

# MOVING TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS: THE UNLEASH INNOVATION LAB EXPERIENCE<sup>1</sup>

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## Introduction

In a world ever more complex and interconnected, it is not surprising that the problems that blight humanity manifest in a similar way. Hunger, poverty, inequality, access to a decent education, health and well-being, basic sanitation, climate change, among others, are issues that directly or indirectly affect the health and quality of life of our population.

Since 1992, the United Nations (UN) has been working on strategies to further the sustainable development of our planet. In 2000, it launched an ambitious 15 year-long program, the Millennium Development Goals (MDGs), with an overall objective to address health and combat poverty with the guidance and structure of eight overarching

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goals. It was the most successful health and anti-poverty initiative ever conducted; however, inequalities persisted and the progress made was uneven (UNITED NATIONS, 2015a). This was a huge opportunity to learn from previous challenges and led the UN to conduct the largest consultation program in its history, aiming to gauge opinion on what the new Sustainable Development Goals (SDGs) should look like. At the Rio+20 Summit in 2012, it was decided that an open working group should come up with a draft agenda. The working group, with representatives from 70 countries, had its first meeting in March 2013 and published its final draft, with its 17 core goals and 169 targets, on July 2014. In September 2015, the 2030 Sustainable Development Agenda, a bold and ambitious strategy to end poverty by 2030 and pursue a sustainable future, was unanimously adopted by all 193 member states of the UN. The Agenda seeks to promote health and well-being, gender equality, end poverty and hunger, provide equal opportunities for all, protect the planet, manage natural resources, enhance our quality of life and develop countries equally and sustainably (UNITED NATIONS, 2015b). The 17 goals are listed in Table 1.

**Table 1. Sustainable Development Goals proposed by the United Nations for the 2030 Agenda.**

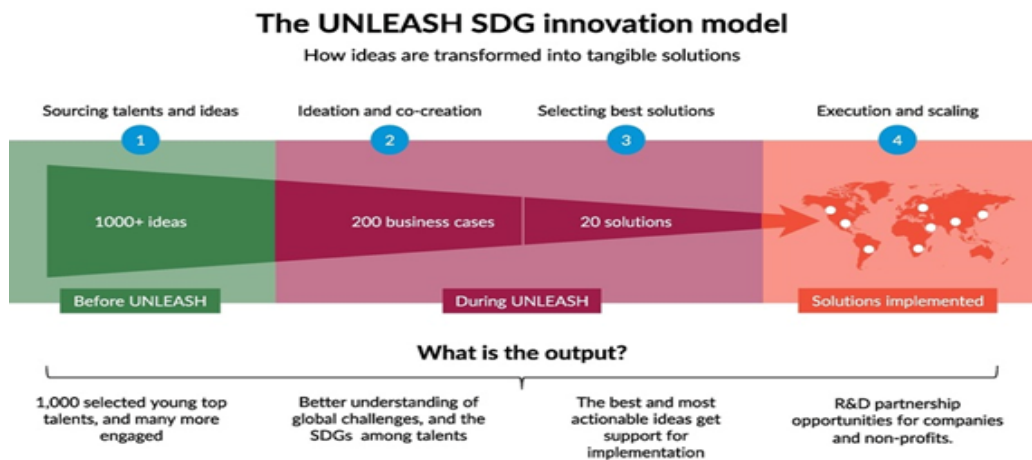
Goal 1: End poverty in all its forms everywhere
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3: Ensure healthy lives and promote well-being for all ages
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5: Achieve gender equality and empower all women and girls
Goal 6: Ensure availability and sustainable management of water and sanitation for all
Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10: Reduce inequality within and among countries
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12: Ensure sustainable consumption and production patterns
Goal 13: Take urgent action to combat climate change and its impacts
Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Source: United Nations, 2015a

## The UNLEASH initiative

To launch the SDGs, stimulate creative thinking, and disrupt conventional solutions to the 17 goals, a non-profit global sustainability initiative was proposed and endorsed by partners from different countries and sectors, among them, NGOs, philanthropic institutions and foundations, private companies and educational institutions as well as the *United Nations Development Programme*. The initiative, named UNLEASH, aims to bring together a thousand young (under 35 years old) entrepreneurs, intrapreneurs, academics and tech experts from all over the world in yearly discussions, until 2030. The selected individuals will participate in a nine-day immersion and innovation challenge focused on creating scalable solutions for the SDGs. At each annual meeting, different themes, or goals, will be selected to focus the scope of the reunions and a different city will be chosen to hold the event. The objective is to explore the SDGs through different lenses, incorporating aspects of the local life, culture and way of thinking and working. The culmination of UNLEASH Innovation Lab takes place during the last 3 days of the meeting. The teams present their solutions to peers, investors and experts within their field and the best projects are selected. The winner will receive technical, financial and technological support from different professionals to ensure fast implementation of those projects in the field (UNLEASH, 2017) (Figure 1).

