GLOBE Regional Meeting of Asia-Pacific Region during January 14-16, 2016 at Chiang Rai, Thailand

Day: 1 (January 14, 2016)

The GLOBE Regional Meeting of Asia-Pacific Region was organized in the Conference Hall of Dusit Island Resort, Chiang Rai, Thailand. It was attended by 13 Countries Coordinators. In all 30 Participants were present for all the 3 days (January 14-16, 2016).

The opening session of the meeting started with a speech by Prof. Dr. Titchai Sumitra, Dr. Tony Murphy, Director GLOBE Implementation Office — USA was also present. Dr. Desh Bandhu, Regional Coordinator, Asia-Pacific spoke about the regional cooperation and the role of different countries in science and environment learning in the region.

Progress Report by Different Countries:-

THAILAND

Dr. Pornum Waifayankoon from Thailand gave a PPT Presentation regarding environment camps for learning about nature for school students where students had a practical experience about soil, hydrology, atmosphere, land cover, flora, fauna and ecosystem.

The IPST (globe implementation agency) developed activity manual (Book) for school students and teachers guide for standard 4-6 standard. The GLOBE Protocols have been included as a part of curriculum in Grade 4-6 and Grade 7-9 students.

TAIWAN

There are more GLOBE Schools on the western part of Taiwan and only 2 schools on the eastern region. There is need to include more schools from eastern region. Many school students are taking daily observations on different GLOBE Protocols. The implementing agency has given instruments to schools. These schools observe record, download and submit the data to GLOBE-Site. The country is encouraging students to take research projects and send results. Many senior high schools are interested in science fairs and project based courses. Instruments are installed in 17 schools. 6 students and 2 schools attended GLOBE Citizens Science Conference in India. In 2015 GLOBE Annual Partnership Meeting was attended by the country. The country has its own GLOBE Website and people communicate through facebook social network. The planning is to encourage and start research related to science education.

PALAU

The Country Coordinator informed that the goal is to conserve and preserve the environment. The Science and Environmental Fairs are organized in their country. They organized Coastal- Cleanup Day, Soil Day (involving all the women's groups), Education Awareness Week, Earth and Water Day Activity, Tours to Coral Reef Centre.

A programme called "From Ridge to Reef" has created awareness for Conservation of Watershed. Approx 98% of Sediments flow through rivers and stays in bays. Project on Conservation of Mangrooves is also important activity in the country

Future in next 3 years GLOBE Protocols shall be introduced as a part of School Education System.

VIETNAM

Vietnam Academy of Science and Technology and Vietnam National Science Centre is main implementing agency. The country has very recently joined GLOBE. Through space technology operation is mainly undertaking Environmental Monitoring but now with the help of NASA Capacity Building shall be taken-up and education / HR development projects shall be undertaken.

Day: 2 (January 15, 2016)

The Countries Progress Report Continued:

PHILIPPINES

Country has 7500 islands. More than 100 High Schools having science subject are participating in GLOBE activities. Dr. Ellen Stofen – Chief Scientist from NASA visited Philippines and spoke about "Women in Science". 150 students from 9 districts attended the programme. GLOBE Teacher Training Program was organized in Quezon City with collaboration of Science Community Foundation on December 1, 2015 which was attended by 52 Teachers from 25 Schools. Next Training Program shall be organized in May, 2016.

The country is facing problem related with insufficient funds, equipment in schools and appointment of deputy / assistant country coordinator. The students and teachers are not submitting data on GLOBE website. The country has to develop its country GLOBE website.

In future plan – The country is planning to have a Asia-Pacific Regional Meeting in 2017 in Manila. The tentative dates can be May-June, 2017.

SRILANKA

Through 56 schools are registered as GLOBE Schools, 60 new schools are pending to be registered. There are 2 Master Trainers and 3 other Trainers which are conducting GLOBE Training. They organize World Water Day / World Environment Day. Field Hydrology Practical Day was organized in which students conducted experiments on hydrology protocol. The country is connected with GLOBE for the past 13 years and its studies are highlighted in community progress.

In 2016 the goal is to develop knowledge, skill and competence on environment education for school students, to develop interaction among school studies with in the country. The phenology study will became a part of school syllabus. Student Camps with an aim to involve students in research activities will be developed.

The great challenge is limitation of funds for purchasing the equipments and strengthening the communication and information exchange.

