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YOUTH CHALLENGE 3.0

Theme:
Elevating lives of people and the planet

CLOSING REPORT

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Generation Unlimited Youth Challenge 3.0 - Theme

The Generation Unlimited Youth Challenge is a flagship holistic social entrepreneurship and youth engagement initiative that tackles skill-building, employability, and social impact while building confidence and empowerment among the most marginalized young people globally. It is designed to engage marginalized youth as creators of solutions to the challenges that they face in their lives in the areas of education, skills, employment and empowerment.

In the third year of youth challenge in Pakistan, creative ideas and solutions from young people age (14-24) under the challenge name, "Elevating Lives of people and the Planet" were welcomed in support of two broad categories.

1. Elevating lives of People – Ideas and platforms that develop capacity and build resilience among young people.
2. Elevating the Planet by addressing threats posed by climate change

Elevating lives of People – Ideas and platforms that develop capacity and build resilience among young people.

Over 10 per cent of the world population lives in extreme poverty today, struggling to fulfill the most basic needs like health, education, and access to water and sanitation, to name a few.

Developing countries are most at risk during – and in the aftermath – of the pandemic, not only as a health crisis but as a devastating social and economic crisis over the months and years to come. Innovative ideas that provide solutions for improving skills and standards of living were encouraged to apply:

1. improving access to sustainable livelihoods and entrepreneurial opportunities;
2. providing universal access to basic social services including mental health;
3. empowering young girls and women to have skills for meaningful and decent work;
4. provide access to technology and innovation especially for building accessible and inclusive learning platforms, so young people with and without disabilities can learn together

Elevating the Planet by addressing threats posed by climate change

The Youth Challenge welcomed ideas from young people for Climate change mitigation and adaptation that goes beyond tree plantation drives and includes nature based approaches for impact.

Innovative ideas especially those that integrate technology for scalability will are encouraged under the sub-thematic components mentioned below.

1. Solid Waste Management
2. Sustainable Energy
3. Water and Sanitation
4. Clean and Green Environment

Generation Unlimited Youth Challenge 3.0 - Timeline

1	GenU 3.0 Launch	1st December 2021
2	Open Call for Applications	10th December 2021
3	Community Outreach	01 January 2022 - 30 January 2022
4	Application Deadline	09 February 2022
5	Announcement of Qualifying Teams	25th February 2022 (15 days gap from Application Deadline).
6	2-Day Pre-Bootcamp	13th & 14th March 2022
7	4-Days Bootcamp	26th March to 29 March 2022
8	Announcement of 5 Winning Teams	Last day of the Bootcamp (29 March 2022)
9	Incubation and Mentorship Sessions	15th April- 15th July 2022
10	Country-level judging process	11th August 2022
11	Submission of Global Nominations	31August 2022
12	Global judging process	October - November 2022
13	Announcement of global winners	10th November 2022

Executive Summary

This report has been compiled after completing all the youth challenge 3.0 activities in Pakistan. It aims to provide an analysis of the implementation process and the impacts the project has had in Pakistan.

The youth challenge 3.0 was launched on 10th December 2021 in Pakistan, followed by an effective outreach campaign. The focus was to receive ideas that can bring change in the societies of Pakistan whether it's about improving the lives of people or combatting climate change. As a result of outreach activities and social media campaigns for an open call for applications. Altogether 256 submissions were received for Youth Challenge 3.0.

The human-centered based pre-bootcamp was planned digitally and, the bootcamp was arranged in person. The bootcamp was attended by 11 shortlisted youth teams. The teams had various opportunities to elaborate on their problems, present their research, and demonstrate their solutions. Multiple design thinking sessions were held, where participants were able to identify stakeholders and assess the nature of their relationship to the problem-solving using the Stakeholder Mapping method. Moreover, they were able to reframe their impact statement as a Design Challenge. The teams further constructed prototypes, and gained an extensive understanding of prototyping, identifying possible prototypes, and utilizing prototyping techniques to build and test key elements of their solution.

At the end of the Bootcamp, 05 youth teams were shortlisted for the incubation phase of the challenge. The incubation period was tailored according to the need of the teams whilst keeping the broader range of stakeholders in mind. The incubation phase ensured the implementation of the desired action plan over the period of three months. That has all the major and minor details about the process including, the judging criteria of the local judging process and the pitch video submission. The toolkit helped the youth teams to track the activities during the incubation and mentorship phase and manage time.

After the incubation period, a panel of judges reviewed the work done by 05 youth teams. The two teams were selected for the Global judging process. The selected teams were; Braille Designer from Sindh and Intelligence Technology from Balochistan. The global selection process was started in October 2022 and consists of 2 screening rounds.

The 12 youth teams got selected from a total participated youth team from 43 countries to be called the global GenUYC3.0 winner. The INT Tech team from Pakistan has marked its footprints on the global platform and is one of the top 12 youth teams. That indicates the team from Pakistan has qualified for the acceleration phase of the youth challenge 3.0.

GenUYC3.0 - Digital Launch

The campaign was launched on the 10th of December 2021 in Pakistan. Social media platforms of Generation Unlimited Pakistan's Facebook, Instagram and Twitter official accounts were used actively. The posts were actively reshared and retweeted by UNICEF Pakistan and School of Leadership Foundation's social media pages. Upon launch, a press release was published in 12+ digital newspapers and 3 print newspapers.

Newspapers & Websites Press Coverage

Daily Times
https://dailytimes.com.pk/867307/unicef-undp-launch-youth-challenge-in-pakistan/

The Nation
https://nation.com.pk/E-Paper/islamabad/2022-01-14/page-4/detail-10

Pakistan Observer
https://pakobserver.net/unicef-undp-launch-youth-challenge-to-improve-civic-engagements/

UrduPoint
https://www.urdupoint.com/en/pakistan/unicef-undp-with-support-from-solf-launch-yo-1447915.html

Technology Times
https://technologytimes.pk/2022/01/11/unicef-undp-with-support-from-solf-launched-youth-challenge-in-pakistan/

The High Asia
https://thehighasia.com/youth-challenge-2-teams-qualify-for-global-contest/

Daily Ausaf
https://dailyausaf.com/en/news/unicef-undp-with-support-from-solf-launched-youth-challenge-in-pakistan.html

247 News
https://247news.com.pk/unicef-undp-and-solf-launch-youth-challenge-in-pakistan/

Taza Tareen
https://www.taazataren.com/2022/01/unicef-undp-with-support-from-solf.html
Capital Update
https://capitalupdate.pk/2068/unisefundp-youth-challenge-in-pakistan/hot-news/2022/01/11/

Diplomatic News
https://diplomaticnewspk.blogspot.com/2022/01/unicef-undp-with-support-from-solf.html

Daily National Herald Tribune
https://www.dailynht.com/epaper/page.php?id=7&edition=lahore&dt=13-01-2022

Paks Live
https://pakslive.blogspot.com/2022/01/unicef-undp-with-support-from-solf.html

Community Vibes
https://community-vibes.com/2235/

Print Newspapers
Pakistan Today
The Spokesman
Islamabad Post

PAKISTAN TODAY NEWS 09

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UNICEF, UNDP with support from SoLF launched Youth Challenge in Pakistan

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PBM joins hands with Qatar

startuppakistansp

UNICEF and UNDP, in partnership with SoLF launch Generation Unlimited imaGen Ventures Youth Challenge 3.0 2021/22

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startuppakistansp Calling on young innovators across Pakistan to apply to a one-of-a-kind opportunity, the Generation Unlimited imaGen Ventures Youth Challenge 2021/22 3.0! If you've got the passion to help your community and the drive to make it happen, apply now 👇

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PAKISTAN

UNICEF, UNDP launch 'Youth Challenge' in Pakistan

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JANUARY 12, 2022

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United Nations Children's Fund (UNICEF) and United Nations Development Fund (UNDP) with implementing partner the School of Leadership Foundation (SoLF), has launched the Generation Unlimited imaGen Ventures Youth Challenge 2021/22 in Pakistan.

The Generation Unlimited imaGen Ventures Youth Challenge 2021/22 will be implemented in more than 35 countries worldwide and calls on young innovators to design solutions to improve employment and civic engagement. The youth challenge encourages youth between the age of 14-24 to come forward to participate in this challenge.

To welcome young innovators; to design solutions by accelerating the SDGs and fighting climate change, the theme for Pakistan this year is: Alleviating People and the Planet.

Outreach Activities

A two-pronged approach was adopted for outreach with an aim to aware the targeted audience (age 14-24) about the Youth Challenge 3.0.

1. Tier one consists of targeted, hybrid outreach method (In-person and digital informative sessions), radio shows and institutes social media platforms, which accomplish the trust-building, vital to successful mobilization.
2. The second tier outreach consists of broadly-targeted marketing techniques used to generate awareness and publicize the opportunity.

Prong 1:
On Ground Outreach Activities

Tier one outreach was about putting foot to pavement, putting staff directly in the Campuses and community centres of Pakistan. School of Leadership Foundation (SoLF) undertook 33 outreach sessions in a duration of 43 days from 20th December 2021 to 2nd February 2022.

Posters and flyers were printed in both languages English and Urdu and has been well-placed in community spaces like different Universities, offices, Community centres where specific age of forum reflects. Also distributed while on ground outreach session.

Provinces	Communities	Campuses
Sindh	ILMBASSADORS, AeN volunteers, and members of Khairpur Youth Council Azm-e-Noujawan Karachi National Incubation Centre, Karachi (Online) Business Incubation Centre, Karachi (Online)	Banazir Bhutto Shaheed University of Technology and Skill Development, Khairpur University of Sindh, Larkano campus Larkano The Shaikh Ayaz University Shikarpur The Begum Nusrat Bhutto Women university Sukkur The Banizer bhutto University, district Shaheed Banazir Abad/Nawabshah University of Sindh, Dadu campus district Dadu The Muslim Generation School Karachi NED University of Engineering and Technology Karachi PACE College Karachi Karachi Univesity (Online)
Punjab	Bright Leader College Rasool Nagar	Oxbridge College Campus Tolo wala GCU Campus Kasur Govt Degree College Kot Radha Kishan Govt Girls Modal High School Baasti Chup Shah Raiwind Chongi Superior University Kasur Campus Govt Degree College Pattoki University of Management & Technology Lahore Punjab Groups of Colleges Ellahabad

KPK	Oxford Education Academy & College Batkhela Malakand	Abdul Wali Khan University, Mardan Abbottabad University of Science & Technologies Imscienses University Peshawar University of Swat
ICT/RWP	Transgender Community Islamabad and Rawalpindi Transgender Community Karachi EOTO Foundation - Street School Islamabad	Shamsabad School for the Blind Rawalpindi Arid Agriculture Rawalpindi Islamabad Model College for Girls (IMCG) PindMalkan
Balochistan	Ideal A Academy Quetta The Future Reformers School Quetta	Sardar Bahadur Khan Women's University Noshki
Gilgit Baltistan		Girls High Secondary School Khaplu Ghanche Boys High School Khaplu Ghanche Baltistan

Total number of Youth Challenge 3.0 outreach beneficiaries is 1,535. Further breakdown of the beneficiaries, to show the gender breakdown and type of outreach activity, is detailed in Table 2.

Table 2. Total number of beneficiaries and their breakdown in terms of gender and type of outreach activity.

	Community	Institute	Total
Women/Girls	219	415	634
Male/Boys	298	535	833
Person With Disability (Girls)	31	-	31
Trans	37	-	37
Total	566	950	1,535

Innovative Approach

To reach out the masses in the underprivileged areas of Sindh, the GenUYC3.0 has been introduced in a regional language in one of the most famous radio program at FM 96.6 SBA. Similarly, social media platforms of all institutes were actively used to designate the message. The public places like DC offices and Libraries, where conducting sessions were not possible, we have placed flyers on the notice boards to attract the attention of people. We also embedded the QR code on all the flyers and broachers for easy access to the application form. On the other hand, where in-person session wasn't possible due to COVID restriction, we took the benefit of digital resources and conducted an online informative session with the audience.

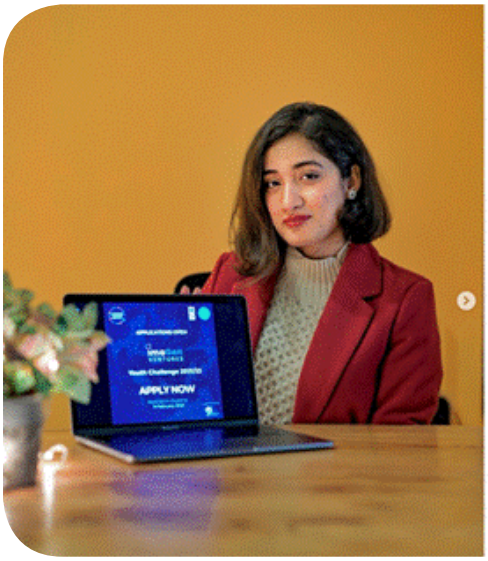
We engaged youth innovators from GenUYC2.0 in the outreach session, so they can share their experience with the audience and the change they see in their idea after being part of the youth challenge process.

Prong 2:
Digital Media Outreach Activities

The Digital Media campaign was launched on the 10th of December across Generation Unlimited Pakistan's Facebook, Instagram and Twitter official accounts while the posts were actively reshared and retweeted by School of Leadership Foundation's social media pages. The campaign was live for 2 months during which we actively posted 40+ social media updates and ran paid campaigns to reach out to the targeted audience.