**Figure 1. The UNLEASH SDG innovation model, how ideas are transformed into tangible solutions.**



Source: UNLEASH, 2017.

In this context, for the first UNLEASH meeting, the School of Public Health of the University of São Paulo, Brazil (Faculdade de Saúde Pública, Universidade de São Paulo – FSP/USP) was selected as the only educational institution partner from South America among 150 academic institutions all over the world (UNLEASH, 2017). About

to celebrate its centenary (1918 – 2018), the FSP/USP is a renowned institution - a local, national and global reference center for health, which possesses a strong tradition in regional development and international cooperation and partnerships. The FSP/USP is frequently ahead of its time; it was the first school of nutrition, health care systems engineering and hospital administration in Brazil, and the first school to offer the undergraduate course in Public Health. Besides which it was also a pioneer in medical entomology, health demography and occupational health. The School offers many excellent undergraduate and postgraduate programmes and receives students from all over Brazil and the world. Currently, it is the only Latin American institution to offer a PhD in Global Health and Sustainability (FACULDADE DE SAÚDE PÚBLICA, 2010).

After an initial internal selection process of PhD and post-doc students, the FSP/USP put forward 8 students and 3 of these were subsequently selected by the UNLEASH selection process to participate in the very first event. Diversity is a key theme in the UNLEASH project, so the profile of the selected students was naturally very eclectic. The trajectories of the UNLEASH chosen students – with backgrounds in physiotherapy, medicine and geography, were diverse, and their research projects varied from infectious diseases and epidemiology to environmental health. However, they were all united by one common objective: to contribute their talents to solving global problems thoughtfully and sustainably.

## The themes

The first event was held in Copenhagen, Denmark, from 13th to 21st of August 2017. From the original 17 SDGs, seven themes were selected for discussion, namely health, food, education, water, energy, urban sustainability, and sustainable consumption and production. In preparation for UNLEASH Lab, the selected USP students carried out a short review of current innovations around the seven selected themes in order to stimulate discussions and ‘warm up’ for the official event. Some of the thoughts that emerged from these sessions are summarized below:

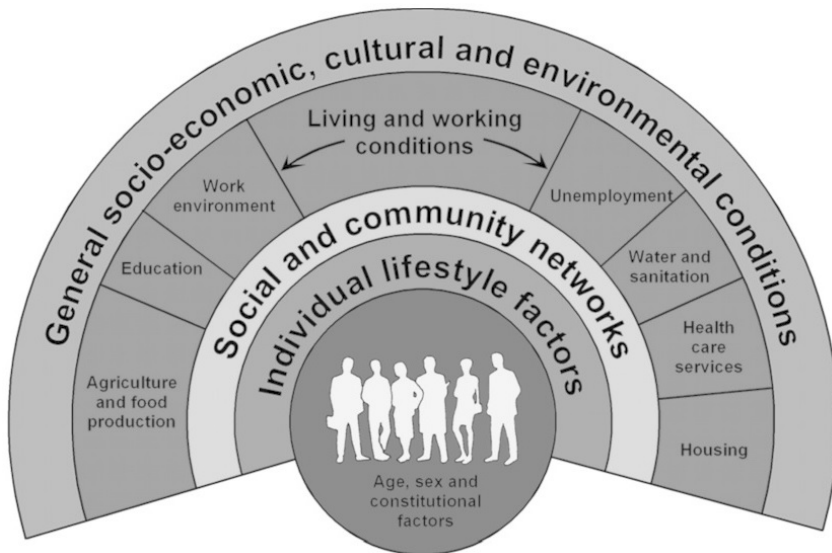
### Health

Despite the huge progress achieved with the MDGs related to health issues, such as reduction in the incidence of the big three: HIV, tuberculosis and malaria as well as huge steps forward in child and maternal mortality, there is still much more to be done. Globally, infectious diseases continue to cause significant morbidity and mortality. In 2015, there were 10.4 million new cases of tuberculosis and 1.4 million deaths. The global incidence of malaria was 94 cases per 1,000 persons at risk, but more than double that in some parts of Sub-Saharan Africa and South Asia. In Sub-Saharan Africa only half of all births are assisted by skilled health staff, compared to almost 90 percent in the developed world. Other health challenges include substance abuse and Universal Health Coverage. In 2012, 6% of deaths worldwide (3.3 million) were attributed to alcohol consumption, predominantly through injuries or non-communicable diseases. Every year, 75 million people are pushed into extreme poverty (less than \$1.90 a day) by out-of-pocket health

payments, and 12% of those already below this line are driven deeper into poverty (WHO, 2016; WORLD BANK, 2017).

