



Climate Leaders of Tomorrow

Our initiative, *Climate Leaders of Tomorrow*, is developing educational programmes to empower climate conscious youth in the Global South to take climate action in their own regions, through expanding their networks and by building off inspiration from local experts.



TEAM - Climate Justice League

Anjukan Kathirgamanathan
Bianca Nagasawa
Mark Prunella-Miller
Mathilde Desurmont



1. Motivation & Background

Current System & Drivers

Europe and other developed regions of the world (hereby referred to as “Global North”) face many challenges in responding to the negative consequences of climate change. Adaptation for resilience and mitigation for minimising the detrimental consequences of climate change are required. The majority of these nations, however, have the economic means and some pre-existing infrastructure to prevent utter catastrophe and to protect their citizens. If the focus is shifted on developing nations (hereby referred to as “Global South”), we see that they lack the resources to appropriately adapt to climate change, making them extremely vulnerable (Mendelsohn et al., 2006)¹. This is compounded by the fact that climate change will be experienced most severely in the regions closest to the equator, or in other words, most developing nations (Huq et al., 2004)². This is quite unfortunate, as when looking back at historical CO₂ emissions since 1751, one sees that Europe and the United States have by far contributed the most to the cumulative CO₂ in the atmosphere (Figure 1). Even today, while lesser developed nations are rapidly growing and expanding their energy and industrial output, in comparison to the developed nations, their per capita CO₂ emissions remain relatively low (Figure 2). Thus, since climate change is a global problem, from which a contribution from any region of the world affects its entirety, there is injustice in the fact that those who have contributed and continue to contribute the least to climate change, are the ones who will suffer the most detrimental consequences.

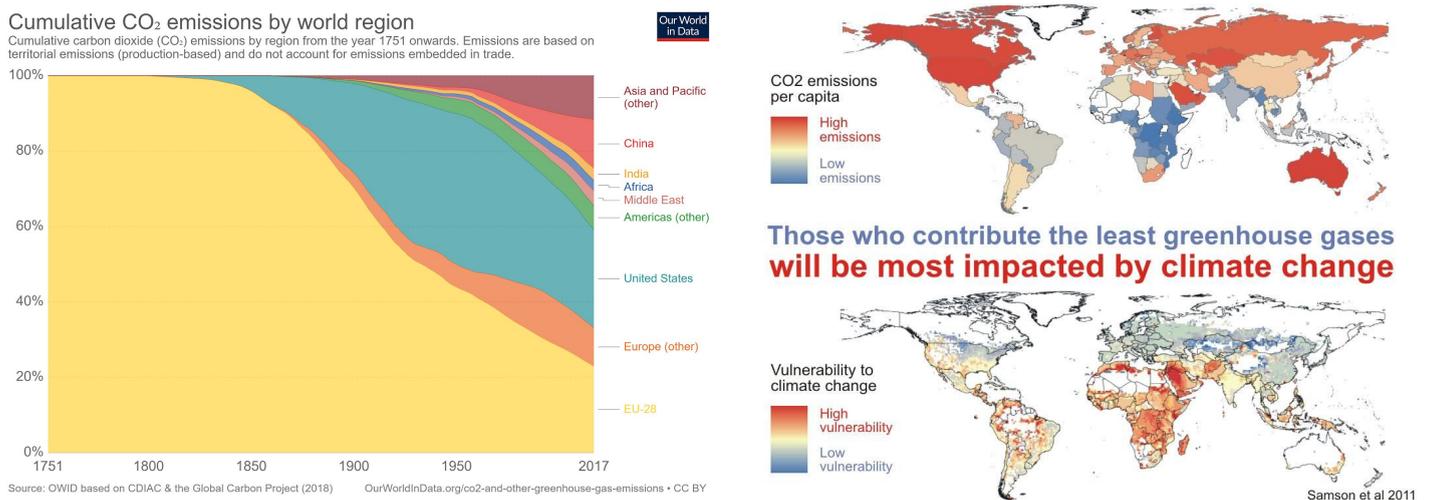


Figure 1 (Left). Cumulative CO₂ emissions by world region. (Our World in Data, 2018)

Figure 2 (Right). Per capita CO₂ emissions by country compared to regions of vulnerability to climate change (Skeptical Science, 2019).³

¹ Mendelsohn, R., Dinar, A., & Williams, L. (2006). The distributional impact of climate change on rich and poor countries. *Environment and Development Economics*, 11(2), 159-178.

² Huq, Saleemul, Hannah Reid, Mama Konate, Atiq Rahman, Youba Sokona, and Florence Crick. "Mainstreaming adaptation to climate change in least developed countries (LDCs)." *Climate Policy* 4, no. 1 (2004): 25-43.

