The Sustainable Development Goals

Many scenarios have been developed to imagine what the world will be like in the year 2030. The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals were crafted and adopted by 193 United Nations member states in 2015 to ensure the best possible state of the world in 2030. It has been five years since the adoption of the Sustainable Development Goals – 17 goals to transform the world focusing on nearly every area of our lives, from birth registration to violence and corruption, technological access, remittances, and pollution.

While there are 17 goals covering an array of topics focusing on advancing **People, Prosperity, Planet, Peace**, and doing so through **Partnership**, the goals seek to balance the basic pillars of sustainable development.[i] These three pillars – the social, environmental and economic pursuits that countries consistently aspire to take shape through 169 targets that underpin the 17 Goals. Each goal is often recognized by its icon, but the targets under it clearly set out a focus for us to achieve transformative change on all aspects of our lives in developed and developing countries.

We have 10 years left to achieve the Goals and last September 2019 world leaders committed to a Decade of Action that would accelerate solutions. The great thing is that the 17 Goals and their targets are interdependent – when we invest well in one, such as reducing inequality, we get gains across many other goals too. This means, if we design solutions for each goal well and with users in mind, then we can really accelerate progress.

Rapid progress was underway in areas across the SDGs until the COVID-19 Pandemic hit the world. Extreme poverty, child labour, mortality for children under age five, were all on the downward trend and access to water, vaccines, and more was on the upward trend.

The year 2020 also started with reminders that we still faced persistent challenges to the Goals. The World Social Report 2020 noted that 70% of the global population lives in countries where income inequality has grown – many are being left behind.[ii] A UN report also noted that the number of hungry people worldwide has been slowly rising over the last six years, before the Pandemic, and that this has now been drastically compounded.[iii] The rate of global progress is not keeping pace with the Goals, and societies are still confronted with daunting challenges such as climate change, environmental degradation, conflict, lack of or weak public services and most recently, a global pandemic. The United Nations has noted that job losses as a result of the Pandemic are leaving up to half the global workforce – 1.6 billion people – without livelihoods and sixty million more people will be pushed into extreme poverty. The world is experiencing a loss of $8.5 trillion in global output – the sharpest contraction since the Great Depression of the 1930s.[iv]

> 66 Everything we do during and after this crisis [COVID-19] must be with a strong focus on building more equal, inclusive and sustainable economies and societies that are more resilient in the face of pandemics, climate change, and the many other global challenges we face. 99

António Guterres
Secretary-General, United Nations

Youth can lead the Transformation – Accelerating well-designed solutions

Today, there are 1.8 billion people between the ages of 10-24—they are the largest generation of youth in history (UN, 2019).[v] Nearly 90 per cent of youth live in developing countries, and these numbers are expected to grow—between 2015 and 2030 alone, about 1.9 billion young people are projected to turn 15 years old, yet youth are not leading the implementation of the 2030 Agenda (UN, 2019).[vi] Youth are not just beneficiaries, they are leaders that can design solutions to recover from the COVID-19 pandemic and accelerate progress for sustainable development in every community across our globe.

Actively engaging youth and shaping their knowledge, skills and mindsets for sustainable development is vital to the successful implementation of the 2030 Agenda in the coming decade. Not least because youth are already becoming political leaders, social and green entrepreneurs and champions of change, but also because they will only increasingly do so in the decades to come. Many leaders today are aware of the power of youth to galvanize change, as seen when a then 15-year old climate activist Greta Thunberg started her #FridaysforFuture movement that has now spread globally.[vii] The UN has also launched key campaigns to engage youth, such as *Be The Change*, provides practical ways youth and all citizens can champion how to "walk the talk" when it comes the SDGs, by changing consumption patterns, transport methods, and much more.[viii]


Sustainable by Design

To tackle the complexity of challenges today, it is imperative that the solutions developed are effective and they are most effective when designed in a **participatory** way – a **user-centric** way. Engaging today's youth is of primary importance in forging the leadership, empathy, ideas, energy and hope to demand change and design effective solutions to these challenges.[ix] Consumer products, industrial processes, government programmes and more can all benefit from design that focuses on **end-user needs**; design that aims for **impact across the SDGs**. For example, SDG 12 focuses on 'ensuring Sustainable Consumption and Production patterns', with targets aiming to reduce waste and pollution. But, some of our products are not designed for recycling. Did you know that only 9% of plastic waste has ever been recycled?[x] Many plastic straws, toys and more simply don't meet **the business case** for recycling. How can we better design our products to be less resource intensive, easily reusable and 100% recyclable? Only if they are **sustainable by design**.