Since the 1960s, health has been understood and discussed not only as disease prevention and treatment but as an inseparable and interdependent condition strictly linked to other areas. Almost 40 years ago, the Declaration of Alma Ata in 1978 brought health equality to the center of discussion and Dahlgren and Whitehead (DAHLGREN; WHITEHEAD, 1991) presented their diagram to show how health is dependent on many social determinants and related to other SDG (Figure 2).

Figure 2. Determinants of Health



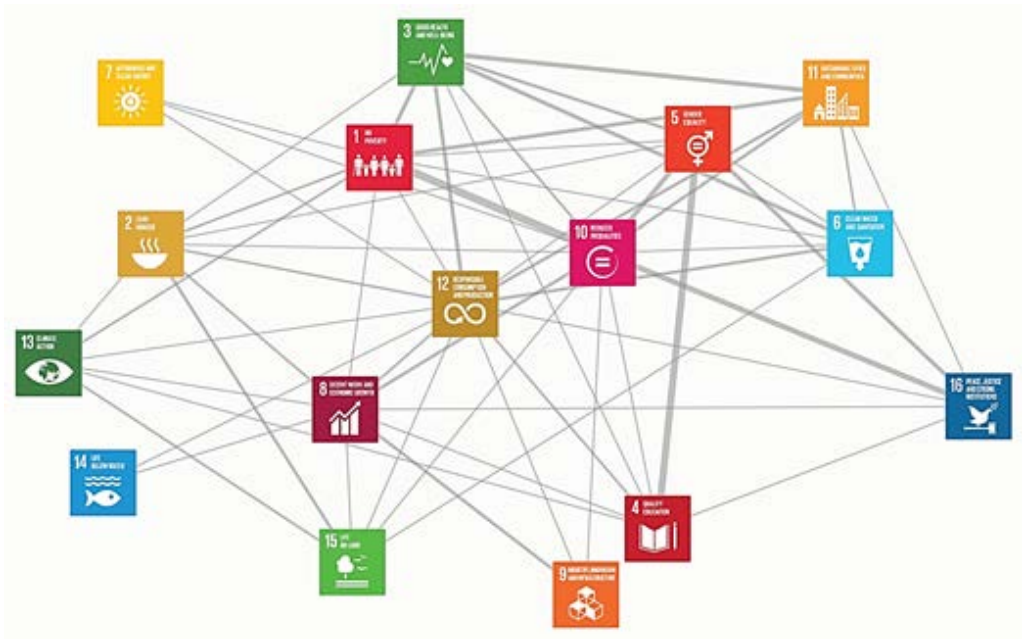
Source: Dahlgren & Whitehead (DAHLGREN; WHITEHEAD, 1991)

While the MDGs had three out of eight goals focused on health, the SDGs have one specific goal for health with 13 targets covering: Universal Health Coverage, health workforce, vaccines and medicines, reproductive, maternal, newborn, child and adolescent health, infectious diseases, communicable and noncommunicable diseases, mental health and substance abuse, hazardous chemicals, injuries and violence (WHO, 2015). Despite this, health is indirectly contemplated in most other SDGs.

In an increasingly globalized world, these problems do not exclusively affect the poorest regions of the world and cannot be viewed as belonging to single countries. Borders are ever more permeable, and in order to achieve progress in the health goals, a joint global effort is mandatory with cooperation and collaboration from other sectors as well. Some actions are necessary and urgent, and may require a change in paradigms in order to improve the population's health and well-being. For instance: reducing social disparities and inequities, malnutrition, gender inequalities, violence, vulnerability to

environmental, social and economic disasters, improving educational status and promoting social protection and resilience for the poor. Figure 3 shows the complexity and interrelationship of all the SDGs. The width of the lines connecting the goals represents the strength of the links between the targets. In order to tackle one, several others must be included in the equation to success.

