



INTERNATIONAL ATOMIC ENERGY AGENCY

The Coming of Age of South-South Technical Co-operation

Address by

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International Atomic Energy Agency

On behalf of the Director General of the International Atomic Energy Agency, Mohammed ElBaradei, please allow me to express our gratitude for your kind invitation to address this meeting of Ministers. Your agenda is a full one; my remarks will be brief, but they do carry a message we think is very relevant to this meeting's purpose.

The Coming of Age of South-South Technical Co-operation

Introduction

The IAEA is probably best known in the wider international community for its work on safety of nuclear installations and verification that nuclear materials are used for peaceful purposes. Perhaps less well recognized is the IAEA's long running programme of technical co-operation with developing countries. Yet it is this programme which speaks most directly to the needs of the South, and which is most relevant to the purposes of this Summit meeting. The programme is a modest but successful effort to build capacity and increase self-reliance. It serves as a model for both North-South and South-South co-operation in nuclear science and technology.

Lessons from more than 4 decades of technology transfer through capacity building

The topic I particularly wish to focus on today is **technical co-operation for development**. The IAEA has worked toward this goal with developing countries for more than four decades. The organization's earlier experiences in technology transfer were mostly with traditional North-South co-operation, and this effort is continuing in many places. More recently, however, some of our most productive interactions have been realized through South-South collaborations, or so-called TCDC. With your permission, I will touch briefly on both aspects.

The IAEA has amassed a great deal of experience with North-South technology transfer, not only in the nuclear power and safety fields, but also especially through various practical applications that employ nuclear and isotope technology to improve health, protect the environment, enhance food security, and conserve natural resources. **I am pleased to be able to tell you that the major lessons learned along the way are very encouraging ones and the basis for real optimism**. My fundamental message to the donors is, "Don't give up on science and technology!"

It is true that the past is filled with examples where development assistance in science and technology failed. We need to analyze the underlying causes and learn from them how to improve the way we handle North-South co-operation. The IAEA's work shows that, when it is done properly, technology transfer can not only keep the gap between developing and developed countries from widening, but also narrow or even close it. Our experience suggests that making this happen depends on having both sound principles and effective practices. Let me summarize briefly what we have learned in this regard.

In many parts of the world, the knowledge and skills gap between developed and developing nations has narrowed significantly in nuclear science and technology, and in some cases, the gap has nearly vanished. This accomplishment shows that certain characteristics of the IAEA's approach to technical co-operation have stood the test of time. These attributes include steadfast insistence on the **promotion of self-sufficiency** through a strong emphasis on training. The IAEA has put into practice the tenet that **accumulation of human capital lies at the heart of sustainable development**, and should therefore be the main focus of technical assistance.

UN Secretary-General Annan has pointed out that technical assistance which does not put capacity- building first runs the risk of “reining in rather than unleashing national capacity”. The IAEA’s TCP has largely avoided this pitfall. By stressing capacity-building instead of a top-down approach, technical co-operation can help forge the so-called “missing link” in development. And it is this same national capacity in nuclear technology applications that creates the basis for solving problems at the regional level through effective TCDC .

In putting these basic principles into practice, the IAEA’s collaboration with member States has been greatly aided by **relatively stable funding** ---thanks in part to Article VI of the nuclear Non Proliferation Treaty---and hence by **continuity in its programmes**, which in turn has led to **consistency in its focus** on nuclear applications for development. The evolution of the Technical Co-operation Programme has been striking. When the IAEA’s TC programme began in 1958, few countries boasted nuclear technology infrastructure. In its early years, the IAEA had TC programming in just over 40 countries and disbursed less than \$2 million annually. Most projects were aimed at building up scientific and technical capacity and the associated infrastructure.

Today, useful nuclear technology infrastructure exists in all regions. The Agency has programmes in nearly 100 countries, disburses approximately \$65 million per year, and can use the capacity developed earlier as a springboard for further development. The aim now is to make a positive and visible difference by direct support of priority development goals in various countries and regions.

