AGENCY WORK COMMENDED IN UN GENERAL ASSEMBLY

When the Agency's annual report to the United Nations was presented in December to the General Assembly, representatives of fifteen nations spoke, all in support. Many of the comments related to the growing tasks of applying safeguards against proliferation of nuclear weapons, but other aspects of Agency work were also commended.

The report was presented by Dr Sigvard Eklund, Director General, who emphasised the impetus of nuclear energy in the world by noting that in the year since his previous report the estimates of power from this source which might be installed by 1980 had doubled, rising from 150 000 to 300 000 megawatts electric. He outlined some of the obligations which this development put on the Agency's programme in fostering practical uses of all branches of nuclear science as well as improving methods of exchanging information. In addition to speaking of power programmes, desalination possibilities, the new concept of energy centres, mineral prospecting, uses of radiation and isotopes and the development of a computer-based nuclear information system, he affirmed that should the General Assembly consider it desirable the Agency had the competence to act as a co-ordinator of radioactive waste disposal. It was also prepared to undertake any responsibility placed upon it should the Assembly decide on holding a fourth International Conference on the Peaceful Uses of Atomic Energy during 1970-71.

PREVENTING SPREAD OF NUCLEAR WEAPONS

An important part of Dr Eklund's address was devoted to urging the need for preventing the spread of nuclear weapon manufacture. He stressed the fact that by 1980 it was expected that 100 000 megawatts of electricity from nuclear sources would be produced in countries which at present had no nuclear weapons. This meant that by that date these countries would be producing 25 tons of plutonium annually, enough to manufacture at least 100 bombs of minimum size every week.

"This indicates both the necessity and urgency of the conclusion of a non-proliferation treaty" he declared.

The Treaty for the Prohibition of Nuclear Weapons in Latin America was without doubt a major advance, limiting the use of nuclear energy to economic and social development. It was the first agreement of its kind to establish a nuclear-free zone in an inhabited area. It was the first agreement

to recognize the international character of the IAEA safeguards system. Nevertheless it was but the beginning of what they were all striving towards. The much broader agreement on non-proliferation of nuclear weapons, especially the article on international control, was still under discussion. It had highlighted the relationship between the various systems being applied at present and in particular the relationship between regional safeguards and the worldwide system of the Agency. In 1962 he had expressed the following opinion about the subject:

> "In principle, it is difficult to understand why safeguards applied under bilateral agreements should be considered less onerous and more acceptable than those of a multilateral nature applied by an international organization of which the recipient country is a Member State".

Nothing had happened since then to make him change his mind in that respect. *If a safeguards system* were to be credible, not only within a region but also between political regions, and give assurance to the people of the world, avoiding the discrimination so often referred to, it surely must be international.

"The way leading to the peaceful use of the atom has been long and difficult" concluded Dr Eklund. "A few days ago a quarter of a century had passed since the first controlled chain reaction was achieved. Atomic energy carries both rewards and dangers. A non-proliferation treaty could greatly reduce those dangers, and the Agency is ready to contribute to that task".

Although safeguards and the implications of the proposed non-proliferation treaty dominated the discussions, many aspects of Agency work were mentioned.

It was strongly urged that the Agency system of safeguards was acceptable for assuring compliance with obligations under a non-proliferation treaty. The recent US and UK offers to permit application of Agency safeguards to all nuclear activities except those with direct national security significance should the treaty discussions be successful were noted; there was one reservation, that in these cases the nuclear power itself would decide which activities were related to security while non-nuclear powers would be required under a treaty to accept safeguards for all activities. The Latin American treaty for the prohibition of nuclear weapons was welcomed as a forerunner of much more comprehensive agreements. The progress which had been made and was continuing to be made in extending the safeguards system and in acquiring inspection experience was also noted with satisfaction. Some regrets were expressed that not all countries were members of the Agency and that acceptance of its controls was not yet universal.

Approval was expressed of the way in which the technical assistance programme was carried out in the developing countries, and it was thought that the suggestions made in the General Conference would give it more practical emphasis. Concern was expressed however at the fact that the lack of resources made it possible to meet only a small and decreasing proportion of requests for assistance. Other aspects of Agency work mentioned with approval

were the activities in medicine, food, agriculture and industry; training courses; the attention given to expanded application of nuclear energy and desalination; preparation of codes and standards for safety; the proposed international nuclear information system (INIS); the programme of scientific meetings; and stimulation of regional co-operation.

Speakers were the representatives of Argentina, Australia, Austria, Bulgaria, Canada, Czechoslovakia, Hungary, India, Indonesia, Japan, Mexico, the Netherlands, Poland, USSR and USA. A resolution submitted by Argentina, Bulgaria and Indonesia that the General Assembly should take note of the report was carried unanimously.

STUDYING THE INSECTS

Among the many millions of species of insect, large numbers are useful to man, but some are harmful. Nuclear techniques have made it possible to study them in minute detail, as well as to evolve methods of controlling those which destroy food and carry disease. Important successes are now being achieved in some of the control applications.

One of the biggest gatherings of radiation entomologists to be held in recent years took place during December in Vienna. Organized by the FAO/IAEA Joint Division of Atomic Energy in Food and Agriculture, its purpose was to discuss and review the most recent information on the use of isotopes and radiation in entomology. Twenty-nine countries and six international organizations were represented among those who took part.

Much information was given of research making use of nuclear techniques to assess the effects of radiation on insects, to learn about their behaviour from the beginning to the end of their lives and to find ways of reducing harmful insect populations.

At the beginning of the meetings Dr Henry Seligman, the Agency's Deputy Director General for Research and Isotopes, said that the nuclear age had made possible a new arsenal of weapons against harmful insects. One method