





Disclaimer

The views expressed in this report do not reflect the views of any organization, agency or programme of the United Nations. The Report has been prepared by the Solution Initiatives team of SDSN Youth. The production team consists of: Inna Amesheva, Amy Au, Alex Clark, Kanika Joshi, Kira Mullally, Julian Payne, Dario Piselli, Sushil Rajagopalan. The authors of each chapter are indicated separately.

This Report has been prepared with extensive advice and consultation of Members of the SDSN Leadership Council, Members of SDSN Secretariat and representatives of our partner organizations. These individuals serve in their personal capacities, so the opinions expressed in this Report may not reflect the opinions of their host institutions. They are also not necessarily in agreement with every detail of this Report.

The publication may be reproduced in whole or in part and in any form for educational or non-profit services without special permission from the copyright holder, provided acknowledgement of the source is made. SDSN Youth would appreciate receiving a copy of any publication that uses this publication as a source. No use of this publication may be made for resale or any other commercial purpose whatsoever without prior permission in writing from SDSN Youth. Any request for such a permission should be directed at solutions@sdsnyouth.org.

Cover design by <u>Katya Burceva</u>. Report Layout by <u>Katya Burceva</u>.

© Figures, photos, and illustrations as specified.

Suggested citation

Sustainable Development Solutions Netwok - Youth (2018). Youth Solutions Report - 2nd edition. Sustainable Development Solutions Network - Youth, New York.

Production

Sustainable Development Solutions Network - Youth 475 Riverside Dr.
Suite 825

New York, NY 10115, USA Tel: +1 (212) 870 2799

E-mail: solutions@sdsnyouth.org Web: http://www.sdsnyouth.org SDSN Youth is an initiative of the UN Sustainable Development Solutions Network; a program launched by UN Secretary General, Ban Ki-moon, in 2012 to mobilise global expertise around the Sustainable Development Goals (SDGs).





Partners

The following Partners have collaborated with the preparation of the report:

















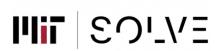














Table of Contents

Foreword Statements of Support List of Advisory Panel Members Preface: Young people need strong innovation systems to thrive: an interview with Preface Marianna Mazzucato Executive Summary	5 6 8 rof. 12 18
PART I - YOUTH SOLUTIONS AND ANALYSIS	
Chapter 1: Overview and analysis of key trends and statistics from the 2018 Report	20
Kanika Joshi, Sushil Rajagopalan and Dario Piselli Chapter 2: The 50 Solutions	34
PART II - IDENTIFYING CHALLENGES AND OPPORTUNITIES FOR YOUTH SOLUTION TO HARNESS YOUTH SKILLS IN ALL SECTORS	ONS:
Chapter 3: Financing for youth entrepreneurship in sustainable development	88
Inna Amesheva, Alex Clark, Julian Payne Chapter 4: Empowering youth solutions and the challenge of visibility Amy Au	105
Chapter 5: Building youth skills: are acceleration programs working for young people' Chloé Khalifat-Calbet, Gautier Loo, Mathilde Souchon, Jack Parsons, Paul Frampton, Kirsten Naude, Inna Amesheva and Dario Piselli	? 114
Chapter 6: Advancing youth skills in the public discourse: the importance of policy a cacy at the United Nations	advo- 126
UN Major Group for Children and Youth Chapter 7: Social intrapreneurship: the next frontier for youth solutions? Tim Heard	136
Chapter 8: Youth skills and the rise of impact entrepreneurship in Africa: are we get the most out of it? Fabio Petroni and Fabrizio Lobasso	tting 145
Chapter 9: Young people and the private sector: opportunities for collaboration in L za's sustainability strategy	Lavaz- 158
Mario Cerutti Chapter 10: Aligning youth solutions with the SDG framework Sushil Rajagopalan, Yuri Hung and Dario Piselli	166
Acknowledgments Riographies of the Solution Initiatives team	176 177



Foreword

The Sustainable Development Goals (SDGs) are to be achieved by 2030, and by this time an additional 1.9 billion children will enter their youth by turning 15. All too often, young people are seen as the objects of development – as vulnerable populations that must be protected and who are passive recipients of the fruits of sustainable development. However, this misconception could not be further from the truth. In every culture, passionate and driven young people have wrought great advancements through technological innovation, by leading social movements, or by starting businesses

and NGOs that serve the needs of their communities.

This report highlights 50 transformative projects launched by young people to bring about more just, prosperous, and environmentally sustainable societies. These youth solutions combine visions of a better world, leadership to inspire action, and the energy and drive needed to realize the SDGs. For example, I am sure you will be as inspired as I have been by reading about MuHealth, which works to improve healthcare in Rwanda, or the Trafficking Dispatch, which aims to end modern slavery and human trafficking globally.

Building on last year's inaugural Youth Solutions Report this second edition provides great analysis and recommendations for how young people can support the SDGs. Mariana Mazzucato of UCL explains how youth-led innovation for the SDGs forms part of mission-oriented innovation. In Chapter 3, Inna Amesheva, Alex Clark, and Julian Payne discuss the barriers young people face in accessing financing projects and propose solutions. Amy Au explores in Chapter 4 how social media can empower young people and enhance the visibility of youth-led solutions. Contributors consider the merits of startup acceleration programs (Chapter 5), opportunities for involving young innovators in United Nations policy processes (Chapter 6), and training of young entrepreneurs in Africa (Chapter 8). In Chapter 7, Tim Heard discusses social intrapreneurship, and Mario Cerutti suggests models of collaboration between young people and the private sector (Chapter 9). The report closes with a look at how young innovators can support the monitoring and review of the SDGs.

I congratulate SDSN Youth on this excellent report, which was compiled by young people, many of them volunteers. The report itself serves as an example for how youth are driving change towards achieving the SDGs.

Co. Slindt to

Dr. Guido Schmidt-Traub Executive Director, SDSN

Statements of Support

The future belongs to the young, who are increasingly providing imaginative solutions to push the Sustainable Development Goals agenda forward, helping to solve the greatest challenges our world faces. Initiatives such as SDSN Youth and its Youth Solutions Report are confirming how important youth-focused programmes are in supporting the ideas and energy coming from the next generation.

Paul Polman, Chief Executive Officer, Unilever

"Young people are doers whose talent to spark positive change is yet to be fully recognized. The Youth Solutions Report is a great platform to showcase the capacity of young women and men for creativity and innovation. Taken together, the brilliant solutions featured in the Report contain a call to future action, an invitation to trust youth as front-runners both in the present and in the future. We need to provide young people with tools and opportunities so that they can – and they will – come up with their own solutions to address problems that arise in their environment."

Forest Whitaker, UNESCO Special Envoy for Peace and Reconciliation, Founder and CEO, Whitaker Peace & Development Initiative

"All of us — citizens, political and social institutions, businesses — are asked to respond to global challenges and undertake to make a difference. The United Nations 17 Sustainable Development Goals are the way to go to save the planet, but 2030 is fast approaching and the triggering of a virtuous contamination of people is as urgent as ever. It is important to work actively with institutions and local governments, but most of all with young people, who are the real game changers of the future. I encourage SDSN Youth to keep on engaging young people from all over the world in the search of sustainable solutions to build a better future."

Francesca Lavazza, Director, Luigi Lavazza S.p.A.

"Achieving the SDGs requires open goverance at all levels and simultaneously needs to promote SDG Science, Technology and Innovation for successful implementation. SDSN Youth works tirelessly to advocate youth engagement in the governance of the SDGs to set agendas and have oversight of SDG implementation. The focus of the Youth Solutions Project is to show how youth can take the initiative and become leaders of science, technology and innovation to implement the SDGs. The Youth Solutions Report is a truly wonderful set of youth solutions that government and private sector partners all around the world should scale and finance."

Patrick Paul Walsh, Chair of the Global Association of MDPs at the Earth Institute in Columbia University, Senior Advisor SDSN, and Director of the Centre for the Sustainable Development Studies in UCD, Ireland

"Once again, the Youth Solutions Report highlights practical and inspiring projects led by young people from many countries. We need these creative and fresh ideas if we are to find solutions to the most difficult sustainable development challenges. The work done by SDSN Youth on youth-led innovation is a great way to bring together the ideas of young people from many different countries and backgrounds."

John Thwaites, SDSN Leadership Council and Chair, Monash Sustainable Development Institute

"To achieve the SDGs we need the young people's innovation and passionate entrepreneurship. The Youth

Solutions Report showcases brilliant solutions to some of our most difficult sustainability challenges from all over the world. Thank you for leading us into a more sustainable future!"

Anna Nordén, Ph.D., Network Manager SDSN Northern Europe

"Five mega disruptive trends noted in Africa—demographics, climate change, technology, connectivity, and unique natural resource discoveries— could be turned into opportunities rather than risks if innovative solutions can be found. The work of the SDSN Youth Solutions Network provides a platform by which innovative ideas from the young can find financing and get implemented, rescuing them from the pit of good ideas that never get done."

Frannie Leautier, Senior VP, African Development Bank

"Involving youth in achieving our Sustainable Development Goals is essential for their success and for the future of our Planet and all of its inhabitants. This SDSN initiative is a welcome contribution which will bring new energy and new solutions to our common aspirations."

Julia Marton-Lefèvre, Board Chair, Bioversity International

"Sustainable food systems are central to achieve the 2030 Agenda and the 17 Sustainable Development Goals. Over half of the SDGs relate to global food security and nutrition, including the goals that relate to poverty, gender equality, water and sanitation, responsible production and consumption, and climate change. Global food system needs new generations and Youth Solutions to achieve all SDGs and address the current challenges of the 21st century. Youth has a key role to be agent of change, owner of the future."

Anna Ruggerini, Operations Director, BCFN Foundation

"IUCN, on behalf of the PANORAMA – Solutions for a Healthy Planet partnership, is thrilled to be a partner in the Youth Solutions Report again. SDSN and PANORAMA share the objective of promoting successful, inspiring examples of "what works", celebrating the actors behind these solutions, and facilitating support for taking solutions to the next level and ensuring they are applied more widely."

Marie Fischborn, Lead, Protected Area Solutions, IUCN

"Our grassroots movement Liter of Light provides training to communities in 30 countries to build solar lights, has reached 950,000 households, and addresses 15 out of the 17 Sustainable Development Goals. The Youth Solutions Report is an inspiring initiative that has provided us with invaluable support to carry our innovations forward and scale our movement even further."

Luca Bucken, Partnership Director, Liter of Light (Solution Featured in 2017 Report)

"The key to achieving success in implementing the SDGs is in collaboration, rather than in competition. We are up against a limitation of time, with a limited amount of resources - and it is only by coming together can we multiply the impact of our efforts on ground. The Youth Solutions Report is an embodiment of these very ideas."

Kirthi Jayakumar, Founder and CEO, Red Elephant Foundation (Solution Featured in 2017 Report)

"For too long, we hear the saying: young people are the leaders of tomorrow. To achieve the audacious vision set by the SDGs, young people need to be leaders of today - and the SDSN Youth Solutions Report shows us so many inspiring examples of young people being leaders of today to achieve the SDGs. As one of the Youth Solutions featured in this report, it has given me the global exposure that I have never dreamt of. Thank you to the dedicated team at SDSN Youth for making this happen."

Bonnie Chiu, Founder and CEO, Lensational (Solution Featured in 2017 Report)

Advisory Panel

For the selection of the Solutions which are showcased in the Report and included in the Youth Solutions community, SDSN Youth works together with an Advisory Panel comprising world-renowned experts from different disciplines, representatives of the SDSN Secretariat and members of SDSN Youth Executive.

MEMBERS



DJAFFAR SHALCHI

Mr. Djaffar Shalchi is originally from Tehran, Iran, where he was born in 1961. He has lived in Copenhagen, Denmark since 1970. In 1977, Djaffar met a lovely Danish girl, Ané Maro, with whom he is now married and has two amazing children. Djaffar obtained a bachelor's degree in constructional engineering in 1988. In 1999 he decided that he was ready to become self-employed. Djaffar founded his own construction company, which flourished rapidly and led to great financial success. Djaffar is an accomplished entrepreneur in the property development business and at the forefront of philanthropic activities focusing on ending extreme poverty. After successfully building up many property companies, Djaffar decided to dedicate the majority of his time and fortune to eradicate extreme poverty. He is the Founder and Executive Director of Move Humanity. Filled with love for humanity, Djaffar Shalchi is committed to making a difference and to inspire others to do the same.



CHERIE NURSALIM

Cherie Nursalim is Vice Chairman of GITI Group, a Member of the International Advisory Board of Columbia University and the Asia Advisory Board of the MIT Sloan School of Management. She also sits on the boards of the Yale Center for Environmental Law Policy and the University of Indonesia Climate Change Center, as well as the China Disabled Persons Foundation Board and the United in Diversity Foundation.

Ms. Nursalim has recently been appointed to the Executive Board of International Chamber of Commerce. She organizes international and education forums and has won the Baiyulan Award from the Shanghai government. She was listed among Forbes' 48 Heroes of Philanthropy.



MARIE FISCHBORN

Marie Fischborn is with the International Union for Conservation of Nature (IUCN). She currently leads IUCN's engagement in the Panorama initiative, with a thematic focus on protected area solutions, working globally with a wide range of partners and stakeholders. Marie has also played a leading role in the emergence of Panorama. Panorama is a partnership initiative to identify and promote examples of inspiring, replicable solutions across a range of conservation and development topics.

Marie holds a master's degree in Biodiversity and Ecology and a bachelor degree in Biology.



MARTIN MÄRKL

Martin started his professional career within the Crop Science industry in 1991 as a research chemist. He held various positions in research and development before joining Bayer Crop Science, Regulatory Affairs in 2003. In 2008 he was given the opportunity to establish a sustainable development department at Bayer CropScience Headquarter in Monheim, Germany. In October 2016 he accepted a position as Senior Stakeholder Engagement Manager, responsible for agricultural topics with a focus on rural development, food security and sus-

tainable agriculture. He represents Bayer on these topics with the relevant bodies of the European Commission, multilateral platforms such as OECD, FAO and CFS, as well as bilateral initiatives by the German Government.

He received a PhD in Chemistry from the University of Würzburg in 1989, followed by a post-doc fellowship at the University of California at Berkeley.



ROSS HALL

Ross is currently directing Ashoka's education strategy for triggering a fundamental change in the experience of education so that every young person is empowered to make a better world. He is a Board Director of Whole Education - a network of schools committed to providing holistic education - and a founding trustee of a new all-through schools chain in the UK.

Ross researched and designed a ground-breaking programme that aims to equip and incline young people to be well and to do well. The first implementation of the Better World Programme is with 500,000 children in rural communities across Zimbabwe and Tanzania.



FRANNIE LÉAUTIER

Dr. Frannie Léautier is Chairperson and Co-Founding Partner of Mkoba Private Equity. Dr. Léautier previously served as Executive Secretary of the African Capacity Building Foundation (ACBF). A Tanzanian national, she served as Vice President of the World Bank and Head of the World Bank Institute from December 2001 to March 2007. She also served as Chief of Staff to the former President of the World Bank from 2000 to 2001. Cumulatively, Dr. Léautier served in various capacities at the World Bank from 1992 to 2007. From 2007 to 2009, she was a Managing Partner at The Fezembat Group, a company focused on risk management and leadership development.



RASMUS SCHJØDT PEDERSEN

Rasmus is a Harvard and MIT-educated digital transformer and winner of a Crown Prince Frederik Scholarship for extraordinary academic achievement. He serves as CEO of Sustainia, a global advisory group and digital studio that turns UN Sustainability Development Goals into business strategies and digital solutions for international clients. He is also the founder of Athliit - a sports & health tech company that works to ensure healthy lives and promotes well-being for all at all ages.

At Harvard, he earned an MPA degree with a concentration in management, entrepreneurship and new media (with cross-registration at MIT). Previously he held leadership positions at Deloitte and a digital strategy consultancy. In parallel Rasmus has maintained a military career with NATO and EU assignments (and became the youngest officer promoted to Naval Commander reserves).



JENNIFER GROSS

Jennifer Gross founded the Blue Chip Foundation in 2015 which focuses on alleviating extreme poverty in the developing world; education in the United States, and social enterprise at the local region. Ms. Gross is a member of The Gross Family Foundation which has donated to Mercy Ships, Doctors Without Borders, Earth Institute at Columbia University, Duke University, UCI Stem Cell Research Center, Sue and Bill Gross Women's Pavillion at Hoag Hospital in Newport Beach, Sue and Bill Gross Surgery and Procedure Center at Cedars Sinai in Los Angeles, and The Teachers of Orange County. She also serves on the board of the Sustainable Development Solutions Network, Duke Global Health Institute and LA Kitchen.

She is partnering with PixHug which is a social media platform designed to bring money to charitable campaigns through member participation. Prior to joining PixHug, Ms. Gross owned a physical therapy clinic in Beverly Hills. She has 10 years of philanthropic and business experience and earned her undergraduate degree from Duke University.



RAINER KATTEL

Rainer is Professor of innovation and public governance at the UCL Institute for Innovation and Public Purpose, and research professor at Ragnar Nurkse School of Innovation and Governance, Tallinn University of Technology, Estonia. He led Ragnar Nurkse School of Innovation and Governance for 10 years, building it into one of the leading innovation and governance schools in the region.

Professor Kattel has also served on various public policy commissions, including the Estonian Research Council and European Science Foundation. He has worked as an expert for the OECD, UNDP and the European Commission. Currently, he leads the Estonian Government's Gender Equality Council, and is a member of governing boards at Tallinn University of Technology and Estonian Academy of Arts..



OLIVER LIBBY

Oliver B. Libby is the Chair & Co-Founder of The Resolution Project. Resolution identifies and empowers undergraduate students around the world who wish to launch new social ventures, supported by Resolution's global network of resources.

Oliver is also a founding Managing Director of Hatzimemos / Libby, a global growth catalyst firm based in New York, focusing on the energy and advanced technology sectors. Oliver serves as a Trustee of the philanthropic Harvard Club of New York Foundation and a member of the Clinton Global Initiative's LEAD program. Oliver graduated magna cum laude from Harvard University.



LAUREN BARREDO

Lauren Barredo is a Manager for the SDSN, where she manages the Thematic Groups on Health, Agriculture, and Extractive Industries. She also manages the Caribbean SDSN and the Amazonia SDSN. Previously she was a Special Assistant to Jeffrey D. Sachs at The Earth Institute, Columbia University. Prior to that Lauren worked as a project administrator for the National Fish and Wildlife Foundation. She holds a Masters Degree in Envionmental Management from the Yale School of Forestry and Environmental Studies, and two Bachelors Degrees from American University.



VIRGILIO VIANA

Virgilio Viana is an expert in forestry and sustainable development. He received a PhD in evolutionary biology from Harvard University and did post-doctoral work on sustainable development at the University of Florida. He was formerly professor of forest sciences at the Higher School of Agriculture Luiz de Queiroz, at São Paulo University. Dr. Viana coordinated the Brazilian consultative process that led to the establishment of the Forest Stewardship Council (FSC) in 1993. In 2008, Dr. Viana transitioned to a new role as Director General of the Amazonas Sustainable Foundation (FAS), an organization charged with implementing the Bolsa Floresta Program, as well as providing the institutional framework to market environmental services of Amazonas' forests.



CATHERINE BARBA

Catherine Barba is one of the top global experts in the intersection of retail and digital transformation since 1996. She develops the New-York-based PEPS Lab, a Retail Innovation Lab that offers clear guidance to brands and retailers seeking to adapt to the new consumer behaviors and values, and to imagine the future of their business. Prior to that, a serial entrepreneur and Internet pioneer in Europe, Barba founded and sold several digital busi-

nesses in France. A trusted angel investor and mentor, she serves on the board of directors of successful tech startups, including Euveka (CES 2018 Innovation Awards Honoree), Reech, Retency, Popshop, and on the board of multinational organizations such as Renault, the world's largest carmaker. In 2015 and 2016, she was named one of 50 most influential figures in Europe's digital economy and in 2014 one of 3 most influential female figures in France. Barba is a Knight of the French National Order of Merit and Knight of the National Order of the Legion of Honor.



ALEXANDER DALE

Alexander Dale leads MIT Solve's Sustainability work, where he supports people and organizations passionate about tackling food, energy, water, and climate challenges. He has an academic background in the life-cycle impacts of energy and water infrastructure, and a professional background in environmental policy, engineering education, and nonprofit management.

Alexander was Executive Director of Engineers for a Sustainable World (ESW) from 2013 until 2015 and continues to serve on ESW's board. From 2015 to 2017, he was a AAAS Policy Fellow hosted by the US EPA's Transportation and Climate Division. He has also taught courses in social entrepreneurship, energy & science communication, and technical sustainability.



ANNA NORDÉN

Anna is the Network Manager of the SDSN Northern Europe. She holds a PhD degree in Environmental Economics from from the University of Gothenburg and is currently a Research Fellow at the Department of Physical Geography and Ecosystem Science of Lund University. Her primary research interest is forest conservation policies and behavioral economics, with emphasis on sustainable forest management, payment for ecosystem services and biodiversity conservation. Her current research topics include: policy design for implementing REDD+, especially Payments for Ecosystem Services (PES); synergies and trade-off between biodiversity and ecosystem services; forest certification.



SUZI IBBOTSON

Suzi Ibbotson is a Global Communications Director at Unilever, focused on external campaigns. Prior to joining Unilever she held various marketing and communications positions in both public and private sector organizations, bringing a focus on sustainability to every role. She is a lead member of the Collectively project, a pilot venture to explore intrapreneurship across companies, and responsible for Unilever's own intrapreneurs network.

Young People Need Strong Innovation Systems to Thrive: a Conversation with Mariana Mazzucato



(interview conducted by Dario Piselli on 31 May 2018)

Professor Mariana Mazzucato (PhD) holds the Chair in the Economics of Innovation and Public Value at University College London (UCL) and is the Founder and Director of the UCL <u>Institute for Innovation</u> & <u>Public Purpose (IIPP)</u>. IIPP is dedicated to rethinking the role of public policy in shaping both the rate of growth and its direction—and training the next generation of civil servants with a focus on the dynamic organisational capabilities required for mission-oriented policies. She is the winner of the 2<u>014 New Statesman SPERI Prize in Political Economy</u>, the 2015 Hans-Matthöfer-Preis, and the 2018 Le-

ontief Prize for Advancing the Frontiers of Economic Thought. She was named as one of the <u>'3 most important thinkers about innovation'</u> by the New Republic.

Professor Mazzucato advises policy makers around the world on innovation-led inclusive growth and is currently a member of the UN Sustainable Development Solutions Network Leadership Council; the Scottish Government's Council of Economic Advisors; and SITRA's Advisory Panel in Finland. She is currently a Special Advisor for the EC Commissioner for Research, Science and Innovation, Carlos Moedas, and has recently authored a high impact EC report Mission-Oriented Research & Innovation in the European Union. She is also a Special Advisor to the Secretary General of the OECD, Angel Gurría, for the OECD's New Growth Narrative. Her research is funded by many international grants including from the European Commission, the Ford Foundation, the Rockefeller Foundation and the Open Society Institutes. Her highly-acclaimed book The Entrepreneurial State: debunking public vs. private sector myths (Anthem 2013; Public Affairs, 2015) was on the 2013 Books of the Year list of the Financial Times. She is co-editor of Rethinking Capitalism: Economics and Policy for Sustainable and Inclusive Growth (Wiley Blackwell, July 2016). Her new book The Value of Everything: making and taking in the global economy is published by Penguin (Allen Lane, 2018).

Professor Mazzucato, a leading concept behind SDSN Youth's work supporting youth-led solutions is the concept of innovation. Let's start from here, because from this perspective harnessing the skills of young people is central to the kind of innovation-led growth that is promoted in the 2030 Agenda for Sustainable Development. In your opinion, why is innovation important in the context of the Sustainable Development Goals (SDGs)?

First of all, innovation is important in itself because it represents a key driver of growth for every country, not just highly developed market economies. Innovation is about change: structural change, transformative change, change in production methods, distribution methods and even consumption patterns, as the demand side has always been a key driver of growth. Economic growth, however, has both a rate and a direction. What kind of innovation we have and how it is being financed will in fact affect the direction of innovation. That is a really important first point because otherwise we just use the word 'innovation' and it is sometimes confused with simply high-tech areas.

Secondly, innovation is also essential to transform the SDGs from inspirational challenges to more concrete

missions. There is a real opportunity for the SDGs to learn from innovation, and particularly what I call mission-oriented innovation, that is, the kind of innovation that is focused on solving problems. These could be either technological problems, like going to the moon, or social problems, like air pollution in cities. Let's stick with the moon example. Embarking on this collective mission required leadership, someone to actually say "we are going to the moon and back again in a generation". Moreover, getting to the moon called on many different sectors to invest. It was not just aeronautics; even clothing and textiles had to innovate their products. Finally, going to the moon prompted the launch of all kinds of related projects, and built capacity for exploration, experimentation, risk taking and learning around those projects. Now, most of the problems that are set out in the SDGs also require lots of different sectors to innovate, and so we should not be using them just to drive innovation to solve one specific problem, but also to help economies diversify, because many economies are too skewed towards one sector. However, the SDGs are actually framed as challenges, not as missions. They are really useful because they are bold, they are inspirational, they require risk taking and leadership. But transforming them into missions means making them more concrete than a challenge. Climate change, inequality, problems around hygiene and clean water, those are challenges, but to solve those challenges requires targeted missions that you can actually say yes or no to: did you reach the goal? Transforming the SDGs into these types of missions really requires all actors in society to come together, think in new ways and enable and nurture this bottom-up forms of exploration, experimentation and learning.

How do you think that the SDG framework is different for thinking about innovation, as opposed to a focus on specific sectors for example?

The problem with industrial policy is that it is often framed in terms of assisting the key or top sectors in a country. Every country will have its list of the sectors they think need support, and then they will use industrial strategy or an innovation policy to target those. The problem with that is a problem of additionality: it is not clear what you are asking that sector to do, and you certainly would not lead that sector to meaningfully engage with emerging social, environmental and technological challenges.

Let's look at this from another perspective. Many countries are affected by a common problem, which is low business investment. Especially in modern day capitalism, we live in an era of over-financialization, and so we have many companies spending more on things like share buybacks than on human capital development and research and development (R&D), or hoarding of capital as well, so inert capital that is actually at record levels around the world right now. How do you unlock business investment? You do not do it by giving business handouts. It is not by giving them subsidies. It is by picking the willing, coming up with problems and then asking your companies in all sectors, as well as other types of organizations: who's willing to help us tackle this particular mission around pollution, around making sure that people living with Alzheimer's disease can actually be more independent at home, around tackling how big data can be used to improve healthcare in hospitals? Who is willing to help us? You should focus on the problem and then you set up your instruments, that could even involve public banks. Many developing countries, as well as developed ones, have public banks: instead of just lending out money to a sector, you can ensure that that sector transforms itself in order to tackle a mission. The example of Germany and their Energiewende mission is quite interesting, in that it also had a bottom-up origin which really brought it to the top of the table, gave it legitimacy and required every sector to change. This is the key point: to really transform all the policy instruments, including what a public bank does for example, in order to deal with the complex challenges of sustainable development, you need precisely the sort of holistic, integrated approach that is contained in the SDGs.

Building on this, where does innovation come from? How can we think of communities and particularly young people as part of the equation and leverage the effective use of their skills, whether they are entrepreneurs, intrapreneurs, social innovators? Should they be framed and targeted specifically within those systems with particular actions?

I do believe in unlocking new opportunities for youth, but I don't believe that in order to do that we need to frame innovation problems solely in terms of either age groups or in terms of the size of firms. Even for startups, what we want them to do is scale up and to really produce value for the economy, be innovative and productive, produce jobs, produce valuable things. Similarly, if you just think about the word 'youth', there's all sorts of different young people: they differ by race, by class, by gender or by opportunities that they have been given. We must put the emphasis on opportunity creation and capabilities, in the way Amartya Sen does, and if we do that it means that we are focusing on getting an early start for all people, which then enables young innovators to pursue the types of opportunities that their skills and potential can unlock. Having said that, so many problems we have affect the youth, and especially working class young people, working class young women and girls in particular, as well as young people of particular ethnic and racial groups in specific countries, so that's definitely part of the equation.

Another consideration that comes to mind is that innovation really requires a diversity of opinions. It is not linear, it requires feedback effects and it really benefits from diversity in terms of actors coming to the table, but also literally in terms of different ideas. So, of course young people, because of their age group but also because of the particular context and problems they are facing, would bring to the table a diverse set of ideas. That would be extremely useful for innovative thinking, whether it is around problems like creating stronger health care systems or addressing climate change and how it's being experienced in cities and influencing the way in which people live. The way that youth interact with similar questions will be different than how an older person does. So that diversity of opinions is absolutely fundamental.

My next question was actually going into what you started mentioning, which is the matter of treating youth not just as an age group, but rather looking at what are some of the specific factors which might limit their full contribution to innovation and sustainable economic growth. And with SDSN Youth we have done a lot of work on trying to map what is the approach in different countries to this specific topic, which too many times focuses on the concept of startups and does not necessarily think of the wider picture. National policies around youth-led innovation often include innovation challenges, in some cases there are some national funds for youth-led innovation, or other forms of grants and awards, but these are always one-off initiatives, which don't go beyond a single prize or training given to winners. Do you think this is an effective way to address the problem of creating opportunities for young changemakers, or should there be a more systemic attention to the issue of youth-led innovation?

I find myself thinking in the same way when people ask me the similar question around small companies and startups (because if you just take the word entrepreneurship, that is often associated with younger people you kind of think of an entrepreneur as being a 20-25 year old person in Silicon Valley, not an old person). For startups to thrive, what we often need are entrepreneurial ecosystems, and similarly for youth to thrive you need a certain ecosystem around them of different types. This ecosystem especially requires organizations and institutions which fuel a long-lasting, systemic, continuous process which leads to innovation that is not just a one off, but also innovation that matters. And in this context personal mentoring is incredibly important: this is an interesting lesson from the venture capital model, which is something that the U.S. did better than Europe in the past. In Europe, there was this idea that we are not innovating enough because we don't have enough venture capital (VC), so we set up all these VC funds and ignored that one of the most important roles that the VCs have had is in Silicon Valley was mentoring, something which we call soft capital, not hard capital. That kind of mentoring role is really important obviously for the young innovators who are starting off in any new enterprise, and so it plays a fundamental role as part of that ecosystem.

Another thing which matters is patience. In countries that don't have patient long term finance it's really hard for youth or newcomers in general to thrive, because you need time to learn. This is in some ways what patient finance does and this is especially true in developing countries as it gives you time to learn how to do things. One of the problems with venture capital, coming back to VC as a metaphor, is that the way it ended

up getting structured in many cases is very exit-driven. Venture capitalists want to exit any enterprise that they helped set up in three years, either through a buyout or an initial public offering. That's a form of impatience and that is fine if you are really experienced and older and know what you want to do, so you set up a company and you get VC funds and in that context it's not a problem if your company gets bought out or goes to the stock market in that amount of time. But if you are young and inexperienced, that's not going to help you. We have seen for example that this has hurt innovation in different sectors. Therefore, that would be another key factor in an entrepreneurial ecosystem. You would need pots of strategic, patient, long-term, committed finance.

A third, and final aspect is that you need institutions that allow science and industry to really talk to each other in creative ways. This is not a top-down way in which business just comes in and tells the scientists, or the young researchers, or even the startups what it needs, but a real conversation, which then leads to genuine, mutual learning between private businesses and researchers, both in universities and in other organizations. And that again would be really important for youth in any country, to have a genuine, creative, inspiring place where top level research meets top level business thinking.

So, the key takeaway is that it is the system of innovation, the system of organizations which really allows interesting new conversations to happen between public, private and third sector institutions, and including social movements and young people, which then produces additionality. And what I mean by additionality is: making things happen that would not have happened anyway. You don't need to spend money in setting up a whole new structure that basically just produces what would have happened in some other form anyway. And that's again where the SDGs are really important: if they are framed, and especially the targets underneath them are framed, in such a way that really gets people thinking about solving a problem together in new ways, and the instruments from the policymaking perspective actually really allow new forms of collaboration, then by definition you will be doing something that wasn't being done before.

Going back then to do what you were mentioning in terms of ecosystems for innovation, I just want to briefly zoom in on three things that will be discussed in the Report, because we have some contributions touching on those and also because we found them coming up a lot when we sourced the solutions that are going to be in the Report. These things are the challenge of access to finance, which you started mentioning, the challenge of the role of universities and also the debate between startups and big companies and how you harness youth skills. Let's start with access to finance. Mapping the solutions both in the first edition of the Report and in this year's upcoming Report, we saw that access to finance and de-risking remain really the biggest challenges for young innovators in every sector and the SDGs actually, within the targets under SDG 8 promote this idea of improved access to capital and financial services for all. Where do you see like the biggest role here, is it just governments or is it also the private sector and investors which have to become a little bit less path-dependent and willing to take more risks?

We have to look at the access to finance issue from the proper perspective. There is often not an access to finance problem per se because there are often not enough things to finance. Most good startups find the finance they need, there are just not enough good startups. So, my view would be that again, if you don't have a vibrant entrepreneurial ecosystem you will not get enough youth to actually do the kind of things that the existing financial instruments want to finance. Of course if you are an innovator and you don't have patient finance, or the right form of finance, and easier access to finance then you can't develop, but seeing it as a solely financial problem versus a more systemic problem is precisely what has often created the dysfunctional policies I mentioned before, where you bring finance and don't realize all this other stuff you need around it.

Having said that, the more public and private actors can restructure financial institutions so they can better distinguish different forms of risks and the kind of risk you need to innovate (because innovation is very risky, most of it fails), the more we will have easier access to finance for young innovators. This is because the risk

they face is a different type of risk from the risk that is purely about speculation. If the financial structures don't know how to differentiate these two types of risk, then by definition anyone who is trying to think out of the box, and one could say that young people are more willing to think out of the box, would appear to bring risky proposals that they are not willing to support.

Moving to the second topic I mentioned, namely the role of educational systems, what is the role of skills development and education in supporting innovation for sustainable development?

I can't emphasize enough the importance of education, and so many countries are currently experiencing a crisis in belief that education should be equal for everyone. In the UK, for example, where we have private and public education, private education is very strong in the sense that many middle-class and upper middle-class families send their kids to private schools. When you have such a large part of the population who has the resources to do that, what that very quickly leads to is the creation of two different curricula. The more creative stuff, including philosophy and literature and the arts, get nurtured more in the private system, and the public system is almost just always trying to catch up and giving young people basic vocational needs. In modern times this would include skills like coding, or in any case the those skills needed just to put you in the job market, whereas critical thinking skills sometimes suffers.

The first thing that happens when you have cuts to public budgets is that we immediately see cuts to the arts, to music, to areas that are seen as peripheral to what is needed in the job market. These kinds of dichotomous and bipolar educational systems are really bad for the disadvantaged youth who then don't get invested in terms of their creative thinking skills. These young people don't read as much literature, they don't read as much philosophy, they don't learn as much music. Innovation thrives in these different types of thinking. And when you're in a country where the public education system is suffering, this negatively impacts marginalized youth in terms of not giving them the resources to really think critically and out of the box and to be questioning and having that rebellious mind which is what innovation requires.

The other point that I wanted to touch on education relates to the relationship between innovation and universities. It is definitely more common in the US than in Europe that universities try to act more and more like hubs of innovation, create spin offs, support research and development or maybe encourage students to create startups. What do you think of that? Is it something that universities should do more?

It would be very important to have more data about similar programs and initiatives. Silicon Valley, for example, had lots of startups and spinoffs coming out of universities, but they didn't necessarily come out of spinoff policy. That was a spillover of actually having a proper kind of innovation policy and universities actually functioning for what they should be doing, which is to really be places where both basic and applied research are happening, as well as where the conversations between the two are happening in dynamic ways. In Stanford, a classic place that produced a lot of spinoffs, there was no spinoff policy. There was an innovation policy that worked, and a very dynamic relationship which also involved big public laboratories. There is a whole incubator in Berkeley (Skydeck Berkeley, editor's note) which is very interesting, but that actually happened after Berkeley produced a lot of spinoffs, just as a way to almost formalize a process that was already working. Certainly it is important for universities to engage with the issue of supporting innovation, but it is also crucial that this does not become about getting a piece of the pie versus creating a bigger pie. I am thinking of this idea that universities will create spinoffs and then retain perhaps some equity, instead of rethinking how to create new forms of collaborations and how to design an innovation system that really has lots of spillovers including spinoffs.

As a last question, I would like to go back to the relationship between startups and entrepreneurs and intrapreneurs. This is a point which has been made many times: if we are going to achieve the SDGs and

sustainable economic growth we do not just need startups which become successful companies, but we also need the existing big companies to start transforming themselves. A big component of this whole discussion is intrapreneurship, and by this I am referring to the idea of supporting the skills of young innovators within firms and giving them room to be creative to try to have responsibility within them. What do you make of the whole intrapreneurship debate?

Encouraging social intrapreneurship is a great idea. More broadly, even in the discussion about robots, and about the fact that somehow they are taking people's jobs and so forth, we tend to forget that skills have always been developed inside companies. Skills building does not just happen through government training programs. One of the real threats we have in modern day capitalism is not the robots, it's the lack of investment in people inside companies because of this problem of over-financialization that we also mentioned earlier. That means that when you do have automation the workers inside the company suffer because they haven't been trained to adapt to these changes. So, your question really suggests the great relevance of big companies investing in the workforce, and it is also important for the big challenges we have today around automation and how to make sure that workers are not just shut away when you have a new type of machinery. Similarly, with young people, it always strikes me that most people in universities are constantly being offered training for free. Almost every day I get e-mails offering you to go learn a new software, or learn how to do human resources in a new way. There are all sorts of offerings in universities and that is also how companies used to be. Companies were places where you really developed skills and you were invested in as a person because of the notion that you were going to be there for quite a long time. With the proliferation of short term contracts, that kind of investments by companies into people has fallen because there is this idea that people come and go. And that really hurts the ability of workers, both young and older ones. In the end, having companies orient their financial resources towards developing the skills, the capability, the absorptive capacity of the young I think is fantastic, alongside government training and education.

Do you have any final message?

I do have one final message. A great thing for youth to do is to be a constant thorn in the side of how we talk about the economy. I often think this is also true of institutions that see themselves as charitable (or what we call third sector): NGOs and the youth should be a thorn in the side of how we define markets. Instead of allowing us to define, say, the health care market around drugs and medicines, youth should push all other stakeholders to redefine it around what a healthy life looks like, and then we could really use these different framings to reorient all the investments we made around life sciences and so forth. That is an important role of the youth, to redefine even how we define a market.

Also, youth should not allow the word 'innovation' or the word 'youth' to be comfortable words. They should be uncomfortable words that make people feel uneasy and that's why if you're a young person you shouldn't want some of the incumbents to feel so calm when they talk about youth policy. You should see a bit of tension in their face because it's going to by definition require a change in the status quo and going against kind of incumbency. And yet if you think about it everyone loves to talk about the youth, everyone likes to talk about the word creativity, the word startup, the word entrepreneur. People feel cool when they say these, but we should transform that and make them feel very uncomfortable when they use the word youth and when they use the word innovation. The SDGs are of course a way to do that, because these are extremely challenging, they should be uncomfortable because people are living in poverty, or sick, or have no access to education. And maybe the youth can really lead that uncomfortableness, which should be an agenda and a key driver of innovation policy.

Executive Summary

Chapter One, Overview and Analysis of Youth Solutions, introduces the second edition of the Youth Solutions Report, which showcases the innovative approaches that young people are taking in achieving the Sustainable Development Goals (SDGs). The chapter details the submission and review processes which led to the final selection of 50 solutions. In addition, the chapter provides a brief overview of the way in which submissions are divided based on geography, the SDGs addressed, as well as funding and organizational structures. Overall, the diversity and scope of the submitted solutions have greatly increased since the publication of the first edition in January 2017, as has the awareness about the need to take SDG interactions into account when implementing youth-led projects. By contrast, the identified challenges of access to finance, mentoring opportunities and visibility, which were predominant in last year's edition, largely remain the predominant concerns of young innovators.

Chapter Two, *The 50 Solutions*, contains the 50 solutions that have been selected by the SDSN Youth Advisory Panel to be included in the Report. These youth-led projects have been grouped into three categories in order to facilitate submissions: Design, Pilot and Prototyping Phase, Implementation Phase (less than 18 months) and Implementation Phase (more than 18 months). The 50 showcased solutions were chosen from over 200 submissions in over 60 countries.

Chapter Three, Financing for Youth Entrepreneurship in Sustainable Development, looks at the needs of young entrepreneurs working on the SDGs and the barriers faced in scaling their projects. In many cases, access to finance is identified as the main barrier impeding the scaling of solutions. The chapter reveals that there is a major need not only to develop additional investment opportunities for youth solutions, but also to bridge the gap between what is needed and what is available. This requires developing a robust investment pipeline and designing youth-focused funding vehicles for the SDGs – SDSN Youth being in a unique position to source a pipeline of high-quality solutions to fund.

Chapter Four, Empowering Youth and the Challenge of Solutions' Visibility, explores another major barrier to youth-led solutions: the lack of visibility. Limited exposure is a large hurdle hindering youth-led solutions. Yet social media can break this barrier – access to internet and free media are leading factors of youth empowerment by allowing them to connect and interact with the rest of the world. It levels the playing field, offering high visibility at low cost. By circumventing traditional media channels, young innovators are able to get started more easily. However, it is key that governments and other stakeholders support the young digital generation by improving internet infrastructure, adjusting attitudes towards young entrepreneurs, creating partnerships and holding media campaigns and showcases.

Chapter Five, Building Youth Skills: Are Acceleration Programs Working for Young People?, contributes to the debate on the effectiveness of startup acceleration programs as key actors in the training and scaling-up of youth-led solutions. Whereas such programs have been shown to play an increasing role within innovation ecosystems, their great heterogeneity, coupled with a lack of standardized benchmarks for evaluation, may lead one to question their suitability in bridging the skills gap among young people while simultaneously helping them align their vision with broader sustainable development objectives. Through a survey of three different accelerators based in the UK and Hong Kong, the chapter underlines how transformative acceleration programs need to foster mutual exchange between managers and innovators, build synergies with the SDG framework, and be nested in strong mission-oriented innovation systems that formalize their role within the wider context of the 2030 Agenda for Sustainable Development.

Chapter Six, Advancing Youth Skills and Participation in Public Discourse: The Importance of Policy Advocacy, aims to highlight the importance of bringing youth voices and solutions into global policy dialogues in order to realize the SDGs. This cannot be achieved without institutional spaces for meaningful youth participation at the United Nations, such as the UN's Major Group for Children and Youth. Youth have both the immense opportunity and responsibility to make use of the tools provided by science, technology, innovation and engineering to design impactful solutions for the SDGs. Yet, more purposeful innovation and the inclusion of youth are required to bridge the gap between "the world we want" and the world we have.

Chapter Seven, Social Intrapreneurship; the Next Frontier for Youth Solutions, explores the concept of social intrapreneurship and how it can help deliver the SDGs. Social intrapreneurship is a process by which you can convert social problems into business opportunities by delivering sustainable solutions which aim to profitably-do-good. The Circle of Young Intrapreneurs (COYI) attempts to do just that, by creating an 'ecosystem of impact' among and within existing large companies. By harnessing the power of business, two key products are being delivered by social intrapreneurs: the creation of economic value for the companies they work for, and the delivery of social or environmental value. COYI believes that young innovators within companies must be the ones to drive these impacts in order to support the achievement of the SDGs by 2030.

Chapter Eight, Youth Skills and the Rise of Impact Entrepreneurship in Africa: Are We Getting the Most Out of It, reveals that despite the fact that African economies are the next frontier of global growth, educated youth still struggle to find decent employment. However, Impact Entrepreneurship — an impact business that aims to combine social-environmental impact and economic success to contribute to sustainable development — could be part of the solution. Yet, Africa has the world's highest discontinuation rate among new businesses due to lack of access to finance, lack of entrepreneurial skills and tools, and difficulty with market expansion. All three must be provided in order to support impact entrepreneurs in Africa.

Chapter Nine, Young People and the Private Sector: opportunities for collaboration in Lavazza's sustainability strategy, presents some insights about how opportunities for collaboration between young people and the private sector can be realized within the sustainability strategy of a company, using the recent efforts of Lavazza as a case study. Lavazza is developing specific activities to involve young people in a discussion on the SDGs due to their belief that young innovators are crucial with which to foster mutual exchange and define a common vision for sustainable development. There are now ample opportunities for companies, including Lavazza, to promote sustainability as a shared responsibility and intergenerational duty. Partnering with young innovators who can contribute their skills to raise societal awareness and define innovative ideas for achieving the SDGs is rapidly emerging as the leading means through which these objectives can be achieved.

Chapter Ten, Aligning Youth Solutions with the SDG framework, tries to fill the current gap in the development of SDG-based reporting and impact assessment strategies among youth-led solutions by providing some initial notions of SDG alignment that young innovators can consider in their project's activities. From this perspective, the challenges that young people today face in order to build SDG alignment range from resource scarcity to lack of appropriate knowledge. Using the guidance provided to businesses in general by the SDG Compass, the chapter lists five steps that youth-led solutions can take, namely (i) understanding the SDGs; (ii) defining priorities; (iii) setting goals; (iv) integrating the goals in the project's activities; and (v) reporting and communicating. Reporting impact through the SDG framework can build on the strengths of the synergies between different SDG targets, offering strategic positioning and streamlining the way youth-solutions work. In addition, using the SDG framework also opens up avenues for youth-led initiatives to connect with SDG-oriented funders.



Youth Solutions and Analysis

Overview and Analysis of Key Trends and Statis-tics

Overview and Analysis of Youth Solutions

SUSHIL **RAJAGOPALAN** (PROJECT OFFICER, SOLUTION INITIATIVES, SDSN YOUTH); KANIKA **JOSHI** (PROJECT OFFICER, SOLUTION INITIATIVES, SDSN YOUTH); DARIO **PISELLI** (PROJECT LEADER, SOLUTION INITIATIVES, SDSN YOUTH)

INTRODUCTION

This 2018 edition of the Youth Solutions Report comes 18 months after the publication of the first edition, which was released during the ECOSOC Youth Forum in January 2017. This second edition again bears the fruits of a months-long process in which the Sustainable Development Solutions Network - Youth (SDSN Youth) and its partners sourced youth-led solutions across all countries and regions to showcase the innovative approach that young people are taking in achieving the Sustainable Development Goals (SDGs).

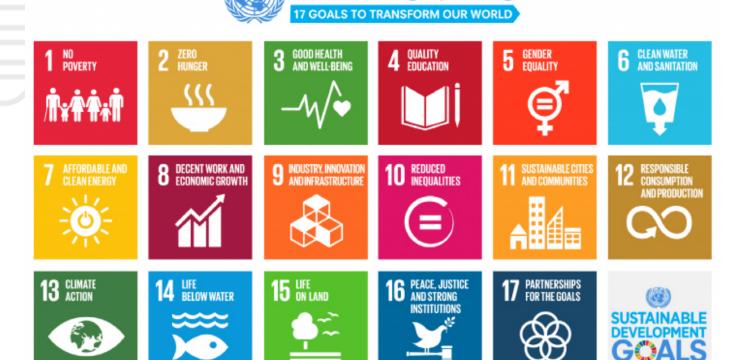


Figure 1 - The 17 Sustainable Development Goals

The Report builds upon one of three key pillars of the activity of SDSN Youth (SDSN Youth 2018a), which mandates an operational focus on "supporting young people in the creation and scaling of innovative solutions for the SDGs". Like its 2017 predecessor, this year's Report primarily seeks to identify and celebrate 50 youth-led solutions that are contributing towards the achievement of the 2030 Agenda for Sustainable Development in business, charity, education and research. However, the new Report comes with a wider scope and greater ambitions, aiming to inform the policies and actions of all stakeholders through in-depth research and analysis, with a view to substantially increase the support that young innovators receive in their countries and communities.

In 2017, with the first edition of the Youth Solutions Report, SDSN Youth offered young innovators the opportunity to present their solutions and take part in international conferences and events, including

the UN High-Level Political Forum, the International Conference on Sustainable Development (ICSD), EXPO 2017 Astana, COP23, the Youth Assembly at the United Nations, and UNLEASH Lab 2017. SDSN Youth also built on the Report to help youth-led solutions become more visible online, not just through its media channels but also with collaborations with websites and media outlets including National Geographic, Impakter, Virgin Unite, and Connect4Climate, among others. Lastly, SDSN Youth stepped up its support to the solutions featured in the 2017 Report by sharing funding and mentoring opportunities, matching innovators with interested experts and supporters, and launching the first edition of our Investment Readiness Program in collaboration with Babele.co in January 2018 (SDSN 2018).

The 2018 Youth Solutions Report is envisaged as a new step in the long term process through which SDSN Youth, in collaboration with the Sustainable Development Solutions Network (SDSN) at large, aims to directly support youth-led projects in business, charity, education and research by addressing the three key challenges of access to funding, access to expertise, and increased visibility. SDSN Youth remains committed to working with partners at all relevant levels, including UN agencies, governments, universities, NGOs and the private sector to overcome the challenges that youth are facing in developing their solutions, establishing young people not only as a key demographics in the implementation of the 2030 Agenda for Sustainable Development, but also as a Main contributors to its success.

WHAT IS THE RATIONALE FOR FOCUSING ON YOUTH-LED SOLUTIONS?

We are in the midst of an era of unprecedented transformation. Be it in the context of the rapid modifications of the global economy, in the difficulties our societies face in coping with massive technological and other societal changes, or in the dramatic ways in which our ecosystems are adapting and reacting to increased anthropogenic pressures, the world is calling for solutions that can embark us upon a trajectory of sustainable development.

Yet, worryingly, we seem to have lost the notion that it is young people who are the best positioned to analyze and solve this sort of novel challenges. Young men and women between the ages of 15 and 30 today represent the best-educated generation ever (The Economist 2016), are more intelligent and have higher literacy rates than the average of the adult population (Kremer 2015; Unesco Institute for Statistics 2017), and are far more knowledgeable about new technologies (ITU 2013: 50). In addition, and mainly as a consequence of these other characteristics, younger generations also have a grasp of uncertainty and complexity that other age groups often lack. On the one hand, this leads to a better understanding of the synergies and trade-offs involved in addressing the cross-sectoral challenges enshrined in the 2030 Agenda for Sustainable Development (United Nations 2015). On the other, it allows young people to think of institutional arrangements and innovations that confront the many forms of path dependency which exist in international organizations, governments, and businesses and usually lead to inefficient, inequitable and unsustainable outcomes.

For the first time in history, young people from different countries and regions often share the same objectives and grievances, usually linked with the negative impacts of globalization and poor governance, and are increasingly part of a common culture as well. This goes beyond the usual notion that "all young people are idealistic", even though idealism itself is everything but a negative word, in the context of the major challenges we are facing. Rather, it speaks of the incredible, untapped potential of 1.8 billion global citizens (UNFPA 2016: 105) who largely hold the same ideas about how to transform our societies for the better through innovative forms of problem-solving along the four dimensions of sustainable development.

At SDSN Youth, we believe that failing to partner with young innovators and change-makers would represent

the biggest waste of human capital in the history of mankind. In pursuing their objectives, however, these young people still face common challenges in most countries, including reduced visibility, limited access to funding, and lack of sufficient advice or technical support. As such, it is extremely important to recognize and celebrate solutions led by young people around the SDGs in order to provide them with a solid network of supporters, whilst also advocating for concrete actions to be taken by all stakeholders to develop innovation systems that take into account the specific concerns and needs of these young innovators.

WHAT IS A YOUTH-LED SOLUTION?