**Figure 3. Interrelations between goals and targets of the SDGs.**



Source: Adapted from SDG toolkit (“SDG Toolkit”, )

Rasanathan & Diaz (RASANATHAN; DIAZ, 2016) state that, paradoxically, the recent increase in knowledge about health inequities has not been accompanied by an improvement in equity. Likewise, there has been no increase in the production of good quality evidence about interventions and policies that have been shown to reduce health inequities. This is because the literature has been more focused on relaying the prevalence of disparities and their pathways rather than finding ways to overcome these barriers and implement change. One innovative solution might be the use of e-health and mobile health (m-health) both recently emerging as interesting options to make healthcare more accessible, efficient, faster and cheaper (GLOBAL DIGITAL HEALTH NETWORK, 2017). These new technologies can connect people to health professionals, improve remote monitoring, and foster health workforce development, alleviating the pressures on healthcare services depleted of professionals and infrastructure especially in the most isolated communities. They can also contribute to diseases and disaster prevention, early warning, risk reduction and management of local, regional, national and global health risks

(WHO, 2017). Changes will not come from one source, everyone has to take ownership and play their part: Governments, universities, private sector and society.

### Food

The second goal of the SDGs seeks to address the growing challenge of world hunger, establish food security, improve proper nutrition and promote sustainable agriculture. It is estimated that 800 million people are currently hungry in the world (FAO; IFAD; WFP, 2015). Although this rate has declined in the last decade, current food production would have to increase by 70% to account for population growth, to feed a staggering projected population of 9 billion people by 2050 (DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, 2014).

By this time, 66% of the world population will live in big cities, making food production and distribution more challenging. Rapid urbanization and population growth, particularly in developing countries, are expected to put mounting pressure on the global food system as agricultural production comes under stress from environmental degradation, climate change, and extreme weather conditions. And as urbanization accelerates, so will the triple burden of malnutrition: the coexistence of hunger, undernutrition, and overnutrition in the form of obesity (INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE, 2017). As of today, 2 billion people worldwide are overweight or obese (UNITED NATIONS, 2015b).

The Global Food Policy Report (INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE, 2017) asserts the need for commitment of the world's leaders to agree on a common approach for food production. This approach should be integrated at a local and global level and have clear criteria and indicators to help identify and prioritize the implementation of policies for good governance. Numerous food production projects in urban and peri-urban areas, known as urban agriculture, have been identified as solutions for food production, distribution, and security (FAO, 2014). An example of a successful food production project in an urban area can be found in the work of the NGO Cities Without Hunger, based in the city of São Paulo (CIDADE SEM FOME, 2015).

### Education

It can be argued that the success of the SDGs overall, hinges around the achievement of the education goal, since education targets are not only encapsulated in a stand-alone goal but also appear in goals on health, growth and employment, sustainable consumption and production, and climate change among others. Education is a fundamental right, yet there are 58 million children still out of school and 781 million adults are illiterate, two thirds of which are women (UN WOMEN, 2016). The education goal strongly supports the reduction of persistent disparities by ensuring equal access to all levels of education and vocational training for all boys and girls, the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.

To fulfil the promise of universal primary and secondary education, new primary school teachers are needed, with current estimates showing a need for nearly 26 million of them by 2030 (UNESCO, 2017).

The education goals include seven main targets, encapsulating the need for an inclusive and equitable access to primary, secondary and tertiary education. Also emphasized are the importance of quality and affordable education and the reduction of illiteracy among adults (ECONOMIC AND SOCIAL COUNCIL, 2017).

Education brings innumerable benefits to society. With each year of education, the risk of conflict in a given population reduces by around 20% and an increase in secondary education enrollment reduces the risk of war by 3% (COLLIER, 2000; COLLIER; SAMBANIS, 2005). Not to mention the countless benefits for the individual; an additional year in school increases individual earning by up to 10% and each dollar invested in an additional year of education generates gains and health benefits equivalent to ten dollars in low-income countries (GEM REPORT, 2011; THE INTERNATIONAL COMMISSION ON FINANCING GLOBAL EDUCATION OPPORTUNITY, 2016). However, disruptive innovations are needed in order to achieve these targets.

### Water

Access to safe drinking water continues to be an issue of concern. According to the UN, 2.6 billion people have gained access to potable water sources since 1990, but 663 million are still without. It is also estimated that more than 2.4 billion people lack access to basic sanitation services such as toilets and latrines. Although the proportion of people without access to water and sanitation has fallen, there is still much to be done (UNITED NATIONS, 2015b).

