turning a page of agency history.

Recent developments, and especially the new and critical interest of developing countries, have helped to mark the turning of a page in the Agency's history.

If the present situation in the economics of nuclear power does not change there is a danger that developing countries will lag further and further behind the advanced countries in its use.

Shortage of resources impose a brake on Agency efforts to promote benefits of nuclear techniques, especially by technical assistance.

These were some of the points made by Dr. Sigvard Eklund, the Director General, when he presented the Agency's annual report to the Economic and Social Council (ECOSOC) in July.

For the first ten years of its life, Dr. Eklund said, the Agency had been chiefly concerned with planning and implementing a range of scientific and technical programmes. The Non-Nuclear Weapon States had made it clear that the programme and structure would have to be modified to enable the Agency to play the various roles foreseen in the Non-Proliferation Treaty.

On the problem of economic nuclear power, he pointed out that at present such a plant, to be cheaper than other sources, must usually be very large and must be one of several stations feeding into a big electric distribution grid or network. The situation would change if industry were able to develop smaller nuclear power plants that were economically competitive.

"Unless this happens" he warned "we may see yet another illustration of the development gap. The advanced countries, to their own advantage, including the necessity of eliminating some environmental problems, will meet a growing part of their energy needs by means of nuclear power, while the developing countries as a group lag further and further behind, using more expensive power sources and remaining overwhelmingly dependent on conventional fuels."

Erosion of Technical Assistance Resources

Dr. Eklund also drew attention to the brake imposed on the IAEA's efforts to promote all aspects of the potential benefits of nuclear techniques by shortage of resources, especially for technical assistance. Since 1962 a target of $2 million for voluntary contributions to carry out such technical assistance had remained unchanged. The IAEA had never succeeded in obtaining more than 70% of this sum. As a result it could now meet only a quarter of the value of technically sound requests for assistance, compared with 90% ten years ago. Moreover,

In the arid Hodna Basin area of Algeria water samples are taken from a well as part of an investigation of underground resources. Nearly 100 samples have been taken in a United Nations Development Programme plan executed by the Food and Agriculture Organization and assisted by the Agency. Photo: IAEA/Dincer

the real value had been steadily eroded by inflation. Because the technical assistance programme sought out and initiated new programmes which could subsequently be taken over by the UN Development Programme, it could have a multiplier effect out of proportion to its actual size. The IAEA could also handle a considerably larger assistance programme with little or no increase in the size of its staff.

As an example of the ways in which applications of nuclear energy other than power were already helping developing countries, he cited the "green revolution" in Asia following new and better mutants of rice and wheat; rice mutants in Japan with twice the protein content of present strains; and a ninety per cent reduction of the Mediterranean fruit fly pest in a Central American Special Fund test project (though several million dollars would be required to turn it into a full-size campaign). Each of these had been in collaboration with the Food and Agriculture Organization of the United Nations (FAO) but he was not overlooking other contributions in medicine, biology, industry and hydrology.

Composition of the Board

As far as structural changes were concerned, the Board of Governors intended to inform the General Conference that it proposed an amendment to the Statute as soon as possible for a modest increase in the size of the Board, to reflect the broad considerations stipulated by the General Conference and to be acceptable to the greatest possible number of Member States. This had been decided by an open committee to which all Member States had been invited to contribute their views. A similar committee discussing the peaceful uses of nuclear explosives had concluded that while technology was still at an early stage, the IAEA had the statutory and technical competence needed to be the responsible international organization in this field. The first priority was to promote a much fuller and wider exchange of information about the technology.

A report had been prepared on the question of a fund of special fissionable materials, showing the terms on which such materials were already available and suggesting possible ways of improving the supply situation for the benefit of Non-Nuclear Weapon States, especially developing countries.

Development of safeguards was becoming more important both in respect of progress in ratification of the Non-Proliferation Treaty and the entry into force of the Tlatelolco Treaty creating a nuclear weapons-free zone in Latin America. Steps were being taken to mechanize, simplify and reduce the costs of safeguards.

He suggested that because of the renewed demand for uranium and the need for about a million tons of new low-cost reserves to be found by 1980, a vigorous prospecting campaign in the developing countries might result in discoveries of economic importance.

(As an addendum to the full report an illustrated non-technical summary of the IAEA's work to assist developing countries was distributed to ECOSOC delegates.)