Digital Results:

With a massive reach of **3.07M+** & link clicks **19.7K+** ----→ we have received a total of **256** applications



noorrulhudaa • Follow

noorrulhudaa UNICEF and UNDP in Pakistan welcomes young innovators to design solutions to accelerate the SDGs and fight climate change.

Theme: The theme for Pakistan this year is, Alleviating People and the Planet.

The Generation Unlimited imaGen Ventures Youth Challenge 2021/22 will take place in more than 43 countries worldwide and calls on young innovators to design solutions to improve, employment and civic engagement.

Outcome: 11 best ideas will be selected for Human Centred Design Bootcamp to out of which top 5 ideas will receive seed funding and mentorship for the implementation of their idea.

Deadline: 09th February 2022 at 12:00 PM

#ImaGenPK #YouthChallenge #GenUnlimited @solforgpk

📸: @saadanjumbutt

Edited · 10w

syedatoobatooba Wowww❤️❤️❤️

8w Reply

rumaisa5564 Great❤️

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JANUARY 26

syedaakanwal_ and **solforgpk**

syedaakanwal_ Are you a young innovator and wants to showcase your design solutions to improve, employment and civil engagement? Then UNICEF and UNDP are welcoming you participate in "The Generation Unlimited imaGen Ventures Youth Challenge 2021/22" with theme "Alleviating lives of people and the planet" and 09th February 2022 is the last date to submit your application.

Check out this form for brief details.
https://docs.google.com/forms/d/e/1FAIpQLSeCYRWMPqJtwaq_y3YryNvJ_cA62aJ3f1bOVGRDw5HIRt61RA/viewform

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JANUARY 11

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anamblogga_ Get ready for the ImaGen Ventures Generation Unlimited Youth Challenge 3.0

The year again UNICEF and UNDP in Pakistan are welcoming young innovators to design solutions to accelerate the SDGs and fight climate change. The theme for Pakistan this year is, Alleviating People and the Planet.

A) Alleviating lives of People – Ideas and platforms that develop capacity and build resilience among young people. Innovative ideas that provide solutions for improving skills and standards of living.

B) Alleviating the Planet by addressing threats posed by climate change
In this category the idea should focus on mitigating climate risk, inaction, especially in terms of meaningful engagement of young people. The ideas are welcomed from young people for Climate change mitigation and adaptation that goes beyond tree plantation drives and includes nature based approaches for impact.

11 best ideas will be selected for Human Centred Design Bootcamp to out of which top 5 ideas will receive seed funding and mentorship for the implementation of their idea.

The application deadline is 09th February 2022 at 12:00 PM. Applications received after the deadline will not be considered for selection.

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JANUARY 9

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Shortlisting of Teams

As a result of the two-Pier outreach approach shared in the Generation Unlimited Youth Challenge 3.0 outreach report, A total of 256 applications were received from young people across Pakistan. To ensure the selection of appropriate teams a qualifying filter was created along with the setup of a selection committee.

The qualifying filter took into account the four components highlighted in the toolkit, i.e.

1. Link with Generation Unlimited,

2. The severity of the problem,

3. The overall quality of the application and motivation of the team,

4. The need of applicant team and commitment.

These four components were weighted evenly and were added to create an index score. Each category had up to 3 points allocated to it for a maximum score of 12.

The selection committee included four UNICEF, one UNDP, and one School of Leadership Foundation personnel, where the blinding approach was taken (each evaluator did their assessment independently) to reduce information bias and the shortlisted teams were compared to come to a consensus over which teams to shortlist. Subsequently, 12 teams were selected to participate in the 2- day digital pre-Bootcamp 4-Days in person Bootcamp.

Annexure A: Agenda of Pre-Bootcamp and Bootcamp

Annexure B: Attendance Sheet of Bootcamp

Facilitators Engaged in the Bootcamps

Mariyam Irfan

Mariyam is a development sector practitioner who excels in designing initiatives for social change; and the startup ecosystem along with leading behavioral change campaigns. She is currently working as the Managing Director at School of Leadership Foundation. Her expertise lies in conceptualizing and designing interventions that work at the grassroots level and create a multifold impact. She's a seasoned facilitator and has rolled out programs on multiple thematic areas including community engagement, entrepreneurship, education, youth empowerment, leadership and disaster risk management. She's an avid believer that building the capacity of individuals' is the key to their empowerment.

Under her dynamic leadership SOLF has worked with multiple UN and Government partners. In the last 3 years SOLF has trained thousands of youth volunteers on multiple programmes of community engagement and have facilitated hundreds of startups to build their business plans from ideation to development.

Imaad Rizvi

Focused on results, Imaad Rizvi is an independent performance coach who is known to challenge the status quo thus pinpointing and enabling highperforming individuals to make the tiniest of shifts resulting in the biggest impact.

Imaad draws on 13 years as an aspiring athlete, 16 years of corporate experience and 11 years of coaching. His natural ability to connect with people grows the trust and insight needed to face new challenges with confidence. Throughout his career, Imaad has coached teams, groups and individuals to ensure they perform at their peak enabling them to be effective and fulfilled in their role and life. Furthermore, he has worked closely with key stakeholders at leading organizations to develop and execute plans aligned with their strategic priorities in an effort to build stronger employee engagement – a key strategy which enables a company to perform at higher levels of performance.

Wajahat Iqbal

Wajahat is an entrepreneur with 19 years of experience in ICT sector. He is working full time on his business consulting and training services company Solutions Ahead Pvt. Ltd. which helps businesses develop sustainable and scalable innovations, using Human centered Design approach. He is a coach and consultant to earlystage technology startups helping them to identify LEAN Startups and achieve product/ market fit. Wajahat is presently partnering with several incubators/ accelerators to deliver workshops and entrepreneurs development programs for their incubated startups. He has trained over 600 microentrepreneurs, and is now on a mission to train and develop 1 Million microentrepreneurs by 2025.

Digital Orientation Session

The orientation session was conducted on 5th March with the 12 youth teams. It aimed to familiarize the youth teams with the procedures of the youth challenges and timeline. Also, to inform them about relevant rules that will be followed during the YC process.

Based on our experience with frequent changes in minds and plans of young people and to prevent any backouts once the challenge officially starts. All the minor and major details of the challenge were shared with the youth teams in the session. Every team was given a day time to reflect on the details before proceeding with YC assigned tasks.

As a result of that, one team from the adolescent age group from Lahore placed a request to withdraw from the challenge, due to the exams schedule.

Team Members :	*City:*	*Idea:*
Eman Masood (Age 17) Nabia Masroor (Age 17)	Lahore	Our goal is to develop an app that directly connects therapists to patients. The patients will have the opportunity to choose from a myriad of well-reputed therapists from across the country.

2- Days Pre Bootcamp

HCD Pre-Bootcamp

The 2-days digital Pre-Bootcamp with 11 youth teams was conducted on 12 and 13 March 2022. We have observed the dedication of the teams with their ideas and enthusiasm for bringing those ideas into reality. During the pre-Bootcamp, the youth teams learnt basic fundamentals of design thinking and human-centered design process, stakeholder mapping, community need assessment and empathetic interviews. Demo interviews were also practiced for better clarity. In the end, youth teams were guided in conducting the field research. They were instructed to talk to target users and other stakeholders connected to the problem, hear their needs and understand their behaviors first-hand. The main focus was to study the problem completely and touch on the roots of the solution-oriented approach in the Bootcamp.

Young people undertook the research ahead of the Bootcamp and returned to develop a prototype and pitch their ideas in the 3-day Bootcamp. The field research undertaken between the pre-Bootcamp and the Bootcamp applies the concepts learned in the Pre-Bootcamp to observe, interact and understand people's perspectives and incorporate the issues the community is facing and work on the solution according to it the Bootcamp.

All the 11 shortlisted teams were present in the training session while the following components were discussed in detail:

1. Expectations & Values
2. Introduction to Design Thinking
3. Stakeholder Mapping and Community Need Assessment
4. Preparing for Field Research
5. Facilitator Support Segment on Field Research
6. Managing Finance Factors

List of 11 Teams

GenUYC3.0 - Details of 11 Youth Teams

Team#	Members	Age	City, Pakistan	Idea
1	Muzzamal Hameed Hamad Rizwan Mohammad Anas Tahseen	20 21 22	Islamabad Rawalpindi Rawalpindi	Developing Deepfake Detection System
2	Fatima sherjan Sadaf Sherjan Saleem Syed Sherjan	25 24 18	Quetta	Designing and placing speed breaker on roads that generates energy and stores it in a battery.
3	Bilal Ahmed Salal Shah Faisal	23 23 25	Quetta Turbat Chaghi	Introducing biodegradable plastic that will synthesized by organic material (potato starch).
4	Zeeshan Abbas Ghayoor Abbas Miraj Mohammad	16 14 18	Kaplu	Preserving glacier and using the water glaciers in an effective way.
5	Areej Ahmad Tabish Rafiq Hafiz Sheikh	22 24 25	Karachi	Boltay Haroof - Facilitate the blind community through a translation software by providing access to braille books and documents of multiple subjects in various languages, and hence creating equal opportunities.
6	Danish Ayesha Asif Abdul Jabbar Rashdi	23 23 22	Sukkur	Launching an Application (CliamteHero APP) with the 3D animated story and game-based and activity-based assessment to be literate our children, youth and adult with the aim of clean and green environment.
7	Muskan Firdous Farah Feroz Inara Sutriya	21 16 20	Karachi	Developing a comic book to spread awareness about female reproductive system, problems and rights. The reason to keep this in hardcopy is to make it accessible for under privilege people of Pakistan. Developing an application is in business plan.
8	ShahRukh Aleem Areesha Irfan Eeman	21 22 19	Jamshoro Hyderabad Tando Jan Muhammad	AI based application that detects crop's diseases and recommending the treatment accordingly. Also provide online shop facility where user can buy the recommended treatments.
9	Abrar Hussain Masaod Ahmed Nouman Ali	24 23 22	Larkana Khairpur Shikarpur	Creating thermo electric paint
10	Saad Ahmed Aleena Riaz	21 22	Islamabad	Microbial Fuel Cells for the purification of industrial waste especially sugar industry waste water that contains complex organic waste and contaminates water bodies.
11	Muskan Nisar Shabina Shah	16 15	Gilgit	Tech-related idea called "Human Library". A mobile application with an aim to build an online platform for people to interact and network in a different way

Gender and Age Wise Distribution of Participants

Adolescent	Male/Boys	Female/Girls	Total
Adolescents (14-18)	4	3	7
Youth (19-24)	13	8	21
25 years	2	1	3
Total	20	11	31

DAY 1 (12th March 2022)

Facilitator

Mariyam Irfan program manager and lead trainer of the School of Leadership Foundation started the day with an introduction of teams UNICEF, UNDP, and SoLF (IP) and availability of their support throughout the Bootcamps and after.

She described the theme of the year "Elevating Lives of people and the Planet" and the concept of the challenge.

She further emphasized on the level of dedication expected from teams to mark the footsteps at the global level. Followed by the explanation of Pakistan's success in the first year of youth challenge showed the previous year highlights video to current teams to get familiar with the course. Before moving forward some values have been set to be followed throughout the learning journey.

Presentation

Eleven teams have presented their raw approaches to the problem they are looking to resolve in their communities. Following are the teams project names:

1. Electric Paint
2. Chagabar (Human Library)
3. CropCare
4. Siachen Sherpa
5. Captain Climate
6. IntTech
7. Brave Space
8. GE tech
9. D-DFIR
10. Braille Designer
11. Microbial Fuel

Expectations & Values

Mariyam drafted clear expectations with feedback from the participants at the beginning of the pre-Bootcamp to develop an understanding of the values of the Youth Challenge 3.0. Participants were familiarized with the expectations, rules, and responsibilities they will have to subscribe to throughout the process.

For a conducive environment for all participants, general values of the youth challenges were reinforced such as

1. Being collaborative
2. Being human-centered
3. Embracing failure
4. Being empathetic
5. Being tolerant and being experimental

Introduction to Design Thinking

Mariyam explained to the participants the concept and the fundamental principles of design thinking and the human-centered design process. To elaborate on the concept of design thinking she stated that innovation can be deconstructed into a process by anyone anywhere and can be used to innovate at any given point in time. What is essential is to turn the unfamiliar process of innovation into a structured process that anyone can follow.

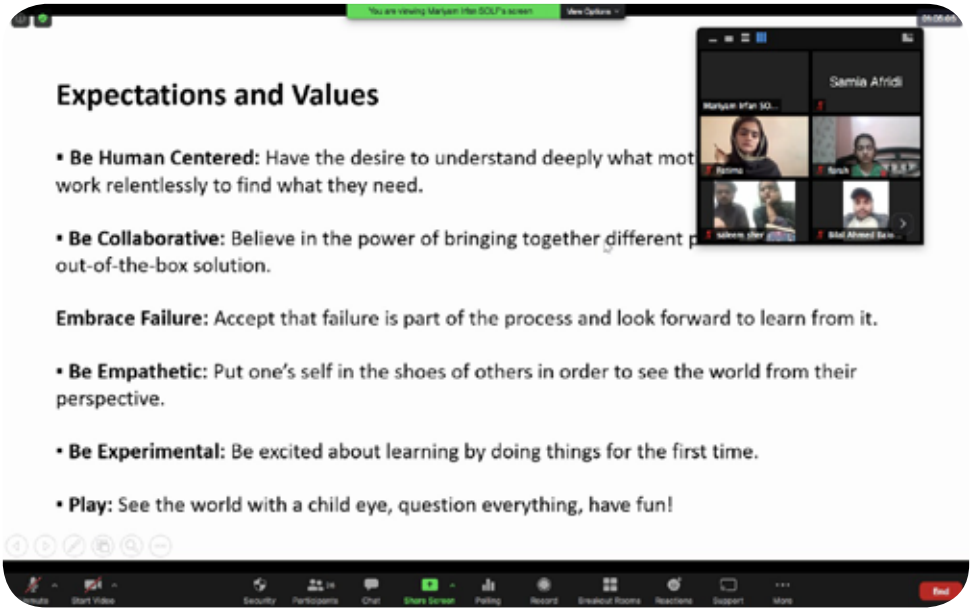
This condensed introductory module helped reflect on how the Youth Challenge would unfold in the following sessions. The five stages of human-centered design and iterative HCD significance were discussed i.e.