Water scarcity not only compromises quality of life but also the consumption of contaminated water is an important cause of infectious diseases, such as cholera and cysticercosis. Diarrhea, which among other factors is caused by drinking contaminated water, is the second largest cause of child death in the world (CAULFIELD et al., 2004). In many cases, the scarcity and contamination of water sources can be fully or partly blamed on anthropic actions (WHO, 2008), such as pollution and climate change. It's also important to remember that water scarcity is not only restricted to low-income countries. In fact, more than 40 percent of the global population is affected by water security issues and this is projected to rise.

Thus, this SDG is not restricted to accessibility to water, sanitation and hygiene but also refer to diseases transmitted by polluted water and how humans can be an altering agent of the water cycle (ECONOMIC AND SOCIAL COUNCIL, 2017).

There are revolutionary ideas about new ways of obtaining water or getting access to safe water. For example the use of portable water bottles containing high-tech microbiological filters to remove waterborne pathogens (GERBA; NARANJO, 2000; LIFESAVER, 2017) These may provide a solution in disaster relief situations and in areas where water is available but contaminated.



## Energy

In the words of the UN, energy is a crucial ingredient in achieving almost all of the SDGs; and was a dominant theme in the discussion of the 2030 Agenda in Rio+20. Furthermore, in the center of the Climate Change agreement, signed in Paris in 2015, was the idea of a global energy transition; which saw a big commitment from the signatory countries particularly in renewable energy and energy efficiency. However, today there are still 1.1 billion people living without electricity and only 58% of the world's population has a clean energy source for cooking, the rest being at risk of intoxication from burning unsafe fuels. In 2015 the total consumption of renewable energy was just 19.2% (REN21, 2014; UNITED NATIONS, 2015b; UN, 2016a).

The SDGs concentrate energy goals into three main targets; universal access to energy, renewable energy and energy efficiency. Achieving universal access to energy by providing electricity to those 1.1 billion living without, especially in rural settlements in developing countries, will improve equity and the health of these populations, as energy shortages in health facilities are commonplace in these areas. Renewable energies such as hydropower, solar, wind, biogas, geothermal, marine sources, waste and bio-fuels have been increasing in the distribution of total energy consumption. However, a switch-paradigm is still necessary as well as investment and political will to support the implementation of these energies. Energy efficiency is a matter of investment in infrastructure, research and technology to improve the existing network as well as creating new energy-efficient and environmentally sound technologies (UNITED NATIONS, 2015b; UN, 2016a).

Solutions are appearing slowly but disruptively. For instance, by July 2017, Costa Rica had already accumulated 160 days of 100% renewable electricity (INSTITUTO COSTARRICENSE DE ELECTRICIDAD, 2017). In the US, Burlington became the first city to run completely on renewable energy (CITY OF BURLINGTON, 2017) and Denmark has pledged to run entirely on renewable energy by 2050 (DANISH ENERGY AGENCY, 2014). The adoption of renewable energy sources depends mostly on political will. Finding more reliable, accessible and cheaper ways to move forward in energy will no doubt be aided by investment in science. However, innovations are crucial to change how we source, store and distribute energy.

In rural communities in the world's poorest regions the availability of electricity is still very limited which has huge impacts on education, health, agriculture, economic growth and ultimately jeopardizes gender equality and sustainable development (PALIT; BANDYOPADHYAY, 2016). In many of these regions, energy infrastructure is outdated and improving this would be very expensive.

We need to find alternative ways to reach these populations, for example with off-grid household or community solutions (PALIT; BANDYOPADHYAY, 2016). However, improvements in these technologies are essential in order to reduce costs, make them more reliable and more sustainable.

## Urban sustainability

Currently, about 54.5 percent of the world's population resides in cities. Of this amount, one in five individuals live in a city with at least one million inhabitants. Projections indicate that by 2050, cities will house a total of 6.25 billion individuals, with developing regions accounting for 90% of citizens (DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, 2014). These data highlight the urgency of policies, programs and attitudes to deal with the impacts of accelerated growth, and the need to think about the development of sustainable cities (NAM; PARDO, 2011).

Against this backdrop, SDG 11 discusses Sustainable Cities and Communities. The main targets addressed in this goal are related to ensuring access to safe and adequate housing and promoting access to basic services for the population as a whole. This includes an adequate transportation system, the preservation of public spaces, prioritizing green spaces; and guaranteeing safety and access to the community, especially women, children and the elderly population to all the services available. Special attention is paid to the deleterious effects of accelerated urbanization processes, such as air, land and water pollution, with a focus on the destination and treatment of waste.