SDSN Youth defines youth-led solutions as "transformative projects and endeavours, ranging from entrepreneurial ventures to educational programs, and including research activities, charity initiatives and so forth, that showcase the innovative approach that youth are taking in solving the multiple challenges of sustainable development" (SDSN Youth 2017: 16). For the purpose of this Report, these projects have been grouped according to three categories, in order to facilitate submissions and highlight the great diversity that exists in the landscape of youth-led innovation for the SDGs: Design Phase/Pilot/Prototyping phase, Implementation Phase (less than 18 months) and Implementation Phase (more than 18 months).

In order for a solution to be included in the Report, six eligibility criteria were developed. As discussed below, these criteria were also used by the Advisory Panel of the Youth Solutions Report for assessing the applications that were received.

- Relevance of the challenge addressed: projects must seek to address a challenge which is identified as relevant in the context of the 2030 Agenda for Sustainable Development in order to qualify, and they must also describe why tackling such challenge will help achieve the SDGs.
- Innovative character of the solution: the projects must have been founded by a person aged 15-30 and they must showcase the skills and creative mindset of the proponent(s). SDSN Youth has not simply looked at successful endeavors. Through the Youth Solutions Report it has specifically tried to celebrate innovative, game-changing ideas which have the potential to build transformative change and shift the behavior of people, businesses and countries.
- **Financial viability:** solutions must be self-sustaining in the long term. In other words, they must able to achieve efficiency and to survive on their own through the resources they generate and/or the investments and donations they attract.
- **Scalability:** projects must have the potential to perform as well or better after expanding in scope or size and/or being transported to other regions. The Youth Solutions Report looks at projects which might help other people in other parts of the world, beyond their immediate community.
- Current or potential impact: the solutions must be effective in solving the challenge(s) it seeks to address. Ideally, they should also go beyond short- to medium-term effects and show the potential to have positive long-term consequences for the community(ies), country(ies) or region(s) in which they operate. This includes positive environmental impacts (e.g. innovations which capable of reducing carbon emissions, developing sustainable consumption and production patterns, reducing the loss of terrestrial of aquatic biodiversity, or more generally respecting the earth's planetary boundaries), as well as positive social impact (e.g generating employment, eradicating poverty, or developing skills).
- Integrated approach to the SDGs: The solutions should take into adequate consideration the synergies and trade-offs between the SDGs, beyond the immediate Goal they tries to address. They should demonstrate to have tried to create positive feedbacks or mitigate negative impacts in other areas. Finally, they should ensure that their impacts have been adequately measured and/or that they are in principle measurable, and if possible that such measurement is aligned with the SDG indicator framework developed to monitor the implementation of the 2030 Agenda (UN Stats 2018).

WHAT WAS THE PROCESS OF SUBMISSION AND REVIEW?

a) Call for submissions

The call for submissions to the second edition of the Youth Solutions Report was launched in March 2018. The initial pool of Solutions was developed based on: (a) SDSN Youth's outreach efforts to youth groups and communities; (b) SDSN Youth's cooperation with SDSN Regional and National Networks, SDSN Youth's Member Organizations, and other external partners; and (c) nominations and direct submissions through the Report's website. The window for submissions was extended once to 12th May 2018. The submission form used to receive and review submissions can be visualized on the website of the Youth Solutions Report (SDSN Youth, 2018b).

b) The review of submissions

After the final deadline for submissions expired, SDSN Youth convened an Advisory Panel comprising sixteen individuals, including world-renowned experts from different disciplines, representatives of the SDSN Secretariat and members of SDSN Youth Executive. After a first round of review which was conducted by the Solutions Initiatives team of SDSN Youth to exclude incomplete submissions and assess the most interesting applications, around 80 Solutions were shortlisted and presented to the Advisory Panel to receive individual feedback on each of them.

The Panel had the task of ranking the shortlisted projects provided by SDSN Youth by assigning a mark ranging from 1 (lowest mark) to 3 (highest mark) through an online survey. The ranking system was composed of the following separate marks:

- Relevance of the Challenge Addressed: assign a score of 1 if the solution does not address a real
 need, or if the challenge is not relevant in the context of the SDG framework; assign a score of 2 if the
 solution addresses a real need across the environmental, social, economic or governance dimensions
 of sustainable development, or if the challenge is in any other way relevant in the context of the SDG
 framework; assign a score of 3 if the challenge is a central and/or cross-cutting one in the context of
 the SDG framework.
- Innovative Character of the Solution: assign a score of 1 if the solution neither improves nor redefines existing concepts, products, services or processes, but merely applies them; assign a score of 2 if the solution improves or redefines existing concepts, products, services or processes, or if it seeks to apply them to new sectors or regions in an innovative way; assign a score of 3 if the solution introduces radically new concepts, products, services of processes driven by sustainability considerations.
- **Financial Viability:** assign a score of 1 if the solution does not appear to be economically sustainable in its current form; assign a score of 2 if the solution appears to be potentially sustainable after minor adjustments or if it might become so after receiving substantial external support; assign a score of 3 if the solution already appears economically sustainable or if it is already well-suited to attract investments and/or other forms of support.
- Scalability: assign a score of 1 if the solution does not appear to be replicable and/or scalable outside
 of its current areas of operation; assign a score of 2 if the solution shows promising potential to perform as well or better after being replicated or expanded in scope and/or size; assign a score of 3 if the
 solution is already in the process of being replicated or scaled to a successful extent.
- Current or Potential Impact: assign a score of 1 if the SDG impacts of the solution appear negligible, or if there is no way of measuring them; assign a score of 2 if the solution appears to be able to deliver positive SDG impacts in the short- to medium-term; assign a score of 3 if the solution appears to be able to create positive SDG impacts and long-term value for the communities, countries and/or regions in which it operates.
- Integrated Approach to the SDGs: assign a score of 1 if the solution only mentions the SDG(s) it directly tries to address, without discussing potential synergies and tradeoffs with other SDGs; assign a score of



Figure 2 - Map of solutions submitted to the 2018 edition of the Youth Solutions Report. Source: SDSN Youth elaboration.

GEOGRAPHIC FOCUS

Many of the youth solutions submitted seek to address issues which expand beyond their immediate countries of origin. Collectively, these solutions operate in more than 100 countries (virtually, due to the presence of digital-based solutions, all countries are actually impacted), indicating the intent and capability of their founders to scale-up efforts at the national and international level. This year, a large proportion of the submitted solutions appears to be focused on the African and Asian regions, with strong representation from countries including India, Nigeria, Kenya and Uganda. Understandably, the emphasis of many solutions lies in addressing urgent social needs in developing countries, while simultaneously mobilizing the booming social entrepreneurship movement which characterizes most of these geographical contexts (See Chapter 8 of this Report). In other words, the presence of pervasive challenges including youth unemployment, digitalization, climate smart agriculture, access to healthcare and energy, and waste management provides a strong indication of existing market gaps and business opportunities, leading to the design of solutions that are tailored to the local communities in which they are expected to operate.

The geographical context appears to be particularly important to youth-led solutions from another perspective as well. In order to be able to establish themselves as self-sustaining, viable projects, these solutions usually have to overcome a range of challenges, including access to capital, access to business developmental services, limited visibility and lack of capacity building programmes. These challenges, and the way they are dealt with by policymakers, educational institutions and private supporters, are inevitably influenced by local contexts, policy frameworks and opportunities, and in turn influence the legal structure of the organizations that are set up (e.g. non-profit versus for-profit), the sources of funding, the use of impact assessment tools, and so forth.

MAIN SDGS ADDRESSED (AS IDENTIFIED BY THE INNOVATORS)

All the submitted applications have emphasized the fact that their solutions are capable of addressing multiple SDGs, and were asked to provide an explanation of how the interaction between the different goals was taken into account in the projects' design and activities. This is extremely important when one considers the complex interconnectedness that exists amongst the 17 SDGs and 169 related targets, as contributing to one Goal is capable of providing co-benefits but also, potentially, negative impacts in other areas of the 2030 Agenda (See case study, Youth-led Climate Action is Real).

YOUTH-LED CLIMATE ACTION IS REAL

Featured Projects: Barsha Pump, YES!BAT, Youth Climate

Leaders, Solar Rais Microgrid and VPP

Areas working in: Global







Rising greenhouse gas emissions are, with scientific certainty, leading to increasing temperatures, sea level rise, and seasonal unpredictability. These impacts are undermining millions of people's rights to life, security, food, water, health, shelter and culture. Climate change is real and can be considered as one of the greatest threats to life on Earth as we know it.

With this year's submissions, we can optimistically say that youth-led climate action is real as well, and increasingly hardwired into young innovators' thinking about other societal problems. In other words, many projects featured in this year's Report are increasingly considering the necessity to achieve positive synergies between reducing emissions and promoting other social or environmental goals. For example, the *Barsha Pump* does not use any fossil fuels and has let 5000 farmers grow more with fuel-less water pumps, preventing 100 tons of CO2 emissions. Another youth-led initiative, *Yes!Bat*, whilst directly focusing on the use of biological suppressors of pest populations that harm crops as a sustainable alternative to the use of chemicals, is also well-aware of the indirect impact that it can have as a nature-based solution for climate mitigation and adaptation.

On their end, the team behind *Solar Rais Microgrid and VPP* is contributing to reducing climate change impact by improving access to clean energy in rural communities through solar power plants and microgrids, thereby reducing the heavy reliance on coal that many such communities face. Finally, innovative advocacy solutions such as *Youth Climate Leaders* aim to spearhead climate action by preparing the new generation of changemakers and climate leaders. They are seeking to empower youth all over the world to learn about climate change in theory, understand it in practice, and work together with other youth and partners to find and deliver solutions.

Figure 3 shows the SDG focus the solutions mapped during the submission process. The figure particularly shows the self-assessment conducted by the innovators themselves, despite the fact that SDSN Youth's own evaluation has led to slight changes in some of these self-assessments. The reason for this decision is that it is important to convey how young innovators perceive that they are supporting the achievement of the SDGs, in order to understand knowledge, skills and resource gaps as well as to mobilize the contribution of young people in the areas where their enthusiasm and potential impact are higher.

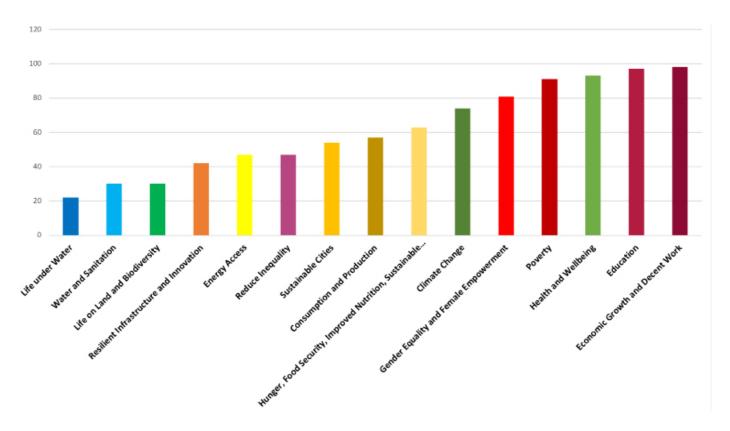


Figure 3 - SDG Focus of the Submitted Solutions. Source: SDSN Youth elaboration.

As shown by the Figure, an overwhelming attention is put by young innovators on achieving the basic needs of people along the social and economic dimensions of sustainable development. At the same time, the lower emphasis on projects that aim to achieve the typically "environmental" SDGs (with the notable exception of climate change) should not suggest a comparative lack of attention on the part of youth-led solutions. Rather, this gap highlights the fact that it remains difficult for young people to develop new technologies, nature-based solutions, or sustainable business models when access to capital, technology transfer and access to expert networks is limited. The financial and support gap, not only for young people but for all actions linked to the 2030 agenda, is wider where investments are more urgent, namely, in support of the maintenance of humanity within the planetary boundaries on which our societies and economies rest

BUDGET AND FUNDING SOURCES

Funding is a crucial aspect for youth-led solutions, as different levels of access to capital and financial services often define not only the operations and scaling-up of the project activities, but also the legal form in which the solutions themselves are structured. Within the submissions, the data indicates that the majority of solutions operate on a small annual budget, especially those currently in their design or pilot/prototyping phase [Fig. 4]. For these projects, it is often difficult to find early stage investors who are willing to take risks to support the skills of young people. Lack of patient finance leads investors to wait until a subsequent stage, when solutions have already passed the valley of death of innovation by their own means.

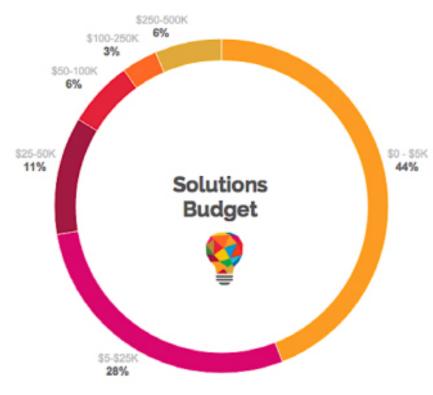


Figure 4 - Annual Operating Budget of the Submitted Solutions. Source: SDSN Youth elaboration.

As a consequence, the data also shows us that the solutions try to diversify their funding sources and consequently end up relying on multiple ways to raise capital. Within such a diversified portfolio of options, innovative forms of finance, such as crowdfunding, hybrid or insufficiently formalized forms ("other"), or grants and subsidies play a major role as funding sources for youth-led solutions, adding further insecurity in the implementation path of innovations (see Chapter 3 of this Report). Only a small proportion of the overall funding sources is represented by access to concessional loans and equity, commercial loans, and convertible grants. [Fig. 5]

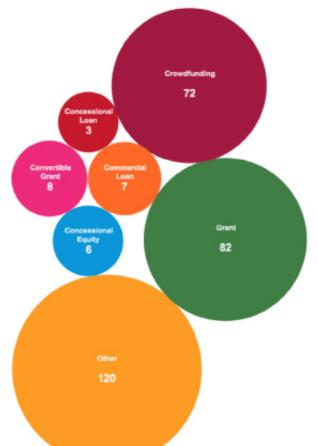


Figure 5 - Current Funding Sources as Identified by the Submitted Solutions. Source: SDSN Youth elaboration.

Whereas improving access to funding is a challenge that fundamentally lies at the level of mission-oriented policies and innovation systems, there are still ways in which young people can be supported in raising capital and attracting investments for their solutions. For example, Increased mentorship and visibility in the design phase and early-stage implementation of youth-led innovations certainly holds promising potential for guiding youth on realistic approaches and estimations when they calculate budgetary costs and financing options. Awareness and education on available organisational structures and business models, in particular, could be an area to develop with young innovators, with the aim creating self-sustaining solutions. Several solutions addressing, SDG 3 for example, face lack of access to funding due to the high volume of funds required to set up adequate infrastructures (See Case Study, 'Good Health for the Last Mile'). At the same time, it appears that the choice of a specific business model is often determined by significant obstacles in access to capital, which effectively impose the use of small grants or one off donations and prevents young innovators from developing viable business models in the medium to long term.

GOOD HEALTH FOR THE LAST MILE

Featured Projects: One Day Health Centres, MuHealth, Sewer Scavenging Assistant Machine, The Health Equity Voice

Areas working in: Africa, South Asia







SDG 3 a priority on improving health and well-being and expanding access to healthcare for people of all ages. Several solutions submitted this year aim to support research and development in the area of public health, while promoting innovative ways to deliver health services in marginalized and remote communities.

Youth-led solutions such as *OneDay Health Centers and Health Equity Voice Project* are focusing, respectively, on ensuring high level primary care in rural 'health black holes' and improving trust and understanding between the health workforce and local populations. These solutions have identified the need for rapid action to reduce health inequalities and step towards universal health coverage by focusing on two critical aspects of health systems in developing countries, namely: (a) how to reach remote villages in the face or constrained public resources; and (b) how to develop health policies and narratives that take into account the voice of those most involved in the day-to-day delivery of health services.

Other projects featured in the Report, like *MUhealth* are diligently working to achieve SDG 3 by promoting the digital storage and use of medical data, thereby aiming reducing doctor time per patient and providing additional time for the personal activities of healthcare users. The health of the workforce in other sectors is also considered, with solutions like the *Sewer Scavenging Assistant Machine*, which seeks to improve the working conditions of manual scavengers and create healthier and safer working environments.

While significant strides have been made by the abovementioned youth solutions, access to finance remain a common barrier across health-related projects. An increase in health financing in developing countries is vital to ensure that rural areas, marginalized populations, health personnel and workers have equal access to medicines, care and sanitation services.

LEGAL STATUS AND MAIN ACTIVITIES

Innovation, in the sense employed by SDSN Youth, does not only concern technological innovation or business-oriented solutions, but also refers to a wide range of innovations in the non-profit sector, as well as new forms of social innovation. These projects have a potential to directly address some of the most profound gaps in SDG implementation in many developing countries, ranging from migration to lack of reliable maternal and children health services, to social inclusion and so forth. As a consequence, the legal status adopted by the submitted solutions varies greatly, from for-profit models to not-for-profit organizations, and including informal and hybrid structures. At the same time, however, young innovators' choice of a particular legal form appears to be partly driven by another consideration, namely, the availability of predictable sources of funding and especially commercial loans and equity (see Chapter 3) [Fig. 6]

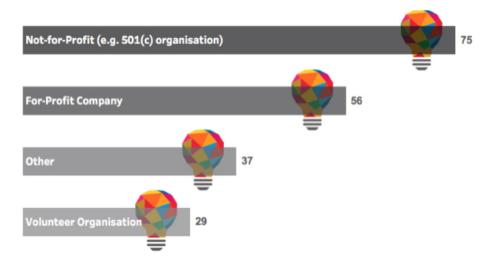


Figure 6 - Organizational Type of the Submitted Solutions. Source: SDSN Youth elaboration.

This is evident by the fact that, when asked about the main activities that their solutions undertake, most young innovators make it clear that they see themselves as operating through a social enterprise/startup model, as shown in Fig. 7. More broadly, despite the organisational structure

assumed in a specific phase of their developments, the main activity that young innovators imagine to carry out through their own solutions takes on a much wider range. Again, this happens because beyond the immediate legal form, which can be influenced by problems such as lack of access to capital and investments, or legal or administrative barriers, a solution can start as a non-profit project but have the objective to become a startup or a company as soon as possible. In fact, social enterprise models and development of new technologies appears as two of the top three activities carried out by the submitted solutions. As shown in the Figure, the emphasis of young people on the development of educational programs to spread knowledge and skills for sustainable development is also particularly strong.

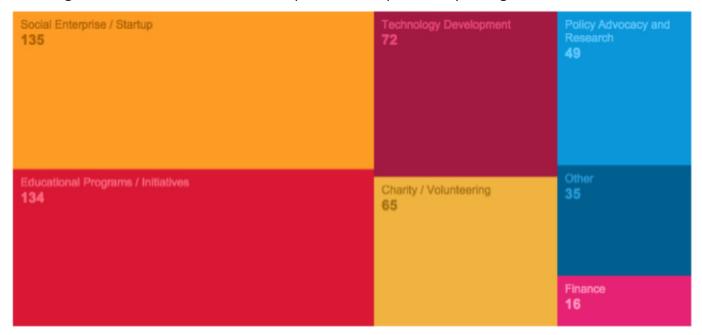


Figure 7 - Main Activity of the Submitted Solutions. Source: SDSN Youth elaboration.

REVOLUTIONIZING THE EDUCATION SYSTEM

Featured Projects: ImpactEd, HowtUyoga, Tespack, Edu-

cate!Experience

Areas working in: Europe, Africa, North America, South

America, South Asia







Achieving inclusive and equitable quality education for all (SDG 4) is widely seen as a potential catalyst for many of the other Sustainable Development Goals and targets, ranging from reducing

youth unemployment to promoting sustainable industrialization and tackling climate change. Successful education strives to ensure a prosperous, safe, healthy and environmentally sound world whilst simultaneously contributing to economic, social and cultural development, acceptance and international cooperation.

In line with this, youth solutions like *ImpactEd and Educate!Experience* provide a marketplace of real world projects for college students, designed in collaboration with leading employers. Their objective is to equip youth with mentorship and skills training in leadership, entrepreneurship, workforce readiness, in order for them to start real, sustainable businesses. These solutions see education reform as the most cost effective way to make a large-scale, sustainable impact on millions of young people around the world.

Other innovative solutions like *Tespack* and *HowtUyoga* also have a direct positive impact on the environment. *Tespack* creates smart classrooms and powers teachers and students through Solar Smart backpacks, equipping them with learning-teaching models at the intersection of energy and education. Similarly, *HowtUyoga* proposes the development of an entrepreneurial training course aimed at transferring expertise on the creation and management of a plant that would allow the reuse of organic waste resulting from coffee farming in order to produce mushroom self-cultivation kits.

Quality education draws upon many disciplines and requires deep understanding of both complexity and interdisciplinary thought. Education has been shaped by society but education also shapes society in deep ways and several solutions in this year's report are addressing this fundamental theme.

CHALLENGES AND NEEDS

When asked about their challenges they face in sustaining and scaling up their youth-led solutions, young innovators have described a variegated landscape of obstacles, with access to finance featuring across an overwhelming proportion of the responses (166 responses) [Fig. 8]. Lack of access to networking opportunities and awareness raising (117), as well as lack of visibility (83), continue to represent the other two most important challenges, along the lines of our findings from the 2017 edition of the Report. At the same time, lack of sufficient technology transfer and innovation (70 responses) and shortage of educational and skills development opportunities (61 responses) also appear as widely shared concerns among young innovators (see Chapter 3 of the Report).

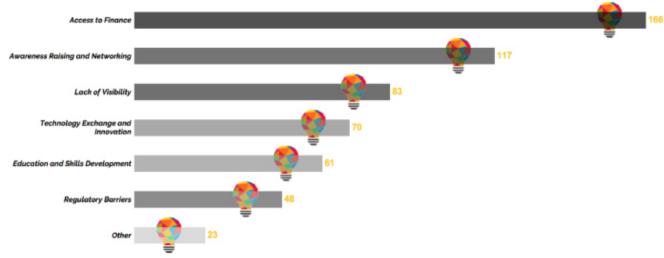


Figure 8 - Main Challenges Faced by the Submitted Solutions. Source: SDSN Youth elaboration.

In terms of their immediate needs, a slight majority of the young innovators expressed preferences for increased access to finance or de-risking, including debt, equity, grants and guarantees [Fig.9]. However, the requests for expert advice and incubation, as well as those for better communication and visibility, were similarly widespread among the submitted solutions.

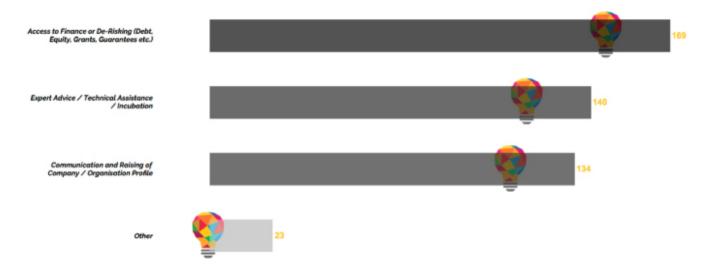


Figure 9 - Main Needs Expressed by the Submitted Solutions. Source: SDSN Youth elaboration.

This is essential, because it suggests that there is no silver bullet to scale up youth-led projects. The success of youth innovations is not born in a vacuum, but rather emerges and prospers where there are both a long-term vision and a comprehensive, integrated ecosystem in which different actors (the UN system, governments, cities, the private sector, acceleration programs, academia, civil society) can provide different forms of support to young innovators. On the one hand, having a long-term vision is crucial because opportunities such as innovation prizes and charitable grants often give temporary help but fail to provide patient finance and continuous training and expert advice. On the other, an integrated ecosystem also serves to mobilize the specific competences of the different stakeholders that participate in the innovation process.

First, such an ecosystem obviously needs to include permanent funding streams (e.g. supported by private donors, multilateral development banks, and public-private partnerships). Secondly, it requires quality training and acceleration programs provided by universities, private and public-private actors. Third, it can benefit from local support offered by city and territorial governments, in order to link solutions to the communities where they can have their first and most obvious impacts (e.g. in terms of sustainable transportation, air quality, greening of urban spaces, waste management). Fourth, it calls upon country governments, which remain essential to incorporate solutions into national strategies and action plans for implementing the SDGs. Finally, it extends to the international dimension, which is necessary to ensure that young people's initiatives can be exported, replicated, disseminated, and ultimately used to support a paradigm shift towards the full recognition of youth skills as a key enabler of sustainable development.

REFERENCES

ITU (2013). Measuring the Information Society 2013. Geneva, Switzerland: International Telecommunications Union. Available from: http://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2013/ MIS2013 without Annex 4.pdf (accessed July 2018).

Kremer, W. (2 March 2015). Are humans getting cleverer? BBC News. Available from: https://www.bbc.com/news/magazine-31556802 (accessed July 2018).

SDSN (2018). SDSN Youth Announces Youth Investment Readiness Program, Thanks Volunteers. Sustainable Development Solutions Network. Available from: http://unsdsn.org/news/2018/01/12/sdsn-youth-announces-youth-investment-readiness-program-thanks-volunteers/ (accessed July 2018).

SDSN Youth (2017). Youth Solutions Report - 1st edition. New York, NY, USA and Paris, France: SDSN Youth.

SDSN Youth (2018a). Our Mission [online]. Available from: http://sdsnyouth.org/about/#our-mission (accessed July 2018).

SDSN Youth (2018b). Submit your innovative solution. Youth Solutions Report. Available from: https://podio.com/webforms/20377041/1391773 (accessed July 2018).

The Economist (23 January 2016). Young, gifted and held back. The Economist. Available from: https://www.economist.com/leaders/2016/01/23/young-gifted-and-held-back (accessed July 2018).

UN Stats (2018). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. UN Doc A/RES/71/313.

Unesco Institute for Statistics (2017). Literacy rates continue to rise from one generation to the next. UNESCO UIS Fact-sheet no.45. FS/2017/LIT/45. Available from: http://uis.unesco.org/sites/default/files/documents/fs45-literacy-rates-continue-rise-generation-to-next-en-2017_0.pdf (accessed July 2018).

UNFPA (2016). The State of the World's Population 2016. New York, NY, USA: United Nations Population Fund. Available from https://www.unfpa.org/sites/default/files/pub-pdf/The_State_of_World_Population_2016_--English.pdf (accessed July 2018).

United Nations (2015). The Millennium Development Goals Report 2015. New York, NY, USA: United Nations. Available from: http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20 rev%20(July%201).pdf (accessed July 2018).

United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Available from: https://sustainabledevelopment.un.org/post2015/transformingourworld (accessed July 2018).



50 Solutions

Design, Pilot and Prototyping Phase



Sheep Wool Insulation for Displaced Syrians











Founder Ri

Riccardo Luca Conti and Joana Dabaj

Place of Establishment Bekaa, Lebanon

Main Activity

Charity/Volunteering

Organisation Type

Not-for-Profit (e.g. 501(c) organisa-

tion)

Place(s) of Operation

Al Marj, Lebanon.

Budget

\$5000-\$25,000

Find out more at

www.catalyticaction.org

THE NEED

The conflict in Syria has developed into one of the worst humanitarian disasters of our time. Lebanon has been the hardest hit by the exodus of Syrians, with more than 1 million refugees. The area of Lebanon most closely bordering Syria, the Bekaa Valley, hosts the highest numbers of refugees and is characterised by hot summers and snowy cold winters. Housing insulation is absent or if existing is not efficient, resulting in high running costs with bad living conditions. The aim of the project is to provide an innovative, sustainable and affordable solution to improve the living condition of refugees.

THE SOLUTION

The sheep wool insulation technique is context-specific as 72% of Lebanese sheep farms are located in Bekaa Valley. The wool is usually wasted or rarely used as a filling for mattresses and pillows given as prestigious wedding gifts. This solution introduces a technique to treat the wool in order for it be used as insulation. The team developed two proposals that allow refugees in Lebanon to adopt the sheep wool insulation technique. The first one looks into insulating existing unfinished concrete buildings by creating OSB boxes filled with sheep wool, while the second proposal provides insulation in tents through the use of recycled cardboard tubes filled as well with sheep wool. Sheep wool insulation has been chosen also for its great benefits as an outstanding thermal insulator for summer and winter and an air purifier to its remarkable sound insulating and flame resisting characteristics.

THE IMPACT

Use of sheep wool as insulator supported the farmers and empowered the women in the process, enhancing community resilience and gender equality. Social impacts linked to the adoption of this material ranged from boosting small local farms to employing women in the wool treatment process. Environmental impacts can be validated by the reduction of CO2 emissions to heat up the school. Thanks to the sheep wool insulation, reduction of heating costs and noise between the classrooms is tangible in Jaraheih School since 2016.

ALIGNMENT WITH SDGs

The project is addressing multiple SDGs simultaneously. This is because of the process that the team uses and because of the multiple impacts that the adoption of this innovative material can generate within the local community. Sheep wool insulation has been proven to be a high quality insulation material (SDG 7), which in the context of Lebanon has the power to challenge unjust power dynamics, by financially boosting small local farms (SDG 10) and by empowering women to be part of the transformation of this product (SDG 5) from waste to valuable insulation (SDG 12).



Bloom Project









Founder Lorenzo Enrico Nicola Giorgi

Place of **Establishment**

Padova, Italia

Main Activity

Educational Programs / Initiatives; Social Enterprise / Startup; Technology

Development

Organisation Type

For-Profit Company

Place(s) of Operation

The project has been developed to have a maximum impact in African countries.

Budget

\$0-\$5,000

Find out more at

www.bloomproject.it

THE NEED

Desertification, environmental pollution and climate shocks have a great influence on farmers' spending and in consequence of these phenomena negatively impact on production turnover and on its cost. Main problems are food production and access at affordable prices. Bloom Project's aim is to develop innovative agricultural systems, permitting safe, sustainable, open source cultivation cycles, cheaper than traditional techniques, for 12 months a year. The goal is to make rural farmers independent around the world, by using innovative technology developed by sustainable and open source technologies.

THE SOLUTION

Bloom Project is a research and development center, born in collaboration with the University of Padova's DAFNAE. Its objective is the creation of agricultural innovative systems for the future and the testing of circular agriculture practices, believing that the correct use of resources and waste reduction are fundamental parts of the progress. Bloom supports micro-businesses in rural areas by transmitting and constantly updating knowhow to involved communities. Two prototypes are ready to be installed and powered up all over the world: AG-RITUBE has its main purpose in realization of a system of hydroponic cultivation, economically sustainable and with a low technological input in order to be scalable; AGRIPOT provides for the development of off ground culture methods with a low environmental impact.

THE IMPACT

Bloom will try to involve all continents through development cooperation projects with social, economical and environmental benefits for beneficiary communities. All its prototypes are open source and provide for formation and transfer of knowledge to local farmers. The team has grown local African seeds, creating different climatic conditions to stress plants and control their biological parameters. Results are measured in different intervention areas: the team considers both environmental and socioeconomic impacts. Impact is measured based on the local partner Bloom works with (NGO, association, municipality) or based on its own goals (social business, no hunger, farmers' training, sustainable agriculture in arid and polluted places).

ALIGNMENT WITH SDGs

This project has been created to have an integrated approach to the SDGs. According to the team's vision, supporting social agri-businesses that could have an economic impact on beneficiaries and fight poverty (SDG 1) should also ensure that such businesses improve their production and reduce the selling costs of their products, permitting a better access to food (SDG) 2). The project always includes education and an open source technology transfer to beneficiaries that start enterprises (SDG 4). Lastly, the environmental impact of businesses will also be positive, as the team focuses on off-ground cultivation, reducing water consumption (SDG 6), as well as on the use of solar-powered pumps (SDG 13).



Solar N3E



Place of Tempe, Arizona, USA Establishment

Main Activity

Educational Programs / Initiatives; Social
Enterprise / Startup; Technology Development; Policy Advocacy and Research

Organisation Type Not-for-Profit (e.g. 501(c) organisation)

Place(s) Manila, Philippines of Operation

Budget \$5000-\$25,000

Find out more at graduateinstitute.ch/home/about-us/discover-the-institute/le-geneva-

challenge/2017-edition/2017-sdsn-youth-special-prize-1.html

THE NEED

Solar N3E's believes there is a need to contribute to inclusive economic growth in the Philippines by minimizing in-work poverty/urban unemployment for youth who are neither educated nor employed or trained through the efficient use of government programs in place and taking advantage of the expansion and accreditation system of the solar energy industry. Solar N3E aims to redirect the trajectory of marginalized community members' employment opportunities.

THE SOLUTION

Solar N3E is a social enterprise that holistically integrates research, training, and networking among poor communities, educational trainers, and solar energy employers. Solar N3E has three primary thrusts: research, training, and networking. Conducting research and providing reports on the Philippines' solar industry, including an annual job census, is crucial as industry intelligence is currently lacking. Providing low-to-no cost training to marginalized communities will be possible through government funding and multilateral agency grants. Finally, networking would include events such as conferences, career fairs, and workshops for job-seekers.

THE IMPACT

Solar N3E aims to increase solar industry intelligence and accessibility to solar energy training and employment. Its goal is to increase the number of formal employment opportunities for community members who live below the poverty line to help improve their stan-











dard of living. Solar N3E would produce an annual solar job census that would quantify the number of people working throughout the local solar value chain, and provide information on their working conditions and average salary. The impact of the enterprise will be evaluated through data collection. Solar N3E believes in data-driven evaluation. The members plan to partner with the Abdul Latif Jameel Poverty Action Lab (J-PAL) in conducting policy evaluation and scientific evidence for our effectiveness.

ALIGNMENT WITH SDGs

By proposing a social enterprise that would increase industry intelligence, as well as bring solar training and employment opportunities to the urban poor, Solar N3E aims to positively contribute to the following SDGs: employment & economic growth; education; sustainable cities; access to clean, affordable energy; and climate change. They also aim to directly address at least two of these, namely, employment and clean energy.



HowtUyoga



















Founder Ivano Bilenchi
Place of Bari, Italy

Establishment

Main Activity Educational Programs / Initiatives

Organisation Type Other
Place(s) Tanzania

of Operation

Budget \$50,000-\$100,000

THE NEED

Tanzanian coffee farmers often live in poverty, mainly due to the low productivity of local agricultural systems. Their activity portfolio is limited to the sole cultivation of coffee, upon which they depend and which is often their only income source. They usually do not possess sufficient knowledge and skills (e.g. in technology and entrepreneurship) which would be required to warrant satisfactory income levels, as well as good sustainability in coffee production.

THE SOLUTION

The HowtUyoga ("uyoga" means "mushroom" in Kiswahili) project proposes the development of an entrepreneurial training course aimed at transferring knowledge and expertise on the creation and management of a plant that would allow the reuse of organic waste resulting from coffee farming to produce mushroom self-cultivation kits. The entrepreneurial training program would cover micro- enterprise management, sustainable production practices, mushroom cultivation know-how with particular emphasis on species with specific and proven nutritional and pharmacological properties (such as Pleurotus Ostreatus, which also stands out for its excellent quality/ price ratio), design, implementation and management of small biomass and solar heating plants to autonomously fulfil internal energy demand. User-friendly multimedia material would be made available to the course's attendees through a dedicated web portal as a support for the on-site frontal lessons.

THE IMPACT

The envisioned goal of the project is to establish virtuous dynamics of environmental, social and econom-

ic sustainability while also involving trainers, entrepreneurs, financing institutions and other stakeholders. The expected operating results are the reuse of green waste, the diversification of agricultural products and related asset portfolio, the increase in income of local farmers, better food and health coverage due to improved micronutrient intake and phytopharmaceutical effects, and access to renewable energy sources.

ALIGNMENT WITH SDGs

By increasing the income of coffee farmers by introducing fungiculture, HowtUyoga would contribute to SDG 1. It would ensure food security (SDG 2) and improve local diets by introducing mushroom species with excellent nutritional properties (SDG 3). It would provide knowledge and competences by means of the free HowtUyoga courses and learning material (SDG 4). It would encourage conscious usage of traditional energy sources and, compatibly with the Tanzanian context, introduce renewable energy sources (SDG 7). It would create decent jobs in mushroom cultivation sector and diversify the tanzanian economy (SDG 8). It would encourage usage of green waste as a substrate for mushroom cultivation (SDG 12). Finally, it would make tanzanian agriculture more resilient to climate change by introducing fungiculture (SDG 13) and fight deforestation through this form of environmentally friendly agriculture (SDG 15).



YES!Bat









Founder Laura Garzoli

Place of Verbania, Italy

Main Activity Educational Programs / Initiatives; Policy

Advocacy and Research

Organisation Type Other

Place(s) Novara province, Italy

of Operation

Establishment

Budget \$5000-\$25,000

Find out more at www.yesbat.it

THE NEED

Rice is a primary staple food, but its cultivation involves environmental deterioration and a massive amount of chemicals to face pest outbreaks that annually cause severe yield losses. Insecticides, besides being worthless in the long-term due to the development of pesticide resistance, are seriously threatening the environment, human health and, in the long term, the entire agroecosystem sustainability. Therefore, there is an urgent need of alternative strategies to suppress insect pests populations below the economic injury level while reducing risks for human health and the environment.

THE SOLUTION

In agroecosystems, bats are important pest predators, naturally controlling nocturnal insect pests. Therefore, YES!BAT project promotes an Integrated Pest Management strategy in rice fields that, by enhancing the ecosystem services provided by bats, will offer effective tools for insects pests prevention and management, while contributing to the protection of the environment and its components. It is based on the employment in rice fields of bat boxes, artificial roosts designed for encouraging bat presence in areas where there are few roosting sites, and therefore for fostering their beneficial pest control service. Moreover, bat boxes will also allow the easy collection of guano that will be analysed both morphologically and genetically, to understand which insect pest species are predated.

THE IMPACT

To date, the Piedmont Region, Legambiente Association and the VCO Foundation are giving their support to the project at national and regional level. A proto-

type of bat box has been conceived, evaluating different materials for its creation to guarantee the long-term preservation , and to avoid any possible cause of disturbance to bats. Bats hibernate in winter, therefore, sampling will started in May 2018. Colonisation success will be evaluated by monthly inspecting roosts and by acoustic surveys to gather information on the presence of bat species different from those found in bat boxes, but foraging in the study area.

ALIGNMENT WITH SDGs

YES!BAT promotes an integrated approach that provides tools to achieve several SDGs goals that concur synergistically. Bats are one of the most promising biological suppressors of pest populations that harm crops, and they represent a sustainable alternative to the use of chemicals that are poisoning the food and the environment. (SDGs 2 and 12). Furthermore, bats are protected under several national and international regulations, as many species are threatened or are facing the risk of extinction. These components can fundamentally contribute to the protection of biodiversity and the restoration of natural habitats suitable for the local flora and fauna (SDGs 13 and 15).



MuHealth



Founder Adrien Mugimbaho

Place of Kigali, Rwanda **Establishment**

Main Activity Social Enterprise / Startup; Technology

Development

For-Profit Company **Organisation Type**

> Rwanda Place(s)

of Operation

\$100,000-\$250,000 **Budget**

Find out more at adrienmug@gmail.com

THE NEED

For healthcare providers in many countries, receiving a transferred patient with no information except for a transfer paper and having to act immediately when the patient is in a critical state is not uncommon. Having detailed information about the medical history of patients saves time to cater to patients and makes the patient's life easier. There is a need to solve problems including long waiting times for patients in hospitals, unnecessary duplication in tests, patient's data loss for future treatment, lack of data for researchers and lack of interoperability between health care providers for an effective multidisciplinary approach.

THE SOLUTION

The service that the team presents is a cloud access of patient's data including demographics, medical history, medication and allergies, immunization status, laboratory test results, radiology images, vital signs, personal statistics like age and weight, and billing information. The system will be developed using computer industry techniques and medical experience. This data will be available to every doctor registered under the Rwanda Medical Council every time the patient attends any public/private hospital. They will train nurses in partnership with ministry of health that will assist doctors in entering data in the system. On a patient's return, relevant data will be added making the system more helpful and sustainable in the future.

THE IMPACT

MuHealth will include tools in the system that will ease multidisciplinary partnership between wards and departments in hospitals, a follow-up system for patient and access to data for researchers considering ethics on patient's privacy. Their services will reduce doctor time per patient and long wait times given to patients. The project is in a design phase so far but will be measuring the project's impact by overseeing the decrease in health expenditure specific to diseases.

ALIGNMENT WITH SDGs

At debut MuHealth's services will not only be reducing doctor time per patient, but patients will spend less time waiting in the clinics and thus have additional time for their personal activities, tgus targeting SDG 3 in multiple ways. Business will also be environmentally conscious as it will reduce paper usage in hospitals as in line with SDG 12. MuHealth will be running as a social business and they will use 10% percent of the profit earned in order to contribute to solving common social problems (e.g. supporting access to health insurance for vulnerable people).

Youth Climate Leaders



Founder

Cassia Moraes

Place of Establishment

São Paulo, Brazil

Main Activity

Educational Programs / Initiatives; Social

Enterprise / Startup

Organisation Type

Not-for-Profit (e.g. 501(c) organisation)

Place(s) of Operation

Global

Budget

\$25,000-\$50,000

Find out more at

www.youthclimateleaders.org

THE NEED

Climate change is one of the most pressing issues of our time. It concerns all people on Earth, especially the younger generations. They will not only inherit all the problems to come, but they are also the key to stopping climate change. There is thus a need to spearhead climate action by preparing the new generations of changemakers and climate leaders. Youth Climate Leaders seek to empower youth all over the world to learn about climate change in theory, understand it in practice, and work together with other youth to find solutions to the most pressing problem of our time.

THE SOLUTION

The project can be summed up by the idea of young people traveling the world and working together to learn more about climate change and starting their careers as climate leaders. To build the next generation of climate leaders, they are designing a unique experience: this first pilot will have three main components with a 40- day immersion in Paris and Kenya for 20-35 people from all over the world, a 3-month tailored field placement and a 1-week delegation to COP24 in Poland. In each destination, participants will meet with key local organizations, universities and community leaders. Additionally, the program also includes individual and collective coaching.

THE IMPACT

Youth Climate Leaders has already received close to 200 applications from more than 50 countries, a month before the deadline. After presenting

the initiative to eminent people such as President Obama last October, they had the opportunity to present YCL to an audience of 700 people from more than 20 countries at the Climate Reality training with the Nobel laureate Al Gore in Mexico City. Currently, they have more than 12 partners and 15 people directly working on the project. Their plan is to spread climate action message to more than 1 million young people through participants and social network activity.

ALIGNMENT WITH SDGs

YCL directly concerns Sustainable Development Goal 13 on Climate Action. YCL also partners with many other organizations, whose work addresses multiple SDGs, such as Goal 11 on Sustainable Cities and Communities (Climate Scorecard), Goal 4 on Quality Education (Endeleza), Goal 15 on Life on Land (Plant for the Planet) and Goal 2 on Zero Hunger (Thought for Food).



Climatenza

Establishment









Founder Akshay Makar
Place of Delhi, India

Main Activity Social Enterprise / Startup

Organisation Type For-Profit Company

Place(s) India, Chile, Uganda, Kenya, Bahamas and Puerto Rico in next 5 years.

Budget \$50,000-\$100,000

Find out more at www.climatenza.com

THE NEED

Despite huge potential in power generation through solar energy, studies show that the distribution network of electricity in Africa is poor, especially in remote areas. As a consequence vital services such as telecommunications, water supply, health care and education are neglected, creating significant barriers to development. With an estimated two-thirds of the African continent with little or no access to electricity, the continent lies under darkness. Also, non-metallic industries including mining and cement industry are major contributor to carbon emissions. According to data, agriculture industry is second most while cement plants are third largest emitters of global greenhouse gases.

THE SOLUTION

CLIMATENZA is a Solar Thermal Company that is revolutionizing power plants utilising solar thermal parabolic trough. The company is focusing on innovating the design of parabolic troughs to reduce the initial cost of deployment by 10-15% by 2020 and further by 30% by 2023, ultimately reducing LCOE (levelized cost of electricity) and LCOH (levelized cost of heat). Climatenza is also conducting research over the heat transfer fluid which is used as driver of the parabolic trough with an aim to use molten salts in medium/ large size parabolic trough solar power plants which will improve the thermal efficiency by 15-20%, further reducing LCOE.

THE IMPACT

A case study was performed over the Pacasmayo cement power plant in Northern Peru where the tech-

nology could save 5000-6000 tons of CO2 per year. Also, a second case study was performed on Gesex, one of the largest fruit production industry in Chile where a 5MW plant will avoid 11,000 tons of GHG emissions. Climatenza's vision is to drop the cost of LCOE below 5 cents by 2023 and to make solar energy a source of power for 24/7, something which is only accessible for maximum of 12 hours through current Solar PV. Climatenza has got high traction from the energy giants in India and Chile. Apart from the energy companies, cement plants, fruit exporter companies and small-medium mining companies have also shown huge interest.

ALIGNMENT WITH SDGs

With this solution, not only the communities that do not have power will get electrified, the reduced emissions will also help mitigate climate change. Application in the cement industry will help companies decrease the carbon emissions by 10-15% depending upon the scale of the project. Therefore, Climatenza aligns with SDG 7 and 13.





ReliefCycle







Founder Shannon Lisa

Place of Establishment Edison NJ, United States

Main Activity

Educational Programs / Initiatives; Technology Development; Charity / Volun-

teering

Organisation Type

Not-for-Profit (e.g. 501(c) organisation)

Place(s) of Operation

New Jersey, USA. Seeking to expand pilot to Texas and Puerto Rico, Greece,

Bangladesh, and Kenya

Budget

\$0-\$5000

Find out more at

www.reliefcycle.org

THE NEED

Roughly 65 million people worldwide have been forcibly displaced, the most since WWII, suffering needlessly from lack of adequate clothing and shelter. Leading causes of death of refugees are exacerbated by hostile weather conditions which tents provide minimal protection from, as natural disasters become more frequent due to climate change. This impacts upon humanitarian organizations, who are struggling to balance provision of other critical supplies. Textile waste has become a global crisis: an abysmal 5 billion pounds of retail returns, many brand-new, enter the waste-stream annually.

THE SOLUTION

ReliefCycle seamlessly blend "recycling" with humanitarian "relief" with a simple process that engages the public into giving their clothing - and those that need it most - a new life. ReliefCycle's main structure consists of rescuing clothing about to go to waste from retailers, homes, schools, and governments through pickups and a network of drop-off locations. Along with this, utilizing this material in care packages for refugees, wealth-challenged families, and natural disaster victims is crucial. Unwearable material recycled and transformed into building insulation, solar blankets, and water filtration devices for refugees and natural disaster rebuild projects around the world. Lastly, environmental education programs for schools and public are organized to continue the momentum towards the recycling/reuse of textiles and get youth engaged in the SDGs.

THE IMPACT

ReliefCycle has launched recycling-education campaigns with local schools and organizations, and have reached over 500 children and young adults in 6 months, inspiring youth to initiate their own clothing drives and community clean-up events. Its Corporate Partnership Program secured commitments from 5 businesses in the first 8 weeks. 2017 saw the re-purpose of approximately 1 million pounds of textiles. After implementation of its new initiatives, ReliefCycle has seen a nearly 15% increase in textiles recycled after the first quarter of 2018, compared to the same time period of 2017, diverting approximately 130 tons of clothing from landfills and incinerators.

ALIGNMENT WITH SDGs

ReliefCycle makes vulnerable communities more resilient to economic, environmental, and social instability through cost-effective reuse of resources, contributing to SDG 1 and SDG 12. ReliefCycle will change the dynamic of emergency and humanitarian response by converting textiles destined for the landfill into quality building insulation for emergency shelters, further contributing to SDG 11 and particularly making cities and human settlements inclusive, safe, resilient and sustainable, with a particular focus on targets 11.5, 11.6, and 11.C.



Scaling Up the Dissemination of Aquaponic Systems Through Conversion of Brownfield Sites







Founder Alessandro Biagetti

Place of Rome, Italy Establishment

Main Activity Social Enterprise / Startup

Organisation Type Othe

Place(s) Alessandro Biagetti

of Operation

Budget \$25,000-\$50,000

Find out more at www.facebook.com/rglregen/

THE NEED

There is a very common belief that eating foods contaminated with pesticides or other chemicals is an important cause of cancer. In Italy, according to an ISTAT report, in 2014 130 miles tonnes of phyto-sanitary product (such as pesticides) have been employed, which equals to 2kg per each Italian citizen. At the same time, brownfield sites are abundant in many countries, including Italy, but their conversion to rural fields could be too expensive. In Italy, soil sealing is soaring despite the countless unused urban spaces.

THE SOLUTION

The project promotes the dissemination of aquaponic systems by upgrading unused urban spaces. In order to do so, it operates in several directions. First, the creation of aquaponic gardens in which the entire community gets involved, thanks to the use of energy self-sufficient aquaponic modules, made with cheap materials, easy to transport and install, for the production of edible and sustainable vegetables and fish. Second, the use of a wider production system making the industrial one sustainable. Third, the promotion of aquaponic consciousness and its advantages among the public opinion (for example thanks to the introduction of aquaponic systems in restaurants), planning awareness-raising activities and involving volunteers.

THE IMPACT

The project today aims to disseminate the problem and our solution. The goal is to create awareness, disseminate and create a foundation to build a large manufacturing plant on a brownfield in the urban context. The team has partnered with a restaurant in Rome for the construction of an aquaponic facility in his restaurant. In this way people can closely touch the benefits of aquaponics products. At the moment the team is also doing research thanks to a partnership with the University of Rome "Tor Vergata".

ALIGNMENT WITH SDGs

The project's focus is on SDGs 2, 11 and 12 By divulging the aquaponic system, the solutions offer access to a safe, nutritious and sufficient diet throughout the year. Bringing cultivation techniques to urban areas allows people to re-establish a connection with nature by creating social inclusion in neighborhoods. A greater awareness of the value of food generates a reduction in food waste.



Anspruchpartner

Founder Martin Rinnhofer

Place of Vienna, Austria Establishment

Main Activity Social Enterprise / Startup

Place(s) Austria of Operation

Budget \$5000-\$25,000

Find out more at www.anspruchpartner.at

THE NEED

Despite a huge welfare system, there are 230,000 families at risk of poverty in Austria. Many of them are entitled to social transfers. Access to financial state aid is so difficult that despite conservative scientific estimates, only 50% of aid actually arrives. That is what Anspruchpartner wants to change, through a web application that helps those people to escape the risk of poverty by empowering them with the tools and knowledge to benefit from state aid.

THE SOLUTION

Anspruchparther is the digital partner for Austrian state-aid. The team built a web application where the users just have to provide personal data in order for the app tells them what they are entitled to. The app also gives them a step-by-step guide on how to claim it. The team collects data about the complex Austrian state-aid system, analyzes it and creates an algorithm, which allows then to give individual, low-threshold and user-friendly information. Anspruchpartner combines the benefits of personal advice, which is usually connected with opening hours, long delays and high administrative costs, and online information platforms that provide a lot of information, but not just the information relevant to users. For the first time, their solution brings individualized information about personal claims online.

THE IMPACT

The team has a working prototype that has already undergone a few updates to improve ease of accessibility and ease of use. The prototype is a questionnaire on anspruchpartner.at. Currently, when a re-











quest about what the user could receive arrives, the team works out the answer manually and then send the answer within a week. So far, dozens of requests have been processed, which the team use to test and evaluate their assumptions. Also, the team is currently working on a calculator that displays the aid so that a claim can be checked automatically. Feedback is very positive and encouraging for the team to continue working.

ALIGNMENT WITH SDGs

The solution brings transparency into the state aid system and thus sustainably combats relative poverty in Austria. This leads to equal opportunity and social inclusion. Their main target is combating poverty in Austria (SDG 1), by helping people to receive the monetary state-aid, that they are entitled to. In Austria, however, correlation between poverty and access to education (SDG 4) and health (SDG 3) is especially significant, so ensuring that access to state-aid is more effective can help address these issues too. Anspruchpartner also enhances equality of opportunity by helping people to worry less about their financial situation (SDG 10), and promotes accessibility to this social security system partly got lost because of bureaucratic hurdles (SDG 16).