1- Empathy
2- Define
3- Ideate
4- Prototype
5- Test

After sharing some global examples with participants, the segment was concluded with an understanding that innovations don't have to be crazy, they just need to solve a problem a user has regardless of the size of the problem.

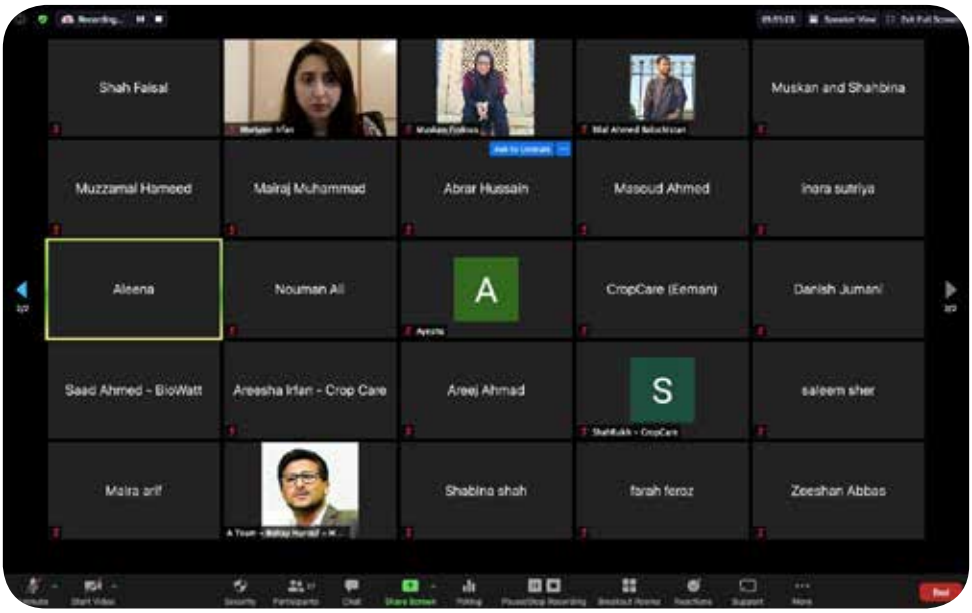
Stakeholder Mapping and Community Need Assessment

Mariyam has discussed the concept of stakeholder mapping and created relevancy of it with the practice everyone has done though never considered it as a component of making an enterprise. Participants were familiarized with the stakeholder mapping tool that later helped them understand the key people that have a stake in the challenge they are trying to solve.



Moreover, community needs assessment exercise helped participants to get familiarize themselves with design thinking techniques to help assess the specific needs of the respective communities they will be working in.

All the participants were teamed up digitally into the breakout rooms and were instructed to write down the direct and indirect stakeholders to be involved and affected by the dissolution of the problem in their notebooks.

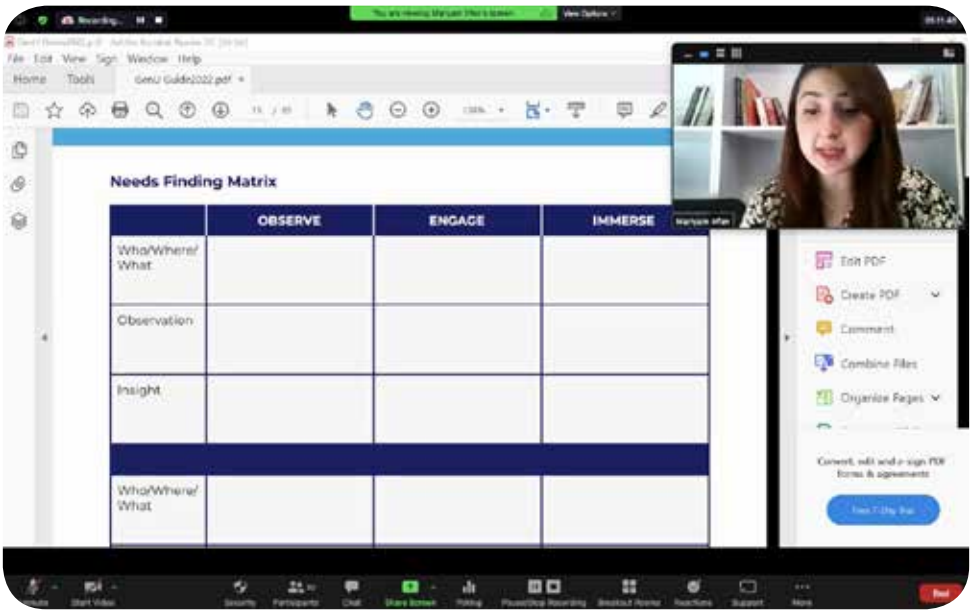


Day 2 (13th March 2022)

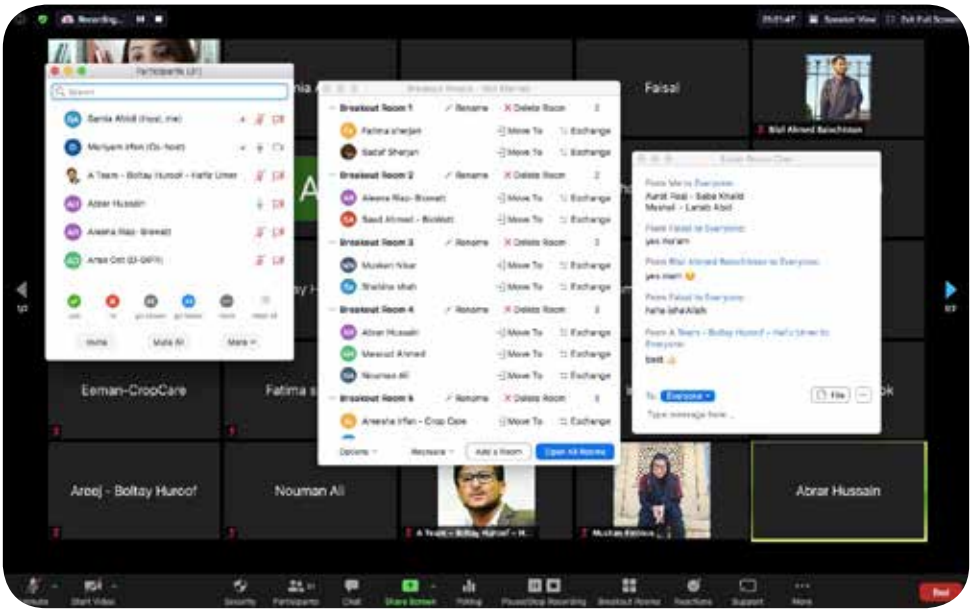
Mariyam Irfan kicked off the day Reflecting on learnings from the last day and briefed about the day forward segments. There were some energizers to boost the energy level, and keep participants active and engaged during the sessions. Participants have shared their learnings and insights about the process of challenge and the pleasure of attending the training, including a lot of concepts that have not been explained anywhere else in their education journey.

Preparing for Field Research and Facilitator Support Segment

Following day participants were guided on the value of conducting interviews from the targeted stakeholders. Mariyam has explained the purpose of this exercise to experience empathy by understanding another person's condition from their perspective. He made them understand before setting them into the situation of interviewee and interviewer that empathy is the starting point for social innovation as it unlocks for us the doors to understand how people or communities experience their world both the good and the bad.



Participants practiced the key skill of interviewing and developing empathy in breakout rooms. They were instructed to use different interview preparation tools and these tools were put to practice during the Scenario Based Role Play activity.



4-day Bootcamp

The 4- Days Bootcamp was sceduled from 26-29 March'22 in Islamabad,Pakistan. The content of the Youth Challenge included the phases of understanding the problem, designing the solution, building, testing, thinking long term - developing sustainable operating models and pitching the idea. The Bootcamp was dynamic, interactive, and immersive in how a lot of teamwork and collaboration took place.

A broad set of knowledge and skills has been practiced. These skills included:

1. Problem-solving
2. Analytical thinking
3. Creative thinking,
4. Research skills
5. Communication and Leadership skills
6. Perseverance
7. Civic awareness.

DAY 1 (26th March 2022)

Mariyam Irfan started the first day of the Bootcamp with a debrief on the interviews conducted with the stakeholders during field research and participants reflected on how the user research fieldwork resulted. Participants shared learnings from the field research and shared their perspective on their problem statement in light of the research, which in many cases had transformed entirely.

Opening Remarks and Programme Overview

Ghazala Farid, Social and Behavior Change Officer – Education at UNICEF Pakistan office welcomed all the participants on board. She congratulated the teams and wished them luck for a new venture. She gave an overview of the program and described the objectives of the intervention along with success stories from last year. She shared that this platform is specifically created to facilitate fresh ideas and provide resources to make it an impactful idea. She further added, these programs will develop young people's capacity to perform extraordinary things. She also shared that to be a part of a youth challenge with a learning mindset. No matter what the result will be on the fourth day, when you are back in your communities, everyone should go back as changemaker and leader.

In the end, she appreciated the women participation and said that young women must come forward and participate in all walks of life and contribute to the socioeconomic development of the country. This is a great opportunity for young women to learn new skills and get involved in making their societies more productive.

Problem Tree (Assess Causes & Symptoms)

Mariyam led the problem tree concept. The objective of this activity was to enable the participants to assess the causes and symptoms of the problem. A better understanding of the problem, its causes, and consequences were helpful to meet a need and build successful solutions.

Mariyam started the discussion with participants about their current perception of the problem after the field research, he asked the teams to make a problem tree where the idea of a Problem Tree puts the fundamental problem at the center of a tree in the trunk. The root causes are then placed in the roots, closest to the trunk and the consequences are placed in the branches. This way participants got a visual representation of the specific problem they were working on and its causes and then consequences.

In this exercise, the 'Five whys' approach was incorporated to evaluate the causes of even big problems to identify where an intervention could be designed. Participants chose one root from the problem tree (or cause) and formulated a 'Why' question. For each root/cause, a "Why" question was designed. Results were reviewed and the most significant causes were identified and the learnings were consolidated on the chart papers.

Participants have documented the outcomes and used throughout the Bootcamp to communicate the problematic situation, the components of proposed intervention/solution, the stakeholders and beneficiaries, and other information such as the budget, management, and coordination arrangements, etc. about a project.

Revisiting of Stakeholder Mapping & Personas

In this segment, Wajahat Iqbal requested the participants to flash back to the pre-Bootcamp and recall the stakeholders identified at that time and suggested making a new list of stakeholders as compared to the previous one. That way, the participants identified stakeholders and assessed the nature of their relationship to the problematic situation using the Stakeholder Mapping method.

Their initial stakeholder maps were reviewed to incorporate any changes. This helped segue into the persona exercise where the participants were able to represent the stakeholders and their needs and characteristics throughout the development process.

This was achieved by creating a personal profile, which is a semifictional character that embodies the human observations the teams had made in the field. The persona profile incorporated some "typical" characteristics, trends, and other patterns that the teams had identified in their user group over the course of the fieldwork. At the end of this exercise, the participants wound up with a Persona for the target group.

Ideate - Design Challenge

With the help of Wajahat Iqbal, in the ideation phase the participants reframed their impact statement as a "Design Challenge"—a tool that consolidated their research into a succinct goal, phrased as a question, which guided their design efforts. Participants designed their design challenge as 'How might we' questions, which out them in the frame of mind to not only arrive at impactful solutions but to generate as many ideas as possible in the process.

Their design challenge accounted for everything they had done thus far and led them to the solution they would build in a way that answered their 'How Might We' question and helped them achieve the Impact they had identified.

Brainstorming

Imaad and Wajahat amplified the ambiance and got the participants ready for the brainstorming exercise, which will end up having multiple solutions. The brainstorming exercise encouraged the participants to develop creative solutions against the Design Challenge. Teams were guided to reflect on activities such as problem tree and stakeholder mapping and how these helped widen their understanding as much as possible (divergence).

While activities such as 5 whys, personas, and the design challenges have helped them filter ideas and information to narrow down their focus area (convergence). Next, the participants dived into the process of brainstorming where they created ideas to solve their problems. Each idea the teams proposed had to be faced with the following questions to develop a better understanding of the key ideas before prototyping them.

1. Who is it for?
2. What is it?
3. How would it work?
4. Who are the stakeholders?
5. What is the benefit of this solution?
6. What is our rating of this idea?

As the day concluded, teams were encouraged to keep thinking of solutions since the next day, the exercises will deal with designing the solution.

DAY - 2 (27 March 2022)

Idea Design

The first cycle of brainstorming was focused on understanding and defining the problem and its context; the next cycle was focused on imagining, building on, and choosing promising solutions.