³ Skeptical Science. Those who contribute the least greenhouse gases will be most impacted by climate change (August, 2019). Retrieved from <https://skepticalscience.com/print.php?n=630>



Problem Statement

The youth are the future and are also those who have the most novel ideas, as they are not held back by as many preconceptions as adults who often grow comfortable in a certain way of thinking. While there is a preconception that knowledge transfer needs to be from the Global North to the Global South, the concepts and projects which work in some regions may not be applicable to others, and people know best their own contexts. In addition, nations of the Global South have the opportunity to “leap-frog” the practices of the Global North that we are now acknowledging as leading to the degradation of natural environments and contributing to climate change

A well known example of a young person in the Global South is William Kamkwamba, known as the “boy who harvested the wind”, who created a wind turbine out of miscellaneous materials available in his small village. This creation was made with little impact on the environment, created clean energy, and alleviated the community from a climate change related vulnerability. While he gained much recognition for his efforts, many others exist in the Global South, also with the capacity for innovation, but may not have the confidence or support to fully pursue their solutions. The problem statement can be stated as follows:

“There is a lack of accessible opportunities and networks for youth of the global south to become changemakers in their local communities in the fight against climate change”

Ideation

After the problem definition, came the ideation process. The main idea, proposed by all the members, was an education and leadership programme, inspired by the Climate-KIC Journey (<https://journey.climate-kic.org/>). The details of the programme and especially the audience was not defined (i.e only for the Global South or for everyone?). Another idea was to create an online platform/ social network for youth in the Global South to share their thoughts and meet other change-makers around the world. The last solution was a Netflix series with a focus on youth in the Global South, showing how climate change impacts their everyday life and giving them the opportunity to speak loud and share their ideas.

To decide on the best idea, we defined Key Performance Indicators (KPI) and weighed them in terms of importance and impact. Following are the KPIs (most important to least):

- Empowering the youth of global south to become the future climate leaders of the world;
- Climate justice, the Global North realises its responsibility and supports the development of the Global South;
- Educating girls (project Drawdown);
- Promoting and embracing sustainable local and traditional practices and culture;
- Deconstructing the myth on the “Ideal North”;
- Attracting change-makers that care about climate change to apply their knowledge to the Global South;
- Leapfrog the mistakes of the global North;

After comparison of the different ideas according to the KPIs, the training programme in the Global South for the Global South (participants, locations, experts) was selected as the solution with the most impact.



2. Market Research

Our team performed market research to understand the perceptions that youth (18-35 years olds) in the Global South have on climate change and opportunities for taking action in their countries. This was done by distributing a survey through our networks of friends, family, and colleagues. A sample size of 250 was achieved within two days of distribution. The results (Figure 3 and 4) confirm our assumptions that climate change is recognized by citizens of the Global South, and that they feel that it is relevant to their lives. Additionally, they show that there is a lack of these sorts of programmes in their countries and that if they do exist, they are unaffordable, and of poor quality.

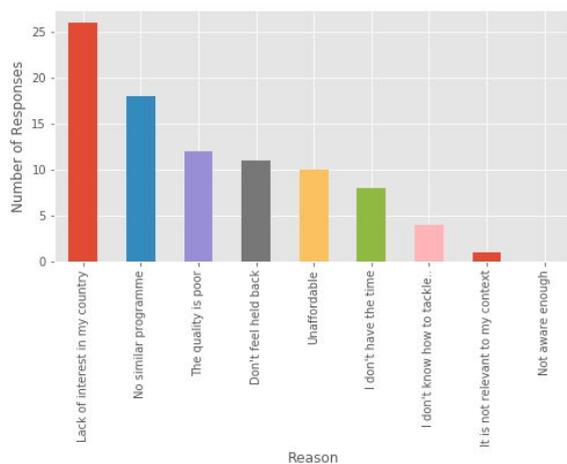


Figure 3. What is holding you back from involving yourself in climate change initiatives like educational programs? (Response from youth in Global South, sample size is 148)

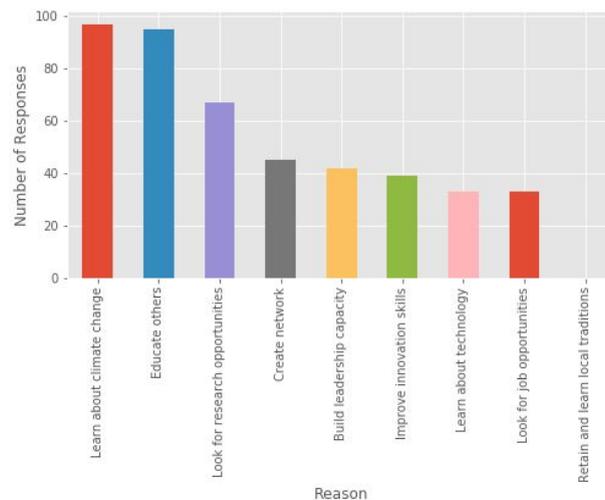


Figure 4. Why would you participate in an educational program on climate change? (Responses from youth in Global South, sample size is 148).

