Popularizing & Awareness of Earth Science in Schools: Seeking suggestions from Fellows of the Society for the Proposed Action Plan — P. Krishnamurthy (Email: gsocind@gmail.com)

A proposal on the above subject put forward by the late K.R. Gupta and myself had been approved by the Council during its meeting in May 2011. The present proposal is a sequel to such an approval and represents an improved version to that presented in the Council meeting held on 15th July 2011. This appeal is being made to seek additional suggestions from Fellows for effective implementation of the programme in the coming years.

Phase I

Delivering lectures at schools on popular topics in Earth Science with special reference to topics of current interest such as Climate change, Tsunamis, Volcanoes, Earthquakes besides those relating to earth's resources such as coal, oil and others and their sustainable use without undue stress on the environment. Environmental aspects of pollution of the land, air and water due to human interventions and their bearing on the earth system at the micro- and macrolevels can also be the topics that can be covered. The challenges to the most common and vital resource, namely water, for human needs is of interest at all levels. Earth's evolutionary history through different eons with changing flora and fauna, with major extinction events would be a fascinating addition. Creating awareness on these topics would certainly arouse interest among students to seek Earth science as a career.

Envisaged at the State and sub-state level, this requires the identification of resource persons from Fellows of the Society besides other distinguished scientists form Universities, Research Institutions and professional Government agencies.

Fellows can adopt schools of their choice from their own neighborhood and deliver lectures and share their own personal collections to stress points of interest to students.

Phase II

Collection of existing syllabi of present curriculum from schools on subjects like geography, environmental science or geology (if it is taught under the syllabi) including excerpts from existing text books that are being used at the schools for 8th, 9th, 10th 11th and 12th standards. This can be in English or regional languages. Fellows from different States should help in this matter.

Phase III

Preparation of appropriate level text/resource books either to supplement existing ones or to make them for an approved new syllabi. The syllabus that is being followed for conducting tests for selection of students by the International Earth Science Olympiad by the Society can be a guideline. The four major areas that are covered here include: (i) Geosphere and Earth System. (ii) Hydrosphere and Earth Systems, (iii) Atmosphere and Earth Systems, and (iv) The Planetary System and Earth Systems.

Existing popular books already published, Earth Day and Environment Day pamphlets published by the Society can be used. These books/pamphlets need to be translated into regional languages and efforts are being made to translate them in Bengali, Hindi, Kannada, Malayalam, Marathi, Odiya, Tamil and others

Fellows and other eminent scientists in the field of earth science should come forward in this endeavour.

Phase IV

Organizing World Water Day (22nd March), Earth Day (22nd April) and World Environment Day (5th June) every year at the different State and district levels by Fellows/Regional Chapters of the Society, through liaison with Government and/or Non-Governmental agencies or Universities/Research Institutes should be initiated. Such celebrations with avenues for essay, debate, quiz and painting competitions, held at different schools do

provide a closer interaction among teachers, students and the earth science professionals or academia. At present this is being done at Bangalore and such activities need to be taken to district and village levels in all States. The Society can be a nodal agency for coordinating the works.

Funding

Programmes as outlined above would require funds that need to be budgeted and provided for. Very limited funds are available for publishing popular books in Earth science with the Society. However, we do seek special funding from MoES for celebrating Earth Day annually. Other sources of funding from other ministries, departments and MNCs can be considered. Honorarium for resource persons delivering lectures at schools besides transport and other contingencies need to be worked out. Costs for production of text books for the school level, popular books and pamphlets and honorarium for these efforts are also need to be planned.

Fellows desirous of providing additional inputs to the above proposal are requested to provide details as requested below.

- 1. Name & address including phone/ mobile & email ID:
- 2. Field of specialization & experience:
- 3. How one would like to participate in the programme; specify lecture topics, name of booklet/pamphlet or popular books or school texts; place & school
- 4. Suggestions for the different phases, honorarium for lectures, publications and sources of funding and approximate estimates for one's own participation