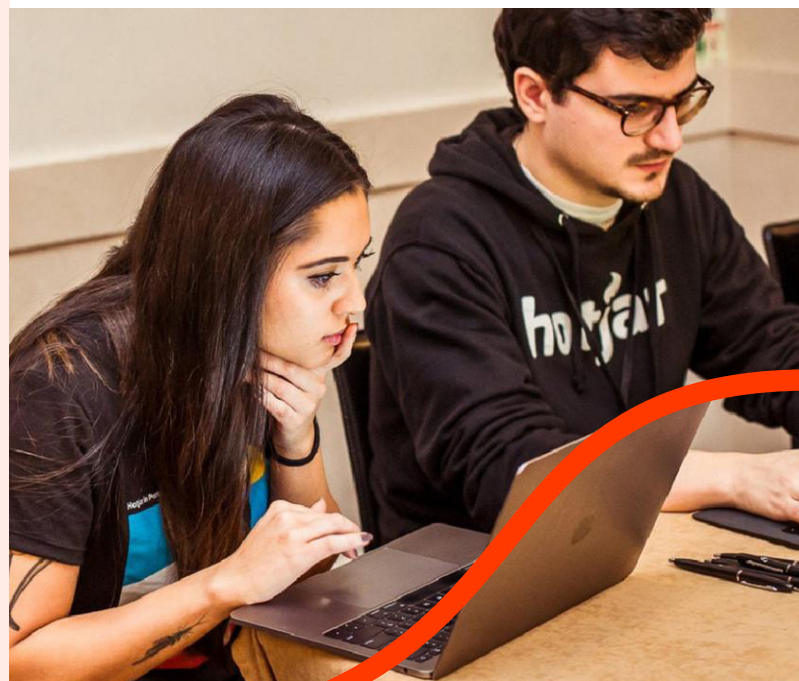
And Hotjar might just be the best partner to help you with that.

Founded in 2014, this company aims to help people make websites that their users love. Note the word, love. Bursting with human feeling, it denotes the significance that Hotjar attaches to emotions and empathy when designing its products. Transcending the traditional confines of web and product analytics, the company designs solutions that help people truly understand their website users. With this understanding, they are better positioned to improve user experience (UX) and invoke joy in their customers.

Hotjar facilitates a uniquely visual way of understanding how users interact with and react to your website. Four main features characterize their product: heatmaps, which indicate users’ behavior by showing where they click, move, and scroll on the site; recordings, which are live playbacks of users’ behavior on the site, tracing their movements from the smallest clicks to mouse movements; feedback, which allows users to give suggestions on each component of the site; surveys, which gather users’ opinion on new changes.

Using these features on Hotjar, one is equipped with the information, awareness, and confidence required to craft websites that actually work for users. As a Product Lead who’d benefitted from Hotjar says: *“I find Hotjar gives me empathy for the user. I can see their experience directly and notice how frustrating it can be, and this gives me real empathy...it’s a powerful thing—I spot insights in Hotjar, implement a change, then test with users.”*

For approved nonprofits, Hotjar offers a variety of free lifetime plans—some of the benefits include 500 monthly responses, 500 daily sessions, and even a 50% lifetime discount on a yearly subscription. Partner with them to create a great first (and lasting) impression through a website for your nonprofit now: <https://www.hotjar.com/about-us/>.



ESG SUMMIT

Future Roadmap for Net-Zero Economy

20th - 21st February 2023

City Garden GRAND Hotel, Philippines



The Critical Relationship between Sustainable Agriculture (SA) and Food Security

By: Ana Yong

What is Sustainable Agriculture?

According to the National Sustainable Agriculture Coalition in the United States of America, Sustainable Agriculture is “an integrated system of plant and animal production practices having a site-specific application that will over the long term” fulfill human food consumption needs, improve and retain the environmental resources used to produce the food, efficiently utilize non-renewable resources and agricultural reserves to enhance natural cultivation methods, support the financial capability of farms and advance the standard of living for farmers and society at large.

In a nutshell, the three fundamental goals of SA are environmental wellbeing, financial viability, and social & economic equity.

SA satisfies the United Nations’ (UN) Sustainable Development Goal No. 2 which is ‘Zero Hunger’. The objective is to stop world-wide hunger (especially in disadvantaged countries), attain food security and enhanced nourishment, and encourage sustainable agriculture.

Sustainable Agriculture provides a plethora of opportunities for the farming industry to create workable and viable food production models to provide sustenance not only for the current population but also for future generations to come.



2 ZERO HUNGER



END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

According to an article entitled "Russia's Ukraine invasion cut 30 percent of the world's wheat from global markets" by The Week dated 10 March 2022, the Russian-Ukraine conflict is threatening international food safety because the 2 countries together produce close to 30% of the world's wheat exports, over half the world's sunflower oil and 35% of barley.



Photo credit: Freepik.com

Sustainable Agricultural Practices

- 01 Crop Rotation and Diversity of Harvests**
This involves cultivating a variety of plants to maintain soil health and improve pest control.
- 02 Cover Crops and Perennials (plants that live more than two years)**
Cover crops are cultivated during off-season so that the soil is not left bare while perennials keep the soil covered and preserve living roots in the earth all year round.
- 03 Decrease Tillage**
If tillage is done often, valuable nutrients could be lost from the soil. By practicing no-till or reduced till methods, soil erosion may be diminished.
- 04 Reduce use of Pesticides**
Biological and mechanical controls may be applied to manage pests in place of pesticides, for example, garlic repels aphids while cabbage wards off moths.
- 05 Incorporate Livestock with Crops**
Farmers should allow farm animals to graze in the same area where the crops are grown so that animal manure may be used as fertilizers.
- 06 Apply Agroforestry Methodologies**
Trees and shrubs are grown around the crops as they provide shelter for plants and animals. Some farmers may even cultivate fruit trees as a secondary income.
- 07 Operate and Maintain the Land as a Whole**
Farmers manage areas which are not used or less used for agriculture as part of the farm. By allowing natural vegetation to grow alongside cultivated crops, soil health can be sustained with reduced soil erosion.

What is Food Security and how does Sustainable Agriculture play a part?

Food Security means having a consistent source of affordable and healthy food.

SA enhances food security by allowing farmers to increase crop yield, become more economically viable while maintaining land use, water, fauna and flora, and the biodiversity of ecosystems.

The United Nations has predicted that the world population would reach 8.5 billion by 2030 and 9.7 billion by 2050. Therefore, having access to reliable supplies of adequate and nutritious food is vital.

According to the Global Food Security Index 2022 report, Finland takes the number one spot in having the best food security rating of 83.7% among 113 countries.

With only 2.5% of prevalence of under-nourishment in the population, Finland has 0% of children who are stunted or underweight. It has made food security the number one priority through implementing green policies that encourage farmers to practice SA.

One such trailblazer is the Knehtilä Farm owned by Markus Eerola which produces its own clean energy through the use of a biogas plant installed onsite. Thus, he is not affected by the high cost of fuel. The biogas powers his tractor, truck and cars and this mode of transportation is zero-emission.

Oat and buckwheat are grown on the farm using 'Agroecological Symbiosis' where soil nutrients and energy are recycled. Agroecological Symbiosis (AES) "is a food production and processing industrial symbiosis that runs on renewable energy derived from its own feedstocks".

The Knehtilä Farm also won the award for Organic Business of the Year in 2021.



Ana Yong is a freelance writer and blogger who has written for *Unsustainable Magazine*, *E: The Environmental Magazine* and *HubPages*. Her articles focus on the Environment, Personal Development and Learning English.

The Nuances of the New Workforce



By: Viju Swaminathan

Intergenerational differences have always existed, but they were more to do with culture and lifestyle. The workplace had remained constant since the time of baby boomers except for the adoption of technology and perhaps method and style of communication. As technology defined speed and efficiency, the language of work became more informal and casual. These differences came about in a subtle, staggered and fairly seamless manner. However, with the entry of the millennials into the workforce the differences they have initiated are prominent if not stark. Alongside, the post millennial, the Gen-Z are the new kids round the block, whose advent into the world of work coincided with the upheaval of the pandemic. The pandemic, in its

own right, triggered huge changes in the people's work and life. Work from home, a workstyle close to the heart of Gen Zs, became the new normal.

But, are the millennials and Gen Z really that different from any other demographic group? Their work habits, values and motivations have given rise to much speculation about the future workplace ecosystem. The millennials and Gen Z grew up surrounded by innovations of technology which have influenced their behaviors and perspectives. They are very different from the older generations in the way they view work and approach essential tasks. Interestingly for the new workforce, work is fundamental to their lives; the quality of work assigned to them is key to their professional satisfaction. In other words, they derive



Viju Swaminathan has 40 years of experience in various aspects of English language teaching, Human Resource development, HR Consulting, training needs analysis, Instructional Design & content development, and training delivery. Career stints include General Manager - Human Resources, Randstad India and Head - HR Consulting, TATE Leadership Consulting, Chennai, India.



their motivation and sense of well-being from the kind of work they do. The younger employees are lifelong learners as they are well aware of the importance of constant enhancement of skills and competencies. They take responsibility for their own career paths and are willing to make investments towards growth from the start of their career.

While they are labeled as a generation that has no hesitation in switching jobs for higher pay, there is no doubt that they are committed to the company they work for and are keen to make a commendable contribution. Their money management is well thought

out and they believe in investing for the future. The newer generations also care about social communities and make measurable contributions by way of time and effort.

With this understanding of the new workforce, the responsibility of the management lies in catering to their expectations and ensuring a challenging role that will do justice to their intelligence and interests. While trust and autonomy are important for them to feel they are respected, these generations can handle critical feedback with grace provided the feedback is constructive and objective. Long work hours and

lack of organizational communication can bring down their motivation urging them to gravitate towards more interesting roles in another organization.

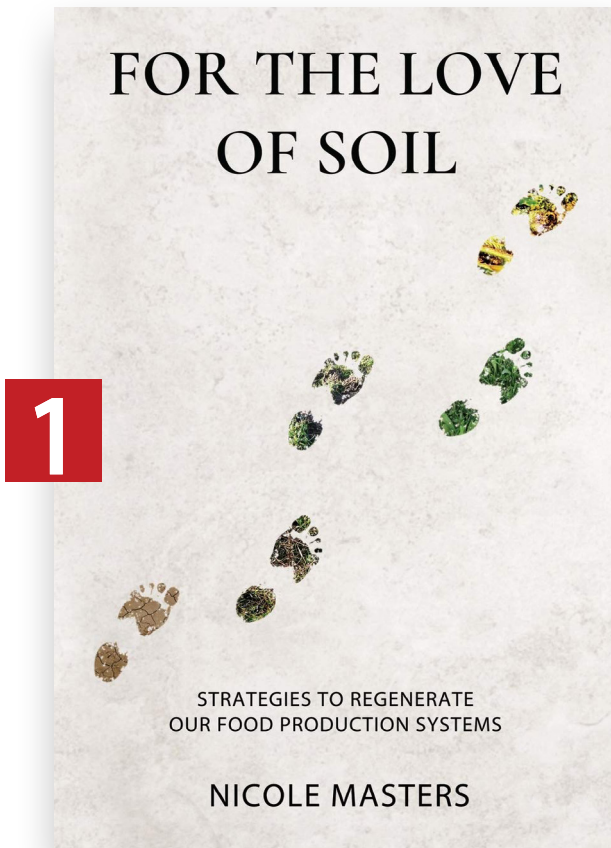
All said, today's workplace has an interesting blend of older and younger generations, from baby boomers to Gen Zs, working together resulting in a robust combination of experience and innovation. An organization that balances the differences and envelops the varied perspectives, skills and workstyles has achieved diversity in its true sense.