While investigating the pre-existing programmes for empowering youth towards taking climate change action, we came across a few programmes similar to this project: the Climate-KIC Journey, Youth Climate Leaders, and Global Climate Corps. While youth taking part in the Climate-KIC Journey can originate from the Global South, participation in the programme is restricted to individuals who are studying in Europe, which leaves out those who are living in the areas of the world most vulnerable to climate change. Moreover, because the Journey is based in Europe, participants from the Global South are not exposed to projects or systems related to their context, and do not see first-hand how climate change affects their region. The Youth Climate Leaders programme does a bit of what the Journey does not, and is open for participants in the Global South regardless of where they live or study. Their programmes also expose participants to problems in the Global South, as they do programmes in Brazil every year, and have also done programmes in Kenya and India. These programmes, however, are done in combination with programmes in Europe (past programmes have been in France and Germany) and are not explicitly for participants coming from the region where the programme takes place. Furthermore, participation in the programme comes with high fees, which again would barr many in the Global South from participating. While the Global Climate Corps programme offers learning opportunities in the Global South, the programme is an internship for individuals who might not even be from the region they visit. In addition, this programme has high participation fees, although it offers some financial aid through the USA government and their own scholarship fund, it still does not guarantee that everyone who needs financial aid would receive it. Lastly, while the internship allows



participants to build their networks through partnering with NGOs, it does not facilitate participants' ability to support each other to take action in their own regions.

3. The *Climate Leaders of Tomorrow* Programme

To address the need for programmes strictly in the Global South for the Global South, our programme helps climate-conscious youth in the Global South who want to become climate leaders and make a positive change for a better future by connecting them to professionals from their regions to build a network for climate action and increase their capacity to create innovative solutions. Through the programme, participants will understand the causes and impacts of climate change, learn about how traditional and modern practices can be combined for sustainability and innovation, build confidence through leadership training and empowerment through networking and co-creation. *Our vision is to create a growing community of changemakers that will inspire others in their own communities to work towards climate action.*

The *Climate Leaders of Tomorrow* initiative, is for youth aged 18-35 in the Global South who desire to come up with potential climate change solutions in their own contexts. Participants will visit locations within their general regions with local coaches and experts. The programme will take place over four weeks and participants will visit different locations in order to be able to see contrasting environments in their regions. Due to the large distances in many developing countries and the desire to limit air travel and the carbon emissions cost of the initiative, the extent of travel to different host locations would vary by programme.

There will be 5 programmes for five key regions and themes of the Global South (Amazon Programme - Brazil, Oceans - South Pacific, Water - Africa, Deltas - Vietnam & Cambodia, Urban - India & Sri Lanka). These will be tailored according to the particular needs and issues of these locales with local partners selected accordingly. The exact nature and location of these proposed programmes will be based on the lessons learned from the pilot programme and the requirements of the funding body. Each of the four weeks in the *Climate Leaders of Tomorrow* programmes will focus on one of our four pillars for climate change action in the Global South. This is illustrated in the poster below for the Amazon programme as an example (Figure 6).

As four participants in the Climate-KIC Journey, we ourselves, have felt what it is like to become empowered and confident. We started out feeling as individuals but through the first week of the Journey we became a community with a common objective. Each member of the team felt that they were part of something powerful, that they were not alone in their fight against climate change. As our project started to materialize into a prototype, we saw that we were actually capable of creating something. We are lucky to have had the opportunity to be here in Europe and benefit from the Journey; we want people in the Global South to feel the same way.



Climate Leaders of Tomorrow

Empowering young leaders of the Global South towards climate action

Amazon Programme

Manaus ----- Cuiabá ----- São Paulo

Week 1 – Pillar 1: Awareness

- Participants will get to know each other and share values to create solidarity.
- Presentations on expanding participants' knowledge and awareness about the causes of climate change and the consequences they have, both on a global and local scale
- Interactions with local university professors, researchers, community leaders and NGO workers from the areas of ecology and conservation, sustainability, agriculture, and health.