Vital Vans







Founder Musibau Bolarinwa

Place of Establishment Lagos, Nigeria

Main Activity

Social Enterprise / Startup

Organisation Type

Other

Place(s) of Operation

Lagos, Abuja, Kaduna and Kano,

Nigeria

Budget

\$0-\$5,000

Find out more at

haimahealth.org.ng/

THE NEED

Nigeria has a huge deficit of blood. With a population of 180 million, there is a blood need of about 1.5 million pints per annum. Currently less than 500,000 is collected, leading to avoidable deaths. Out of these 500,000, over 60% is collected by family replacement, i.e family members having to donate for patients. Commercial blood donors fill 40% of the need and the percentage of voluntary donations is negligible. Nigeria accounts for the 2nd highest rate of maternal mortality in the world with most of these deaths due to lack of blood in real time.

THE SOLUTION

The team got insights into many cases of lives being needlessly lost and validated it with data on how lack of blood in real time leads to mortality. Vital Vans are solar panelled, refrigerated donation vans that will use intelligent fleet management IT systems to collect blood and deliver it to hospitals that order it. The solution works by removing key barriers to donations using technology to recruit and connect with donors, collect blood and then deliver it to hospitals in semi urban areas. Donors get updates on where their blood is delivered to, when it's used, and reminders for their next donations. The IT system is able to predict the type of blood required and will use social media to target donors. Hospitals and blood banks are able to order the quantity and type of blood they required in advance.

THE IMPACT

Vital Vans measures impact by the amount of blood

collected and delivered in the States it works in. Since inception, the team has connected over a thousand donors to patients in hospitals. The number of blood requests, the number delivered and the rapidness of their response time serves as their KPIs.

ALIGNMENT WITH SDGs

The use of blood and its products is integral for modern medicine and its unavailability leads to mortality in Nigeria and other countries with weak health infrastructure. The project impacts SDG 3 because it ensures improved health outcomes for patients. It also addresses better lives for women because the majority of lives lost as a result of lack of blood are of women in labour. It achieves its objectives by building on SDG 9 because it aims to build an innovative and sustainable solution that takes account the local needs. Finally, it works with partnerships (in line with SDG 17) within and outside the country, in order to improve lives.





Manufacturing of Plastic Embedded Lightweight Brick







Rupam Choudhury Founder Guwahati City, India Place of

Main Activity Social Enterprise / Startup; Technology

Development

For-Profit Company **Organisation Type**

> Place(s) of Operation

Establishment

India

Budget \$5000-\$25,000

rupamchoudhury169@gmail.com Find out more at

THE NEED

With the rapid increase in population that Assam, a state located in the extreme north-eastern part of India, faces each year, the use of plastic materials is also ever increasing. To be precise, an amount of 36.86 tonnes of waste plastics is generated each year in the state which directly or indirectly affects the environment, creating some serious environmental crisis and the need for coming up with solutions to deal with it. There is a need to recycle waste plastics by overcoming technical and economic difficulties.

THE SOLUTION

This product primarily uses waste plastics as key components, which is why there is tremendous cost cutting, making the product eco-friendly as well as less expensive. The patented product's name is PELC (PLASTIC EMBEDDED LIGHTWEIGHT CONCRETE): it is type of lightweight brick which can be used for almost all kind of construction purposes and contains waste plastics, thus making it absolutely eco-friendly. The plastics are added in a very grinded form using simple machineries. The product aims to eradicate plastic waste from Assam, make construction faster by making the product lightweight, cut down construction costs, and provide comfort to dwellers since the brick is also heat-insulated.

THE IMPACT

The project has been able to achieve a commendable result from the implementation of a pilot project. It has eradicated around 1.5 ton of plastic waste from Guwahati by manufacturing 1 cubic metre of PELC brick for quick toilets. Toilets built with PELC bricks are designed so that a single toilet could be built in just an hour. In a country like india, which is suffering from an open air defecation challenge, the team hopes these affordable and quick toilets will bring a huge change in the ecosystem.

ALIGNMENT WITH SDGs

The product unanimously conforms with SDG 12 and SDG 14 and also indirectly affects SDG 11. Beside contributing to sustainable production processes and preventing plastic waste to reach the ocean, the product also has the potential to promote inclusive and sustainable urbanisation



Beacon Chat







Founder Allan Okoth Odhiambo

Place of Na Establishment

Nairobi, Kenya

Main Activity Social Enterprise / Startup; Technology Development

Organisation Type Other

Place(s) Nairobi, Kenya and soon United

of Operation Kingdom

Budget \$0-\$5,000

Find out more at beaconing.wordpress.com/found-

ers-story/

THE NEED

Low understanding of Sign Language in Kenya has left the deaf community marginalized and unable to access basic human services like health care. Moreover, global hearing aid production only reaching 10% of the deaf population and the insufficient number of trained sign language experts is contributing to the increasing number of loss of deaf lives in hospitals. An 83-year old, cancer-stricken deaf man recently died without even knowing his diagnosis after three hospitals failed to provide a sign language Interpreter for 7 months. There are a lot of people like this patient, and his story was a testament of the problems that deaf people go through on their daily lives.

THE SOLUTION

Beacon Chat is a mobile application that uses a Bluetooth Internet of Things framework to provide an inclusive communication platform for deaf operating at no cost regardless of network coverage. Its next focus is to scale in the UK to serve the estimated 9 to 11 million people suffering from hearing loss there.

THE IMPACT

Having impacted more than 1600 deaf lives in Kenya, one of the team's favorite success stories is Atieno, a deaf girl who works at a NGO-sponsored voluntary counseling and testing center in Nairobi. In her daily role she interacts with more than 100 youths seeking consultation on sexual and reproductive health. Through Beacon Chat, she is able to attend to her pa-

tients without the need of a sign language interpreter. Beacon Chat not only facilitated her to secure a job, but also to participate in achievement of Universal Health Coverage.

ALIGNMENT WITH SDGs

Besides improving the health and wellbeing of deaf people, BeaconChat also promotes SDG 4, facilitating peer to peer learning, increasing persistence of deaf students in learning progress, and enhancing information flow, learning support, group commitment and learning satisfaction. Moreover, it contributes to SDG 10 by building a bridge to stop marginalization and segregation of deaf communities.



Kilimo Taarifa

Place of







Founder Adam Andrea

Tanzania

Establishment

Main Activity

Educational Programs / Initiatives; Social Enterprise / Startup; Technology Development

Organisation Type For-Profit Company

Place(s) Tanzania

of Operation

Budget \$50,000-\$100,000

Find out more at adamandrea43@yahoo.com

THE NEED

The agricultural sector employs about 80% of the Tanzanian population, and contributes 25% of Tanzania's GDP. Small scale farmers struggle to get markets for their products due to mismatch between what is produced in terms of quality and quantity and market demand, leading to post-harvest loss up to 40% annually. Low crop productivity, with an average of 1.7 tons per hectare, is a result of barriers to access and use of agricultural information and knowledge, whereas good knowledge and management should result in yield of 3.5 -4.0 tons per hectare.

THE SOLUTION

Kilimo Taarifa provides services to small, medium and new/startup farmers to connect them with the market and also provide researched data that help in crop production to meet buyer needs in terms of quality and quantity. By relying on their mobile phones without limitation of internet access, they can use USSD and SMS technology to access information anywhere, anytime. Unlike other systems, Kilimo Taarifa provides guaranteed market to farmers and quality assurance of the products produced by farmers to meet market demand.

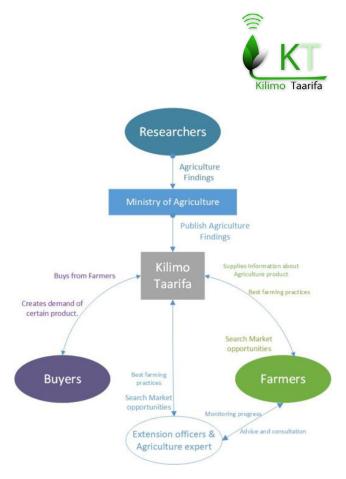
THE IMPACT

Kilimo Taarifa will encourage youth participation to agricultural activities by providing relevant researched information. Moreover, it will promote the transformation of subsistence agricultural farming to commercial farming through adaption of new technological ways of farming and improved connection of users with market. Feedback from farmers will be used to measure impact through comparing the level of production in a particu-

lar year of Kilimo Taarifa implementation and previous years when the system was not yet introduced.

ALIGNMENT WITH SDGs

1: NO POVERTY. According to FAO report 40% of farmers in Tanzania are living under poverty line average of \$ 0.5 per day, by using Kilimo Taarifa we help farmers to overcome poverty by helping them to sell their product and help them to make better decision on what to produce, when to produce, how to produce and where to sell it. 2: ZERO HUNGER. With 80% of Tanzania population being employed in agriculture sector, farmers still fail to produce enough food to eradicate hunger. With Kilimo Taarifa, farmers may learn of different ways to increase productivity and quality and therefore reduce the hunger challenge and produce nutritious food for the community. 8. DECENT WORK AND ECONOMIC GROWTH. Low incomes and unemployment are also a challenge that Kilimo Taarifa combats. With Kilimo Taarifa, unemployed youths, men and women may learn the different opportunities that they can utilize in agriculture in order to overcome the challenges of unemployment or inadequate employment.



NatureCoin

Founder Crystal Tsz Ue Chow

Place of Seoul, South Korea Establishment

Main Activity Social Enterprise / Startup; Technology Development; Finance; Other

Organisation Type For-Profit Company

Place(s) Vancouver, Canada Hong Kong SAR, China Seoul, South Korea

Budget \$25,000-\$50,000

Find out more at www.linkedin.com/company/13704965

THE NEED

By 2050, there will be more plastics than fish in the seas. Each year globally, about 8 million tonnes of plastic waste enter the oceans, more than 600 marine species are harmed by marine litter and at least 15% of those are endangered. However, it's estimated that less than 11% of plastics are recycled in Canada and Hong Kong – similar to the global rate of about 9%. NatureCoin could be able to be one of those solution of plastic problem and to stop the discharge of plastics into seas using disruptive technology in environmental protection.

THE SOLUTION

NatureCoin is a cryptocurrency designed as the game-changer of the recycling industry for the vision of future smart city. It utilizes blockchain and Internet-of-Things (IoT) technologies to reward users for their sustainable actions, thus making recycling profitable and building a global economy connecting individuals with environmental cause. Users will be rewarded when they recycle disposable wastes, including plastics, tins, cans. Nature-Coin's vision is to develop a network of decentralized recycling rewarding system for smart cities, solving recycling problem and spur changes across world. It will be a better bottom-up solution for the current expensive, inconvenient inefficient recycling system and to create economical value and incentives for every individuals.

THE IMPACT

The team has developed a blockchain platform on Ethereum network, an Android Wallet app and is now work-











ing on the refinement of NatureCoin's blockchain platform design, which will be based on block-lattice to eliminate carbon footprint through block mining. In April 2018, NatureCoin was selected as a Top 3 finalist in the Canada region anda Top 9 semi-finalist in Canada/US/Mexico at the 2018 CEC Youth Innovation Challenge. In February 2018, the team was shortlisted among the Top 50 finalists at the Asia Pacific Low Carbon Lifestyle Challenge by UN Environment. NatureCoin is now at the prototype stage and has successfully verified cryptocurrency on the Ethereum testing net.

ALIGNMENT WITH SDGs

NatureCoin aims to make recycling profitable, connect the world with environmental causes, and provide positive impacts to the communities by creating economical and ecological values. Utilizing disruptive innovative technology, this project prioritizes the sustainable development goals (SDGs) 9 - innovation and infrastructure, 11 - sustainable cities, 12 - sustainable consumption, 13 - climate actions, 14, life under water, 17 - partnership and eco-tourism.





Valorizing Beach Waste









Founder Ravosaina Ntsiva Nirinimanitra Andriatsitohaina

Place of Antanan

Antananarivo, Madagascar

Establishment Main Activity

Educational Programs / Initiatives; Social Enterprise / Startup; Charity / Volunteering

Organisation Type

Other

Place(s) of Operation

Foulpointe, Madagascar

Budget

\$25,000-\$50,000

Find out more at

ntsivaandria@gmail.com

THE NEED

Foulpointe, a small commune located in the eastern coast of Madagascar is one of the popular destinations of many domestic tourists, mainly during school holidays. There are uncontrolled developments such as expansion of new construction for hotels, restaurants and the informal sectors. Thus, Foulpointe has become dirty and people are living under pollution. Pollution has an impact on natural resources below water, life on land and on health. Currently, the main concern of this coastal city is the deficiency of a waste management plan. Therefore, this project suggests tackling this issue by valorising waste and transforming it into local useful product.

THE SOLUTION

Following the idea to involve citizens and tourism sector stakeholders in implementing a waste management plan in Foulpointe Municipality, the team would like to go deeper in the process and help these stakeholders concretize solutions through key activities, turning coconut waste to charcoal for local household use; shells to livestock feedstuffs; organic waste to hotel fertilizers for permaculture. The project's idea is innovative because it focuses on transformative operational solutions, raised from a participatory reflection with all the key stakeholders involved in the process and combined it with the existing knowledge around key elements towards common benefits for sustainability.

THE IMPACT

The team conducted a workshop in Foulpointe with

all the key actors (local authorities, local hostels associations, youth associations, etc.) who expressed their willingness to be involved and contribute to this project idea towards sustainability.

ALIGNMENT WITH SDGs

The project acknowledges that waste is a problem causing social, economic and environmental impact not only in the region but has serious impact on all aspects of society in Madagascar. Hence, the project would like to propose an integrated solution which addresses these problems towards sustainability by contributing to SDG 1, 3, 11 and 14.





BeanStalk



Founder Nishita Karad

Place of London, United Kingdom

Establishment

Main Activity Social Enterprise / Startup

Place(s) Globally of Operation

Budget \$0-\$50,000

Find out more at nishita.karad@gmail.com

THE NEED

The working population keeps asking "where/what charities do I donate money or time to?" "How is my money or time impacting those in need?" while charities wonder "How/where do I find quality sources for funds/advice?". At the same time, the UN wonders "How do I collect reliable data and measure impact of various scattered efforts on the 17 SDGs?". There is a pressing need to address all these questions in an integrated way.

THE SOLUTION

Beanstalk is an online platform that brings NGOs/social enterprises (looking to raise funds or recieve consulting from top talent) and donors (corporate houses or individuals looking to donate their time and money to social causes) together. Each NGO/social enterprise 'advertisement' will be mapped to the relevant UN SDG, offering the UN readily available, tailor-made data from thousands of charities across the world into the efforts and progress on the 17 SDGs. The website will include features such as donor experience feedback, NGO ratings, user profile to advertise skills - which will drive search options and visibility.

THE IMPACT

Upon its launch, BeanStalk aims to measure results through tiered KPIs – primary information on much funding is being allocated to which SDG, how many charities are operating in various geographic regions, what kind of reach does each charity have, as well as more complex information such as monitoring and evaluation of the impact of 'time' and 'money' on various SDGs.

ALIGNMENT WITH SDGs

The project is aligned with SDG 17, focusing on leveraging the role of partnerships for achieving all the other goals. As such, it then has the potential to positively impact all SDGs by mapping key activities on the website to the relevant SDG. There are no negative impacts as this is a web platform solely driven by partnerships and has alignment with all SDGs.

Implementation Phase (Less than 18 Months)



Closed-Loop System Ventures

Founder

Patu Ndango Fen

Place of

Yaounde, Cameroon

Establishment Main Activity

Social Enterprise / Startup

Organisation Type

Other

Place(s)

Cameroon

of Operation

Budget \$0-\$5000

Find out more at

www.closedloop-sv.com

THE NEED

Due to increasing urbanization and lack of a proper waste management system in Cameroon and most African countries, the amount of waste being produced is huge problem. Over 60% of the waste produced is organic waste matter which has several negative impacts on human health and the environment. It is therefore important to valorize this part of the waste and reduce the total amount of waste that ends on road sides and landfills.

THE SOLUTION

Closed-Loop System Ventures is a social enterprise created in 2016 which transforms organic waste matter into organic fertilizer. The team has established a compensation model in order to achieve the selective collection of organic waste matter. The end goal is to install sensory trash cans in various locations which automatically signals the waste collector once full. By so doing, they will greatly reduce the amount of organic waste matter that ends up along the streets, in open dumpsites and eventually in landfills. They have identified the need to transform waste management challenges into an opportunity for the farming sector. Waste management still remains one of the major problems faced by most African countries and Cameroon in particular. In order to remediate this situation, the team collects organic plant and animal waste from various sources such as markets, restaurants, hotels, households, poultry and agricultural farmlands. Once collected, such material is transformed through several processes into organic fertilizer known as Healthy Soils Organic Fertilizer. A compensatory waste collection model was also developed, through which people get rewarded in cash or in kind for sorting and providing their organic waste matter to CLSV.













THE IMPACT

The team has acquired a small piece of land where the transformation of the waste takes place. It is a 1000 meters square piece of land on which they have set up demo sites to practice small scale carbon farming. They have produced over 3 tons of organic fertilizer since the creation of CLSV as part of their R&D process. The prototype organic fertilizer has been tested by 15 farmers and waste is collected from about 15 households, 2 markets, 5 restaurants and 2 hotels. They hope to expand their activities and cover over 60% of the city of Yaoundé with their waste collection model by 2019, and then gradually expand to other regions of the country. The team measures the social impact created both in terms of the amount of organic waste matter diverted from ending in open dumpsites and landfills as well as in terms of percent increase in organic farming and total number of direct and indirect jobs created.

ALIGNMENT WITH SDGs

By reducing the amount of organic waste matter which ends up in landfills and open dumpsites, CLSV reduces the degree to which the environment gets polluted by excessive waste produced and contribute to promote SDGs 3 and 6. The project also supports sustainable agriculture through its process of converting waste into organic fertilizer, contributing to SDG 2. Finally, the solution promotes sustainable production and consumption habits by encouraging people to consume eco-products and also promoting recycling activities, in line with the achievement of SDG 12 and 13.



Kitovu









Founder Emeka Nwachinemere

Place of Iseyin/Nigeria Establishment

Main Activity Social Enterprise / Startup; Technology Development

Organisation Type For-Profit Company

Place(s) Nigeria, Guinea, Ghana, Liberia, Sierra Leone, Ivory Cast, Togo, Benin, Senegal, Gambia

Budget \$0-\$50,000

Find out more at www.kitovu.com.ng

THE NEED

For the founder, growing up it was almost unforgivable telling peers that he would end up a farmer. Why? Because the earning potential of most farms in Nigeria and Sub-Saharan Africa was very low due to the very low yields (at a third of global yield averages) and the high post-harvest losses (with between 40 and 60% of everything produced lost to post harvest losses annually). As a result, farmers were very poor, and constituted about 75 % of people living on less than \$1 per day.

THE SOLUTION

For farmers in the grains and cassava value chains looking to increase the earning potential of their farms, Kitovu is an agtech startup that uses soil and market demand data to provide soil and crop specific inputs to increase crop yields and access to markets. Unlike the traditional approach, its products guarantee farmers soil-crop-input fit and guaranteed buyers at no extra cost. Through market demand data and soil and crop specific Inputs, Kitovu enables farmers grow crops to specifications with greater precision, which increases their crop yields while ensuring 100% offtake of their produce, ultimately increasing the farmers' income. Kitovu's humantech model utilizes trained youths as a channel to reach farmers, and its technology thereby creates jobs for young people in a country where youth unemployment make up 63% of all adult unemployment.

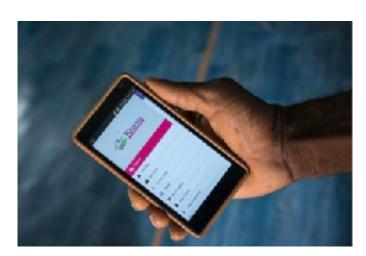
THE IMPACT

Kitovu triples crop yields through a proven system that has outperformed the national yield average for grains by over 300%; going from 1.2 Tons to 4.2 Tons per Hectare. So far, Kitovu has onboarded 4,250 farmers, and has 57 Kitopreneurs. It generated \$1,547 in pilot revenue last year and \$9,589 in just one month post commercialization in 2018, bringing revenue to date to a total of \$11,136. They have secured partnerships with ACTO Fertilizers, Premier Seeds, and the International Fertilizer Development Center who worked with them through proof of concept.

ALIGNMENT WITH SDGs

SDG1: In Sub-Saharan Africa, agriculture accounts for 64 percent of the labor force and 75 percent of the people who survive on less than \$1 per day work in the agricultural sector. Using the platform, Kitovu provides soil and crop specific fertilizers that enables farmers achieve higher yields. SDG 2: Kitovu ensures that the price of foodstuffs is affordable and reduces the number of people who suffer hunger because they cannot afford the prices of foodstuff. SDG 8: Kitovu runs a micro-enterprise "humantech" model, where it trains young people on extension and soil management, so that they are able to provide these services to farmers for free while at the same time making a living as last mile suppliers of soil and crop specific inputs and collectors of commodities from farmers.





Think.it











Founder Mehe

Mehemed Bougsea

Place of Establishment Wermelskirchen, Germany

Main Activity

Educational Programs / Initiatives; Social Enterprise / Startup; Technology

Development

Organisation Type

For-Profit Company

Place(s) of Operation

Tunis, Tunisia. Expected to operate in

Egypt and Morocco

Budget

\$250,000-\$500,000

Find out more at

www.think-it.io

THE NEED

Think.iT is addressing several pressing socio economic challenges in Tunisia and the North Africa region by addressing market failures that limit labor mobility and pose high barriers to international talent exchange between areas of undersupply and high supply of talented professionals. Through its ability to offer young Tunisians full-time positions in international firms without having to leave the country, it achieves the twin goals of combating high youth unemployment and fighting the flight of skilled labor (i.e the global south's brain drain) due to inequality in access to opportunity, both of which are intractable problems that have long plagued the region.

THE SOLUTION

Think.iT connects North African tech talent with opportunities in the global tech services marketplace. It does so by developing and connecting outstanding software engineers from the region with the technology needs of companies across the globe through an innovative approach. Throughout a six month boot-camp designed for youth with high potential but limited opportunities, Think.iT prepares engineers for the challenges of tomorrow's sophisticated labor market in a blended learning environment. Upon completion of the training program, Think.iT embeds its engineers as full-time distributed members in a client's engineering team, thereby allowing Tunisian talent to overcome existing barriers to practising their trade and gain international experience without the challenge of leaving the country.

THE IMPACT

Think.iT plans to build a hub of tech excellence in the North Africa region that will substantially improve job and income prospects of young North Africans. In the medium to long term (i.e. a time span of 3-5 years) they hope to be operating in two other North African countries. Results will be measured using a mixed methods approach based on formal and informal qualitative feedback through interviews and surveys, formal metrics-focused surveys to evaluate client satisfaction (on a scale-basis) and the health of our financial statements. Throughout this process, they will place equal importance on their clients as they do on their staff, the Think. iTeers. At present, they have encouraging positive feedback from their clients, speaking to the strength of our services. They have also secured job placements for all the Think.iT fellows from our first 15-person cohort at global tech firms.

ALIGNMENT WITH SDGs

Given the high proportion of unemployed (and underemployed) youth, high levels of SDGs indicated above income inequality which disproportionately affect women (and more so women in technical fields) and the need to close the skills-jobs gap without leading to the flight of top talent from the country, Think.iT recognizes that the best way to combat these overlapping challenges is through a multidisciplinary approach. They directly touch on several SDGS, such goals 4 (education), 5 (gender equality), 8 (economic growth and decent jobs) 9 (innovation) and 10 (reducing inequality).





Illustrated Cases of the Supreme Court of India



Founder Siddharth de Souza

Place of Delhi, India Establishment

Main Activity Educational Programs / Initiatives; Social Enterprise / Startup; Policy Ad-

vocacy and Research

Organisation Type For-Profit Company

Place(s) of Operation

India

Budget

\$0-\$50,000

Find out more at

justiceadda.com/baithak/wp-content/uploads/2018/01/Illustratedcases-of-the-Supreme-Court-of-India-E-Book.pdf

THE NEED

The Supreme Court of India has pioneered some landmark judgments in the area of environmental law, labour reform, gender and sexuality, issues of public duty, child rights and many others. The purpose of this project is to translate and produce cases in a language that is easy to understand, use and share. It is an endeavour to simplify concepts through visual design. The need being addressed is to make the law engaging and useful for the citizen.

THE SOLUTION

These cases involve a multi-disciplinary approach to their production and involve both lawyers and designers who work together to produce these drafts. The process involved the lawyers selecting and summarizing the judgments in a manner that reflects the facts of the cases, the questions of law and the ratio of the court. This approach is standardized across the cases to ensure that there is uniformity. Thereafter, the cases are then sent to the design team who visualize the case and discuss the design narrative with the lawyers. Thereafter, a design and textual story is finalized and the drawing is finalized for production. The innovative aspect of this project is that it attempts to break down barriers between the law and those who most need it. It attempts to simplify concepts by providing simple yet substantial introductions to critical cases that have concerned questions of access to justice in India.

THE IMPACT

An E- book was launched in January 2018. It has reached over 15,000 people through our social media metrics. However, the team is now engaged in a concentrated campaign to provide NGOs engaged in legal aid work in India with access to the E-book, so that they can use the content in their outreach work.

ALIGNMENT WITH SDGs

The Illustrated Cases project attempts to address a chronic challenge of access to justice, which is the informational barriers and asymmetries that constrain the provision of this goal for a large number of people around the world. As this is also a challenge in India, the project attempts to take small steps to show how the law can be communicated to make it more accessible for the citizen.





Coco Grow Media





Founder James Kapombe

Place of Kilifi. Kenya

Place of Kilif

Main Activity Social Enterprise / Startup

Organisation Type For-Profit Company

Place(s) of Operation

Kilifi county, Kenya

Budget \$5,000-\$25,000

Find out more at www.casemo.co.ke

THE NEED

Farmers are facing huge pre and post harvest losses and high costs of production due to high prevalence of "sick soils' because of soil pests and diseases. Also, dwindling natural resources and water scarcity are threatening food production due to water wastage in horticultural production.

THE SOLUTION

Coconut is the main crop in more than 14 districts in Coastal Kenya. Annually 20,000MT of coconut husk waste is produced, which is either burnt emitting CO2 in the atmosphere or dumped in landfills/drained into rivers/oceans. At CocoGrow, they produce a soilless growing media from coco husk waste to horticultural farmers thereby improving food security, water conservation and efficiency in production. 99.9% of growing media is shipped into Africa from India and Sri Lanka. Their media holds 10 times more water than normal soil, is resistant to pests and diseases and offers a good avenue for vertical/urban farming.

THE IMPACT

Several impact indicators for measurement that are used by CocoGrow revolve around time taken from transplanting to maturity, harvest period, number of seedlings germinated and transplanted, amount of water saved and cost of pesticides used.

ALIGNMENT WITH SDGs

The team has undertaken an integrated approach of addressing the SDGs and currently are focused on water optimization and soil less farming to increase food security. These solutions can help arid

areas and small island developing states produce sustainably. In future they hope to incorporate models which will help households increase access to fresh veggies to boost nutrition by further impacting SDG 2 and 13.



Sewer Scavenging Assistant Machine









Founder Kevin Thakkar

Place of Mumbai. India

Establishment

Main Activity Other
Organisation Type Other

Place(s) of Operation

Mumbai, Delhi, Bangalore, Chennai and Kolkata, India

Budget

\$0-\$50,000

Find out more at

www.dnaindia.com/mumbai/report-17-yr-old-develops-machine-to-aid-sewagecleaners-2553169

THE NEED

Manual scavenging in India violates basic human rights, discriminates workers based on caste, lacks humane conditions, and causes hundreds of deaths every year. The Supreme Court of India has banned this practice but it continues across the country leading to deaths by asphyxiation and tuberculosis every day. There has been no sustainable alternative found since over a century and the problem continues to grow, as Mumbai produces enough sewage to fill 8000 Olympic size pools a day.

THE SOLUTION

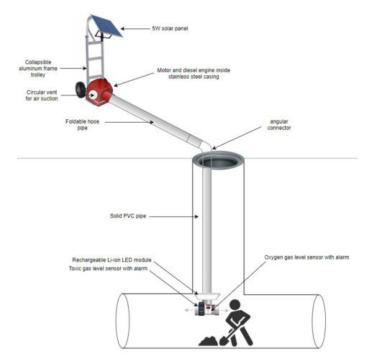
There has been no portable alternative solution to prevent asphyxiation yet. The machine provides fresh air in the sewers with LED lighting for better visibility and has alarm-triggered toxic gas sensors to indicate gas levels. It uses solar energy to run the light and the sensor making it self sustainable while using compact and affordable components which make it easy to carry into slums and scale up production. The team has gathered funds to provide 12 such machines across the city of Mumbai and is working on this at the moment. Sewer cleaners are given 1 bar of soap a month and the average life expectancy for workers is less than 60 as most suffer from tuberculosis due to their job. The team has initiated free tuberculosis check-up camps for workers and families and has started soap collection drives in schools to provide disinfectants to the workers.

THE IMPACT

The machine aims to eliminate the possibility of death by asphyxiation and improve working conditions. The improvement in the system has been commended by the sewage department and the workers who have found a long awaited relief in their job. Workers have been more protected and can work for longer hours without any health hazards. There have been no cases of asphyxiation or discomfort when the machine was used at several real locations.

ALIGNMENT WITH SDGs

By protecting the fundamental human rights of sewer workers, the team is ensuring a healthy living for all workers. By raising awareness about this pressing issue, they are reducing the caste discrimination in employment. The scalability plan is such that it improves working conditions of all workers and ensures their right to live thus contributing to SDG 3, 6, 8 and 16.



The Trafficking Dispatch



Founder

Victoria Erdel

Place of Establishment Beijing, China

Main Activity

Educational Programs / Initiatives

Organisation Type

Other

Place(s) of Operation

Podcast has reached listeners in over 80 countries such as USA, India, Ukraine, UK, Switzerland, Peru, Canada, China, France, and the Philippines.

Budget

\$0-\$50,000

Find out more at

www.thetraffickingdispatch.com

THE NEED

Although awareness of human trafficking has significantly increased since the Palermo Protocol's creation, there are a plethora of misconceptions surrounding its scope and manifestations that make it difficult for concerned citizens to sustainably act against it. There is a pressing need to not only inform a global audience of the root causes and consequences of human trafficking, but to also feature the work of advocates and survivors whose work exemplifies sustainable action and will also inspire people to take action.

THE SOLUTION

The solution is a student-led podcast which seeks to "brief you on human trafficking issues in a brief amount of time." This means that each episode is around 15 minutes or less in length, about the time it takes for a student to walk to their next class on a work day. The only exceptions are season finales and upcoming "Survivor Summer Series" which feature 30-minute episodes with survivors and/or their immediate family. These information-based episodes and interviews with advocates and survivors require an intersectional approach that involves looking at the root causes and consequences of human trafficking, such as poverty, employment conditions, unequal educational opportunities, gender inequalities, etc. By discussing these complex causes and consequences, and interviewing anti-trafficking advocates, the team breaks out of the "awareness bubble" and provides ideas for its listeners to get involved in a concrete way.

THE IMPACT

The team monitors the countries their podcast has reached on a daily basis using the measurement sys-

tems provided on the website's host platform. They have reached listeners in over 80 countries on all 6 habitable continents. As such, accumulated feedback received is positive: "This podcast has helped me a ton with understanding human trafficking more but also how to put what I've learned to practice in my work at an anti-sex trafficking shelter", said a listener from Ecuador. The team also maintains contact with all of the survivors that are interviewed, because they want to ensure that they support them and amplify their voices, not talk over them. For example, they nominated Jennelle Gordon, the first survivor that was interviewed, for the Survivor Leadership Institute. She was accepted into the program and has since founded OCC Beyond Freedom, a human trafficking organization on her campus.

ALIGNMENT WITH SDGs

The team has discussed elements of the SDGs in episodes, and based on their listeners' feedback, are pleased to know that the content has inspired them to join working toward these goals to end human trafficking. They successfully advocate for several SDG goals, but through the podcast more directly contribute to promote education (SDG 4) and Peace, Justice and Strong Institutions (SDG 16) through their efforts spreading awareness against human trafficking.





Annual YouthParticipation Process





Founder Carlo Angeles Manturano

Place of Establishment Lima, Peru

Main Activity

Educational Programs / Initiatives; Policy Advocacy and Research

Organisation Type

Other

Place(s) of Operation

Peru

Budget

\$100,000-\$250,000

Find out more at

www.youtube.com/watch?v=Bxe_SnrHkd0

THE NEED

Young people account for 27% of the peruvian population (over 8 million citizens). Although they are the most affected by the decisions made today, they are neither part of decision-making processes nor of the implementation of public policies. This project will establish an annual, formally recognized participation mechanism for young people to address SDGs that will also serve as an accountability mechanism in which young people are informed about the actions taken by the government at regional and national level. As part of the process, Regionals Youth Councils will also inform about the progress of their commitments made to address the SDGs.

THE SOLUTION

With the National Youth Authority and the National Center for Strategic Planning, this solution will hold 26 youth forums, covering all of Peru. Young people will participate in thematic tables, which will set out what image Peru must achieve by 2030 with the purpose of contributing to the Sustainable Development Goals. In this participatory process, for the first time young people will be able to set out their own youth vision for the country by 2030. This vision will be approved at a National Congress at the end of the 26 forums, which will take place in November in Loreto region.

THE IMPACT

The team already launched a pilot of the Annual Participation Process at the National Encounter of Regional Youth Councils, in which these officially recognized

youth authorities were trained in the construction of the Country Vision by 2030 and they elaborated the Declaration of Regional Youth Councils for the Country Vision by 2030, in which they committed with concrete actions to achieve the SDGs. These actions will be reported at the Annual Participation Process at the National Encounter of Regional Youth Councils.

ALIGNMENT WITH SDGs

This project will establish a participation and accountability mechanism in which young people will be informed on the actions taken by the government at regional and national levels to address the SDGs, and they will also participate in the process with a view influence those actions (thus contributing to SDG 16). Youth and the Regional Youth Council will also make annual commitments, the same that will be reported in the annual process, thus contributing in a spirit of partnership to the achievement of the SDGs (SDG 17)





Edunamtext



Founder Petrus Nghipandulwa

Place of Windhoek, Namibia Establishment

Main Activity Educational Programs / Initiatives;

Technology Development

Organisation Type Other

Place(s) Namibia

of Operation

Budget \$100,000-\$250,000

Find out more at www.edunamtext.com

THE NEED

Most parents in Namibia are not highly involved in the education of their children and tend to blame the non-performance of their children solely on them. There is a need to therefore find preventative measures that can help overcome current high failure rates of Namibian students through the involvement of the parents and also create employment in the country. Edunamtext believes that there is a need for a system that updates the parents on a regular basis on all the academic affairs of the children for the entire year.

THE SOLUTION

The project was formed due to the high failure rate experienced in the Namibian Education system (evidence from the published grade 10 and grade 12 results annually shows an average failure rate of more than 40%) and the high rate of youth unemployment which is partly a result of the former issue. The key components and activities of the project are the collection of data/information from the schools (teachers) on a weekly basis by administrators to be employed in every region of the country. These data will be loaded onto the online platform, and once loaded, the Senior Administrator will send out the information directly to the parents' mobile number to update the parents with academic related information on a weekly bases. The project is innovative as it uses the online platform to communicate directly to the parents through their mobile phones via text messaging on all related academic affairs of the children.

THE IMPACT

The solution has been piloted at a primary (Martti Artisari Primary School) and secondary school (A. Shipena Secondary School) and the feedback was positive from the teachers and the parents that were involved in the pilot studies. The team has obtained endorsement/backing from the Ministry of Education, which is supporting the project in its implementation.

ALIGNMENT WITH SDGs

The solution will create employment and will contribute to the better performance of learners in the education system, ultimately reducing the high failure rate experienced in recent years. The approach is to focus and address issues one at a time (and, where possible, multiple issues at a time), without losing focus on our main SDG, Goal 4.



"Educational success through text messaging"

Urban Gardening







Founder Bhagya Wijayawardane

Place of Establishment Piliyandala

Main Activity Educational Programs / Initiatives; Social Enterprise / Startup; Charity /

Volunteering

Organisation Type Not-for-Profit (e.g. 501(c) organisation)

Place(s) of Operation

Sri Lanka. Expected: Oman/U.A.E

Budget \$5,000-\$25,000

Find out more at https://www.facebook.com/eshkolsl/

THE NEED

Sri Lanka still faces a significant hunger burden, but agriculture and forest management can become sources of decent income, support rural development and help tackle climate change. Agriculture contributes only 7.5% of Sri Lanka's GDP. This project can help achieve not only SDG 2, but also the other 16 SDGs by tackling climate change, promoting economic growth & local food production, helping infants and young children access minimum dietary diversity, and contributing to peace and stability. Sri Lanka's natural resources and biodiversity are being rapidly damaged, while climate change is putting greater pressure on the resources the countries depend on and increasing risks associated with natural disasters.

THE SOLUTION

This project aims to create an abundance of food for people in need by supporting and encouraging the installation of gardens on unused land & space, while raising awareness for health and wellness through workshops. The solution aims to inspire, educate, empower people who are unemployed, underemployed, malnourished, or laid off, to create an economically sustainable system to uplift urban communities in Sri Lanka. It consists of a social enterprise that sells products from space-saving vertical gardens to hydroponics/aquaponics, a technology which makes it possible to grow plants without soil. Most of the products are made using upcycled materials by people living in rural communities. The team runs a community centre to teach organic vegetable gardening and provide seed starting and composting. The team also also delivers programmes in schools and youth clubs to teach young people about the importance of fresh produce and provides low-income

families with the resources needed to grow food at home and reduce school dropouts.

THE IMPACT

In less than 2.5 years, the team has established 460 urban gardens, trained 320 students as urban gardeners and mentors and another 4300 as climate change agents, recruited 15 teachers to use eco literacy programs, created partnerships with prominent vendor spaces such as the Good Market, Urban Living, urban councils, National Teacher Training College, state and private universities, and schools. The team has received international awards too-particularly the Commonwealth Queen's Young Leaders Award, and has been featured in popular publications. Since 2015 they have also been operating as a plant nursery with over 10,000 customers.

ALIGNMENT WITH SDGs

The project contributes to SDG 2 by supporting food security and improved nutrition and promoting sustainable agriculture in Sri Lanka. The team will eradicate hunger & ensure access to safe, nutritious and abundant food by its target audience, which includes urban dwellers and people in vulnerable situations such as elderly, disabled, women and infants. Ensuring sustainable food production systems and carrying out resilient agricultural practices that increase productivity and produce, the team hopes to create green jobs and promote agriculture as a good study program in schools to support SDG 4, while helping build resilient urban cities against natural disasters, as well as safe and inclusive green spaces, in order to contribute to SDG 11.



Letter for the Reconciliation





Founder Leonardo Párraga Place of Bogotá, Colombia

Establishment Educational Programs / Initiatives; **Main Activity**

Charity / Volunteering; Other

Organisation Type Volunteer Organisation

Colombia Place(s) of Operation

Budget \$0-\$5000

Find out more at www.iyfnet.org/blog/dont-re-

duce-youth-peacebuilding-contributions-stereotypes

THE NEED

Colombia experienced more than 50 years of war, causing more than 7 million victims. During this period, the rebel group FARC and civil society were disconnected and did not have a chance to engage in a conversation. In 2016, the government signed a peace agreement with the FARC. However, when it comes to the reintegration of the FARC members to society, studies show that only 46% percent of the population is willing to have an ex-combatant as a neighbor and only 2.7% of the population feels safe in an environment where the majority of people are ex-combatants.

THE SOLUTION

The goal of Letters for the Reconciliation is to invite civil society for the first time to write respectful letters where they engage in a dialogue with "the other", FARC members who have been the majority of their lives in the jungle and rarely have had interactions with the city dwellers to engage in an open dialogue. Conversely, the ex-combatants are invited to ask questions about the society that Colombia has nowadays and discover which chances they have to fit in. The letters were structured in a way that was progressively escalating in terms of personal disclosure, with people first sharing superficial statements about them and then recalling more intimate stories, usually connected with the suffering caused by war. Precisely, letters that express new narratives of forgiveness, reconciliation, and openness are a relevant step in this direction. These letters were hand-delivered in the FARC encampments and then came the second phase, where people from the cities and FARC ex-combatants could engage in a face to face conversation.

THE IMPACT

The solution has had +100 appearances of the program in the media which helped to substantially modify the negative image of FARC ex-combatants, showing that there are possibilities of living together with the rest of society. The program was featured at the European Development Days and UNESCO General Conference. We contributed to +3,000 letters exchanged, leading to an open conversation using respectful language and appreciative inquiry that helped to foster a greater understanding and challenge stereotypes. Also, 3 meetings were organized in the FARC encampments between university students and ex-combatants that helped to develop attitudes of empathy and care by exchanging the personal narratives.

ALIGNMENT WITH SDGs

Through the creation of a greater connection and understanding between ex-combatants from the rebel group FARC and civil society, the project allows the former guerrillas to easily incorporate themselves into society and avoid conditions of discrimination. Contributing to SDGs 4 4., 4.5 and 4.7, they work directly with young people and ex-combatants to increase some of their soft-skills who are valuable in the marketplace like empathy, effective dialogue, and conflict resolution with people who share different views of the world than them. At a broader level, the exercise of Letters for the Reconciliation serves as a peacebuilding effort in which after 50 years of war in Colombia, a structure for reconciliation and creating a society that can settle its difference through dialogue is created (SDG 16).



Solar Rais Microgrid and VPP













Founder Sabatha

Place of Centurion, South Africa **Establishment**

Main Activity Social Enterprise / Startup; Technology

Development

Organisation Type For-Profit Company

Place(s) South Africa, Kenya, Botswana, Zim-

of Operation babwe, Malawi

Budget \$5,000-\$25,000

Find out more at www.solarrais.co.za

THE NEED

This project addresses SDG 7, 8, 9 and 10 by providing affordable electricity to communities within countries that need reliable clean energy to improve their economies. South Africa suffers from rolling blackouts and other African countries lack basic infrastructure services and job opportunities. This project also offsets the carbon emissions from other companies and activities in the region.

THE SOLUTION

The need for electricity services in areas that are too costly for the traditional grid to reach, and the need for stable clean energy without rolling blackouts led to this innovation. This project is a 10kW microgrid and Virtual Power Plant that consists of Solar Panels, Inverters, Li-Ion batteries, online monitoring, and employment creation through 24/7 remote monitoring. It involves bringing clean and reliable to South Africa. It is one of the few VPPs in the country and the only Power Plant that uses Microdot technology to secure all its assets, for greater asset recovery ratios.

THE IMPACT

The solution has so far contributed to offset ½ Ton of Carbon from the sale of 0.5MW of power through our 10kW system in Centurion. The team has installed large solar panels of over 300W each, to promote better panel technology from

international product providers. The team has also installed the first fully Microdotted facility in South Africa.

ALIGNMENT WITH SDGs

SDGs 7, 9, and 11: Solar Powered VPP and Microgrids are recent technologies that provide clean energy and Li-Ion battery storage ensures reliability, thereby helping create sustainable urban settlements. SDG 8: 24/7 remote monitoring and quarterly servicing provides employment. SDG 10: By delivering electricity to areas that are difficult to reach with a traditional grid, it reduces inequality and increases opportunities for these communities. SDG 13: The sale of RECS is in line with the Paris Agreement, thereby the Solar Powered microgrid contributes to reducing climate change impact by reducing the amount of coal used by other power plants.



SkillStudy



Founder Javnyuy Joybert

Place of Buea, Cameroon Establishment

Main Activity Educational Programs / Initiatives; Social Enterprise / Startup; Technolo-

gy Development

Organisation Type Other

Place(s) Cameroon, Nigeria, Kenya, South Suof Operation dan, Tanzania, Uganda, Malawi

Budget \$0-\$5000

Find out more at www.skillstudy.org

THE NEED

The African Continent currently has 60 million people who need university or post-matric education & skills. If the continent started building tertiary learning institutions today, it would probably take around 200 years for there to be enough institutions available and that's just to meet the current demand. Africa needs to start thinking seriously about new ways to educate its people. The critical skills deficit throughout Africa has to be addresses as a matter of urgency in order to allow the continent compete with the rest of the world on an equal footing. SkillStudy was born to tackle this issue

THE SOLUTION

Upskilling a new generation of skilled and competent experts across Africa through a combination of accredited syllabi and non-formal programs is essential to sustainably manage Africa's natural and mineral resources and balance Africa's unequal trading platform. SkillStudy is using e-learning technology to promote the development of Africa's education infrastructure. The innovation here is that the team offers a web/mobile learning platform accessible on any mobile device, enabling Africans to learn and develop competence from top universities and training institutes at their comfort, thereby advancing higher education beyond the walls of a university.

THE IMPACT

Over 300 learners have taken courses on the platform in 7 African countries. The team measures

their results from a learning management system that ensures the monitoring of visitors and learners on the platform.

ALIGNMENT WITH SDGs

SkillStudy has positively impacted SDG4 by increasing access to quality education and promoting lifelong learning opportunities for Africans.



The Health Equity Voice





Founder Rose Mary Nakame

Place of Hoim Establishment

Hoima, Uganda

Main Activity

Policy Advocacy and Research

Organisation Type

Not-for-Profit (e.g. 501(c) organisation)

Place(s) of Operation

Rural Areas of Uganda, Kenya and Tanzania

ation

Budget

\$5,000-\$25,000

Find out more at

www.remieastafrica.org/theheal-thequityvoice

THE NEED

The burden that falls onto Uganda's rural health workers (1 medical person: 714 people) serving in under equipped facilities has often been neglected. However, its consequences have been made headlines in the media, building public distrust, damaging the standing of the health profession and unknowingly raising the barriers to accessing quality healthcare (VSO, 2012) instead of fixing the broken system to benefit the common man (87%).

THE SOLUTION

"The Health Equity Voice" project equips health workers and students studying to join the profession with skills to tell their own stories of serving in the public hospitals, profiles the stories on a web platform and through newsletter, curates them for the public and creates awareness about the platform so as to inform health budgeting, programming, policy, public opinion, and academia. These stories help re-shape thinking and attitude of users of public health facilities, while restoring pride of the health workforce as a source of motivation.

THE IMPACT

The team has trained 22 healthcare workers in the rural areas of Masaka and Wakiso in story telling for Health Equity as recorded by our attendance sheets. It has collected and profiled 11 stories so far, and this work has been recognized for the impact it is having in the Nursing Now global campaign aimed at empower Nurses, as well as by the

Huffington Post. The local impact is seen from the social media engagement, tweets, shares, likes and comments. The project's general impact has been: increased knowledge about storytelling for health equity among health workers; increased number of health workers telling their stories, increased public support towards health workers.

ALIGNMENT WITH SDGs

The project is utilizing an integrated approach towards achieving SDG3 and SDG5. This is due to the fact that 70% of the health workforce is female and improving the rural health system would in turn empower them too. Apart from this, the utilization of The Health Equity Voice serves as an advocacy tool for better public healthcare programming, budgeting, reporting and service delivery, therefore, providing insights for further research, innovation and entrepreneurship around public health. Health workers able to tell their stories thus becoming advocates of an efficient, transparent and accountable health sector.



Shoonya



Founder Ravi Kumar

Place of Patna, India Establishment

Educational Programs / Initiatives;

Social Enterprise / Startup; Technology Development

Organisation Type Other

Main Activity

Place(s) of Operation

India

Budget \$100,000-\$250,000

Find out more at india.ashoka.org/ravi-kumar-and-an-shu-kumari-age-19-started-rk-crystal

THE NEED

The diverse threats we face are increasingly cyber-based. Much of world's most sensitive data is stored on computers. We are losing data, money, and ideas through cyber intrusions. As civilians, we are also increasingly vulnerable to losing our personal information. The main problem is not that cybersecurity can be compromised, it is the fact that majority of the people don't even have the idea that it can be compromised and the destructive effects that it will cause. There is no one taking the responsibility to get down to people using technology for their daily convenience and training them in the basics of cyberspace.

THE SOLUTION

After seeing and studying the mass destruction caused by Wannacry ransomware in May 2017 and observing that the cyber criminal's interests are shifting from corporate giants to common people, the founder felt the need of training civilians in basic personal cyber security, in terms of making them less vulnerable to such attacks. Shoonya is a cybersecurity initiative that trains civilians using technology without actually knowing its threats. They specialise in personal cybersecurity and conduct Free Seminars, Workshops, Webinars, social activities, etc. to reach out to people. Shoonya is trying to bring a revolution in cyber education so that people recognize cyber threats and take charge to at least keep themselves secure.

THE IMPACT

Shoonya's vision is to create a full proof and impeccably secure information system in India to guard against

all kind of malicious information security breach. Thus, empowering the nation with the reliable, efficient and secure database system. The mission is "to validate information security professionals who are equipped with the necessary skills and knowledge required in a specialized information security domain that will help them avert a cyber conflict, should the need ever arise." The team has trained 50000+ people and these data are taken from the number of participants in our seminars, workshops, webinars and other activities.

ALIGNMENT WITH SDGs

Shoonya is taking steps towards fulfilling SDG 9.c, "Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020" They are working towards ensuring a secure cyberspace, in terms of promoting the availability of authentic and productive information.





Implementation Phase (More than 18 Months)



Barsha Pump

Founder

Barsha Pump

Place of **Establishment** Delft, The Netherlands

Main Activity

Educational Programs / Initiatives; Social Enterprise / Startup; Technology

Development; Other

Organisation Type

For-Profit Company

Place(s) of Operation Guatemala, Colombia, Zambia, Uganda, Nepal, Indonesia, Spain, Turkey

Budget

\$250,000-\$500,000

Find out more at

www.facebook.com/aQysta/

THE NEED

During his childhood years, the founder of Barsha Pump had to irrigate his family's land alongside a river in mountainous Nepal, a daunting task that later led him to search for a solution to the daily challenge that farmers in mountainous areas experience. Purchasing or even renting a diesel pump is often not an option for smallholder farmers due to the high upfront costs and the uncertainty of a good harvest. The Barsha Pump addresses these constraints, also as the pump can be leased by means of a pay-per-harvest or farm incubator system. In search for a solution to the daily challenge that farmers in mountainous areas experience, the Founders invented the Barsha Pump.

THE SOLUTION

The Barsha Pump is a hydro-powered water pump that lifts water from rivers/canals by only using the energy of flowing water. It does not require fuel or electricity to operate. The absence of any operational costs results in a 65% cost reduction when compared to diesel pumps over its lifetime. The team has a proven technology, business model and impact, and have formed a solid team to grow the organization. The patented award-winning innovation of Barsha pump has been recognized by several international innovation awards such as: Philips Innovation Award, Empowering People Award (Siemens Foundation) and Forbes 30 under 30 - social entrepreneurship.

THE IMPACT

The Barsha Pump does not use any fossil fuels and hence does not emit greenhouse gasses. Gasoline













pumps use about 1.11 liter of fuel to pump 40 m3 water and 330 liter of fuel per year. With an average CO2 emission of 2.31 kg per liter of petrol, the annual emission to pump 40 m3 water per day during 297 days per year is 0.76 ton CO2 per year. Each year, the 300 Barsha Pumps that have been sold prevent the emission of 228 ton CO2. Irrigated land: 200 hectares land irrigated. Volume of water pumped: 300,000,000 liter of water pumped. Beneficiaries: 5,000 people served. Environment: 100 tons of CO2 emissions prevented.