OUR PICKS

Looking for your next read, documentary to watch, or organization to follow? Look no further, for we share some of our favourites in the development space.

If you'd like to suggest a resource for inclusion in this list, email us at editor@theimpactmagazine.org

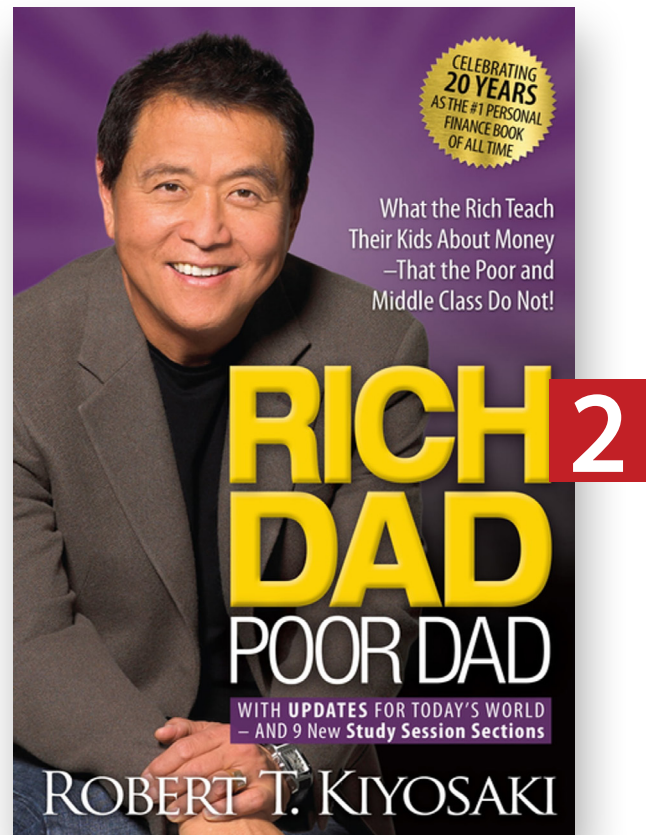
Books



For the Love of Soil (2019)

by Nicole Masters

The book is more of a folk narrative, with important facts hidden in the stories. It provides farmers with the information, skills, and insights they need to restore ecosystem health while increasing farm/ranch earnings. Along with fundamental soil health concepts and restoration methods, For the Love of Soil offers land managers an action plan to jumpstart their soil resource's well-being, regardless of scale.



Rich Dad Poor Dad (1997)

by Robert Kiyosaki and Sharon Lechter

Rich Dad Poor Dad provides actionable lessons based on real-life experiences for novices seeking economic prosperity. It teaches us concepts about applied economics that we should have learned in school or at home. Accounting, investing, market understanding, and applicable legislation are described so that even a layperson may completely understand them. This book shows us the distinction between acquiring assets and disposing of obligations in ways we never expected.

Podcasts



Vertical Farming

Hosted by Harry Duran

A weekly podcast where Mr. Duran engages in conversations with CEOs, Founders, and luminaries from the exciting and fast-growing world of Vertical Farming. Tune in to the episodes to discover or cure your curiosity of the world of Indoor AgTech. Already in its sixth season, the diversity of speakers opens horizons to different experiences, expert advice, challenges, and solutions.

The Nonprofit Leadership Podcast

Hosted by Dr. Rob Harter

Dr. Rob is a nonprofit executive professional with an experience of over 27 years in leading and building nonprofits. Through the podcast, the audience gets to hear first hand from leaders in the development sector about strategies and practices that made them successful.

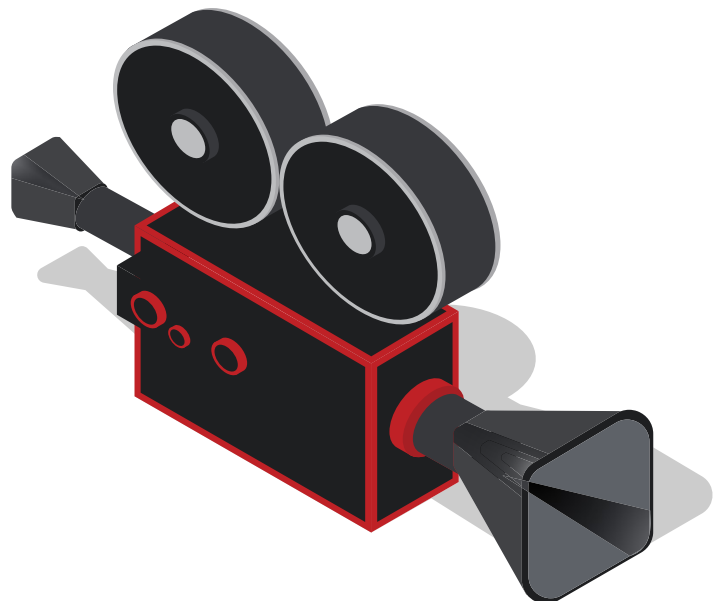
Future of Agriculture

A weekly podcast where Mr. Tim Hammerich talks to farmers, founders, innovators, and investors to share stories of Agtech, sustainability, resiliency, and the future of food. Discussing and sharing insights on every innovation, best practice, and data available in the Agri field.

Video

Equal Half

The documentary provides practical ways in which sectoral plans and budgets can be made gender-responsive. The video captures exemplary work done in India by the Department of Science and Technology and the Department of Agriculture and Cooperation at the Union (local) level. The experiences show how in the two so-called 'women unrelated' sectors, gender issues have been recognized and addressed in sector policies and programmes. At the level of State government, the documentary covers the initiatives taken by the Kerala State Planning Board and highlights gender-targeted programmes in sectors such as Public Works Department and Police. To capture these experiences, interviews were conducted with officials of the Departments at the Union and State level and women's testimonies were collected from the field.



Make Farming Sexy, Make it Profitable

Interviewed by Carmella Disilio; Written by Deniere Zaint Garcia & Reysha Ruiz

Last November IMPACT had the opportunity to interview Senator Francis “Kiko” Pangilinan as he sat down with us to explore and discuss the current agricultural issues that farmers face in the Philippines, and how they link to government efforts both existing and urgently needed.

Q: What are the main problems and challenges that have persisted over the years in agriculture

A: It is the neglect of society, of the government, and of the private sector to give priority to our agriculture and fishery sectors. If agriculture was at all included in the Top 10 Budgetary Appropriations of the government then it will undoubtedly rank low. In fact, the difference between the Philippines and Thailand, Taiwan, Vietnam, South Korea, Japan, and China in Agriculture is that these countries give more priority to the farmers and fisherfolks than our country. Our farmers are around 50 years old on average, their highest educational attainment on average is at grade 4, and have an average monthly salary of 6,000 pesos.

A: This shows exactly just how lacking the prioritization of the Philippines towards the agriculture and fishery sectors truly is. The country stands as one of the most food-insecure countries, we have a high reliance on food importation, and even higher food prices compared to other countries.

Q: What are the new problems farmers have in this time of pandemic?

A: Despite the pandemic’s recent effects on the global market with prices skyrocketing, particularly for oil and fertilizer, there is still little to no difference in farmers’ profits as their goods are sold at a lower price, while the traders are selling those produce at double the amount. The Philippines has the 5th largest coastal waters, yet here we are importing fish, meat, rice, and vegetables from other countries.

Q: What are the existing government policies and actions that have been done in an attempt to address these challenges?

A: The government funds should be focused on:

- Building the capacity
- Raising the income
- Raising the capacity of our farmers and fisherfolks

Just last 2019, the Republic Act 11321 Sagip Saka Law was passed, it is also known as the Farmers’ Enterprise and Entrepreneurship Development Program under various other government agencies whose goal is to encourage farmers toward Farm Enterprise Management and Entrepreneurship. The Sagip Saka Law’s Section 7 exempts farmers and fisherfolk from public bidding and places them under negotiated contracts where Local Government Units (LGUs) can now directly buy their goods at the right price.

A: Aside from this, there is ongoing work on the amendment of the Rice Tariffication Law to ensure that the fund will be given directly to the farmers, which could be an additional cash assistance to them. However, in a 5-6 year period, we have to triple the budget for agriculture to meet the minimum requirement to achieve: building the capacity of our farmers, accessing the markets, organizing & providing the farmers credit, and increasing farmers' income.

Despite the pandemic's recent effects on the global market with prices skyrocketing, particularly for oil and fertilizer, there is still little to no difference in farmers' profits as their goods are sold at a lower price, while the traders are selling those produce at double the amount. The Philippines has the 5th largest coastal waters, yet here we are importing fish, meat, rice, and vegetables from other countries.

Q: Sagip Saka Law was enacted in 2019. What has been its progress in 2022?

A: Since its enactment, the Sagip Saka law has in fact led to the "Nagkakaisang Magsasaka ng Isabela" (Cooperative of Rice Farmers in the Province of Isabela) to prevent the waste

A: of approximately 6 million kilos of rice grain as they sold their harvested produce directly to the LGUs in the surrounding cities. Since its implementation, farmers have had a nine-times increase in their profits reaching 62 million in October 2020 from 7.2 million in 2019. Farmer Cooperatives profited more because of this law.

Q: What is the importance of cooperative and cooperative leaders in improving the lives of farmers?

A: Cooperative and Cooperative Leaders are essential because you need to have an Economy Subscale, and having enough scale helps to have better access to the market. These cooperatives help in promoting the support and extension of services to farmer groups. For example, in the irrigation system, as a cooperative, farmers get to share the cost of maintaining and benefitting from the irrigation.

Q: Can you share your key takeaways in practicing organic farming, and how can you promote this to other individuals and farmers?



A: I've faced several problems in organic farming over the years, including dealing with crop pests, crop destruction due to natural disasters, and others. If I had difficulty resolving these challenges at this period, imagine how difficult it will be for our farmers, who have fewer resources to address these concerns promptly. "My key takeaway is that you have to be patient, you cannot rush". I respect the farmers for their absolute patience and perseverance, but unfortunately the majority of the Philippines do not share this same respect. It's so ingrained in our society to look down on agriculture and farming, which is so unjust.



Photo credit: Freepik.com



Photo credit: Freepik.com

Q: How does this contribute to the overall landscape of the country?