Another aspect highlighted in the presented objectives is the importance of integrated policies and relevance of social participation in development and implementation of programs for urban sustainability (UNITED NATIONS, 2015b).

However, as Wachsmuth and colleagues discuss (WACHSMUTH; COHEN; ANGELO, 2016), it is important to reflect on the problems that arise if we were to consider urban sustainability as only being about large centers and most favored populations. Thus, it is crucial to discuss urban sustainability with social equity in mind, considering the population demographic, economics, health, and the migratory movements of the inhabitants.

Several projects are being developed in the perspective of urban sustainability. Among them, an interesting model to evaluate and implement projects for urban sustainability: Paris started in 2014 with a proposal to redefine urban spaces using a collaborative thinking and under support of the citizens. The project is called "Reinventing Paris" and reinforces the need of social participation to change our cities and communities (REINVENTER PARIS, 2017).

## Sustainable consumption and production (SCP)

The definition of SCP has previously been proposed during the Oslo Symposium as *"The use of services and related products, which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations"* (UNEP, 2010).

In 2012, at the United Nations Conference on Sustainable Development (Rio+20), a 10-year framework of programmes (10YFP) was proposed to accelerate a shift towards global sustainable consumption and production. Since then, more than 500 stakeholders

have engaged in the 10YFP and several programmes have already been initiated throughout the world (UNEP, 2013).

Sustainable consumption and production is becoming a pivotal issue, as societies continue to grow in a disordered manner. World resources are finite and more than ever need to be used efficiently and consciously. With a projected global population of 9.6 billion people by 2050, it is estimated that we would need the equivalent of 3 planets to provide the resources to maintain our current consumer lifestyles (UN, 2016b).

This goal proposes that societies should adhere to some of the programmes mentioned above; promoting energy efficiency, sustainable management of natural resources, and sustainable infrastructure; providing access to basic services, green and decent jobs and a better quality of life for everyone. The key concepts are “doing more with less” and reusing where possible. The idea of “lifecycle thinking” has also been widely discussed and consists of utilizing resources in an eco-friendly manner, reducing food waste, managing waste production and reducing its impact on the environment, encouraging recycling and sustainable practices; and at the same time developing societies and economies into an era of progress and inclusive growth (UNEP, 2010; UNITED NATIONS, 2015b).

Specific targets include: implementation of 10YFP worldwide, reduction in material footprint and domestic material consumption, adequate management of chemicals, decrease in food waste and increase in national recycling rate, adoption of sustainable practices by large companies and development of sustainable tourism.

### The UNLEASH experience

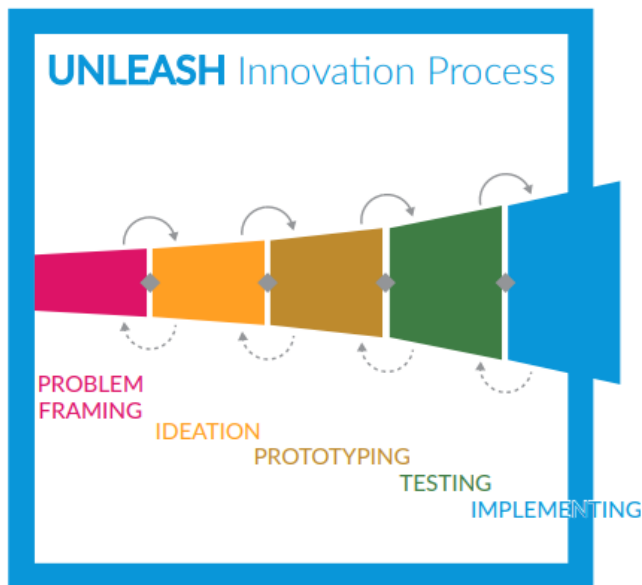
The first day of the UNLEASH innovation lab saw the participants from 129 countries gathered bright and early in a huge former train workshop in the city of Copenhagen. When we entered, there weren't 1,000 chairs as one might expect, but instead a fluid and adjustable structure of boxes which served equally to work on and to listen to inspiring opening speeches. This dynamic and creative set-up gave us a sneak preview of what lay ahead. The methods that would be used to guide and catalyze the innovation of process in the seven different SDG themes would not be conventional by any means. These initial days, where a thousand of us were all bundled together as a group, were overwhelming yet exhilarating - at every turn, you would have an intellectual and thought-provoking debate about a number of issues related to the 2030 Agenda. It made you realize you were part of something really huge and powerful.

