**INTERNATIONAL ATOMIC ENERGY AGENCY**
**DEPARTMENT OF TECHNICAL CO-OPERATION**

# COSTA RICA

## *COUNTRY PROGRAMME FRAMEWORK FOR TECHNICAL CO-OPERATION*

**For COSTA RICA _____ Date:_____**

**For IAEA:_____ Date:_____**
**DDG-TC**

# COSTA RICA
## Country Programme Framework

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## EXECUTIVE SUMMARY

**The aim of the Country Programme Framework (CPF) is to specify and focus on key areas which are of high priority in line with national development and investment policies and plans in Costa Rica, respond to major needs, have defined end-user impact, strong Government commitment and are of a type where the Agency can make an important contribution.**

**Technical Co-operation with the IAEA is considered essential in addressing specific selected areas where local expertise and technologies for solving problems are missing. Recognizing the importance of linking prioritization of efforts with the national development and energy plans, the following areas have been identified as priorities for the medium-term focus of the Technical Co-operation programme with Costa Rica:**

- **Health**
- **Food and Agriculture**
- **Environment**
- **Industrial Applications**
- **Nuclear Safety**

**The following subjects have been identified that may form the core of future high-impact projects: QA/QC system, improved system of monitoring and quality control in medicine, including medical and occupational exposure; water resources pollution and mitigation of negative impacts, radiation protection infrastructure strengthening. Identification and formulation of specific projects deriving from the above Programme Focus areas shall be made.**

**Although the fields listed above will serve as a general guidance, the country will submit, for each biennium, an addendum, with a detailed list of priorities.**

**Endorsement of this CPF document by the Government of Costa Rica and by the IAEA while is not binding legally, demonstrates a common commitment, shared responsibility and sustained guarantees for the implementation of a medium term strategy.**

# I. OVERALL CPF GOAL

In the context of the TC Strategic Goal, the Country Programme Framework (CPF) is a management-planning tool aiming to be a prospective surveillance for future programming. Therefore, it specifies and provides focus on key areas of development which are of high priority to Costa Rica characterized by:

- Respond to major needs of the country.
- Is end-user oriented.
- Have defined impact.
- Are of the type where the Agency can make a significant contribution within its field of responsibility and capability.

CPF also serves to further the possibility of initiating regional projects where distinct benefits are derived from coordinated and cooperative activities involving more than one recipient Member State in the region.

This CPF document is based on communications and interaction with a number of Government bodies and representatives of Costa Rica, in particular the National Liaison Office as the main counterpart for all IAEA matters.

The endorsement of the CPF document, while not being legally binding, demonstrates a common commitment, shared responsibility and sustainability guarantee for the implementation of a medium term strategy.

(See **Attachment 1 -** The CPF document.)

## II. BRIEF COUNTRY PROFILE.

Costa Rica is a Central American success story: since the late 19th century, only two brief periods of violence have marred its democratic development. Although still a largely agricultural country, it has expanded its economy to include strong technology and tourism sectors. The standard of living is relatively high. Land ownership is widespread.

The country has 51,100 km2, bordering both the Caribbean Sea and the North Pacific Ocean, between Nicaragua and Panama. With four millions inhabitants Costa Rica's economy depends mainly on tourism, agriculture, and electronics exports. Poverty has been substantially reduced over the past 15 years, and a strong social safety net has been put into place. Foreign investors remain attracted by the country's political stability and high education levels, and tourism continues to bring in foreign exchange[1].

The reduction of inflation remains a difficult problem because of rises in the price of imports, labour market rigidities, and fiscal deficits. Costa Rica recently concluded negotiations to participate in the US - Central American Free Trade Agreement, which, if ratified by the Costa Rican Legislature, would result in economic reforms and an improved investment climate.

The CEPAL[2] estimates that, in 2005, the GDP will grow 3.5% and inflation will down to 10.5%. In the fiscal area, it is anticipated that the deficit could reach 3.5% to 4% of the GDP[3].

With a GNP around 16 billion US dollars (agriculture: 8.5%, industry: 29.4%, services: 62.1% - 2004 est.), the low prices for coffee and bananas have hurt the agricultural sector. The government continues to grapple with its large deficit and massive internal debt. The reduction of inflation remains a difficult problem because of rises in the price of imports, labour market rigidities, and fiscal deficits.

[1] IAEA Intranet Country Profile, 2004/12/08.

[2] "Comision Economica para America Latina y el Caribe", is an UN system organization specialized on development issues in the region.

[3] "Preliminary balance of the Latin America and Caribbean Economies", CEPAL, Dec. 2004.

