

achievement in a year of commemoration

In reviewing a year notable for the twenty-fifth anniversaries both of the United Nations and of the first military use of nuclear explosives, Dr. Sigvard Eklund, Director General, was able to point to significant progress in the peaceful uses of atomic energy at the opening of the Agency's fourteenth session of the General Conference.

The twenty-fifth anniversary of the United Nations would inspire much oratory, but would also provide an opportunity for analysis of what had been achieved so far and for opinions as to why not more could be accomplished. "But no matter how one looks at the UN" commented Dr. Eklund "there seems to be unanimous agreement that if the UN did not exist, the concept would have to be invented".

The year had been marked by the coming into force of the Non-Proliferation Treaty. The Strategic Arms Limitation Talks in Vienna were also promising, as both sides believed that progress made so far justified resumption of the negotiations in November.

"When we look at the political situation today as reflected in NPT and SALT" said the Director General "we see that the spirit of reasonable compromise may allow for cautious optimism". The work of the Agency should be seen against this background.

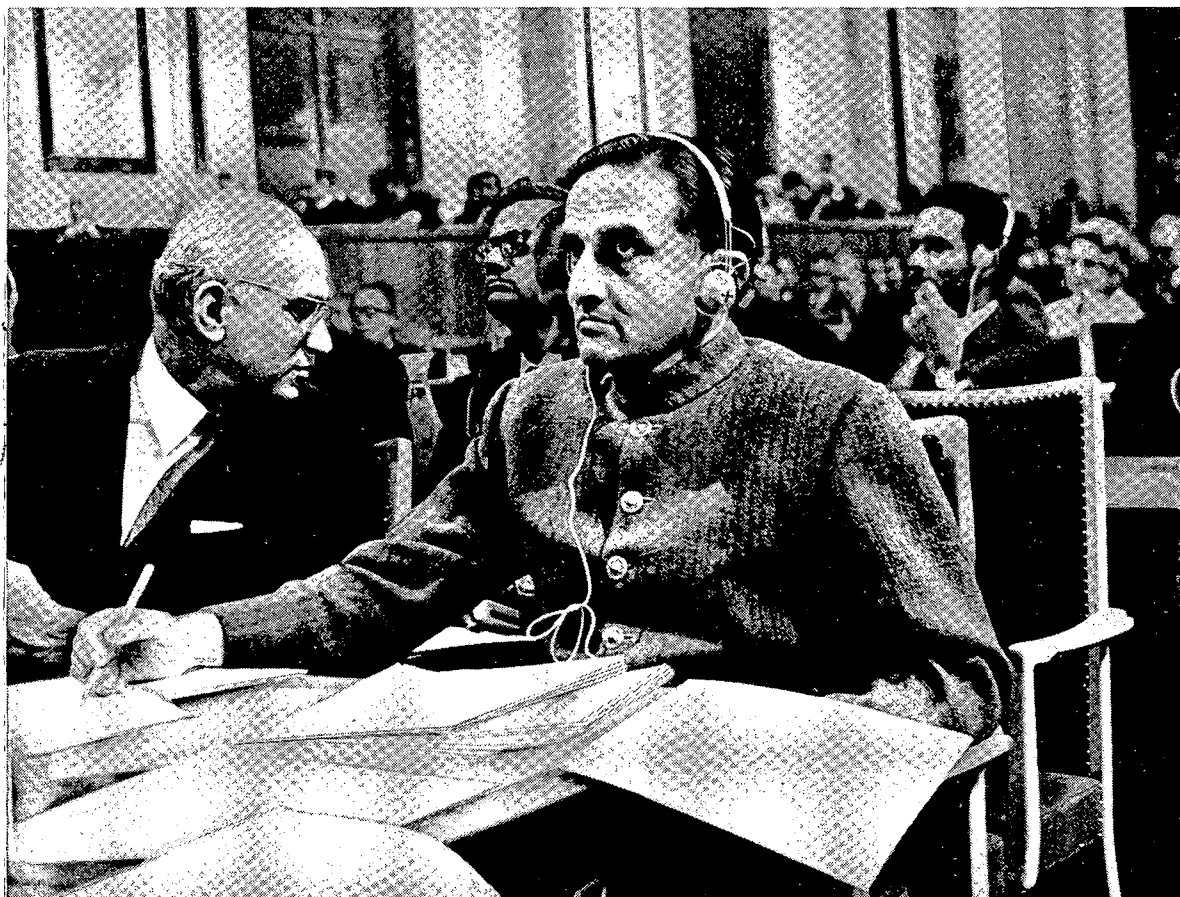
Dr. Eklund noted that the spirit of cooperation which had led to the NPT had also prevailed in the actions undertaken by the Agency as a result. He referred especially to the Safeguards Committee (1970), established by the Board of Governors, which through hard work during several weeks was able to prepare for the negotiations which had to be undertaken to complete the necessary agreements. He hoped that a further series of meetings due to start in October would be equally fruitful. Detailed technical procedures for the safeguards which would have to be applied, as well as a study of the financial problems involved remained to be considered.

"The question of safeguards — and in particular their application under NPT — is a challenge of the coming decade for the Agency," said Dr. Eklund. "It will be essential to establish and implement safeguards in a way that ensures their optimum acceptability and effectiveness. It is necessary to establish the confidence of Governments that essential commercial aspects of their nuclear installations are protected."

He pointed out that the Agency's safeguards system had been and would continue to be in constant evolution. The Agency had become a centre of the world's knowledge on the subject and there had been substantial achievements in systems analysis, instrumentation and other techniques.