For the subsequent days, the talents from each theme were shipped off to their own Folk High School (traditional Danish liberal schools where you go to learn about 'life' for a few months with educational courses). There, the talents were divided into sub-themes. The School of Public Health representatives were assigned to health and water. The health subthemes were: prevention, access, supply chain, disability, mothers and families and mental health. The water sub-themes were related to access & governance, purification/treatment & recycling, scarcity, sanitation & hygiene.

The UNLEASH innovation method (Figure 4) was a dynamic process that involved moving through five stages (UNLEASH, 2017):

- Problem framing: Using insights to establish a clear-cut problem statement.
- Ideation: Creating a solution to address the problem statement.
- Prototyping: Designing a preliminary model for potential users/customers to visualize the solution.
- Testing: Testing assumptions and uncertainties and refining the prototype based on expert and community feedback.
- Implementing: Production, dissemination and marketing of final product or service to investors and customers.

**Figure 4. UNLEASH Innovation Process.**



Source: UNLEASH, 2017

During the initial problem framing phase, the participants were encouraged to brainstorm broadly about problems and ideas related to their sub-theme that had been brought forward by the talents on the online platform. Subsequently, the participants were asked to present posters with root causes (in the form of a problem framing tree) and information about the needs and wants of the target user as well as the existing roadblocks. The problems were voted on by each individual according to what they felt was most relevant and what they would like to work on. The top problems were then selected according to number of votes and groups of up to six people were naturally formed. For the ideation phase, participants were encouraged to draw three alternative solutions to address the chosen problem statement. In order to select the final idea to work on the

innovation, viability and impact potential of the idea had to be taken into account. For the prototyping phase, a solution canvas was used to consolidate key areas such as value to the user, resources and cost structure, partners, implementation approach, societal impact, revenue streams (financing) and links to the SDG targets and indicators. The testing phase helped the groups to validate the ideas and prototypes based on experts and community feedback. Short- and long-term roadmaps were drawn up by the groups to plan the implementation including milestones and major anticipated obstacles.

To move between phases every group had to go through a “gate”, based on a checklist of tasks to be completed and presented in a 3 minute pitch. Suggested activities for each phase were provided to help groups to fulfill the checklist requirements. The facilitators and external experts provided continuous feedback to guide the groups through the innovation process. If at the gates, the panel felt the group wasn't ready to move on, they would have to go back to the drawing board. However, despite setbacks and disappointments, it was incredible how dedicated everyone was, pushing forward with brave smiles on their faces whilst helping other teams along the way if they could. The experience of being in the Folk High Schools was simply unforgettable and was the crucial ingredient in the bonding/innovation process.

The final stage of the innovation lab was held in Aarhus (European Capital of Culture, 2017) where the 1000 talents gathered once again to present a total of 199 solutions, initially to peers for the first phase of the selection process, and later to a panel of experts. By the end of the day, the 14 best solutions (two from each theme) had been selected for the final event - the 'Dragon's Den'. This final phase saw the talents making 3-minute pitches to a panel of four 'Dragons' (investors) who would put the teams through their paces before committing to invest in the top ideas.

Some innovative ideas that came from the health group were the use of blockchain technology to improve supply chain traceability and combat counterfeit drugs, the use of artificial intelligence with machine learning for diagnosis and prevention of colorectal cancer, the creation of online platforms to translate scientific knowledge into understandable and actionable information for end users or to foster health care accessibility.

Unsurprisingly, technology was harnessed by many solutions at Unleash. For instance, in the food theme, an app was proposed to link small farmers with providers and consumers in order to improve food security and prevent food waste that occurs due because to the lack of communication between the members of the chain. In the water theme, an app was designed to prevent household water leaks in urban areas by linking the individual consumers/residents and the water supply companies, optimizing water distribution and reducing waste. In the education theme, a platform was proposed to allow teachers to share micro-innovations in a classroom setting to improve communication and student achievement. Another solution was to reduce prejudice and discrimination against refugees using virtual reality to allow the user to actually feel and experience the real-life journeys that these displaced people have had to endure to arrive where they are. Several ideas also emerged from a number of themes which provided consumers with a platform to look up the sustainability profile of various products and companies, therefore promoting sustainable production and consumption and enhancing transparency.

The entire event was incredibly enriching and inspiring in all aspects, but also served as a huge learning experience not only for the participants but also for the organizers who will use this as a model to help improve future events.

We hope that in the upcoming events, like in this one, sustainable attitudes can continue to prevail not only for the duration of the event but also in the ongoing efforts of the participants and organizers, and that this innovation laboratory reflects desirable actions of our day-to-day lives.