ALIGNMENT WITH SDGs

SDG 1: The Barsha Pump and the offered payment mechanisms allow resource constraint smallholder farmers to access irrigation technology, key to practice irrigated agriculture (cash cropping) and making a good salary. SDG 2: The Barsha Pump allows farmers to grow high water demanding crops which diversify their diet as well as the diet of the people in the surrounding villages. SDG 6: The Barsha Pump allows farmers to access 40 m3 of water per day to irrigate their crops. The Barsha Pump is also used for used for providing water for livestock and for drinking water purposes. SDG 12: The Barsha Pump allow farmers to also practice dry season irrigation, providing them and the people in their village with year access to nutritious foods. SDG 13: Each Barsha Pumps prevents the emission of 0.76 ton of CO2, each year.



Rahwa















Founder Hanna Amanuel
Place of Zoba Debub, Eritrea
Establishment

Main Activity Social Enterprise / Startup

Organisation Type Not-for-Profit (e.g. 501(c) organisation)

Place(s) Ten rural communities in Zoba Debub, of Operation Eritrea

Budget \$25,000-\$50,000

Find out more at www.rahwahealth.org/

THE NEED

Every day, 830 women die due to preventable pregnancy and birth complications. 550 of these deaths occur in sub-saharan Africa. In Eritrea, 1 in 52 women die due to reproductive complications. Two-thirds of Eritreans live in rural areas and 73% of women give birth at home, where they do not have access to emergency obstetric care. Rahwa aims to strengthen maternal and child healthcare in Eritrea and, ultimately, the Horn of Africa region.

THE SOLUTION

"Rahwa" means "freedom from hardship" in Tigrinya, the primary language in Eritrea. Rahwa trains and employs women in rural communities as Maternal Health Agents (MHAs), or Aleyti Adetat, who support women throughout the pregnancy, childbirth, and postnatal periods by (i) providing critical services (ii) fostering trust-based communication between families and clinicians, and (iii) collecting data on community-level reproductive health indicators.

THE IMPACT

To date, through Rahwa, 427 women have accessed free, quality childbirth care and transportation; MHAs have conducted 8,707 screenings of child malnutrition; and 1,638 children with malnutrition have received medical care, including specialized nutritious foods.

ALIGNMENT WITH SDGs

Rahwa employs an intersectional lens, recognizing that those who suffer from the poorest health—namely, low-income women in rural areas (SDGs 5

and 10)—face multiple barriers to quality care. By training and employing women as Maternal Health Agents who then support women in their own communities, Rahwa (i) improves community health (SDG 3); (ii) creates opportunities for education and employment (SDGs 1, 4 and 8); and (iii) fosters trust-based networks between actors who do not typically work together.





OneDay Health Centres









Founder Dr. Nicolas Laing, Pranav Sridhar

Place of Gulu, Noi Establishment Sub-Saha

Gulu, Northern Uganda, Sub-Saharan Africa

Main Activity Social Enterprise / Startup; Charity /

Volunteering

Organisation Type Not-for-Profit (e.g. 501(c) organisation)

Place(s) of Operation

Remote, rural villages in Uganda

Budget \$25,000-\$50,000

Find out more at www.onedayhealth.org

THE NEED

In Uganda, 10 million people live in remote villages more than 5km from a healthcare facility. We call these locations healthcare 'black holes'. When rural citizens get sick in these black holes, they have few options. Either they wait and hope they get better, or spend a crippling amount of money to reach a distant health facility. Every rural citizen deserves high quality primary care within walking distance. Every healthcare black hole should be filled.

THE SOLUTION

The project maps all the health centers within a 2-hour motorbike ride from OneDay Health Centres' base. The team selects locations and physically visit potential healthcare black holes, to assess whether there is no healthcare available, and whether the local population is high enough to justify a OneDay health center (between 3000 and 5000 people). It then equips the health center and trains one nurse for each health center to use an innovative flowchart-based diagnosis and treatment guidelines, which provides a framework for nurses to effectively diagnose, treat and communicate 30 common conditions. Finally, the team loads all equipment onto a pickup truck, reaches the location and installs it. The nurse starts treating patients that very day, while the team sustains the health center. The goal is to have the low fees paid by patients sustain between 75% and 100% of the operating costs within 1 year.

THE IMPACT

Three OneDay Health Centers are now operational in healthcare 'black holes', leading to: 8000 patients treated in the first year - 3000 cases of malaria treated - 3000

children under 5 treated - 800 Pneumonia cases treated - 300 Pre-referral intravenous treatments given for severely ill patients - Over 90% of patients given correct treatment for diagnosis - 2 clinics achieving 75% local sustainability within 6 months.

ALIGNMENT WITH SDGs

One Day Health centers are a clear step towards universal health coverage in Uganda, and the model can contribute to the wider conversation on healthcare provision, and be adapted and built up in other countries. Treatment of common conditions and provision of pre-referral IV treatment will reduce under 5 mortality in the areas served by the project (SDG 3). One-Day Health centers are also the only providers of hormonal family planning methods in the areas they serve. This empowers women to take control of their sexual and reproductive health in areas where medical family planning was not previously available. In addition, provided antenatal care can help reduce maternal mortality. (SDG 5). As the project drastically reduces the cost of accessing health care, rural citizens have more money in their pockets and more opportunity to provide for their families, creating more resilient societies in previously marginalized area (SDG 1 and 10).





MealFlour











Founder Gabrielle Wimer; Elizabeth Frank; Joyce Lu

Place of Quetzaltenango, Guatemala **Establishment**

Main Activity Social Enterprise / Startup; Charity /

Volunteering

Organisation Type Not-for-Profit (e.g. 501(c) organisation)

Place(s) Quetzaltenango and Chimaltenango, **of Operation** Guatemala

Budget \$25,000-\$50,000

Find out more at www.mealflour.org

THE NEED

MealFlour works to improve food security and reduce malnutrition. Many existing programs provide families with nutritional supplements, but this causes communities to be dependent on organizations and is environmentally unsustainable because of the transportation and packaging associated with supplements. MealFlour empowers families to produce their own affordable and environmentally sustainable source of protein — mealworms. Despite the fact that edible insects have been touted as a solution to global hunger for years, few organizations are putting this theory to the test.

THE SOLUTION

Many nutrition programs provide imported nutritional supplements, but MealFlour focuses on edible insects as a way to empower families and communities to grow their own source of protein at home. This reduces dependency on NGOs and charities, improves nutrition, and can increase families' income if they choose to sell excess mealworm powder. In 2016, MealFlour taught 43 university students how to mealworm farm and trained 5 women in the rural community Candelaria. As a part of the program, MealFlour provided women with a mealworm farm, which will positively benefit the other members of their family.

THE IMPACT

In 2016, MealFlour reached a total of 25 beneficiaries in Candelaria. MealFlour continued to follow up with the women through 2017 to assess the success of the farms and the training program. In 2018, it

started working with 3 community leaders in the department of Chimaltenango. They will go on to train at least 5 other members of their community for a total of 18 beneficiaries. Through our community outreach in Guatemala, we have also reached over 100 people through presentations and demonstrations explaining the benefits of mealworm farming and edible insects. In total, MealFlour has reached at least 200 people in Guatemala, and this number will continue to grow. We are currently developing partnerships with other local NGOs who can help bring the program to more communities

ALIGNMENT WITH SDGs

MealFlour's goal to improve nutrition and food security aligns with SDGs 2. To address the many causes of malnutrition, MealFlour's secondary goal is to teach people how to sell excess mealworms and mealworm powder as an additional source of income, addressing SDG1. The team chose to focus on edible insects as a source of protein because they are more environmentally sustainable than conventional sources of protein. Producing one pound of mealworms requires 2000 times fewer gallons of water than producing the same quantity of beef. Raising mealworms releases significantly fewer greenhouse gases compared to cows. By promoting edible insects as a source of protein, MealFlour thus also integrates SDGs 12, 13 and 15.



ImpactEd





Founder Austin Halbert
Place of United States
Establishment

Main Activity Educational Programs / Initiatives; So-

cial Enterprise / Startup

Organisation Type For-Profit Company

Place(s) United States of America of Operation

Budget \$50,000-\$100,000

Find out more at www.impactedlearning.com

THE NEED

How might universities provide students with a relevant education in a rapidly evolving economy? Industries are changing at a stunning pace, and the school system seems unable to keep up. In a world where professionals are challenged to think critically, creatively, and collaboratively, schools are struggling to prepare students with real-world skills. 7 in 10 college seniors do not feel that university has prepared them for their careers. For this reason, many graduates struggle to acclimate to the workforce. In 2017, 43.5% of college graduates ages 22 to 27 were facing underemployment in "non-college" jobs.

THE SOLUTION

ImpactEd is a marketplace of real-world projects for college students. ImpactEd projects are designed in collaboration with leading employers and delivered in college courses through a digital workspace. This makes it easy for students to gain skills and experience that is relevant for career success in the 21st century. In addition, each project is related to one or more SDGs, enabling students to contribute towards solving the most pressing social, economic, and environmental challenges in their geography and field of study.

THE IMPACT

To date, it has provided workforce development experiences to nearly 500 students. The team considers this to be the primary impact metric, as each project experience directly improves the employability of participating students. The team has al-

so started to measure the impact of their projects on students' skills development. During our pilot program at the University of Gothenburg, they measured learning and development outcomes by administering assessments before and after the course. The project increased student engagement by 22%, while empowering students to make measurable improvements in 21st century skills such as collaboration, problem solving, and creativity.

ALIGNMENT WITH SDGs

ImpactEd's mission is directly tied to SDG target 4.4 (substantially increase the number of youth with relevant skills). As it develops systems and tools to track students' progress, ImpactEd will be able to better monitor its impact on the employability of students going through ImpactEd projects. In addition, each ImpactEd project is directly related to one or more SDGs. With each project, ImpactEd is essentially creating a new partnership for the goals (contributing to SDG 17). For example, a project with eBay challenged students to develop eCommerce strategies that can accelerate the circular economy and achieve SDG 12. As it grows, ImpactEd aims to engage millions of young people in projects related to SDGs.



Inuma Purified Water









Founder Christelle Kwizera
Place of Kigali, Rwanda

Main Activity Social Enterprise / Startup; Technolo-

gy Development

Organisation Type For-Profit Company

Establishment

Place(s) Kigali, Rwanda of Operation

Budget \$50,000-\$100,000

Find out more at www.warwanda.com

THE NEED

Ishywa Island, with a population of 2,600 people has only one borehole. There are 419 households (average 6.5 people) and each household is allowed to fetch a jerry can of 20 liters per day. The Ishywa community suffers from unclean and contaminated water leaving many people to suffer from cholera and water-borne diseases. Currently, children suffering from cholera are unable to attend school for several weeks. The initiative wants to deliver water points, which will provide clean and safe water.

THE SOLUTION

A network was originally set up by our partner Water4 "NUMA", who trained the WARwanda team on its operation. An INUMA Network of water kiosks secures permanent employment of about two to ten people. Usually, two people will be assigned to the nexus where the water will be filtered and pumped; eight more people will be positioned in four nodes (two people in each node). Additionally, for the construction of the pipeline, a minimum of 100 local people (sometimes up to 200 people) will be temporarily employed. This boosts the economy of the area and provides clean drinking water. WARwanda builds and professionally maintains INUMA safe water systems that can serve up to 2,400 people (500HH) from a single bore-hole or other available safe/usable water source. INUMA outlets sell water to walk up customers and wholesale distributors from up to four different locations in the community. Homeowners, schools and clinics

can also purchase a piped-water system from an INUMA outlet.

THE IMPACT

WARwanda has reduced the individual expenditure on good water systems in Rwanda. Our prices remain 2-4 times more affordable than any direct competitor in the country and sometimes for superior service. In 2014, the price of our boreholes was \$4,000, for the same boreholes we charged \$3,000 in 2017. WARwanda seeks to always keep a low Operating Expense Margin. Youth employed by WARwanda included 39 youth employed full time and over 300 employed part-time in 2017. Rwandan francs 41,430,612 were invested towards the employment of youth in the company in 2017.

ALIGNMENT WITH SDGs

WARwanda, a Rwandan owned and operated company, deploys a next generation business model to reach the community of Ishywa Island in a manner that is financially sustainable and that enables the government of Rwanda to reach the key objectives of safely managed water (SDG6) as well as the targets set in the Ministry of Infrastructure, Water and Sanitation Strategic Plan 2018-2024 (SDG 9). INUMA further contributes to reduce water-borne diseases (SDG 3) and to job creation for young Rwandan people (SDG 8).





Proyecto Agua Segura









Founder Nicolás Wertheimer

Buenos Aires, Argentina

Place of Establishment

2401.007 ... 00,7 ... 801.1.1.14

Main Activity

Social Enterprise / Startup

Organisation Type

Other

Place(s) of Operation

Rural and isolated communities from 19 provinces in Argentina.

Budget

\$250,000-\$500,000

Find out more at

www.aguasegura.com.ar

THE NEED

The United Nations declared clean water and sanitation a human right in 2010. However, today in Argentina more than the 17% of population does not have access to clean water and 50% does not have access to sanitation. Most of people living in rural, vulnerable and isolated communities have to collect rainwater because their water sources are contaminated or do not exist. Drinking untreated water is the primary cause of diarrhea being the second cause of death of children under five years-old in the world.

THE SOLUTION

PAS aims to find actual solutions to water crisis worldwide. It works in rural, peri rural, isolated and marginalized communities where access to clean water seems impossible. These communities are living into socio economic and environmental vulnerability conditions, suffering diseases that could be easily prevent having access to good quality water. PAS programs have two main components (i) installation of technology that allow immediate access to good quality water in schools and homes from low income, isolated, and rural communities; and (ii) development of educational exchanges that promote healthy and hygiene habits and water care.

THE IMPACT

Since 2015 PAS has reached 19 provinces in Argentina, 938 families, 468 schools, 96 community centres and 52,482 children. Its impact is measured through the following indicators: # of families that participated in interventions, # of schools reached by interventions, # of community centres reached by interventions, # of community centres reached by interventions.

tions, # children reaches by interventions. PAS also evaluates to what extent participants adopt healthy habits and whether water consumption increases after our interventions.

ALIGNMENT WITH SDGs

PAS programs impact positively on multiple SDCs at the same time, since its interventions have an integral approach. Installing technology and supplies to give isolated communities access to good quality water contributes directly to ensure availability and sustainable management of water and sanitation for all (SDG 6). Combining this intervention with educational exchanges contributes to encourage families to adopt healthy habits and ensure children's health (SDG 3). As women adopt a strong role in developing care family habits, they empower themselves and become change agents in their communities (SDG 5). Since access to water is an essential element for developing sustainable communities, PAS helps to make cities and communities sustainable, reducing poverty and inequalities (SDG 11).





SeeingBlue









This project is an initiative from mem-Founder bers of 2 youth-led organisations: The

> SIDS Youth AIMS Hub (SYAH) and the Global Shapers Port-Louis Hub.

Place of **Establishment**

Ébène, Mauritius

Main Activity

Educational Programs / Initiatives; Social Enterprise / Startup; Policy Ad-

vocacy and Research

Organisation Type

Not-for-Profit (e.g. 501(c) organisation)

Place(s) of Operation

Mauritius/Rodrigues and Seychelles. Expected to cover other Small Islands Developing States (SIDS) including Maldives, Comoros , Guinea-Bissau, Sao Tomé en Principe and Cape Verde.

Budget

\$5,000-\$25,000

Find out more at

www.seeingblue.net

THE NEED

SIDS feel the disproportionate effects of climate change. Firstly, the absorption of excess amounts of CO2 by the oceans has made them warmer, causing them to rise and thus posing a serious threat to low-lying SIDS. This heat also impacts coral reefs, causing them to bleach and affecting ecosystems services. To add to the stresses being faced by oceans, the productive yield of oceans has declined dramatically due to overfishing and destructive processes of extraction. These, in turn, have a negative impact on artisanal fishermen in SIDS and on the coastal economy. Marine debris is perhaps one of the biggest challenges of our time. Unprecedented amounts of litter finds its way into oceans, deforming and damaging the pristine ecosystems which are typical of SIDS. With 8 million tons of plastic being dumped into the ocean every year, the very productivity and health of oceans are at risk.

THE SOLUTION

#SeeingBlue has two components: (i) The Young Ocean Champions Award, which is a competition open to SIDS that provides finalists with seed funding, coaching through a bootcamp and mentoring to bring projects/blue enterprise to life; and (ii) a platform where people from every walk of life can freely and constructively express their opinion on the future of oceans and engage in dialogue with each other. The rationale behind this project is that some voices which are critical to the well-being of oceans, such as skippers, fishermen community and youth, are often missing from the table where decisions are made about them. The Award and platform thus empower youth and brings them together with CEOs, government officials and fishermen to discuss ocean matters and put forward policies that protect the marine ecosystem among SIDS.

THE IMPACT

Since its initiation in 2014 #SeeingBlue has impacted around 620 young people to take action on youthled, ocean-related initiatives created in the Mauritius, Seychelles and Rodrigues. It has reached around 2500 followers on Facebook. The project has also organised several spin-off events, projects and dialogues to amplify impacts. #Seeing-Blue was registered at the 3rd UN International Conference on Small Island Developing States (SIDS), has been shortlisted for the Coca Cola "Shape a Better Future Challenge" and was a winner of the Mary Robinson Climate Justice Foundation Award.

ALIGNMENT WITH SDGs

This project is directly linked to SDG 14, ensuring the protection and conservation of the marine ecosystem through the involvement of SIDS youth, and SDGs 16-17, providing a forum for inclusive discussion on concrete actions and policies to be taken by the government and private sector. The project also closely links to SDG 12, as through its training programs it focuses on helping young changemakers address the issue of marine pollution through reduction of plastic and styrofoam consumption.



EnviroChallenge





Founder Rahyang Nusantara

Place of Jakarta, Indonesia

Main Activity Educational Programs / Initiatives; Social Enterprise / Startup; Policy Advoca-

cy and Research

Organisation Type Not-for-Profit (e.g. 501(c) organisation)

Place(s) of Operation

Establishment

Indonesia

ation

Budget \$5,000-\$25,000

Find out more at dietkantongplastik.info/2017/12/14/inspirasi-program-pengurangan-sampah-plas-

tikdari-pemenang-envirochallenge-2017

THE NEED

In 2015, Indonesia was reported as the second largest contributor of plastic pollution to the marine environment. Poor waste management allows waste to escape. Due to a 2015 petition, demanding that retailers no longer give out plastic bags for free, the Ministry of Environment and Forestry immediately rolled out a nationwide trial of a plastic bag charge. The trial revealed stunning results, with a 55% reduction of plastic bag use: this has led to the development of organizations and movements pushing for solutions, including EnviroChallenge's efforts to engage youth to be part of a solution.

THE SOLUTION

In 2016, the team came up with the name "Enviro-Challenge", a combination of "environment" and "challenge". The program aims to challenge high school students to create an impactful program in their school to tackle plastic pollution. The team and representatives of @america acted as mentors and facilitators. The program activities consist of school workshops, pitching/presentation sessions, an implementation phase, a monitoring and mentoring session, and final presentations.

THE IMPACT

The results were collected differently in each school, based on what programs they have conducted. Some schools have statistical data on waste reduction and some of them use an observation method. Since 2016, EnviroChallenge participants created programs to ad-

dress paper waste in their schools and to ensure that each student is well-informed about their rights and obligations about waste management and reduction. Some schools provide reusable plates, bowls and cups to their canteens as a replacement for disposable packaging. Most canteen stalls admitted that this system can be more profitable. Meanwhile, school canteens looked much cleaner and comfortable than before, with the reduction of styrofoam and plastic waste.

ALIGNMENT WITH SDGs

The project's objectives are to strengthen student awareness about plastic consumption, trigger them to create innovative solutions on the issue, and teach them to have critical thinking about upstream and downstream aspects of plastic pollution, thus contributing to education for sustainable development (SDG 4). The project also supports SDG 12 by working to reduce waste generation through prevention, reduction, recycling and reuse, while ensuring that people everywhere have the relevant information and awareness on sustainable lifestyles.





Tespack

Establishment







Founder Yesika Aguilera
Place of Helsinki, Finland

Main Activity Educational Programs / Initiatives; Social Enterprise / Startup; Technolo-

gy Development; Other

Organisation Type For-Profit Company

Place(s) Europe, Sudan, India, South America and closing new partnerships in Africa.

Budget \$250,000-\$500,000

Find out more at www.tespack.com/

THE NEED

Over 1 billion people don't have access to electricity and over 260 million people are out of school. Without access to electricity, teachers and students are lacking the means and tools for teaching and studying in rural areas. Rescue forces also depend on energy, which is one of the key challenges for the SDGs. On average, a rescue worker carries between 5 and 10 mobile devices and this can weight up to 10kg extra, creating a need for efficient, practical and light energy solutions that could work anywhere in the world.

THE SOLUTION

The Tespack team created patented Solar Smart Backpacks. They are currently ranked as the Best Energy Startup in EU and collaborate with astronauts and scientists to develop the energy solutions. Currently used by United Nations, Save The Children, Governmental Entities, as well as big companies like Vodafone, Microsoft, the backpacks can power a smartphone up to 13 times, laptops for 10 hours, and can even power a projector. They can bring education to any part of the world and equipping rescue forces to deliver efficiently and safely. The innovative side is having the lightest technology (500 grams) and an efficient solar panel that can power a smartphone in 1-2 hours. The panels can also be joined to create a solar power plant and are easy to utilise. Tespack will soon realise an Ultra fast tech that can recharge power banks in less than 10 mins.

THE IMPACT

Tespack is already powering various projects all over the world and it is financially sustainable due to partners including TomTom, Microsoft, the UN and major distributors in more than 20 countries. Tespack has also closed a seed round of 2.5M€ and has more than 10 innovative products coming up. The team has won more than 30 International Awards and is ranked among the Top 50 Energy Startups Worldwide.

ALIGNMENT WITH SDGs

Tespack contributes to SDG 4 as it facilitates access to education in places where there are power cuts. It also contributes to SDG 7 by relying on solar energy and innovative and affordable technologies. Finally, it supports the work of rescue workers in crisis situations, thus promoting the achievement of SDG 1.



Educate!Experience





Founder Boris Bulayev, Eric Glustrom, Angelica Towne

Place of **Establishment**

Uganda

Main Activity

Educational Programs / Initiatives Orga-

Organisation Type

Not-for-Profit (e.g. 501(c) organisation)

Place(s) of Operation

Uganda, Rwanda, and Kenya

Budget

> \$500,000

Find out more at

www.experienceeducate.org

THE NEED

Six to seven billion young people will go through secondary school in Africa between today and the end of the century, and families all over the continent will make large investments in their children's education. But education systems across Africa deliver a broken promise— spending years in schools that don't teach the skills youth actually need does not lead to employment or the opportunity to make a decent living. In a world where 50% of the world's children are expected to be African by 2100, reforming secondary education is a catalytic, high-leverage solution to youth unemployment and consequent development issues.

THE SOLUTION

Educate!Experience transforms secondary education in Africa by teaching young people to solve poverty for themselves and their communities, providing youth with skills training in leadership, entrepreneurship, and workforce readiness, along with mentorship to start real businesses at school. The program focuses on social issues such as health, gender, and the environment, while inculcating values of social responsibility and ethical leadership to the youth who will become the leaders and drivers of development within their communities.

THE IMPACT

In 2018, Educate!Experience is working in 175 secondary schools in Rwanda and over 700 schools in Uganda, reaching over 42,000 students intensively and 530,000 more broadly. Through advocacy, practi-

cal training for teachers, and direct service in schools, the organization is working to make this practical, skills-based model part of African education systems, starting with Uganda and Rwanda. Its vision for 2024 is to measurably impact one million students and reach four million students more broadly across Africa each year.

ALIGNMENT WITH SDGs

Educate!Experience promotes sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all across Africa, as millions of youth flood the labor market each year looking for opportunities, but are unprepared for the realities that face them (SDG 8). Schools often fail to equip youth with the skills they need to succeed in life after school, and with this solution the Educate! Team complements their efforts and contributes to the achievement of SDG 4.





CubeDrive









Founder Bartlomiej Kolodziejczyk Place of Melbourne, Australia

Establishment Main Activity Social Enterprise / Startup; Technol-

ogy Development; Policy Advocacy

and Research Organization

For-Profit Company **Organisation Type**

> Place(s) Australia

of Operation

Budget \$50,000-\$100,000

THE NEED

This novel bioelectronic solution allows for robust and highly reproducible studies of allergens and other environmental factors on cell cultures grown on top of the novel microelectronic chip based on conducting polymer. Variety of cells can include but are not limited to skin cells, lung cells, etc. allowing for personalized drug and cosmetic development and to study the toxicity and allergic reaction of different compounds. The chip eliminates the need for studies on patients or animal targets. It is a more bioethical platform for new healthcare developments.

THE SOLUTION

CubeDrive's skin on-a-chip device is a new biosensor device which allows integration of flexible transistor architecture with a layer of skin cells grown on top of it. The device provides an electric response to external parameters applied to the cell culture, i.e. to measure the toxicity of a whole range of environmental agents to the skin. This bioelectronic device can also be used to measure other environmental conditions such as skin exposure to UV light, among others. Further, this tailored solution allows for tests on lab-grown cell samples collected from the specific patient.

THE IMPACT

The start-up team is already negotiating its first commercial trials with some of the largest chemical and cosmetic companies. The team is very excited about being given the opportunity that will remove the animal factor from the toxicity studies while saving thousands of animals a year. First medical trials showed superior reproducibility and reliability of the method. It is expected that commercialized technology will cost about \$4 per test. The CubeDrive team has filled the provisional patent application and is looking for investors and/or customers.

ALIGNMENT WITH SDGs

CubeDrive works relate closely to SDGs 3, 9, 12 and 15. The technology provides new sustainable and more reliable way of developing new medical and cosmetic solutions which can potentially revolutionize the market same time excluding animals from chemical and toxicity trials.





Refuge





Founder Jackson Frazier Place of Columbus, USA **Establishment**

Main Activity Educational Programs / Initiatives Orga-

Organisation Type Not-for-Profit (e.g. 501(c) organisation)

Columbus and Cincinnati, OH, United Place(s) of Operation

\$5,000-\$25,000 **Budget** www.refugeusa.org Find out more at

THE NEED

The great majority of resources for immigrant families are designed for parents; after all, they have an immediate need to support their children and other family members. Young children are supported by the educational system and face relatively low barriers to acclimation. However, a success gap persists for adolescent immigrants: they are too old to receive adequate support from schools and too young to qualify for adult integration programs.

THE SOLUTION

According to the U.N. High Commissioner for Refugees, less than 1% of refugees pursue higher education. Refuge seeks to change this statistic through peer-based mentorship and immersive university experiences for refugee and immigrant youth. In the mentorship program, students are paired with college mentors who work with them throughout the school year to develop an educational plan that suits their goals. Immersive university experiences complement the virtual component by providing students the opportunity to envision themselves on campuses by meeting with professors, sitting in on classes, and spending several days as a college student.

THE IMPACT

The positive collection of qualitative feedback from all participants allows for the continuous improvement of the mentorship platform. The success of Refuge is contingent upon funding received and the participation of established organizations

in the communities we serve. We maintain records of our connections with other organizations, allowing us to analyze our role in the greater refugee and immigrant support network. The longterm sustainability of Refuge is measured through participation, retention, and growth from one year to the next.

ALIGNMENT WITH SDGs

Refuge works primarily on SDGs 4 and 10, operating in the United States where educational opportunities are better for refugees and immigrants than in many other countries. This could widen inequalities between refugees resettled in the US and elsewhere. By uplifting refugees and immigrants, it will bring focus to the broader educational challenges of refugees and immigrants throughout the world.





RoHo



Founder Caleigh Hernandez

Place of Malindi, Kenya Establishment

Main Activity Social Enterprise / Startup Organization

\$25,000-\$50,000

Organisation Type For-Profit Company

Place(s) Kenya, USA

Budget

of Operation

Find out more at loveroho.com/

THE NEED

RoHo seeks to create opportunities in areas with vast amounts of artisanal talent, but also high unemployment rates, limited infrastructure, and poor education services. By creating new American markets for quality, artisan made products, it is helping people help themselves break the cycle of poverty. Not only that, but RoHo is committed to its artisans, their safety and wellbeing, which ultimately influences the success of their families.

THE SOLUTION

RoHo is committed to creating social change through its ethical fashion brand. It focuses on quality of products, ethical work and economic empowerment. Each product is handcrafted and handtooled using the finest products available in East Africa by local artisans. The team is committed to these producers and their well-being through consistent and steady employment, paying them fair wages and ensuring they are working in a safe environment. Additionally, the team provides its artisans with education grants to send their children to quality schools in the area. Finally, RoHo works to make the supply chain more transparent, ensuring that consumers and fans begin to familiarize themselves with the faces behind the product. Customer acquisition is done through home shows, festivals, social media advertising, Roho's website, blogs as well as upscale women's boutiques.

THE IMPACT

RoHo has begun measuring its impact qualitatively by hosting meetings with artisans to gain feedback about their needs and suggested improvements. Moreover, it measures results through the wages of its employees as well as the number of artisans' children that are sent to private schools in the area. Artisans are paid salaries that are 50% higher than the industry standard in the area and 7 of the artisans' children are currently being sent to school. Two of the artisans are receiving biannual food rations in place of school fees because their children are not yet old enough to attend school. RoHo also works to ensure 100% of its artisans are above 18 years old.

ALIGNMENT WITH SDGs

RoHo has a heavy focus on SDG 1, working to end poverty amongst artisans through productive, consistent, and safe employment, stimulating the local Kenyan economy and breaking the cycle of poverty in the short term. It further works to support SDG 12 by ensuring its supply chain is sustainable and safe for workers.





Techstart

Establishment







Founder Raghav Singh
Place of Mumbai, India

Main Activity Educational Programs / Initiatives; Social Enterprise / Startup; Charity / Vol-

unteering; Policy

Organisation Type Volunteer Organisation

Place(s) of Operation

India

Budget \$0-\$5,000

Find out more at www.techstart.info

THE NEED

Digital illiteracy is a big concern in India as the education system is outdated and teachers are poorly trained. Most NGOs focus on English and Mathematics education but leave out technology which is an important job skill. Computer skills are required for all jobs, from waiters to cab drivers. However, the increasing illiteracy in technology is causing its misuse. Having basic technical skills will also provide youth better job opportunities which can alleviate them from poverty.

THE SOLUTION

The project started when founders began teaching a few college students web design at an NGO named Down to Earth and got connected in subsequent stages. The key components of the project include: (i) teaching students from all age groups in various technical skills - MS Office, Web Development, Robotics, Java Programming, Arduino, Swift and Graphic Design; (ii) establishing a professional mentorship program for any students who are interested in a particular topic and wish to pursue a career in the same; and (iii) providing free technological assistance to other NGOs (e.g. to build websites, set up the internet, design posters and softwares, etc.).

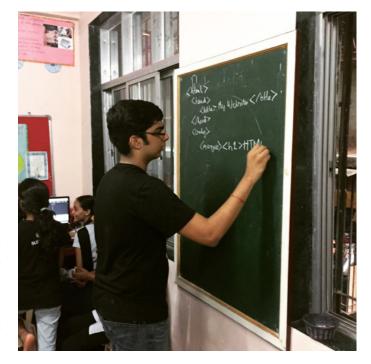
THE IMPACT

Techstart has trained over 450 students in 3 cities by engaging over 85 volunteers in 18 months. Some students have gone on to pursue education in computers at the colleges/universities because

of the strong platform that it provided them. Impact is measured by the performance of students. Around 85% of the students taught pass the assessment at the end of the workshop, and those who don't are provided additional help and training from the volunteers.

ALIGNMENT WITH SDGs

Techstart has a primary focus on SDG 4, but by directly impacting the education of students and youth, it also hopes to improve employability and salaries and thus reduce poverty and income inequality (SDG 1 and 10).



NYAToday



Founder Jesse Anderson

Place of Baltimore, Maryland

Establishment

Main Activity Educational Programs / Initiatives; Poli-

cy Advocacy and Research

Organisation Type Other

Place(s) Global

of Operation

Budget \$0-\$5,000

Find out more at nyatoday.com

THE NEED

Although many sites claim to cater to youth, they often discuss typical topics (such as, "Taylor Swift's album just dropped") that are often associated with teens. Although youth are eager to combat injustice, they are often not provided with objective, extensive education regarding global affairs - nor are they given actions that they can take to remedy the issue.

THE SOLUTION

NYAToday is a website that provides free, informative content about global affairs that's written by youth, for youth. It has reached hundreds of thousands of individuals around the world with content, and currently has a team of over 40 writers that hail from Morocco, Mexico, Kenya, the U.S, and dozens of other places around the world. Additionally, it has partnered with organizations like UNICEF, Mogul, 5calls. org, Earth Guardians, and more to ensure that it provides options for action to our readers at the bottom of each article. Let's say you read an article about mass incarceration within the U.S. With NYAToday, you're provided with myriad actions at the bottom of that article. This way, youth aren't simply expanding their knowledge on world affairs - they're learning about ways that they can make the world better.

THE IMPACT

The site has provided daily analytics, including which countries it is reaching the most as well as a daily view count. Audience reach anywhere from 7,000 - 20,000 people per day, depending on whether a major news story breaks. Frequently browsed in New York, Maryland, California, and Seattle in the U.S., as

well as in Pakistan, India, Kenya, Canada, China, and the UK.

ALIGNMENT WITH SDGs

NYAToday most notably impacts on SDGs 4 and 9. 10 articles are published a day a day covering everything from social justice to US news to global news, in an objective and informative manner. Going further, there are numerous initiatives that mix action with education. For example, NYAToday recently published an entire section dedicated to HIV, promoting access to information on sexual and reproductive health (SDG 3).



Plan b





Justin Yu Founder Place of

Establishment

Taipei, Taiwan

Main Activity

Educational Programs / Initiatives; Social Enterprise / Startup; Policy Advoca-

cy and Research; Finance

Organisation Type

For-Profit Company

Place(s) of Operation

Taiwan

Budget

\$250,000-\$500,000

Find out more at

www.sdgsnewsexy.com/

THE NEED

Since the adoption of SDGs, there has been a wealth of resources published to support the achievement of the goals, but traditional Chinese publications and local contextualization of the SDGs were close to none. As the SDGs are used as the shared language in global and regional conversations among various stakeholders and across sectors, Plan b's mandate is to close the local resource and knowledge gap, to link Taiwan with the 2030 Agenda for Sustainable Development, and to mainstream sustainable development by mobilizing and enabling all local stakeholders in adopting and practicing sustainability.

THE SOLUTION

Plan b's SDGsNewSexy is an initiative that encompasses an open platform for resource and knowledge sharing as well as consulting services to guide cross-sector sustainable development. SDGsNewSexy challenges Taiwan to incorporate sustainable development as a methodology in policy planning and design. As part of the project, Plan b launched an SDGs handbook in traditional Chinese and a "2016 Taiwan Shadow Report" (local contextualization of SDGs). Further sustainable development projects consulted under the initiative include the renovation and transformation of idle city corners into a living community space under the ParkUp brand, the development of ParkUp Tools as a modular structural system and green alternative for playground designers, the repurposing of the inoperative Taipei Soccer Stadium to a coworking space branded CIT, and the conceptualization and execution of The Taipei New Horizon Center as a community engagement venue.

THE IMPACT

The mainstreaming of sustainable development thinking and the incorporation of SDGs in government initiatives, private sector strategies, and the general public have all been the result of SDGsNew-Sexy's innovative public awareness strategies. The "SDGs Manual" and "2016 Taiwan Shadow Report" motivated the publication of Taiwan's own Voluntary National Review, where Plan b also served as a consultant to review its content, and the incorporation of SDGs as KPIs in Taiwan's Ministry of Education and Ministry of Economic Affairs. On the other hand, its facilitation of project implementation and ongoing operations of ParkUp, CIT and The Taipei New Horizon Center, as well as the development of ParkUp Tools, gave rise to new business models and market opportunities. For example, the establishment of CIT as a co-working space in the inoperative soccer stadium in 2012 popularized the co-working trend and galvanized the growth of innovative co-working spaces in Taiwan.

ALIGNMENT WITH SDGs

Cities serve as the project's foci to include, coordinate, and facilitate partnerships of all stakeholders in the realization of the 2030 sustainable development agenda and beyond (SDG 11 and 17). However, SDGsNewSexy anticipates to cover all 17 goals through various partnerships with individual activities addressing different SDGs.





-> PART 2: Chapter 3

Identifying Challenges and Opportunities for Youth Solutions: How to Harness Youth skills in All Sectors

Financing for Youth Entrepreneurship in Sustainable Development

Financing for Youth Entrepreneurship in Sustainable Development

INNA **AMESHEVA** (PROJECT OFFICER, SOLUTION INITIATIVES, SDSN YOUTH), ALEX **CLARK** (SENIOR ADVISOR, SOLUTION INITIATIVES, SDSN YOUTH), JULIAN **PAYNE** (SENIOR ADVISOR, SOLUTION INITIATIVES, SDSN YOUTH)

THE ROLE OF YOUNG ENTREPRENEURS IN SUSTAINABLE DEVELOPMENT

Young people currently represent approximately one quarter of the world's population (USCB, 2018) and constitute a primary source of untapped potential for the implementation of the Sustainable Development Goals (SDGs). The majority of young people live in developing countries, where they tend to constitute a larger proportion of the population. Nearly all projected population growth will occur in less-developed countries with high fertility rates, primarily in Africa. These countries, the major focus of this chapter, typically already have large youth cohorts that will continue to grow as the world races towards a projected population of 9.6 bn by 2050 (UN DESA, 2015).

The 2030 Sustainable Development Agenda emphasizes the role of young people as "critical agents of change" (UNGA, 2015). Young people are the workers and entrepreneurs who hold the responsibility of building a brighter future for their countries and the planet. Providing them with education, employment and entrepreneurial opportunities, particularly in the poorest countries and communities, will prove critical to leveraging the demographic dividend and the unique potential of an ever-increasing youth demographic to deliver on the SDGs.

In parallel, sustainable development is becoming a mainstream element of the investment landscape. Corporate and financial actors across sectoral and geographic boundaries are beginning to grasp the importance of sustainable products and policies, and the emergence of robust public policy measures to support them, from local to global levels (BSDC, 2016: 3). The SDGs are more than a mere political declaration. The economic opportunities sustainable business offers are clear – from sustainable transportation to clean energy, and healthcare technology to reducing food waste.

In the short term, this means understanding the skill profiles of the future, incorporating the SDGs into high-level strategy and appreciating the financing requirements of an economic opportunity worth an estimated \$25-35 trillion by 2030 (BSDC, 2017: 15-17). Simultaneously, if societies and businesses are to reap the rewards of the shift towards a sustainable economy, the next generation of entrepreneurs and innovators will need tangible support such as access to networks, access to affordable financing and multifaceted expert guidance.

This chapter looks first at the needs of young entrepreneurs working on the SDGs and the barriers face din scaling their projects. It then surveys financing options for young entrepreneurs, and identifies the gaps between what is needed and what is available. The chapter closes with an exploration of alternative financing mechanisms, and of the need to develop robust investment pipelines to attract capital on more traditional terms.

THE NEEDS OF YOUNG ENTREPRENEURS WORKING ON THE SDGS

BARRIERS TO INNOVATION AND SCALE

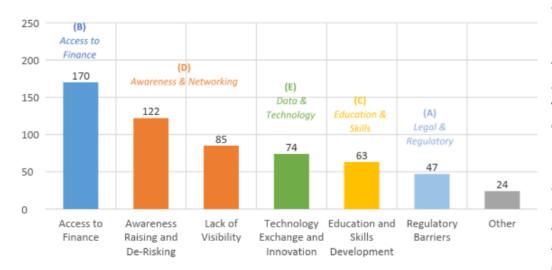
There is no shortage of creativity and innovation among young people in developing countries – but a lack of entrepreneurial opportunities can stifle these qualities, increasing the risk of leading a life of poverty. Without avenues for the acquisition and development of entrepreneurial skill sets, young leaders and their communities will struggle to adapt to globalization and environmental change in market economies. Providing young people with such opportunities, especially in the realm of sustainability, requires an understanding of the barriers faced by young entrepreneurs in scaling their solutions.

Based on a series of interviews and a literature review, SDSN Youth identified five categories of barriers facing young entrepreneurs working on the SDGs, displayed in Table 1 below (UNCTAD, 2015) (SDSN Youth and The Social Investment Consultancy, 2017) (OECD, 2013) (Ahaibwe and Kasirye, 2015) (CYFI, 2017) (eMFP, 2015). The extent to which entrepreneurs encounter these barriers depends on several variables, including but not limited to: (i) the nature of their business, (ii) the stage/level of progress in developing the business, (iii) the geography of operation and (iv) their social and economic status.

BARRIER TYPE	DESCRIPTION
(A) LEGAL & REGULA- TORY	 High business registration costs, complex regulatory procedures and distrust in regulatory environments Limited knowledge of regulatory issues, in particular of copyright, patent or trademark regulations
(B) ACCESS TO FINANCE	 A shortage of appropriate youth and social venture-focused financial products and excessive restrictions on engagement in the financial sector Low financial literacy levels and high credit, age and collateral requirements for obtaining loans
(C) EDUCATION & SKILLS	 A lack of entrepreneurship education and limited practical or experiential opportunities restricts young people from becoming successful entrepreneurs Limited and poor-quality business development and incubation services
(D) AWARENESS & NETWORKING	 Negative social attitudes towards entrepreneurship in sustainability, especially among potential financiers (including domestic commercial banks and venture capital investors) Underdeveloped young entrepreneurship networks Insufficient promotion of role models and/or entrepreneurship networks, including linkages between youth-led start-ups and investors
(E) DATA & TECHNOLOGY	 Knowledge gaps regarding geographical contexts in which youth-led innovation occurs, including regulatory and financial contexts, as well as supporting mechanisms Insufficient digital infrastructure, access to reliable/cheap electricity and workspace

Table 1 - Taxonomy of barriers facing young entrepreneurs working on the SDGs. Adapted from UNCTAD (2015).

The 2018 Youth Solutions Report (YSR) surveyed 207 youth entrepreneurs' perceptions of the main hurdles they faced in scaling sustainability-oriented ideas (see Figure 1, cross-referenced with the taxonomy in Table 1). Access to finance was identified as the main barrier impeding the scaling of solutions, closely followed by awareness and networking possibilities. The emphasis on access to finance is closely aligned with a survey conducted by the Foundation for Social Entrepreneurs (UnLtd, 2017), which identified access to finance



and a lack of financial resources as the main issue facing social entrepreneurs — receiving almost twice as many votes as the next highest-ranked barrier.

Figure 1 - Youth Solutions Report Survey: What are the main challenges your organization faces in scaling? (n=207)

The need for access to finance was further underlined in interviews with entrepreneurs and ventures featured in the first iteration of the YSR, including Bean Voyage, Educate! Experience and Pixis. Access to finance has had a significant impact on the viability and structure of these ventures, and many others. In the early stages, financial constraints place significant pressure on meeting operating costs as well as the administrative expenses of registering a non-profit or for-profit business. In the later stages, growing expenditures for on-the-ground resources and staffing budgets mean that many solutions rely heavily on grants, family support or volunteers to continue their work. Finally, the administrative burden of continuously applying for grant funding consumes resources more productively employed in product design, development and testing. The instability associated with reliance on grants also leads to high turnover rates and time lost in retraining.

SUPPORTING YOUNG ENTREPRENEURS WORKING ON THE SDGS

There are a variety of activities and interventions that can encourage the contribution of youth-led solutions to sustainable development. An indicative and non-exhaustive list of interventions mapped to the barriers in Table 1 is presented in Table 2 below.

BARRIER TYPE	DESCRIPTION
(A) LEGAL & REGULA- TORY	 Advise countries on using legal and regulatory frameworks to support youth entrepreneurship most effectively Provide technical assistance to assist young entrepreneurs in complying with and navigating regulation
(B) ACCESS TO FI- NANCE	 Develop additional investment opportunities for youth solutions Establish innovation grants, awards and prizes with links to follow-on financing and access to investor networks Develop a pipeline of viable youth solutions for investors to fund

BARRIER TYPE	DESCRIPTION
(C) EDUCATION & SKILLS	 Develop innovation incubators, acceleration programs and mentorship programs to provide a combination of training and hands-on experience to develop: Idea generation, market research, business planning, pitching, value proposition, financial sustainability, marketing and communications, monitoring Promote education on SDG-oriented impact assessment to comply with the reporting requirements of many investors
(D) AWARENESS & NETWORKING	 Develop mapping tools to connect social ventures with large organizations and funders Encourage cooperation with community groups, NGOs and other local stakeholders to develop meaningful partnerships at the local level Develop media campaigns and public showcasing of youth entrepreneurship research
(E) DATA & TECHNOL- OGY	Provide technical assistance to ventures to develop digital infrastructure and plug knowledge gaps

Table 2 - Mapping Interventions to Barriers facing Young Entrepreneurs.

The YSR survey also asked entrepreneurs what they needed to overcome the barriers they identified in Figure 1 (see Figure 2 below). While many entrepreneurs indicated that they required technical assistance (for example on legal, regulatory or technological issues), or support in marketing and communications, the majority identified access to finance as the key bottleneck to growth and the area requiring most support. Some entrepreneurs indicated that they required support in multiple areas. Separately, in a series of 98 interviews conducted by the Foundation for Social Entrepreneurs, 22% of practitioners working with young and social entrepreneurs identified their primary support need as "business training and business experience", while 17% prioritized "business support and pro-bono advice", and 14% "financial support" (UnLtd, 2017). These percentages are comparatively low as interviewees were asked to identify only one priority area.

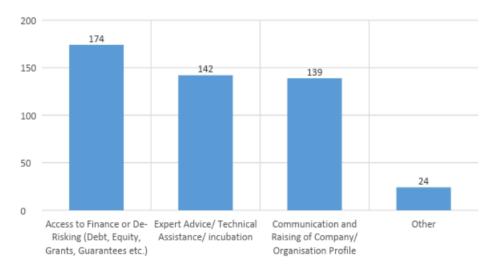


Figure 2 - Youth Solutions Report Survey: What are your needs to overcome the barriers identified above? (n=207)

There is a clear need to develop additional investment opportunities for youth solutions. SDSN Youth is already actively engaged in the raising of company profiles via the YSR, as well as the provision of technical assistance and incu-

bation activities through the newly inaugurated Investment Readiness Program (IRP). There is immense catalytic potential in providing appropriate financial support to the strongest Youth Solutions emerging from this process.

THE FINANCING OPTIONS AVAILABLE TO YOUNG ENTREPRENEURS WORKING ON THE SDGS

There are many notable examples of corporate leaders, international networks and national governments highlighting the work of youth entrepreneurs, but these remain isolated exceptions. In general, very little work is currently being done to support young entrepreneurs in systematic ways. Corporations with funds available for providing risk capital are more often inclined to pay high dividends to shareholders and engage in share buybacks than put their capital to work (BSDC, 2017: 10). Public-private blended finance vehicles are gaining traction in the agricultural, clean energy and urban development sectors, but currently have little to offer to first-time young entrepreneurs amid persistent structural barriers to obtaining financing from such vehicles (BSDC, 2017: 13)¹. While technical assistance and business support form a major focus of youth entrepreneurship programs globally, additional support is needed and there remains a need for follow-on financing that is rarely met. Opportunities to push for youth-driven evolution in existing business practices and models are being missed as a result.

SOURCES AND INSTRUMENTS OF FINANCE FOR YOUNG ENTREPRENEURS

Lack of access to financial services is an urgent and chronic problem, especially in developing countries, where 62% of 18-25-year-olds have no access to formal financial services (eMFP, 2015: 6-7) and only 6% source start-up capital from financial institutions, as opposed to family savings or similar sources (UNCDF, 2016). There are three main sources of finance relevant to youth-focused social impact entrepreneurship, namely:

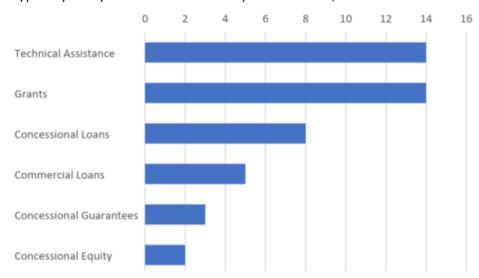
- **PUBLIC AND BLENDED FINANCE** Bilateral aid agencies, development finance institutions, foundations, etc. The use of blended finance (using public capital to de-risk an investment enough to attract private investors) is a trend of growing size and sophistication in the context of financing the SDGs.
- **PRIVATE FINANCE** Commercial banks, impact investors, venture capital and private equity. Institutional and other mainstream investors' role is limited due to the insufficient scale and high risk of usually early-stage youth sustainability ventures.
- ALTERNATIVE FINANCE Crowdfunding and other technology-underpinned financing sources such
 as microfinance institutions and financial technology (FinTech) startups provide a promising venue for
 raising capital to young social impact entrepreneurs. However, entrepreneurs should also be wary of
 the potential drawbacks and increasingly cumbersome regulatory and compliance implications associated with using alternative finance options.

Of the youth finance initiatives examined in this study, a substantial majority (14) provide grants and technical assistance to recipients (see Figure 3). Concessional loans (e.g. with low interest rates and delayed repayments) are provided by only eight initiatives, while five provide loans on commercial terms. Concessional guarantees (3) and equity (2) are offered least of all.

Venture capital and private equity markets are underdeveloped in many emerging economies, but even in developed economies, entrepreneurs frequently raise initial funds through family and friends. In emerging economies, this typically means that startup capital volumes are meagre and insufficient, owing to the relatively low savings volumes from which they are sourced.

1 Examples include the &Green Fund for sustainable agricultural intensification, supported by the Norwegian government; the Terra Bella Fund with first-loss and technical assistance support from USAID; and affordable housing and mortgages in Honduras, supported by concessional loans from OPIC.

Financial institutions in developing countries are not meeting the needs of young borrowers either. Banks typically see youth as commercially unattractive, with a lack of collateral, no credit history, limited ability



to pay, low employment stability, low average balances and high customer retention costs counting against them. A USAID (2005) survey found that although savings products are the most widely accessed by young people, loans are the most commonly offered products. Loans are inherently more profitable to banks, but difficult to scale due to the perceived risks of lending to youth.

Figure 3 - Summary of youth finance-focused initiatives, by instrument type offered.

The potential for mobile banking and FinTech (including peer-to-peer lending, investment and wealth management services not necessarily connected to the formal banking system) in promoting and monitoring youth financial activity remains largely untapped in many of these markets, and can compensate for the riskier profile of young people by driving down customer acquisition costs, vastly improving data collection and reaching scale by reducing customer acquisition and retention costs. From a regulatory perspective, relaxing age restrictions on banking down to 16 have proven helpful in rapidly scaling youth savings in Rwanda. Elsewhere, most financial institutions still require account holders to be 18 years old (eMFP, 2015).

The relative paucity of commercial loans to youth entrepreneurs underlines the importance of improving commercial banks' ability to extend financing to youth. Low-income or otherwise vulnerable youth face challenges in accumulating assets due to high interest rates, a low ability to save and small loan amounts. For more far-sighted banks, initiatives tackling these barriers can translate into long-term profit by increasing credit lines and loan sizes over time, as young clients mature into more lucrative customers, even if youth lending cannot generate short-term returns. (Rivas Schurer, Magala Lule and Lubwama, 2011: 6). Achieving the right balance between commercial viability and meeting youth needs, however, requires greater tailoring of products (longer loan tenors and preferential interest rates), supported by risk mitigation measures (formal training and mentorship) that can help generate short-term returns for less flexible banks and reduce collateral requirements.

