

CORRESPONDENCE

GEOLOGY IN SCHOOL EDUCATION

(11)

The Editorial by S.V. Srikantia on "Geology in School Education", which appeared in the June 1996 issue of the Journal, prompts me to tell your readers something about the situation in Sri Lankan Schools.

Pupils in this country up to year 11 ('Ordinary Level') take two main subjects, viz., Science and Social Studies, in both of which they are introduced to various aspects of geology. Social Studies are taught mainly by geographers and Science by graduates in one of the Physical or Biological Sciences. Until now, practically none of them have had any education in geology, and for the most part are largely ignorant about what they are teaching. Furthermore, there are striking gaps in the geology, that is taught in the two syllabi, and a few of us met officers of the Education Department some years ago in an attempt to remedy that situation. Unfortunately, nothing came of that effort.

As in India, Geology is not taught as a subject in our schools, not even in years 12 and 13 (up to 'Advanced Level'), when they take individual subjects in Arts and Science in preparation for entry to the Universities. However, unlike in India, Geology for a combined or for a special degree is taught in only one of our eight Universities.

In order to remedy this situation even slightly, the Geological Society of Sri Lanka, with the sponsorship of AGID (Association of Geoscientists for International Development) and COGEOED (IUGS Commission on Geoscience Education and Training), conducted a one-day programme on Earth Science for Schools on 4th and 5th of May, 1995, in Kandy. This was attended by 158 participants, made up of 140 senior school students and 12 teachers from four schools (two of each gender) in Kandy and six officials from the Department of Education of the Central Province. It was held at the Institute of Fundamental Studies, Kandy, and the lecturers were from the Department of Geology of the University of Peradeniya.

The programme was held on two successive days for two groups, and each day's programme consisted of lecturers, a short field class, a video film, a quiz, and a panel discussion; and awards ceremony was held at the end of each day. The lecture-demonstrations covered elements of Meteorology, Oceanography, General Geology, Rocks, Minerals, Mineral Resources and the Application of Geology to the Environment. In the field class the students were shown landforms, rock types and their structures, minor earthslips, soils, erosion, occurrence of groundwater, springs and the detrimental effects of human activity on the environment. Each participants was given a set of Course Notes entitled "The Earth Around Us" and the film was called "The Origin of the Earth". The winners of the quiz were given a labelled set of typical Sri Lankan rocks and economic minerals.

According to the replies to our questionnaire, the programme was a great success with both students and teachers, who found it interesting as well as useful. At the end of the programme there were many requests for more such courses, especially from the Geography teachers. And this we are hoping to do next November when we plan to hold a programme for 120 teachers drawn from 20 schools in the Kandy area.

Fortunately, the original grant from AGID and COGEOED will cover the cost of this second programme, but after that we shall have to look for funding from outside it. The Education Department were very supportive in our first programme and they are very enthusiastic about the second. They – and we – see it as a means of improving the knowledge of the teachers in areas where they are rather ignorant, and in doing so, increasing their teaching skills.

A colleague and I are now in the process of enlarging and expanding the Course Notes into an "Earth Science Reader for Schools", which will be published first in Sinhala, the language of instruction in our schools in the south of the country; we hope that a Tamil translation will be made available for schools in the north later.

The Editorial by Shri Srikantia draws attention to many shortcomings and handicaps resulting from the absence of Geology in Indian schools, and it is very timely that this was brought to the attention of geoscientists in India. Our thinking here includes another consideration – the environment – which is of such vital importance in this day and age. Our aim is to teach the children in our schools as much as we can about the physical environment in which they live. This includes the atmosphere, the oceans, the rocks and minerals, landforms and soils, as well as how we are degrading and polluting the environment, and the measures to be taken to conserve it for the benefit of ourselves and succeeding generations.

We are also urging our government to introduce Geology as an examinable subject at "A" level; and to have Geology taught in all our Universities, at least in a combined degree programme. Only in this way, we will be able to achieve our aim of making our children conscious of the Earth around them.

When I was in London early this year, I gave a talk on "Our Moving Earth" to the last two classes in my grandson's Primary School, the children's ages being 9-10 and 10-11. The talk went down very well, and the children were full of quite intelligent questions, showing that they understood most of what I told them about continental drift, plate tectonics, earthquakes and volcanoes. More recently, I gave the same talk to a group of Senior Citizens of Kandy (over 60 years), and again it was received very well.

The story, we geoscientists have to tell about the earth and about its resources is a exciting one which, if well told in simple terms, will appeal to children and adults alike. I think it is time that we geoscientists began telling those around us about the earth and about our science. Shri Srikantia speaks very truly when he says that most people in our part of the world are woefully ignorant about geology. But that is our fault, not theirs, because we in Sri Lanka and India, and in many other parts of the Third World, have failed to make the "powers that be" see how essential Earth Science or Geology is, as a part of general education. Geology touches us at so many points of our everyday lives, yet so many people do not even know what geology is about! It is time we started talking and writing about geological topics and making our governments realize how essential the study of geology is to the understanding of our environment and what goes on around us.

426, Mahakanda Road
Hindagala, Kandy dist
Sri Lanka

P.G. COORAY