

# Popularisation of Science

J. N. Oleap Fernando

*Lecturer in Chemistry, University of Sri Lanka, Co'ombo Campus,  
General Secretary, Sri Lanka Association for the Advancement of Science.*

Science can be considered as the biggest social force of today because scientific knowledge and methods have over the past century changed our manner of living more than any other form of human endeavour. Much of our lives is dominated in one way or other, directly or indirectly, by the scientific discoveries of the present era. Unfortunately, while the rapid advance of science and technology has brought much progress to the developed world, the selfsame science and technology has widened the gap between the developed and developing countries.

It is necessary, therefore, to re-orient science and technology for the solution of basic human needs of the rural poor in the developing countries. It is necessary to create an awareness of appalling problems, such as poverty, ill-health and malnutrition amongst the rural population.

However, the greatest tragedy lies in the fact that working scientists and educated people in the developing countries are getting alienated from the rural surroundings and the problems of the country. There is a massive communication gap between the scientists and the public. This gap is so wide that some people view our present dependence on science and the domination of our lives by scientific discoveries on what seems to them as a materialistic and perhaps directionless effort. Others are possessed with a vague and limited notion of the benefits of science and technology in their lives. Most of such misunderstandings and fears arise due to a limited understanding of what science is and what it is capable of achieving.

In this paradoxical and somewhat conflicting situation, it becomes necessary to have an effective programme of popularisation of science and dissemination of relevant science information. Methods used for dissemination of information have therefore to be geared to national problems and be appropriate to local conditions.

In dealing with unsophisticated illiterate and semi-literate masses, living under different conditions in farflung areas away from the urban-based information centres, one cannot overlook the cardinal fact that such rural masses also have some impressive understanding of some "Scientific Principles" in their own vocations. One cannot underestimate the importance of this traditional scientific heritage as a conditioner for the ready acceptance of additional scientific concepts.

In the developed countries, particularly in the West, there is little tradition to change or destroy in the

introduction of modern scientific concepts. However, the greater sense of values and culture inherent in the developing countries, particularly in the Asian region, require a different approach to the popularisation of science programmes in such countries. The needs and priorities are different and the scientist needs to learn what the villager needs most, rather than the scientist teaching the villager what the former thinks the villager needs to know.

It is in the context and general background that a UNESCO-sponsored four-week training course-cum-seminar workshop was held in Manila, Philippines from February to March this year on the subject, "Promotion of Public Understanding of Science, Technology and Environment (PUSTE)"

The meeting at Manila was organised by the Science Foundation of Philippines, which is the official state agency set up with the specific objective of popularising science among the Filipino people. The very existence of this organisation (SFP) indicates the tremendous importance attached by the Philippine Government to the promotion of science consciousness among the people. The Manila meeting had as its field study the Philippine example of promoting PUSTE under the careful and systematic direction of the SFP.

The PUSTE programmes of the SFP aim at disseminating the underlying principles of the basic knowledge in science-developed technologies to the people. With a massive financial input provided by the Philippine Government, the SFP plans and implements research and development activities geared to the development of effective and economical tools for the promotion of PUSTE. There are science promotional officers appointed by the SFP working in every educational region in close contact with regional educational officers. The main target of the activities of the SFP is the youth of the country, for in them lies the hope of the land. The ultimate goal of the SFP is the improvement of the quality of life of the people.

The central pivotal tool of the SFP is the Science Club Movement of the Philippines. Science clubs under the guidance and direction of science club advisers provide the initial spark to budding scientists. Through such science clubs, a host of science popularisation activities are organised and among them mention must be made of out of school science education laboratories, science fairs (or exhibitions) science congresses, science quizzes, youth research apprenticeship programs and the youth science camps.

The SFP has an impressive public information service including hand-books, newsletters, magazines and science films. Several training programs are organized and much encouragement is given to the conduct of academic programmes in universities leading to post-graduate degrees in the promotion of science consciousness.

A science and technology museum, which would provide a focal point for activities related to popularisation of science is being set up shortly.

The participants at the Manila seminar-workshop were thus able to go fairly deeply into the question of the promotion of PUSTE with direct observation of the Philippine example. The workshop brought out as a result of this study, an Asian frame-work for the promotion of PUSTE. This is meant to serve as a model that could serve a useful starting point for the formulation of national programmes. Each country obviously has to map out its own strategy taking into account national priorities and not forgetting existing cultural patterns and traditions.

The seminar—workshop while formulating a series of resolutions and recommendations (and presenting them through UNESCO to national Governments) did recognize that it is no easy task to convince Governments to give more recognition, both moral and financial to PUSTE programmes. Professional and other organizations

such as the Sri Lanka Association for the Advancement of Science and the National Academy of Sciences have therefore to play a leading role, both in getting that official recognition as well as getting the large scientific man-power in our midst to take this issue seriously and participate actively in an effective PUSTE programme for Sri Lanka.

The Sri Lanka Association for the Advancement of Science has particularly over the past five years launched a very effective science popularization programme in Sri Lanka. Its special statutory committee for the popularization of Science has during this period conducted a pilot project at Hanwella and is now extending its sphere of activity to other villages in different parts of Sri Lanka. Even more than finance, the Association requires manpower from our scientific community to successfully implement PUSTE programs in Sri Lanka. It is sincerely hoped that the vast manpower we have would offer their services so that we can use them to improve the quality of life of the people of Sri Lanka.

#### REFERENCES

1. J. N. O. Fernando: *Promotion of Public Understanding of Science, Technology and the Environment for enhancing the Quality of Life in the Asian Region*, (paper presented at the Annual Meeting of the Malaysian Institute of Chemistry, Kuala Lumpur, March 1977).