A: When I sat down to talk to farmers in San Simon, Pampanga, I learned that their years of farming cumulatively reach up to 186 years. Almost two hundred years they have been farming & feeding the nation, and what did we, as a people and as a nation give them?

I learned that we should treat our farmers like our parents. We should continue to educate university students across the nation about agriculture to value farming. Let's make farming sexy or optional, make it profitable. If we can make a living out of farming, then there are people who would want to do it.

Q: Do you think there's a need for a more specialized focus when it comes to aquaculture?

A: We should definitely separate land-based agriculture from aquaculture. Our territory is 80% water and only 20% land, so we need to have strong fisheries coastguard intervention partnership to protect our waters. Other countries are benefiting from our resources instead of us.

Q: What laws do you wish to be enacted to further address other agricultural issues or challenges?

A: We have to reserve and preserve agricultural lands, instead of converting them into residential assets. Given the increase in population

A: we need to have a larger agricultural land to feed the increasing number of people in our country. And we need to have more tax incentives so capital will flow into agricultural investments.

And the Rice Tariffication Law has to be amended. The Government must protect the farmers instead of siding with the big traders.



Francis Pancratius Nepomuceno Pangilinan, popularly known as Kiko, is a lawyer, politician, and farmer from the Philippines. He is a former Philippine Senator who served as the President's Assistant for Food Security and Agricultural Modernization from 2014 to 2015, which paved the way for Sagip Saka Law to be implemented, an advocacy that aims to improve farmers' incomes and lives by modernizing agriculture and ensuring the sustainability of agriculture and fisheries.

ANNOUNCING!



ASSOCHAM Southern Region

Presents

3rd Edition

CSR & Sustainability Awards 2022



OBJECTIVE

The objective of the Award is to acknowledge, motive and incentivize corporate members for their contribution towards social and environmental goals and look at the CSR mandate as an opportunity to move towards strategic philanthropy, rather than an onerous compliance, with support from civil society and the State Governments to make a difference to the lives of people in the State.

ASSOCHAM Southern Region is planning to organise 3rd Edition of the Corporate Social Responsibility (CSR) & Sustainability Awards to recognize companies through their innovative & sustainable CSR initiatives in multiple sectors.

AWARD CATEGORIES

- ❖ Excellence in providing support to healthcare
- ❖ Excellence in supporting education and skill
- ❖ Excellence in providing livelihood to local community
- ❖ Excellence in eliminating Hunger and Poverty
- ❖ Excellence in Employee Volunteering
- ❖ Excellence in Energy Management
- ❖ Excellence in Waste Management
- ❖ Excellence in Water Conservation
- ❖ Excellence in Diversity & Inclusion
- ❖ Excellence in Carbon Emissions reduction

TIMELINE & REGISTRATION FEE

(Per Category)

Sl. No.	Description	Registration Fee	Total	Timeline
1	NGO's/Foundation	Rs. 15,000/- + 18% GST	Rs. 17,700/-	Upto 5 th Feb. 2023
2	Corporates	Rs. 20,000/- + 18% GST	Rs. 23,600/-	Upto 5 th Feb. 2023

Presidium Partners



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THE ASSOCIATED CHAMBERS OF COMMERCE & INDUSTRY OF INDIA (ASSOCHAM)

Southern Regional Headquarters: #613, 6th Floor, Barton Centre, 84 M G Road, Bengaluru – 560 001



Bayer Kubo

Innovative solutions for sustainable development in agriculture and health



“This Bayer Kubo is where Bayer in the Philippines is bringing together our three divisions: Consumer Health, Pharmaceuticals, and Crop Science under one program to support our farmers”



Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) director, Dr. Glenn Gregorio, said that the pandemic reduced the volume of agricultural production by 3.11 percent or 17.03 million tons due to the decline in agricultural farm labor affecting about 100.77 million people. It disrupted farming communities and stretched out rural healthcare networks with farmers still struggling to recover and boost productivity.

To support the agricultural community, global life sciences firm Bayer Philippines Inc. has launched a pilot Bayer Kubo in Manaoag, Pangasinan with the Asia Society for Social Improvement and Sustainable Transformation (ASSIST). Through the pilot, we shall run capability and capacity building programs combining health and agriculture by tackling family planning, self-care and nutrition, as well as agri-oriented financial management and best practices.

The program is being piloted in Brgy. Cabanbanan in Manaoag, supporting the community of smallholder farmers surrounding the Bayer Learning Center located in the area. The Bayer Learning Center is where the farmers in the community learn best practices and

see the latest solutions available for vegetable production. With the Bayer Kubo program in place, women farmers and farmers’ wives are receiving expert-led training on family planning, farmer self-care, and basic farm financial management.

“This Bayer Kubo is where Bayer in the Philippines is bringing together our three divisions: Consumer Health, Pharmaceuticals, and Crop Science under one program to support our farmers,” says Angel Michael Evangelista, Managing Director and Country Division Head - Pharmaceuticals for Bayer Philippines Inc. “With the growing role of women in Philippine agriculture, who face competing demands to care for their families while ensuring they contribute to farm work and productivity, we aim to support women farmers and farmers’ wives’ through health, wellness, and sustainable agricultural practices - contributing to Bayer’s vision of ‘Health for all, Hunger for none.’”

Through the pilot program, Bayer Philippines and ASSIST together aim to empower over 100 women farmers as Community Champions through its Master Training component. These Master Trainers will in turn ensure



continued knowledge sharing and capacity building by training their community members on the best practices of family planning, farmer self-care, and smallholder farmer support.

Since the pilot launch in September, we have conducted Women’s Health Master Training and roll-out in Manaoag, Pangasinan. The training was attended by 46 Master Trainers, who went back to their communities to train at least 15 members from their community. 25 from these have already achieved their target for training members.

As an incentive, the first 10 trainers received grocery packages worth PHP 1,000 and a PHP 300 in cash. The rest of the trainers received PHP 300 in cash. The remaining Master Training is scheduled to be completed in January and February, with 2 more (Consumer Health and Crop Science) master training in Manaoag, Pangasinan and 3 more (Women’s Health, Consumer Health and Crop Science) in Dolores, Quezon.

“As ASSIST moves forward in this partnership with Bayer Philippines, we will remain committed in creating more capacity-building opportunities that fit the needs of the women farming communities in Manaoag, Pangasinan. We acknowledge that other farming communities would greatly benefit from our intervention. As such, we hope to replicate the Bayer Kubo

program in other farming communities and locations in the Philippines,” said Francis Macatulad, Executive Director of ASSIST.

The Bayer Kubo is Bayer Philippines’ local corporate social engagement (CSE) program that started out by encouraging and supporting communities to grow their own produce while encouraging an integrated, holistic approach to growing nutritional food using responsible agricultural practices. To date, Bayer Philippines has established three Bayer Kubo across different communities: in Ususan, Taguig; in Calauan, Laguna; and in Payatas, Quezon City in partnership with NGOs such as Rise Against Hunger and AGREA.



Bayer is a global enterprise with core competencies in the life science fields of healthcare and nutrition. Its products and services are designed to help people and the planet thrive by supporting efforts to master the major challenges presented by a growing and aging global population. Bayer is committed to drive sustainable development and generate a positive impact with its businesses. At the same time, the Group aims to increase its earning power and create value through innovation and growth. The Bayer brand stands for trust, reliability, and quality throughout the world. In fiscal 2020, the Group employed around 100,000 people and had sales of 41.4 billion euros. R&D expenses before special items amounted to 4.9 billion euros. For more information, go to www.bayer.com.





Photo Credits to Becca Tapert (Unsplash)

Institute of Development Studies (IDS)

Location: Falmer, East Sussex



Ranked by the 2020 Global Go To Think Tank Index Report as the number one international development policy think tank, the Institute of Development Studies (IDS) aims to provide research and training that enhances the knowledge and action required for more sustainable and equitable development across the world.

What makes this development school unique is its appetite for cross-sectoral collaboration, its dedication to four focus areas in development, and its vibrant learning environment.

IDS' Masters courses are fashioned to help students connect insightful research with policy and practice. Sticking close to the interdisciplinary nature of development studies, they cite 'collaboration' as one of their main priorities. Students are encouraged to expand their interests across the sciences and different sectors to arrive at a multidisciplinary, holistic approach to developmental issues. As part of this initiative, IDS also works with various partners to build international research and mutual learning networks.

There are four core areas that IDS is committed to creating an impact. Based on the problems in these areas, their courses accordingly equip students with the knowledge required to engage in informed and innovative thinking. To *uphold social and environmental justice*, students are taught about climate change's social, economic, and political aspects. To *reduce inequities*, inclusive growth and

good governance are two major values the courses focus on. Research on tackling diseases and strengthening food systems is explored to foster healthy and fulfilling lives. To *nurture inclusive, democratic, and accountable societies*, students' conceptual understanding of social change processes is deepened. If any of the causes you're passionate about falls within these four areas, then the chances of honing your knowledge and skills in these areas are extremely high due to the importance that IDS places on them.

The learning environment in IDS is characterized by diversity, creativity, and growth opportunities. The institute hosts students of more than sixty different nationalities, who go on to form lifelong bonds. The instructors, often active researchers in the field, bring their practical knowledge to the classroom and encourage students to craft solutions to development challenges. Through workshops, students can also acquire a host of valuable skills in "critical reading and writing, research communication and policy engagement, participatory methods, and multicultural teamwork."

IDS postgraduates have gone on to work as Ministers in national organizations, high-level officials in international development organizations, civil servants, and leaders of civil society organizations. Regardless of the differences in their career paths, you can be sure that each student comes out of this school better poised to think about and act on the contemporary developmental issues facing them.

Lean Canvas

The Lean Canvas is a business modeling tool created to help deconstruct a startup idea into its key and most risky assumptions. Deeply influenced by the lean startup methodology, the Lean Canvas serves as a tactical plan to guide entrepreneurs in navigating their way from ideation to building a successful startup. The methodology has been developed by Ash Maurya as an adaptation of Alexander Osterwalder’s Business Model Canvas – the most used modeling canvas in the world. Any kind of entrepreneur needs to put their ideas on paper, so it’s possible for every stakeholder to be aware of the goals and threats of the project. That’s the best way to make everyone think of solutions and accomplish the aimed results. But this process needs to overcome two challenges:

1

Translate your thoughts into some language. It is complicated to translate what’s in our minds into words clearly and assertively. The opposite often occurs: everything gets even trickier when concepts must become concrete and visible.

2

The time this translation can take. Traditional business plans usually take weeks – sometimes even months – for elaboration. This may become a waste of time and energy, especially considering that the market and your business scenario can change in a few days. When we think of an unexpected crisis, it can transform drastically.

Lean Canvas Template



The purpose of Lean Canvas is precisely to solve both problems. Because this method is based on practical principles, with a simple, user-friendly visual language, which allows the entrepreneurs to test their hypotheses more efficiently.