Week 2 – Pillar 2: Local & Traditional

- Visit traditional indigenous communities to learn about the sustainable practice.
 - Gain cultural pride and respect for roots and traditional practices
 - Select topics of interests and form project groups
- Participants will realize that technology may not always be the answer for sustainable solutions and that it may be possible to combine traditional practices with modern lifestyles.



Week 3 – Pillar 3: Leadership & Innovation

- Training sessions to work on leadership capacity building.
- Develop and practice entrepreneurship & innovation skillsets
- Visits to start-ups in São Paulo
- Work and develop project ideas

Participants will develop leadership skills to work effectively in diverse and multi-disciplinary team environments as well as get a taste of the latest innovation trends in the locale.



Week 4 – Pillar 4: Empowerment

- Create projects related to climate action with guidance from sustainable businesses and NGOs. Empowered by materializing an idea into a project in a team environment
- Leave the program with a network of fellow climate champions from their own regions and others throughout the world.
- Potential for students to then find research or job opportunities.
- Alumni from the programme will also be able to share their experiences with others in their communities, educating and empowering an even larger network.



- Empowering the youth of global south to become the future climate leaders of the world.
- Promoting and embracing sustainable local and traditional practices and culture
- Promoting the education and empowerment of girls
- Accessibility to all youth (There is no participation fee and all expenses included)
- Deconstruction of the myth 'Ideal North' in the Global South
- Two-ways sharing of knowledge, resources, promoting Global South to Global South interactions;
- Attract change makers that care about climate change to apply their knowledge to the south
- Leap-frog the mistakes of the global North

For more information or to apply, visit www.climateleadersfortomorrow.org

Figure 6. Information Poster for Amazon (Brazil) Programme



4. Implementation

The implementation of the *Climate Leaders of Tomorrow* programme is outlined below. A pilot programme is the first part of the project for validation of the concept and allowing for progressive scale up. It is envisaged that the pilot programme will be conducted in one specific region and focussing on one particular theme (from those identified in the previous section). The selection will be based on several factors; committed funding partners and availability of and connection with local partners. The following section describes the implementation of the pilot programme. An early stage plan on scale up is also included.

Financial Budget

The financial budget below (Figure 7) was based on rough price estimates for a four week program in Brazil for 40 participants. Local knowledge and websites such as booking.com were used to find out the approximate values.

Accommodation	\$31,500
Meals	\$17,640
Transport	\$23,520
Equipment & Materials	\$4,000
Salaries	\$18,400
Activities	\$5,000
Total	\$100,000.00

Figure 7. Financial Budget for one “Climate Leaders of Tomorrow” Programme of 40 participants

Funding

The funding goal is to cover the costs of the operational costs of the pilot programme. We have identified governmental aid agencies and philanthropic foundations as potential funders. There is scope for tailoring the programme and its objectives in a way that aligns with the goals of both the funder and the potential participants of the programme.

Training of Coaches and Administration

Selection and training of the coaches/facilitators will be conducted prior to the pilot programme. Potential candidates will be identified by reaching out to local universities and NGOs for references. Diversity in terms of regional representation will be ensured to initiate the formation of a network of changemakers and coaches who can help scale the project up following the pilot programme. The administration of the programme will initially be conducted by our team during the pilot programme but we envisage that a team will have to be formed once the project is scaled up with representation in each of the regions identified.

Recruitment & Selection of Participants

For the pilot programme in a specific region, it is envisaged that recruitment of participants will be through local partners (third-level institutions, NGOs and community organisations) and social media as the predominant means. Selection of participants will be conducted through interviews (either in person or through the use of technology) with the local partners and the administrative team. Criteria for selection shall be demonstrated leadership capacity, interest for climate change action, vulnerability from climate change and aptitude for learning. Selection shall be non-discriminatory, gender balanced



and allow for representation from under-represented communities and indigenous populations in aligning with the visions of the programme.

Local Partners

Local partners will be comprised of companies, organizations, businesses and NGOs working in the field of climate change and sustainability. The criteria used for the selection of these partners will be based on their relevance in these fields, their local work, and interest in giving back to their communities.

Metrics and Quantification of Impact

The following are intended to be used as metrics for quantification of the impact of the programme and at a project level.