Wajahat helped the Participants to connect and blend brainstorming techniques to be able to construct more complex ideas that were a leading step towards crafting solutions. They wrote down as many ideas and as much information as possible, explored and refined those ideas, and then narrowed it down and focused on the best ideas and moved forward. Participants have assessed the feasibility of the idea, developed an understanding of how it will run and estimate the eventual impact.

Wajahat assisted the participants in visualizing their concept and by doing this, saw the gaps and connections in solution-oriented approach. This helped to build and connect ideas into a complete solution that helps them to achieve Design Challenge. Sketching exercise was used to build the connection between ideas and visualize what users will be doing by interacting with a service or using a product inflow.

Prototyping & User Stories

Wajahat led the segment and explained the prototype using the human-centered design concept. The prototyping phase helped the teams understand and identify possible prototypes, and utilize prototyping techniques so as to build and test key elements of their solution, and iterate on their prototypes using the findings of testing. Prototyping also led the teams to create a basic version of the key elements of a product or service that they can test and learn from. Teams then used the User Stories method to identify and elaborate features of their solutions required by users. This was achieved by articulating their Persona's needs, etc. in a format characteristic of User Stories: "As [Persona], I need/want to [need or desire] so that I can [goal or objective]". Teams worked collaboratively on the exercise to develop 5 to 10 User Stories and ordering them top to bottom by importance.

Thinking Long Term - Developing Sustainable Operating Models

Before putting the team in the testing phase. The concept of developing operating models was important for them to know. To finalize an idea based on its sustainability factor mainly. Imaad expanded the awareness by bridging the knowledge in two concepts: short term and longterm goals.

Imaad inaugurated the segment and explained both the concepts to the participants. He asked them to write on a sticky note the "vision" they have applied for this challenge and the mission they want to accomplish. Afterward, they were asked to incorporate the hopes that seem realistic to them that will be achieved shortly

and the goal. Giving clarity to participants Imaad closed the session by saying, knowing where you want to go lets you align all your business activities in the right direction.

He explained if you don't have a longterm goal you can't make the right mission-critical decisions about your budget, business practices, marketing or growth. And even if you have long-term goals without short-term goals your big-picture planning resembles a bridge without any supporting pillars.

Testing & Feedback

Participants understood the purpose of prototyping is to create a basic version of the key elements of a product or service that we can test and learn from. Clarity was given to participants that having the perfect prototype in one go is not conceivable. In the first attempt, the prototype will be tested, feedback from users will help them learn about how their solutions will succeed, and where they may fail. Which will be the learning phase to bring improvements and build a better version. After testing their prototypes, participants went on to prioritize areas for improvement from user testing to develop new or refined user requirements and incorporate feedback into an improved prototype.

Day 3 (28 March 2022)

Guidelines for Pitch Presentations

Through pitch preparation exercises participants learned how to craft a concise and effective pitch to get the idea of their project across. While finalizing their prototypes they had to work on presenting their idea to the judging panel. All the guidelines and scoring criteria for the pitches were shared in this segment. Each team had a time limit of 3 minutes for the elevator pitches, and 3 minutes for the jury to be able to ask questions. Before going on to pitch, the teams completed the Pitch Preparation, Pitch Perfect worksheet to list the details of what they will present and how they will present it.

Story Telling for Effective Pitching

Imaad commenced the session by soothing the participants from all the roller coaster experience in the past four days. He eased them and set them in a relaxation phase to recall all the stages they have accomplished from registering for the challenge.

He explained in many ways' stories are how we think and make sense of the world around us, and this extends to business concepts as well. This hidden power of storytelling can influence how we make decisions and how we persuade others of our ideas.

He stated that stories have a purpose. They have to be relevant to the experience and interests of yours and your audience. Each story should have a point to it that your listeners can easily grasp and identify with. Make your stories clear and relevant, to support the information in your presentation. That means keeping them fairly short and removing unnecessary details.

Participants were put into an activity where they shared their story with their team members in a minute to experience the power of telling things that are closer to your heart and practicing to bring improvements in that specific area.

Mentoring Circle

After getting a refined idea about the problem and solution. Teams were introduced to the mentors (Issue experts). The mentors had a unique insight into how the team works together to overcome challenges and their motivation to continue to develop their idea. One to one mentoring sessions were conducted with teams to revisit the problem and solution and bring changes according to mentor's guidance if need be.

We adopted the hybrid method for mentoring circle. Some mentors joined us inperson and all the outstation mentors connected through digital platform. Following mentors joined us on Day 3:

1. *Samir Ahmad*
   Energy Transition Consultant

2. *Anum Rathore*
   An avid social, political and climate justice organizer with a demonstrated history of working in the non-profit industry. Anam is also an accomplished development professional with a decade worth of experience in programme management, monitoring and implementation with special focus on climate change adaptation, habitat restoration, disaster risk reduction, natural resource management, environmental education, policy and governance, gender & development, programme development, research, donor communication.

3. *Raheem Dawar*
   With the experience of 10 years in the field of web development. He has completed 300+ successful projects and worked with many Fortune 500, he is a fullstack developer who's worked on every technology, tool, framework, and library in existence.

4. *Dr. Sohail Yousaf*
   Chairman Department of Environmental Sciences, QuaidiAzam University Islamabad. He has done his PhD from "University of Natural Resources and Life Sciences, Vienna, Austria and Post Doctorate from IASMA Research and Innovation Centre, Trento, Italy. He has also a second Post Doc from "Australian National University, Canberra, Australia.

5. *Muhammad Ismail*
   He is currently the Programme Coordinator for Pakistan for the Hindu Kush Karakorum Pamir Landscape (HKPL) Initiative. He is comprised of multidisciplinary professionals working on climate change science, the economic valuation of ecosystem services, biodiversity information, and the upscaling and promotion of transboundary landscapes and trans Himalayan transects across the landscape.

6. *Ali Mehdi*
   Chief Financial officer at DeafTawk an online sign language interpretation services. They aim to empower deaf community across the globe.

7. *Bilal Qureshi*
   Bilal Qureshi is the founder and creative director of Abstract design. It is a creative development agency that amplifies in striking brand identities, social media campaigns, developing even branding, website layouts, and digital illustrations.

Practice Pitches and Feedback for Improvement

After the mentoring Circle, each team was given a time to tweak the problem/solution if they would like as per guidance received from the mentors.

Each team has presented the pitches to Imaad, Mariyam and Wajahat and to other teams considering them as an audience. Upon the presentation, the facilitators gave their valuable feedback to the teams individually so they can incorporate all that insights before the final pitch.

Day 4 (Pitch Day) - 29th March 2022

10 teams gave the pitch and team Microbial Fuel (Saad Ahmed and Aleena Riaz) withdraw from the challenge due to personal reasons.

A panel consisting of 04 judges were present with a mindset that these young people may not be the ones with the greatest solution today, but are those that will continually work to improve themselves and their teams to accomplish great things in the future. The programme is focused on developing PEOPLE as much as PROJECTS. Young people with the greatest potential to create community changing projects – the youth that have the greatest passion and ability to learn and adopt an enterprising spirit.

The details of the judges are:

- Ms. JiEun Lee, Education Officer UNICEF
- Mr. Ziggy Kugedera, Knowledge Management Specialist, WASH section UNICEF
- Mr. Muhammad Zahoor , Social and Behavior Change specialist UNICEF
- Mr. Ehsan Gul Sher, Head of Experimentation at UNIDP

Results Consolidation & Announcement of Winners

After listening to each presentation followed by Q/A by judges, the segmnet was concluded and adience was directed to crowdvoting. On the other hand judges and programme team started working on compiling the marks received from judges and mentors.

Subsequently, judges were sequestered to a closed space where they consolidated results where judges' scores have a weightage of 60% and came to a consensus over the five winning teams. Simultaneously, crowd vote was carried out with the participants and other audience members and the results were included in each team's total score (crowd vote held a weightage of 25%).

The third component of the scoring process, mentors/facilitators' vote (which was gathered before the pitches and had a weightage of 15%) was also incorporated to calculate a final score.

Five winning teams were announced and trophies with certificates were distributed to the teams by the judges.

Siachen Sherpa

Green Energy Technology

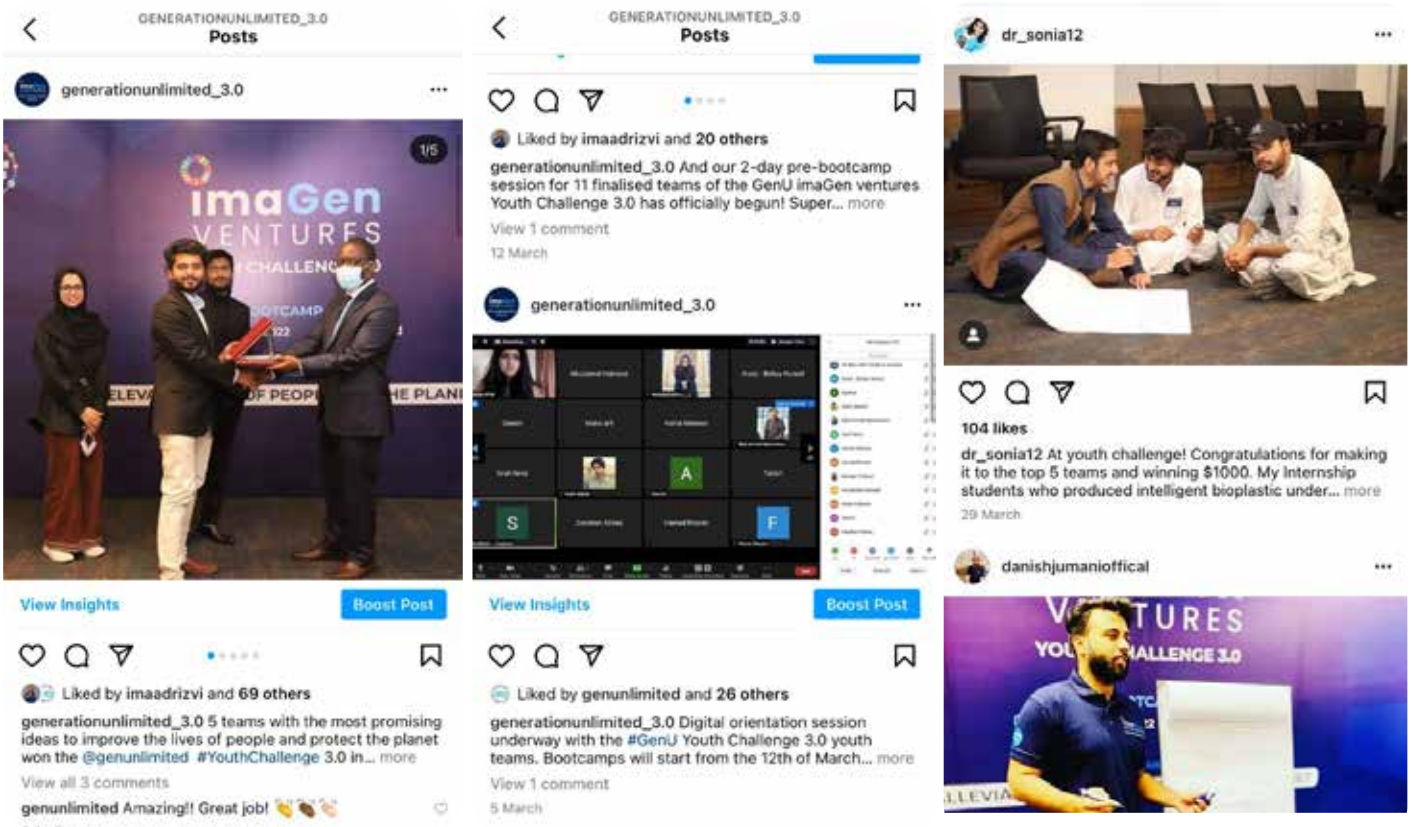
Intelligence Techonology

Captain Climate

Braille Designer

Digital Platforms Engagement

Once the bootcamps began, regular social media updates and creative Instagram stories were posted from SoLF's channels to showcase what's happening at the GenU Youth Challenge 3.0 in Pakistan. Participants and trainers joined in to share their experiences of the bootcamp online via their personal channels which was greatly appreciated by the GenU global social media accounts.



A press release of the GenU Youth Challenge launch in Pakistan was published in 14 digital newspapers and 6 print newspapers including Daily Times, The Nation and Pakistan Today. The application form link was also shared in the press release. The application announcement was also posted on Startup Pakistan's Instagram, LinkedIn and Facebook platforms which has an accumulated following of 1.5M+.

Reach
4.5M+

Engagement
172K+

Video Views
189K+

Link clicks
38K+

Announcement of 05 winning teams:

The 05 youth teams were awarded with US$1,000 seedmoney and mentoring for the incubation time period. Mentors agreed to perform at least 2 mentoring sessions each month either face-to-face or digital (2 session per month = 3 months = 06 session in total).
A toolkit was designed for teams and mentors specifically for incubation phase that has all the details regarding developing the idea and mastering the incubation phases to make things easier for both involved parties.