PROBLEM: when you want to sell a solution (whether a product or a service), there should be a demand, in other words, at least one identifiable problem. Every customer segment you are going to define has its own problems, and it's your business's purpose to solve them. You are going to build your whole canvas over this building block. This section, then, must contain up to three priority problems.



CUSTOMER SEGMENTS: perhaps this is your first building block to establish. Because probably the first step to understanding your business will be to discover who your customer is. After all, you can only get to know what problems you will solve when you know the ones who face them. Thus, if there is more than one customer segment, you ought to develop one canvas for each.



UNIQUE VALUE PROPOSITION: This block shows how your business differentiates from others and what value your customer will only have through your product or service and no one else. Therefore, list what makes your brand stand out over the competition – i.e., why your customer must buy from you rather than your rival.



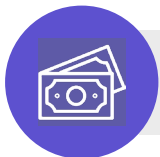
SOLUTION: now that you know what and whose the problem is, it's time to offer the solution. It must stand for the minimum set of functionalities and features (Minimum Viable Product) that allows you to deliver the value proposition from the previous block.



CHANNELS: here, you have to inform the means you are going to use to reach your audience. That includes all marketing, communication, and distribution channels you intend to adopt, both from traditional and digital media.



REVENUE STREAMS: ask yourself, "how much will my customer pay for my product/service?". The price and the payment system chosen are a very important part of your offer. That can mean the success or failure of your venture.



COST STRUCTURE: gather here all the costs needed for you to be able to sell your product. You should list all the expenses, from research and development to monthly fees and salaries.



KEY METRICS: you must get to know what metrics you are going to apply when measuring your business's performance. That's the only way you may monitor the team toward the results.



UNFAIR ADVANTAGE: ask your team, "what does this business/product/service have, that no one else does?". This is possibly the most difficult question in the whole canvas. The answer must be something that cannot be copied, mimicked, or acquired – unique in the market. It's challenging, but it's an essential matter, mainly if you intend to use the canvas for attracting partners and investors.



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SCAN ME



◀ I am so grateful to Digital Daana, as with my new laptop, I am able to now complete my B.SC IT. My family had never thought that I would be able to make it to college and learn a professional skill.



▶ I could not attend any classes during the two years of the pandemic. Despite me being able to do all tasks, I got left out in competitions that was conducted by my school. With my new laptop I am so rejuvenated and aim to fly high.



◀ I thank Digital Daana to have changed my goals and aspirations forever. With my new laptop, I will be able to do so many new things so easily.



▶ All my friends were able to continue with school. But due to our family conditions, I could not buy a phone or any device. I am so thankful to Digital Daana. The laptop I have received completely changed my life.

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Regenerative Agriculture Silver bullet?

Regenerative agriculture has garnered massive global attention which only keeps growing as the world recognises how the industrial farming system is broken: ruinous for the environment and rural economy alike. It's accepted that over a third of available topsoil is already severely degraded, and that the world's poorest people live in rural areas. Enter the dark cloud of climate change looming on the horizon, and people are looking for alternatives, solutions... that silver bullet.

By: Stephie Mendelsohn

As a production system, Regenerative Agriculture offers farmers (and the rest of us who depend on them) the potential for improved quality and reduced input costs and access to new and premium markets. It also promises to have a broader impact; as when managed regeneratively agricultural lands can sequester carbon, mitigate climate change and curb biodiversity loss.

All looks glossy and promising but we know by now that silver bullets

don't exist. The reality is that there is a whole lot of nitty gritty in making Regenerative Agriculture work.

Grounded works in Africa to scale regenerative agriculture by making it economically viable. We do this by partnering with agri-processing companies whose impact lies at the intersection of agriculture, livelihoods and environment. These companies are a gateway to many smallholder farmers who in turn are custodians of the soil. When Grounded started, we were

building companies like these up from scratch. Over time we realised that with multiple bottlenecks to squeeze through and hurdles to overcome, we could add more value by joining forces with existing entrepreneurs.

What we've found is that many impact driven entrepreneurs in Africa adopt innovative and largely informal approaches to building their businesses. This promotes resilience and adaptability - crucial traits if you want to 'make it' in the African business



Photo caption: Grounded and Trianon teams line up together in front of bags of cinnamon in the warehouse in Muhaza, Tanzania. Grounded focuses on high value, non perishable ingredients including spices, herbs and tea.

context. But over time this avenue can hinder scale and / or efficiency. Building the bridge between the formal and informal isn't simple, its not easy for a leopard to change its spots. But without doing so, these companies find themselves sitting in the proverbial 'missing middle': unable to attract equity (too small, too independent, too 'informal') but also too big for more flexible debt options (which focus on micro-enterprises). By partnering hands-on with them, and taking an active role in their operations, Grounded tackles the challenges these entrepreneurs face.

On a more operational level, one of the tricky dynamics that comes up time and again is the chicken and egg loop between the product and the market. Potential clients often want a certain quantity, quality or consistency before committing, which usually requires an investment on the ground, at the origin of good quality outputs. Making this investment without certainty and security of an offtake market can be a showstopper at worst or at a minimum introduces a risk for producers. Similarly, with the demand for regenerative products, the burden of the transition sits with the producers. In these situations, blended finance - combining grants or patient capital with traditional funding - helps to de-risk these opportunities and can be key to getting 'unstuck'.

Finally, there's the logistics of getting regenerative ingredients to the brands that want them. Tackling this labyrinth is a big part of [Grounded Ingredients](#) who are bridging the gap between brands invested in ethical sourcing and regenerative producers. Beyond the noble mission lie decidedly unsexy mountains of paperwork, a faltering international shipping system and finding or growing enough supply to reach economies of scale that make it viable. We knew there was a gap in the market for this, but the deeper we get, the more our humility grows. We remind ourselves that if it were easy, it would already exist!

So this big promise of regenerative agriculture, the silver bullet, the untapped impact - thats not a farce - but we've found that getting there requires a business turnaround, supply chain wizardry and some panel beating of the whole food and agriculture sector. We can (we do) learn a lot by the bootstrapping, innovative, informal approach in Africa.

All of this and we've yet to discuss the reality of repairing - regenerating - the soil! To read more about how Grounded is doing regenerative agriculture, the complexity of the living soil food web which we can hold in our palm, and yet scarcely grasp, please head over to our [blog](#).

Only a third of the transition to regenerative agriculture happens on the land. A transition changes everything and requires a business turnaround.
Gijs Boers,
Grounded CEO and Founder



Stephie is Head of Impact at Grounded and helped craft the company's growth strategy from its inception in 2015. She also supports business development for the Grounded Investment Company. Stephie is an avid explorer, having twice crossed the Atlantic Ocean under sail, and always aiming to visit more countries than her number of years on Earth.

Empowering Small Farmers through the 3Fold model

By: S Balakrishnan

About 120 million smallholder farmers employ themselves in their farms, and provide employment to their own family members and a few more. The livelihoods of smallholder farmers are nevertheless constrained by a variety of issues. It is challenging for small farmers to escape poverty with their current portfolio due to their restricted access to many other inputs and services, low soil quality, declining water tables, and marginal land holding. New commodity entry entails production risk, market risk, and capital availability/cost risk.

Vrutti (<https://vruttiimpactcatalysts.org/>), a not-for-profit organization registered under the Karnataka State Societies Registration Act, 1960 has been working to improve the lives and livelihoods of small farmers through our 3Fold model. Founded by graduates of the prestigious rural management institution - Institute of Rural Management, Anand (IRMA) in Gujarat, Vrutti is a part of the larger Catalyst Group, a 28-year-old institution that has made a difference in the lives and livelihoods of over a million poor and marginalized. Vrutti works with the vision of "enhancing people's well-being through knowledge, innovation and transformative actions".



Photo caption: Farmers harvesting carrot in Bageppalli, Karnataka



3F Model

3Fold is about enabling farmers to become wealthy, resilient and responsible, being successful entrepreneurs, and sustained job creators, having their income increased by three times. The model believes in the empowerment of farmers and their entrepreneurship orientation/potential.

It addresses the key gaps of lack of integrated services, need for 'diversified options' (value addition, farm, allied and off-farm), augmented by 'integrators/activators at field level' and 'technology', and establishment of a sustainable eco-system at a cluster level.

The three parts of this model are personal growth of farmers; business plan for enterprises and potential diversification. The personal growth of farmers is by creating an effective plan for a farmer, customized capacity building, mentoring support along with extension advisory, establishment of convergence with suitable partners for farmers to access seeds, inputs, farm machinery, financial services, capital and markets besides leveraging the Government's social protection schemes.

Under the 3Fold model, Vrutti delivers a bundle of services grouped under the six Cs - Create, Construct, Capacity, Channel, Connect and Capital.



Farmers' Journey in the 3Fold Model

The farmers' journey with 3Fold starts when they are attached to an activator who offers support. Achievement of 3Fold increase in income begins with farmers' existing portfolio through cost reductions, better productivity, appropriate financing linkages and better marketing of existing products.

Moreover, Vrutti operates its virtual Business Acceleration Units (BAUs), through which it incubates clusters that facilitate creating a strong ecosystem in the agricultural sector. Sustainable and scalable farming enterprises in terms of institution, technology, activators and collaborators/partners are established in these clusters.



Photo credit: Freepik.com

3Fold enables farmers to move up in the value chain and increase their margins from the consumer pie by building on key potential agri and allied value chains. Vrutti supports farmers to form farmers' interest groups, women enterprise groups, farmer producer organizations (FPOs), etc. to aggregate produce and sell it to market. These group-based activities help farmers buy inputs at a lower cost and minimize marketing risks. Our aim is to return 80 percent of the consumer pie back to farmers by enabling farmers and their institutions to deal with consumers and markets directly.

This 3Fold model has covered around 42,500 farmers through 29 FPOs in nine locations across the six states of Tamil Nadu, Andhra Pradesh, Karnataka, Madhya Pradesh, Chattisgarh and Maharashtra in terms of increase in farm incomes and assets, resilience, environmental improvement, responsible and sustainable farmers' institutions. Further, the model encourages farmers to take up sustainable agriculture practices including climate smart agriculture.



Photo caption: Farm Advisory Support in Pudukkottai, Tamil Nadu

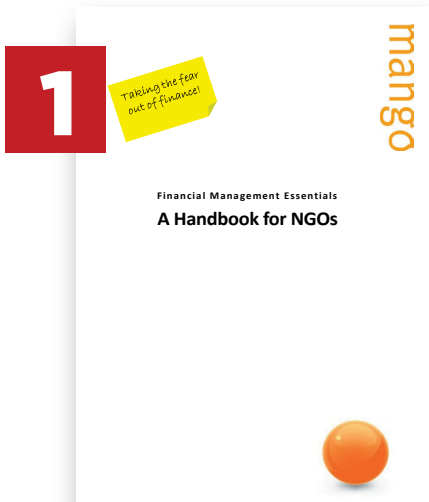


S. Balakrishnan is the CEO of Vrutti; he is based in Bangalore. He is passionate about livelihoods and financial inclusion and has worked extensively on agriculture commodity value chains. One of his roles at Vrutti is the large-scale implementation of the 3Fold model among small farmers in India.

