

Country - BHUTAN



Name: Changa Tshering

Function: Country Coordinator (CC) – To plan, coordinate and implement GLOBE activities in Bhutan.

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Organization and Number of Staff:

- UWICER, 50 staffs

Funding by: GLOBE and RGOB, Bhutan

Cooperating Organizations/Individuals:

- Ministry of Education, Schools
- Department of Forest and Park Services

GLOBE Schools (what types, how many):

- 13 GLOBE schools

GLOBE Areas you and schools focus on:

- Biosphere
- Hydrosphere
- Atmosphere
- Pedosphere

Number of Schools Reporting Data over Past Year:

- 10 schools with about 100 students

Program Implementation, International Cooperation in GLOBE Network, and Activities over Past Year (categorized by GLOBE Strategic Plan 2018-2023 Goals):

1. Education – GLOBE involves around 100 students from 13 different schools across Bhutan. Level of school ranges from Primary to High schools. Being relatively new, we are yet to identify collaborative project with GLOBE students and teachers from other GLOBE countries. Bhutan is looking forward to establish link and connection with other GLOBE schools across the world to conduct joint project.
2. Science – As part of GLOBE program, Bhutan is focusing on integrating GLOBE learning activities in the Environmental Science Curriculum for 9-12 class standard. While schools involve students, its through their collective learning and investigation in collaboration with research institutes and other organizations that adds value to GLOBE program in Bhutan.
3. Community – Students are involved in doing the project that effects communities nearby schools. Topic for GLOBE IVSS are selected based on environmental issues that effect the local communities with the locality of school. Once the topic is identified, relevant GLOBE protocols are used to collect, analyze and interpret data to address the local issues.
4. Technology – GLOBE teachers and students make use of technology such as mobile application to submit globe observation data. They even learn how to refer and make use of satellite data to compare how their observation data matches with satellite data. Also, they use equipment such as mobile GPS to locate their research sites and collect location based environmental data. Schools that participate in GLOBE program have access to digital weather station that streams data every hour and provides advance visualization tools.
5. Communications – GLOBE teacher and students enjoy wider network of communication with other scientific communities, researchers and student from other countries through the collaborative projects.

Plans and Ideas for Next Year:

- Bhutan has plan to involve more schools in the GLOBE program in this year
- Bhutan plan to conduct GLOBE mentor training in this year and built capacity of teachers to conduct GLOBE as part of STEM education in Bhutan
- GLOBE Bhutan has plan to conduct Bio-blitz called Bhutan Budbrust and Bird Count to involve students in observing and recording how environmental variables changes in Bhutan over years.
- GLOBE Bhutan has plan to participate in IVSS events conducted by GIO
- GLOBE Bhutan has plan to participate in micro-plastic monitoring in snow fall.