Qualified Teams

Team#	Members	Age	City, Pakistan	Idea
1	Fatima sherjan Sadaf Sherjan Saleem Syed Sherjan	25 24 18	Quetta	GE tech (Green Energy Technology) will smartly utilize speed breakers in which the waste kinetic energy of running vehicles will be converted to mechanical energy. It will be used to produced electrical energy. Not allowing the waste energy to be send off into the environment instead it will be used for street lights, digital bill boarding, road signals, lighting check post of the highways, digital advertisement and electrify near by small villages.
2	Bilal Ahmed Salal Shah Faisal	23 23 25	Quetta Turbat Chaghi	There is an excessive plastic pollution and the team is proposing an ecofriendly solution with an additional feature that can monitor and detect expiry date of perishable items. Introducing biodegradable plastic, that will not only be beneficial to humans that use it, but also to marine life. It will be synthesized using organic material for example potato starch.
3	Zeeshan Abbas Ghayoor Abbas Miraj Mohammad	16 14 18	Kaplu	Kaplu region is rich with snow that can be converted into water reserves. The entire snow melts in spring season and leaves the whole valley bone dry. Khaplu Baltistan is facing severe water crisis in summer season. Each year more and more villages are reporting water scarcity or threats from glacier lakes. By constructing artificial glaciers where the glacier water in spring will be relocated to high altitudes, north facing scree slopes and will be restored in form of small glaciers. Those artificial glaciers will be then melt down in summer season and water will be efficiently used for productive purposes.
4	Areej Ahmad Tabish Rafiq Hafiz Sheikh	22 24 25	Karachi	Braille Designer is introducing a novel concept of Inclusive Books and Documents. An Inclusive Braille Document will have ink print and braille simultaneously. This will allow both sighted and visually impaired individuals to read from the same document hence the visually impaired community feeling more included and accommodated. Through the help of Inclusive Braille Books, visually impaired children will be able to study alongside sighted students and not have any barrier to understanding or getting help from their fellow classmates. Additionally, visually impaired children will be able to get help from their parents or siblings at home as well. This software will also have tactical graphics which will help to make science subjects books as well for visually impaired students.
5	Danish Ayesha Asif Abdul Jabbar Rashdi	23 23 22	Sukkur	Introducing an application with the name of “Captain Climate” that will highlight the humans habits that are adversely affecting the climate through 3D animated videos. The app will have different characters with assigned roles. There will be around 10 levels in each portion. The user will have to clear all the assessments in terms of getting climate literate certificate.

Local Incubation Period

The local incubation period started in April 2022, that consisted of two main components:

- Seed Funding
- Mentorship

At the start of the incubation phase, each team leader signed an agreement with SoLF that indicated the tasks that had to be performed for the transfer of funds and guidelines for submitting the progress report of each incubation phase.The seed funding was transferred in three tranches, the first tranche of 50% at the time of signing the contract and other 2 tranches of 25 % upon submitting the report and evidence of utilization of the previous tranche.

The mentoring phase aimed to provide a safe environment where mentees can share their issues and get guidance without any judgement. Mentor matchmaking ensured that mentors with skills and area of expertise that coincide with the project themes. The mentoring phase was carried out digitally via Zoom and in person wherever the internet was not accessible.

The mentors led the assigned team on developing the project by keeping them motivated and provide exemplary support throughout the period where fortnightly meetings were set to brainstorm about the impactful execution of incubation phases. Five phases of the incubation period were set:

1. Planning
2. Research
3. Creating a prototype
4. Testing and pitching
5. Preparing them for global finals

The incubation period was tailored according to the need of the teams whilst keeping the broader range of stakeholders in mind. The incubation phase ensured implementation of the desired action plan over the period of three months. To make the process more easy to understand, a toolkit was developed named,Local Incubation. That has all the major and minor details about the process including the judging criteria of local judging process and the pitch video submission. The toolkit helped the youth teams to track the activities during the incubation and mentorship phase and manage time. Similarly, generate those answers specifically based on which their ideas were suppose to evaluate.

To check back on the progress of youth teams, SoLF program team continuously had digital follow up meetings with each team. Those meeting helped the youth teams to stay motivated and keep up with the progress of the idea. Whereas, program team was getting hands on information directly from youth teams and was easier to give them suggestion that drive them towards achieving the set milestones.

Teams Profiles

1. Braille Designer

- Hafiz Sheikh Umer Farooq, 27
- Tabish Rafeeq, 25
- Mahnoor Anwar, 24

Team Profile

Braille designer is a software that assists in designing documents with braille along with text simultaneously. Through this project the team aims to achieve inclusion in society for the visually impaired community

2. Intelligence Techonology

- Bilal Ehmad, 24
- Salal, 24
- Shah Faisal, 26

Team Profile

Name of the project is artificial intelligent bio plastic. The idea is to cope with plastic pollution, for which they created artificial intelligent bio plastic. They are going to produce two types of perishable plastics, a transparent sheet for wrapping the food products and a sensing sheet—a strip of that will be placed in the wrapped product to sense the expiry of the food.

3. Green Energy Technology

- Fatima Sherjan, 25
- Sadaf Sherjan, 23
- Saleem Syed Sherjan, 18

Team Profile

GE Tech (Green Energy Technology) smartly uses simple speed breakers, speed bumps, speed cushions and also reflective pavement markers in which the waste kinetic energy of running vehicles is converted to mechanical energy (through Generators). Downward the speed breaker into electrical energy that does not only light up streetlights besides roads but can be used for many other purposes such as digital bill boarding, advertisement boards and electrify small shops nearby roads.

4. Captain Climate

- Danish, 23
- Abdul Jabbar Rashdi, 22
- Ayesha Asif, 23

Team Profile

The team has introduced an application named “Captain Climate” in which they will highlight the wrong habits of humans through 3D animated videos. The app contains different characters with assigned roles. There will be around 10 levels in each portion. At the end of each level, the user will have to clear all the assessments if he/she wants to get a climate literate certificate.

5. Siachen Sherpa

- Ghayoor Abbas, 14
- Zeeshan Abbas, 15
- Mairaj Muhammad, 18

Team Profile

Siachen Sherpa has made an artificial glacier in Khaplu Gilgit, as all life depends on snow in Khaplu, with the high-altitude desert region receiving only 50mm of rainfall a year. Agriculture relies mainly on the water that comes from snow and glacial melt, but the natural glacial melt happens after their planting months which are usually the months of April and May. So the aim is to find a solution to this water crisis in the critical planting months of April and May, before the natural glacial melt waters start flowing.

Mentor Match Making

Team Name	Mentor Name
Braille Designer	Ali Mehdi
Intelligence Technology	Sonia Tariq
Green Energy Technology	Azam Jan
Captain Climate	Wajahat Iqbal
Siachen Sherpa	Zakir Hussain Zakir

Mentors Profiles

1. Ali Mehdi

Ali Mehdi is working as a Chief Financial officer at DeafTawk - an online sign language interpretation service. They aim to empower deaf community across the globe.

2. Sonia Tariq

Dr. Sonia Tariq is working as associate professor in Lasbela University of Agriculture, Water and marine Sciences, Uthal, Balochistan. She has done Post doctorate in Chemistry (Fulbright scholar), Pennsylvania State university, United States. She has almost 10 years of working experience in the field of education.

3. Azam Jan

Azam Jan is working as a GIS Web Developer in the company AUM Technologies Pvt ltd. he has developed different projects including GIS based dashboard for QDA department, Human resource management information system for P&D department Government of Balochistan, Smart water monitoring system (IOT project) for public health department (PHE) Government of Balochistan.

4. Wajahat Iqbal

Wajahat is an entrepreneur with 19 years of experience in ICT sector. He is working full time on his business consulting and training services company - Solutions Ahead Pvt. Ltd. which helps businesses develop sustainable and scalable innovations, using Human- centered Design approach. He is a coach and consultant to early-stage technology startups helping them to identify LEAN Startups and achieve product/market fit.

5. Zakir Hussain Zakir

Dr. Zakir Hussain Zakir is working as a Director Planning and Development in University of Baltistan, Skardu. He handeled different projects on prototyping of Ice-Towering, site selection, significance of the project regarding water resources, climate change and sustainable development.

Details of the Sessions between Mentor and Mentees:

Team Name	Total number of sessions availed by each team	Means of sessions
Braille Designer	05	Digitally
Intelligence Technology	06	Inperson
Green Energy Technology	06	Inperson
Captain Climate	06	Digitally
Siachen Sherpa	05	Inperson

Conclusion:

The Incubation Phase was critical to the success and development of the youth projects and to provide highly tailored support to each of the teams we developed the toolkit. Similarly, from mentorship we aimed to provide a safe environment where mentees can share whatever critical issues they are facing on their journey. The change in the youth team has been noticed when they understood that the seed funding is not an award but rather funding that goes towards the development and implementation of the project that have to be used to develop a prototype.

Mentors provided assistance to the teams in all the phases from planning to making final pitch videos. During this time they were connected with the teams through zoom calls and in person meetings.

At the end of local incubation phase all the teams had achieved their targets and completed the prototypes of their projects. This phase not only boosted up their confidence but also enhance their inter personal skills such as speaking, writing, research and planning. The teams from rural areas such as Siachen Sherpa, GE tech and INT tech considered this project a life changing opportunity for themselves.

Monitoring Visits

Schedule of Visits

Team Name	Visit date	Location
Braille Designer	25-05-2022	Karachi
Intelligence Technology	27-06-2022	Quetta
Green Energy Technology	28-06-2022	Quetta
Captain Climate	23-07-2022	Digital
Siachen Sherpa	20-06-2022	Skardu

During the visit the program team witnessed the work that were claimed in the reports submitted by the youth teams. Prototypes developed by the youth teams were seen and tested by the program team. Such as; in the meeting with the braille designer, the brailled books and documents were physically seen by the program team. Also, the meeting was attended by one of the visually impaired person who tested the developed documents and share his feedback.

Similarly, during the visit to Quetta, both teams started with explaining the idea and how different methods has been used to get to the final prototype. That has been used for testing in the community. Such as; INT tech has showed all the failed attempts along with the final prototype and its results. Similarly, the GE tech team was able to show the prototype of machine they proposed in the bootcamp and its features.

Team Captain Climate were connected through zoom call where they mentioned all their workings and feedback generated from the beneficiaries. They were able to develop the mobile application completely including all the features. During the information session they got the beneficiaries to download the application in their mobile phones. That helped them to generate accurate and quick feedback.

Lastly, with the team, Siachen Sherpa the site was visited by the program team that required 08 hours hiking to reach the exact location of artificial glacier. The program team has witnessed the hard work done by the youngest team of GenUYC3.0. All the proposed material in the budget and proposal were used and the whole idea was just working fine.

Country-level Judging Process

Following the Incubation period, the judging panel was set to elect the two most promising projects from Pakistan to enter the Global Judging Process. All five youth teams submitted a 3-5 minutes storytelling video that outlined the project focusing on the key components of the scoring criteria (Annexure C) and addresses the areas that were supposed to be considered in the judging process.

The country-level judging process was held at the Roomy hotel Islamabad on 11th August 2022. The event was started at 10:00 AM. MS. Mariyam Irfan, introduced the judges and extended the gratitude by welcoming them and praising for being part of the event. Maryam further introduced the partner organization (UNICEF, UNDP and School of Leadership Foundation) and the roles and responsibilities each entity performed during the journey of GenUYC3.0. With a use of presentation, she further explained thoroughly all the steps of the GenUYC3.0 journey and its achieved outcome. The purpose of sharing all the information was to aware the judges about work done by each youth team for reaching the country-level judging process.

She guided the judges about the scoring criteria that will be used to access each youth team document that includes pitch video and project proposal. A panel of five judges reviewed the video pitches, the project proposal, and mentors remarks. After showcasing each video and revieiwing the documents of the respective team, judges then scored the teams and edited the numbers in the scoring sheet. After all five teams were scored, the floor was open for judges to discuss and select the teams for global submission. They selected top two teams were; Braille Designer and Intelligence Technology.

Annexure D and E : Video Pitches and Project proposals of all 05 youth teams.

Panel of Judges

Name	Organization	Designation
Mariela Buonomo	UNICEF	Education Specialist
Jonathan David	UNICEF	Chief SBC
Mome Saleem	UNICEF	Education Officer
Kamran Naeem	UNICEF	WASH Specialist
Azima Zaidi	UNDP	Social Inclusion Officer

Global Nomination Submission

Two youth teams from Pakistan qualified for the final round of the youth challenge 3.0, that are:

- Braille Designer
- Intelligence Technology

The global judging panel will review the top 80 projects from 40 countries and will select upto 08-10 teams for further investment and mentorship. The awarded projects will receive up to US$20,000 depending on their potential impact and funding needs along with mentorship.

Global Selection Process

The global selection process was started in October 2022 and consists of 2 screening rounds.
In the first screening round, nearly 90 judges from around 50 countries reviewed, analyzed, and scored the submissions from the 71 participant teams. Based on the alignment to the SDGs, Social Impact, Validation, and Organizational Model criteria, the judges had shortlisted 30 teams from different countries, including 02 teams from Pakistan Braille Designer and INT Tech for the second and final phase of the judging process.

The second and final screening round was held on 20 October 2022, in which the top 12 youth teams were selected to be called the global GenUYC3.0 winner. The INT Tech team from Pakistan has marked its footprints on the global platform and is one of the top 12 youth teams. That indicates the team from Pakistan has qualified for the acceleration phase of the youth challenge 3.0.

The Acceleration Phase is a tailored, one-year support program for a winner youth team and is the most critical to the success and development of the youth projects into successful enterprises that will go on to impact youth around the country and world. The youth teams will receive seed funding to test, develop and launch their projects along with mentorship from experts.

