INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

TECHNICAL COOPERATION STRATEGY

Dr. Reyad Kamel Asia and the Pacific Section TCPA, IAEA



Outline of Presentation

- Background of IAEA
- Technical Cooperation
 - Programme
 - Strategy
- Good Project Criteria



IAEA : STATUTE

The underlying basis for the IAEA's work is to facilitate the peaceful development of nuclear energy. Its Statute entered into force in 1957 and sets the framework for technical co-operation activities:

"The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose."



IAEA : Background



138 Member States

 35 Member Governing Board

48 years of international service

 2200 Professional and support staff



IAEA : Financial Resources



\$ 268,5 million regular budget for 2004 in addition extrabudgetary contributions received amounting to \$64,5 million for 2004

\$ 64,8 million for 2004 in voluntary contributions paid to the Agency's Technical Cooperation Fund



Technical Cooperation Fund (TCF)

□ Voluntary contribution by member States:

- Targets established by Member States
- Pledge
- Payments
- Rate of Attainment

National Participation costs (NPC) = 5% of TC delivered with half of it to be payed prior to programme start.

Miscellaneous income

Extra-budgetary fund :

- From Members States
- UNDP



THE DEPARTMENT OF TECHNICAL COOPERATION (TC)

Mission: Management of Technical Cooperation for Development

Objective: To contribute to tangible social and economic benefits and scientific advancement in member states

Administrative Budget: (2004-05) \$31.7 million







TC Programme – Quick Facts

- New obligations: US \$71,0 million in 2004
- Programmes: National, Regional, Inter-regional
- Agency has national TC programmes in approximately 100 countries
 - 2/3rds of these are non-nuclear power countries
 - 25 recipient countries participating in the TCP are LDCs
- Regional programmes: Regional Agreements (4) and non-Agreement regional
- TC Department has approx. 170 staff



Major Areas of the TC Programme in 2005

- Safety (nuclear installations, radiation safety, nuclear waste) 23.4 %
- Human Health 24.0 %
- Food & Agriculture
 - Industrial Applications
 - Nuclear Science 4.5 %
 - Water Resources Management 5.0 %
 - Nuclear Power



12.2 %

9.4 %

3.2 %

The IAEA's TC programme: Trends

- The use of nuclear technologies in developing countries is growing as local infrastructures improve and technology transfer increases.
- Interest is increasing among both donors and recipients in technologies that help respond to and accelerate the achievement of development goals (e.g. relieving hunger, improving health care, providing access to safe drinking water).
- Some countries and institutions are becoming more self reliant as viable markets develop for nuclear technologies, based on an increased awareness of their benefits.



THE IAEA'S TC PROGRAMME: CHALLENGES

To convince donor and recipient governments that nuclear applications and consequently, TC projects are an effective and safe means of addressing important economic and social problems.



TC: MANDATE FROM THE BOARD

- To ensure that TC assistance is based on the most cost-effective nuclear technologies/techniques
- To ensure sustainability and impact of the assistance provided
- In short, to apply the MODEL PROJECT discipline to the entire TC programme



TC STRATEGY

- Following the Board's mandate, TC has developed the strategy with the main objective of ensuring that its limited resources are spent only where the IAEA work can be most beneficial and cost- effective, with measurable and sustainable impact, for solving high priority development problems
- The strategy also aims at improving the design and delivery of the TC programme and assumes a more pro-active role for TC programmers as opposed to the past



TC STRATEGY: OBJECTIVES

The main aims of the 1997 Technical Co-operation Strategy were to ensure: a demand driven approach to technical co-operation; the relevance of TC projects to development priorities; and improved project quality.

The 2002 review confirmed the original Strategic Goal:

to increasingly promote tangible socio-economic impact by contributing directly in a cost-effective manner to the achievement of the major sustainable development priorities of each country.



TC STRATEGY: CURRENT STATUS

- endorsed by the Board in December 1997
- milestones came due at the end of 2000
- report presented to TACC Dec. 2000
- 2002 review of the achievements
- new milestones established to end 2005 (GOV/INF/2002/8/Mod.1)



TC STRATEGY: DIRECTIONS

- Strengthen self-reliance and sustainability of counterpart organizations
- Build partnerships with development organizations
- Focus technology on the roots of Poverty
- Result-based tangible benefits for targeted population groups
- Compete in the technology marketplace.



TC STRATEGY: ELEMENTS

KEY ELEMENTS (MODALITIES) 4Model Project **L**CPF **H**Thematic Plans **4**Partnerships **4**Co-funding **Sustainability** *+TCDC*



THE MODEL PROJECT CONCEPT THE MEANS OF ACHIEVING THE TC GOAL

- Model Project Concept was the most important of the three mechanisms IAEA uses to implement the strategic goal for technical cooperation.
- It provides the framework for moving from institution based projects to beneficiary based projects that serve targeted end-users.
- The end-user in IAEA terminology is the last link in the chain that connects technology with the problem holder. Reaching the end-user is the underlying objective for all Model Projects and the key concept underlying the TC Strategy.



THE MODEL PROJECT CRITERIA

✓ respond to a real <u>need;</u>

✓ reflect an indispensable role for the <u>nuclear</u> <u>technology</u> involved;

✓ produce significant economic or social impact; and

✓ have demonstrated potential for <u>sustainability</u> through strong Government commitment.

The Model Project approach is now implemented in all TC Activities, while sustainability through Government commitment has become the guiding "Central Criterion"



THE CENTRAL CRITERION

A project meets the central criterion if it addresses an area of defined need in which there is a national programme enjoying strong government commitment and support.