CURATED RESOURCES

From the vast gallery of information about Project Management and related topics for nonprofits, we have curated some interesting and educational pieces.

To surf through more of such assets, visit our official website.



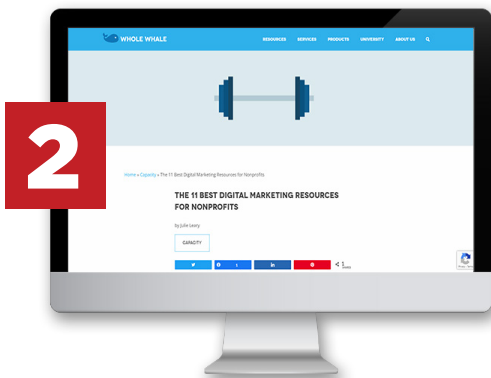
[Financial Management Essentials: A Handbook for NGOs](#)

By Terry Lewis, for *Management Accounting for Non-Governmental Organizations*, August 2013.

Excerpt: “There are two main ways to build a budget – incremental and zero-base. You should adopt the approach which works best for you, given the skills and time available.”

Description: In a rapidly changing and competitive sector, NGOs must adopt appropriate financial management practices to achieve their developmental goals. Financial management is the practice of planning, organizing, controlling, and monitoring the financial resources of an organization. This handbook provides the reader with valuable information on managing and preserving the financial health of the NGO.

If you want to know more about budgeting techniques best-suited for your nonprofit, and gain other tips on managing and preserving the financial health of the organization, then read “Financial Management Essentials: A Handbook for NGOs.” *Management Accounting for Non-Governmental Organizations*, August 2013.

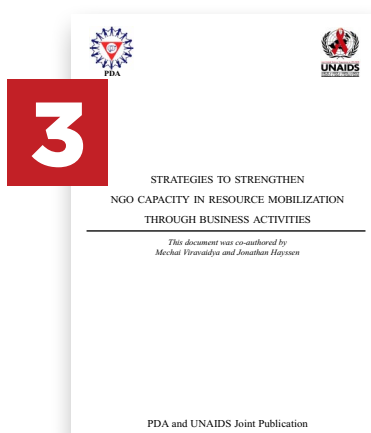


[The 11 Best Digital Marketing Resources for Nonprofits](#)

By Julie Leary, *Whole Whale*

Excerpt: “The top 11 digital marketing tools available have all been assembled in a white paper that is intended exclusively for NGOs. It’s critical to stay current with the most recent tools for digital marketing because the internet is always evolving.”

Description: The internet is constantly changing – it’s important to stay up-to-date with the latest digital marketing resources. Social media, email savvy, SEO, digital advertising, analytics, optimization tools like popups, A/B testing, and web design are non-negotiables that should be in every nonprofit’s toolbox. We face the same challenge here at Whole Whale: How can we make sure we are in-the-know about the latest tech trends, platform changes, and events? The answer: Digital marketing training.



[Strategies to Strengthen NGO Capacity in Resource Mobilization Through Business Activities](#)

By Mechai Viravaidya & Jonathan Hayssen, *UNAIDS & PDA*, 2001

Excerpt: “With a particular emphasis on commercial activities, the paper aims to raise NGO understanding of the opportunities and potential issues related to alternative resource mobilization tactics. It is hoped that this would encourage NGO administrators to choose and use the best resource-generating techniques so that their organizations may carry on and expand their crucial work.”

Key Considerations for Cloud Adoption by NGOs: Five questions to help you decide which cloud computing solutions to adopt

By Richard Cooper, TechSoup, 2013

Excerpt: In order to help you choose which cloud computing solutions to use, the post supplied five questions. Even though these concerns are not new, they continue to be the most important ones when any firm contemplates using new technology, including cloud computing.

Description: In TechSoup’s 2012 Global Cloud Computing Survey, 24 percent of NGOs said that they used cloud-based web conferencing. Yet 55 percent said that they used WebEx, Citrix GoToMeeting, ReadyTalk, or Skype, all companies that market their services as cloud-based web conferencing. This difference in response rates probably indicates that many nonprofits don’t understand what cloud-based web conferencing actually is. And it makes sense that in that same survey, 60 percent of respondents cited a lack of knowledge as a major barrier to cloud computing adoption.

So how should nonprofits evaluate cloud technologies? You can use the five key questions below to analyze cloud computing services. Answers to these questions will help you understand the true value of these solutions to your organization. This will enable you to decide which services to adopt and how to implement them.

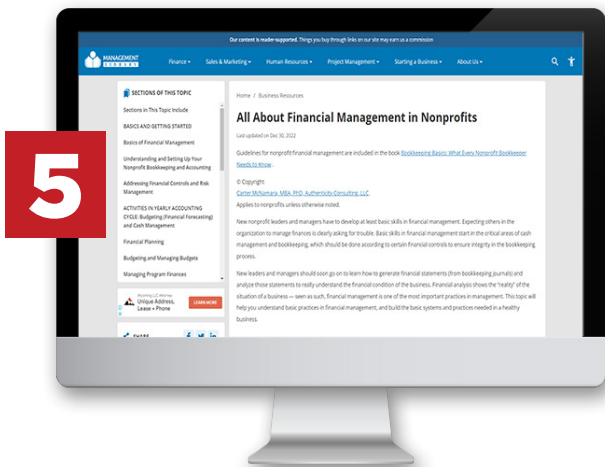
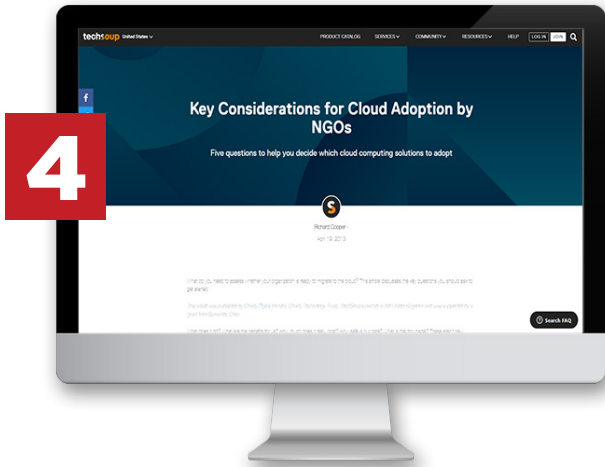
All About Financial Management in Nonprofits

By Carter McNamara, Management Library, 2022

Excerpt: Financial management is one of the most crucial management disciplines since financial analysis reveals the “truth” of a company’s position. You can develop the fundamental processes and practices required for a successful business by learning about the fundamentals of financial management from this topic.

Description: New nonprofit leaders and managers have to develop at least basic skills in financial management. Expecting others in the organization to manage finances is clearly asking for trouble. Basic skills in financial management start in the critical areas of cash management and bookkeeping, which should be done according to certain financial controls to ensure integrity in the bookkeeping process.

New leaders and managers should soon go on to learn how to generate financial statements (from bookkeeping journals) and analyze those statements to really understand the financial condition of the business. Financial analysis shows the “reality” of the situation of a business – seen as such, financial management is one of the most important practices in management. This topic will help you understand basic practices in financial management and build the basic systems and practices needed in a healthy business.



Biodiversity and Food Security:

Two pieces of the same puzzle

By: Aparna Sundaresa

The second phase of the UN biodiversity conference, COP15, was held in Montreal in December 2022—with the agenda to form a new Global Biodiversity Framework to combat declining biodiversity. Biodiversity conservation is of utmost importance as there is a complex interdependency among issues of biodiversity loss, climate change, and development. Biodiversity loss can threaten the achievement of even basic development goals such as food security and further exacerbate the climate crisis and its impacts.

India is highly dependent on the agriculture sector for its food security, and biodiversity loss leaves crops vulnerable to pests and diseases, thereby lowering yields. It also leads to the increased occurrence of invasive species and reduces the pollinator population. Thus, the interlinkage between food security and biodiversity loss needs to be understood in its entirety.

Globally, it has been observed that with biodiversity loss, pollinating species—especially insect pollinators such as bees, moths, butterflies, and wasps—are declining. Habitat loss because of land-use change is a major driver for this decline. Such cases of decline have also been observed in India; for example, WWF India reports a reduction in honeybee population in the past five decades. However, causal studies for pollinator decline in India are very limited, a gap that needs to be plugged.

According to the Food and Agriculture Organization of the United Nations, about 35% of the food crops around the world, such as oil crops and many fruits and vegetables, rely on animal pollination. For these crops, biodiversity loss is essentially a loss of pollinator activity. This leads to reduced yields and a reduction in food availability, ultimately affecting food security.



Photo credit: Freepik.com



Photo credit: Freepik.com

Apart from the population decline of pollinators, reduced pollinator diversity due to biodiversity loss can also pose a food security threat. However, among the many food security indicators in use globally, none consider the link between biodiversity and agricultural ecosystems, undermining the value of plant-pollinator interactions.

Moreover, meeting food security demands requires expanding agricultural land and increasing the intensity of agricultural activities on existing land. Agricultural expansion invariably leads to habitat loss for many pollinator species. In India, the demand for food is increasing with a growing population, which in turn increases pollinator dependence. Therefore, the loss of pollinator species due to habitat loss can have drastic impacts on agricultural yields. According to an Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) study conducted in 2016, the loss of pollinators can lead to a decrease in annual agricultural output by USD 235 to USD 577 billion globally. Further, to meet the growing food security demand, increased reliance on chemicals and pesticides for increasing yields can have catastrophic impacts—nutrients leaching away

from soils, consequent biodiversity impacts as chemicals pollute the water bodies, and reduced soil health—exacerbating pressure on land for higher productivity.

Increasing agroforestry systems where crop fields are intermixed with tree cover can help in biodiversity conservation. Planting native trees in agroforestry systems maintains the diversity of pollinators, thus reducing the reliance on artificial methods of pollinating crops. These systems also serve as carbon sinks, storing carbon in biomass and soil. A study conducted by Ahirwal and group (2022) in Mizoram, India, reports that agroforestry in oil palm plantations positively impacts crop yield and carbon sequestration.

In the past year, when India faced one of its worst heatwaves, the country saw a huge outbreak in locust population, which led to almost 33% crop damage in Rajasthan. Such outbreaks can also be prevented under agroforestry systems, which have a cooling effect on the local climate. In a recent study led by the University of Washington, it was found that adding trees to pastureland in tropical regions can bring down local temperature by approximately 2.5 °C, depending on the density of trees.

With increasing temperatures and heatwave frequencies in India and more development-led land-use change, the vulnerability of biodiversity hotspots increases, especially in the Himalayan region and the Western Ghats, and with it increases the threat of biodiversity loss. Many small- and medium-scale farmers depend on organic farming, relying on natural pollinators for yield. Biodiversity loss for these farmers could lead to economic damage and social insecurity along with food security issues.