Global Winner Announcement

The winner team was informed about the achievement through different mediums, initially by meeting them in-person in their hometown Quetta,Balochistan. Then the winners were announced in the COP27 on 10th November 2022.
Lastly through social media pages of UNICEF, Generation Unlimited Youth Challenge 3.0 (Pakistan) and School of Leadership Foundation.


Photo
genunlimited
imaGen
VENTURES
WINNERS
42 likes
genunlimited Global Winners ... more
nibalqa


Data Mode
Buy data
Go to Text Only
facebook
Cousin shah Faisal.
UNICEF Pakistan
Breaking News
Team Int-Tech from Balochistan, Pakistan has been announced as one of the 12 global winners of the Generation Unlimited Youth Challenge 3.0!
The team is working to reduce the harmful effects of plastic on our environment by introducing biodegradable plastic.
UNDP Pakistan
GLOBAL WINNERS
Asgher Ameer Sasoli and 1 other


OUR VISION IS TO SUBSTITUTE CONVENTIONAL PLASTIC WITH BIODEGRADABLE PLASTICS TO REDUCE PLASTIC POLLUTION IN PAKISTAN.
View insights
Boost post
Liked by imaadrizvi and 64 others
generationunlimited_3.0 Congratulations to team Intelligence Technology for winning the global #GenUnlimited Youth Challenge 3.0! This young... more
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November 14


INT-TECH
WASTE
MANAGEMENT

The Winner Team from Pakistan - Intelligence Technology

Annexure - A

Agenda of Pre-Bootcamp and Bootcamp:

Pre-Bootcamp Agenda: 12 th & 13th March 2022

Digital Session on Zoom

Day 1 – March 12, 2022

Time	Segment	Description
11:00 - 11:30	Opening Segment	Welcome note by facilitator Introduction to GenU Youth Challenge Overview of the Journey and success story from past Opening Remarks by UNICEF/UNDP focal person Norming and Framing
11:30 - 12:30	Introduction Segment	Introduction of Participants (Teams) 2 minutes presentation of their Idea on the basis of which they have been selected
12:30 - 13:00	Interactive Session: Introduction to Design Thinking	Understanding the core concept of Design Thinking Orientation to the Iterative process of 5 phases of Human Centered Design.
13:00 - 13:10	*Break*	
13:10 - 14:00	Interactive Session: Stakeholder Mapping	Stakeholder Identification Stakeholder Impact & Need Analysis Team Activity

Day 2 – March 13, 2022

Time	Segment	Description
11:00 - 11:10	Opening Segment	Welcome note by facilitator Introduction to GenU Youth Challenge Overview of the Journey and success story from past Opening Remarks by UNICEF/UNDP focal person Norming and Framing
11:10 - 11:45	Group Activity : Community Mapping & Community Needs Assessment	Develop an understanding of design thinking techniques that help assess needs communi-ty. Introduction to the Need finding Matrix Tool Activity on Community Need Assessment as per own idea.
11:45 - 12:30	Presentations	Three Minutes will be given to each team to present their ideas after cultivating it using the concepts learned in a day.
12:30 -12:40	*Break*	
12:40 - 01:30	Preparing for Field Research	Empathetic Interviews Dissecting Empathy for better understanding. Scenario Based Role Plays - Feedback
01:30 - 02:00	Briefing and Guidelines to undertake research after the pre-Bootcamp and return to develop, prototype.	

4-Day Bootcamp: 26-29 March 2022

Venue: Roomy Hotel, Islamabad

Day 1 – March 26, 2022

Time	Segment	Description
09:30 - 10:30	Welcome & Program Rundown Energizer	Interactive
10:30 - 11:00	Research Reflections.	Debrief on research (methodology, data etc) Q/A about research (if any) Connecting the Dots
11:00 -11:30	*Networking Tea*	
11:30 - 12:00	Problem Tree (Assess causes & symptoms) Five Whys Technique	Design Thinking Enable participants to assess the causes and symptoms of the problem they are trying to solve.
12:00 – 1:30	Personas and Revisiting of Stakeholder Mapping & Personas	Design Thinking Participants will be able to identify stakeholders and assess the nature of their relationship to the problematic situation using the Stakeholder Mapping method.
01:30 : 02:30	Lunch	
02:30 -3:30	Ideate - Design Challenge	Design Thinking Participants will be able to reframe their impact statement as a "Design Challenge" —a tool that consolidates their research into a succinct goal, phrased as a question, Which will guide their design efforts.
03:30 - 04:30	Presentations	
04:30 – 05:30	Brainstorming	Participants will be able utilize brainstorming techniques to develop creative Solutions against their Design Challenge.
05:30	Closing and Tea	

Day 2– March 27, 2022

Time	Segment	Description
09:30 - 10:00	Recap & Energizer	Interactive
10:00 - 11:00	Idea Design	Participants will have the chance to connect and blend brainstorming techniques to be able to construct more complex ideas that is a leading step towards crafting solutions.
11:00 -11:30	*Working Tea*	
11:30 – 01:30	Prototyping & User Stories	Participants will understand the purpose of prototyping, identify possible prototypes, and utilize prototyping techniques in order to build and test key elements of their solution.
01:30 : 02:30	*Lunch*	
02:30 -03:00	Interactive Talk : Thinking long term - Developing Sustainable Operating Models	Short term vs Long term Goals
03:00 -4:00	Testing & Feedback	Participants will iterate on their prototypes using the findings of testing
04:00 -04:30	*Tea Break*	
04:30 - 05:30	Making it Real	Participants will be able to analyze their models and identify and define resource requirements. Take Away assignment to research in costing

Day 3– March 28, 2022

Time	Segment	Description
09:30 - 09:40	Recap & Energizer	Interactive
09:40 -11:00	Finalizing Project Plans	
11:00 – 11:30	*Working Tea*	

11:30 -12:00	Story Telling for Effective Pitching	
12:00 - 01:00	Pitch Preparation	Participants will learn how to craft a con-cise and effective pitch to get the idea of their project across.
01:00 -02:00	Lunch Break	
02:00 – 02:30	Interactive Session : Managing Finance Factors	Basic Budgeting & Accounting Importance of Receipt and Invoices
02:30 – 04:30	*Practice Pitches and Feedback for Improvement*	
04:30 -05:00	*Tea and Closing*	

Day 4– March 29, 2022

Time	Segment	Description
09:30 -10:00	Fine tuning of Pitches	Interactive
10:00 -10:30	Arrival of Judges Panel Opening Remarks and Overview of GenU	
10:30 – 12:00	Pitches	3 Minutes will be given to each team to pitch their idea infront of the judging Panel.
1200: -12:30	Judging	Judges will take some time to discuss the pitches and evaluate the teams as per criteria in a separate room. Meanwhile the crowdvote and mentors feedback will be generated in the main hall.
12:30 - 01:00	Top five teams	Result will be compiled and a list of top five teams will be finalized
01:00 - 01:30	Announcement of Winner and distribution of trophies. Distribution of certificates among other teams Closing Remarks	
01:30 -02:30	*Lunch*	

Annexure - B

Attendance Sheet of Bootcamp

GenUYC3.0 - Bootcamp Attendence sheet - 26th to 29th March - 2022

Sr.N	Name	Gender	Contac Number	Day 1	Day 2	Day 3	Day 4
1	Fatima sherjan	F	03330128197				
2	Sadaf Sherjan	F	0330 2968129				
3	Saleem Syed Sherjan	M	0317 2807203				
4	Bilal Ahmed	M	03362212572				
5	Salal	M	03212832324				
6	Shah Faisal	M	0336 8634361				
7	Zeeshan Abbas	M	03555712819				
8	Ghayoor Abbas	M	03554101220				
9	Mairaj Muhammad	M	0355 5732392				
10	Muskan Nisar	F	0346 8482964				
11	Shabina Shah	F	0342 0760310				
12	Muskan Firdous	F	03163630316				
13	Inara Sutriya	F	0334 3888970				
14	Ayesha Asif	F	03341820183				
15	Abdul Jabbar Shah	M	03083104008				
16	Danish	M	03156632368				
17	Areesha Irfan	F	03318301060				
18	eeman Arain	F	03154955034				
19	Abrar Hussain	M	03030383380				
20	Masaod Ahmed	M	03032517046				
21	Areej Ahmad	F	03214494399				
22	Farah Feroz	F	03333988385				
23	Hafiz Sheikh Umer Farooq	M	03222832789				
24	Tabish Rafiq	M	092324 2724687				
25	Nauman Ali	M	+923061206888				
26	ShahRukh Aleem	M	03003790673				
27	Saad Ahmed	M	03066031769				
28	Aleena Riaz	F	03355187530				
29	Muzzamal Hameed	M	0316-1501945				
30	Hamad Rizwan	M	03487267 09				
31	Mohammad Anas Tahseen	M	03305195251				

Annexure C -

Criteria and Scoring for selecting two teams

Criteria and Scoring	
Gen U Alignment	**Points 1 – 5**
• **Relevance:** Does the project have the potential to support progress towards the priorities of GenU?	
Social Impact	**Points 1 – 5**
• **Scale:** Does the project have potential to scale beyond the community where the initial pilot that has been conducted? • **Equity:** Does the project explicitly address a need for a group of young people whose needs are often disregarded? (e.g. gender, disability, ethnic minorities, economically disadvantaged) • **Effectiveness:** Does the project have the potential to be more effective than alternatives? (E.g. the project could be meeting a completely unmet need for a group of people or it could be meeting a need much cheaper or faster than alternatives.)	
Validation	**Points 1 – 5**
• **Feasibility:** During initial project implementation, has the product/service been shown to work? • **Design:** Has the team presented evidence that they have engaged with potential stakeholders and taken on board their feedback? (e.g. have they continued using the Human Centred Design principles from the bootcamp?) • **Demand:** Has the initial project implementation indicated that there is demand for the product or service? (i.e. will customers or another stakeholder pay for it)	
Organizational model	**Points 1 – 5**
• **Operational model:** Has there been thought given to the future organizational operating model (which could be for profit, not for profit or via sponsorship)? • **Next steps:** Has the team identified their next steps and are they feasible? • **Partners:** Has the team identified a viable route to operating after the Youth Challenge has ended? Does this include having explored partnerships that will support growth and sustainability (with e.g. CSOs, Not for profits, or Government agencies)?	

Annexure D -

Global Submission of pitch videos

Braille Designer

https://youtu.be/9xjDc_U5AZY

Intelligence Technology

https://youtu.be/WEU9oaXaXCE

Annexure E -

Proposals of five selected teams

1. Braille Designer

1. Title of your project

Braille designer is a software that assists in designing documents with braille and text simultaneously. Through this project we aim to achieve inclusion in the society for the visually impaired community.

2. Idea Description

https://youtu.be/9xjDc_U5AZY

Do you give permission for Generation Unlimited to use parts or all of your video in global communications?

Yes

3. Your vision and goals

In terms of United Nations Sustainable Development Goals, we aim to achieve the following:

- Quality Education
- Economic Growth
- Reduced inequality
- Reduced Poverty

Our main impact pertains to social, educational, & financial inclusion of the visually impaired community. According to the British Councils report, 96% of the visually impaired community do not complete their undergraduate degree. As a result, 71% remain unemployed, incurring an annual economic loss of $3 billion to Pakistan ("Moving from Margins," 2019).

Our purpose is to make them self-reliant and independent members of society and close the gap in the annual economic loss. To fill this gap, we are in the process of collaborating with the government to provide education institutes with inclusive braille books. We also work with the corporate sector to publish inclusive braille documents for the purpose of inclusivity.

4. Problem you are solving

There are nearly 8 million visually impaired people in Pakistan. Due to the absence of a specialized quality education system, 96% of visually impaired people do not acquire formal education. Moreover, nearly 71% of visually impaired people remain unemployed, these people are excluded from all mainstream activities of our society. Hence according to a British Council report, the estimate led to almost $3.2B of annual productivity loss to Pakistan.

Furthermore, we realized during the pandemic, that visually impaired children at home were unable to seek help as their limited books were completely in braille, and their family members were unable to assist them.

Additionally, visually impaired children in rural areas of Pakistan are unable to gain education due to lack of teachers who can comprehend braille.

Moreover, for doing independent tasks, such as going to a bank or restaurant, visually impaired individuals need guidance from others to read their documents.

5. Your solution

To ensure making braille books accessible, and for the purpose of financial and social inclusivity, we have designed our software Braille Designer where, by including ink print alongside braille text, we provide a novel idea of Inclusive braille books and documents. We believe that inclusive braille books would pave a path for inclusive education as well, where visually impaired children could study alongside sighted children. As a result, visually impaired individuals would be able to get assistance from their classmates and won't have to rely on braille-trained teachers only. Similarly, parents and siblings of these children would have an opportunity of becoming a more active part of their academics.

In the case of braille documents, visually impaired adults will be able to read documents independently, for example bank forms and menu cards,eliminating their reliance on a third person. Additionally, the inclusive aspect of these documents will ensure better customer service for visually impaired individuals.

Inclusive Document Sample:

https://drive.google.com/file/d/1l7CPz0K1R06xEHjv2ulBELiZhNh7u6hv/view?usp=sharing

https://drive.google.com/file/d/1ifewRE1UDlcoL_NBmsynd9YWweFBO7cX/view?usp=sharing

Tactile Graphic Sample:

https://drive.google.com/file/d/1PJlWYvbiOFGBOeUj57xRO4140FvGfGAc/view?usp=sharingProof of concept (evidence gathered to date during the mentorship period)

6. Proof of concept (Evidence gathered to date during the mentorship period)

Samples of inclusive and tactile books and documents were generated to test the proof of concept. Data and feedback was gathered against this POC, from educators and parents to check the viability of the product and to see if the market is receptive to such a concept. Informal feedback from around a hundred individuals was obtained. The overall response has so far been very positive and the parents of blind students have been very appreciative and welcoming towards the concept.

