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THE INTERNATIONAL ATOMIC ENERGY AGENCY — A 10th ANNIVERSARY



Ten years is a short time in the life of any organization, but in a rapidly developing science it represents a period of great significance. At the time of the establishment of the International Atomic Energy Agency in 1957, atomic energy for power production was in its infancy, and the first commercial nuclear power stations were coming into operation. Subsequent development has been such that the anticipated nuclear generating capacity at the end of this year will be 8000 MW, and this is accelerating at such a rate that the next eight years is expected to show a growth to some 60 000 MW. This indicates the challenge which the Agency has had to meet in its ten years of existence and which has governed its operations.

The introduction of nuclear power programmes presents auxiliary problems relating to the siting of reactors, the disposal of radioactive wastes, the safe utilization and transport of radioactive substances, etc. Regulatory questions are continuously under consideration in the Agency, not to speak about the organization's responsibility to ensure that assistance given by it or through it is not used for military purposes. The Agency is obviously not able to undertake massive research and development programmes, but it can and has played a significant role in coordi-

nating the results of this work throughout the world and making them available by means of its scientific conferences, scientific information services, and technical assistance to the developing countries of the world. By these means, the Agency has had a unique responsibility in assisting the development of nuclear power.

A less spectacular application, but one which has had great appeal and usefulness, has been the use of atomic energy in food production and preservation, and improvement of health standards. The Agency's role in cooperation with other organizations (FAO and WHO) in these activities has made a valuable direct contribution to raising living standards by the application of nuclear energy for such peaceful purposes.

Complementary to these activities have been programmes on training in nuclear energy, both by individual fellowships, regional training courses, and regional projects, such as the water reactor research between Norway, Poland, and Yugoslavia or the crystal spectrometer project in Southeast Asia operated by the Agency, India, and the Philippines. Nor has the fundamental study of the scientific principles underlying nuclear energy been neglected; note, for example, the establishment of the International Centre for Theoretical Physics in Trieste, which provides opportunities for research and teaching in theoretical physics for scientists from all parts of the world. The spectacular success of the Trieste Centre is one of the major achievements with which the Agency may be credited.

One of the problems accompanying the development of nuclear power is that of the control and management of radioactive wastes, and in this the Agency has, in its short existence, served an important function, both in coordinating research on waste disposal into the sea by means of research contracts and by work at its laboratories in Monaco and in the establishment of standards. Related to this is the necessity for international agreement on the safe shipment of nuclear fuels on and between international waterways, liability for nuclear accidents, etc. in which the Agency has initiated international conventions which it is hoped will be adopted by most, if not all of its Member States.

An essential requirement of any organization in a rapidly developing science is its ability to adapt itself to changing emphasis. What was novel yesterday becomes commonplace today; the vision of today becomes the reality of tomorrow, and consequently the Agency must be able to shift the emphasis of its work in relation to the most pressing current needs. The Agency has not up to now played a role as broker of nuclear material as had originally been foreseen, mainly because of the fact that this material turned out to be much more abundant in the world than was anticipated when the Agency was founded. The changing emphasis may be exemplified by the need of the world in recent years for increased supplies of fresh water. This has suggested the great possibilities of nuclear power for the production of fresh water from salt water on a massive scale, and in this field the Agency is cooperating in national and regional projects of great importance to arid areas. What is of more direct interest is its organization of expert panels to coordinate the work being done in various countries and make the results known to those who are interested in the solution of water problems. Related to this is the Agency's work on radioactive tracers in hydrology. Taking a forward look, this would appear to call for greater emphasis in the future, but not to the detriment of other projects of interest or importance to the well-being of mankind, such as the disinfection of stored grain, the eradication of insect pests, and the increased yield of food crops, all of which are the subject of large scale projects by the Agency supported by the United Nations Development Programme.

One of the factors that is of increasing concern to mankind is the potential danger of nuclear energy used for warlike purposes. One of the primary functions of the Agency is to ensure that nuclear materials and facilities are not used for military purposes, and its role in this respect is being increasingly recognized by the countries of the world having nuclear facilities. It is encouraging to note that about 50 reactors in more than 20 Member States and 1 reprocessing facility have now been placed under the Agency's safeguards system and are subject to Agency inspection. There can be no doubt that the increased growth of nuclear power and the perpetual hope for some agreement on nuclear disarmament and the nonproliferation of nuclear weapons will require from the Agency an increasing service in this vital field; the organization already existing is capable of expansion to meet whatever may be required of it in the future.

The IAEA is not, of course, the sole master of its fate. Its impact is conditioned by the scientific, technical, and economic progress made in that varied assortment of disciplines and technologies that are grouped together under the name of atomic energy. With an annual budget of some \$12 million, its technical role is to stimulate and help coordinate research by ensuring the free and rapid exchange of information between nations, to develop international nuclear law and harmonize national legislation, to serve as a bridge between the richer and the poorer nations, and to provide the wide range of services that the international community, regional groups, or individual Member States may require of it. The diversity of "atomic energy" and of the Agency's functions will continue to be a source both of strength and weakness. As with other organizations within the UN family of specialized agencies, the ultimate aim for the Agency is to serve the cause of peace. In this work the atoms serve as means to bring together representatives from politically widely different countries to constructive collaboration in scientific and technical domains where exchanges of views can take place on a more rational level than usually may be the case when the same countries meet in the political arena.

The problems and responsibilities for the Agency in the next ten years will be no less than in the period since its establishment. I feel confident that its ability to discharge these responsibilities will be fully equal to the task.

A handwritten signature in cursive script, reading "Sigvard Eklund". The signature is written in dark ink and is positioned in the lower right quadrant of the page.