Existing pilot schemes in El Salvador and Uganda have yet to turn a commercial profit, but have established several avenues for lenders to control costs and achieve scale, notably mobile banking technology, aggregation of multiple small deposits through cooperatives and savings groups, and youth-specific training for bank staff (YBI, 2012: 8). The East African Youth Entrepreneurship Facility, Root Capital and Saudi Arabia's Centennial Fund have seen considerable success in linking formal training programs with commercial banks and market actors to facilitate access to financing (YBI, 2012: 10).

Non-profit organizations do offer grants or interest-free debt financing to emerging youth-led ventures – including the various branches of Youth Business International, SAJE in Portugal and Imprenditorialità Giovanile in Italy – but they are generally restricted to OECD countries and frequently come with onerous

documentation and reporting requirements that can dissuade inexperienced youth. Microfinance, interest-free microloans and delayed interest payments are all tools that have been applied in developing markets, but reliance on donor funds greatly restricts their scalability. Fully private venture capital is even thinner on the ground outside developed markets and is available only to the well-connected, well-resourced few, even in sectors like IT, medical tech, bio-tech and commercial research and development (R&D) that are beginning to attract greater investor interest (Juneja, 2017).

The UN-led SDG Fund, focused on poverty alleviation, runs grant-driven pilot programs in Fiji, Vanuatu and Samoa designed specifically to help youth find viable economic opportunities in agricultural harvesting and production (Duran, 2016). In general, sustainable development projects like these tend to focus on matching youth skill profiles to resilience-building needs, rather than financing entrepreneurship per se. The SDG Fund has generated private sector interest from firms looking to coordinate more closely with the UN, suggesting a greater potential role for private capital in its future activities (UNDG, 2016: 49-51). Research from Youth Business International (YBI) shows that simply increasing financial access for youth is pro-poor and pro-growth, and non-intervention carries real costs by precluding these opportunities (YBI, 2012: 7).

BRIDGING THE GAP BETWEEN YOUNG ENTREPRENEURS AND THE SDGS

SECTORAL COVERAGE

Financing for youth entrepreneurship has a limited track record from which to draw reliable data and replicable insights. This paucity of data is an even greater problem for assessing youth entrepreneurship in sustainable development, with only 17% of youth financing initiatives examined in this report including a sustainability focus and very few institutions reporting sustainability and youth indicators in combination.

Moreover, the sustainability-focused youth financing initiatives that do exist are typically grant-dependent with no clear pathway to financial independence. With respect to the sectoral focus, from the sample of existing initiatives targeting young people, it appears that most existing youth-focused instruments revolve around youth entrepreneurship in a broad sense, followed by programs specific to agriculture and financial services. A lack of reliable data on the size and impact of each initiative places limits on the conclusions that can be drawn, but Figure 4 summarizes the current landscape in approximate terms.

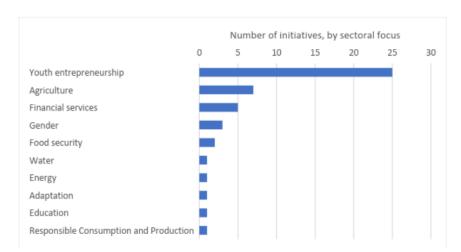


Figure 4 – Sectoral Focus of surveyed youth-focused initiatives.

Even so, the currently available data suggests a number of sectors within the SDGs that could benefit from a greater supply of youth-focused financing, including: climate change, clean energy, energy access, biodiversity protection, responsible consumption and production, and universal education, among others. On the demand side, a large proportion

of youth-led sustainability initiatives target fulfilling SDGs relating to economic growth, education, health,

eradicating poverty, achieving gender equality and tackling climate change (see Figure 5).

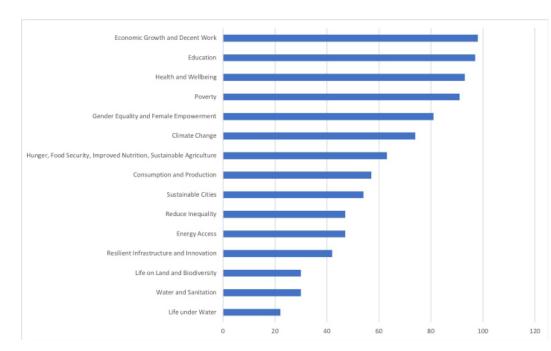


Figure 5 — Youth Solutions Report Survey: Which of the SDGs are most relevant to your project? Source: Youth Solutions Report Innovator Submissions.

These insights help us draw out tentative insights on the gaps in existing support provision. Youth entrepreneurs active in sectors that are most in need of sustainability-driven financing and resources are not receiving the attention

and tools required to secure their financing needs and achieve scalability. There is a substantial market opportunity in tackling sustainability challenges – up to \$12 trillion of the \$25-35 trillion total expected economic benefits from realizing the SDGs will go to the private sector, by UNDP estimates (Vali, 2017). Drawing on the YSR survey results and interviews, much greater deployment of funds towards youth-led ventures may be warranted in the fields of economic growth and decent work, health, and gender equality, as well as food security and nutrition. Progress on each of these SDGs will in most cases spill over to other Goals, with strong synergies expected with respect to clean energy, energy efficiency, smart mobility, urban housing and urban infrastructure. Establishing a funding mechanism focused on providing resources and capacity-building to young entrepreneurs targeting these focus areas would result in considerable economic benefits, as well as reduced inequality, and health-related and environmental co-benefits.

GEOGRAPHICAL COVERAGE

Drawing on YSR submissions data, one can discern a substantial level of overlap in the geography-specific demand and supply patterns of SDG innovators and funding providers. A large proportion of both SDG entrepreneurs and existing funds are oriented towards tackling problems in Africa and Asia (see Figure 6).

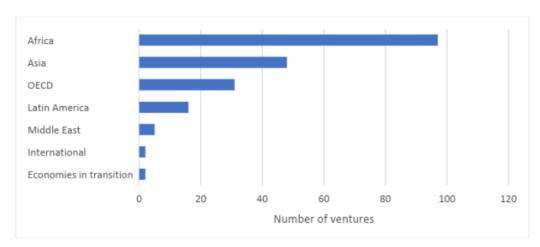
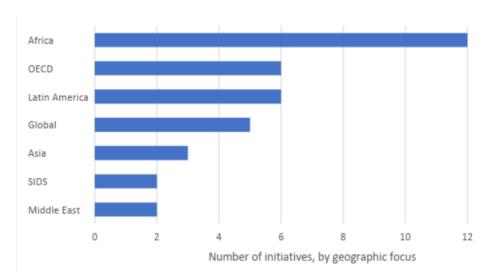


Figure 6 – Geographic focus of youth-led sustainability ventures. Source: Youth Solutions Report Innovator Submissions.

While the greatest proportion of supply-side youth financing initiatives target less wealthy regions of the world (see Figure 7), this is partly a reflection of the barriers that generate the needs for such facilities in the first place, although funding demand in developing regions is clearly high and support needs are larger and more diverse than the current environment is able to support. Emmanuel Noah of BenBen, a blockchain land transaction firm, comments, "All the support is at one side of the world whereas a majority of the youth SDG entrepreneurs are at the opposite side – there's a gap that needs to be bridged." – alluding to the chronic insufficiency of capital aimed at developing regions.

The SDG opportunity in OECD countries is perhaps more significant in monetary terms, given their established technical capacity, well-developed markets, more advanced regulatory frameworks and financial resources – but the SDG needs are greater, and growing, in the developing world. Focusing on financing OECD-based ventures as a pathway to developing world SDG solutions would depend heavily on rapid, smooth



technology transfer – by no means a given in a global trade environment dominated by powerful market players with privileged access to intellectual property rights. Developing onthe-ground capacity in developing countries will be critical in supporting the longer-term success of youth entrepreneurship for sustainability.

Figure 7 – Geographic Focus of Surveyed SDG Funds.

Summary data from our survey of existing youth financing initiatives, shows the majority targeting the African, OECD and Latin American markets, all of which feature significantly in the YSR survey. While the focus on Africa does seem to align with the YSR results, there is a suggestion that insufficient attention is being paid to Asia relative to needs, while the Middle East and small island developing states (SIDS) also receive little attention, despite their greater exposure to environmental change and more urgent need for youth solutions.

A delicate balance must be found, which promotes sustainability innovation by global youth, while at the same time maintaining an equitable and financially viable geographic representation in key regions according to their future expected potential, and development needs. This requires effective financing mechanisms that reach the right targets on reasonable terms, but also lay down the building blocks that young entrepreneurs need to make financing work – including access to networks, expert advice and communication tools.

BEYOND BANKS: ALTERNATIVE FINANCIAL STRUCTURES FOR YOUTH-ORIENTED SUSTAINABLE DEVELOPMENT INITIATIVES

Nearly 30% of entrepreneurs in YSR submissions identified access to finance as one of the chief barriers they faced in scaling their organization. Finance was also identified as the leading requirement for sustainability-focused young-led organizations to achieve scalability, closely followed by the need for technical

assistance, expert advice and venture incubation programs. While the ways in whichcommercial banks can increase youth access to financial services have already been discussed, a step change towards more innovative financing structures is required that most banks are unwilling, or unable, to provide without external guarantees protecting them from losses.

The mobilization of existing latent funding sources for young SDG innovators is critical. To succeed, however, it must be complemented by targeted capacity-building provision, ranging from technical assistance, expert-led mentorship and advice programs as well as the establishment of channels for networking, marketing and dissemination of youth-driven sustainability solutions. In this respect, 'alternative' funding instruments, such as crowdfunding, reliance on decentralized FinTech solutions, as well as the provision of greater early stage financing, could bridge the funding gap between youth-led innovations and project implementation and scale-up in a way that most effectively blends financial and non-financial services.

The gaps in access to finance and relevant support services are clear. With an SDG investment gap of US\$ 5-7 trillion globally, \$2.5 trillion in developing countries alone, there is a clear opening to provide youth-led innovation with the financial and practical tools needed to achieve scale (Niculescu, 2017). Further, the long-term importance of moving steadily away from grant-based, public sector-led SDG funding programs, towards scalable, financially viable and commercially underpinned projects cannot be understated. This would be essential in ensuring a long-lasting and commercially viable transition towards a more sustainable economy, with youth empowerment at its heart, and build entrepreneurial ecosystems in developing countries that will help retain talent and use domestic financial resources more effectively.

PRIORITIZING FINANCIAL INTERVENTIONS FOR YOUTH ENTREPRENEURS AND THE SDGS

The consistent complaint of the financial services industry is not a lack of funding, but a lack of ambitious, bankable projects. The traditional catalysts of such projects – public investors like development banks, development finance institutions and aid agencies – are proving unable to develop them, and unable to link them effectively to a cash-rich private sector. 2016 saw \$23 trillion in socially responsible investments, while private equity markets have up to \$1 trillion available seeking early-stage investment opportunities (Beal, Fetherston and Young, 2018). On the institutional investor end of the scale, insurers, banks and pension funds alike are struggling to meet 'alternative' investment targets due to a lack of projects. There is no lack of capital, but a perceived dearth of suitable investments, in part due to the limited capacity of both investors and financial institutions to accurately and cost-effectively assess the risk profiles of innovative sustainable ventures.

Most youth entrepreneurship ventures are too small to attract commercial venture capital funding – and in most developing countries, venture capital is in short supply anyway. Governments in Uganda, South Africa, Tanzania, Botswana and Kenya have been active in establishing youth-focused venture capital funds, primarily to combat youth unemployment, rather than harness innovation. In Uganda, this involved partnerships with three commercial banks to provide debt funding at fixed below-market rates to viable projects, accompanied by bank-led mentorship services and guarantees in the form of assets of the borrowing enterprise. In Botswana, public sector involvement acted as a check on profiteering tendencies that tend to further marginalize youth that already struggle to meet banks' requirements, but was also linked to higher default rates and a lack of fund sustainability stemming from insufficient interest earnings. Tanzania's potentially more resource-efficient approach was to provide a credit guarantee fund to banks to encourage youth lending by removing the need for other forms of collateral (Ahaibwe and Kasirye, 2015: 4, 7-8, 12-15).

Excessive public involvement in youth entrepreneurship can be distortionary if it stifles innovation and misdirects resources inefficiently (BSDC and Convergence, 2017). This is not to say policy support is not

needed: startup capital that cannot yet be provided by commercial actors is in short supply (YBI, 2012: 4). However, relatively light-touch instruments like government credit guarantee facilities can remove barriers to financing for high-risk youth borrowers, whilst allowing the private sector to allocate greater capital resources to youth entrepreneurs on more favorable terms.

While the exact structure of funds or financial instruments targeting young entrepreneurs is highly context-dependent, there are several initial conclusions that can be drawn. First, instruments ought to be married to pipeline building activities to ensure that there are effective, sustainable disbursement mechanisms to channel public and private funds effectively. Second, while non-repayable grants have historically been used to support youth-led ventures, they should be deployed more strategically and with the explicit aim of being phased out over time, to be gradually replaced by financing on commercial or concessional terms as appropriate. In countries with poor regulatory environments and shallow financial markets, the need for early-stage grants is unlikely to diminish rapidly. However, grant funding should be prioritized for meeting one-off project preparation activities (i.e. non-operational expenses like legal and advisory costs), rather than directly subsidizing project revenues. Concessional loans, convertible equity and guarantees are likely to be better candidates for encouraging long-term financial sustainability and resilience.

NON-FINANCIAL SERVICES

While young entrepreneurs typically perceive access to finance as their largest hurdle, non-financial services also play a key role. Young people are often perceived to lack an understanding of debt financing, working capital management and overall fiduciary responsibility. Non-monetary support in the form of technical, legal or regulatory advice and access to networks, can be extremely valuable in addressing these concerns, and improving the likelihood of success once financing is obtained. The Bhayarati Yuva Shakti Trust leverages each dollar lent to youth entrepreneurs ten times in ultimate business turnover through complementary non-financial activities, while the Canadian Youth Business Foundation saw default rates halve once mentoring became mandatory for youth entrepreneurs (YBI, 2012: 2).

In the long run, non-financial services can address the stigma around lending to youth and drive down risk perceptions of banking and risk capital providers. SAYES Australia, sponsored by the South Australian private sector community, supports 18-30-year-olds with sector-specific support, mentorship and business development training. Similar 'advisory council' models in countries with unmet youth financing needs could go a long way in helping young entrepreneurs obtain, and make productive use of, seed and follow-on funding.

DEVELOPING A ROBUST INVESTMENT PIPELINE

Delivering the SDGs will require increased investment in socially, economically and environmentally sustainable businesses. Meeting these goals will in turn require action and support from young people to develop innovative solutions to sustainable development challenges.

Access to finance and how it pertains to young entrepreneurs has been discussed extensively here. However, many investors working in developing countries alongside experts interviewed in the process of developing this report commented on the need to develop well-prepared and investment-ready solutions to fund (ODI, 2016) (GIIN, 2018). This is critical in order to effectively match the access to finance needs of young entrepreneurs with the capital that investors have at their disposal.

The metrics that investors assess when determining the risk and return profiles of investments are multiple and extend beyond the perceived merits of business, including the regulatory and policy environment, local currency challenges and the broader financial ecosystem. The international community has launched numerous capacity building and technical assistance initiatives, such as the UNDP Low Emissions Capacity Building Program, as well as financial interventions, such as hedging facilities, to address these factors. Greater support is needed at the project preparation stage in order develop a pipeline of viable sustainable businesses for investors to fund. Of 219 impact investors interviewed regarding the growth of the impact investing industry by the Global Impact Investing Network (GIIN), 32% indicated that sourcing high-quality investment opportunities with a track record was a significant challenge – a further 43% indicated it was a moderate challenge (GIIN, 2018).

As different investors use different metrics to assess investment opportunities, sourcing a pipeline is about finding ways to access a set of high-quality potential deals that suit a given investment strategy. Key activities for developing an investment pipeline include (Toniic, 2018):

- Developing or joining a value-aligned network of investors and impact investing funds
- Attending business plan competitions and 'pitch' events for entrepreneurs
- · Employing impact intermediaries and investment advisory firms
- Collaborating with incubators, accelerators, academic institutions and non-profits
- Tracking online databases and global crowdsourcing sites
- Attending key events and conferences

SDSN Youth is in a unique position to source a pipeline of high-quality solutions to fund based on a number factors. First, the Youth Solutions Report identifies solutions led by young Entrepreneurs working on the SDGs. A selection of these subsequently participate in the aforementioned Investment Readiness Program (IRP) accelerator, to provide core business skills, network-building and mentorship. Second, SDSN Youth is a global network of over 90 employees and volunteers committed to engaging young people in the creation of innovative and sustainable solutions to global development challenges. SDSN Youth currently has 20 regional and in-country networks, as well as a vast membership network of student associations, youth-led and youth-focused organizations and other institutions dedicated to youth empowerment globally, as illustrated by the figure below.

Third, SDSN Youth operates under the auspices of the United Nations SDSN Leadership Council and the coordination of Regional Centers across the world. Spanning six continents, the SDSN Networks Program draws upon the knowledge and education capacity of over 650 member institutions.



Figure 9 - SDSN Member Institutions worldwide.

DESIGNING YOUTH-FOCUSED FUNDING VEHICLES FOR THE SDGS

There is immense catalytic potential in providing appropriate financial support to youth-oriented sustainable development initiatives, including the Youth Solutions emerging from the YSR. The development of an investment pipeline for youth solutions will need to be integrated into a broader investment strategy that assesses investment priorities, goals and assets alongside other variables.

Critically, a step change towards more innovative financing structures is required that most financial institutions are unwilling, or unable, to provide without external guarantees protecting them from losses. Opportunities to push for youth-driven evolution in sustainable development and business practices are being missed as a result.

Targeted financial mechanisms and capacity-building activities will need to be married to an appropriate youth-adjusted risk assessment. An indicative framework for setting up funding vehicles for youth solutions is presented below.

0750		
STEP	TITLE	DESCRIPTION
I	INVESTMENT STRATEGY	 Set and identify investment priorities, including (i) the balance between finance-first and impact-first investments and (ii) the portion of the portfolio devoted to early-stage impact investments Define impact and determine alignment across investment themes, including: (i) articulating mission and values, (ii) deciding on industry, impact goals and investment themes, and (iii) the geographical breadth Evaluate assets, including: (i) portfolio size, as well as well as the diversification of risk, time commitment, and follow-on reserves for equity investments, (ii) define the appropriate investment vehicle (e.g. private family foundations, public charities, donor advised funds (DAFs), private trusts, private capital, special purpose vehicle (SPV)), and (iii) consider non-monetary assets, such as knowledge of and access to networks and investment style preferences
II	INVESTMENT PIPELINE	• Find trusted partners through: (i) incubators and accelerators, (ii) business plan competitions, (iii) impact investing funds, (iv) networking groups, (v) deal flow and investor networks, (vi) events and conferences, (v) impact intermediaries, (vi) crowdfunding
Ш	DUE DILIGENCE	 Assess appropriate due diligence processes, ensuring that the investor (i) and the entrepreneur have a shared set of values and enterprise objectives, (ii) knows the environment of prospective investments, (iii) takes a portfolio approach, and (vi) evaluates the legal constraints and opportunities before diving into a new geography (onsite visit and eco-system analysis) Develop a management and engagement framework, focusing on (i) establishing the path to deal decision and listing deal-breakers, (ii) staging questions and requests to the entrepreneur, (iii) treat due diligence as capacity building, (iv) become acquainted with other investors in an enterprise, and (v) lead or empower leadership
IV	DEAL TERMS	Determine appropriate capital and deal terms, including (i) return expectations, size and type of investments (e.g. grants, loan guarantees, debt and demand dividend, convertible debt, subordinated debt, revenue share, profit sharing, equity), (ii) syndication preferences to match investment styles, (iii) using appropriate legal council

STEP	TITLE	DESCRIPTION
V	MANAGEMENT	 Establish a regular financial and impact reporting process that balances need and time, as well as determine shortcuts, benchmarking and portfolio-wide reporting Determine technical assistance and capacity building needs, potentially working directly with the enterprise
VI	ASSESS PERFOR- MANCE	Assess performance goals through the investment lifecycle, including (i) setting clear target social and financial performance, (ii) managing financial returns, (iii) managing impact
VII	CULTIVATING LESSONS	Develop lessons from existing investments and experienced practitioners to develop new models and norms to re-assess and improve steps I to VI

Table 3 – Indicative framework for design of youth-focused funding vehicles. Adapted from (Toniic, 2018).

REFERENCES

Agrawal, A., Catalini, C. and Goldfarb, A. (2013). Some Simple Economics of Crowdfunding. NBER Working Paper No. 19133. doi:10.3386/w19133.

Ahaibwe, G. and Kasirye, I. (2015). Creating Youth Employment Through Entrepreneurship Financing: The Uganda Youth Venture Capital Fund. Kampala, Uganda: Economic Policy Research Centre.

Beal, D., Fetherston, J. and Young, D. (2018). Narrowing the SDG Investment Gap. Boston Consulting Group. Available from: https://www.bcg.com/en-us/publications/2018/narrowing-sdg-investment-gap-imperative-development-finance-institutions.aspx (accessed June 2018).

BSDC and Convergence (2017). The State of Blended Finance. London, UK: Business and Sustainable Development Commission. Available from: http://s3.amazonaws.com/aws-bsdc/BSDC_and_Convergence_
The State of Blended Finance July 2017.pdf (accessed June 2018).

BSDC (2016). Breakthrough Business Models: Exponentially More Social, Lean, Integrated and Circular. London, UK: Business and Sustainable Development Commission. Available from: https://volans.com/wp-content/uploads/2016/09/Volans_Breakthrough-Business-Models_Report_Sep2016.pdf (accessed June 2018).

BSDC. (2017). Better Business, Better World: The Report of the Business and Sustainable Development Commission. London, UK: Business and Sustainable Development Commission. Available from: http://report.businesscommission.org/uploads/BetterBiz-BetterWorld_170215_012417.pdf (accessed July 2018).

CYFI (2017). CYFI and UNCDF launch the "Bank the Youth" Campaign in 7 African countries. Child and Youth Finance International. Available from: https://childfinanceinternational.org/news-and-events/news-blog/entry/cyfi-and-uncdf-launch-the-bank-the-youth-campaign-in-7-african-countries.html (accessed July 2018).

Duran, P. (2016). SDG Fund Launches New Programs in Pacific Islands to Support Youth. Office of the Secretary-General's Envoy on Youth. Available from: http://www.un.org/youthenvoy/2016/04/sdg-fund-launches-new-programs-in-pacific-islands-to-support-youth/ (accessed July 2018).

eMFP (2015). European Dialogue: More Inclusive Finance for Youth: Scalable and Sustainable Delivery Models for Financial and Non-Financial Services. Luxembourg: European Microfinance Platform.

Fulmer, M. (2012). Is Microfinance for You? Entrepreneur. Available from: https://www.entrepreneur.com/article/223391 (accessed July 2018).

GIIN. (2008). Annual Impact Investor Survey. New York, USA: Global Impact Investing Network (GIIN).

Juneja, P. (2017). Youth Entrepreneurship: An Overview. Management Study Guide. Available from: https://www.managementstudyguide.com/youth-entrepreneurship.htm (accessed July 2018).

McKinsey. (2017). The Art of Project Leadership: Delivering the World's Largest Projects. Sydney, Australia: McKinsey Capital Projects & Infrastructure Practice.

Niculescu, M. (2017). Impact investment to close the SDG funding gap. United Nations Development Programme. Available from: http://www.undp.org/content/undp/en/home/blog/2017/7/13/What-kind-of-blender-do-we-need-to-finance-the-SDGs-.html (accessed July 2018).

ODI (2016). Finding the Pipeline: Project Preparation for Sustainable Infrastructure. London, UK: Overseas Development Institute (ODI).

OECD (2013). Youth Entrepreneurship: A Background Paper for the OECD Centre for Entrepreneurship, SMEs and Local Development. Paris, France: Organization for Economic Co-operation and Development (OECD).

Oxford English Dictionary (2018). Crowdfunding. Oxford English Dictionary. Available from: http://oxford-dictionaries.com/definition/english/crowdfunding (accessed July 2018).

Rivas Schurer, V. I. Magala Lule, R. and Lubwama, A.. (2011). Sustainable Business Models for Youth Financial Services: Case Study. Washington DC, USA: The SEEP Network.

Roche-Saunders, G. and Hunt, O. (2017). Crowdfunding for Charities and Social Enterprises. BWB. Available from: https://www.bwbllp.com/file/bbw-cseup-crowdfunding-sum2017-pdf (accessed July 2018).

SDSN Youth & The Social Investment Consultancy. (2017). Supporting Youth-Led Innovation to Achieve the SDGs. New York, USA: SDSN Youth & The Social Investment Consultancy.

Toniic (2018). The 7-Step Framework. Available from: https://www.toniic.com/7-step-framework/ (accessed July 2018).

UN DESA (2015). World Population Projections: The 2015 Revision. New York, USA: United Nations Department of Economics and Social Affairs (UN DESA).

UNCDF (2016). YouthStart Global: Inception Phase - Youth Economic Opportunities Ecosystem Analysis - Uganda Country Report. Dakar, Senegal: YouthStart Global, United Nations Capital Development Fund.

UNCTAD (2015). Policy Guide on Youth Entrepreneurship. Geneva, Switzerland: United Nations Conference on Trade and Development (UNCTAD).

UNDG (2016). 2016 Annual Progress Report of the Sustainable Development Goals Fund. New York NY, USA: United Nations Development Group.

UNGA (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. New York, USA: United Nations General Assembly (UNGA).

United States Census Bureau. (2018, May 27). International Programs. Available from: https://www.census.gov/data-tools/demo/idb/informationGateway.php (accessed July 2018).

UnLtd (2017). European Learning for Youth in Social Entrepreneurship (ELYSE) Final Report. Geneva, Switzerland: The Foundation for Social Entrepreneurs (UnLtd).

USAID (2005). Serving Youth with Microfinance: Perspectives of Microfinance Institutions and Youth Serving Organizations. Washington D.C., USA: USAID.

Vali, N. (2017). More than philanthropy: SDGs are a \$12 trillion opportunity for the private sector. United Nations Development Programme. Available from: http://www.undp.org/content/undp/en/home/blog/2017/8/25/More-than-philanthropy-SDGs-present-an-estimated-US-12-trillion-in-market-opportunities-for-private-sector-through-inclusive-business.html (accessed July 2018).

World Bank (2013). Crowdfunding's Potential for the Developing World. Washington DC, USA: World Bank, Information for Development Program.

YBI (2012). Youth Entrepreneurship Beyond Collateral: How to increase access to capital for young entrepreneurs. London, UK: The Prince's Youth Business International.



The Challenge of Visibility



Empowering Youth Solutions and the Challenge of Visibility

AMY AU (DIGITAL COMMUNICATIONS MANAGER, SUSTAINIA)

INTRODUCTION

Today, one in four people is a young person aged between 15 to 29. With 1.8 million worldwide, there are more young people on Earth than ever before (Commonwealth Secretariat, 2016). Such an unprecedented youth population presents an unprecedented potential to solve some of the greatest challenges of our time. Adopted by the United Nations General Assembly in 2015, the 2030 Agenda for Sustainable Development emphasizes that "children and young women and men are critical agents of change," who hold "the future of humanity and of our planet." (United Nations, 2015, p. 16)

Meanwhile, these young agents of change are confronted with the very challenges they seek to solve. In the 2030 Agenda, youth unemployment was highlighted as a particular concern. According to the World Employment and Social Outlook, global youth unemployment rate stands at 13 percent, or three times higher than the adult rate of 4.3 percent. Worse still, gender inequality has taken root among young workers, putting young women at a disadvantage (International Labour Organization, 2018). Mitigating the effects of climate change on vulnerable groups such as youth in least developed countries and small island states is also one of the targets under Goal 13: Climate Action. This comes as no surprise, as it is no debate that youth will bear the brunt of climate change.

Despite the daunting prospect ahead, young people are determined to embark on the quest to build a better world. *Millennials: The Challenger Generation* (2011) finds that 84 percent of youth believe they have a duty to change the world, and a comparative 82 percent are convinced they have the capacity to do so.

However, young people's capacity is often overlooked, their voices often unheard. In the latest *Global Shapers Survey 2017*, more than half of the youth respondents do not think that young people's views are considered before important decisions are taken. Even two years after the adoption of the 2030 Agenda, António Guterres, Secretary-General of United Nations, highlights the need to empower youth in the *Sustainable Development Goals Report 2017*: "Young people continue to face alarmingly high rates of unemployment, and their voices are yet to be sufficiently included in the deliberations affecting their lives and futures." (UN DESA, 2017, p.2)

SOCIAL MEDIA AS APPARATUS FOR CHANGE

This is where social media comes in. Coming of age with the Internet, Web 2.0, and smartphones, many young people are already digital natives living and breathing social media. The immediacy, interactivity and inexpensiveness of social media have enabled youth to bypass traditional communication channels, express their views, connect to like-minded individuals, get organized, rally support, and mobilize change anywhere, anytime. In fact, quoting again *Millennials: The Challenger Generation*, 61 percent of youth regard social media as the "new power of youth," and 70 percent consider it a force for change. "The people, empowered by social media" is even deemed a greater agent of change than politics (2011, p. 20).

Is social media the game changer of youth empowerment? What are the opportunities and challenges it presents to the young leaders and shapers who want to make themselves heard?

This chapter first explores one of the major barriers

to youth-led solutions, that is, the lack of visibility. Then it focuses on social media, exploring how it can (and cannot) break this barrier. It concludes with recommendations for governments, businesses, NGOs and the media who are looking to to tap into the power of social media to connect, communicate, and celebrate youth-led solutions.

STRUGGLING TO BE HEARD

Awareness of governments and other stakeholders on the presence and value of youth-led solutions brings new opportunities for these solutions to grow and scale. Often overlooked, increased opportunities for visibility and effective means of connecting young innovators with potential partners is essential in determining the success of youth-led solutions (SDSN Youth and The Social Investment Consultancy, 2017).

Published last year, the first edition of Youth Solutions Report calls attention to limited exposure as one of the largest hurdles hindering youth-led solutions, in particular when they are trying to get off the ground. A survey of more than two hundred young entrepreneurs conducted by Youth Solutions Report 2018 further proves that this struggle is real: Among the barriers they face, lack of visibility ranks third, following access to finance and the lack of awareness and networking opportunities — the latter of which is also closely related to visibility.

The causes of lack of visibility are manifold and interrelated. The following are just some of them:

LIMITED COMMUNICATION SKILLS

Communication skills are indispensable to entrepreneurial success. Sir Richard Branson, founder of Virgin Group, regards communication as "the most important skill any leader can possess." It is what "makes the world go around." (2015) Young entrepreneurs need to hone their communication capabilities and strategies to effectively promote their ventures, collaborate with co-workers and partners, and engage potential customers, clients, investors, and anyone else whom they would like to bring on board.

LACK OF NETWORKS

Professional networks benefit youth by providing knowledge, inspiration, and support to facilitate their personal and business growth. *The Global Youth Entrepreneurship Survey* conducted by YBI in 2011 shows that support from networks such as mentorship, training, brand building, and networking is a strong driver of business performance and capability for young entrepreneurs. Young people who are able to rely on a network of professionals have easier access to mentors, more networks, and additional funding.

LIMITED MEDIA COVERAGE

Positive media coverage is crucial to the visibility of youth-led solutions. Media has long focused on negative, attention-grabbing, breaking events, thus relegating solution-focused stories to inside pages or more obscure part of the site. While an increasing number of media outlets are now covering more stories of solutions, and even actively looking out for solutions online to report on, whether or not solutions can grab media's attention in the first place is also influenced by their pitch (communications skills-related) and their relationship with journalists and industry influencers (network-related).

LACK OF POSITIVE SOCIETAL PERCEPTION

This includes people's views about youth, youth entrepreneurship as a career choice, social status of young entrepreneurs, and the media attention they receive (GEM and YBI, 2013). Lukewarm or even negative attitudes makes entrepreneurship less attractive to fellow youth as well as to the broader society, thus generating less visibility and support for youth-led efforts, further hampering their outreach to potential mentors, investors, suppliers, and customers.

LACK OF INTERNET ACCESS

Internet access enables young entrepreneurs to boost their visibility, enter the global marketplace, and expand their customer/client base beyond local markets that rely largely on personal network. Although youth continue to dominate Internet usage, with 70% of the world's youth online today, access is not equally distributed and the "digital divide" remains: 94 percent of youth in developed countries

use the Internet, compared with 67 percent in developing countries and only 30 percent in Least Developed Countries (LDCs) (ITU, 2017).

So why aren't they online? On the supply side, many remain offline simply because there is no infrastructure; on the demand side, affordability, awareness and capability influence the actual adoption and usage of the Internet (Broadband Commission for Sustainable Development, 2016).

CULTURAL AND LANGUAGE BARRIERS

As more youth are looking to work and collaborate across borders, cultural and language differences and subtleties could pose challenges. Not only do messages have to be translated to the local language, but they also have to make sense in the local context. Differences in Internet access and literacy levels further complicate youth entrepreneurs' choice of communication channels and approach.

THE POWER OF SOCIAL

PREVALENCE OF SOCIAL MEDIA

Nowadays, it is almost impossible for many people to imagine a world without social media, so ubiquitous it has become in our everyday lives. Think about how much time you spend facebooking, tweeting, instagramming, and snapchatting everyday – perhaps you're reading this chapter because you clicked through SDSN Youth's social media updates! In fact, there are more than 3 billion active users around the world, spending an average of more than 2 hours on it as their daily routine (Kemp, 2018).

Since the launch of Six Degrees, the first social network in 1997, increasingly available and accessible personal computers, widespread Internet, access to mobile devices and economics have all lowered the barriers to social media (World Economic Forum, 2016). Facebook, the world's most popular social networking platform, reaches more than 2.1 billion active users; other platforms also enjoy impressive numbers of users – YouTube (1.5 billion), Instagram (800 million), Twitter (330 million), and LinkedIn (260 million) (Kemp, 2018). These platforms, which did not even exist 20 years ago, are now an indispensable means of communication for many around

the world.

The rapid adoption of social media is reflected, for example, in studies conducted by the Pew Research Center (2017): when it first began tracking social media usage in the United States back in 2005, just 5% of adults used at least one of the social media platforms. By 2011, that share had risen to half of all Americans, and now 69% of the population uses social media. As for youth usage of social media, the number is even higher: some 88 percent of 18-to 29-year-olds indicate that they use social media. That share falls to 78 percent among those ages 30 to 49, to 64 per cent among those ages 50 to 64 (Smith and Anderson, 2018).

SOCIAL MEDIA GOES MOBILE

Meanwhile, advancement in mobile technologies further accelerates such shifts in social media. To-day, more than one-third of the world's population – 2.9 billion people – now access social media via mobile devices. With 93 percent of active social media users accessing their platforms via mobile devices, mobile is now at the heart of the social media experience (Kemp, 2018).

The shift from browser-based interactions on desktops to app-based experiences on mobile devices has also disrupted social media and its usage: Unlike early social platforms like Friendster and MySpace that enable users to socialize with friends and meet new ones who share similar interests, it is no longer simply a social networking tool. It is evolving to become service providers, supplying news, entertainment, financial transactions, shopping destinations – and the list goes on (World Economic Forum, 2016).

SOCIAL MEDIA, YOUTH'S BEST FRIEND

Today's youth have grown up with the Internet, and have become the fastest adopters of information and communication technologies (ICTs). Often called the "Dotnet generation," "Netizens" or "digital natives," youth not only have the digital skills to use these technologies effectively, but also prefer to take action or express their views online. As the first generation to grow up using social media intensively, young people use social media not just for

entertainment and making friends. They use social media to power every aspect of their lives. Whether it is to make a stand or join a movement, they try to harness social media to drive change. Therefore, the youth of today are very likely to be the first generation to reflect the transformative potential of social media (Keating and Melis, 2017).

And youth themselves do hold some faith in the power of social media. *Millennials: The Challenger Generation* finds that 61 percent of young respondents think social media is the "new power of youth," and 70 percent consider it a force for change. Having witnessed the power of social media in political uprisings such as Iran's Green Revolution and the Arab Spring, as well as in viral global campaigns like #IceBucketChallenge and more recently, #Me-Too, young people are well aware of its capacity as a tool for organization, mobilization, and eventually, change (Euro RSCG Worldwide, 2011).

Young people's belief in social media as a tool for change is also reflected in the *Global Shapers Survey 2017*. When asked "What are the most important factors contributing to youth empowerment?" young respondents regard "access to the internet" (39.6%) and "free media/social media" (39.2%) as two of the three leading factors. This shows that youth are eager to connect to and interact with the rest of the world, while being able to freely voice their views – via the Internet and social media.

SOCIAL MEDIA LEVELS THE PLAYING FIELD

It is no news that social media has disrupted the way we communicate, allowing us to share ideas more immediately, more directly and more democratically than ever before. It presents many opportunities for youth entrepreneurs, such as gaining market intelligence on their target audience, building awareness around the brand, creating meaningful customer/client relationships, and attracting potential customers, clients, partners and investors, thereby helping them overcome the visibility barriers outlined above.

HIGH VISIBILITY AT LOW COST

With access to the Internet on a device – be it a computer, laptop, tablet or smartphone – anyone can easily create a social profile online at no cost. Social media is a serious business: A view from European Youth (2018) highlights social media as an important enabler for young entrepreneurs and startups who need to build brand awareness and recognition fast on a limited budget.

So why is social media a particularly useful tool for young entrepreneurs? Firstly, compared to traditional marketing and advertising, the cost of managing social media accounts (and even boosting posts and running ads on it) is comparatively much lower. Secondly, as ventures create content and link their vision and mission, day-to-day business activities, and important milestones to their social media accounts, they further boost their visibility and transparency online. Thirdly, as the audience can like, comment, share, and send direct messages, entrepreneurs can interact with the audience, and thus improve on their products and services based on their feedback. Meanwhile, engagement with the audience can further boost the ventures' exposure on social media (that is, free word-of-mouth and advertisement), helping them expand their follower base and attract potential customers and clients.

In fact, there is a clear connection between a venture's social media presence and its commercial performance. Take Facebook as an example. In an analysis of roughly one hundred social entrepreneurs, the average annual revenue for ventures that set up dedicated Facebook accounts is roughly \$142,000 - greater than the \$77,000 for those who have not. Those with larger Facebook networks are found to be more successful in raising capital (Roberts, 2013). This indicates that developing a "voice" on social media and effectively communicating ideas to the audience is an important success factor.

CIRCUMVENTING TRADITIONAL MEDIA CHANNELS

By giving youth much higher visibility, social media enables them to bypass traditional media to reach a wider yet more targeted audience. Young entrepreneurs no longer have to rely on media to amplify their voice. Instead, they can now tell their stories with their own voice, in their own words, expressing themselves freely outside of the confines of traditional media. And with social media groups and hashtags, they can actively and directly locate and disseminate their stories to like-minded people far beyond their own network and society.

EASY TO GET STARTED

What's even more encouraging to budding entrepreneurs is that when it comes to generating social-media engagement, social ventures in Internet or marketing sectors do not do any better than their counterparts in other fields. Nor are there advantages for entrepreneurs with deep experience or advanced degrees (Roberts quoting Unreasonable Institute, 2013). This implies it does not necessarily take a tech guru, a marketing expert, or an experienced entrepreneur to generate social media engagement with their ventures.

Every entrepreneur, no matter how young and inexperienced they are, can tap into the power of social media. To do so, one simply has to stay on top of the trends and conversations online, create relevant content, and engage people around it – "... it is just this kind of visibility that translates into greater revenue and investment." (Roberts, 2013)

TAPPING INTO THE POWER OF THE CROWD

The direct, dynamic nature of social media has made possible co-creation, crowdsourcing, crowdfunding and other ways of working together. It helps build virtual networks which connect diverse people from all over the world, compressing time and space as it removes the distance between here and there. Through these networks, young entrepreneurs can make business contacts, and find partners and collaborators.

Furthermore, social media can contribute directly to the financial success of youth ventures. As mentioned earlier, access to finance is the top barrier faced by young entrepreneurs. Tata Consultancy Services (2018) reveals that young entrepreneurs use social media to circumvent traditional banks and obtain funding straight from investors. As many as 70 percent use social media to attract potential investors. It can facilitate contact between entre-

preneurs and investors, and within the alternative finance market, such as crowdfunding. In fact, more than half of the young entrepreneurs say social media enables them to crowdsource.

BUT SOCIAL MEDIA HAS ITS OWN CHAL-LENGES

While social media is easily accessible for young entrepreneurs to promote visibility, the rules of the road may not be as easy as they seem, especially when the social media landscape is constantly changing.

CUTTING THROUGH SOCIAL NOISE

While the ease of content creation is a merit of social media, the fact that everyone can publish their own content has lead to "content overload" or "content shock." An overwhelming amount of content floods our newsfeeds: Every minute, 3.3 million posts are generated on Facebook, 448,800 tweets on Twitter, 65,972 photos on Instagram, 500 hours of videos on YouTube, and 29 million messages on WhatsApp (Allen, 2017). Since there is a finite amount of content people can consume everyday, competition for attention is intense. Standing out from the pack demands resources for better strategy, content, analytics, and (paid) targeted promotion, leaving resource-constrained youth at a disadvantage.

BEATING THE ALGORITHM

Even though social media is fundamentally an open communicative space, as users grow and feeds are flooded with content, social media platforms are adjusting algorithms to make sure they deliver the most relevant content – but the most relevant content to whom is the question. The danger with algorithms is that they are able to structure people's beliefs and behaviour in certain ways for certain purposes, without them actually being aware of it. And since they are not good at determining mistakes, this has contributed to, for example, the spread of fake news and misinformation in recent years.

At the same time, an algorithm's small tweak can have a huge impact on reach and engagement. For example, in early 2018, Facebook changed its algorithms to prioritize updates from friends and family over that from media and brands, causing organic traffic to the latter to drop significantly (Zuckerberg, 2018). Algorithms – and keeping up with their changes – pose a huge challenge to young entrepreneurs, who, again, have limited resources as well as limited strategic knowledge to get the right content into the right hands.

WHAT ABOUT SOCIAL MEDIA'S BAD REPUTATION?

Social media's reputation may have gone bad these days, as in, for example, the recent Facebook-Cambridge Analytica data scandal which involved the unauthorized harvest and use of personal data. But Facebook remains so pervasive no matter what. You feel that you have to be on it, because everyone is there – including the people you want to reach. And it is still powerful as it empowers youth with creative, non-conventional ways to access financial resources, build their brands, cultivate relationships with customers, and develop their ventures in ways that were recently not possible.

SUPPORTING THE YOUNG DIGITAL GENERATION

You may wonder: If youth are so good at social media, why not just leave everything in their hands? Yet in order for young entrepreneurs to be able to capitalize on the visibility benefits of social media, governments and other stakeholders have a role to play:

INTERNET INFRASTRUCTURE

Digital connectivity is the key to unlock the opportunities enabled by social media. 30 percent of youth are still offline (ITU,2017), and they are disproportionately rural, low income, illiterate and female (Broadband Commission for Sustainable Development, 2016). Some social media platforms such as Facebook are already offering Lite versions of their app for emerging markets and areas with poor connectivity, but governments and businesses in relevant sectors need to step up to close the digital divide and provide affordable connectivity that young people need to connect with the rest of the world.

ATTITUDES TOWARDS YOUNG ENTREPRENEURS

Perception is a powerful force of change, and the media (via social media) is well-positioned to change attitudes towards young entrepreneurs. Positive media coverage on youth-owned ventures and young entrepreneurial role models enhances visibility and attractiveness of youth entrepreneurship, thereby cultivating a more supportive environment. (GEM and YBI, 2013). The public and private sectors also have a part to play. Encouraging innovation as well as highlighting young talents and the contributions and benefits of supporting or investing in them via various media channels can help promote awareness, build credibility, and generate support to youth-led innovation (Ernst & Young, 2008), making it easier for youth to find investors, suppliers, customers and advisors. Another added benefit from this is that more young people will become more aware of entrepreneurship as an alternative yet viable career path.

PARTNERSHIPS

As the saying goes, "alone we can do so little; together we can do so much," building partnerships is crucial to tackle the visibility challenge. Governments, businesses, NGOs, universities, research institutes, and various stakeholders should come together to identify, map out, and match young entrepreneurs with potential partners. This can foster knowledge exchange between established practitioners and aspiring young entrepreneurs, and together they can solve common challenges that they face. Social media as a communication medium can help spread the word and source potential young entrepreneurs to join in the alliance of changemakers.

MEDIA CAMPAIGNS AND SHOWCASES

One of the most effective ways to bring various stakeholders together to amplify youth-led solutions is through media campaigns and showcases. The open, instant and participatory nature of social media makes it an effective medium for campaigns and showcases. When solutions, along with other stakeholders, participate in campaigns like Twitter chats and digital showcases, they are able to attract new followers, expand their network, meet new partners, and drive conversation and engagement around issues they care deeply about. This invariably boosts their visibility in the online world.

REACHING OUT TO YOUTH HAS NEVER BEEN SO EASY

Most of this chapter has discussed the power of social media to help youth reach out to people whom they have not been able to in the past. Yet it is easy to forget the other way around – established political and private institutions can also leverage social media to reach out to young people and to collaborate with them. Even just by giving them a pat on the back through social media could help raise awareness of their efforts.

So what are you waiting for? Start looking up #YouthSolutions on social media to discover inspiring youth efforts around the world!

REFERENCES

Allen, R. (2017). What happens online in 60 seconds?. Smart Insights. Available from: https://www.smartinsights.com/internet-marketing-statistics/happens-online-60-seconds/ (accessed July 2018).

Branson, R. (2015). My top 10 quotes on communication. Virgin. Available from: https://www.virgin.com/richard-branson/my-top-10-quotes-on-communication (accessed July 2018).

Broadband Commission for Sustainable Development (2016). Enabling the Use of ICTs and Broadband: Understanding What Works to Stimulate ICT Adoption. Available from: http://www.broadbandcommission.org/Documents/publications/WorkingGrouponDemand-2016.pdf (accessed July 2018).

Commonwealth Secretariat (2016). Global Youth Development Index and Report 2016. London, UK: Commonwealth Secretariat.

Ernst & Young (2008). Entrepreneurs speak out: A call to action for G20 governments. Available from: http://www.ey.com/Publication/vwLUAssets/Entrepreneurs_speak_out_2012/\$FILE/Entrepreneurs%20speak%20out_2012.pdf (accessed July 2018).

Euro RSCG Worldwide (2011). Millennials: The Challenger Generation. Prosumer Report. Available from: https://download.havas.com/prosumer-reports/millennials-the-challenger-generation/ (accessed July 2018).

GEM and YBI (2013). Generation Entrepreneur? The state of global youth entrepreneurship. Global Entrepreneurship Monitor and Youth Business International.

Global Shapers Community (2017). Global Shapers Survey 2017. World Economic Forum. Available from: http://www.shaperssurvey2017.org/static/data/WEF_GSC_Annual_Survey_2017.pdf (accessed July 2018).

International Labour Organization (2018). World Employment and Social Outlook: Trends 2018. Geneva, Switzerland: International Labour Organization. Available from: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms 615594.pdf (accessed July 2018).

ITU (2017). ICT Facts and Figures. Geneva Switzerland: International Telecommunication Union. Available from: https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2017.pdf (accessed July 2018)..

Keating, A. and Melis, G. (2017). Social media and youth political engagement: Preaching to the converted or providing a new voice for youth? The British Journal of Politics and International Relations, 19(4), 877-894.

Kemp, S. (2018). Digital in 2018. We Are Social and Hootsuite. Available from: https://wearesocial.com/blog/2018/01/global-digital-report-2018 (accessed July 2018).

Pew Research Center (2017). Social Media Fact Sheet. Pew Research Center: Internet & Technology. Available from: http://www.pewinternet.org/fact-sheet/social-media/ (accessed July 2018).

Roberts, P. (2013). Facebook Presence Is an Important Clue to a Social Venture's Future. Harvard Business Review. Available from: https://hbr.org/2013/03/facebook-presence-is-an-import (accessed July 2018).

SDSN Youth and The Social Investment Consultancy (2017). Supporting youth-led innovation to achieve the SDGs. SDSN Youth Solutions Report Policy Brief No.1. Available from: http://www.tsiconsultancy.com/wp-content/uploads/2016/01/SDSN-Youth-Policy-Brief.pdf (accessed July 2018).

Smith, A. and Anderson, M. (2018). Social Media Use in 2018. Pew Research Center. Available from: http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/ (accessed July 2018).

Smith, A. and Anderson, M. (2018). Social Media Use in 2018. Pew Research Center. Available from: http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/ (accessed July 2018).

Tata Consultancy Services (2018). Social Media is Serious Business: A view from European Youth. Tata Consultancy Services. Available from: http://sites.tcs.com/generation-direct/wp-content/uploads/2018/03/generation-direct.pdf (accessed July 2018).

UN DESA (2017). Sustainable Development Goals Report 2017. Geneva, Switzerland and New York, NY, USA United Nations.

United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Available from: https://sustainabledevelopment.un.org/post2015/transformingourworld (accessed July 2018).

World Economic Forum (2016). Digital Media and Society Implications in a Hyperconnected Era. Shaping the Future Implications of Digital Media for Society. World Economic Forum. Available from: http://www3.weforum.org/docs/WEFUSA_DigitalMediaAndSociety_Report2016.pdf (accessed July 2018).

YBI (2011). Global Youth Entrepreneurship Survey. Making Entrepreneurship Work. Youth Business International.

Zuckerberg, M. (2018). Facebook. Available from: https://www.facebook.com/zuck/posts/10104413015393571 (accessed July 2018).



Acceleration Programs



Building Youth Skills: Are Acceleration Programs Working for Young People?

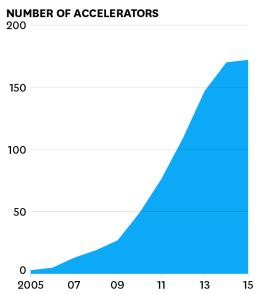
CHLOÉ KHALIFAT-CALBET (ACCELERATOR OFFICER, SOINSOGOOD INCUBATION PROGRAM), GAUTIER LOO (GENERAL MANAGER, SOINSOGOOD INCUBATION PROGRAM), MATHILDE SOUCHON (ACCELERATOR OFFICER, SOINSOGOOD INCUBATION PROGRAM), JACK PARSONS (CHIEF EXECUTIVE OFFICER, BIG YOUTH GROUP), PAUL FRAMPTON (CHAIR, BIG YOUTH GROUP), KIRSTEN NAUDE (HEAD OF INVESTMENT AND PARTNERSHIPS, THE CHILDREN'S SOCIETY), INNA AMESHEVA (PROJECT OFFICER, SOLUTION INITIATIVES, SDSN YOUTH) AND DARIO PISELLI (PROJECT LEADER, SOLUTION INITIATIVES, SDSN YOUTH)

INTRODUCTION

In a global economic landscape characterized by a growing relevance of startups and venture capital, the emergence of acceleration programs as major actors in entrepreneurial and social entrepreneurial systems is usually hailed as an essential component of the innovation pipeline. In their essence, such programs

"support early-stage, growth-driven companies through education, mentorship, and financing. Startups typically enter accelerators for a fixed-period of time, and as part of a cohort of companies. The accelerator experience is a process of intense, rapid, and immersive education aimed at accelerating the life cycle of young innovative companies, compressing years' worth of learning-by-doing into just a few months" (Hathaway 2016a).

While acceleration programs often provide a small amount of seed capital for innovators, their essence fundamentally lies in the provision of mentoring, educational and skills development services (Cohen and Hochberg 2014). From this perspective, acceleration programs are widely touted as "supporting actors" in innovation ecosystems involving complex interactions between entrepreneurs, investors, public actors and academia (Hathaway 2016b), with the function of closing the gap between skills traditionally provided in formal education and new skills increasingly expected by investors specifically and the job market more generally.