UNLEASH Lab 2017 was a truly unique experience and commendable in its huge effort to connect such a diverse group of people with different experiences and backgrounds to achieve real scalable solutions to the SDGs.

## Conclusion

The current globalization paradigm presents many problems, while also offering new opportunities. Complex problems challenge policy makers and society in the modern world and by observing the web of relationships these challenges present, we can emphasize that health is a recurring theme and virtually connected to every goal of the 2030 Agenda.

The creation of a global network and platform to join efforts and share innovative solutions is a way to foster social, economic and environmental sustainable development and improve health and quality of life. Connecting highly skilled young people with diverse backgrounds and areas of expertise to discuss the world's most pressing problems is an experiment that can bring huge benefits to mankind. UNLEASH Lab is an example of this leap of faith and demonstrates how much stronger and effective we can be if we work on solutions together.

Exchanging successful practices, knowledge, products and technologies through international and interregional partnerships will help address problems that are difficult to tackle for countries in isolation. Thus, it is up to the citizens of the world, private companies, NGOs, policy and decision-makers to take action, remembering that, in the end, as the world becomes even more interconnected and interdependent, that a more holistic view can produce better results than individualistic thinking.

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# MOVING TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS: THE UNLEASH INNOVATION LAB EXPERIENCE

**Abstract:** In response to innumerable global challenges in a world ever more complex and interconnected, including a number of public health challenges, the United Nations launched the 2030 Agenda for Sustainable Development; a guideline intended to deal with these issues. Foreseeing their huge complexity, the UNLEASH initiative was created with a vision to gather, on a yearly basis until 2030, 1.000 young talents from all over the world to co-create disruptive solutions for the 17 Sustainable Development Goals (SDGs). The School of Public Health of the University of São Paulo was selected as the only educational institution partner in South America and was invited to select and send students to the launching event in Denmark in August 2017. The aim of this study is to address and reflect on the seven SDGs (health, food, water, energy, urban sustainability, sustainable consumption and production and education) that were explored in this first event and relate the students' experiences of this global innovation lab.

**Key-words:** Sustainable Development Goals; 2030 Agenda; United Nations.

**Resumo:** Em resposta a problemas cada vez mais complexos e interconectados, entre os quais figuram diversos desafios de saúde pública, as Nações Unidas lançaram a Agenda 2030 de Desenvolvimento Sustentável que pretende servir como guia para lidar com essas questões. Visando abordar a complexidade destes desafios, foi proposta a iniciativa UNLEASH, um evento que reúne 1.000 jovens talentos de todo o mundo anualmente até 2030 para encontrar soluções inovadoras aos 17 Objetivos do Desenvolvimento Sustentável (ODS) propostos na Agenda 2030. A Faculdade de Saúde Pública da Universidade de São Paulo foi a única instituição de ensino latino-americana selecionada para enviar estudantes na primeira edição do evento, realizado na Dinamarca em 2017. O presente artigo tem como objetivo abordar os sete ODS (saúde, comida, água, energia, sustentabilidade urbana, consumo sustentável e educação) que foram trabalhados neste primeiro encontro, refletir sobre os mesmos e relatar a experiência dos pós-graduandos no evento global e inovador da UNLEASH.

**Palavras-chave:** Objetivos do Desenvolvimento Sustentável; Agenda 2030; Nações Unidas.

**Resumen:** Como respuesta a los innumerables desafíos globales en un mundo cada vez más complejo e interconectado, las Naciones Unidas lanzó la Agenda 2030 para el Desarrollo Sostenible; como un guía para tratar con estos problemas. Previendo las grandes comple-

tidades de estos, la iniciativa UNLEASH, fue creada con la visión de reunir anualmente 1000 jóvenes talentos de todo el mundo hasta 2030 para encontrar soluciones disruptivas para los 17 Objetivos de Desarrollo Sostenible (ODS). La Facultad de Salud Pública de la Universidad de São Paulo ha sido elegida como la única institución colaboradora en América del Sur, y fue invitada a seleccionar y enviar estudiantes para el primer evento en agosto del 2017 en Dinamarca. El objetivo de este estudio es abordar y reflexionar sobre los siete ODS (salud, alimentación, agua, energía, sostenibilidad urbana, producción y consumo responsables, y educación) que fueron explorados en este primer evento, y relatar las experiencias de los estudiantes sobre este laboratorio de innovación global.

**Palabras claves:** Objetivos del Desarrollo Sostenible; Agenda 2030; Naciones Unidas.

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