1. Number of participants who have participated in the programme
2. Participants which create bottom up activities in their communities
3. Gain of knowledge in certain key areas (pre and post surveys)
4. Projects and ventures resulting from the programme
5. Connections provided to the participants, both within and with external partners

Scale-Up

Following the initial pilot programme, lessons learned will be used for the creation of future programmes. A successful pilot programme would be a sign to funders of a worthwhile project and additional funds would be requested to search for collaborators in another and to run two programmes the following year in order to expand our reach and to involve more regions of the Global South. The aim would be to continually expand with a new programme in a new region every year. Through making connections within host programme sites, potential new funders, such as businesses looking to have a positive impact on their region would be scouted out as sponsors for future programmes.

5. The Team - Climate Justice League



Figure 9. Geographical impact of the members of the team



Anjukan Kathirgamanathan

Born in Zambia, having lived in the Maldives and ethnically Sri Lankan, I have strong roots in the Global South and am immensely proud of the traditional cultures and way of life from these regions. These are under immense threat today and I believe that these have a major role in tackling climate change.

I am pursuing a PhD at the Energy Institute at University College Dublin and am passionate about using machine learning and data-driven techniques to make the world a more sustainable place. My research is looking at the use of data-driven predictive control in buildings, thereby harnessing energy flexibility to allow increasing renewable energy penetration in the future smart electricity grid.

I completed my BE(Hons) at the University of Auckland, New Zealand specialising in Mechanical Engineering. I am the president of the UCD ASHRAE Student Chapter, part of the UCD Sustainable Energy Community, a leadership network member of the Asia New Zealand Foundation and a Rotary Young Leaders Award recipient.

Mathilde Desurmont

Born under the sun of New Caledonia and raised in the South Pacific Community of Nouméa, I accumulated for 20 years good humour, optimism and curiosity, to venture general engineering studies in Centrale Lyon (France) and then a Master of Sciences in Design and Innovation in the Technical University of Copenhagen, emphasising on entrepreneurship, health and sustainability.

During my studies, I got involved in different projects and student activities like the *Café Ethiques*, organising conferences and debates on ethical issues during lunch, during which I realised the power of students sharing their ideas and beliefs. I was also part of *SolidariTerre*, a humanitarian association, with whom I organised and participated in a project in Madagascar, to provide material and educational support to young children in a school. During this journey, I fell in love with the African culture, their generosity and their dedication to the protection of natural resources.

My will to tackle climate change and to fight for social justice is not the consequence of one or more special events, but of the way I was raised, close to nature and passionate for the richness of the various cultures on this planet. I'm proud of my origins, considering myself as a Pacific Islander more than a French citizen, and my ambition is to preserve both the natural paradises that exist on earth and their cultural assets.

Mark Prunella-Miller

Although US American born and raised, since graduating college I've left my home country and worked and studied throughout various parts of the world, primarily in the Global South, with a focus on International Development.

After obtaining a B.S. in Biology and Spanish, I joined the Peace Corps and worked as a Biology and English teacher in a high school in a small town in Mozambique. During these two years I became involved with a couple youth education and empowerment initiatives which I implemented in my host community as well as coordinated ToTs, workshops, and conferences for my entire province and M&E for the whole country.

I later worked at an NGO in Guatemala taking on various positions arranging logistics for visiting volunteers' projects, assisting with an adolescent reproductive health education programme and managing donor communications, fundraising campaigns and grant writing.



Through these experiences, I found that I was most passionate about development programmes related to health, and decided to pursue an M.Sc. in International Health from the University of Barcelona. During my studies, I became focused on Environmental Health and Climate Change and Health which ultimately led me to participate in the Journey this August. Because of my background in International Development, I was interested in pursuing a project related to Climate Justice, and was happily surprised to find myself in good company.

Bianca Nagasawa

Born in the Amazon rainforest region in Brazil, the Global South is my home and I can see the effects of climate change in my backyard. I have also lived in Japan and Australia and I am currently studying in the Netherlands. Moreover, I have worked in many social and sustainable related projects such as working together with prison inmates in organic agriculture, aiming at improving their diet and the public's perception of them and working in environmental education for children.

I am currently an MSc student in Sustainable Development with specialization in Earth System Governance at Utrecht University thanks to being awarded the Utrecht Excellence Scholarship and the Geosciences scholarship, and working as a student assistant at land governance partnership group aimed at bringing stakeholders from the Global North and South together.

Bridging the gap between people, science and decision-makers is what motivates me. Only through cooperation we will be able to reach common global goals such as the sustainable development as well as dealing with climate change. I believe that by the exchange of knowledge from different sources we have the chance to develop holistic and innovative solutions for local problems while focusing on achieving global targets.

Team

We found ourselves though a common shared value: Climate Justice. From that, we were able to form a team with a strong driver for motivation, and that is what makes our team so cohesive and passionate. We all wish to implement the project and we are working towards making this a reality.