As detailed in, inter alia, the preface and Chapter 1 of this Report, the skills gap still represents a major obstacle to investors seeking to support youth-led solutions in many countries. Whilst the validity of the concept has sometimes been debated (Bessen 2014), nearly two thirds of the solutions submitted to this edition of the Youth Solutions Report identified the need for incubation and expert advice as a key means for scaling up, while almost a third defined lack of education and skills development services as a challenge for their success (Chapter 1 and 3 of this Report). Even more importantly, however, youth-led innovation for the SDGs does not just require "a" skills gap to be bridged. Rather, it requires a very specific, transformative way of seeing skills development as part of integrated, mission-oriented innovation systems that operate in the context of sustainable development.

Figure 1 - Number of accelerators in the United States, 2005-2015. Source: Hathaway (2016a).

Existing literature on acceleration programs suggests a significant potential to improve startup outcomes

and cause positive spillovers in the broader community of innovators. For example, Hallen, Bingham and Cohen (2014) find that certain programs provide measurable acceleration in reaching milestones including time to raising venture capital and gaining customer traction. In addition, Feder and Hochberg (2014) illustrate the role played by startup accelerators in boosting the provision of early-stage financing in regional entrepreneurial ecosystems, suggesting that these actors should also be seen as valuable partners in the mobilization of SDG-aligned finance. At the same time, however, the relevant literature also highlights significant variability (in terms of quality and performance) among these programs. First, Hallen, Cohen and Bingham (2018) highlight that the real support provided by acceleration programs is linked to the quality of the education received, rather than on the signal that participation in such programs give to investors or to the access to new networks. Second, and as a consequence, Hallen, Bingham and Cohen (2014) point to the fact that the lower quality of the educational component might lead to ineffective (or even counterproductive) acceleration. Taken together, these findings suggest the need not to take the role of acceleration programs for granted. Rather, the extent to which the ongoing proliferation of such programs will contribute to bridging the skills gap and facilitating youth-led innovation will largely depend on understanding under which conditions they can be made effective, as well as how they can be aligned with a "social good" vision that will help their cohorts contribute to the 17 SDGs and 169 targets enshrined in the 2030 Agenda for Sustainable Development (United Nations 2015).

In this chapter, we provide an initial input to the debate by surveying the views of three leading youth-focused, social acceleration organizations based in Hong Kong and the UK. These are namely: <u>SolnSo-Good</u> (a Hong Kong-based initiative dedicated to social and green innovation, with the aim to support change-makers and to foster the emergence of a new economy, more inclusive and sustainable); <u>The Big Youth Group</u> (a collective of youth-first companies which all share a common purpose – to improve the odds for young people between the ages 18-30 years old); and <u>The Children's Society</u> (a charity that works with the UK's most vulnerable children and young people). Comparing the perspectives from these three entities with diverse mandates, but the common overarching purpose of youth empowerment and social good, allows us to draw some valuable insights regarding enabling youth-led innovation in the realization of the SDGs.

SOINSOGOOD (www.soin-sogood.com)



Youth education has always been a burning issue in Hong Kong. Even though the full-time education attendance rate for youth aged 15-24 has continued to increase and has reached 65.3% in 2014, underprivileged young people continue to be left out (The Commission of Youth 2015).

Hong Kong possesses a very polarized economy, where billionaires and poorer people coexist in a densely populated urban metropolis. That is one of the reasons SoInSoGood was created in 2016, in order to make a difference by catalyzing game-changing solutions to the most pressing economic, social, urban, environmental challenges in Hong Kong and beyond. The program's core focus is on young people, as they are the key to a more sustainable future.

SoInSoGood is the result of a partnership between three entities: the Hong Kong Science and Technology Park (HKSTP), which is one of the largest incubators in Hong Kong; Hong Kong Children and Youth Services (HKCYS), one of the leading organizations supporting children and teenagers in Hong Kong; as well as Groupe SOS, the biggest Social Enterprise in Europe. The project is fully funded by the Hong Kong Jockey Club, Hong Kong's leading charity, ranked the sixth largest charity worldwide.

The SoInSoGood project is composed of two distinct programs. The first one, also called SoInSoGood, is a free six-month Incubation program offering consulting services, mentoring, facilities and a HKD 30,000 (roughly USD 3,800) fund. The services are entirely tailored to the needs of the participating startups. This incubation program is targeted towards "Social-Tech" startups, meaning that the projects must have a social or environmental impact on society by using technology.

The second program, called Social-Up Youth, is an incubation/acceleration program targeted specifically at Hong Kong's underprivileged youngsters. In partnership with the Hong Kong Children and Youth Services (HK-CYS), Social-Up Youth introduces young pioneers to social impact through workshops focusing on innovation. Throughout the program, Social-Up Youth helps the youngsters build a socially-oriented project in order to improve Hong Kong society by combining theoretical and practical training.

CHALLENGES AND SUCCESSES OF SOINSOGOOD

The Social-up Youth program was challenging to build, as it needed to generate an attractive proposition in order to get partners on board. The program also had to get young people interested by helping them understand the benefits they could gain before joining. As a result, the Social-Up Youth curriculum was divided into four key parts.

1) Exploring youth creativity

By participating in a series of workshops on entrepreneurship, interpersonal skills, social issues and new technologies, young people learn about social and environmental issues and benefit from an introduction to the use of technology through activities such as coding, 3D printing and design thinking to tackle these issues. Additionally, social-tech startups from the SolnSoGood acceleration/Incubation program are also invited to share their valuable experiences about social entrepreneurship during sharing sessions with the youngsters. This training leads youngsters to work on their own project with one major mission: come up with a solution to solve a social and/or an environmental issue that Hong Kong faces.

2) Expressing youth views

The main challenge for youngsters is to prepare and expose their project in front of a jury during a pitching competition. Most of them never experienced public speaking before. Having to share their ideas with adults who listen and value their opinion is crucial to the program. By doing so, the youngsters gain a feeling of significance and are more eager to believe in their project and ideas. At the end of the competition, the jury designates four winning teams that can take their innovative ideas to the next level by entering a pre-incubation program.

3) Hands-on experience

The curriculum was built to let youngsters have real work experiences and to practice what they learned during their two-month training period. Each youngster is given the opportunity to accomplish a 60-hour internship at a social enterprise or NGO. The main challenges are to find organizations willing to support them and to motivate the youngsters to actively engage in their internships. More than 80% of the young participants have special education needs with 1/4 of them being school dropouts. This gives them the opportunity to have some hands-on experiences, to gain confidence and to understand that not fitting in school does not mean that they cannot have an important role to play in society.

4) The incubation journey of a young entrepreneur

The most promising teams are offered the chance to be part of an acceleration program especially designed for youngsters by SoInSoGood called Social-Up Youth, during which they can benefit from individual follow-ups by high-profile mentors and training sessions. With limited time and a restricted budget, defining the

scope of their projects and building their prototypes with their mentors is one of the key challenges. Since the start of the program, 200 youngsters have been impacted, 80 training sessions have been organized, 12 000 hours of internships have been accomplished and 14 teams were enrolled in the incubation program and successfully built a first prototype of their projects.

One of the many examples include Green Machine, a team of 5 youngsters from age 15 to 17 who designed and built an automatic recycling machine. With the guidance of their mentor, the team hopes to enter the HK-STP Incubation program in order to gain further knowledge and have a broader impact on Hong Kong's society.

KEY BENEFITS OF THE PROGRAM

Introducing youngsters to social innovation is one of the key benefits of the Social-Up Youth acceleration program, as it allows them to develop a social conscience and have a better understanding of pressing social issues. Youth-led innovative projects can provide a better response to problems that civil society encounters. Participants also develop various skills and a sense of responsibility by gaining confidence that will help them in their future professional lives.

The young participants benefit from the great synergies created between the two SoInSoGood programs. Indeed, incubatees from the incubation program for adults regularly volunteer to tutor youngsters at Social-up Youth: they guide youth innovators during training sessions and share experiences about their personal social entrepreneurship adventure.

How can public policies, investments or other means of support help acceleration programs

Social-Up Youth has been going strong for more than two years, while constantly evolving to better benefit youth entrepreneurs. Nevertheless, the promotion of more robust innovation policies would help boost the program and other similar initiatives. Support through investment and favorable government policies is the principal youth-focused innovation catalyst in today's Hong Kong. More targeted assistance would contribute to building efficient projects and reach young people with innovative ideas, by providing the needed resources for them to develop social impact solutions.

An increase of visibility would also be a good way of boosting the program's impact by touching a broader public and raising awareness towards youth-related issues in Hong Kong. The emergence of youth-targeted programs, represented by initiatives such as those supported by the Hong Kong Jockey Club, the Yeh Family Philanthropy, or the Hong Kong Federation of Youth Groups, has shed light on Hong Kong's disadvantaged youth. By providing opportunities and facilities for the development of young people, many projects urge the Hong Kong government to focus on its youth in order to modify relevant policies and enable funding flows. Catalyzing such support will help programs such as Social-Up Youth to have a broader impact by eventually ending youth poverty in Hong Kong and bringing hope to students, allowing them to dream big, regardless of their social background.

RECOMMENDATIONS FOR OTHER ACCELERATION PROGRAMS

As one of the leading acceleration programs for youngsters in Hong Kong, SolnSoGood would recommend to other organizations supporting young innovators to focus on three critical axes: (1) build, grow and engage your network; (2) create and foster youth engagement; and (3) monitor and evaluate your program.

First, building a strong network of mentors, financial partners and supporting organizations to guide, assist and support acceleration programs for youngsters is critical for the success of any initiative. The absence of a strong pool of knowledge, human and financial resources would compromise the integrity and effectiveness of any youth-related accelerator program. Program staff should define a clear and appealing strategy with an

emphasis on tangible benefits for youngsters and show its alignment with some of the United Nations' Sustainable Development Goals, which are regarded as the most important criteria to develop solutions for improving youth education.

Second, foster youth engagement. For the initiative to appeal to youth, the team working on the project has to be truly motivated, as many hurdles can be in the way. Program staff and mentors are viewed as role models; they have to be equally or even more inspired than the participants, as they are at the core of the initiative and are part of the reason why the youngsters decide to join the program in the first place.

Third, monitor and evaluate. Defining, implementing and following a standardized benchmarking matrix is crucial for evaluating acceleration programs dedicated to youth. All actors from the educational sector in the relevant jurisdiction should push accelerators to work together and define a standardized matrix to better understand the impact of social incubators on the development of young innovators. In the absence of concrete measurement tools, only loose and poor insights on the value of incubators can be gained.

BIG YOUTH GROUP (www.bigyouthgroup.com)



When Big Youth Group (BYG) was formed in February 2018, it was with one clear goal in mind: to better the workplace odds for two million young people (defined as 18-30 year olds) in the UK through mentoring, apprenticeships, startup investment and a nationwide programme of accelerated learning. As Jack Parsons, CEO of the BYG, once stated:

"Young people don't know what they don't know. And the way information is presented in the traditional education system isn't engaging or encouraging to them. Big Youth Group provides young people with the resources and the connections they need to find answers, on their own terms and in the format they prefer. Entrepreneurship and the ability to build a personal brand weren't subjects that were taught to me at school, instead my teacher suggested that I go and work on a building site."

Big Youth Group, which is run by Jack Parsons alongside Chairman Paul Frampton (ex-Havas UK CEO), came about through the realization that the UK's youth population was being under-served by traditional educational solutions, and, furthermore, that young people were struggling with countless issues such as getting onto the property ladder, the cost of further education, the work impact of Brexit, supporting families and, most importantly, getting their first step on the employment ladder to enable economic opportunities.

Through upskilling and inspiring, Big Youth Group hopes to begin to address many of the challenges its young community, which BYG has termed #GenerationNow, faces. From this perspective, the 'why' of Big Youth Group is very broad. In a sense, it is a youth-first collective with a social conscience: by laser focusing on the jobs market for young people, it is trying to provide a tangible route for those who might not otherwise have been given the time of day in a business world that favors the fortunate and few. Providing young people with meaningful workplace experiences and the ability to earn, according to BYG, is a step towards helping them find their purpose.

CHALLENGES AND SUCCESSES OF THE BIG YOUTH GROUP

Big Youth Group's understanding of the problem and its vision of the solution lay with Parsons, himself only 24, who felt that he had been 'set up to fail' by his school and in early jobs. His ability to listen to, engage with and eventually communicate this vision to a young audience initially stemmed from his closer knowledge of this generation than that of – arguably – politicians more advanced in years. Parsons was voted Young Digital Leader of the Year in 2017.

According to BYG's vision, any business looking to capture the interest of young innovators needs to at the very least have a first-hand knowledge of the pressures and challenges young people are currently facing. The risk is that those in positions for change management have an unrealistic perception based on research or simply the observations of their own children. As a consequence, the Big Youth Group puts an emphasis on being insight-driven and asking the community when needed.

Initially, Big Youth Group's community was built on social media. This is an essential and agile tool when connecting with young people, but also – by definition, community-focused. One of the key mantras for Big Youth Group is to 'take the online world offline' and bring young people physically together with those who inspire them. Additionally, to counter the negative experience of Parsons himself, Big Youth Group has outlined a number of pledges that are focused 100% on actionable outcomes – connecting young people to tangible work/life experiences, amplifying the touch points of the community through advocacy and helping young founders grow their early-stage companies.

KEY BENEFITS OF THE PROGRAM

Big Youth Group specifically offers two levels of structured accelerated learning to young entrepreneurs: 1) the Big Youth Accelerator (powered by GoDaddy) which offers insights, inspiration and sometimes investment to young Startups; and 2) a nationwide roadshow, which connects young people with businesses, knowledge and ultimately – apprentice-level roles.

The accelerator program is purposefully centered around three C's, namely: Content, Connections and Coaching, rather than simply providing office space or investment, like many accelerators. The skills taught through Big Youth Accelerator include how to nail the "why" of your business, how to pitch a business idea for funding, how to effectively use marketing and social media to build consideration, how to hire and manage a team and how to structure an early-stage business for growth. Young startups are required to apply to be part of this learning program and those selected are also given support in more tangible ways (connections to funding, online advertising credits, digital upskilling etc.). The first cohort of seven early-stage companies is already mid-way through the program.

The delivery of the content comes directly from key players and industry experts, sharing anecdotes and first-hand experiences, rather than theoretical learning. It is geared towards positivity and success. As shared by Mark Priest, CMO, Hoxo Media (part of Big Youth Accelerator 2018):

"We're immensely proud to be a part of the Big Youth Group Accelerator. It's amazing that as a start-up, we can get access to world-class mentors from global companies. Combine that with the unbelievable emerging talent that's in the room in the shape of the other start-ups, the learning potential and network that comes from being in the Big Youth Group is phenomenal."

The first roadshow event, which took place in March 2018, titled 'It's all about Maximizing Entrepreneurial Enterprise and Energy (MEEE)', was attended by 250 young people and supported by Sage and Accenture. It resulted in 25 young people being connected with business opportunities. The content for the event was deliberately focused on tangible learning outcomes and take-aways, from young people, for young people (tailored by Jack Parsons himself, who was joined by Britain's highest-profile young entrepreneur, Ben Towers), so that the audience could both engage with and action what they learnt, rather than feel like they were in a classroom environment. Demonstrating the innovative approach to maximizing young people touched by BYG, the audience in the room was encouraged to share key take-home messages and the 250 people in the room spread the message to collectively reach 1.7 million in 2 hours.

In a similar vein, in addition to the social amplification of face-to-face events, Big Youth Group has recruited 1,200 ambassadors across multiple sectors of UK business pledging their support to improve the odds for young people. Ambassadors are asked to commit ten hours a year to mentoring, amplifying BYG messaging, supporting at events and connecting the BYG to an additional three ambassadors, employing community advocacy as a means of increasing the impact. Big Youth Group will also be able to offer responsive ad hoc support to young people facing workplace challenges.

HOW CAN PUBLIC POLICIES, INVESTMENTS OR OTHER MEANS OF SUPPORT HELP ACCELERATION PROGRAMS

Big Youth Group's approach radically refutes the current education system, where even in the case of Business Studies, the skills which are useful to an entrepreneur or a startup team are overlooked, as noted by Eva Strauss, Senior Tutor, MPW:

"Business Studies now lacks any coursework; an element previously included, under which learners undertook their own primary research. Also gone is the pre-released case study approach, which gave students the opportunity to research a specific business scenario. When coursework still existed, most students imagined that they were setting up a business from scratch. Instead, the syllabus is now completely textbook-driven, and specific business examples tend to be 'boring' and 'mainstream'. The over-riding philosophy of examiners is to set questions based on household name firms, and to make these gender & ethnicity-neutral; this inevitably means supermarkets, clothing retailers & travel companies."

With the UK's 2017 uptake of apprenticeships seeing a 24% drop on the previous year (Moules 2018), and think tank Reform suggesting that 40% do not meet the historical or international definition of 'apprenticeship' (Richmond 2018), the recruitment landscape for businesses is arguably bleak. With young people's expectations of work, flexibility and learning radically changing, Big Youth Group has pledged to help businesses, big and small, to better understand young people and adapt their appeal. Big Youth Group already advises a range of large organisations on how to source the best diverse, young talent, how to attract young people in a way that is truly inclusive and how to bring the voice of the young person into the room. For it to work with the UK government in a more effective way, the latter would necessarily have to anchor programs like the BYG in a solid system of further education that takes into account the need to equip young people and all entrepreneurs with new skills and capabilities. However, there is no vision for such system at the moment.

RECOMMENDATIONS FOR OTHER ORGANISATIONS WORKING TO SUPPORT YOUTH-LED INNOVATION

While Big Youth Group might still be a fledgling organization, there is clear evidence that this model is working. There is active support from the likes of Google, Twitter, the Guardian, Tech UK, the Mayor of London, the Prince's Trust and many more – not to mention an online community of millions. The real successes, however, are the youth-run startups who have gained valuable support and the young people who will today, tomorrow and in the future, take the first steps towards achieving their career goals.

As a consequence, BYG believes that similar organisations would have to focus on ensuring that the delivery of the educational components of their programs comes directly from key players and industry experts, sharing anecdotes and first-hand experiences, rather than theoretical learning. In addition, BYG suggests the need for other acceleration programs to be continuously insight-driven, requesting inputs from the community of innovators and constantly challenging established assumptions about the obstacles facing young people, as well as the potential solutions.



THE CHILDREN'S SOCIETY (www.childrenssociety.org.uk)

The Children's Society is a charity founded in 1881, who seeks to support vul-

nerable children in England and Wales. Despite its long history and focus on policy and advocacy work, in the last 18 months The Children's Society has been exploring what it looks like to break cycles of disadvantage affecting children and young people. How can we stop just sticking plasters on things that happen, and start tackling root causes and achieving even greater impact? How can we go further in creating new models of support for young people and going beyond this to affect change at a legislative, political, cultural and social level? How can we be disruptive – not in a 'start-up innovation' sense but in a tackling the cycles of issues experienced time and time again, and in improving the systems that are meant to help.

Nowhere is the challenge more relevant than in the digital space. The deep irony of the digital revolution is that, as the pace of change throws all our standard operating responses into chaos – the fundamental needs of young people don't really change very much – to be safe, loved, cared for, protected from risks, empowered to be resilient, supported with adequate resources. Whether young people are included or excluded from the digital world, we know that its impact is ever increasing, and that there is huge potential in facing up to this reality and embracing the use technology to improve the lives of vulnerable young people.

A key strand of this approach is our partnership with Bethnal Green Ventures (BGV), Europe's leading social tech accelerator. Together we have embarked on sponsoring and supporting 10 social tech ventures through the accelerator process over the next 3 years. The idea is simple. How can we support the development of social technology that could make a massive difference to vulnerable young people – way beyond anything we could develop in house or commission out?

CHALLENGES AND SUCCESSES OF THE CHILDREN'S SOCIETY

We are now a year into that journey and have encountered a number of challenges while building this approach. We have found that you will need to establish a good balance between social tech ventures that are at very early stage (idea/concept), and those who have a prototype and who might already be starting to sell their product out. To run an accelerator programme which is all things to all ventures is very tricky, The mix of content for the accelerator programme should be well balanced, informative and provide specialist and deeper support for ventures where required.

The accelerator programme is always moving forward and extremely fast paced. Ventures need to be prepared to be committed for the duration of the 13 weeks in order to make the most of it. Innovation environments generally feel like this – non-stop and sometimes relentless. This can generate 'innovation fatigue' which can lead, to disengagement, non-attendance and feeling overwhelmed.

It is always important to keep you call-out (for ideas, concepts, solutions, ventures etc.) aligned with your overall aims and objectives. We dithered about whether we do an all-encompassing call-out (being purposefully vague about problems / challenges areas, to ensure we were able to attract submissions from a wide range of ventures) or a very specific, well targeted call-out (focused on detailed challenge areas which we felt might limit the amount of submissions we would receive).

KEY BENEFITS OF THE PROGRAM

The Children's Society decided that rather than invest solely in our tech development by our own steam, we instead sought fresh ideas, start-ups, and new collaborators that could help us accelerate the impact we seek to achieve. Hence, the decision to partner with BGV. A structured accelerator already has investment in place i.e. the venture's place on the programme is secured by an external investor (whether they take equity / share or just gift it – it's all paid for and set up ready to go).

Working as a partner to an accelerator means there is a quicker way to explore and understand technological solutions to break the cycles of disadvantage faced by young people than the Children's Society could do alone. Through the use of an existing, leading accelerator programme, we are thereby de-risking operational delivery and speeding up progress in achieving these outcomes.

A structured acceleration programme allows a venture to build momentum. They start off in the programme exploring business basics (key messaging, brand, marketing etc.) and end with their business plan and investment strategy which is included in their pitch. Allowing them access to expert partners, mentors, established founders and advisors as part of the programme allows them to, week by week, receive detailed guidance and direction and be reflective on what they have learnt and how they have applied it to their business. Being able to link ventures with specific investors / funders is crucial to their sustainability and these relationships can only be achieved through a structured and well-timed programme of work.

Equity recycling is a key benefit to an accelerator. Successful ventures will return equity to Bethnal Green Ventures to be re-invested into future cohorts of ventures – ensuring that we are essentially creating a cycle of creating impact that is sustainable and could be potentially ongoing.

HOW CAN PUBLIC POLICIES, INVESTMENTS OR OTHER MEANS OF SUPPORT HELP ACCELERATION PROGRAMS

In addition to any social value from the projects that emerge from the accelerator programme, we have found that we now have access into a larger network of potential partners and investors. Bethnal Green Ventures accelerator is backed by some of the types of funders and partners that the Children's Society currently is and would like to work with in future. These include a number of market shaping and innovation funders, but also a host of entrepreneurs and tech start-ups that represent primary partners for us with future work. The value of this has already paid off, for example, in the receipt of a grant from Nominet Trust to run a national digital reach programme, assisting vulnerable young people to develop digital skills.

Through this programme –we are able to influence a whole range of new ventures so that they more adequately addressing the issues and challenges faced by vulnerable young people. The fact that these solutions are digital in nature means scaling is easier, faster and less expensive. It also means that delivering these alongside face-to-face interventions as a blended approach has a much more impactful outcome (24/7 access, anonymity, confidentiality, real-time response times)

These types of innovation systems enable us and provide the time to explore and better understand the problem / challenge / social issue as a starting point. This is crucial to making an informed decision about the type of solution which is required, and detailed understanding about whether it is going to have the desired impact. This saves time, energy and cost on the innovation journey – hence reaching scale quicker and most likely resulting in an increased and deeper impact.

RECOMMENDATIONS FOR OTHER ORGANISATIONS WORKING TO SUPPORT YOUTH-LED INNOVATION

Through this process, we continue to encourage and support young innovators. Just recently we held a Q&A session for young people to talk to us about their ideas, concepts and social issues they wanted to address. It is important for us to be an organisation that wants to hear and explore new ideas is imperative. Helping young innovators to harness this creativity and realise their potential is like gold dust.

Being transparent and open with young innovators about expectations is imperative. Vagueness, disappointment, agitation can easily creep in later down the line if not agreed up front. Having some sort of agreement to sign where each party understands objectives, roles and responsibilities is ideal.

I can't emphasise enough how crucial the chemistry of the team and the scale for ambition (rather than their product or solution) are. The latter will always change and develop ('pivoting' is a natural part of an innovation journey) – but the *people* taking it forward will either make or break success.

A focus on 'development themes' will be important for young innovators. This gives a good coverage of what they might encounter in their development journey. The mix of content for instance, on the Bethnal Green Ventures is good. It includes founder confidentials (founders of start-ups who have 'made it' sharing their journey and their experiences), mentoring with experts and themed weeks focusing on important aspects of building a business like marketing, branding, investment strategy, user research and design.

The 13 week accelerator programme is structured to build as it goes, culminating in a 'demo-day' at which ventures have the opportunity to pitch their product. It is positive to see how ventures grow over the 13 weeks of the accelerator to demo day. Allow young innovators ample opportunity to reflect on their growth and perfect their pitches (whether this is for speaking at conferences, networking at events or taking a product to market).

CONCLUSION

The three examples of youth-focused acceleration projects surveyed in this Chapter demonstrate that there are diverse models of enabling youth-led social innovation, starting with a more traditional acceleration-based model (SoInSoGood), then examining the importance of upskilling and ongoing, practical-based youth training (Big Youth Group) and then moving onto the charity sector with its own innovation and acceleration platform (The Children's Society). Learning from the challenges and successes of these and other existing initiatives can pave the way towards more robust innovation-driven ecosystems with young people at their heart. In particular, a few elements stand out across the three cases, and could serve as recommendations for similar programs and initiatives. First, in order to maintain youth engagement and respond to actual needs of the participants, acceleration programs should facilitate mutual exchange between the cohort of innovators and the accelerator's organizers, avoiding one-size-fits-all approaches and standardized assumptions. Second, it is important for such programs to connect young people to tangible work/life experiences that link the acceleration process with broader social good objectives, allowing the vision of the 2030 Agenda to inform the way early-stage entrepreneurs perceive and conduct their business. Third, acceleration programs should put more emphasis on monitoring and evaluation, defining standardized benchmarking matrices that are not only necessary to more effectively assess results, but also capable of helping innovators align their own impact assessment with wider sustainable development frameworks. Finally, acceleration programs should be able to rely on more integrated, mission-oriented, public innovation systems. These systems can enable the accelerator's managers to make informed decisions about the types of solutions that are socially required, prompting them to reorient the mentoring and educational components of their programs and thereby effectively contributing to training startups that have the SDGs at their core.

REFERENCES

Bessen, J. (25 August 2014). Employers aren't just whining - the "skills gap" is real. Harvard Business Review. Available from: https://hbr.org/2014/08/employers-arent-just-whining-the-skills-gap-is-real (accessed July 2018).

Cohen, S.G. and Hochberg, Y.V. (2014). Accelerating Startups: The Seed Accelerator Phenomenon. Available at SSRN: http://dx.doi.org/10.2139/ssrn.2418000.

Feder, D.C. and Hochberg, Y.V. (2014). Accelerators and the Regional Supply of Venture Capital Investment. Available from: http://www.seedrankings.com/pdf/accelerators-and-regional-suppy-of-vc-investment.pdf (accessed July 2018).

Hallen, B.L., Bingham, C.B., and Cohen, S.G. (2014). Do Accelerators Accelerate? A Study of Venture Accelerators as a Path to Success. Academy of Management Proceedings, 2014(1). https://doi.org/10.5465/ambpp.2014.185.

Hallen, B.L., Cohen, S.G. and Bingham, C.B. (2018) Do Accelerators Accelerate? If So, How? The Impact of Intensive Learning from Others on New Venture Development. Available at SSRN: https://dx.doi.org/10.2139/ssrn.2719810 (accessed July 2018).

Hathaway, I. (2016a). What startup accelerators really do. Harvard Business Review. Available from: https://hbr.org/2016/03/what-startup-accelerators-really-do (accessed July 2018).

Hathaway, I. (2016b). Accelerating growth: startup accelerator programs in the United States. Brookings. Available from: https://www.brookings.edu/research/accelerating-growth-startup-accelerator-programs-in-the-united-states/ (accessed July 2018).

Moules, J. (19 April 2018). Big drop in uptake of UK's 'unfit for purpose' apprenticeship levy. The Financial Times. Available from: https://www.ft.com/content/93204bc2-43bb-11e8-93cf-67ac3a6482fd (accessed July 2018).

The Commission of Youth (2015). Youth in Hong Kong, a Statistical Profile. Executive Summary. Available from: http://www.coy.gov.hk/filemanager/template/common/images/archive/research/YSP_2015_SP_English_Executive_Summary.pdf (accessed July 2018).

Richmond, T. (2018). The great training robbery. Assessing the first year of the apprenticeships levy. Reform. Available from: http://www.reform.uk/wp-content/uploads/2018/04/The-great-training-robbery-assessing-the-first-year-of-the-apprenticeship-levy.pdf (accessed July 2018).

United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Available from: https://sustainabledevelopment.un.org/post2015/transformingourworld (accessed July 2018).



Policy Advocacy at the UN Level



Advancing Youth Skills and Participation in Public Discourse: The Importance of Policy Advocacy

UN MAJOR GROUP FOR CHILDREN AND YOUTH

INTRODUCTION

The United Nations (UN) have the power to convene country governments and a broad range of stakeholders to discuss pressing issues of our time, with the aim of taking deliberate action towards a more sustainable, inclusive, and peaceful society. In the process, the UN establish normative frameworks that can serve as recommendations for country governments to consider when designing, implementing, and monitoring policies at a national and local level. As such, it is paramount for young people to understand the political and institutional architecture at the UN, in order to share their views and perspectives on all sustainable development related discussions. A collective and concerted approach can go a long way towards effectively informing the dialogue, helping shape the narrative at the UN and providing useful recommendations to countries.

In this context, however, we encounter knowledge gaps, bottlenecks to progress, and emerging issues. Overcoming these barriers, which can be manifest in many different forms (structural, institutional, behavioural, political, etc.), requires a type of thinking and a way of doing that is different than the "business as usual" approach that has put society on the current path of rising inequality, anthropogenic climate change, increasing humanitarian crises, and other challenges that will have repercussions for many years. Reversing these trends and aligning with the aspirations outlined in the 2030 Agenda for Sustainable Development (United Nations, 2015) is paramount. Moving forward, policies should reflect the level of ambition, commitment, and urgency needed to turn rhetoric into reality. Leaps in accelerating progress will come from innovative approaches to understanding the multi-dimensionality of issues and designing solutions that are fundamentally people-centred, planet-sensitive and context-specific.

Young people have a unique opportunity and important responsibility to share their solutions at the local, national, and global level. Not only will this inspire others to take action, but also allow for sharing of lessons from both successes and failures. It will help demystify global policy processes, making every community of young people realize that they too can contribute to the discussion and have an impact. Just as the UN is a place to convene over various social, economic, and environmental concerns, it will only accomplish its role in setting a path for sustainable development if it provides institutional spaces conducive for sharing innovative solutions from across all relevant actors and stakeholders.

SETTING CONTEXT: 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

The 70th session of the United Nations General Assembly was historic in ushering in a new era of sustainable development, making 2015 a year of transformative change. The UN Sustainable Development Summit saw the 193-member states adopt, celebrate, and make commitments to the 2030 Agenda for Sustainable Development. The 17 Sustainable Development Goals highlighted are a revitalized commitment to build from the Millennium Development Goals, while aspiring to close inequity gaps in an effort to "leave no one behind" locally and globally. The SDGs are integrated and indivisible, balancing the three dimensions of sustainable

development: economic, social and environmental. They have established a framework for development over the next 15 years, while building a thread between various sustainable development frameworks that have been adopted in recent years. These include the 10 Year Framework of Programmes on Sustainable Consumption and Production, Sendai Framework for Disaster Risk Reduction, Addis Ababa Action Agenda, COP21 Paris Climate Change Agreement, and New Urban Agenda. Other notable outcomes from the first World Humanitarian Summit, 14th UN Conference on Trade & Development and inaugural Oceans Conference, among others, demonstrate the way in which the UN system is aligning its objectives and activities to better support implementation, monitoring, follow-up and review of the 2030 Agenda.

Young people, making up close to 50% of the world's population, are torchbearers of the agenda - as they will be the ones held accountable for implementing it in its entirety and ensuring its continuity into the next generation. Younger generations have the potential to make change, and yet they must equip themselves with the proper tools and resources to meaningfully participate in the design, implementation, monitoring, review, and reporting of policies. Young practitioners, who are also growing up in an increasing socio-technological environment, have an especially important role in informing the appropriate application of science, technology, and innovation in order to identify emerging issues and develop solutions to overcome roadblocks in achieving sustainable development. These processes have chimed in a new era of sustainable development, reinvigorating efforts towards a shared vision of "the future we want". As such, young people have both the responsibility and opportunity to work collectively as a constituency, as well as with other stakeholders to turn the "world we want" into "the one we live in". This will not come passively, but rather demands innovative approaches to policy at all levels to overcome normative frameworks hindering acceleration of progress towards the SDGs.

The article is structured in a way that aims to give readers a perspective into the importance of bringing youth voices and solutions into global policy dialogues, as well as avenues on how to do so. This starts with understanding the institutional architecture of the UN and the legal mechanisms that have been created to ensure spaces for youth to take part in policy dialogues. It then goes into a review of principles for meaningful youth engagement, providing concrete recommendations on how to go beyond tokenistic engagement of young people. The next section highlights entry-points for engaging in and sharing youth solutions for the implementation, monitoring follow-up and review of the SDGs. The last part of the article provides recommendations for promoting skills-building, lifelong learning, and sustainable livelihoods, as well as purposeful innovation in the context of rapidly changing social, economic, and environmental conditions.

INSTITUTIONAL SPACES FOR YOUTH PARTICIPATION AT THE UN

The Earth Summit in 1992 recognized that achieving sustainable development would require the active participation of all sectors of society and all types of people. Agenda 21, its outcome, formalized nine sectors and rights-holder groups of society as the main channels through which broad participation would be facilitated in UN activities related to sustainable development (United Nations Conference on Environment and Development 1992). This initial group was later expanded as part of the Rio+20 Conference. Officially called major groups, these have since been expanded and referenced in over a dozen UN General Assembly resolutions as "Major Groups and other Stakeholders". The UN Major Group for Children and Youth (UN MGCY) receives



its mandate from these resolutions, bilateral agreements and/or the terms of reference of its specific entities. As such, it is the UN General Assembly-mandated, official, formal and self-organised space for children and youth (under 30) to contribute to and engage in certain intergovernmental and allied policy processes at the UN.

Its mission is to act as a bridge between young people and the UN system in order to ensure their right to meaningful participation is realized. It does so by engaging formal and informal communities of young people, in the design, implementation, monitoring, and follow-up and review of sustainable development policies at all levels. Today, the network comprises over 6500+ entities across 170+ countries and territories.

PRINCIPLES FOR MEANINGFUL YOUTH PARTICIPATION

The principles for meaningful youth participation are derived from consultation processes facilitated by the UN MGCY and build on related efforts throughout the UN system (UN MGCY 2017). The UN MGCY sees them as intrinsic to any form of meaningful youth engagement with the UN. In addition, these principles draw legitimacy from rights already granted to young people through engagement with the UN in various avenues.

Self-Organised

In the context of engagement, self-organization implies autonomy and freedom from outside control or pressure. Each group of young people can and will decide the best structure and working style for them based on their interests and capacities.

Legally Mandated and Rights-Based

In the context of the UN, the imperative to engage in any initiative/avenue should be formally enshrined as a requirement in its rules of procedure or modalities through wording that makes it clear that the 'youth' in the conversation have an equal say in any decision. This is critical to prevent an ad hoc approach and/or be entirely dependent on the prerogative of the engaging party.

Designated

Young people should not be made to compete with other stakeholders, parties or groups for space in the modalities and process of engagement. Specific designated/reserved seats must be made available in mechanisms through which they engage.

Well Resourced

Engagement is a right, and young people should not have to spend out of pocket for the realisation of this right. Arranging the budget for the engagement of young people should be the obligation of the engaging entity/entities.

Accountable

To ensure far-reaching engagement, the respective engagement structures should have built in accountability, reporting and feedback mechanisms towards a constituency of young people.

UN ENTRY-POINTS FOR YOUNG INNOVATORS TO CONTRIBUTE TO THE SDGS

Voluntary National Reviews

The 2017 UN High Level Political Forum (HLPF) saw 44 countries conducting Voluntary National Reviews (VNRs) on their progress to meet the 2030 Agenda. The 2018 HLPF will see another 48 countries report (United Nations 2018).

If these reviews are going to truly reflect the views of all citizens and peoples, while meeting the ambition of the agenda and building a world for people and planet, then young people need to be meaningfully includ-

ed in the creation, implementation and monitoring processes at all levels, especially, the national. 2017 saw an increase in the number of Governments who meaningfully engaged young people in their VNRs, however there is a lot of progress still to be made with the majority of Member States who presented not mentioning or consulting with young people throughout the process.

The outcome document for a side event on "Enhancing the inclusiveness of VNRs", held during the 2017 ECOSOC Youth Forum, focused on the need to bridge the intergenerational gap in the following ways (United Nations 2017):

- From a more top-down perspective all data should be disaggregated with age-labels to provide insights
 in the current state of affairs of youth in the country and to identify positive and negative trends that
 could be used in the VNR's. Data disaggregation plays a role at the global level where age is an important component of the SDG indicators, but should also be used on the national level to connect more
 closely with youth in the country's own context.
- From a more bottom-up perspective youth should be actively engaged in the collection of data. Since young people themselves are in the best position to provide relevant data concerning youth issues they will enhance the quality of the Review but also feel a sense of ownership over the Reviewing process. A best practice is the approach of UNAIDS where young people in the field collect data about sexual and reproductive health rights issues.
- To be most successful in involving youth in the reviewing process, young people should visibly be a
 priority of the reviewing state. Countries should make sure to give efforts of youth organisations and
 young innovators who contribute to achieving the SDGs a place in the report. There are numerous
 youth organizations who meaningfully contribute to the implementation of the SDGs. A first and important step would be to give credit to them and to the way they are committed to making the Agenda
 a success.

Paragraph 89 Report: Staying Accountable

Major groups and other stakeholders (MGoS) are crucial to the successful implementation, follow-up, and review of the 2030 Agenda. In preparation for the HLPF, its mandate areas and associated follow up processes, MGoS contributed at all levels, including through the regional and national mechanisms.

Paragraph 89 of the 2030 Agenda (A/RES/70/1), paragraph 12 of the Follow up and Review of the 2030 Agenda at the Global Level ((A/70/L.60) and paragraphs 14 and 15 of General Assembly Resolution 67/290 (A/RES/67/290), together provide MGoS an opportunity to "report on their contribution to the implementation of the Agenda" and speak to the topics of the HLPF, while also highlighting opportunities and barriers for more effective engagement, especially considering the difference in the respective roles of rights holders and duty bearers.

Through these processes, the UN MGCY seeks to highlight ways in which the young people's constituency, including young innovators, is working towards realising the agenda, and how they perceive their role in scaling-up implementation. The four critical areas of work are identified as: 1) Policy and Advocacy, 2) Capacity Building, 3) Youth Action and 4) Knowledge.

Policy and Advocacy

This area of work is aimed at facilitating the collective and meaningful participation of young people in official and formal avenues of policy design, implementation, monitoring, follow-up and review at all levels. These include, but are not limited to: intergovernmental deliberations (negotiations, reviews and reporting), substantive deliberations, briefings, special fora, UN reports and UN system-wide policy.

Examples:

- Global Level: official constituency-led thematic papers that provide inputs to processes (e.g. expert group meetings, inter-sessional of intergovernmental processes, or for advocacy in mainstream messages).
- National Level: official or shadow report engagement at national monitoring and reporting processes.
- Advice provided to entities in the UN on policy and substantive matters related to youth priorities
 and processes of meaningful engagement (e.g. across the scope of those entities' activities, in the
 context of their engagement and thematic architecture).
- Facilitated participation of young people in existing stakeholder structures, partnerships, platforms and mechanisms in the UN system and creation of interlinkages among key stakeholders.

Capacity Building

This area of work seeks to facilitate the establishment a capacity building processes and activities for young people aimed at enhancing understanding, knowledge and skills in relation to sustainable development, meaningful engagement, the UN system and its various technical and political processes and organs.

Examples:

- Capacity building for youth organisations to incorporate the 2030 Agenda and other sustainable development frameworks into their activities.
- Training and capacity building for youth led initiatives to engage in formal national, regional and international avenues associated with the UN.
- Capacity building for young people to better understand the UN, its respective frameworks and processes.

Knowledge

The third area of work is concerned with providing young people a platform for dialogue, in order to create an evidence base for best practices in design, implementation, monitoring, follow-up and review of sustainable development frameworks and affiliated processes. This includes the assessment of existing knowledge, the generation of new knowledge, the identification of emerging issues and effective use and dissemination of knowledge to inform policy processes. It should include inputs from formal, informal, traditional and indigenous knowledge streams.

Examples:

- Youth-led, peer reviewed science policy interface publications related to the themes of the respective UN processes.
- Youth-led assessment of existing knowledge, for example to better understand the implications of emerging technologies on the social, environmental, and economic dimensions of youth lives.
- Promotion of both qualitative and quantitative knowledge, while provide equal weight to all sources of knowledge (e.g. formal, informal, indigenous, etc.).

Action

The fourth area of action is more directly concerned with youth-led innovation and seeks to provide young people with a platform that encourages them to join, lead, showcase and share innovative and effective actions aimed at addressing the needs of all people and the planet.

Examples:

• Identification of youth-led best practices, mapping of sample activities across thematic and regional contexts and analysis of how youth actions contribute to the implementation, follow-up and review

- of targets, indicators, and deliverables across various sustainable development frameworks.
- Case studies of organisations reporting on deliverables, targets and indicators of the respective frameworks (including through voluntary commitments and the UN Department of Economic and Social Affairs' partnerships platform).

CHANGING ENVIRONMENTS: HOW IS THE UN RESPONDING?

While systemic issues persist (e.g. anthropogenic climate change, increasing socio-political exclusion, widening inequality), new issues are rapidly emerging (e.g. cybersecurity, microplastic contamination). These bring uncertainty in an increasingly volatile world, highlighting the value of rapidly adaptive governance systems that are able to scan the horizon for emerging issues and plan proactively. While integrating the social, economic, and environmental dimensions is a challenge, this should not be seen as a trade-off, but rather a deliberate goal in the design and implementation of sustainable development agendas. Developing solutions that address these unparalleled changes in technology, globalization, population demographics, and economic landscapes continues to remain a challenge.

More specifically, when speaking about 'future of work', relevant questions arise: How will these changes shape and transform the labour markets around the world? How will changing labour markets differ across sectors (e.g. water, energy, etc.), territorial landscapes (e.g. urban-rural continuum), stakeholder groups (e.g. women, youth, people with disabilities, indigenous people, etc.), and formal versus informal economies? How will changing regulations influence the governance around work, relationship between workers and employees, and societal structures? How will skill-sets need to adapt and how can the mismatch between education, jobs, and sustainable livelihoods be closed?

Technology trends - dominant in discussions on the future of work - including automation, artificial intelligence, Internet of Things, additive printing, genome editing, and connectivity, offer opportunities for improved productivity, increased quality, and cost optimization. However, there is growing uncertainty surrounding the trajectories of these trends and whether these future projections will accelerate or slow down sustainable development progress. While previous technological revolutions (e.g. agricultural, industrial) had impact on labor markets, they were not without institutional, socio-political, and economic changes. Efforts such as the Global Initiative on Decent Jobs for Youth¹, a UN-system wide campaign spearheaded by the International Labor Organization, are taking a proactive step towards convening stakeholders to fill knowledge gaps and provide guidelines for ensuring decent jobs and livelihoods for young people.

SKILLS-BUILDING, LIFELONG LEARNING, AND SUSTAINABLE LIVELIHOODS

Notions around education, capacity building, and lifelong learning are becoming increasingly important. Each year, the Multi-Stakeholder Forum on Science, Technology and Innovation (STI) for the SDGs highlights the



importance of capacity building with a dedicated plenary session aimed at sharing experiences, recommendations, and best practices². It has focused on, amongst other topics, building human and institutional STI capacities, effective scientific advisory systems, national and regional STI

¹ See https://www.ilo.org/global/topics/youth-em-ployment/databases-platforms/global-initiative-de-cent-jobs/lang--en/index.htm

² See https://www.un.org/ecosoc/en/events/2018-6.

policies and programmes, exchange of knowledge and appropriate technology production, dissemination and utilization to spur innovation from the grassroots levels all the way to large-scale production. In June 2018 (at the 3rd Annual Forum), the UN MGCY held an event in collaboration with the Mission of Denmark to the UN and Office of the Secretary General's Envoy on Youth to convene a meaningful and focused discussion on the importance of lifelong learning and skills-building from an intergenerational lens.

In the discussion, there was broad recognition that STI capabilities can contribute to accelerating progress towards the 2030 Agenda if used well, while knowledge sharing provides a basis for informed decision making and guiding of policy decisions.

Some recommendations include the following:

- 1) Closing the gap in education between and within countries, high and low-income families, stable and fragile contexts, and rural and urban areas;
- 2) Creating equal access to digital literacy to democratize use of and ensure appropriate applications of ICTs and other technologies;
- 3) Promoting decent jobs for youth that create livelihoods in communities in ways that fill sustainable development gaps and promote innovate ways to deliver appropriate solution;
- 4) Developing solutions that address the multidimensionality of poverty.
- 5) Promote a shift in views about the skills needed to achieve SDGs, requiring disruptive thinking in the STI environment.

Often, the market-driven obsession with "delivering innovations" is misguided. Rather, focus needs to shift to thinking about effective solutions for "innovating the delivery" of existing and proven sustainable solutions and knowledge. This should be done in ways that close gender and digital divides, respect human rights and planetary boundaries, and overcome structural barriers to access.

In doing so, skills should be identified, not based on private sector and profit-maximizing needs but principles of sustainable development. If skills training is narrowly focused on the pattern of job creation, then youth will lack the flexibility and skillsets to adapt to the fast-changing landscape of the future and fail to be active civic agents. As such, education needs to be done in ways that promotes complementarity between formal and informal skills that are context-specific. Basic literacy, creativity, numeracy, teamwork, and speaking skills must stem from diverse knowledge sources and are among those that cannot be neglected in the increasing focus on digital literacy education.

PURPOSEFUL INNOVATION

Youth play an integral role in implementing the 2030 Sustainable Development, including the full scope of the Sustainable Development Goals and associated intergovernmental frameworks. In order to operationalize this agenda into action, paragraph 70 of the 2030 Agenda highlights the importance of launching a Technology Facilitation Mechanism, as well as strengthening the science-policy interface (SPI). The science-technology-innovation mechanism (STIs) and SPIs have become an increasingly important component of sustainable development within the UN system. They provide the foundation for empirically-informed policies, facilitate the use of science as an enabler in policy implementation and review, and provide a unique scientific lens into monitoring impact. Furthermore, SPIs have been integral in identifying emerging priorities, drawing links between the interconnected nature of thematic issues, and devising solutions to address challenges and barriers to progress. The Rio+20 outcome document - The World We Want - solidified the role of SPIs and sought to operationalize its place within all sustainable development processes. Additionally, resolution 67/290 that

established the High-Level Political Forum seeks to strengthen the SPI by building on existing assessments, enhancing evidence-based decision-making at all levels, and contributing to the strengthening of ongoing capacity-building of statistical capacities.

For sustainable development to achieve long-term resilience, it cannot proceed arbitrarily. To close the gap between the "world we want" and the world we have, policy and implementation has to be evidence informed. In doing so, youth play an integral role. As key partners of the development agenda, youth have both the immense opportunity and responsibility to contribute to and make use of tools provided by science, technology, innovation, and engineering to design impactful solutions for the SDGs.

Many other reports and agendas have highlight the integral role of youth, especially youth-led and influenced innovations. Young people have a keen understanding of their communities that gives them the foresight for ensuring appropriate design, development, deployment, scale, and use of solutions in the context of social, economic, and environmental dimensions of local settings, as well as ensuring equitable access.

CONCLUSION – KEY TAKE-AWAYS FOR THE UN SYSTEM

The UN will only accomplish its role in setting a path for sustainable development if it provides institutional spaces conducive for sharing innovative solutions from across all relevant actors and stakeholders, including the rising numbers of young innovators worldwide that are putting their capabilities and vision to the service of SDG-related solutions. At present, such institutional spaces exist but the urgency and room for expanding them has never been greater. In particular, it is important that these spaces increase the attention to the topics of youth skills and innovations, and devise ways for these topics be included in official SDG monitoring efforts and implementation strategies. On the one hand, this is necessary to identify skills gaps and needs among young people and target them with appropriate policies. On the other, this is also instrumental in allowing successful youth-led innovations to inform national strategies and action plans and build more inclusive partnerships for SDG implementation. Therefore, we suggest the need for the UN system to:

- Define the skills gap as a gap between the content of skill development initiatives and skills needed to achieve sustainable development targets.
- Build an evidence base on the topic and chart concrete skills development pathways along it.
- Run, build and support programs that build the skills needed to achieve sustainable development.
- Engage young people, especially through meaningful and institutional spaces, in all deliberations related to skills developments.

REFERENCES

United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Available from: https://sustainabledevelopment.un.org/post2015/transformingourworld (accessed July 2018).

United Nations (2017). Enhancing the inclusiveness of National Voluntary Reviews, bridging the intergenerational gap. UN Web TV. Available from: <a href="http://webtv.un.org/en/ga/watch/enhancing-the-inclusiveness-of-national-voluntary-reviews-bridging-the-intergenerational-gap-/5306538000001/?-sort=date&term="http://webtv.un.org/en/ga/watch/enhancing-the-inclusiveness-of-national-voluntary-reviews-bridging-the-intergenerational-gap-/5306538000001/?-sort=date&term="http://webtv.un.org/en/ga/watch/enhancing-the-inclusiveness-of-national-voluntary-reviews-bridging-the-intergenerational-gap-/5306538000001/?-sort=date&term="http://webtv.un.org/en/ga/watch/enhancing-the-inclusiveness-of-national-voluntary-reviews-bridging-the-intergenerational-gap-/5306538000001/?-sort=date&term="http://webtv.un.org/en/ga/watch/enhancing-the-inclusiveness-of-national-voluntary-reviews-bridging-the-intergenerational-gap-/5306538000001/?-sort=date&term="http://webtv.un.org/en/ga/watch/enhancing-the-inclusiveness-of-national-voluntary-reviews-bridging-the-intergenerational-gap-/5306538000001/?-sort=date&term="http://webtv.un.org/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/en/ga/watch/

United Nations (2018). Voluntary National Reviews Database. Sustainable Development Knowledge Platform. Available from: https://sustainabledevelopment.un.org/vnrs/ (accessed July 2018).

United Nations Conference on Environment and Development (1992). Agenda 21, Rio Declaration, Forest Principles. New York, NY, USA: United Nations.

UN MGCY (2017). Principles and Barriers for Meaningful Youth Engagement. UN Major Group on Children and Youth. Available from: https://static1.squarespace.com/static/5b2586e41aef1d89f00c60a9/t/5b2bc1fb-2b6a286265e3a850/1529594364048/UN+MGCY-+Principles+and+Barriers+for+Meaningful+Youth+Engagement.pdf (accessed July 2018).

Chapter 7

Social Intrapreneurship



Social Intrapreneurship: the Next Frontier for Youth Solutions?