NEPAL

The country could not do much due to devastating earthquake and political situation. Environmental Camps for Conservation Awareness (ECCA) is a children's nature club, a first NGO to establish Paper Recycling Plant and has been awarded nationally. There are 22 GLOBE (20 Govt. + 2 Private) Schools involved in hydrology and heritage programme. Education by Street Drama, Celebration of Earth Day, Wash Hand Day and World Toilet Day are main. ECCA is a self funding agency. They plan exchange programme in 2017. Water Class is a good concept where in practical and experimental learning related to water is given. Awareness of students to purification and treatment technology.

Herbal Garden in school is another activity. Human Value based Water Sanitation and Hygiene (WASH) Education, Green Campaign are some of the areas. Nearly 50,000 youths have been involved in this. Learning about climate, training of youths, one school one heritage campaign are of the priorities in next 2-3 years. Lack of material and political disturbances are some of the problems in running the programme.

MICRONESIA

It is a small pacific ocean country having 1,06,000 population and 186 schools. There are 5 GLOBE Schools. The country shall start activity in 2016 and 2017. There are problems like Tropical Storms, Landslides and Tidal Waves etc. GLOBE Teacher Training is planned in 2017, 5 schools will be involved. One teacher shall be sent to Philippines for training.

INDIA

It is one of the 17 Mega Biodiversity Countries. GLOBE Schools are involved in different activity. In Delhi organized Youth Environment Science Congress, Global Citizen Science Congress in Bhubaneswar. Students from Thailand and Taiwan participated in exchange programme. 2 days program was organized on Earth Day, on this day Tree Plantation, Study of Soil and Hydrology Protocols were carried out. Environment and Science Communication was organized on October 16, 2015 and a grass root organization as Khamam Science Club was awarded. In 2015 in 7 States of North India the 120 Teachers of Govt. Schools were trained in Hindi.

In coming future, India wish to extend GLOBE School Network, more participation of Kendriya Vidyalaya and develop a better Monitoring Mechanism.

MALDIVES

With a population of 3,60,000 and Coastal Country the EPA is involved in Environment Education for past 3 years as Country has high biodiversity. A Teachers Training Programme was organized by Dr. Desh Bandhu in Fedu High School at Addu Atoll in which 22 teachers from 11 schools were trained.

Challenge like limitation of funds, lack of instruments availability, teachers not having scientific background and willingness of Ministry of Education for Environment and GLOBE activities are some of the constraints.

KOREA

KOFAC was founded in 1967. The main idea is to have creative economy and creative education with science culture activity. Korea Science Foundation is nurturing scientifically gifted youths. 20 science high schools with 76 students.

MANGOLIA

With a population of 3 million Mangolia is called a Land of Blue Sky. Country is developing a master plan for education of our decade 2016-2025 in which "Environment Education" is important aspect. There are 67 (64+3) Eco-schools, 18 UNEP Schools, 11 GIZ and 13 WWF schools in the Country.

The handbook on 'GLOBE' is to be translated in local language, published and to be distributed among teachers. Plan to have a Teacher Training Programme in May 2016. They have a plan to start GLOBE Olympiad and Train by Website to different 'GLOBE' protocols and collection of data.

SPECIAL LECTURES:

- 1. Mrs. Janney delivered a lecture on Global Precipitation Management and Role of Soil Moisture Active Passive Mission.
- 2. Dr. David delivered lecture on Changes on the GLOBE website and its capabilities including Training of Teachers and Students by Website itself.
- 3. Dr. David also deliver a lecture on data entry / long in and looking for other data. He had one to one interaction with country coordinators.

TRAINING IN GLOBE PROTOCOLS

- 1. Training on Hydrosphere and Mosquito was given by Asst. Prof. Mullica, with Mrs. Laplai and Dr. R.K. Garg.
- 2. Training Soil Protocol was given by Prof. Dr. Charlie Navanugraha and Ms. Samorsrikanphi.
- 3. Dr. David gave a training on data entry on one to one basis.
- 4. Training on Atmosphere Protocol was given by Dr., Krisanadej Jaroensutasinee and Ms. Suwinai Mongkonthan.

FUTURE ACTIVITIES AND PLANS

- 1. Each country shall start sending at least 100 data to GLOBE Website.
- 2. Next training programme shall be organized in May 2016.
- 3. Next regional meeting shall be held at Philippines.
- 4. The countries which do not have their own website shall start their own website.