The lens of Education Sustainable Goals through The Enlightenment of YouthMappers Network

Thinking about the sustainable future, the importance of education for sustainable development (ESD) has played not only an intrinsic part of quality education but also a key enabler for sustainable development. The United Nations definition of ESD: "Education for Sustainable Development (ESD) empowers people to change the way they think and work towards a sustainable future". ESD has included in the Sustainable Development Goals (SDGs)accepted by the global community for the next 15 years and target 4.7 of SDG 4 on education addresses ESD and different approaches such as Global Citizenship Education².

The lens of implementing Education Sustainable Goals by YouthMappers Network-

YouthMappers (https://www.youthmappers.org/) established in 2015 with the support of the United States Agency for International Development (USAID) GeoCenter, Texas Tech University, George Washington University, and West Virginia University students and researchers. The vision of Youth Mappers is "WE DON'T JUST BUILD MAPS.WE BUILD MAPPERS". YouthMappers has created an effective collaboration among university students and a network of professionals and peers to enhance the open mapping platform in the community resilience and economic development purposes3. The mission of YouthMappers is to create the generation of mappers who can use the web-based geospatial technologies like OpenStreetMap for creating data on the satellite image related to the building, roads, and points by adding the detailed information about the different categories buildings, street names and muchother information. Several humanitarian and development actors like IFRC, USAID, World Bank, UN agencies, Doctors without borders are using these maps in the real- world projects (Soils et al., 2018)4.

YouthMappers is promoting the new era of education sustainable development and global citizenship concept uniquely by engaging the students from the different parts of the world through humanitarian mapping by creating data that serve development needs in the international community. Creating the new geospatial data on OpenStreetMap for projects which address the most pressing needs of society in places where fundamental information on basic infrastructure is scarce or nonexistent, from food security in Ghana to peace planning in Colombia to flooding in my native country Bangladesh.

As of June 2019, beginning my role as a Regional Ambassador carries the responsibility to elevate the students' contributions to open mapping to enhancing community resilience in the Asia-Pacific region. Increasing the number of major disasters, including —earthquake, flood, cyclone, landslides are placing greater pressures on responders, vulnerable communities and aid organizations shifting the fundamental spatial data needs of this century. In this role, I have also contributed to the engagement of students at Keio University and the Okayama University of Science in Japan and Daffodil University and State

¹ United Nations. (2018). United Nations Sustainable Development Goals: Goal 4. Retrieved from:

https://www.un.org/development/desa/disabilities/envision2030-goal4.html

² Education for Sustainable Development. (2019, August 29). Retrieved from

https://en.unesco.org/themes/education-sustainable-development.

³ ww.youthmappers.org

⁴ Solís, P.; McCusker, B.; Menkiti, N.; Cowan, N.; Blevins, C. Engaging Global Youth in Participatory Spatial DataCreationfortheUNSustainableDevelopmentGoals: TheCaseofOpenMappingforMalariaPrevention. Appl. Geogr. 2018, 98, 143–155.

University in Bangladesh, with the goal of affiliating them with the YouthMappers network. As I also provide local support to chapters through in-person, technical training (virtual and field mapping) to ensure data quality in OpenStreetMap data, I saw the immense value of a humanitarian lens in helping our YouthMappers team design community-driven, responsive, and resilient communities through mapping around the world.

Impact of the work -

- ♣ Participatory way of learning methods for the students by involving in diverse projects related to disaster-related fields which motivate the young people to empower their actions and thoughts on ESD.
- Networking with people from diverse backgrounds around the world through exchanging information, ideas, and results.
- ♣ Building the technical and critical thinking competencies of the students through developing soft skills related to workforce development not only by mapping skills but also by fostering the leadership skills and enhancing the research skills by using various geospatial tools (Field Papers, Mapillary, MAPS.ME, Geopaparazzi app, iD editor and JOSM editor) in the humanitarian mapping sphere.
- Imagining future scenarios and collaboratively making decisions to apply knowledge for the development decision making
- **♣** Enhancing the teaching and learning resources to develop and improve open mapping inside and outside of the classroom.
- ♣ Enabling the young minds how they can be part of the humanitarian sectors by engaging their time for mapping into the humanitarian mapping sector.
- ♣ Promoting the voices of the females through their achievement in the humanitarian sector through Lets Girls Map campaign (https://www.youthmappers.org/letgirlsmap).



The students of Keio University Fujisawa campus in Japan are collecting the data by using Kobo Toolbox.



The students of the Okayama University of Science in Japan are taking part in the YouthMappers training.



The students of Daffodil International university in Bangladesh are learning how to edits maps by using OpenStreetMap.

The outreach activities with the universities were bit challenging among the students and faculty members but exciting as well. Sometimes at first, I have felt that it was hard to take the permission from the university head office but it can work out through engaging the authority into the training. The lesson I have learned that not only the students but also motivated the faculty members for engaging with the YouthMappers Network. I have applied a few strategies to promote YouthMappers activities around the campus in Bangladesh and Japan. To overcome the challenge, I have been promoted the YouthMappers activities through posters around the campus, giving presentation to the faculty members and students before the training and always carrying the hard copies of the YouthMappers activities during the meeting in the university premises. The established communication has helped me to find out the interested

students for the training and I am so grateful to the faculty members who have supported me for disseminating the YouthMappers activities with the university.

If we want to achieve the EDS, the students must not always keep themselves within the textbooks, they need to encourage changes in knowledge, skills, values, and attitudes to enable a more sustainable and just society for all. The engagement of Youth is an essential part of Education's sustainable development through their activities and awareness. For that reason, a youth-led chapter of YouthMappers on university campuses supports university efforts to offer meaningful global learning experiences, build a socially engaged citizenry, enhance long-term scientific capacity around the world, and foster youth leadership. We hope that the enthusiastic students will be the part of this network, who want to do great stuff for humanity as a human being because through this network they will understand the spatial analytical methods that lead to a greater understanding of resilience. There is no cost for affiliation or enjoying the benefits of being a part of the consortium.