

# Draft Proposal for the Establishment of the Caribbean Science Foundation

Prepared by

**The Caribbean Diaspora for Science, Technology and Innovation**

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## A. INTRODUCTION

The high-level meeting convened by Prime Minister Mitchell in Grenada on April 9, 2008 recommended the establishment of a Caribbean Science Foundation (CSF) to help promote the aggressive development of Science, Technology and Innovation (STI) in the Caribbean, and to harness STI for sustainable economic development of the Region.

The Caribbean Diaspora for Science Technology and Innovation (CADSTI) has undertaken the responsibility for the establishment of the CSF. The launch of the CSF has been scheduled for September 21, 2010 in Port of Spain.

This proposal from CADSTI suggests that the CSF should be an independent semi-autonomous agency, and that it must employ a lean, agile and accountable structure responsive to regional needs. The administrative budget should be small and benchmarked to international standards so that the bulk of its operating funds are available to support STI projects. The proposed mission, major roles and responsibilities, activities, areas of focus, organizational structure, performance assessment, and the funding and sustainability mechanisms of the CSF are outlined below.

## B. MISSION

It is the mission of the CSF to help promote the aggressive development of Science, Technology and Innovation (STI) in the Caribbean Region, and to harness STI for sustainable economic development of the Region.

## C. MAJOR ROLES AND RESPONSIBILITIES

The major roles and responsibilities of the CSF will be as follows:

### 1) Assistance with Education Reform

The broad goal in education reform is to help stimulate technology-based entrepreneurship by promoting science and technology in schools, universities and other educational venues.

### 2) Assistance in Developing and Funding Relevant Science and Technology Projects

This goal is to identify and help develop (with funds and technical resources) new projects and industries that are relevant to the economic development needs of the Region, and that would be carried out by new and existing companies.

## **D. ACTIVITIES**

The activities of the CSF would include:

### Assistance with Education Reform

- Promote science and technology studies in the schools and universities through new activities that may include special lectures, and extracurricular opportunities
- Development of new curricula (with a special focus on STI and entrepreneurship) for the schools in the Region
- Provide scholarships and fellowships:
  - For students
  - For the professional development activities and continuing education of teachers
  - For the exchange of scientists, engineers and other R & D personnel between the Region and the Diaspora
- Fund knowledge acquisition and science popularization programs such as public science education programs on TV and at museums
- Help establish linkages between the universities in the Region and the leading universities in the Diaspora for the purposes of joint research projects, and student and faculty exchange

### Assistance in Developing and Funding Relevant Science and Technology Projects

- Identify new science and technology projects that are relevant to the economic development needs of the Region by:
  - Closely tracking research around the world and maintaining constant contact with the external research community for novel discoveries
  - Identifying science and technology projects that leverage our natural resources, including marine resources
- Procure funds to support new science and technology projects by liaising with similar international organizations, donor agencies and non-government organizations (NGOs)
- Solicit and critically review applications for funds to support new science and technology projects
- Distribute funds to initiate and/or maintain support for new projects
- Mentor small companies at which new projects have been funded to maximize the chances of success of the projects
- Connect companies in the Region with angel, venture capital and corporate capital in the Diaspora
- Support partnerships between academic institutions, industry, and governments both within and outside the Region.

## E. MAJOR AREAS OF FOCUS

The major areas of focus will include:

- a. Energy, Water and Materials
- b. Transportation
- c. Agriculture and Food Science
- d. Medicine and Health Care
- e. Manufacturing
- f. Small and Medium Business Development & Entrepreneurship
- g. Information and Communication Technologies (ICT)
- h. Environmental Science and engineering
- i. Crime Prevention

## F. STRUCTURE

The CSF will be accountable to an Executive Board of Governors that will comprise forward-looking, action-oriented individuals with broad experience in business, education, finance and government. The proposed governance structure is shown in Figure 1.