One of the goals of the Nationally Determined Contribution commitments of India is to create an additional carbon sink of 2.5–3 billion tonnes CO₂ equivalent through the expansion of forest and tree cover while promoting biodiversity conservation. However, developmental goals including food security and renewable energy expansion require land, creating a trade-off in terms of land allocation. Coherent and holistic policy frameworks need to be developed to address and align targets across the nexus of biodiversity, climate change, and development. Systems thinking in developing these policy frameworks will ensure that crucial interdependencies are not ignored and trade-offs are minimised. Such frameworks could address the chronic underfunding in biodiversity conservation and discourage financial incentives that negatively impact biodiversity and climate.



Aparna Sundareshan is an analyst in the Climate, Environment and Sustainability sector at CSTEP.



Getting ready for what's next in climate-friendly agriculture

As global demand for responsibly grown food keeps rising, opportunities are rife for farmers in Asia Pacific. Throughout the region, many are already working with the global agriculture company Cargill to skill up for growth.

“Thanks to our global reach, vast on-the-ground experience and hands-on knowledge of local farmers’ needs, the impact we can deliver for our partners is profound.”



Every day, Lata Marandi, a smallholder farmer from the state of Odisha in India, tends to her flock of chickens. Whether it’s vaccination, deworming or disinfection, Lata is confident that she knows how to keep her birds healthy and thriving. Working with her son, she’s recently also set up her own poultry feed operation to boost the family’s income.

Lata is not alone. Along with 30,000 other farmers, she was trained on best poultry management practices by Hatching Hope, an initiative launched in 2018 by the NGO Heifer International and the U.S.-based food and agriculture company Cargill.

“I am so glad I took up this opportunity,” said Lata. “I am sure my business will continue to grow consistently.”

Boosting skills and incomes

Hatching Hope is just one way Cargill is helping smallholders in the Asia Pacific region and elsewhere adopt more sophisticated agricultural and sustainability practices so that they can command higher prices for

their products. Headquartered in Minneapolis, the company partners with NGOs, local governments and other food companies to connect farmers with markets around the world.

“We succeed when farmers succeed,” said Ben Fargher, Environmental Markets Lead in Asia Pacific. “Thanks to our global reach, vast on-the-ground experience and hands-on knowledge of local farmers’ needs, the impact we can deliver for our partners is profound.”

Cargill’s work with farmers touches every part of the world, including Asia, where the company is active from farm to fork – or, in many countries around the region, chopsticks – and in numerous agricultural supply chains.

In Indonesia, for example, Cargill is helping cocoa farmers develop new skills and raise their incomes. Chocolate consumption in Asia is growing fast. With its cocoa bean production of 180,000 metric tons in 2021-22, as estimated by the International Cocoa Organization (ICCO), Indonesia is an important cocoa producer, which opens up ample growth opportunities for farmers.

Teaming up with local farmer cooperatives, Cargill has provided training to more than 26,000 farmers on Good Agricultural Practices (GAPs). More than half have also participated in on-site, one-on-one coaching. It's all part of the Cargill Cocoa Promise, a program that supports sustainable cocoa production, including farmer and community wellbeing and the protection of natural resources.

Driving sustainable growth

Meanwhile, working with multiple partners in the palm oil sector in Malaysia and Indonesia, Cargill is helping smallholder farmers get Roundtable on Sustainable Palm Oil (RSPO) sustainability certification. The company, which owns few palm oil plantations of its own, is making steady progress with both small and large suppliers to adopt environmentally sustainable practices and protect valuable forestlands. These actions help local growers gain improved access to increasingly discerning global markets.

At the same time, attention in the agricultural sector is shifting to not only preserving forests as a natural carbon store and safeguard against climate change, but also using farmland as a means of sequestering carbon.

Cargill is driving this kind of regenerative agriculture through its Cargill RegenConnect™ program. Participating farmers receive education and training on climate-friendly



Photo caption: Farmer demonstrating the benefits of regenerative agriculture practices, which are part of the Cargill RegenConnect program

agriculture practices, resulting in payments for every ton of carbon sequestered in the soil and increased marketability for their crops through Cargill's global network of customers. The initiative supports Cargill's regenerative agriculture commitment to expand regenerative practices such as the use of cover crops and low- or no-till agriculture to 10 million acres (400,000 hectares) of U.S. farmland.

These benefits help explain why the program is growing so impressively, most recently with a 400% year-on-year increase in enrolled acres. For now, the initiative is limited to the U.S. and Europe, but plans to expand to other markets are in the works.

"We see great potential for global regenerative agriculture," said Fargher. "Asia Pacific has seen impressive growth in recent decades and demand for sustainable crops is bound to keep rising. That's why the region's farmers have such a crucial role to play. We are keen on working with partners who have the same outlook. We're excited to connect, contribute our technical, environmental and business expertise, and help build sustainable success stories together."



Photo caption: A Cargill employee works in a nursery inspecting palm plants



Photo caption: A Cargill employee with a farmer inspecting his cocoa beans in Bush, Ghana, Africa.



Cargill helps the world's food system work for you. We connect farmers with markets, customers with ingredients and families with daily essentials—from the foods they eat to the floors they walk on. Our 160,000 team members around the world innovate with purpose, empowering our partners and communities as we work to nourish the world in a safe, responsible, sustainable way.

From feed that reduces methane emissions to waste-based renewable fuels, the possibilities are boundless. But our values remain the same. We put people first. We reach higher. We do the right thing. It's how we've met the needs of the people we call neighbors and the planet we call home for 157 years—and how we'll do so for generations to come. For more information, visit Cargill.com and our News Center.



Food and Agriculture Organization of the United Nations

Food and Agriculture Organization of the United Nations (UN) is an international agency focused on defeating global hunger and rural development through the promotion of agricultural development. It serves as a neutral organization that raises the level of nutrition and sustainability standards of living in both developed and developing countries, where all countries collaborate to negotiate agreements and debate policies.

Throughout its years of service, FAO continuously plays a role as the world's largest agricultural database providing further knowledge in the best methods of farming, forestry, and fishery practices, having a significant new domain that makes it much simpler to compare and analyze historical patterns in the agricultural structures of all member nations. Through assessing the ongoing trends over time, the organization has introduced projects that served as a global public good in different member countries in modernizing and improving their agricultural structures.

In addition, FAO endlessly encourages private-public partnerships between different organizations across the globe to boost smallholder agriculture and further develop monitoring, reducing, and warning systems for food chain dangers. FAO is now composed of 194 member nations, two associate members, and the European Union, with headquarters in Rome, Italy, and offices in more than 130 countries have over 11,500 staff members.

FAO has selected key objectives on which it is best qualified to satisfy the demands posed by significant global trends in agricultural development and issues encountered by member countries. Strategic objectives were established as a result of a thorough analysis of the Organization's comparative advantages, which allowed for identifying the critical areas of work on which FAO will focus its efforts to realize its vision and reach its worldwide objectives.

1

ERADICATE MALNUTRITION, FOOD INSECURITY, AND HUNGER

FAO will be concentrated on advancing the FAO's "Zero Hunger" goal. FAO will work with other organizations to develop pilot projects that promote nutrition-sensitive agricultural techniques and positive nutritional behaviors such as hygiene and sanitation practices. To increase their abilities to efficiently plan, carry out, and track nutrition education for behavior change, emphasizing healthy diets.

INCREASE THE PRODUCTIVITY AND SUSTAINABILITY OF AGRICULTURE

To promote value chains for low-input alternative crops connected to adopting sustainable agricultural and natural resource practices, FAO will work to build farmer capacities. The FAO will offer technical assistance to the rural poor to build solid institutional frameworks that will allow them to improve their sustainable livelihoods and raise household incomes.

2

3

ENSURE INCLUSIVE AND EFFICIENT AGRICULTURAL AND FOOD SYSTEMS

In order to increase their abilities to efficiently plan, carry out, and track nutrition education for behavior change with an emphasis on healthy diets, FAO will also concentrate on developing capacity in a select group of regional and national nutrition training institutions and universities.

LOWERING RURAL POVERTY AND DISASTER-PROOFING LIVELIHOODS

Through projects that create jobs in the agriculture and enterprise sectors and other initiatives, FAO will emphasize enhancing the capabilities and skills of the poor for gainful and sustainable lifestyles. To assist employment-producing agribusiness and enterprise clusters, FAO will offer assistance and build capacity to strengthen agroecological systems and farmer field school methodologies presently being used in various parts of the nation.

4

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The Face of Sustainably Produced Cacao: MEDA's Approach in Integrating Gendered Environmental, Social, and Governance (ESG) in the Philippine Cacao Market System

By: Roderick "Derek" Valones

Globally, the face of sustainably produced or sourced cocoa tends to be more of an environmental concern. Historically, cacao production is linked to deforestation, biodiversity loss, and soil degradation in major cacao-producing countries. However, taking the fundamental elements of market systems approach, sustainability transcends environmental considerations. In MEDA's integrated market systems approach, sustainability does not only entail environmental aspects, but economic, social, and governance factors as well.

In MEDA's Resilience and Inclusion through Investment for Sustainable Agrikultura (RIISA) Project, a five-year initiative funded by the Global Affairs Canada, cacao sustainability is being addressed by:



Mobilizing Environment, Social, and Governance (ESG)-focused investment for cacao sector small and medium enterprises (SMEs) and financial intermediaries (FIs).



Strengthening the capacity of cacao cooperatives and smallholder farmers (SHFs) in environmentally sustainable and inclusive farming and business practices



Strengthening the capacity, including Gender Equality and Social Inclusion (GESI), human rights (HR), and Environment and Climate Change (ECC), of local Financial Institutions and business service providers (BSPs) to deliver better services and products to cacao SMEs and cooperatives.



Improving key enabling environment actors' awareness of ESG practices in the cacao market system.

In the two-day National Congress held in Davao City last November, MEDA had the opportunity to share with key stakeholders how the RIISA project will contribute to cacao sustainability in Mindanao and the entire cacao industry development in the Philippines. MEDA's side meeting featured RIISA staff describing its integrated market system approach and the gendered Environmental, Social and Governance approach and explaining how the technical assistance and gender lens investing will work. MEDA believes that cacao sustainability lies in the hands of small-scale producers as they supply 90% of the requirement of the country. Ensuring they have sufficient financial incentives such as premium price for their sustainably produced cacao, and the financing support to de-risk cacao farming enterprise will encourage and scale-up the practice of environmentally sustainable agriculture that also results in biodiversity conservation. This will prevent farmers from cutting down their cacao trees in favor of crops that give them more income but are detrimental to the environment.

Equally important to MEDA in sustainable cacao production is having the women, the youth, and indigenous people participate and benefit in the cacao value chain. From the result of RIISA's Integrated Market Systems Analysis (IMSA), gender equality and inclusion of marginalized sector is possible if women and men, the youth and Indigenous People have equal opportunity to decide; have equitable access to information, capacity building trainings, and technologies designed to meet their needs and priorities. And lastly, indispensable for cacao sustainability is the governance factor as it cuts across environment, economics, and social factors. To this end, RIISA collaborates with cooperatives, SMEs, business service providers, and cacao industry development councils to influence and facilitate change in structure, systems, policies, and mindset that will benefit the environment, the business operations of relevant and strategic market system actors and stakeholders, and, ultimately, women, men, youth, and Indigenous People who are small-scale producers.