Dr. Vikram A. Sarabhai, Chairman of the Atomic Energy Commission of India, was unanimously elected President of the Fourteenth General Conference. With him (left) at the opening meeting is Ambassador V. C. Trivedi, who was elected Chairman of the Board of Governors at its meeting on 29 September.

Photo: IAEA/Preuschl



Financing Safeguards

Means of financing safeguards had given rise to much anxiety. All agreed that every effort should be made to keep costs low, at the same time maintaining efficiency. He indicated that ways in which this might be accomplished could include the establishment by States, in their own interests, of their own safeguards systems, harmonized as much as possible with the Agency's system; and organization by the Agency of training courses for people to be engaged in national safeguards activities. He felt that in the long run well-trained technicians would be able to take over many of the tasks now performed by inspectors with high academic or technical qualifications. Finally, 80—90% of the analytical activities which would have to be carried out to cover the needs of safeguards could be contracted out to different national laboratories and the Agency's own facilities could accordingly be kept moderate in size.

He regarded as encouraging the remarkable exchange of information not previously available internationally on the peaceful uses of nuclear explosions which had arisen from Agency meetings. He intended to call in November a group of experts to advise him on the question of international observation of peaceful explosions.

Dr. Eklund was aware that overwhelming interest in NPT had caused some Member States to be worried about the Agency's other activities. "I share their worries to a certain extent, but I am sure that the General Conference and the Board will exercise great care so that no other statutory functions are hampered" he said. The success of this endeavour depended greatly on the amount of financial assistance given by Member States. 1970 was the first year in which more than eighty per cent of the target for voluntary contributions had been reached. An increase in voluntary contributions would be very much in keeping with the spirit of NPT. He hoped that other nations would follow the initiative shown in the beginning of co-operation with the Swedish International Development Authority, and that countries operating bilateral programmes would channel funds through the Agency to assist developing countries. He noted that the World Bank had established a Special Projects Department, one of the functions of which was to find and try to develop nuclear power projects.

The Starving and the Slimming

"In the developing world we also see an increasing use of nuclear techniques in which the Agency is active — for example in hydrology, agriculture, medicine and industry" said Dr. Eklund. "I would remind the Conference that according to some statistics, every fourth case treated in hospitals throughout the world originates from contaminated water". Referring to the agricultural programme conducted jointly with the Food and Agriculture Organization, Dr. Eklund said that the immediate danger of famine had been averted by the "Green Revolution", with many new high-yielding crop varieties resulting from radiation induced mutants of wheat and rice. Nevertheless a situation still prevailed where half the world's population lived under starving conditions while fifty per cent of the rest were worried about slimming methods.

Delegates to the Fourteenth General Conference of the Agency had the rare privilege of a visit from and address by a Head of State — Nicolae Ceausescu, President of Romania. Mr. Ceausescu had conversations with the President of the Conference, Dr. Vikram A. Sarabhai and the Director General and also saw a small exhibit illustrating the links between his country and the Agency.



Photo: IAEA/Preuschl

He regretted that the real value of the Agency's research contract work was being cut by inflation, and drew attention to problems arising from salary increases suggested by the International Civil Service Advisory Board. Studies were in progress to bring about an improved balance between programmes and staff costs. An effort was also being made to cut from the programme items with only secondary priority.

Considering nuclear power, Dr. Eklund reported a worldwide increase in orders for plants. The disadvantage of rising capital costs had been offset by increases in conventional fuel prices; prices of natural uranium had hardly risen at all. Growing demand for nuclear fuels held prospects for developing countries, where one could assume that large undiscovered reserves exist.

Effects on the Environment

"As nuclear power expands, a careful reassessment is being made of its effects on the environment" said Dr. Eklund. "There still appears to be an 'information gap' on this subject, nuclear power often being cast in the role of the villain before any attempt is made to study the problem in the right perspective". Among the Agency's efforts during the year to fill the gap had been a symposium in co-operation with the US Atomic Energy Commission on environmental aspects of nuclear power plants. Here the conclusion was reached that nuclear power stations contributed far less to environmental degradation than other forms of power production. A suggestion had been made that the Agency should become a central repository of data on radioactivity released in connection with civilian uses. Disposal of radioactive wastes into the seas and oceans was another question under consideration. He had for years appealed to Governments to provide voluntarily information on such releases. The Inter-Agency Group of Experts on the Scientific Aspects of Marine Pollution had recommended a single international register on all waste of this type, and an Agency panel would in November discuss procedures for establishing limits for radioactive nuclides in the sea.



Agricultural research. Prof. Alan Ward (left) Dean of Science, University of Zambia, with a soils chemist of the Mount Makulu Agricultural Research Station discussing a disease of groundnuts. A Technical Assistance expert is assisting radioisotope experiments here. Photo: John D. Marr

Other topics dealt with by the Director General included insurance against nuclear risks; the International Nuclear Information System, now operating; the possibility of establishing an International Fusion Research Council to review progress and to discuss co-ordination of national programmes; and the plans now taking shape for the Fourth International Conference on the Peaceful Uses of Atomic Energy to be held in Geneva next year.

In spite of exhaustive efforts during the year, a consensus on an amendment to Article VI of the Statute to revise the composition of the Board of Governors had not been achieved. He hoped that discussions and consultations during the Conference would bring them closer to a solution acceptable to all, and give another proof that the Agency was a viable organization able to adapt itself to a changing world.