We also tested the concept of tactile books on visually impaired students by visiting special schools, and conducting informal focus groups, where students were given to test the books. Parents of these students were also approached to review these tactile books. Once again they responded appreciatively.

7. Tecnology (if it is important to your solution)

Technology plays an important role in the proposed innovation. As braille designer is a software that assist in designing braille documents and without this software the idea cannot move forward to developing and printing the braille books and making them available in markets for the visually impaired people.

8. Your challenges to success

For the purpose of research and development and for testing the product, it was imperative that we reach out to the visually impaired community in Pakistan. The most challenging initial barrier faced was the access to institutes and individuals in this community. As there is no compiled data, we had to identify the key players in the community ourselves, from where we could reach out to the maximum number of visually impaired individuals for data gathering.

Once these key players were identified, the next obstacle was gathering data for product development. Data from over a thousand individuals was obtained to test the product concept, which was a challenging task in itself, as not only teachers and students, but parents of these visually impaired students were also approached to check the feasibility of the inclusive books developed. This daunting task of gathering feedback further helped us in fine tuning our concept of inclusive documents.

9. How you would use the grant/seed fund

During the mentorship period, we demonstrated the potential of the product, and the capacity of the team to learn and adapt to the customer needs. Further, if our team is chosen for extended grant we intend to use them initially to expand our research and collect as much concrete data about visually impaired people in Pakistan. Compile a data of all the educational and training institutes that are present in Pakistan for visually impaired people. Moreover, to conduct an extensive focus group discussion with the targeted audience to list down their needs about having brailed course books and other books/documents. Simultaneously, we will work on developing linkages with government entities and other decision making authorities to introduce the project to them and have their support on board with us.

Afterwards, we will proceed towards bulk printing and distribution starting with areas in high demand. This stage will make us ready to touch the international markets and pitch the idea.

10. Your Team Motivation:

This project has become a lifelong purpose for our whole team. The R&D process where the team interacted with this community, has touched us in many ways, and has shown us what amazing resilience and dedication this segment has, and how apart from all the challenges they face,at the end of the day they see a hopeful future which can be achieved through inclusion and accessibility.

11. What kind of support would be useful for you if you joined Global Acceleration?

We will require an extensive mentorship that will provide expert guidance at every step to move forward with the decisions taken. Also, financial guidance will be helpful to maintain the grant money effectively. Furthermore, having support of relevant UN or government agencies or providing linkages of relevant agencies will be helpful in expediting the process of implementation.

2. Intelligence Technology

1. Title of your project

Our project idea is artificial intelligent bio plastic. The idea is to cope with plastic pollution, for we crated artificial intelligent bio plastic. We are going to produce two types of perishable plastics, a transparent sheet for wrapping the food products and a sensing sheet—a strip of that will be placed in the wrapped product to sense the expiry of the food.

2 .Idea Description

https://youtu.be/WEU9oaXaXCE

Important: Do you give permission for Generation Unlimited to use parts or all of your video in global communications?

Yes, we do

3. Your vision and goals

Our goal is to substitute the conventional plastic with the bio degradable plastics, and a plastic pollution free world. Since we cannot eradicate the use of plastic, it is an essential product for packaging. If our social venture succeeds, then the society and the world will no longer see littering of plastic everywhere.

We are hoping to achieve the sustainable development goals through our project. That is completely eco-friendly, beneficial for health, and an effort to produce work opportunities for other people

4. Problem you are solving

The two problems collectively triggered us to work for a solution, plastic pollution and food poisoning. Conventional plastic production has been on peak and billions of tons of conventional plastics were produced. However, these plastics were tool for packaging and other use, but time has shown that plastics have occupied our oceans, posed landfilling and littering, and caused different health issues. That's why, it hit hard our attentions that plastic pollution is a severe problem.

The second problem is the food spoilage. In our society and throughout the globe, a considerable amount of wood waste is generated. That happens, when, people buy a lot of food stuffs once they go for shopping. And in the shelf-life the food gets spoiling and the consumer does not aware of that the food is subtly starts spoiling. The consumer eats it if does not detect the food spoiled, and chances are that the consumer will get food poising. However, when the food spoilage initiates, the food is still safe and could be utilized, if the consumer detects that after some hours it's going to spoil, so, he can eat it. If not than the food completely get spoiled and this increase food waste.

5. Your solution

Our solution for the above-mentioned problems is an artificial intelligent bio plastic. It is a collective solution for the both issues. The bio plastic is synthesized in two forms, a transparent sheet and a colorful sensing sheet. The transparent sheet is used to wrap the food products, while the sensing sheet's strips are placed inside the packaging to sense the expiry of the food product. The simple logic behind the expiry sensing mechanism is that the sensing sheet detects the food pH and change its color when it gets spoiled. For example, a food has a specific pH, 7, when it's fresh and when it becomes spoiled its pH is 3.

The bio plastic is synthesized using organic materials, polymers like starch of corns and potatoes, colors. This plastic is going to perish in minimum three months and maximum six months.

6. Proof of concept (evidence gathered to date during the mentorship period)

After securing our position in the top five teams in the GenU, one of colleague (Shah Faisal) visited the university of LUAWMS to have access of laboratory. During the month of Ramadan Kareem, we initiated our project work. For more than one month we worked in laboratory and synthesized the above mentioned solution. The prototype was working perfectly as we presented our idea during the bootcamp. It was like conventional plastic and the sensing mechanism was functioning properly.

https://drive.google.com/drive/folders/19CG2SN4Ae38MjBuZfFMbbzclPX_9Wp0i

7. Technology (if it is important to your solution)

8. Your challenges to success

Our work was delayed due to unavailability of organic dyes at local market because of Covid. We approached the international product delivers and they told us that they can deliver the product within 4-6 weeks, but we had to work according to the schedule of GenU, so we didn't have enough time to wait, for we extracted the natural dyes from several organic sources during our project work. We created bioplastic from potato starch that did not give the quality product, but this problem was solved by replacing the source of polymer: corn starch.

9. How you would use the grant/seed fund

If our team is chosen we will build a large scale venture in the county. We will purchase some large scale machineries that can produce bulk production of bio degradable plastic, and we set up our factory. We will set up an area for the extraction of polymers from organic wastes, we collect throughout the region of our setup. We will buy renewable source of energy rather than non-renewable.

10. Your Team Motivation:

The biggest motivation was that we have been selected in Pakistan level and we belong to a backward province, it made us feel that we can do it. The selection in GenU boosted our confidence scale to a great extent. The entire team was full of energy and ready to do any sort of scarifies and bring the idea into reality, even we had worked in 47C temperature without any facilities.

11. What kind of support would be useful for you if you joined Global Acceleration?

We are very thankful to the GenU team of Pakistan, they helped us every time we approach them even in non-office time. Absolutely, we need the help of GenU Img in scaling up of our project. We will need further business strategies and mentorship in our initial phases of setup. If we succeed and need further investment for scale up, GenU should facilitate us that how we can get investments.

3. Green Energy Technology

1. Title of your project

GE Tech (Green Energy Technology)

2. Idea Description

https://www.dropbox.com/s/43mjz6jr00gurmf/GE%20Tech%20Pitch%20Video%20FInal2.mov?dl=0

Important: Do you give permission for Generation Unlimited to use parts or all of your videos in global communications?

Yes, we do.

3. Your vision and goals

Our vision is to light up all the roads with streetlights in Balochistan or in general Pakistan. where we have more than 80% roads with no streetlights. Due to the energy crises in Pakistan, conventional expensive fuel-based electricity is out of reach, so our startup aims to bring cheap but effective, reliable, and green energy to the streets. We would like to introduce green energy that can power streetlights, billboards, check posts and shops, etc. on highways. Green energy is not harmful to the environment and that is one of our main goals.

4. Problem you are solving

We belong to a very small village in Balochistan called Pasni. For higher education, we travel from Pasni to Quetta. The highway and roads here are single-track roads, which have caused many traffic accidents. One of the main reasons is the lack of streetlights. On single-track roads when there is not enough light, the drivers have to turn to the sharp light, not the dim which then causes a problem for the opposite driver and accidents to occur. We have lost our loved ones in these accidents. And after some research, we found out that most of the roads/streets in Pakistan are without lights and the reason being is the energy crisis. There we realize we should work on a startup and solve this issue. Hence GE Tech.

5. Your solution

GE Tech (Green Energy Technology) smartly uses simple speed breakers, speed bumps, speed cushions and also reflective pavement markers in which the waste kinetic energy of running vehicles is converted to mechanical energy (through Generators). Downward the speed breaker into electrical energy that does not only light up streetlights besides roads but can be used for many other purposes such as digital billboarding, advertisement boards and electrify small shops nearby roads. This system is not only elevating lives of people but also is a sustainable, reliable and an inexpensive source of energy which can lessen climate change and global warming if used on commercial scale. This module is easy, effective, feasible and environment friendly. Effective because it uses the same tried and tested mechanism of Wind turbines but the source here is not wind but downward movement generated by vehicles. The existing green energy alternative being used is solar panels but solar penal is not effective for streetlights, because streetlights are needed at nights and solar is of no use in nights. The battery drains in 3,4 hours. Wind Turbine takes a lot of space and initial capital cost is too high to be done on many roads.

GE Tech is cost efficient because it only uses a pinion and rack with a generator, and it only need vehicle movement to work that too not rapid. According to research, in an hour, passing 40 cars of 400kg can generate 54.58 kWh (Azam et al., 2016).

6. Proof of concept (evidence gathered to date during the mentorship period)

With the supervision of our mentor and the support of the government innovation lab (GIL) at the University of Balochistan, we successfully developed a prototype that generated desired results. We are able to produce 11 volts with simple human pushes to the prototype and stored the energy in a 12-volt battery. We were able to light up a 100-watt sharp street light using the prototype. The size of the prototype however is large because we used the components (Rack and pinion) of cars and bicycles (Fly Wheel). These components were easily available locally and did not need to be imported from another city or abroad. The prototype can be rapidly reduced in size because all we need is small sizes of the rack, pinion, and flywheel. Which can be prepared in Lahore and Karachi, we did not go with this option because it could have taken a lot of time and we wanted to build and test our idea before thinking to shrink the size.

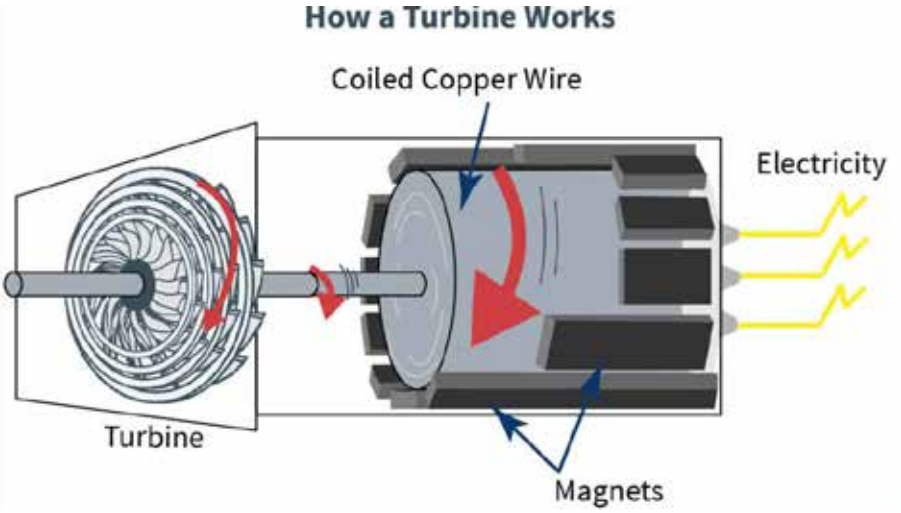
We discussed with some drivers of highways and government vendors if this idea is something that excites them and got some great feedback from them.

Some of the pictures with stakeholders are below:

7. Technology (if it is important to your solution)

We are using generators to produce energy, same as wind turbines but in smaller size. It produces energy with rotation per minute (rpm) mechanism. It rotates a electrical conductor in a magnetic field which creates electricity.

Below is an image of a generator:



(reference: https://bestpracticeenergy.com/2020/08/26/energy101-electricity-generation/)

8. Your challenges to success

Our main challenge was to increase the generator's rpm. Because a simple push will only make it rotate for a few seconds and that made it generate only 4-5 volts. Then we took help from a mentor and he connected us with a physics lecturer through GIL connection, He suggested adding a flywheel. A flywheel is a heavy disk or wheel that is attached to a rotating shaft. Flywheels are used for the storage of kinetic energy. The momentum of the flywheel causes it to not change its rotational speed easily. Because of this, flywheels help to keep the shaft rotating at the same speed. Thus, this way, we were able to produce 11 volts from 12-volt generator with h simple human push. And that was a huge success.

9. How you would use the grant/seed fund

If our team is chosen, we intend to use the seed fund to make 15-20 of the final versions of our prototype and choose a place to pilot our project. Once piloting is done and successful, we will go for mass production and manufacturing. Making outlets and attracting government and private vendors.

10. Your Team Motivation:

We are motivated and confident of having our own product which not only benefits the government, and people but also the environment. Our aim is to make green energy as successful as conventional electricity.