In 2019 alone Overseas Development Assistance, or the money that countries send to developing countries to ensure impact on areas under the SDGs totalled **$147 billion**, nearly the same level as in 2018.[xi] This number has already begun to decline due to the Pandemic and so has Foreign Direct Investment and other flows that can enable **financing solutions**. Financing is often the biggest challenge to scale-up an idea, so we need to ensure all the financing going towards solutions for development are effective and **sustainable by design**.

Stanford D-School Design-thinking Methodology
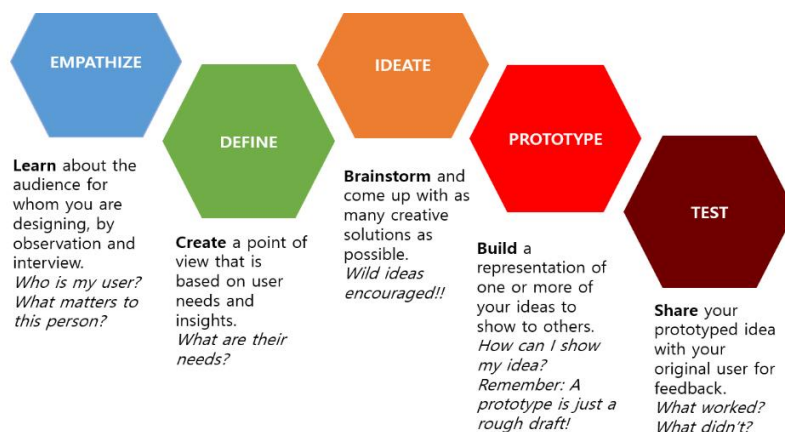
Design-Thinking to get us there

Design thinking is a simple step process that can be applied to solve problems, developing tailored solutions according to the end-user's needs. It allows those who use it, including corporations, civil society, students or entrepreneurs a way to "**understand users**, challenge assumptions, redefine problems and **create innovative solutions** to prototype and test."[xii] The standard design-thinking process has **Five steps** - 1. Empathize, 2. Define, 3. Ideate, 4. Prototype and 5. Test – with academic institutions like the Stanford D.School (Hasso Plattner Institute of Design at Stanford University) popularizing this process for impact on sustainable development as well.

Let's Learn about Design-thinking for Sustainable Development – Let's learn about two cases on 1. When design-thinking could've helped and 2. When design-thinking did help!

The following cases were developed to share how design-thinking's stages are all important. From the first part on empathy, it's fundamental to start any solution journey by understanding the end-user's needs. This means studying the community, all potential users and more. It also means defining the exact needs, challenges, priorities and worldviews, social norms or more that may act as barriers or problems. Understanding the barriers to the current problem or challenge is fundamental in development – sometimes a simple solution can make the difference. As a third step, ideating or brainstorming the potential solutions from all angles and with beneficiaries can make all the difference. We can find market gaps, products and services that do not exist but could make the difference. All potential solutions must then Prototyped and Tested with the original users. This could lead to restarting the process too, so it is a cycle that can be repeated for success. In the end, the process means identifying effective solutions that can be scaled-up and make a true impact to accelerate the SDGs!

CASE 1. Playpumps - When design-thinking could've helped

Source: Playpump.co.za

The Playpump was developed as a fun solution to provide water for communities in need of this vital resources. Instead of a normal handpump, the novel Playpump could act like a merry-go-round, pumping water as children pushed it around. It also allowed children to stay in schools as they did not have to fetch water. They also had access to clean drinking water, latrines, and hand-washing facilities, and were able to attend schools without water-related diseases. In 2009, however, it was revealed that Playpump led to child labour (SDG 8.7).[xiii] The Playpumps required more pumping effort than normal, and as a result water quantities pumped declined and UN reports evaluating the pump noted "there is often insufficient quantity of water to carry out other activities such as gardening and sanitation. Some schools stopped or drastically reduced their small-scale irrigation efforts as a result".[xiv] In the end, the Playpump failures were because it was not designed with the users in mind – millions of funds were spent in vain.