Such project take two forms:

a) those that produce a tangible socio-economic benefit in an area in which nuclear technology holds a comparative advantage;

b) those that clearly support an enabling environment for the use of nuclear technologies (such as safety infrastructure or energy planning).



Country Programme Framework (CPF)

Improves the project selection process by placing it in the context of national priorities. CPFs help national authorities to identify the problems to be addressed with nuclear technologies and visualize the results expected in a given time frame. CPFs are the principal means of implementing the central criterion. A key to the success of CPFs is for governments to take ownership of the process.



Country Programme Framework (CPF)

Aim:to achieve agreement between the Agency and the Government to focus on a limited number of priority areas for the TC Programme in the coming years.

Experience has shown that the CPF <u>process</u> is at least as important as the <u>product</u>



THEMATIC PLANNING

The main PURPOSE of Thematic Planning for technical cooperation is to identify the best technical solutions the Agency can bring to bear on sustainable development problems, then to replicate these solutions in countries where they can help the most.



THEMATIC APPROACH/ PLANNING

Is one of the management tools (modalities) for identifying special value technologies among all the various technologies that the Agency is currently transferring to Member **States**



THEMATIC PLANNING - PURPOSE

- The multiplying effect on National level (Problems common to Member States) should be considered as a priority in any thematic planning
- Identifying lead/collaborative institution in developing countries



THEMATIC PLANNING

 Provide a guide to Member States on nuclear technologies with proven applicability and benefit, and good cost/benefit characteristics.

 A planning tool that compliments CPF by providing a resource on proven Agency technologies and their application



Thematic Planning

- Identification of best practices, key stakeholders/partners in a thematic area;
- Comparative assessment of nuclear techniques with conventional techniques clarifying the Agency's role;
- Identification of key countries for programmes using a given technology;
- Mapping the way forward: CRPs, TCP



PARTNERSHIPS

- a) Financial: partnerships between the Agency and large donor organizations;
- b) Strategic: partnerships raise the profile of nuclear science in development. Raising the profile of the Agency's TC programme is not an end in itself; rather, in the effort to attract partners, it promotes awareness of the nuclear technologies available and, significantly, of tangible benefits from their application;
- c) Technical: technical partnerships achieve synergy by combining complementary nuclear and nonnuclear technologies.



PRINCIPLES OF FUNDING

- IAEA is not a funding organization.
- Project fund raising is at least a joint activity between the Agency and Member States, and at best a concerted government objective.
- The Technical Co-operation Fund is too small to realize social-economic impact in most Member States. TCF must be used to demonstrate the tangible benefits of applications that attract major funding (seed money).
- Funding is competitive: the best projects attract the most money.



FUNDING

In part, new funding for technical co-operation should come through partnerships with nontraditional donors. New funding also comes from recipient Member States that are prepared to share project costs, because of the tangible benefits that accrue to them through Agency assistance.



CO-FUNDING

- Other agencies are not automatically aware of IAEA projects
- TC is actively working to acquaint other agencies both in general and in terms of specific projects
- Much of this process of informing and educating can best be done at the country level



CO-FUNDING Using support from two or more sources

- The IAEA has projects that work and produce useful results if carried through to the end user
- Applications through the right end user can involve experiences beyond the means of the IAEA

- E.g. taking the results of mutation breeding programme through field tests and national agricultural extension programme to farmers



SUSTAINABILITY OF BENEFITS

- National ownership of TC programmes;
- Careful selection, and;
- Leveraging of Agency resources.

All help to ensure the long term viability of country programmes.

However, the ultimate factor in sustainability is the degree to which countries and individual institutions can achieve technical and financial self-reliance.



ASSISTING COUNTRIES AND INSTITUTIONS TOWARDS SELF RELIANCE

- At the institutional level, this role includes encouraging management to develop "markets" or "customers" for their products and services;
 - At the national level, it means encouraging Member States to enhance strategic planning for the nuclear sector, to solidify their support for areas in which nuclear technologies can best serve national priorities.
 - At the regional level, it involves encouraging Member States to work collectively towards rationalizing services and products so that individual institutions can remain viable.



Self-Reliance

- Agency assists countries and institutions that are ready to move towards self-reliance.
- TCP strengthens capacity of institutions in Member States using nuclear technologies to become more technically and financially selfreliant.
- This will ensure sustainability.



OWNERSHIP AND SUSTAINABILITY

- Regional Cooperation Mechanisms.
- Field management structure where leadership, planning, organization and control of projects coming from member states.
- Strong regional base for expert services and host institutions.
- Formal agreements with regional institutions to "outsource" implementation activities.
- Strong technical inter-dependence among scientific institutions and common ownership of technology packages such as Tissue Banking.



Regional Cooperation Mechanisms

- Regional Cooperation Agreement (RCA) for East Asia and the Pacific
- African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology among African Member States (AFRA).
- Regional Cooperation Agreement for the Promotion of Nuclear Science and Technology in Latin Americana the Caribbean. (ARCAL).
- The Cooperative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology (ARASIA).

Regional intergovernmental agreements provide opportunities for cooperation among IAEA counterpart organization. The IAEA acts as Technical Secretariat.



TECHNICAL COOPERATION AMONG DEVELOPING COUNTRIES (TCDC)

- Many developing Member States have strong technical capabilities in nuclear technology and its applications.
- The experience of succeeding in difficult circumstances may be of more value than that of a developed country
- TCDC will often be less expensive



TCDC

- Contributing sustainable delivery of services to target beneficiaries by endusers after completion of Agency TC Projects.
- Sharing of resources and skills
- Use of Regional Centers (RRU, RRC)