It is important to note that this capacity was built with what was, and which remains, essentially “seed” money. Although it is now a participant in significant development projects, the IAEA is not a development agency. The resources it commands are small in terms of dollars, but rich in terms of technical expertise and management vision. What the IAEA’s experience shows is that, through sound partnering arrangements with both recipients and donors, and with the right strategy, it is possible to leverage limited funds to achieve tangible socio-economic impact. As it plans for the future, we hope the international development community will take note of this successful example of North-South collaboration. Perhaps you will agree that the IAEA programme is one of only a few beacons to guide us through a landscape that is increasingly characterized by so-called “donor fatigue”.

A new era in technical co-operation

But the message doesn’t end there by any means: **a new phase** in the IAEA’s technical co-operation programme is emerging and should become its dominant feature over the coming decades. This phase is characterized by the **mobilization of established capacity to solve problems at the regional level**. Its foundation is the capacity developed over four decades of largely North South co-operation, but **South-South collaboration, or TCDC, is its essence, and self reliance its motivating spirit**. In this new phase, the IAEA’s regional intergovernmental agreements are playing an increasingly important role in formulating TC projects and overseeing their implementation, sometimes in partnership with higher level regional bodies, such as the OAU. At the same time, regional resource units, nodes of technical capacity and know how, are being mobilized and linked. The aim is to pool resources to solve common problems, with only carefully targeted additional interventions from external sources.

Two prominent examples of the new era in technical co-operation come from the fields of **insect pest control** and **water resources management**.

The Sterile Insect Technique, or SIT, uses radiation to render mass reared insects sterile. When released, their unproductive mating with wild insects causes the pest’s population to decline and eventually die out. Regional collaborations have formed to apply this technology to the Mediterranean fruit fly (Latin America, West Asia); the Old World Screw Worm (West Asia, East Asia & Pacific), the New World Screw Worm (Latin America), and most recently, to one of the world’s most serious insect pest problems, the tsetse fly (Africa). In some instances, eradication of entire pest populations has been the result.

The hallmarks of all these activities are a) South-South collaboration at the regional, or even supra regional, level; and b) the use of expertise and facilities from within each region. For example, sterile New World Screw Worm pupae reared in Mexico are being used to eradicate this pest in Jamaica, and hopefully then from Cuba. Chile successfully rid itself of the Mediterranean fruit fly using SIT and is now working with Peru to maintain a fly-free

zone along their common border. Argentina, after making a large investment of its own to establish pest-free areas, is also collaborating with its neighbors, Chile and Peru, and more recently with Uruguay. Similar joint efforts are emerging between Mexico, Guatemala and other countries in Central America, as well as among several partners in West Asia. And in Africa, building on the successful eradication of tsetse from Zanzibar, plans are moving ahead to establish regional-scale facilities for tsetse rearing, sterilization and release on the mainland, beginning in Ethiopia's Southern Rift Valley. The realized and potential impact of these activities on the lives of people and the economies of nations is very substantial, and can be attributed in large part to effective South-South collaboration.

Awareness is rapidly growing that the techniques of isotope hydrology need to be an integral part of all water resources development and management activities. Particularly important applications include, to name a few, investigations of dam leakage; the assessment of arid zone groundwater resources (especially their rate of renewal); trans-boundary problems associated with regional groundwater basins; and, in cases such as Bangladesh's current problems with arsenic in drinking water, the avoidance or mitigation of severe waterborne health threats. The IAEA is collaborating with various regional authorities to create problem solving teams that draw on the capabilities of regional resource units in addressing these problems. In addition to helping to remedy gaps in regional capacity when necessary, the IAEA is working with major donor organizations to show that the solutions proposed are the most cost effective ones available.

These are but a few examples from a diverse and vital programme. The IAEA invites the wider international community to take a closer look at its philosophy and practice of technical co-operation. We think that both South and North will find in them reason for optimism, and an encouraging model for strengthening both North-South and South-South collaborations for sustainable development.

Thank you.