In the case of Costa Rica, the present Multi-annual Development Plan for 2002-2006 addresses the Fight Against Poverty as the major goal of the administration4. The five major programmes are:

- Human resources development
- Economic growth in other to create jobs
- Environmental harmony
- Citizenship safety and fair administration
- Transparency in the public affairs, citizenship participation and external relations and international co-operation

[4] Home page of the Ministry of National Planning and Economical Policy (MIDEPLAN) of Costa Rica, http://www.mideplan.go.cr/, Dec. 07, 2004.

## III. FOCUS OF PAST AND CURRENT TC PROGRAMME

In the nuclear field the country has several institutions working with nuclear applications. In terms of structure, there is an Atomic Energy Commission, as an autonomous entity under the supervision of the Executive Government. The Atomic Energy Commission (AEC) is the official designated National Liaison Office (NLO) for the national and regional, including ARCAL, technical cooperation programmes and projects. Besides, concerning medical applications, the Ministry of Health is responsible for all the regulatory aspects, the Ministry of Science and Technology is responsible of financial aspects and payment of the regular budget of IAEA. The Ministry of Foreign Affairs and Worship is responsible for the country position in political and international cooperation affairs.

Costa Rica is an active participant in the technical cooperation (TC) either from the national as well as for the regional and interregional parts of the programme. The nuclear sector is diverse and mainly focused on research and development and nuclear applications in the health, agriculture and environment (mainly water resources and geothermal) sectors. The radiation protection regulatory system has also been a key component for TC assistance to this country.

The NLO had structured a reliable procedure in order to identify sound projects in line with the central criteria. Therefore, projects were well designed and funded with focus on the national priorities.

The 1997–2004 approved TC core programme focused on nuclear applications in radiation protection, health, hydrology and the agricultural sectors. Major outputs include a clear improvement on the radiation protection infrastructure and capacity building and support to the heath sector, in particular to cancer treatment, including diagnosis and therapy.

The focus for the programme for 2005–2006 is on agriculture and the health sectors with the aim of improving a variety of beans thorough radio-genetics to increase competitiveness, and production via in vitro techniques of human skin to improve the quality of life of patients with epidemical problems[5].

[5] 2005 – 2006 IAEA White Book

## IV. FOCUS OF FUTURE TC PROGRAMME

Costa Rica considers continued technical co-operation with the IAEA as highly important in addressing selected specific subjects where local expertise and technology are missing for solving problems. In so doing, it benefits from high international standards, know-how and expertise. The programmes of the country, in line with the TC policies and strategies, shall focus on strengthening radiation protection capabilities, on the human health, the protecting the environment, hydrology and natural resources development, particularly through practices for increasing efficiency and productivity.

The characteristic of the country that facilitate a focused programme and the identification of sound projects is its Medium Term Development Goal. The Unit of International Co-operation from the Ministry of Planning and Economic Policy (MIDEPLAN) had set up for the 2002-2006 Development Plan the main issues for the multi and bi lateral co-operation[6]. In this document, the priorities for the co-operation with the Agency are:

- Health
- Food and Agriculture
- Environment
- Industrial Applications
- Nuclear Safety

Therefore, the main fields to be addressed in the medium term for the national, regional and interregional part of the countries TC programme are:

In Human Health:

- Radiotherapy
- Nuclear Medicine
- Radiology
- Radiodiagnostic

[6] http://www.mideplan.go.cr/cooperacion/index.html, 2004/01/07.

In food and agriculture:

- SIT
- Animal Health and nutrition
- Radioactive food contamination
- Improvement genetic of plants

In Environment:

- Water resources
- Environmental contamination

In Nuclear safety:

- Legal aspects
- Enhancement of the national regulatory capability
- Waste management
- Radiological protection
- Quality Assurance in Nuclear Techniques
- Radiological Emergency

Industrial Applications:

- Nucleonic control systems and tracers

## V. OTHER INTERNATIONAL TECHNICAL ASSISTANCE

Costa Rica has received bilateral and multilateral financial and technical co-operation assistance in a number of fields. It has benefited the development of the country in its programme of political, economic and social transformations and reforms. Assistance has been provided by international financial institutions, such as the WB, Inter-American Development Bank (IDB), the Central American Bank of Economic Integration (BCIE), IMF, OEA, OPS, UNO and other organisations and donor countries (USA, EU, Spain, Japan, Netherlands, Sweden, Korea, France, Mexico, Canada)

# ATTACHMENT 1
## THE CPF DOCUMENT

The Country Programme Framework (CPF) is a concise document specifying key areas where nuclear applications play a significant role in achieving national development objectives. This is where the Agency concentrates its technical co-operation efforts and resources. It typically covers the forward period of 4-6 years and is established in close co-operation and endorsement of the country concerned.