TIM **HEARD** (CO-FOUNDER – THE CIRCLE OF YOUNG INTRAPRENEURS)

INTRODUCTION

"The greatest agents for sustainable change are unlikely to be [social entrepreneurs], interesting though they are . . . They are much more likely to be the entirely reasonable people, often working for large companies, who see ways to create better products or reach new markets, and have the resources to do so." (The Economist 2008)

Business should solve social and environmental problems – that much has become evidently clear over recent years both in terms of press coverage, demands from customers, demands from investors and demands from employees. Historically, the remit for creating this kind of impact fell within the CSR departments of companies. However, social intrapreneurship (and the social innovation it brings) adds 'people' and 'business' capital to the 'social' capital CSR alone provides. More specifically, it provides people, management, and financial 'do well' rewards to a company, alongside the social 'do good', under an approach which could be summarized as "doing well and doing good, doing good by doing well and doing well by doing good".

Social intrapreneurship itself is a methodology to both deliver solutions to social and environmental problems within business and enhance the benefits the company sees as a result. So what is 'social intrapreneurship'? The Circle of Young Intrapreneurs defines social intrapreneurship as "a process by which we can convert social problems into business opportunities by delivering sustainable solutions which aim to profitably-do-good." And why is this important for social impact? The UN Sustainable Development Goals (SDGs) require at least two percent of the world's GDP to be mobilized every year by a variety of stakeholders. A significant share – likely more

than 50 percent – of this financing, "can and should be mobilised by the private sector" (Schmidt-Traub 2016) and for each year we miss this target the percentage of GDP required for the remaining years to 2030 increases.

Given that the private sector has the greatest opportunity to support the achievement of the SDGs, this then leads us to a view that business must solve social problems because it is the sector with the greatest potential to support the achievement of the SDGs by 2030. The private sector is the only sector which has the resources, and ability to mobilise these resources, to address social problems at sufficient scale to solve them in a sustainable way. A lot of companies do now realise this 'must' for social impact, but it is not always clear how business solves social and environmental problems.

Social intrapreneurship provides a powerful answer to this question, unlocking multiple benefits for business in the process. Social intrapreneurs can be seen as key change agents to deliver social impact and, up until recently, this was an unrecognised and undeveloped channel for the delivery of the SDGs. Social intrapreneurship means businesses can solve social and economic problems.

Given that social and environmental problems are something business **should**, **must and can solve** through social intrapreneurship programmes, then social intrapreneurship can be seen as potentially the most powerful undeveloped frontier for positive social and environmental impact. Young people, and young professionals in particular, can lead this change and, indeed, are the ones most likely to.

CONTEXT

WHO ARE THE CIRCLE OF YOUNG INTRAPRENEURS?

Conceived in 2015 by two social intrapreneurs based

at Barclays, Tim Heard and David Spears, The Circle of Young Intrapreneurs (COYI)¹ was launched in January 2016 to inspire, guide, develop & deliver purpose-driven business ideas from social intrapreneurs inside corporate organizations globally. By December 2017 the network had grown to 5000 members in over 70 countries, working at over 400 companies worldwide; spreading the #dowelldogood mindset all over the world.

As many great things are, The Circle was founded out of a sense of frustration. A sense of frustration that, despite having plenty of encouragement and a great product, the actual day to day of being a social intrapreneur was intrinsically hard for Tim and David and, in fact, for almost all social intrapreneurs at the time, delivery was something of a pipe dream. COYI was created to answer this need, and create positive social change through business, by creating a community of changemakers, supporting them with mentoring and advice, encouraging pan-industry collaboration to solve shared societal challenges, and driving advocacy of the intrapreneurial agenda.

WHAT?

INTRAPRENEURSHIP; MORE THAN JUST A SPELL-ING MISTAKE

"Intrapreneur" in itself is not a particularly new term. It was coined in 1978 by American academic pioneer - Gifford Pinchot III – to define "a person within an existing organization who takes direct responsibility for turning an idea into a profitable finished product through assertive risk-taking and innovation" (Pinchot and Pinchot 1978) Pinchot later simplified this neatly as "intrapreneurs are dreamers who do" (Pinchot 1984). Intrapreneurship now appears in an increasing amount of corporate literature (Tracey and Stott 2016) and is accorded a multitude of strategic benefits from driving innovation to catalysing market growth. Intrapreneurship can, however, be taken further by applying new social and environmental lenses to it, in order to actively harness the power of business to make the world a better place.

There are essentially two key parts to products being

delivered by social intrapreneurs:

- The creation of economic value for the company they work for
- The delivery of social or environmental value

Academic research portrays intrapreneurs as mavericks, as radicals, as "de-institutional entrepreneurs fighting against extant logics" (Kistruck and Beamish 2010). Given this maverick status, social intrapreneurs often face something of an uphill struggle, given they "are confronted with the challenge of structuring their organizations in a manner that allows for the blurring of previously separate institutional boundaries while continuing to be perceived as legitimate" (Kistruck and Beamish 2010).

The potential for delivering impact by utilising the largely untapped social-impact channel of existing large corporations is hugely significant, and it is social intrapreneurs who can lead this charge, thus making social intrapreneurship a highly important new frontier for achieving the sustainable development goals. Intrapreneurship is a new channel which can work alongside entrepreneurship to make our world a better place; it is more than just a spelling mistake of the latter!



WHO?

'SUPERHEROES' OF THE CORPORATE WORLD

At the "core of the concept of intrapreneurship is the idea that established organizations are most effective when they find ways of harnessing the creative talents of their members" (Basso 2010), which means that ultimately social intrapreneurship is about ordinary people doing ordinary things which can add

¹ See http://www.circleofyi.com/.

up to extraordinary things which in turn can make the world a better place. Not only can social intrapreneurship help the world at large but it also provides clear purpose, value and meaning to the careers of the individuals involved and it is for this reason that the movement will continue to grow exponentially.

Social intrapreneurship is founded on the belief that individuals can be change agents *within* a company. On the one hand, these individuals are often highly motivated, innovative and creative. On the other, being an intrapreneur is also "challenging and involves risk" (Eaves 2018), and as a consequence organizations must work hard to nurture, not restrict, their Intrapreneurs. As Susan Foley puts it,

"Intrapreneurial leaders are change agents. They blaze new trails. They become the very change they wish to see. Not just driving change, but modelling change so others can change as well. Intrapreneurship provides a platform to engage employees in work that is challenging and meaningful. Intrapreneurs are highly engaged in their work. Their passion and determination inspire others to get involved and try new things. As they grow, the organization grows." (Foley 2013).

Nurturing social intrapreneurs goes beyond the support companies can give social intrapreneurs to deliver and towards the support structures for the individuals themselves to grow, develop and flourish vs. succumbing to the inevitable strain of working multiple 'full time' jobs. The topic of social intrapreneurship and mental health has been recently rather eloquently explored in *The Intrapreneur* a book by one of the most famous social intrapreneurs, Gib Bulloch. ²

Given that "it is now widely recognized globally that we need to develop more socially conscious business leaders who can make a positive contribution to pressing social challenges in order to achieve lasting social change" (Eaves 2018), social intrapreneurs are slowly being seen as trendsetters at the core of an organization's future. Alongside this, the fact that millennial mindsets often 'pre-dispose' them towards being so-

cial intrapreneurs (Heard 2018) means that the young professionals of today are the key demographic to take this important movement forward. Given the fact that this is a relatively underdeveloped channel for the creation of social and environmental impact, this therefore means that social intrapreneurship represents a truly new frontier in delivering youth solutions that can contribute to achieving the SDGs.

It is proven that the most successful leaders inside big corporations share a mind-set with successful entrepreneurs (Altringer 2013). How do you create entrepreneurs inside an organisation? First and foremost, it is important to create intrapreneurs who are defined as entrepreneurs inside organisations. Empowering more junior individuals to make decisions and work autonomously is more agile in nature investing in social intrapreneurship programmes creates leaders who 'future proof' your organisation in an increasingly fast paced, socially conscious market place. To this end we are also seeing a growth in youth leadership organizations such as the Global Shapers³, One Young World⁴ and, of course, COYI, which promote and support socially conscious business leaders. To truly nurture their intrapreneurs and social intrapreneurs companies need to (re)think about how they approach talent management, CSR and innovation and take a holistic approach across all three. In return, an effective social intrapreneurship will deliver benefits across all three, transform company culture positively and add to the bottom line. To develop this holistic approach, social intrapreneurship needs to be sponsored from the top. It requires enlightened business leaders to say that business should 'do well and do good' as leaders at Unilever and Barclays, for example, have done over recent years.

The next step is then to find ways of translating such a view into a reality. This is currently the sticking point – but it shouldn't be, as a fully functioning social intrapreneurship environment will do this for you. In particular, implementing a culture of (social) intrapreneurship should involve the following 5 core steps:

1. Setting aside some capital to fund the development, and delivery, of social intrapreneurship initiatives

- 2 See http://www.gibbulloch.com
- See https://www.globalshapers.org/
- 4 See http://oneyoungworld.com/

- 2. A coherent internal communications campaign to state what social intrapreneurship is, why the business is investing in it, and what the business value is
- 3. A review of new product approval processes and delivery channels to ensure that intrapreneurial-style, "non-traditional" delivery is possible
- 4. Training for the management on how to recognize and support (social) intrapreneurs
- A small, agile central team to manage a portfolio of multiple social intrapreneurship projects at once; over time this team will recruit more experienced social intrapreneurs coming out of the programme.

Companies need to combine all of the tools mentioned above, in order to allow these "superheroes" of the corporate world to flourish, grow and, ultimately, deliver. Superheroes such as Matthew O'Shea at Thomson Reteurs and Sal Mohammed, of Telefonica and then Google, who form the case studies in the appendix to this chapter, Ryan Krahmer who is leading on the delivery of low cost medicines at Bristol Myers Squibb, Willemijn Brouwer and Reinoud Clemens who are leading on social intrapreneurship at DSM and Charlotte Munro and Karl West who are currently working on a financial inclusion initiative at Barclays. These young intrapreneurs are starting to go 'public' as their achievements become more and more recognised and their products are delivered and scaled. Converting social intrapreneurship from theory into talk and converting talk into a movement.



4. WHY?

NURTURE YOUR HEROES

Intrapreneurship increases the rate at which companies can diversify, enter new markets, create new markets and create new products. *Social* Intrapreneurship increases the growth potential ahead of this further by virtue of the simple fact that 'doing good' itself sells (Holder 2017). In fact the World Economic Forum has recently quantified this "profitably-do-good" market at \$12 trillion (BCSD 2017). This gives a fixed financial value to 'doing good sustainably' and it is this market which only your social intrapreneurs can effectively open up to your company.

Intrapreneurship delivers value. Just to give a few examples, Gmail and Google Sky, PlayStation and the Xbox were all created by intrapreneurs (Spitzeck 2010; Magida 2012). Whilst delivering individual profitable products for the company it is clear that social intrapreneurs in particular have a much wider impact. It is clear from analysis of existing literature and case studies that, if companies establish effective social intrapreneurship programmes, it is possible to attract, develop and retain top performers in a way which most effectively prepares them to be future leaders of the business. The same approach delivers to the bottom line, innovation capacity, engagement levels, reputational image and brand.

As the 'millennial' generation form an increasing part of the workforce, and wider trends in the market move towards socially-conscious spending, these benefits are only becoming more established and the need, therefore, to build effective social intrapreneur programmes is becoming more pertinent to business. Particularly when you focus on what the three 'real' motivators of humans at work are as described by Daniel Pink: mastery (getting better at something), autonomy (doing something your own way) and purpose (something with wider value). All three of these are provided by a fully functioning social intrapreneurship programme.

Viewing the benefits of a successful social intrapreneurship programme holistically they can be seen not only as the 'holy grail' for talent management but the 'holy grail' for how to run a business in general (Heard 2018) and this makes social intrapreneurship a truly exciting commercial opportunity. The fact that effective social intrapreneurship programmes can also simultaneously solve social and environmental problems and make people's lives better is even more enticing. Even on a purely numbers-based view of costs versus benefits, the benefits of building effective social intrapreneurship programmes will vastly outweigh the costs involved. Put simply, social intrapreneurship can actually be seen as less purely philanthropic and more just good business.



IMPACT?

THE IMPACT UNICORN

Social intrapreneurship projects have great potential for impact but also great potential for profit. Indeed, as profit increases, impact should also increase. M-PESA is a great example of this. Created by Nick Hughes at Vodafone, this mobile payment engine raised 194,000 Kenyan households out of poverty whilst causing a 44,000% growth rate in customer accounts for its main baking partners (The Economist 2018).

In addition, beyond the doing well-doing good synergy, social intrapreneurship can also provide new forms of positive environmental impacts. This can sometimes involve thinking creatively: for example, Barclays has recently launched a suite of green finance products (Financial Times 2017) which don't necessarily create 'environmental' impact on their own but do create a strong incentive for others; and indeed this is why social intrapreneurship can be particularly powerful in the finance sector.

In short, profit and impact should go hand in hand. Social intrapreneurship does not encourage companies to not make profit; it encourages profit with purpose. Businesses should be profitable; this makes them sustainable but if impact and profit are combined then *impact* becomes sustainable. Encouraging scale and profit is complimentary, not antagonistic, to social intrapreneurship. Therefore, the aim for any social intrapreneur is to create an *impact unicorn*; a highly profitable, rapid growth business that also creates impact. As the business scales, so does the impact. The more scale, the more profit, the more impact.

Seeing business in this way, and the potential of business to *become* this way, is easier for young people who are entering the workforce with new attitudes and a fresh pair of eyes. Young people must be the ones to drive these impact unicorns to drive the achievement of the SDGs by 2030.

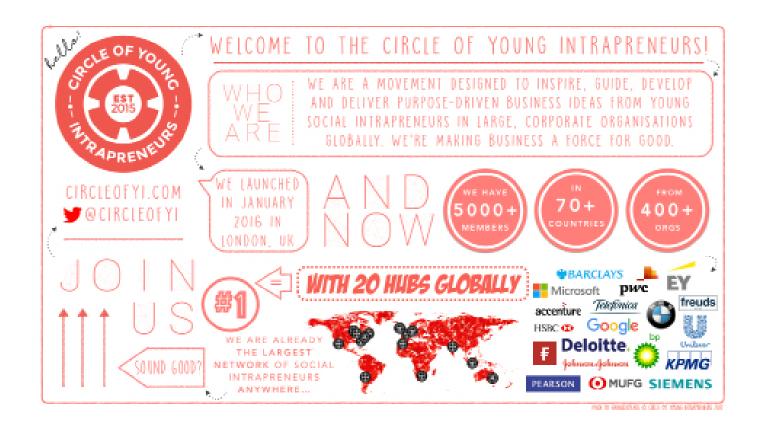
CONCLUSION

Existing businesses can be seen as the great untapped resource for positive social and environmental impact and the most effective way of transforming corporations from the inside out, using colleagues as change agents; as social intrapreneurs. As positive social and environmental impact is proven to be something which a growing number of clients, investors and employees directly seek out in companies they interact with we have an opportunity to can create a fairer, more equal world, where businesses collaborate to solve some of humanity's greatest issues and, therefore, create a better world for everyone sustainably.

The Circle of Young Intrapreneurs aims to create an 'ecosystem of impact' by creating, and delivering, as many "profitably-do-good" initiatives as possible around the world, and using them as case studies to a) inspire others and b) make big business realize that this isn't just philanthropy, it is good business. This will provide a platform to convert the world's biggest companies into the world's biggest social enterprises and create one of the most impactful societal movements of our time. "Changing the world" is often seen as a fluffy, pie-in-the-sky ideal but, when it comes to social intrapreneurship there are very

tangible steps to get there which make it a rational objective not a pipe dream.

Many people see profit as the problem, and it *can* be. However, profit can also be **magic**. It can be magic because profit is the platform upon which you can build **scale** and scale is how we can create the levels of **impact** required to provide really sustainable **solutions** to many of our most pressing issues. Profit therefore becomes a core part of purpose instead of seeing profit as the purpose. This means that, in principle, social intrapreneurship doesn't aim to change the core aim of conventional business, to make profit, in fact, it encourages it in many ways, but what it does tweak is the methodologies to get there. Business can be the problem in many ways but, with with a strong, youth-led social intrapreneurship movement behind it, it can also be the answer.



REFERENCES

Altringer, B. (2013). A new model for innovation in big companies. *Harvard Business Review*. Available from: https://hbr.org/2013/11/a-new-model-for-innovation-in-big-companies (accessed July 2018).

Basso, O. (2010). 'Intrapreneurship': Corporate Entrepreneurship Developing an Entrepreneurial Dynamic within Large Businesses. In: Bournois F., Duval-Hamel J., Roussillon S., Scaringella JL. (eds.) *Handbook of Top Management Teams*. London, UK: Palgrave Macmillan.

BCSD (16 January 2017). Sustainable Business can unlock at least USD 12 trillion in new market value, and repair economic system. *Business Commission for Sustainable Development*. Available from: http://business-commission.org/news/release-sustainable-business-can-unlock-at-least-us-12-trillion-in-new-market-value-and-repair-economic-system (accessed July 2018).

Eaves, S. (2018). Chapter 4: Why is social intrapreneurship important to employees? In: Heard, T. et al. (eds) Social Intrapreneurship, What it is, Why it Matters and What it means for you. The Circle of Young Intrapreneurs. Available from: http://www.circleofyi.com (accessed July 2018).

Foley, S. (8 November 2013). 5 reasons why intrapreneurship is important. *Corporate entrepreneurs*. Available from: https://corporate-entrepreneurs.com/2013/11/08/5-reasons-why-intrapreneurship-is-important/ (accessed July 2018).

Heard, T. (2018) Chapter 3: The business case for social intrapreneurship. In: Heard, T. et al. (eds) *Social Intrapreneurship, What it is, Why it Matters and What it means for you.* The Circle of Young Intrapreneurs. Available from: http://www.circleofyi.com (accessed July 2018).

Holder, A. (3 February 2017). Sex doesn't sell any more, activism does. And don't the big brands know it. *The Guardian*. Available from: https://www.theguardian.com/commentisfree/2017/feb/03/activ-ism-sells-brands-social-conscience-advertising?CMP=fb_gu (accessed July 2018).

Kistruck, G.M. and Beamish, P.W. (2010). The Interplay of Form, Structure, and Embeddedness in Social Intrapreneurship. *Entrepreneurship Theory and Practice*, Vol. 34(4), 735-761.

Magida, J. (25 June 2012). Intrapreneurship: What, Who and Why It's Important. *Infospace*. Available from: https://ischool.syr.edu/infospace/2012/06/25/intrapreneurship-what-who-and-why-its-important/ (accessed July 2018).

Pinchot, G. (1984). Who is the Intrapreneur? In: *Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur.* New York, NY, USA: Harper Row Publishing.

Pinchot, G. and Pinchot, E.S. (1978). *Intra-Corporate Entrepreneurship*. Terrytown School for Entrepreneur White Paper. Available from: https://drive.google.com/file/d/086GgwqtG-DKcSlpsbGRBZkZYSlk/view (accessed July 2018).

Schmidt-Traub, G. (1 March 2016). Funding the SDGs. *SDGs: Delivering Change*. Available from: https://www.sustainablegoals.org.uk/funding-the-sdgs/ (accessed July 2018).

Spitzeck, H. (2010). 'The Yunus Inside' – How Social Intrapreneurs Create and Blend Societal and Business

Value. SSRN Electronic Journal. 10.2139/ssrn.1725254.

The Economist (22 January 2008). Unreasonable people power. *The Economist*. Available from: https://www.economist.com/news/2008/01/22/unreasonable-people-power (accessed July 2018).

The Economist (3 May 2018). Mobile financial services are cornering the market. *The Economist.* Available from: https://www.economist.com/special-report/2018/05/03/mobile-financial-services-are-cornering-the-market (accessed July 2018).

The Financial Times (6 November 2017). Barclays launches first UK bank green bond to fund British assets. *The Financial Times*. Available from: https://www.ft.com/content/3b525ae3-0139-3514-8598-88bcf0db530a (accessed July 2018).

Tracey P. and Stott, N. (2016) Social innovation: a window on alternative ways of organizing and innovating. *Innovation: Organization and Management*, 19(1), 51-60.



Youth Skills and the Rise of Impact Entrepreneur-ship in Africa



Are We Getting the Most Out of It? Youth Skills and the Rise of Impact Entrepreneurship in Africa

FABIO **PETRONI** (DIRECTOR OF PROGRAMMES, E4IMPACT FOUNDATION), FABRIZIO **LOBASSO** (AMBASSADOR OF ITALY TO SUDAN)

AFRICA LIONS, UNEMPLOYMENT AND ENTREPRENEURSHIP

African economies are the next frontier of global growth. EU and US-based investors and businesses look at Africa, including Sub-Saharan Africa, as the next economic partner. The EU showed how strongly it believes in Africa by setting-up the **European Fund for Sustainable Development** and endowing it with 3.35 billion euros. The end goal is to mobilize EU investors and businesses to enter the African markets. Indeed, macroeconomic data signal how rapid and sound economic growth is in Sub-Sahara Africa (Leke et al., 2010; Bughin et al., 2016).

ECONOMIC GROWTH IS SUSTAINED AND DIVERSIFIED

Economies in Africa keep growing at a strong pace: after a spectacular average increase of 5.4% in the first decade of the new millennium, real GDP growth between 2010 and 2015 averaged 3.3% (4.4% if the countries in North African, which were struck by political unrests, are taken out to the picture). According to January 2018's World Economic Outlook Update (IMF 2018), in 2019 Sub-Saharan Africa will grow by 3.5%, second only to China (6.4%) and India (7.8%). The big news is that Africa is now transitioning from a commodity-based economy to a diversified economy. According to the McKinsey Global Institute (2010), natural resources accounted for only a third of the newfound growth. The rest was a yield of other sectors, such as wholesale, telecommunications, manufacturing and others.

INDUSTRIALIZATION AND INTERNAL MARKETS ARE ON THE RISE

Sustained by a privatization process that cuts across the Continent, an improving business environment and the increase of productivity (2.7% on average since 2000), Africa is entering slowly but surely the manufacturing space. The manufacturing output should double by 2025, largely through meeting internal domestic demand (McKinsey Global Institute 2016). Today Africa consumes goods and services for about 4 trillion USD. This value should grow by 25% in 2025, a sign of how a middle class is eventually rising in Africa.

AFRICA HAS EXCEPTIONAL HUMAN CAPITAL

According to the World Population Prospects, Africa will contribute 59% of the 2.2 billion people to be added by 2050, reaching a population of about 4.5 billion. This will be well educated workforce (UN DESA Population Division 2017). By 2030, UNESCO projects that 59% of people aged 20-24 will hold a secondary degree, while gross enrollment ratio for tertiary education has already doubled between 2000 and 2010 (UNESCO Institute for Statistics 2009).

AFRICA IS AT THE EDGE OF THE DIGITAL ECONOMY

The Continent jumped in a spectacular digitalization process. Sustained by a spiking penetration rate of mobile phones (50% by 2020) and internet use (+130% by 2025) (GSM Association 2018), Africa is developing cutting-edge solutions from B2B mobile payments (<u>Lipisha</u>) to digital-based health diagnosis (<u>Toto-</u>

Heath) and application of blockchain to report sabotaging of oil pipeline (SelaLabs).

EDUCATED YOUTH STILL STRUGGLE TO FIND DECENT EMPLOYMENT

Nevertheless, Youth employment in Sub-Saharan Countries is a daily fight. Youth unemployment is stuck at 12% and 70% of youth entering in the job market ends up in informal employment. The situation is possibly worse when it comes to graduate employment, as the study the British Council carried out in 2014 shows (British Council 2014). The study took into consideration 4 of the largest and strongest African "lions": Nigeria, Ghana, South Africa and Kenya. Unemployment among graduates hits 23.1% (Nigeria). Focusing on an age group of 25-26 (fresh out of university), unemployment is at 41% in Ghana. All this is happening on a road that is leading Africa to add 15 to 20 million of well-educated Youth to the job market every year.

In such a context, African governments often look at **youth entrepreneurship** as a key weapon to fight unemployment. This fits well with the macroeconomic scenario of the African Lions and with the fact that Sub-Saharan Africa has the highest rate of entrepreneurs as a proportion of the population (AfDB, OECD and UNDP 2017). It is expected that new businesses, especially small but innovative ones led by the youth, will create jobs for the millions of young Africans entering the job markets in the next 4 decades.

This expectation is not groundless. Entrepreneurship, and particularly **impact entrepreneurship**, is indeed well suited to address the challenges that (youth) unemployment poses to African and international policy-makers: there are blazing examples of young African entrepreneurs leading this way. The question is: are we getting the most of (youth) entrepreneurship to solve the issue of (youth) unemployment in Sub-Saharan Africa?

THE RISE OF IMPACT ENTREPRENEURSHIP

Over the last decades, we have seen the concept and practice of social businesses taking off and then the progressive spin-off of the impact entrepreneurship movement. In order to delve into how impact entrepreneurship can contribute to create jobs and drive sustainable development, it can be useful to provide a (non-scientific) definition of what that is. Entrepreneurs in training under the E4Impact initiative (see infra) gave have come up with the following concept: "An impact business is an individual or team venture that turns a social / environmental issue into an economic opportunity. It aims to combine social-environmental impact and economic success and to contribute to sustainable development. An impact business may be either a non-loss or a profit company that shares dividends with investors".¹

While both struggle to address a given social or environmental issue, the major difference between a social and impact business consists in the use of the net result and investments that the company gains. While a social business simply re-invests the net result in the company to expand impact and does not recognize interests to investors while only paying back the funds received, an impact business can share profits among shareholders, including the payment of interests to investors. E4Impact entrepreneurs who gave this definition were concerned about one basic issue: If there is no profit sharing, the business will not be able to attract any major investment to sustain its growth. If there is no growth, the impact and jobs the business can generated will be necessary limited.

With this mindset, impact entrepreneurs might be better positioned that multinational corporations to create youth jobs in Africa, as the latter are more likely to be capital-intensive and use high-tech solutions drawn from other markets.

The definition resulted from informal talks with entrepreneurs enrolled in the MBA in Impact Entrepreneurship that the E4Impact Foundation and the Catholic University of Milan offer in 7 African Countries (www.e4impact.org)

LOCAL SOLUTIONS TO LOCAL NEEDS

Impact entrepreneurs identify a business opportunity out of a social or environmental challenge that their community faces and build solutions based on resources locally available. An impact entrepreneur in Ghana realizes that 50% of farmers use chemical fertilizers that deplete the soil and that the remaining 50% do not use any fertilizers. He will use local agricultural byproducts to develop a bio-fertilizer to fix depleted soil and improve yields (this is the case of Farmer's Hope).

LOCAL JOBS FOR LOCAL SKILLS

Given the fact that impact businesses are local, they are pinned to the local markets, including the job market. Our Ghanaian entrepreneur in the bio-fertilizer industry will hire a salesforce of several people to market the bio-fertilizer, open shops across the country, set up a manufacturing plant where workers will produce and package the product, form a research and development unit and a small management staff.

SCALE IMPACT

Since they can share profits with shareholders, impact entrepreneurs can win equity investments to become regional. Again, our Ghanaian entrepreneur, having proven his product in Ghana and being the situation of farmers in neighboring countries rather similar, will obtain a large investment to scale his business in Ghana and to Nigeria. This will enable to create more jobs in Ghana and across the whole region while creating positive environmental (soil preservation) and economic (yields improvements) impact.

Eventually, since impact entrepreneurs combine local solutions, impact and scalability, they ensure a long-lasting contribution to **sustainable development and job creation**.

Being more fluent in using new technologies and better connected in the global world, policy makers are looking at Africa's youth to lead this kind of contribution. Two examples can better explain the mechanics of how the youth can spearhead impact entrepreneurship and address the challenge of youth unemployment. The examples provided are drawn again from E4Impact network of alumni. Both the entrepreneurs were in their twenties when they started their business.



RITA KIMANI AND FARMDRIVE

Rita Kimani is a UN Young Leader for the Sustainable Development Goals. She has obtained the Queen's Young Leaders Award and the Commonwealth Youth Award for Excellence in Development Work; she is an Ashoka Changemaker.

Rita Kimani co-founded in Kenya FarmDrive, an impact business that aims to bridge the funding gap between smallholder farmers and financial institutions. Rita found that, despite its great role in Africa's economy (65% of Africa's population is employed in agriculture and it makes up 32% of its GDP), agriculture absorb only 1% of commercial loans and hardly any of that goes to smallholder farmers. Indeed, due to the lack of business records, credit history and collaterals, most smallholder farmers have no access to finance. FarmDrive estimates that over 7 million smallholder farmers have no or very limited access to finance in Kenya. The figure spikes at 50 million for the whole of Africa.

FarmDrive addresses this issue in two ways. On the farmers' side, FarmDrive provides digital mobile platforms (SMS) that enable farmers to apply for loans using the simple feature phones. On the financial institutions' side, FarmDrive reduces the risk of lending to the farmers by bundling the credit with weather-indexed insurance. In addition, it reduces the cost and time spent lending to farmers, by crowding credit seekers on the digital platform and collecting the necessary information. Eventually, FarmDrive enables financial institutions to digitally monitor the entire loan process, from application to full repayment.

An impact business as FarmDrive, on the one side creates a diverse range of jobs (40) from agronomists to software developers. On the other side, by facilitating access to finance, FarmDrive enables smallholder farmers in rural Kenya to increase yields and improve quality (by buying better inputs and technologies), therefore contributing to local economic development and food security.

FarmDrive supports Sustainable Development Goals (SDGs) 1, 2, 5, 8, 10.



AMIN SULLEY AND ZAACOAL

Today, around 80% of households in Africa depend on wood and charcoal as a primary energy source. Africans consume more than 23 million tons of charcoal every year. In Ghana, over 80% of people rely on wood-based fuel as their source of cooking energy (Ghana Energy Commission). The Ghanaian charcoal market is estimated at 70 million dollars (2008). The use of charcoal especially concerns vulnerable households, which do not have access to modern and expensive fuels.

In most African Countries, charcoal is produced using traditional methods. On the one side, this is at the root of significant health issues. The output is a product that generates significant amount of smoke when burnt and eventually causes indoor pollution when used for cooking purposes. The World Bank estimates that over 2 million people die annually due to lung disease associated to such indoor pollution. On the other side, in order to provide traditional charcoal, producers have to use wood, therefore contributing to deforestation. Ghana's Forest Commission estimates that 91% of all trees cut in Ghana are used to make charcoal or as firewood, leading to a loss of a third of its forests.

Amin Sulley founded Zaacoal in 2014 with the "vision to transform how Africans and the World accesses clean fuels". Zaacoal converts city waste (such as coconut husks, largely disposable in Ghana's capital city, Accra) into clean burning fuels. Zaacoal charcoal generates less smoke, lasts three times longer than regular charcoal, has higher energy content and an affordable price. Zaacoal: improves the health of people using charcoal to cook (they breathe less smoke); reduces deforestation (no wood is cut to produce the fuel, since the raw material is a byproduct); enables more vulnerable households to save money (they will use less charcoal since it lasts longer and has a higher energy content); reduces pollution (since it recycles waste). In just a few years of existence, Zaacoal created 11 jobs. It supports SDG 3, 7, 8, 11, 12.

THE ROAD TO IMPACT ENTREPRENEURSHIP: HURDLES AND SOLUTIONS IN THE WORK OF E4 IMPACT

Youth-led impact businesses such as FarmDrive and Zaacoal are indeed able to drive both job creation and sustainable development. Nevertheless, pioneers such as Temitope Ogunsemo (Krystal Digital), Nthabiseng Mosia (EasySolar), or Oluwatobi Ajayi (Jetvan), just to mention the top 3 of Forbes' ranking of most promising young entrepreneurs, are the exception rather than the rule. Indeed, about 50% of Sub-Saharan Africa nationals starting a new business do so out of necessity and are unable to grow the new businesses into an SME (Samans and Zahidi 2017). Actually, Africa hits the World's highest discontinuation rate among new businesses: 14% against 5.4% in Latin America, 4.1% in North America and 3.9% in Asia (GEM Consortium 2018). All the same, new businesses die very often at an early stage. For examples, according to the National Bureau of Statistics about 400,000 MSMEs in their second year of existence die every year in Kenya (2016). Going by the statistics of the Ministry for Business Development (2017), 75% of businesses in Ghana fail within the first three years. The same rate applies to South Africa.

Building on E4Impact's field experience, reasons for failure can be sorted in 3 broad areas.

ACCESS TO FINANCE

Obtaining a loan or an equity investment is a tough job for impact entrepreneurs in Sub-Saharan Africa. Even if they have strong projects, sounds skills and their business shows some market traction, impact entrepreneurs very often don't succeed in raising funds. On the one hand, debt is extremely expensive (e.g. in Ghana interests rate can shoot up to over 30%, while in Kenya 15% is a good deal) and requires collaterals that impact entrepreneurs seldom have (e.g. cash deposits, while assets often are out of the picture since ownership is disputed – this is especially the case of land). On the other hand, equity investment is often a bad match for impact entrepreneurs. Investment tickets are beyond what an average impact entrepreneur needs when starting the business (250.000 USD minimum opposite to 50.000-150.000 USD). In addition, impact entrepreneurs can't rely on audited statements and rigorous valuations, both due to the nature of the business (a small venture) and to the costs associated: often they have to choose between putting together sound financial statements and investing in the company. Impact Investing is surely more suited to support entrepreneurs in Sub-Saharan Africa: the red tape is not comparable to what equity vehicles require and the average size of investment is around 100.000 USD. Nevertheless, the capital disposed through impact vehicles is limited and largely unbalanced. Including development finance in the figure, in 10 years (2005-2015) East African impact businesses earned 9.3 billion USD, West African ones only 6.8 billion. Although these figures shout out a great growth compared to the previous decades, the values are still low. Moreover, most of the investments are going to East Africa, even though the regional GDP is just half of West Africa's. Moreover, within the same region investments land in few countries: for example, West Africa Nigeria and Ghana account for 54% of the investments (GIIN and Dalberg 2015). Finally, a business angels movement is growing in Africa, but this cannot bridge the huge finance gap.

ENTREPRENEURIAL SKILLS AND TOOLS

According to the Startup Genome initiative, most startups fail by self-destruction. This does apply to African impact businesses too. While discussing with candidates which gaps they feel the Global MBA in Impact Entrepreneurship should help them meet, entrepreneurs always answer: "I need help to raise funds" and "I need help to expand my market". When challenged on whether they need support to structure their financial model, to re-target the marketing to high-worth niches, or to refine the pricing tactics, the most frequent reactions are: "I think my books are good"; "The product is selling, will sell more if I have more visibility"; and "Price is fine, customers are buying". In other situations, the business owner may run the company on a personal bank account, customers may buy the product but use it improperly, and the price might be just 10% lower of whatever the closest competitor is proposing. Now, while this is not unheard of in the EU too, the

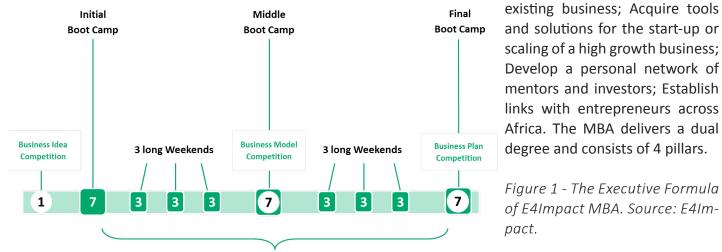
issue is that in Sub-Saharan Africa, startuppers have little chances to develop those skills and tools to jump to the next level. Either you enter an incubation programme (mainly focused on digital and fintech) or you need to be able to afford consultants, something that is really off the picture for somebody who is now starting a business. Universities are expanding their reach but entrepreneurs are not among their target market and so long as it concerns management disciplines they focus on the kind of skills and knowledge a manager would need to work in large business or in a multinational corporation. This is not exactly the kind of support that an entrepreneur needs to take a decision on whether to introduce a new product while break-even is still a mirage.

MARKET EXPANSION

Once the right niche is identified, impact entrepreneurs run into a myriad of issues. Product development is slowed by the lack of industry specific research centers and as well as by the lack of a skilled workforce. As a consequence, solutions provided by entrepreneurs improve slowly, limiting the capacity to meet the customers' needs and reducing the rate of adoption. Large retail systems are developing but still limited (e.g. in Ghana the best way to sell locally produced yoghurts, apart from the largest mall scattered across the country, is through corner shops and gas stations). Transportation costs are high and networks are not always at their best. The possibility to scale deep in a market is halted by the limited availability of production systems (e.g. a small manufacturer of yogurt in need of bottling machineries either buy second-hand systems already in the market or imports from abroad, which requires access to finance ...). Exporting is largely based on personal and family networks and runs into several informal costs as well as uncertain regulations.

Any solution that intends to support Sub-Sahara African entrepreneurs has to address all these challenges together. For instance, no investor would support entrepreneurs who do not have the necessary skills or the right conditions for a sound market penetration. Nevertheless, no single organization has the competencies and networks necessary to provide the full support Impact Entrepreneurs need to succeed in Sub-Saharan Africa. It is therefore necessary to establish alliances. The work of the E4Impact Foundation offers an example of how such alliances can be born.

<u>E4Impact</u> is a spinoff of the Catholic University of Sacred Heart of Milan, Italy. The Foundation aims to promote impact entrepreneurs in Sub-Saharan Africa and it pursues this goal by means of addressing the challenges it is better equipped to tackle: access to entrepreneurial skills and tools. E4Impact has designed a Global MBA in Impact Entrepreneurship, a 12-18 month program offered by E4Impact Foundation with local universities and ALTIS – Graduate School Business and Society of the Università Cattolica del Sacro Cuore of Milan (Italy), that combines academic training and business acceleration experience. The Global MBA supports both active and aspiring entrepreneurs to: Develop the business skills necessary to guide a new venture or scale an



degree and consists of 4 pillars. Figure 1 - The Executive Formula of E4Impact MBA. Source: E4Im-

Distance Learning and coaching in between

TRAINING SERVICES

The educational dimension aims to build the structure of the business and take it to a level of maximum efficacy and of compliance with international standards, a key component not only to run the business effectively but also to secure funds or access to markets abroad. To this end, the MBA is project-based. Each course responds to a specific need that arises in the starting or scaling of a business. In the classroom, lecturers and business experts use a workshop type format to share innovative tools. These workshops feature group projects and meetings with successful entrepreneurs. Distance learning consists of the guided application of these tools to the entrepreneur's business and in assignments geared to the field testing of these tools. The final expected output is a proven business model and an investment ready business plan. In addition to that, the MBA offers laboratories through which participants can develop the skills necessary to manage the business well. The training services are offered in partnership with **local universities** that carry out about 50% of the activities and tailor the service to the local context and needs.

BUSINESS SERVICES

Along with building the structure of the business and entrepreneurial capacities, the MBA provides access to go-to people and ready-to-use solutions that sustain participants when it comes to taking action.

- **Business Coach.** A full time dedicated consultant supports MBA participants in developing their business plan and establishing relationships with the business community.
- **Mentors.** MBA participants receive experienced guidance through regular contact with successful local and international business people and MBA Alumni.
- **Alumni Platform.** MBA participants are given visibility in the E4Impact Alumni Platform to aid them in meeting potential suppliers, customers and investors from Italy and Europe.
- **Solutions Book.** MBA participants are given access to the "Solutions Book" which offers business models, best practices and technologies that can enhance the performance of their company.

The business services are carried out in partnership with **local incubators**, **accelerators and business associations** that provide the mentors and coaches.

INVESTOR'S RELATIONS

While the MBA does not provide access to funds, it offers tailored support.

- Talks with investors. Throughout the MBA, students are introduced to investors that supports them
 during and after the launch of their impact venture. During these meetings, entrepreneurs become familiar with investors' requirements and develop a trustful relationship with the aim of raising investments to
 start or scale up their businesses.
- Business Competitions. The MBA organizes 3 business competitions in which participants have the occasion to develop their business network and pitch to a panel of investors: Business Idea Competition: organized prior to the Initial Boot Camp. Entrepreneurs show the potential of their Business Idea; Business Model Competition: Organized at the Mid Boot Camp. Entrepreneurs show the soundness of their business model; Business Plan Competition: organized at the end of the Final Boot Camp. Entrepreneurs show the economic profitability and viability of their business.
- Investors' Database. E4Impact entrepreneurs would have access to a database with more than 150 investors from Africa and Europe in order to find out those one can be of help for their business.
- Global Social Venture Competition. The best MBA participants at pan-African level would have the occasion to be directly admitted to the GSVC Global Social Venture Competition African Finals, to compete for a cash prize and receive further training. The global finals of GSVC takes place every year in a different city around the world.

Investors relations services are delivered through partnership with **local and international funds**, **banks and angels** as well as **local associations** of investors and **public bodies** that stimulates entrepreneurship development.

ACCESS TO INTERNATIONAL MARKETS

The top entrepreneurs of each edition have the chance to attend a one-week business networking program in Milan, Italy. During the program entrepreneurs will meet: key players that can support in access EU markets: International investors; Business Associations; EU based chambers of commerce; Export Credit Authorities. In addition to that, entrepreneurs who are attending the MBA in a given country have the chance to get in touch with their colleagues across the E4Impact network.

Since 2010 E4Impact has been able to train about **600 impact entrepreneurs**, **73%** of which have a business in place today. The largest investment that an E4Impact Alumnus was able to win amounts to **1.2 million**. They created about **3.500** jobs in their value chains.

To offer the MBA, E4Impact heavily relies on partnerships: with African universities to tailor and jointly deliver the training; with local experts for the mentoring and coaching activities; with local and international investors to facilitate access to finance; with EU based business facilitators to create a platform that entrepreneurs can use to explore markets abroad. This suggests how integrated services is crucial to support impact entrepreneurship.

HOW PUBLIC-PRIVATE PARTNERSHIPS CAN CATALYZE IMPACT ENTREPRENEURSHIP: THE CASE OF E4IMPACT

To mount solutions that convene various stakeholders and integrate different support services as the Global MBA does, a wide range of conditions must be in place: from operating capacities to supportive ecosystems that supply the competences necessary to support entrepreneurs; from the mobilization of international networks to a solid reputation that can attract entrepreneurs committed to make a difference. Eventually, access to finance to cover the costs associated to start such an initiative.

Based on E4Impact's own assessments, Public-Private Partnerships (PPPs) are the quickest and most effective way to start integrated initiatives to support impact entrepreneurship in Sub-Saharan Africa. Establishing a PPP has on many occasions allowed E4Impact to:

- Identify very quickly local universities with the necessary capacities to deliver the Global MBA jointly;
- Establish a very solid support ecosystem around the MBA and its participants;
- Build a solid brand from the start;
- Raise the funds necessary to run start-up operations.

The most recent and successful case is the launch of the Global MBA in Sudan. The PPP players were the **Italian Embassy in Khartoum**, E4Impact Foundation and the **Dal Group**, the largest food and beverage company of Sudan.

LANDING THE MBA IN SUDAN

The first challenge to start the MBA is to find the right partners to deliver the MBA. Soon after the international community lifted the sanctions on Sudan in October 2017, the Italian Embassy to Khartoum entered in touch with the E4Impact Foundation to explore the possibility to launch the MBA in Sudan. The Week of the Italian Cuisine in December provided the occasion for E4Impact Representatives to join the Italian Embassy in Sudan and offer a workshop on impact entrepreneurship to top lecturers and students of the some of the best universities in Khartoum. The goal was to assess the interest of such institutions in running supporting

programmes for impact entrepreneurs in Sudan and to gauge how ripe the "entrepreneurship ecosystem" was to host the global MBA. Through the convening power of the Italian Embassy, the partnership was able to engage the top colleges of Khartoum and interest them in the MBA as well as to organize follow-up meetings and calls to start the negotiations. Through the Dal Group, the partnership had the chance to cover the costs associated to the mission and the workshop, to access excellent facilities to run the workshop and to engage the entrepreneurial ecosystem. Eventually, from the meetings and negotiations, it emerged that the best partner to launch the MBA in Sudan was the University of Medical Science and Technologies. In January 2018, the core partnership was established and ready to go.

RAISING FUNDS

The next challenge was to obtain seed capital to start-up the Global MBA in Sudan. This was again a joint effort of the partnership. The Italian Embassy and E4Impact organized in February 2018 a country presentation with the Ministry of Foreign Affairs of Sudan, H.E. Ibrahim Ghandour. The partnership was able to convene 40 Italian business interested in entering the Sudanese market or already operating in Sudan. This was also the occasion to present the partnership's plan to start the MBA in Sudan. Eventually, out of the 40 businesses engaged, 2 agreed to support the venture covering about 50% of needed funds. With 50% of the funds raised, the partnership turned again to the public sector to raise what was left. It was the Italian Agency for Development Cooperation to answer the call and make the venture eventually possible.

BUILDING THE ECOSYSTEM

By the time the funds were available to the partnership, the ecosystem was also ready. It was indeed a obvious output of the PPP: local and international companies were already involved and able to provide mentors and coaches as well as access to international markets; the Governmental bodies involved helped linking to other support initiatives to coordinate efforts and maximize impact; the investment parties followed in as attracted by the other ecosystem partners.

In just 8 months, the PPP took the project for 0 to launch: identified the local universities to run the MBA with; raised the funds necessaries to start the activities; build the ecosystem around the MBA; staff the project; and eventually launch the initiative.

CONCLUSION

What this chapter shows is that it an increasing number of efforts is focusing on the necessity to build a supportive entrepreneurial environment for African youth. But there is still a long way to go. How? Persistence is a must, but only by developing some further tools will the overall strategy towards Africa become more effective and assertive.

INTERCULTURAL PERSPECTIVE

Too many times, policy makers and practitioners stigmatize the term development by assuming an ethnocentric point of view. They tend to forget that values are at the deep core of every culture, and values may be a very relative issue. Time, space, money, gender balance, development, cooperation and so many others, are all values that differ from country to country, from region to region, from one ethnic group to another. Only by sensing the local meaning of those values will commercial and economic cooperation be considered effective. Values are a relatively difficult good to export. Sometimes the cost of cultural barriers is higher than the potential benefits accruing from imports. A successful strategy is an intercultural strategy.

AFRICAN MIDDLE CLASS INVOLVEMENT

According to economists, the rise of the middle class in Africa is resulting in a growing number of people over-

coming the poverty threshold and achieving a position of relative economic stability. It does not talk about wealthy Africans. It is about those small entrepreneurs which put together more than a revenue source and have trespassed the level of survival, started money saving policies and may also help continuously other members of their family. Including them in the future vision of African economic frameworks is a part of the future strategies of African entrepreneurship.

THE ROLE OF DIPLOMACY

New figures have emerged on the path of globalization. Time and space in worldwide economic dynamics are being replaced by intertime and interspace, where virtual reality is as important as physical reality. Development, cooperation, information, trade and politics itself have undergone a sort of contamination from telematics: Africa and African people are fully included into this process of transformation. In order to ride globalization, and gaining all possible benefits from it, institutional and credible coordination is of the utmost importance. We need examples of stewardship that help create trust for the implementation of strategies and plans, with a view to shaping the continent's future socio-economic scenarios. Diplomacy, never like today, is called to play a guiding role towards the achievement of what is arguably the most important goal of the international community: highest results for the highest number of people.

REFERENCES:

AfDB, OECD and UNDP (2017). *African Economic Outlook 2017. Entrepreneurship and Industrialization*. Paris, France: OECD Publishing.

British Council (2014). *Can higher education solve Africa's job crisis? Understanding graduate employability in Sub-Saharan Africa*. British Council. Available from: https://www.britishcouncil.org/sites/default/files/graduate_employability_in_ssa_final-web.pdf (accessed July 2018).

Bughin J., Chironga, M., Desvaux, G., Ermias, T., Jacobson, P., Kassiri, O., Leke, A., Lund, S., Van Wamelen, A., and Zouaoui, Y. (2016). *Lions on the Move II: Realizing the Potential of Africa's Economies. McKinsey Global Institute.* Available from: https://www.mckinsey.com/featured-insights/middle-east-and-africa/lions-on-the-move-realizing-the-potential-of-africas-economies (accessed July 2018).

GEM Consortium (2018). *Global Entrepreneurship Monitor.* 2017/2018 *Global Report. Global Entrepreneurship Research Association.* Available from: https://www.gemconsortium.org/report (accessed July 2018).

GIIN and Dalberg (2015). The Landscape for Impact Investing in West Africa: Understanding the current status, trends, opportunities, and challenges. GIIN and Dalberg. Available from: http://ventureburn.com/wp-content/uploads/2015/12/GIIN-West-Africa-Regional-Report-2015-vFINAL-1.pdf (accessed July 2018).

GSM Association (2018). *The Mobile Economy 2018*. GSM Association. Available from: https://www.gsma.com/mobileeconomy/wp-content/uploads/2018/05/The-Mobile-Economy-2018.pdf (accessed July 2018).

IMF (2018). World Economic Outlook Update. January 2018. Washington D.C., USA: International Monetary Fund. Available from: https://www.imf.org/en/Publications/WEO/Issues/2018/01/11/world-economic-outlook-update-january-2018 (accessed July 2018).

Leke, A., Lund, S., Roxburgh, C., and van Wamelen A., (2010). What's driving Africa's growth. *McKinsey & Company*. Available from: https://www.mckinsey.com/featured-insights/middle-east-and-africa/whats-driv-

ing-africas-growth (accessed July 2010).

Samans, R. and Zahidi, S. (2017). *The Future of Jobs and Skills in Africa*. Cologny/Geneva, Switzerland: World Economic Forum. Available from: http://www3.weforum.org/docs/WEF_EGW_FOJ_Africa.pdf (accessed July 2018).

UN DESA Population Division (2017). World Population Prospects: *The 2017 Revision, Key Findings and Advance Tables.* Working Paper No. ESA/P/WP/248.

UNESCO Institute for Statistics (2009). *Global Education Digest 2009: Comparing Education Statistics across the World.* Montreal, Canada: UNESCO Institute for Statistics. s



Collaborating with the Private Sector



Young People and the Private Sector: Opportunities for Collaboration in Lavazza's Sustainability Strategy

MARIO CERUTTI (CHIEF SUSTAINABILITY OFFICER, LUIGI LAVAZZA S.P.A.)

INTRODUCTION

In keeping with the growing role assigned to the private sector in the implementation of the 2030 Agenda for Sustainable Development ("Our journey will involve Governments as well as Parliaments, the UN system and other international institutions, local authorities, indigenous peoples, civil society, business and the private sector, the scientific and academic community – and all people.") (UNGA 2015), companies have increasingly sought to shift away from an approach to sustainability solely based on Corporate Social Responsibility (CSR), and towards one rooted in the concept of corporate sustainability.

Defined by the United Nations Global Compact as a new "imperative for business" (UN Global Compact 2015), corporate sustainability indicates an integrated business strategy that considers the multiple dimensions of sustainable development as central to both corporate success and the long-term creation of value for all stakeholders. From this perspective, an essential principle of corporate sustainability consists in the need to strengthen the societies and communities in which a company operates, and particularly to promote strategic objectives including the participation of youth in the workforce and the diffusion of opportunities for collaboration, skills development and awareness raising among young people.

In order to contribute to the sustainable development of their communities, countries, and regions, talented young people must be given the means to test their ideas, improve their skills and deliver on their ambitions. Youth skills contribute much-needed energy and innovation to the actors that partner with them, and more and more companies now think they must be engaged in the implementation of the Sustainable Development Goals (SDGs), being the future protagonists of the world in 2030.

This Chapter seeks to present some insights about how opportunities for collaboration between young people and the private sector can be realized within the sustainability strategy of a company, using the recent efforts of Luigi Lavazza S.p.A. as a case study (hereinafter Lavazza). Lavazza is only at the beginning of its youth engagement plan, but it has already put in place different activities through different channels, alternatively including marginalized and unemployed young people from Calcutta, Italian university students, and young international innovators. At the core of its present activities lies the notion of "intergenerational duty", that is, the idea that everyone must take part in the dissemination and promotion of sustainable development, with young people being at the forefront.

The Chapter is structured as follows. Sections 1 and 2 trace the evolution of Lavazza's sustainability approach, from one focused on philanthropic commitments to an integrated set of policies and shared values. Section 3 examines Lavazza's activities tasked with promoting the engagement of and collaboration with young people. Finally, Section 4 provides some concluding remarks and discusses next steps.