11. What kind of support would be useful for you if you joined Global Acceleration?

We need support from the government to give us a place where we can pilot our project, and if selected, we hope the GenU imaGen Youth Challenge team can help us achieve that.

4. Captain Climate

1.Title of your project

Captain Climate

2. Idea Description

https://drive.google.com/file/d/1jXcBypquTSkQELd0MVn6gerytSSvjDij/view?usp=sharing

3. Your vision and goals

Everyone wants to be the "Hero" some become for camera only and some become life-time heroes. Therefore, through this application we want to make every individual a "Climate Hero". The main goal of our application is to make people aware about climate change and about all the daily life bad activities which humans practice and unknowingly affects the environment every day. Resulting the accomplishment of our vision which is to make every individual climate literate. We believe that if our project succeeds, this will not only be our success but the success of every single human being of the present and of future as well. Together, we will make our climate clean, green, and safe with the help of "Climate Captain".

4. Problem you are solving

We have been studying about climate change since childhood. While industrialization and deforestation were the most prominent factors we have found in our books, we agree with it. But humans are the dominant cause behind climate change found in the literature. With the help of our observation, literature, and data collection we got to know that humans are lacking awareness about these activities affecting climate. Surprisingly, during the interviews, we found out that most of our rural and local audience didn't know much about climate change. Humans do want to make their environment clean, green, and safe but they are unaware of the fact that they are affecting the environment negatively every day. The data from interviews revealed that humans don't even know that wasting a lot of water affects the environment. They are unknowingly practicing activities like wasting water, using plastic, using excessive use of paper, combusting fossil fuels and ultimately becoming a threat for climate. The interruption of past initiatives for climate change validates the above-mentioned problem. We believe that if we make humans aware about their bad daily activities that affect climate, we can successfully take the first and major step towards the betterment of our environment.

5. Your solution

Considering the above-mentioned problem and needs of the 21st century in mind. To aware people about their common bad habits affecting the environment. We have brought up the idea of Mobile application keeping the fact in mind that more than 80% of the population have mobile phones in Pakistan. This application contains three major stories with three different captains. Captain Jabbar works on saving water, Captain Danish works on decreasing combustion of fossil fuels, and captain Aisha works on decreasing the use of plastic. Each story of captain consists of two major parts, the first part is of Videos termed as level 1. Referring to link 1, in this video we showed the common practices of humans through which they waste water. Then the second part of the video (Link 2) includes the explanatory video through which we make our audience aware about how these habits are harmful for climate. The other major part is game-based activities including Question-answers: which help them to reflect on both videos, flashcard activities: which help them to generate their own story about the given issue through

pictures, then the last activity is of Social Action Project: in which they must implement their learning in climate. After completing both parts, players will move towards the next level and after finishing all the levels they will get certificates.

Link 1: https://drive.google.com/file/d/15UBdV3ocKaS0aoZjh7Hf3KbLb2YH8y7/view?usp=sharing

Link 2:

https://drive.google.com/file/d/1vBcaCBITshpjXN_knvMVSJgG_-xsGVAq/view?usp=sharing

Link 3L

https://drive.google.com/file/d/1xlfM3gJGfkulyYns4fFq8vG1MByX358-/view?usp=sharing

Link 4:

https://drive.google.com/file/d/12h0sg1KAWC6zRyClGWBZAvWdj-0UU5dU/view?usp=sharing

6. Proof of concept (evidence gathered to date during the mentorship period)

As Fontanari (2017) states, awareness solves half of the problem. Considering his study, we believed that making humans aware about bad habits is actually the first step towards resolving the climate change issue. Moreover, till date we have developed a prototype of our solution and tested on more than 200 people. Before the testing, our audience was not much aware about the harmful habits of humans but after using our application "Captain Climate" our audience told us some of their amazing key learning (Please check out the links given below to listen to key learning of our audience). Referring to the videos and face to face interactions we can say that our solution proves to be a good way to make humans aware about climate change and about the bad habits of them affecting climate change.

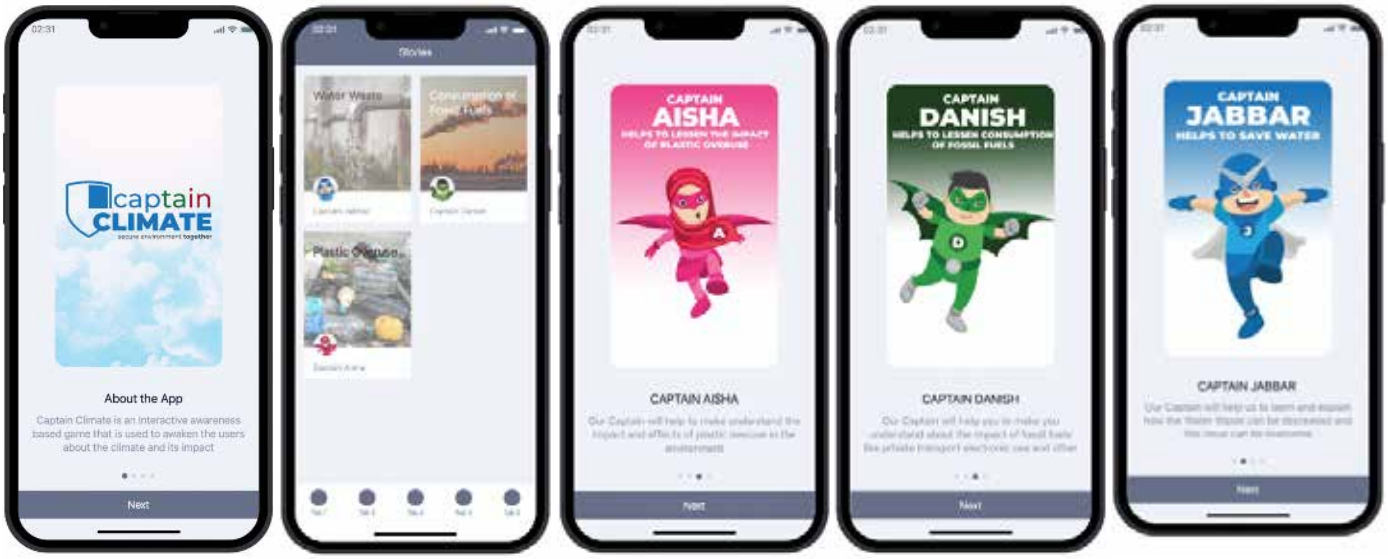
Link 1: https://drive.google.com/file/d/1DkJ72vL3C5BhS5-N0PTOu4-53nx82Fvy/view?usp=sharing

Link 2: https://drive.google.com/file/d/1b6KerBNptv1kUvjwvHQUqzq76AVZembJ/view?usp=sharing

Link 3: https://drive.google.com/file/d/1aNpdX0ghxjmict0CHWwkoOw_YImkkgt_/view?usp=sharing

7. Technology (if it is important to your solution)

We have used technology as a source to our solution. There are already a lot of books related to climate change available in the market, but the excessive use of paper used in those books indirectly eliminates the real purpose of saving the climate. Technology in the form of mobile applications will help us to be as climate friendly as we can. Moreover, in today's world mostly people have access to mobile phones and due to this we can easily reach out to a large audience by taking care of the increasing interest of humans in technology while removing the distance barriers.



8. Your challenges to success

The most difficult challenge was finding a good animator within budget. As the concept of animation is recent in Pakistan, it was difficult for us to find an animator who can work within time and budget. Apart from that, writing stories related to our context and making them ethically and traditionally acceptable while making sure to highlight all the bad habits was another issue which we faced. Moreover, the possible challenge in future can be finding and convincing our partners like schools and organizations to work with us and use our application. We can face this challenge at an initial level only.

9. How you would use the grant/seed fund

Till date, we have developed a prototype of our application which includes limited levels of only one captain story. If our team is chosen, we intend to develop a full effective application which will include all the stories of the captain with minimum 10 levels of each story. Apart from that, we also intend to develop more captains who will make humans aware about other bad habits. We aimed to get other captains and their stories with the help of a chain of ambassadors, flashcard activities, and social action projects. This chain of adding new captains in our application gradually will help us to sustain our project.

10. Your Team Motivation:

Being a climate activist, our team wants to do something for future generations, and we believe that solving climate change issues can be the precious gift we can give to them. Apart from that, we really wanted to highlight the individual's role in saving or destroying our climate.

11. What kind of support would be useful for you if you joined Global Acceleration?

Considering the experience of prototype development, we feel that we really need a critical mentor just like we got during the 1st phase to help us generate more effective ideas not only for betterment of climate but for employment and economy as well. Moreover, as our project is mainly based on technology, we surely need an effective and good quality animator for making budget friendly yet quality videos.

5. Siachen Sherpa.

1. Title of your project

Siachen Sherpa, Artificial Glacier.

2. Idea Description

https://drive.google.com/file/d/1xaf7jP_9sPYtaoAGc-Kahjx34zQFZseB/view?usp=sharing

Important: Do you give permission for Generation Unlimited to use parts or all of your videos in global communications?

Yes, we do.

3. Your vision and goals

The idea and vision behind artificial glaciers are to freeze and hold the water that keeps flowing and wasting away down the streams and into the rivers throughout the winter

• Idea that supports nature to resist climate change

• To enhance leadership skills, built networks, and provide an opportunity to discover Baltistan through climate change action.

4. Problem you are solving

All life depends on snow in Khaplu, with the high-altitude desert region receiving only 50mm of rainfall a year. Agriculture relies mainly on the water that comes from snow and glacial melt, but the natural glacial melt happens after their planting months which are usually the months of April and May. So, the aim is to find a solution to this water crisis in the critical planting months of April and May before the natural glacial melt waters start flowing.

5. Your solution

This simple innovation carried out in Baltistan called the “Ice Stupa” has the potential to change the world. The innovation is no rocket science but a clever application of simple Physics that potentially solves the major water crisis in Baltistan. It has the potential to be a major innovation in saving the glaciers at a time when due to rising global temperatures, the majority of the glacial water is not being put to use and is getting wasted after melting. This can also save the plains from getting flooded by controlling and spreading the melted water onto farms and surrounding areas for irrigation purposes.

6. Proof of concept (evidence gathered to date during the mentorship period)

The Ice Stupa works like this:

Baltistan, a region that has infertile land relies heavily on glacial water for irrigation purposes. Earlier artificial glacial projects were carried out, but it was done so at higher altitudes and didn’t solve any problem that villagers faced. The ingenuity of VC Zakir Thasang intervention was to build the stupas near the village. The temperature near the village was low enough to keep the water frozen but how could you bring such large amounts of water from the glaciers from such great heights and use them to build stupas? The answer was gravitation.

The run-off water of the glaciers was diverted to the village using plastic pipes to the place where the stupas were to be built. As a result of intense pressure developed because of the descent of the water from a great altitude, when they came out of the pipes the water spurted out and sprayed.

7: Technology (if it is important to your solution)

Since 1980 the average temperature has increased by more than two degrees, with a huge effect on the local environment. The glaciated area in Khaplu Baltistan has been lost, meaning that glaciers are much smaller and, in some areas, have disappeared altogether.

When the water came out with high pressure, owing to the temperature being nearly -25deg Celsius during cold winters, it instantly transformed into the snow as soon as it came in contact with the air, and thus started falling around the pipes and over time collected to form the structure of a stupa. As Glaciers are spread out they tend to melt faster; when ice is in compact form the melting process is slower as less of its surface area is subjected to the heat of the sun. The water melted five times slower and gave the essential water required for the farmers to cultivate their crops during the spring season.

Each stupa has the economic potential of 8 Cr rupees, and with rising global temperatures and vast amount of glacial water runoff, this Indian jugaad can be seen as a case study on how to use the run off for productive use and stop the flooding in plains. The natural glaciers are shrinking due to rising global temperatures. For that reason, they provide far less water in early spring but then release a lot in the summer heat, shrinking even more.

8. Future of the Idea

At the end of the Project the participants will be able to achieve the following objectives within a specific period of time with the available resources;

- This artificial glacier brings water to the Upper Village and could save people from dangerous water shortages
- To improve the leadership skills of Youth through the outdoor expedition
- To promote tourism in Gilgit Baltistan
- To provide the youth an opportunity to interact and build networks through climate change sessions.
- Instead, this ice will melt in the springtime, just when the fields need watering. The concept of artificial glaciers is not new to Baltistan, our ancestors used to have a process of ‘grafting glaciers’ in the very high reaches of mountains.
- Harsh weather conditions are a big challenge in this project’s accessibility at site selection in both summer and winter.

9. How you would use the grant/seed fund

Seed funding will be used in equipment purchasing & bought necessary products and other things which will be held or used in project implementations

10. Your Team Motivation:

The climate change mission is our real motivation, under which we are trying to create a positive impact on society. Climate change impact is the biggest issue which is faced by the local community, whose solution is very important to solve the water shortage in town.

11.What kind of support would be useful for you if you joined Global Acceleration

The GenU imaGen Venture Youth Challenge global acceleration program.

Will enhance our team members' capacity in these subjects: Climate Change Action, good governance, leadership, integrated approach to environmental rights, dignity, peace and sustainability. The Youth Ventures program will provide us an opportunity to learn more about Climate Change issues and Youth Leadership from other Alumni participating from different countries. We expect to enjoy the cultural diversity of this Youth venture. We are anticipating that we will get good working knowledge and diversified experience from other fellows participating in this program and will adapt good practices from the participants.

Implementing Partner

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