In order to achieve impact, a limited number of sectoral objectives are addressed to ensure that only the highest priority projects are allocated a significant financial appropriation. Particular attention is demanded to ensure that Institutes involved in the implementation are securely established with respect to infrastructure and capacity being available to service the successful and sustained execution of projects

The final selection of projects to be funded within this framework by the IAEA is the responsibility of the Department of Technical Co-operation. The following aspects are considered central criteria for and during appraisal:

- the project is oriented towards an end-user
- the project responds to a major need of the country
- the project is realistic
- the project has strong Government commitment for sustainability
- the project has visible socio-economic impact, and
- nuclear technology plays a significant role

This CPF also serves to further the possibility of initiating regional projects where distinct benefits are derived from co-ordinated and co-operative activities involving typically three or more recipient Member States.

This document serves two closely related functions regarding future programming of technical co-operation between the IAEA and Costa Rica. Primarily, it aims at providing clear communication between all stakeholders directly involved in the development priorities of the country as coupled to the management priorities and resource limitations of the IAEA. The objective is to provide focus on a few areas of development, which are of high priority to the Government and where technology available through the Agency can make a significant contribution leading to high quality projects. This will result naturally

in providing priority guidelines for allocating resources when faced with requests for support.

The new strategy for technical co-operation pays a great deal of attention to the near-term and to medium-term core programme, including high priority selection projects with Model Project potential, which should meet the TC central criteria as set above. At least 80 per cent of all new projects are expected to meet these criteria, with strong justification for the rest.

# ATTACHMENT 2
## NUCLEAR INFRASTRUCTURE

Competent authorities

**The Ministry of Foreign Affairs & Worship,** in charge for the country´s relations with IAEA.

**The Ministry of Health** is the regulatory authority, responsible for the appropriate administration, use, maintenance and quality of services provided through use of medical radiation equipment as described in the licensing protocols.

**The Ministry of Science and Technolgy,** is responsible of financial aspects and payment of the regular budget of IAEA.

**The Atomic Energy Commission** is the main National Liaison and counterpart for all TC matters with the IAEA.

Laws/Regulations/Standards
Ley General de Salud.
Ley 4383 Ley Básica de Energía Atómica para Usos Pacíficos.
Reglamento sobre protección de las radiaciones ionizantes.

Research and Other Institutions

A number of institutions in **Costa Rica** carry out activities in the nuclear field and/utilize radioactive sources, such as:

***Universidad de Costa Rica:***
Centro de Investigaciones en Ciencias Atómicas, Nucleares y Moleculares (CICANUM)
Laboratorio de Instrumentación Nuclear (LANIN)
Centro de Investigación en Contaminación Ambiental (CICA)
Centro de Investigaciones Agronómicas (CIA)
Centro de Investigación en Biología Molecular y Celular (CICBM)
Instituto Nacional de Investigaciones en Salud (INISA)
Escuela de Biología
Escuela de Física
Escuela de Nutrición
Sistema de Bibliotecas, Documentación e Información (SIBDI)

***Universidad Nacional:***
Laboratorio de Hidrología Ambiental.
Programa de Investigación en Enfermedades Tropicales (PIET). Escuela de Medicina Veterinaria.
Programa de Genética Agrícola. Escuela de Ciencias Agrarias.

***Instituto Tecnológico de Costa Rica:***
Escuela de Ciencias de Materiales y Metalurgia.

***Caja Costarricense del Seguro Social (CCSS):***
Departamento de Protección Radiológica.
Hospital San Juan de Dios (Servicio de Radioterapia, Medicina Nuclear, Laboratorio de Radiofarmacia, Radiodiagnóstico, Laboratorio Clínico, Servicio de Gastroenterología).
Hospital Calderón Guardia (Servicio de Medicina Nuclear, Radiodiagnóstico).
Hospital México (Servicio de Radioterapia, Medicina Nuclear, Radiodiagnóstico).

***Instituto Costarricense contra el Cáncer. (ICCC)***

***Centro Internacional de Investigación y Adiestramiento Médico (ICMRT)***

***Instituto Costarricense de Electricidad (ICE):***
Centro de Recursos Geotérmicos
Departamento de Auscultación de Obras

***Ministerio de Agricultura y Ganadería.***
Servicio Fitosanitario del Estado.
Laboratorio Veterinario.

# ATTACHMENT 3

## CPF PROCESS SCHEDULE

| | 2005 | | | |
|---|---|---|---|---|
| | 1rst Q | 2nd Q | 3rd Q | 4th Q |
| Send draft to the MS | X | | | |
| Negotiation meeting | | X | | |
| Signature | | | GC | |