THE EVOLUTION OF LAVAZZA'S SUSTAINABILITY APPROACH – FROM PHILANTHROPIC...

Lavazza's approach to Sustainability is rooted in its origins. This coffee business was founded in 1895 by Luigi Lavazza and the first evidence of attention to the environment and local society dates from 1935 and comes from the founder of the company. In fact, that year, during a trip to South America, Luigi Lavazza expressed his dismay ("I don't want to live in a world where nature is destroyed", "A world that destroys the goods of nature is one I do not belong

to") at the destruction of whole batches of unsold coffee — an experience that left a mark on him and shaped his business vision. Since then, Lavazza has always paid great attention to the economic, human, environmental and cultural assets of the countries in which it operates, with tangible actions for the benefit of coffee growers and their communities.

In the late 1990s, the Lavazza Family together with the Coffee Buying Department began considering the organization of a Foundation whose purpose was to disseminate Good Agricultural Practices among coffee producing countries in order to empower local communities and preserve the environment while at the same time enhancing the quality of coffee.

In 2004, the *Giuseppe e Pericle Lavazza Onlus Foundation* was officially founded. Today, it supports 22 projects in 14 different countries all around the world, and has impacted about 90,000 beneficiaries so far. The Lavazza Foundation, thanks to several important partnerships (such as Hanns R. Neumann Stiftung Foundation, International Coffee Partners and Oxfam), is currently carrying out activities that aims to empower coffee-producing communities by making them self-reliant and independent.

The Foundation works to support local communities from different points of view. On the one hand, it seeks to spread good agricultural practices in coffee-producing countries, beyond the immediate Lavazza suppliers. On the other, it also works to encourage access to food resources and to promote diversification of production, as well as to endorse gender equality, enhancing the role of women and families in promoting local livelihoods. Additionally, the Foundation supports several reforestation projects, with the parallel objectives of responding effectively to the effects of climate change and empowering youth.

Lavazza considers this contribution and support, which characterizes its first approach to Sustainability, as a "philanthropic" one. In fact, given that the Foundation wants to enable local communities to

1 See https://www.unicef.org/corporate_partners/index_25078.html.

develop their own business activities in the coffee industry, coffee producers are not obliged to sell their coffee to the Lavazza Corporation.

In 2016, however, Lavazza's approach to sustainability underwent a dramatic shift, as shown by the creation of a Sustainability Department reporting directly to the CEO and a broader strategic change towards a sort of "intermediate approach". In short, this approach is characterized by a reactive method, with professionals focusing not only on Lavazza Foundation projects, but also on Environmental Sustainability, Institutional Relations and Sustainability Reporting within the company's activities.

Currently, Lavazza is working for a structured integration of sustainability into the company's strategy, with a new approach, focused on integrated policies and shared values.

... TOWARDS AN INTEGRATED APPROACH

CHILDREN'S RIGHTS AND BUSINESS PRINCIPLES

In order to move towards an "integrated approach", the Sustainability Department is working to engage other Departments through different activities, such as, for example, the Children Rights and Business Principles (CRBP) project¹. These principles were issued by Save the Children, UN Global Compact and UNICEF, and define a very comprehensive framework to understand and address the impact of business on the rights of children. Lavazza decided to take up the challenge and engage different departments of the company in a series of sub-projects for the promotion of children's rights.



In this context, the Marketing Department is contributing by analyzing Lavazza's advertising policies in order to take into account children's rights, while the Human Resources Department is introducing initiatives and policies involving the families of all Lavazza employees. Moreover, the Coffee Buying Department is analyzing the regions where coffee is bought in order to find areas at risk of child labor and, if needed, developing new projects to prevent it.

SUSTAINABILITY OF THE PRODUCT

From the responsible consumption and production perspective, some innovative ideas have been implemented, including the use of compostable capsules or the launch of the ¡Tierra! coffee brand.

Compostable capsules are the result of a combination of Sustainability and Innovation. This product is on the market since 2016 and constitutes the answer to the growing demand coming from Lavazza consumers for responsible production combined with high quality standards. Compostable capsules represent the first Lavazza project focusing on the concept of Circular Economy, giving value to the important end—of-life phase of the product.

¡Tierra! is the first coffee sustainability project of the company. In fact, the ¡Tierra! brand was launched in 2002 to improve the living condition of farming communities and support their social development and economic growth. Realized in cooperation with Rainforest Alliance, the project is the result of strong commitment and dedication to sustainability. It is based on three fundamental core principles: product quality, support and care for small communities, and respect for the planet.

THE NEW LAVAZZA HEADQUARTERS

In addition to what was mentioned above, Lavazza recently moved to a new Sustainable Headquarters, that was awarded with LEED (Leadership in Energy and Environmental Design) Certification. Thanks to the new building, it was possible to adopt a new paperless policy, promote responsible water consumption and sustainable mobility, and produce renewable energy.

Thanks to the new hub, it was also possible to integrate people and part of the surrounding area through the creation of new open and common spaces, including a public garden, a public bistrot, and a Michelin-starred restaurant "Condividere" which means "To share".

Lavazza's new hub wants to promote efficiency, innovation and sustainability. It was envisioned as an investment that could demonstrate the commitment of the Lavazza Family for responsible business. Moreover, it supported the implementation of an internal communication plan on the SDGs, whose purposes are to both make all employees aware of the 2030 Agenda and trigger an engagement by all of Lavazza's people.

INTERNAL COMMUNICATIONS PLAN ON SUSTAINABLE DEVELOPMENT GOALS

In order to communicate effectively and to achieve the expected results, the internal communications plan is scheduled in three phases: *Awareness, Understanding* and *Adoption*. The first step is to raise the awareness of employees regarding the SDGs. By delivering messages through different communication channels, such as a newsletter or digital signage, it is expected that employees will be made more conscious about the environmental, economic and social challenges highlighted by the SDGs.

The activity that paved the way to the internal communications plan was the Lavazza 2018 Calendar on the Sustainable Development Goals². The Calendar sought to divide 365 days by 17 Goals, with an ambassador for each goal. The Lavazza Calendar Ambassadors are people, including several young women and men, who have distinguished themselves in different SDG-related projects. For example, the ambassador for Goal 5 on "Gender Equality" is Bonnie Chu, a young woman who founded a charity program to train marginalized women in digital photography. At the same time, Manal Kahi is the Ambassador for Goal 10 on "Reduced inequalities" and co-founded a catering company that serves meals conceived and prepared by refugees.

The main communication tool within the Awareness

² See http://www.lavazza.com/en/lavazza-world/photography/calendars/.

phase is a newsletter on the SDGs addressed to every employee describing the goals and the Company's commitment towards their implementation. In addition, educational materials from the United Nations communications resources are made available to provide further details. Finally, every newsletter features the experience of a colleague who is actively working towards a goal and wants to share his/her personal commitment.

Beside this, the Sustainability Department is currently involved in preparing meetings and conventions aimed at the company's management, in order to have all its members on board. In fact, the company is aware of the fact that commitment of top managers is one of the most significant factors in driving corporate sustainability.

Within the *Understanding* stage, Lavazza is planning the creation of online SDGs trainings for employees and a series of seminars with SDGs specialists and professionals. Its main objective is to make all employees, including the youngest among them, fully appreciate the importance of their engagement towards the SDGs.

In the *Adoption* phase, employees are expected to gain a new corporate mindset, which is "SDG oriented" and which would optimize their effectiveness as well as their commitment to be part of Lavazza's sustainable strategy. In order to explain the new approach of the company with the 2030 Agenda as a new conceptual framework, the 2017 Lavazza Sustainability Report will be shaped on the SDGs, and the progress that the company is making to promote and to contribute to the SDGs will be described.



Moreover, the Report will show the targets adopted by the company and the efforts undertaken to promote a new model of responsible consumption as well as the reasons that have brought Lavazza to update its sustainability vision and strategy by referring to the SDGs as its general conceptual framework.

GOAL ZERO AND YOUNG INNOVATORS

Conscious of its responsibility towards sustainability and of the importance of cooperation, Lavazza is taking further steps through a strategic initiative called "Goal Zero." This new goal's purpose is to raise awareness amongst stakeholders about the SDGs, promoting the idea that everyone can act and encourage people to take that action.

Among different stakeholders and dedicated projects, Lavazza is developing specific activities to involve young people in a discussion on the SDGs. The reasons are multi-faceted. First, these projects are meant to raise young people's attention on the SDGs. Secondly, they seek to foster debate and promote engagement with those who will be the protagonists of the 2030 world. According to the company's notion of "intergenerational duty", sustainability is a shared responsibility and an intergenerational engagement. As a consequence, Lavazza decided to focus on young people in order to listen to the ideas they generate to implement the SDGs, thus becoming aware of their expectations, ideas and vision while simultaneously taking them into account in decision-making processes, whenever possible.

'LAVAZZA AND YOUTH FOR SDGS' CONTEST

Lavazza considers it crucial to engage talented and skilled young people in SDG-related problem-solving, including through the creation of contests and prizes that support young innovators and unlock new opportunities for them. For this reason, the first "Lavazza and Youth for SDGs" Contest has been launched by the company in November 2017. The context was aimed at university students, who were required to submit an innovative pilot project to be implemented in a coffee producing country where the Lavazza Foundation has an ongoing supported intervention. The contest was open to students enrolled in different Italian universities and having different back-

grounds, including medicine, engineering, law, economics, and social sciences. Moreover, the projects were required to describe their impact on the SDGs, as well as to analyze the different interconnections among them.

For the winning team, Lavazza Foundation plans to organize a trip to the country targeted by the winning project, in order to study the procedures that might be necessary for its implementation. The second-best team will be offered a Summer School on the SDGs, while a third group will be awarded a tour of Lavazza new Headquarters and production plant.

The main objective of this project is to foster debate among young people about how their skills can be put to use to achieve the SDGs, in a spirit of intergenerational discussion and with the idea of mobilizing their potential for the definition of concrete sustainable solutions. In this context, the company sees value in inspiring and being inspired by young talented students, while also sharing insights and future perspectives with them.

COFFEE STUDY PROGRAM

The second project focused on youth engagement is called "Coffee Study Program".³ The project, organized in early 2018, involved four students coming from different countries (India, Italy, Uganda and the United States) and sharing a common interest for sustainable development issues in the context of food and agriculture.

This project's objective was to show these students how the Lavazza Foundation is working to promote sustainable coffee production and support local coffee communities, and most importantly to ask young innovators to rethink and reinterpret their idea of sustainable development, thereby spreading the message and answering Lavazza's call to action.

The students took part in a study trip to the Dominican Republic, where an ongoing project promoted by Lavazza in collaboration with Oxfam seeks to empower smallholder coffee farmers. The outcome of the Coffee Study Program is intended to be an open dialogue on several issues considered fundamental

by Lavazza, including the importance of partnerships, association and shared responsibilities. One of the participant, Kanika, summed up this attitude in the following way:

"We come from different backgrounds but there was this one thing, having the right intent, that all of us had."

Another student from Uganda, Stuart, added that "sustainability requires not only my effort; it requires the your effort and the efforts of everyone around here.

The concept was also highlighted by Jia, from Italy, who emphasized the importance of putting efforts, and investing time and responsibilities, into being an ambassador of sustainable development for other people ("We can all aspire to inspire").

LAVAZZA AND NEW HORIZONS

A third, additional way used by the company to empower younger generations has been the "New Horizons" program (The Times of Bengal 2017). This is a project by Save the Children that aims to break the intergenerational cycle of poverty, including 800 marginalized youths of Calcutta in a skill development platform and providing them with dignified livelihood options. In India, adolescents and young people from poor households are deprived of opportunities to build their skills, social and professional networks. Children and youths end up working in dangerous and exploitative workplaces where huge gender pay gaps continue to exist.

Lavazza took part in the initiative by offering a training program on the coffee world and barista skills to 15 young beneficiaries of the Save the Children's New Horizons project. For the first time, Lavazza has committed to an initiative expanding its support beyond the donations that the Foundation has been providing for years: Lavazza's expertise in the coffee sector can certainly help young people in marginalized contexts looking for a job or new life opportunities. The results of these Barista trainings have been remarkable, as some of the beneficiaries have been recruited in coffee shops. As of May 2018, one student has been recruited by Café Coffee Day, the leading coffee

3 See http://www.lavazza.com/en/coffeestudyprogram/.

company in India, and further three have found work in other small local cafes.

During the training session, what was particularly inspiring was the students' attitude, including their desire to learn and their focus and attention. This simple training was the chance for these young people to improve their lives and have access to a concrete opportunity for their future. Other than being a youth engagement activity, this project represented the first pilot of a cycle of training sessions provided by Lavazza that aim to go beyond simple donations and support, instead devoting time and experience for the good of beneficiaries. In this case, Lavazza provided young people with the "keys to the job", in order to inspire them and give them new opportunities.



CONCLUSION

A remarkable evolution can be witnessed in the goals and activities pursued through Lavazza's sustainability strategy, an evolution which lies in the company's DNA and which is mirrored by the increasing efforts made by other private sector leaders into incorporating the SDGs in their own business strategies. The first approach to sustainability was mainly philanthropic, characterized by support to coffee producing communities. In 2016, a crucial step resulted in the creation of a dedicated team which was put in charge not only of coordinating the projects of the Lavazza Foundation, but also promoting environmental sustainability and community engagement.

Thanks to this change and to the move to a LEED Certified Headquarters, it has been possible to develop several activities, such as the Internal Communica-

tions Plan, the development of sustainable products, and most importantly the incorporation of the 2030 Agenda for Sustainable Development in the company's sustainability strategy. The company committed itself to a further strategic initiative, called "Goal Zero, spread the message", taking the responsibility for the dissemination of the SDGs among its stakeholders.

Among them, young innovators represent a major audience and have been identified by Lavazza as a crucial constituency with which to foster mutual exchange and define a common vision for sustainable development. An increasing number of activities have been realized to achieve these objectives, focusing on three main areas of need: (i) providing support to young innovators; (ii) collaborating with youth to spread SDG awareness and open new debates in society about their implementation; and (iii) offering opportunities for training and skills development. The first objective was pursued through the creation of a contest aimed at asking students to submit innovative projects to be implemented in coffee producing countries and analyze their impact on the SDGs. The launch of the "Coffee Study Program" project, which gave international students the chance to visit a coffee producing community and to share their personal feelings and insights through Lavazza's social media channels, was an important instrument to realize Lavazza's second objective. Finally, the support provided by Lavazza to the New Horizons program of Save the Children, which provided training opportunities to marginalized youth in Calcutta, has to be seen in the light of the company's increasing emphasis on providing young people with new skills that can enhance their livelihoods and positively impact their communities.

To conclude, there are now ample opportunities for companies, including Lavazza, to promote sustainability as a shared responsibility and intergenerational duty. Partnering with young innovators who can contribute their skills to raise societal awareness and define innovative ideas for achieving the SDGs is rapidly emerging as the leading means through which these objectives can be achieved.

REFERENCES

The Times of Bengal (7 November 2017). Lavazza and Save the Children to partner to provide job skills to marginalised youth. *The Times of Bengal*. Available from: http://www.thetimesofbengal.com/lavazza-save-the-children-partner-to-provide-job-skills-to-marginalised-youth/ (accessed July 2018).

UNGA (2015). *Transforming our world: the 2030 Agenda for Sustainable Development.* UNGA Resolution 70/1, 21 October 2015. UN Doc. A/RES/70/1.

UN Global Compact (2015). *Guide to Corporate Sustainability. Shaping a Sustainable Future*. United Nations Global Compact. Available from: https://www.globalcompact.de/wAssets/docs/Nachhaltigkeits-CSR-Management/un global compact guide to corporate sustainability.pdf (accessed July 2018).



SDG-Based Impact Assessment



Aligning Youth Solutions with the SDG Framework

SUSHIL **RAJAGOPALAN** (PROJECT OFFICER, SOLUTION INITIATIVES, SDSN YOUTH), YURI **HUNG** (PROJECT OFFICER, SOLUTION INITIATIVES, SDSN YOUTH) AND DARIO **PISELLI** (PROJECT LEADER, SOLUTION INITIATIVES, SDSN YOUTH)

INTRODUCTION

Young people have actively participated in shaping the SDG agenda and are seen as critical agents of change. However, as we move along towards 2030, effective participation and engagement from young people will remain crucial in order to create youth-led accountability. Not only are young people the largest demographic, but they are also seen as the policy makers, thinkers, managers and community leaders of tomorrow. Young people have a dynamic approach towards solving critical problems surrounding them. They are often able to bring fresh perspectives and insights to an issue. And with the changing dynamics of global social media, young populations are now able to connect with each other more effectively and efficiently than ever before. Statistica's (2018) analysis of global Facebook data shows that the platform has over 2.19 billion active users, a majority of which fall in the 18-24 and 25-34 age groups. This trend is similar for other dominant social media platforms like Twitter and Instagram. The discourse generated around the SDGs in social media through youth participation help amplify the local voices. The #KnowYourGoals campaign of SDSN Youth, in which over 150 events were organized in 38 countries and more than 10,000 people were involved, was able to generate more than 28,000 social media impressions¹. This highlights the potential young people hold to spread the word about the SDGs worldwide in order to interact and empower with other stakeholders to make change possible.

The same holds true for youth skills and the concrete problem-solving that young people often contribute to their communities through their projects in charity, business, and research. This edition of the Report highlights 50 such solutions which are creating impact by addressing key development challenges across different countries and regions of the world. Whereas most youth-led solutions show a promising potential to achieve the SDGs, however, many of them are unable to directly align their work with the SDGs framework. Indeed, there is a consensus that the SDGs will not be achieved without a substantial contribution coming from nonstate actors (including NGOs and the private sector), and that such contribution will have to be increasingly incorporated into business models and analysis of corporate sustainability performance (World Benchmarking Alliance 2018a). Benchmarks are seen as particularly useful in clarifying how companies can and should contribute to particular SDGs, helping priority setting and efficiency. They are essential for tracking progress, showing gaps and informing the action of investors and companies themselves. Lastly, they constitute much-needed engagement tools for both investors and civil society (World Benchmarking Alliance, 2018a). As a consequence, there is no shortage of initiatives engaging with the development and dissemination of SDG-aligned reporting and impact assessment among large multinational companies, Similar efforts, however, have yet to be undertaken at the level of small and medium businesses (SMEs), including youth-led businesses and the wider community of young innovators (World Benchmarking Alliance 2018b).

Accordingly, this chapter tries to fill this gap by introducing the topic of SDG alignment among youth-led projects (including but not limited to youth-led businesses). First, the chapter provides a brief overview of few challenges that youth today face in terms of aligning their work with SDGs. The chapter then moves on

¹ See http://sdsnyouth.org/knowyourgoals/.

to suggest ways in which youth solutions can think of aligning their work with SDG framework by adapting the guidance provided to businesses in general by the SDG Compass (GRI, UN Global Compact and WBCSD 2015), before providing some concluding thoughts.

WHAT ARE THE CHALLENGES SURROUNDING THE INCORPORATION OF THE SDG FRAMEWORK IN THE ACTIVITIES OF YOUNG INNOVATORS?

Despite the importance of the SDGs for the world's economies and societies, several challenges hinder the meaningful participation of young people in their implementation. With respect to concrete problem-solving endeavors, it is clear that many youth-led solutions are already transforming the landscape of global development, and the two editions of the Youth Solutions Report provide 100 such examples of projects that are targeting various SDGs across different regions of the world. These youth-led solutions are successful in mobilizing more young people in developing a sense of ownership and awareness about the challenges the world is facing (WAY 2015). Despite such efforts, however, a large percentage of youth-led initiatives have so far been unable to more deeply engrain the SDGs into their activities. Many youth-led organizations believe that the SDGs are not relevant to their work, or that it is sufficient to be aware of the SDG framework to develop solutions that effectively contribute to the achievement of the goals. No previous efforts have been taken to change such circumstances. In general, many youth-led solutions have yet to comprehend the significance of the SDG framework in changing business models and impact assessment techniques, as well as to draw linkages to the work done on the ground. This is likely due to multiple factors, including lack of awareness and knowledge and resource scarcity.

a) Awareness and Knowledge

Lack of awareness and knowledge is a key challenge in realizing the SDGs, especially within youth groups. A recent study in university communities of Nigeria indicated that only a little over two-fifths of the population are aware of the SDGs (Omisore et al. 2017). This is particularly concerning given the idea that 'leaving no one behind' is the overarching objective of the SDGs and that such low levels of awareness will only serve as a hindrance towards achieving the 2030 Agenda (World Benchmarking Alliance 2018b). Furthermore, whilst awareness is crucial, it does not necessarily translate into knowledge. The Glocalites Report, which surveyed over 24,000 individuals from 24 countries, revealed that only 1 percent of people 'know the SDGs very well' despite 64 percent being aware of them (Glocalities 2016). This shows that despite awareness, local knowledge of the SDGs is still lacking among young populations. The challenge, therefore, is to communicate this complex framework to youth in an engaging way. SDG 4 explicitly states the importance of learning and education - and specifically of education for sustainable development.

b) Lack of Capacity

The capacity of youth-led solutions is one of the key obstacles preventing young innovators from aligning their work with the SDGs. The scale of solutions in many cases is small or localized, and their founders tend to work in a constrained environment. Hence, they are not in a position to have the resources or capacity to explicitly introduce the SDG framework within their work or impact assessment efforts. More specifically, lack of capacity is often related to the issue of lack of uniform and reliable data frameworks, as well as lack of proper training on data collection and use. Today, data has become the new currency and the associated data value chain (Open Data Watch 2018) involves many phases - from collecting data, to publishing it, to uptaking and impact. The lack of data, which is especially evident in developing regions of the world, makes it even more difficult for youth-led solutions to move forward with idea of aligning their business model with the SDGs or adopting forms of SDG-based reporting. In other words, youth solutions are faced with multiple challenges at all phases of data value chain. Without an implicit understanding of complex SDG interactions and availability of reliable data, youth-led solutions struggle to effectively communicate their impact to dif-

ferent stakeholders through common, SDG-aligned frameworks.

To counter this lack of alignment, SDSN Youth is presently working to build a data toolkit aimed at youth-led organizations and based on the the SDG framework. This toolkit will also address the needs of local actors and policy-makers and suggest pathways to integrate youth-led data within different scales including local, regional and national levels. Similarly, SDSN Youth's Investment Readiness Program² strives to provide support to youth-led initiatives through training and capacity building that is aligned with the SDG framework. When young people are supported through capacity-building programs to develop skills, they in turn drive change in their communities and contribute towards the SDGs. Such programs need deeper partnerships not just at global scale but also at the national, regional and local scale. The 2030 Agenda for Sustainable Development highlights the importance of partnerships, and fostering them becomes the responsibility of policy-makers.

WHAT IS THE SDG FRAMEWORK?

The official SDG indicator framework was developed by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) (UN Stats 2018). Over 230 indicators have been identified within 17 global goals to track the progress of the SDGs. Indicators are the backbone of monitoring progress towards the SDGs at the local, national, regional, and global levels serving two main purposes: management (to stay on course) and accountability (to hold all stakeholders to the SDGs). The SDG framework turns the goals and their targets into a management tool that helps stakeholders develop implementation strategies and allocate resources accordingly. It also serves as a report card to measure progress towards sustainable development and help ensure the accountability for achieving the SDGs. Each of the proposed SDG targets identifies tangible metrics to benchmark and measure progress.

Different stakeholder groups have proposed their own ways of using the SDG framework for their purposes.



A prime example, in the context of this chapter, is the business community which has strengthened its commitment to the SDG framework. The current work being conducted by the World Benchmarking Alliance is one such example, seeking to "build on existing efforts and use corporate benchmarks to measure and compare performance of companies on the SDGs" (World Benchmarking Alliance 2018c)³. The SDG Compass, as developed by GRI, the UN Global Compact and the World Business Council for Sustainable Development (WBCSD) (2015), is another. More specifically, the Compass represents a tool to help companies align their strategies as well as measure and manage their contributions towards the realization of the SDGs. It provides five generic steps for companies to maximize their contributions, which can be adapted to the perspective of young innovators for the purposes of this chapter.

Figure 1 - The 5 steps of the SDG Compass. Source: GRI, UN Global Compact and WBCSD (2015).

² See http://unsdsn.org/news/2018/01/12/sdsn-youth-announces-youth-investment-readiness-program-thanks-volunteers/.

³ See https://www.worldbenchmarkingalliance.org.

Step 1: Understanding the SDGs

The aim of the first step identified by the SDG compass is concerned with helping youth-led organizations get familiarized with the idea of the SDGs. As business organizations increasingly shift away from the traditional philanthropic paradigm to mainstreaming sustainability as a core component of their corporate strategy, they build progressive capacity to understand the challenges and interactions enshrined in the SDG framework. For example, SDG awareness amongst the business community is reported as high as 92 percent (PWC 2016). As awareness grows, the idea of SDGs become easily ingrained into culture of a community and its practices. A similar strategy is relevant for youth-led organizations as well. In order to incorporate the SDGs into their business models, youth-led projects must first understand the SDGs as an overarching strategy for the implementation of their goals and objectives.

More specifically, understanding the SDGs is seen as having multiple positive externalities in the work of a youth-led solution. First, it can lead young people to identify opportunities for action in their own communities, translating societal challenges affecting their immediate neighborhood into a clear vision of gaps that exist in the market and a business case for delivering new products or processes. Second, it can contribute to stabilize the societies and markets in which young innovators operate, supporting pillars of business success such as growing consumer markets, a more skilled and engaged workforce, ensuring sustainable supply of natural resources and other raw materials, and promoting good governance. Third, it can support trust in young people as drivers of positive impact, showing stakeholders including consumers and policy-makers that the contribution of youth skills to society can help deliver triple bottom lines and create value. Finally, it can help establish a level playing field for all businesses, defining a common framework and shared narrative that can assist in the creation of more effective partnerships with civil society, governments and consumers.

Step 2: Defining priorities

After a proper assessment of the positive and negative impacts that a youth-led solution has on different aspects of sustainable development, it is often clear that not all of them will be necessarily relevant to the work done: as such, identifying key impact areas across the Goals helps define priorities. Whereas the SDGs are highly interconnected, it is crucial for youth-led organizations working in different sectors to set priorities, especially when working in resource constrained settings. For example, SDG 12 (responsible consumption and production) will probably not be relevant for youth-led organizations working towards education for climate change or awareness on autism related issues. A relative starting point can be trying to answer: What are the sectors which the organization intends to target? This offers a possibility to really bind the large scope of SDGs into a smaller set of issues that are affected by the solutions. As a consequence, solutions can then move on to think of a second question: What are the observable trends and conditions that sector? Whereas setting SDG-aligned priorities offers youth-led solutions the opportunity to create value for themselves and their stakeholders and constituents, it is also important to vice versa understand the impact that wider social, economic and environmental trends will have on solutions' priorities. External factors can easily either increase or decrease value of solutions. For example, the threat of climate change-induced extreme events like droughts and floods can threaten solutions working on SDG 2 (End Hunger). Thus, solutions will constantly need to focus on evaluating external trends and conditions that may affect them.

When defining priorities, youth-led solutions should focus on three main aspects. First, they should map impacts along the entire value chain in order to identify areas with the highest (positive and negative) impacts, taking local contexts into account and engaging stakeholders in the community where the solutions operate (this will be easier to do if undertaken since the very design phase of a project).

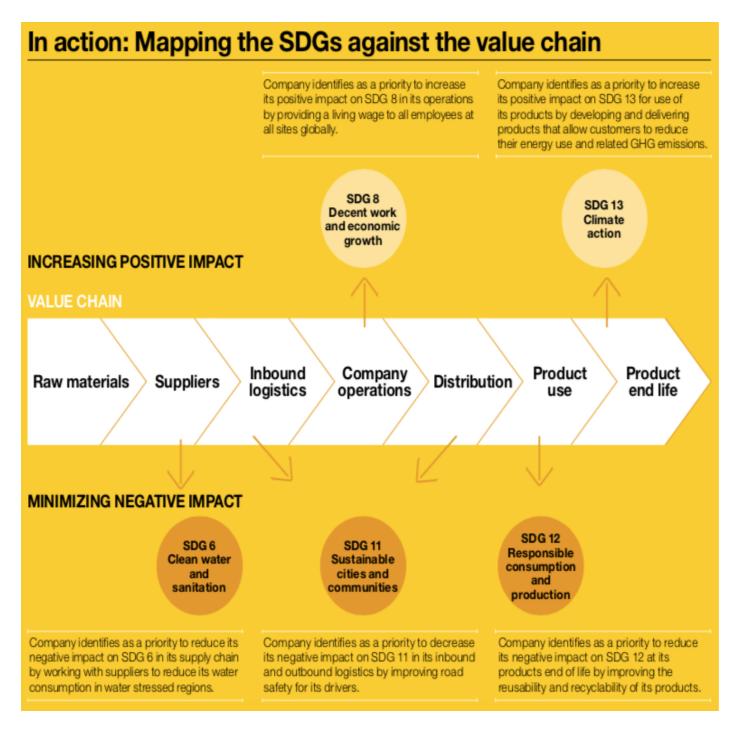


Figure 2 - Example of how to map SDG impact along the value chain of a company or organization .Source: GRI, UN Global Compact and WBCSD (2015).

Second, they should select appropriate indicators and collecting data for each of the identified high impact areas in order to track progress over time. For youth-led solutions, due to resource constraints, it might be difficult to collect data that are located far away along the value chain, such as data concerning the outcomes (i.e. changes in target populations) or impacts (i.e. wider societal changes that result from the outputs) of the project's activities. However, outputs data (i.e. what is generated through the project's activities) will always be available, and might represent a solid alternative for young innovators. Third, youth-led solutions should properly define the priorities themselves, considering the magnitude, likelihood and and severity of current and potential negative impacts while assessing the opportunities for taking advantage from current or potential positive ones. Importantly, all these three steps can (and should) use the SDG as their overarching framework.

Step 3: Setting Goals

Goal-setting is essential in order to drive good performance. Many organizations prefer adopting a SMART (Specific, Measurable, Assignable, Realistic, and Time-related goals) approach for goal setting. Setting goals which align with the SDGs is becoming a norm with business organizations, which allows them to communicate with a larger audience and drive performance. This is especially relevant for youth-led efforts, which often directly start with a focus on delivering solutions to underprivileged populations and thus already have a defined idea of the societal goals they want to impact. Low-cost healthcare services or solar systems for off-grid population are some prime examples of such solutions that have emerged from youth-led efforts. Such bottom-of-pyramid (BOP) approach is already a strategic population target recognized by all development organizations. It is important, however, to ensure that goal-setting is accompanied by a parallel effort to define the goal's scope and end date by selecting key performance indicators of the likes of those used in Step 2 to assess impacts. If possible, these KPIs should reflect the impact (rather than output) of the project's activities, and in the case of youth-led solutions it may help to use proxies for impact and rely on indicators that are already commonly used by other companies and organizations.

Once the goal's scope and end date have been defined, youth-led solutions should also define an appropriate baseline (a time period or a point in time) and then select an appropriate level of ambition. From this perspective, the SDGs provide an overarching, global level of ambition, which youth-led solutions can then seek to internalize through the definition of an appropriate share of that global level and the use of scientific data (so-called outside-in approach to goal-setting). Whilst this might be difficult (and not as relevant) for early-stage, localized projects, there are a number of initiatives that could be used by young innovators to help set goals that are more manageable and realistic (GRI, UN Global Compact and WBCSD 2015: 19). In addition, increased SDG data disaggregation at the national and sub-national level will prove instrumental in identifying shares of ambition that are aligned with the scale at which youth-led solutions operate.

Step 4: Integrating

As suggested by the SDG Compass, sustainability goals should be an integral part of business activity along with traditional goals like sales and productivity. According to a 2014 survey where 38,000 executives, managers, and thought leaders were surveyed, more than 90% of them agreed that effectively addressing sustainability issues cannot be carried out in isolation (GRI, UN GLobal Compact and WBCSD 2015). Hence, it is important to integrate the SDGs across all functions of business. Calling for sustainable practices within various processes has been recognized as the primary goal rather than the secondary goal. Similarly, youth-led organizations need to integrate the SDGs within their operations. Identifying individual goals and targets relevant to their work and defining the actions needed to achieve them will go a long way in symbolizing the organization's commitment to the SDGs. For example, the starting point can be answering the questions such as:

- a. What activities is the organization involved in and how do they align with the SDG targets?
- b. What are the key performance indicators for the organization's objectives?

For youth-led solutions, integrating the SDGs into the business model can arguably be easier than for large companies, whose managers have to create a shared understanding that resonates with the respective Boards of Directors as well as as across an organization's structure. In addition, mainstreaming the SDGs in a youth-led, early-stage solution will benefit from the fact that such a vision will often come directly from the founders and CEOs, rather than from sustainability divisions or supply chain managers. In any case, embedding sustainability goals within a youth-led solution will have to go deeper than positively contributing to a specific goal as a natural consequence of the solution's focus. Once a KPI has been adopted, the related targets have to become part of the management agenda of the solution, and then be translated

into individual targets for each component of the solution's team.

Step 5: Reporting and Communicating

Benchmarking is crucial for communicating the impact of youth-led solutions on the SDGs, thereby creating trust in young people's role in the implementation of the 2030 Agenda and supporting the creation of value by stimulating integrated performance management and attracting investment. In addition, and most interestingly for youth-led solutions, such reporting increasingly occurs beyond the inclusion of non-financial data in formal reports, allowing media-savvy innovators to communicate their impacts through their websites, social media channels and events. In short, a dedicated approach for youth-led initiatives for measuring and monitoring can be helpful in promoting their activities. While little work has been done so far in developing dedicated frameworks or toolkits for youth-led initiatives, young innovators can already learn from other stakeholders including the business community.

With respect to reporting, a first step could entail the search for appropriate standards for sustainability reporting that could be then tailored to the specificities of youth-led innovation. Existing standards or frameworks (like the standards offered by the Global Reporting Initiative⁴) can be difficult to navigate and tailored to larger multinational companies, but this does not mean that young innovators have to refrain from producing concise SDG reporting. In particular, such reporting can focus on those defined as 'material issues', that is, "those issues which reflect a company's significant economic, social and environmental impacts" as well as those that "influence the assessments and decisions of stakeholders" (GRI, UN Global Compact and WBCSD 2015: 27). Material issues will for example include the impacts (positive and negative) on the SDGs, the measures taken by the youth-led solutions to mitigate the negative ones, and the ones taken to leverage the skills and resources of a youth-led solution in support of sustainable development.

By contrast, when it comes to communication, youth-led solutions should pay attention to the need of going beyond simply discussing performance in the context of the SDG framework, and actually using SDG language in order to build a shared narrative and common values among stakeholders. In particular, the SDG Compass suggests four relevant components of such disclosure: (i) a description of the process of SDG-based priority setting; (ii) the significant impacts, both positive and negative, related to any relevant SDG; (iii) the goals identified for each SDG and the progress in achieving them; and (iv) the actions taken to manage impacts and interactions across the SDGs.

WHY THE SDG FRAMEWORK FOR YOUTH-LED SOLUTIONS?

Youth-led solutions working with SDG targets and metrics can be strategic in terms of their approach and communication. One can find the area which a youth-solution is catering to and look for the subsequent target and its associated indicators. For example, if the solution is catering to the rural population through providing access to energy, it can align the solution with the associated indicators of SDG 7 such as proportion of population with access to electricity. Reporting impact through this method directly reflects the efforts of the youth-led solution towards the SDGs. Furthermore, it also builds on the strengths of the associated synergies between the different targets. Not only does the SDG framework offer strategic positioning (i.e. what youth-led solutions are targeted towards), but it also streamlines the way they work (i.e. process). For example, are solutions providing equal opportunity to women or producing decent work culture for people of different religion and class? In Chapter 1, we have already highlighted a few such examples of how positioning can help youth-led solutions deliver impact and increase efficiency.

⁴ See https://www.globalreporting.org/Pages/default.aspx.

Using the SDG framework also opens up avenues for youth-led initiatives to connect with SDG-oriented funders. Organizations look to fund impacts that can be directly linked to the SDGs. For one, there is a global consensus on the idea of the SDGs and governments are increasingly trying to speak this language. It proves valuable to align the organization's ideas, values and strategy to the SDG framework so as to effectively communicate to external stakeholders. In this context, especially important for young people is to communicate SDG alignment to philanthropic organizations, as they often provide great funding opportunities for youth-led organizations. Philanthropic organizations are leading and shaping the discussions on how to achieve SDGs. For example, the SDG Philanthropy platform launched in 2014 is a multi-year initiative led by the UNDP, the Foundation Center, and Rockefeller Philanthropy Advisors (RPA)⁵. It aims to build greater awareness around the SDGs, along with increasing international development resources, and creating opportunities to forge new partnerships for the philanthropic community. A recent report by SDG Funders highlights that universal grantmaking between 2010 and 2013 (when applied through SDG lenses) has totalled over \$97.3 billion and could be more than \$370 billion over next 15 years (Smith, 2016).

CONCLUSION

The Sustainable Development Goals are a global language, as over 193 nations have adopted the 17 goals. This shared language provides a platform for youth-led solutions to align their activities and report their impacts through the SDG framework, whilst opening up avenues for an effective collaboration with funders, foundations, NGOs, and other change-making institutions on a global scale. Leveraging the SDG framework among youth-led solutions is ultimately about achieving the SDGs themselves. Further, an impact report aligned with it can convey the relevance of youth-led solutions to solving the critical challenges of our times. Thus, while solutions may act locally, they can powerfully position themselves in the broader global picture.

REFERENCES

Glocalities (2016). Towards 2030 Without Poverty. Glocalities Whitepaper. Available from: https://glocalities.com/reports/towards-2030-without-poverty (accessed July 2018).

GRI, UN GLobal Compact and WBCSD (2015). SDG Compass: The Guide for Business Action on the SDGs. Available from: https://sdgcompass.org (accessed July 2018).

Omisore, A.G., Babarinde, G.M., Bakare, D.P. and Asekun-Olarinmoye, E.O. (2017). Awareness and knowledge of the sustainable development goals in a University Community in Southwestern Nigeria. Ethiopian Journal of Health Sciences, 27(6), 669-676.

Open Data Watch (2018). The Data Value Chain: Moving from Production to Impact. Available from: https://opendatawatch.com/wp-content/uploads/2018/03/Data_Value_Chain-WR-1803126.pdf (accessed July 2018).

PWC, (2016). Make it your business: Engaging with the Sustainable Development Goals. PriceWaterhouse-Coopers. Available from: https://www.pwc.com/gx/en/sustainability/SDG/SDG%20Research_FINAL.pdf (accessed July 2018).

⁵ See https://www.sdgphilanthropy.org.

Smith, B. (24 May 2016). Foundations Will Contribute \$364 Billion to SDGs. Philantopic | Philanthropy News Digest. Available from: http://pndblog.typepad.com/pndblog/2016/05/foundations-will-contrib-ute-364-billion-to-sustainable-development-goals.html (accessed July 2018).

Statistica (2018). Distribution of Facebook users worldwide as of April 2018, by age and gender. Available from: https://www.statista.com/statistics/248769/age-distribution-of-worldwide-instagram-users/ (accessed July 2018).

UN Stats (2018). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. UN Doc A/RES/71/313.

UNDP (2017). Youth as Partners for the Implementation of the SDGs. New York, NY, USA: United Nations Development Programme. Available from: http://www.undp.org/content/undp/en/home/librarypage/results/fast-facts/fast-facts-youth-as-partners-for-the-implementation-of-the-sdgs.html (accessed July 2018).

WAY (7 April 2015). Involvement of Young People in Sustainable Development Goals. World Assembly of Youth. Available from: http://www.way.org.my/press-release-menu/450-involvement-of-young-people-in-sustainable-development-goals-sdgs (accessed July 2018).

World Benchmarking Alliance (2018a). Consultation on the World Benchmarking Alliance. Amsterdam, 30 April 2018. World Benchmarking Alliance. Available from: https://www.worldbenchmarkingalliance.org/wp-content/uploads/2018/06/Summary-Report-Amsterdam-Roundtable.pdf (accessed July 2018).

World Benchmarking Alliance (2018b). Consultation on the World Benchmarking Alliance. Bonn, 22-23 March 2018. Summary Document. World Benchmarking Alliance. Available from: https://www.world-benchmarkingalliance.org/wp-content/uploads/2018/06/Youth-Roundtable-Bonn-Summary-Report.pdf (accessed July 2018).

World Benchmarking Alliance (2018c). Corporate Sustainability Performance. World Benchmarking Alliance. Available from: https://www.worldbenchmarkingalliance.org/wba/ (accessed July 2018).

Acknowledgments

This report has benefited from comments and inputs provided by members of the SDSN, its Leadership Council, and many outside experts. The authors are particularly grateful to the Members of our Advisory Panel, their assistants as well as the following individuals for comments, data, or other support provided by the following individuals:

Francesca Allievi, Catherine Barba, Luca Bucken, Laura Cavalli, Bonnie Chiu, Antonio Cianciullo, Simone Cresti, Ruxandra Creosteanu, Alexander Dale, Gilmara Dantas, Caroline Descombris, Marie Fischborn, Carly Gallo, Bianca Genitori, Jennifer Gross, Ross Hall, Kristina Hildebrand, Kourosh Houshmand, Suzi Ibbotson, Kirthi Jayakumar, Rainer Kattel, Nelie Kuekam-Keinmeni, Francesca Lavazza, Oliver Libby, Wendy Lim, Martin Maerkl, Julia Marton-Lefevre, Mariana Mazzucato, Lena Menge, Alessio Mennecozzi, Emanuele Musa, Anna Nordén, Cherie Nursalim, Anne Oliphant, Valerie Puetz, Angelo Riccaboni, Anna Ruggerini, Gabriela Sampaio, Djaffar Shalchi, Rasmus Schjodt Pedersen, Jeno Staehelin, Erica Randone, John Thwaites, Jessica Vaghi, Virgilio Viana, Patrick Paul Walsh, Forest Whitaker.

We would also like to thank the external authors of the specific Report chapters: Mario Cerutti, Paul Frampton, Donovan Guttieres, Tim Heard, Chloé Khalifat-Calbet, Kirsten Naude, Jack Parsons, Fabio Petroni, Fabrizio Lobasso, Gautier Loo, Fabio Petroni, Veronica Rossi, Mathilde Souchon.

At the Sustainable Development Solutions Network - Youth, we thank the following members for their support and involvement in the production of the Report: Katya Burceva, Michelle Huang, Sophia Huynh, Anastasiya Kostomarova, Siamak Sam Loni, Yuntong Man, Xavier Peredo, Isabel Perez-Dobarro.

At the Sustainable Development Solutions Network, we thank the following members for their support: Lauren Barredo, Maria Cortés-Puch, Elena Crete, Lara Dahan, Abigail Orzolek, Jeffrey Sachs, Guido Schmidt-Traub, Dorothea Strüber, Ryan Swaney, Kayla Colyard, Cheyenne Maddox.

Meet the Team

The Youth Solutions Report is a flagship project of <u>SDSN Youth</u>, the global youth initiative of the <u>UN Sustainable Development Solutions Network (SDSN)</u>, launched in 2012 under the auspices of the United Nations Secretary General, and directed by Prof. Jeffrey D. Sachs. The work on the Youth Solutions platform is managed by the Solution Initiatives team of SDSN Youth



DARIO PISELLI Project Leader

Dario currently works as a Research Officer for the Centre for International Environmental Studies of the Graduate Institute of Geneva, Switzerland, where he is also a PhD candidate in International Law. He previously worked as a Research Officer for the Global Health Centre of the Graduate Institute of Geneva. In 2017, he was a co-recipient of an Erasmus+ grant for Jean Monnet Modules (project title: European Union Law and Sustainable Development), and is now the Program Manager of the Module, which is hosted by the University of Siena. Dario coordinated the first #KnowYourGoals global campaign in 2015 and has since led the Solution Initiatives team of SDSN Youth. His main areas of work are international environmental law, biodiversity conservation, ocean governance, climate change, and global health. He holds a MSc in Environment and Development from the London School of Economics and Political Science, and a JD from the University of Siena.



JULIAN PAYNE
Senior Project Advisor (Access to Finance)

Prior to joining the Solutions Initiatives team, Julian served as the Project Leader for SDSN Youth's work on Youth, Peace & Security and as a member of its Research & Policy team, acting as a source of feedback on SDSN and UN reports. Julian also works as an analyst at the Carbon Trust, most recently working on Mission Innovation, an initiative in which 20 countries pledged to double their clean energy R&D expenditure up to 2020.

Prior to joining SDSN Youth, Julian worked as a research associate at the Constitution Unit, a think tank housed in UCL's Department of Political Science, and as a research assistant at the Konstanz Science Forum. Julian holds an MSc in Comparative Political Economy from the London School of Economics and Political Science. He also holds a BA in Philosophy and Linguistics from the University of Konstanz and the University of Durham.



ALEX CLARK
Senior Project Advisor (Access to Finance)

Alex has recently returned to SDSN Youth, after serving as Project Leader for Operations/Networks until 2017. Alex Clark is an assistant analyst on CPI's climate finance team, in its San Francisco office. Prior to joining CPI, Alex undertook a wide-ranging fellowship at Harvard University and conducted research on the geopolitics of renewable energy and electric vehicles. He also led a team advising the Ray and Tye Noorda Foundation on their climate change programming. Alex currently coordinates Galvanizing the Groundswell of Climate Action. He has represented Young European Leadership at the COP21 and COP22 climate conferences. He has previously worked for the International Union for the Conservation of Nature, and the debt capital markets division of Bank of America Merrill Lynch in London. He holds an MSc in Global Governance and Diplomacy from Oxford University and a BA (Hons) in Politics, Philosophy and Economics from Warwick University.



INNA AMESHEVA

Project Officer (Digital Ecosystem)

Inna recently completed her PhD in climate change and sustainability at Hong Kong University Law School. After receiving a First Class Honours Law Degree from the University of Birmingham, she worked for a top US law firm in London and gained experience at the European Court of Justice in Luxembourg. Next, Inna embarked on a start-up journey at Google Campus in London, where she developed a passion for innovation, technology and entrepreneurship. Inna then spent four years in Hong Kong, focusing on international climate change law and sustainability. She is passionate about social inclusion and development and her goal is to contribute towards shaping our ever-changing world, supercharging the GreenTech entrepreneurship ecosystem. She is fascinated by breakthrough innovations in the fields of technology, renewable energy and science.



KANIKA JOSHI

Project Officer (Youth Solutions Report)

Kanika works as a Research Associate with IFMR LEAD and has a postgraduate degree in Sustainable Development Practices from TERI, University of New Delhi. Her previous engagements include social research in Uttarakhand, Odisha, Uttar Pradesh, Karnataka, Gujarat and Delhi.

She has experience in participatory appraisals with tribal/rural/peri urban communities and in implementing interventions in the livelihoods sector. She has worked with The Energy Resource Institute, SELCO Foundation and HCL Foundation. She holds a Bachelor's Degree in Commerce from University of Delhi and is a keen contemporary dancer.



FERNANDA MARTINELLI

Project Officer (Events)

Fernanda is a sustainable development scientist passionate about generating data and easy-to-understand information to empower society to make responsible decisions about the environment. For the last five years, Fernanda has led science-based projects regarding poverty, deforestation, and urban challenges in Rio de Janeiro and the Amazon region - three of them years working for the global NGO Conservation International (CI).

She holds a Master from the Global Master Development Program (MDP/UFRRJ) and a post-graduate certificate in Environmental Management from TU Dresden (Germany).



ZENNA LAW

Project Officer (Investment Readiness Program)

Zenna is a UCL graduate with a degree in Russian politics. She has interned at the Permanent Mission of Malaysia at the United Nations in Geneva on issues of human rights, intellectual property, WMDs, and the nuclear ban treaty. She is currently working to develop a campaign initiative in to Malaysia realise the rights and self-agency of foreign domestic workers and migrants.

While in London, Zenna worked year-round as a UCL Global Ambassador as well as conference coordinator for the youth division of British Pugwash to bring forward nuclear disarmament efforts.



SUSHIL RAJAGOPALAN

Project Officer (Research)

Sushil is currently engaged as Research Assistant with the Graduate School of Sustainability

of Arizona State University, where he is also pursuing his PhD in Sustainability. He holds a Masters in Sustainable Development Practice from TERI University.

Sushil has previously worked with TERI University, the Institute of Rural Management of Anand (IRMA) and the Indian Institute of Technology Bombay. For past four years, he has been working on projects relating to climate resilient development in South-east Asia with sectoral focus on energy and agriculture. Recently, he has also been involved in several projects relating to citizen-generated data.



YURI HUNG

Project Officer (Data Partnerships)

Yuri is a UCL graduate with a degree in International Public Policy. He has worked in the consulting industry previously for 2 years, while running a youth Think Tank, Youth IDEAS, for the Hong Kong Federation of Youth Groups, one of the largest youth-targeted NGOs in Hong Kong. Yuri is currently working as an initiator of community workshops, including Telling Story with Data, Presenting with Impact, and Mindfulness x Chinese Calligraphy. He is currently working on a social project focusing on positive education in Hong Kong.

Yuri is a featured speaker at TED. He has spoken for TEDxSOAS and TEDxLingnanUniversity. He is working as a Volunteer Consultant for Asian Charity Services, serving NGOs through advising on the relevant skills and capabilities.



AMY AU

Project Officer (Strategy and Communications)

Amy is currently the Digital Communications Manager at Sustainia, a sustainability advisory group based in Copenhagen, Denmark. She juggles multiple roles, from running social media campaigns to developing media partnerships and managing the online community (while making sure there are chocolates at the workplace). Before she moved to Scandinavia, she had worked as a journalist in Hong Kong, covering environmental, health and sustainability news for three and a half years, during which her passion for sustainability communication and storytelling grew.

Amy holds an MSc. in Social Anthropology from the University of Oxford, and furthered her studies in Sustainable Development at Uppsala University with the support of the Scholarship Foundation of the Swedish Chamber of Commerce in Hong Kong. She also holds a BA (1st Hons) in Anthropology from the Chinese University in Hong Kong.



KIRA MULLALLY

Project Officer (Strategy and Communications)

Kira is a Master's Candidate at the Graduate Institute of International and Development Studies (IHEID) in Geneva, Switzerland. She is pursuing an MA in International Affairs, focusing her studies on Environment and Sustainability. At the Institute, she is an active member of the IHEID Environmental Committee, through which she assisted with Swiss Sustainability Week and also presented a workshop at Geneva's International Climate Show 2018. She is also currently working on an initiative with Impact Hub (Geneva and Lausanne) regarding the Circular Economy in the Arc Lémanique.

Kira holds a BA in International Relations from the University of British Columbia, during which she did an exchange at Lund University.

About SDSN Youth

Launched in 2015, SDSN Youth is the global youth division of the Sustainable Development Solutions Network (SDSN), an initiative for the United Nations directed by Professor Jeffrey D. Sachs. SDSN Youth aims to educate a global movement of young people on sustainable development and support them in creating innovative and sustainable solutions to global development challenges. SDSN Youth works alongside policymakers and receives assistance from field experts.

The global reach of the SDSN, with its strong links to universities from around the world, provides a unique opportunity to effectively involve youth in the post-2015 agenda. SDSN Youth has 5 overarching aims and objectives:

- (I) Monitor constituencies of young people with capacity to mobilise to achieve the SDGs
- (II) Educate young people about the SDGs and encourage them to prioritise their implementation
- (III) Integrate concerns and views of young people into the pathways for achieving the SDGs
- (IV) Provide a platform for young people from different communities to connect and share ideas and experiences that address the challenges of sustainable development
- (V) Support and celebrate projects that are aimed towards achieving the SDGs

For more, visit www.sdsnyouth.org.