Photo caption: MEDA Side Meeting attended by cacao stakeholders during the National Cacao Congress 2022 in Davao City.

MEDA believes that business solutions are a key to cacao sustainability. However, these solutions must integrate gendered environmental, social, and governance considerations in the market systems to enable the women, men, youth, and Indigenous People who are small-scale producers to have an equal opportunity and life chances in making a decent living. With RIISA, we hope that the face of cacao sustainability we put forward becomes the face of the cacao market system in the Philippines.



Roderick "Derek" Valones is the Market Systems Technical Lead and Environment and Climate Change Focal person for MEDA-RIISA. He is an experienced development worker with over 20 years of practice in development and emergency response initiatives involving international and local organizations in the Philippines.



MEDA (Mennonite Economic Development Associates) has been implementing effective market-driven programs globally since 1953. MEDA combines innovative financial and technical expertise to build and enhance sustainable agri-food systems that provide decent work for people living in poverty with a focus on systemically marginalized communities, including women and youth. MEDA partners with local private, public and civil society actors, strengthening individuals, institutions, communities and ecosystems, and thereby contributing to sustainable and inclusive systemic change.

THE FUTURE OF AGRICULTURE: 5G-powered Smart Farming

Agriculture comes with high-risk and low-reward factors. Besides exhausting the individuals involved, traditional farming techniques also deplete natural resources unnecessarily with no significant results. A wise solution to solve this is implementing technology to automate, track, and monitor agricultural processes. And with 5G all set to roll out, smart agriculture is set to take off with lightning-fast-speed data transfer.

A wise solution to solve this is implementing technology to automate, track, and monitor agricultural processes. And with 5G all set to roll out, smart agriculture is set to take off with lightning-fast-speed data transfer.

What is Smart Farming?

Smart farming combines traditional agricultural practices with information and communication technologies (ICT) to enhance farm produce and quality. The usage of new technology can help farmers reduce labor and cut down on costs while improving crop yield and production.

ICT includes a wide range of components under digital and computer technologies to facilitate all these agricultural benefits. These include robotics, sensors and actuators, drones, GPS, etc. The latest addition to this list is a 5G network.

Although mobile networks are already implementing many of these ICT technologies to offer the mentioned agricultural benefits, 5G will enhance the impact by manifolds due to low latency, high bandwidth, and support for many simultaneously communicating sensors.

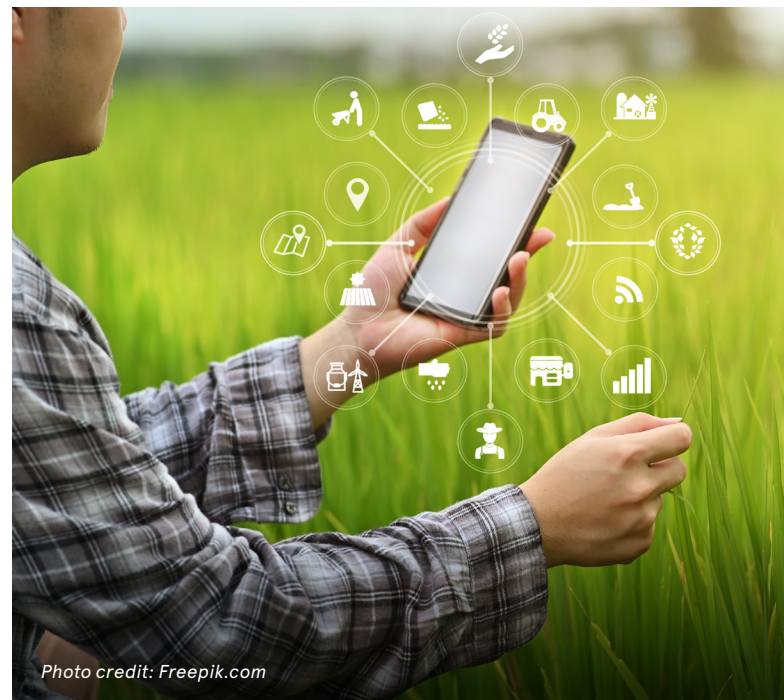


Photo credit: Freepik.com

How Can 5G Improve Farming?

Here are a few ways in which 5G will define the future of agriculture.

1 Smart Farming or Precision Agriculture

As already mentioned, 5G is crucial to bring out the holistic benefits of smart farming. It will help speed up the entire process with machine-to-machine services. 5G's real-time data transfer can help in the speedy functioning of these solutions, making the decision-making quick, robust, data-oriented, and real-time.

2 AI-enhanced Machinery

The proper implementation of precision agriculture involves AI-implemented farm machinery. With Cropin's innovation - SmartRisk mobile applications- farmers can get quick updates on various environmental risks and diseases plaguing crops. At the same time, continuous monitoring using AI-enhanced machinery helps farmers identify risks from the very beginning.

However, artificial intelligence requires adequate data to work efficiently. 5G will bridge the gap in data availability that is still evident by speeding up a massive amount of data transfer, which will help AI perform efficiently.

3 Drone Sprayers

A defining aspect of precision agriculture is cutting down on unnecessary usage of agri-inputs. Cropin Grow aids in this with 360-degree monitoring of farms via data gathered from farms, satellites, drones, and sensors. Implementing 5G in these devices can aid in efficient crop monitoring – an activity performed & executed by autonomous drone sprayers.

These drone sprayers, fairly new technology in agriculture, comprise crop and weed scanners and sprayers. ICT-based platforms can also integrate with IoT devices to use the insights generated by the latter to limit the application of agrochemicals to only where required, instead of blanket spraying.

Restricted, targeted use of chemicals will lead to reduced input costs and help minimize water pollution, soil damage, and crop losses.

4 Accurate Harvest Estimation

Drones use high-quality and AI-powered cameras to tell apart healthy crops from spoilt crops and weeds. They facilitate this by identifying differences in leaf color and texture in plants. Accordingly, these devices isolate plants and report the data to farmers, who then take corrective action.

Remote sensing is also used to track and identify changes in the field. Remote sensing measures the radiation in the area while analyzing the chemical and physical changes in the properties. This aids in the collection of satellite-based data that may be used to estimate accurate crop area.

With 5G, these devices can report data about potential weeds, damaged crops, and their location directly to follow-up machinery in real-time. Farmers can carry out fast and effective harvests with automated crop detection and weeding, saving time and cost.

5 Effective Irrigation

The continuous monitoring of agricultural fields and crops can help farmers understand the exact water requirements. Analysis of soil requirements is possible via soil probes buried 120 cm below irrigation lines. These devices can use 5G connectivity to collect and transfer data about the soil's moisture content, water salinity, and patterns.

Farmers can receive this data on their smartphones via SmartRisk and manage irrigation cycles accordingly. Managing moisture content in the soil will prevent unnecessary water consumption and depletion of surface and groundwater. An estimate of the possible yield will also be available to other stakeholders, including providers of agrochemicals and agri-machinery, via Cropin Intelligence, which will help them decide on sales and marketing techniques.

Prominent Benefits of 5G-enabled Smart Farming

The implications of Smart Farming are yet to be fully explored. However, with 5G's available features, farmers can expect the following benefits with its application in the future.

Faster communication: 5G will offer up to 10 Gbps data speed, which means 100 times speedier connectivity than its predecessor, 4G. Faster speeds and significantly lower latency will facilitate real-time communication between stakeholders.

Machine-to-machine data transfer: As already discussed, direct information transfer between 5G-enabled devices without human invention can enhance the speed and efficiency of agricultural processes.

Reduced costs: With a lesser requirement of agri-inputs, workforce, and other resources, farm owners can increase revenue remarkably.

5G might take more time to entirely roll out in full throttle and cover all remote areas. However, when it does, this new technology in agriculture will reduce workforce requirements with automation.

This way, farmers can dedicate their efforts to areas that need human consideration, like planning sales and marketing. So, farmers must be ready to lap up 5G-enabled solutions for themselves and the environment to reap its benefits.

About Cropin:

Cropin is a global ag-ecosystem intelligence provider. Cropin's suite of products enables various stakeholders in the agri-ecosystem, including financial services providers, to adopt and drive digital strategy across their agricultural operations. Using cutting-edge technology like artificial intelligence, machine learning, and remote sensing, they create an intelligent, interconnected data platform that helps organizations digitize their operations from farm to fork and leverage near real-time farm data and actionable insights to make effective decisions.

Please visit Cropin's website to learn more about their innovative technological solutions for the global agricultural sector. Website: <https://www.cropin.com/>



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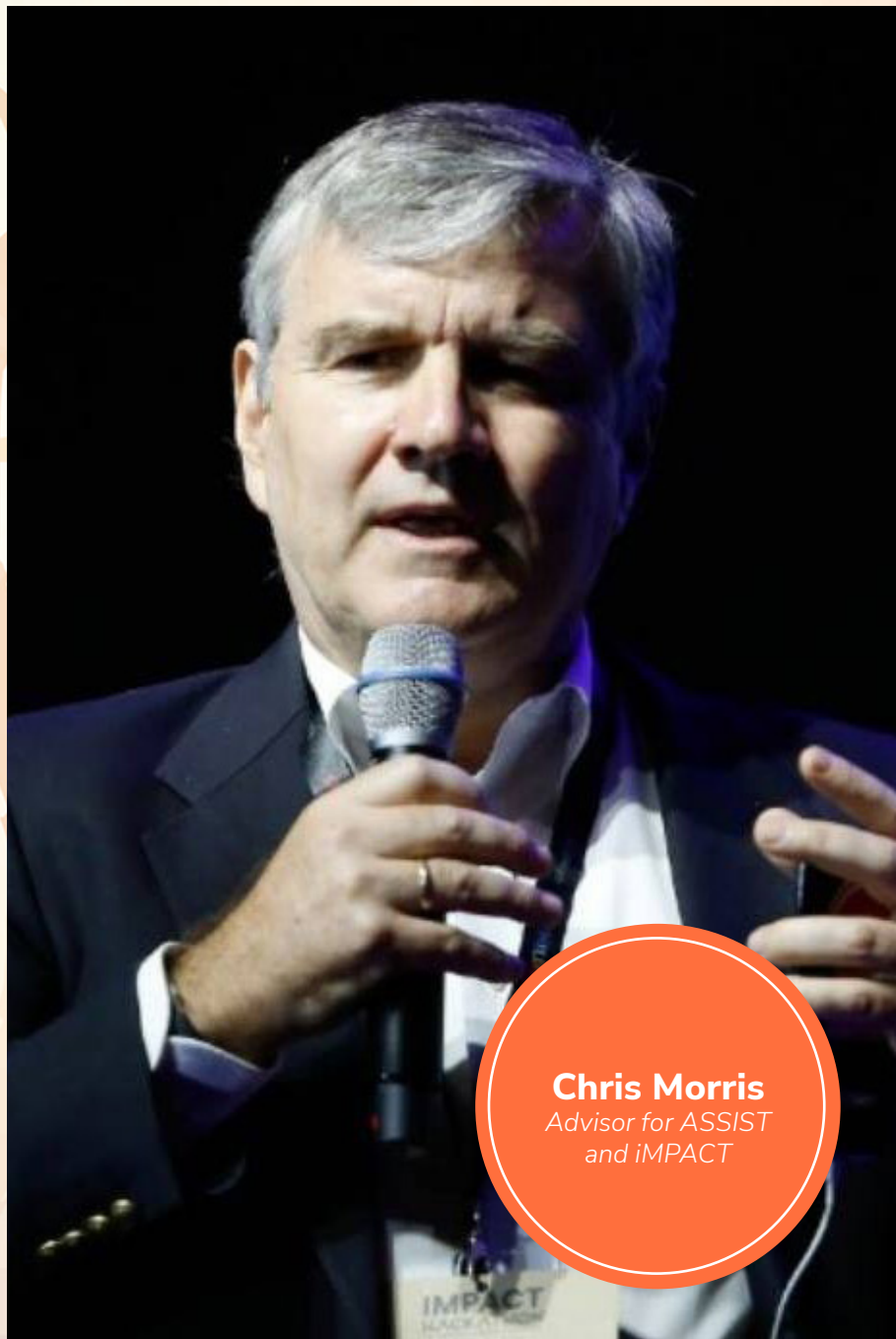
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#YOUTH: THE FORERUNNERS OF CHANGE