Former Playpump sites in Africa are abandoned or simply went back to the former hand pumps, but the organization is still trying to ensure effectiveness today. If it had really succeeded, it would have achieved access to equitable sanitation, paying special attention to vulnerable women and girls (target 6.2) under SDG 6 and SDG Target 3.9.

CASE 2. Pasikola transport service - When design-thinking did help

The Makassar government has developed a masterplan to create an integrated system to mitigate traffic congestion and increase demand for public transportation[xv] In 2018, the United Nations Development Programme and UN Global Pulse Lab Jakarta jointly held a workshop on the value of design thinking approaches to Makassar officials to ease the heavy traffic congestion. They discovered that Pete-Pete, the main mode of transport in the capital, did not meet the public's needs or school-children's needs for safety. This citizen-led solution - designed to be user-centric - became a successful pilot.

This is a good example of how design-thinking can be applied to advance the SDGs and targets on sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children (target 11.2) under SDG 11 on sustainable cities. This design thinking solution also supported SDG 3.6, to halve the injuries from road traffic accidents. Pasikola reduced traffic congestion, became reliable school transportation, saved parents time, and supplemented Pete-Pete drivers' income. The city decided to adopt Pasikola as a core public service and dedicated a budget for its continuation in 2019. In line with SDG 16.6 on effective, accountable and inclusive government, the initiative also increased the citizen participation in designing better user-centred public services, through the Public Sector Innovation Lab.[xvi]

[i] United Nations (2015) Transforming our World: The 2030 Agenda for Sustainable Development. (A/RES/74/1). https://sustainabledevelopment.un.org/post2015/transformingourworld

[ii] United Nations (2020) World Social Report. Retrieved from https://www.un.org/development/desa/dspd/world-social-report/2020-2.html

[iii] FAO, IFAD, UNICEF, WFP and WHO (2020) The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. Rome, FAO. https://doi.org/10.4060/ca9692en

[iv] United Nations (2020) Retrieved from: https://www.un.org/sites/un2.un.org/files/hl_event_financing_covid19_general_introduction-5-25-20.pdf

[v] United Nations (2019). Retrieved from: https://www.un.org/sustainabledevelopment/youth/

[vi] United Nations (2019). Retrieved from: https://www.un.org/sustainabledevelopment/youth/

[vii] Greta Thunberg is a Swedish climate activist who began her movement for climate action at the age of 15. See: www.FridaysforFuture.org

[viii] For example, see https://www.un.org/sustainabledevelopment/be-the-change/

[ix] United Nations Secretary-General Special Remarks (2020) General Assembly Priorities for 2020. United Nations. https://www.un.org/sg/en/content/sg/speeches/2020-01-22/remarks-general-assembly-priorities-for-2020

[x] For this and more important statistics see The Plastic Soup (2020). Retrieved from www.ThePlasticSoup.com

[xi] United Nations (2020) Sustainable Development Goal 17 – Progress and Info. United Nations. Retrieved from https://sdgs.un.org/goals/goal17

[xii] Interaction Design Foundation (2020) Learning about Design-thinking. Retrieved from https://www.interaction-design.org/literature/topics/design-thinking and Stanford D-School (2020) Getting Started with Design-Thinking. Also see for more guidance https://dschool.stanford.edu/resources/getting-started-with-design-thinking

[xiii] Public Broadcasting Service (2010) Troubled Water. Frontline. Retrieved from https://www.pbs.org/video/frontlineworld-troubled-water/

[xiv] United Nations Childrens Fund (2007) An Evaluation of the PlayPump® Water System as an Appropriate Technology for Water, Sanitation and Hygiene Programmes, UNICEF, 2007, P.9.

[xv] UN (2019) Moving Makassar Forward Innovation For A User-Oriented Public Transportation Network, Any Harijanti, Maurice Shawndefar, P. 5

[xvi] United Nations Development Programme (2018) Moon Shots & Puddle Jumps, UNDP Innovation Facility, 2017-18 Year in Review. P.116. Retrieved from http://www.undp.org/content/dam/undp/library/innovation/MoonshotsAnnual%20Report_11Sep2018.pdf