

THE AGENCY'S TECHNICAL CO-OPERATION ACTIVITIES IN 1992

REPORT BY THE DIRECTOR GENERAL



INTERNATIONAL ATOMIC ENERGY AGENCY

SITING OF NUCLEAR INSTALLATIONSCOMPLETED: **92-07-13**TOTAL COST: **\$349,823**

TO SUPPORT CO-ORDINATED ACTIVITIES IN CONNECTION WITH THE SITING OF NUCLEAR FACILITIES IN DEVELOPING **MEMBER** STATES.

The project was approved in 1984 to provide developing countries with experts whose knowledge of the whole site selection process, both theoretical and practical, would provide the technical expertise required for planning the siting of nuclear facilities. During the period 1984-90, twelve experts undertook many missions and four lectured at a seminar on site selection in Vienna in 1985, which was attended by 21 participants from seven countries. Direct results of the project were: the preparation of checklists to be used in site safety review missions; the preparation and dissemination of computer codes related to siting and hazards (used in particular as training tools); and the publication of an Agency TecDoc, leading to a Safety Guide on earthquake-resistant design of nuclear facilities with a limited radioactive inventory. Many siting missions were organized and, in most cases, followed up by national projects for more sustained and systematic assistance, e.g. in Albania, Brazil, Iraq, Iran, Morocco, Portugal, Tunisia, Turkey and Yugoslavia.

IRAN, ISLAMIC REPUBLIC OF**IRA/0/005****PROCUREMENT ASSISTANCE**COMPLETED: **92-07-13**TOTAL COST: **\$312,694**

TO PROVIDE ASSISTANCE THROUGH PROCUREMENT OF EQUIPMENT.

The objectives of the project, namely to assist the Iranian Government by using funds-in-trust to procure equipment or spare parts not provided under an Agency or UNDP programme, has been achieved. The project assisted in upgrading nuclear equipment and facilities in Iran. The major items of equipment procured were reactor control devices, a gamma irradiator cell and source for the Tehran and Isfahan Nuclear Research Centres, supplementing UNDP Project IRA/82/003 and Agency Project IRA/4/016. In addition, advice was provided on suitable suppliers of material such as natural uranium fuel for the Iranian subcritical reactor at the Isfahan Nuclear Research Centre, necessary for Project IRA/4/016, and purchased directly from China on a bilateral basis.

IRA/1/007**CALIBRATION FACILITIES FOR DOSIMETRY**COMPLETED: **92-12-30**TOTAL COST: **\$23,482**

TO IMPROVE SAFETY RELATED TO THE APPLICATION OF SOURCES OF IONIZING RADIATION THROUGH THE ESTABLISHMENT OF A SECONDARY STANDARDS DOSIMETRY LABORATORY THAT WILL ASSUME RESPONSIBILITY FOR THE CALIBRATION OF ALL SOURCES OF IONIZING RADIATION IN THE COUNTRY.

A national calibration laboratory for ionizing radiation was successfully established at the Nuclear Research Centre for Medicine and Agriculture,

Karedj. Back-up for the personnel monitoring services and calibration of dl radiation protection instrumentation was also provided by the Agency. The project contributed to a large extent to the safe application of ionizing radiation in Iran.

COTE D'IVOIRE

WC/51015

NUCLEAR METHODS IN NUTRITIONAL ANALYSIS

COMPLETED: **92-09-09**

TOTAL COST: **\$127,415**

TO ASSESS THE NUTRITIVE VALUE OF RUMINANT FEEDS.

This project was initiated by the Government to assess the nutritive value of animal feedstuffs, many of them in the form of by-products from the food and agriculture industries. The project helped to address the problem by providing equipment for studies on in-vitro digestibility, together with expert advice and fellowship training. Several by-product foodstuffs (e.g. palm sludge, coffee hulls, chocolate waste products, etc.) were studied and their effectiveness compared with that of forage. Practical treatments appropriate to commercial exploitation were elaborated. The interactions between nutrition and reproduction were also investigated. In addition to on-the-job training, two scientists received training abroad. The Central Animal Nutrition Laboratory, Abidjan, now provides analytical services to other countries in the region (Ghana, Burkina Faso).

IVC/51017

FOOD PRESERVATION

COMPLETED: **92-07-13**

TOTAL COST: **\$45,344**

TO PROMOTE PILOT SCALE FOOD IRRADIATION IN ORDER TO COMMERCIALIZE FOOD PRODUCTS.

The project was initiated by the Government to assess the techno-economic feasibility of food irradiation. The project provided expert advice and training in various aspects of food irradiation technology. Four scientists received training abroad. During implementation of the project the Government decided to acquire a commercial food irradiator for preservation of various commodities and for research and development. The project assisted this undertaking by providing expert advice for elaboration of a national programme on food irradiation, including the appropriate legislation, and for safe operation of the irradiator.