**“Climate advocates
– led by the moral
voice of young
people -- have
kept the agenda
moving through the
darkest of days”**

So, while it's amazing how quickly quarterly deadlines come by, I find it equally fascinating to reflect also on how much has happened in the last quarter.

It really seems so long ago that young people sent clear and loud messages to the governments gathering at the UN's COP27 on Climate Change in Sharm el-Sheikh, Egypt. Was the COP a success? The UN Secretary General welcomed the important step towards climate justice through the establishment of an historic loss and damage fund but warned the planet is in a hospital emergency room on its ambition to remain below the Paris 1.5degree limit. He reiterated the important voice of youth when he stated in his ending statement “Climate advocates – led by the moral voice of young people -- have kept the agenda moving through the darkest of days”. Keep those voices coming loud and clear as I for one are disappointed that global leaders have not stepped up earlier with the finance and programs to support the Paris 1.5 target. We would not need a costly “loss and damage fund”, nor massive adaptation budgets if our global leaders had heeded the calls of scientists decades ago and weaned the world off fossil fuels.



Chris Morris
Advisor for ASSIST
and iMPACT

The same leaders are gathering as I write in Montreal, Canada at the UN's related Biodiversity COP15. So far we've seen some smart marketing with @Frankiethedino communicating a clear message #DontChooseExtinction, #ChooseNature which has been echoed by young people at the Youth Hub coordinated by the Global Youth Biodiversity Network. GYBN, representing global youth, have demand transformative change be included in the new Global Biodiversity Framework with young people voices calling for intergenerational equity, with full and effective participation of youth, and the adoption of rights-based approaches for people and nature. With the COP15 conference ending on 19 December let's hope, for the planet, that negotiators are listening to "Frankie" and young people and that an ambitious framework to save the planet is agreed upon.

Last issue I explored Ageism and why it makes sense for society to leave behind prejudices towards young people and older adults alike and the need to foster meaningful interactions between different generations. I argued this was necessary to accelerate actions to achieve the

SDGs. I hope you have forged some intergenerational partnerships over the last quarter. I, personally, was so happy to see that a new Crossgen for Resilient Rivers initiative was launched during the 25th International River Symposium, November 2022. This is exactly why we need to remove the Ageism barriers and have Gen Boomers, GenX, Gen Y (millennials), and GenZ, working together to be "Generation Free but not Generation Blind".

I will over the next few editions be monitoring these intergenerational initiatives across the sectors addressed by this magazine, and I'd love to hear your experiences and actions.

I also wish to start a dialogue with our readers young and old around the subject of "Youth Work". I hope to provoke your thoughts and perhaps even incite a learning exchange. Youth Work has intrigued me for some time and now that I am retired from a 9-5 job, I've a little more time to read and do some research on the subject. I hope this column can be home to some discussion on the subject which I believe policy makers have paid insufficient attention to across Asia and the Pacific.

So, for a definition of what is Youth Work? I defer to the Commonwealth Secretariat whose publication "Youth Work in the Commonwealth: A Growth Profession (2017)" provides a comprehensive foundation for discussions, setting out key concepts and approaches in professionalizing youth work services. The Commonwealth's working definition describes Youth Work as all forms of rights-based youth engagement approaches that build personal awareness and support the social, political, and economic empowerment of young people, delivered through non-formal learning within a matrix of care. Rights-based youth work is based on human rights frameworks as set out in international conventions and Constitutional rights set down by individual countries.

Youth work is a growing, albeit under-resourced, profession responding to the changing and growing needs of young people. When well-funded and resourced, and supported by adequately trained professional practitioners, it has shown to significantly contribute to enhancing employability skills, shaping a productive more inclusive and equitable young workforce, and reducing radicalization and extreme behaviors of young people.

Many countries do not have a national vision for youth work and lack youth work professionals with formalized youth work education, training qualifications and professional recognition. A solid online knowledgebase for tools, methods and approaches, good policies and practices, and professional training curriculum would help advance the youth work sector. I'd love to hear your experiences of the youth work sector in your country including those positive and any frustrations or challenges you may have encountered. I plan to explore the subject of youth work further in future columns.

As we enter a series of festive events over the next few months I wish you good health, peace, and prosperity for the year ahead. I am sure this quarter will also rush by.



Talk to Mr. Morris personally by writing to him at chris.morris@theimpactmagazine.org

TITLE OF ARTICLE	ORGANIZATION	WEBSITE
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News Roundup: The Closing Window	UN Environment Programme	https://www.unep.org/resources/emissions-gap-report-2022
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This Caught Our Eye: Cyber attacks: Why ag-tech innovation could be an 'easy' target for hackers to threaten food supplies	Food Navigator-Asia	https://www.foodnavigator-asia.com/Article/2022/06/06/why-ag-tech-innovation-could-be-an-easy-target-for-hackers-to-threaten-food-supplies
This Caught Our Eye: Roadmap to a Healthier Future	World Economic Forum	https://www.weforum.org/agenda/2022/03/food-systems-innovation-transformation/
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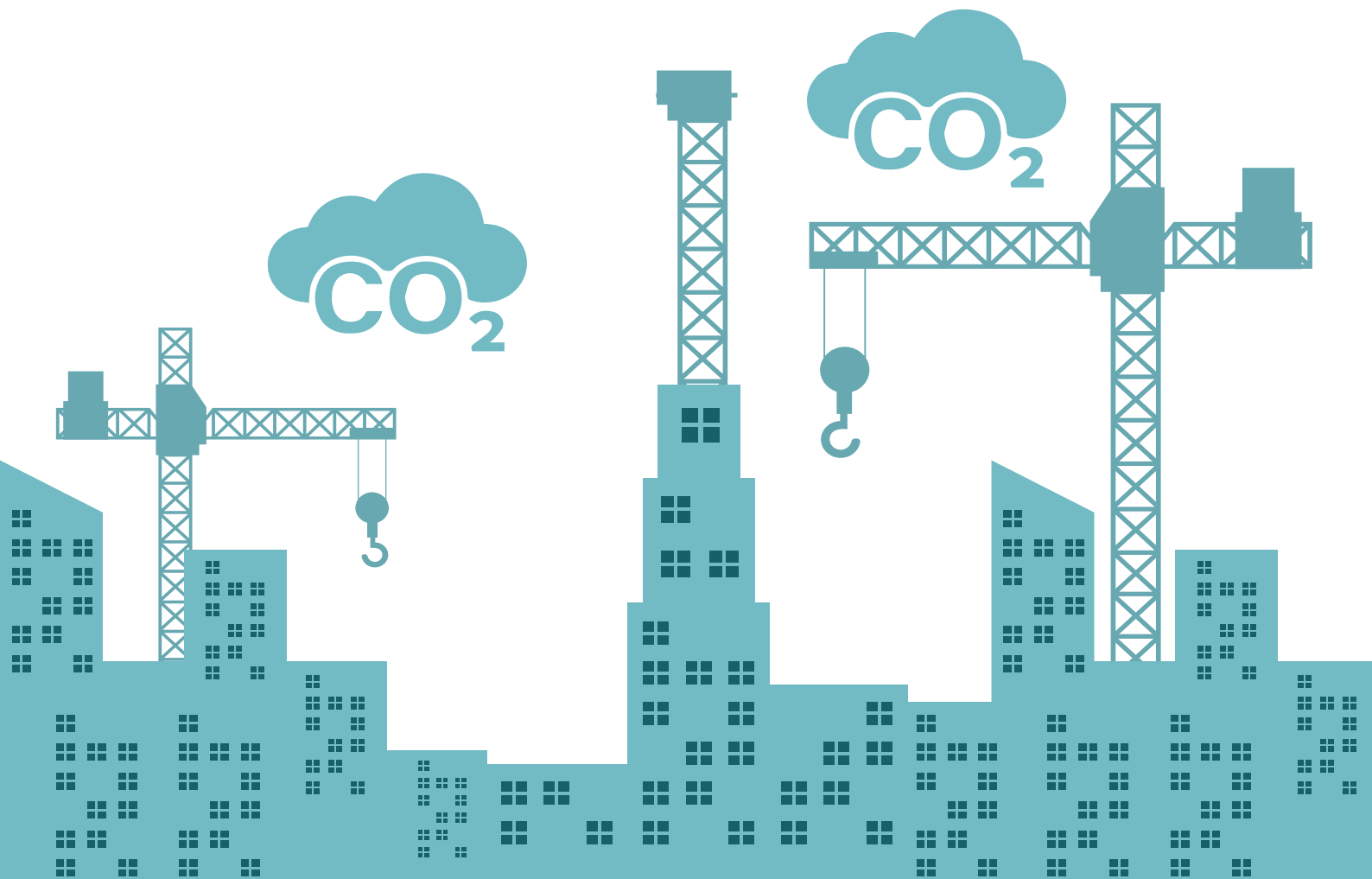
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Shortlisting and evaluating whether the opportunities identified fit all the criteria, and identify the detailed requirements of each opportunity



REPORT & RECOMMEND

Presenting the identified opportunities, and recommending which best encapsulates your interests and where you can go from there

WHO WE ARE

Our Opportunity Research Service was founded on the premise that funding / opportunity research is a critical component for any successful business or non-profit organization. With a seasoned team specialized in grant research, we will both strengthen and ease your fundraising & opportunity seeking endeavors.

**To know more about our services,
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