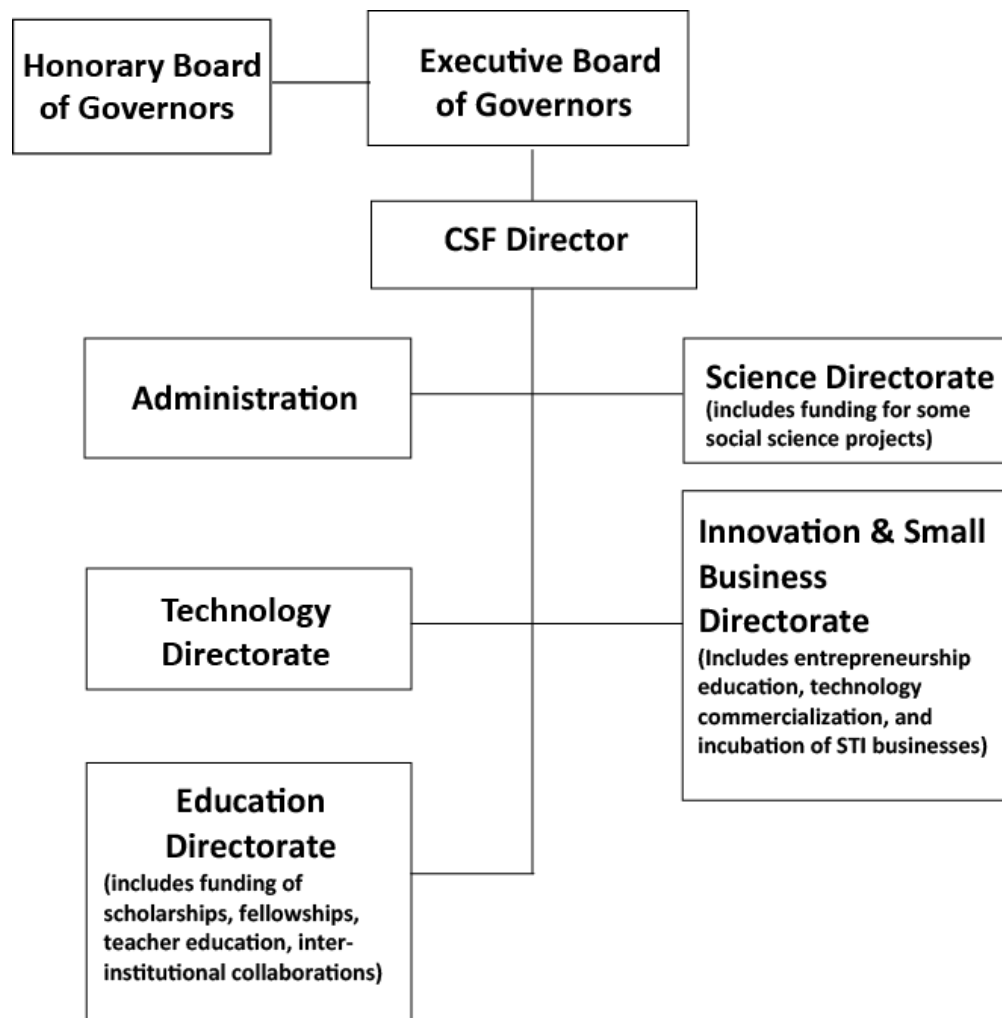


Figure 1. Organization Chart When Fully Functional

The Executive Board will be the voting body that sets the policy and plans for the CSF and should meet at least three times year. It will also select or appoint the following:

- (1) Its Chairperson
- (2) The CSF Director
- (3) Leaders of the Directorates upon the recommendation of the CSF Director

The Honorary Board of Governors could comprise, among others, individuals such as:

- a) CARICOM Secretary-General
- b) Prime Minister responsible for science and technology in the CARICOM Quasi Cabinet
- c) President of Caribbean Association of Industry and Commerce (CAIC)
- d) President of the Caribbean Academy of Sciences (CAS)
- e) Executive Secretary CARISCIENCE
- f) Two 2 Nobel Laureates

In addition:

- All Board members will serve terms no longer than 3 years initially, although reappointments will be considered on a case by case basis.
- The CSF Director will be a renowned scientist with an international reputation, fund-raising experience and will also be a proven leader with a sound track record in R&D management.
- The CSF Director will oversee CSF staff and management, and will be directly responsible for fund raising.
- The administration and management staff (appointed by the CSF Director) will be responsible for program creation and administration, proposal merit review, planning, and day-to-day operations.
- The CSF Director, in close collaboration with the Executive Board of Governors, will prepare a new strategic plan for approval every 3 years.
- The CSF Director will be in charge of the day-to-day running of the CSF and implementation of policy and plan.

## **G. PERFORMANCE ASSESSMENTS**

- The CSF Director will prepare an annual report for submission to the Executive Board (including financials) which will show how the CSF has (or has not) achieved its long-term objectives.
- The CSF will rely on external committees of experts to evaluate its long-term outcomes and the performance of its mission on a biennial basis.
- The performance assessment will be guided by the CSF's strategic plan.
  - The goal will be to provide its donors, investors, and the people of the Region with vital information about the return on their investments in STI
  - The criteria for assessment will include discovery, learning, research, entrepreneurship development, innovativeness and overall economic impact

## **H. SPECIAL FEATURES OF THE CSF**

The special features of the CSF that distinguish it from existing bodies are:

- a. It is a semi-autonomous overarching body.
- b. It will be driven by the Diaspora, the governments of the Region, the private sector, and the Region's STI community.
- c. It will ensure dynamic leadership of STI in the Region.
- d. It will be developmental, action oriented and accountable.
- e. Initial funds required for its launch are modest and therefore attainable, and
- f. It is expected to be self-financing within 7 years.

## **I. FUNDING AND SUSTAINABILITY**

This is a most critical role for the CSF. It will require effective leadership of the CSF Director and a finance committee to ensure that the organization remains financially viable at all times. Failure to secure adequate funding and/or mismanagement of funds can spell the demise of the CSF.

It is estimated that the CSF will require an initial investment of approximately US\$ 1M to launch the organization with a modest staff, and to provide funding for a few pilot projects within small businesses. The goal is to have the CSF be self-financing within 7 years, but each country in the Region will be expected to make a financial contribution to the CSF, irrespective of how small, to show commitment. The goal will be to grow the research funding budget in excess of US\$ 5M per year in the first 5 years of operation.

The sustainability model is shown in Figure 2. Sources of research support are expected to include:

- International agencies/organizations
- Member countries
- Private sector
- Equity holdings in CSF-invested companies
- The Diaspora
- Dividends or profits from invested endowment/trust funds

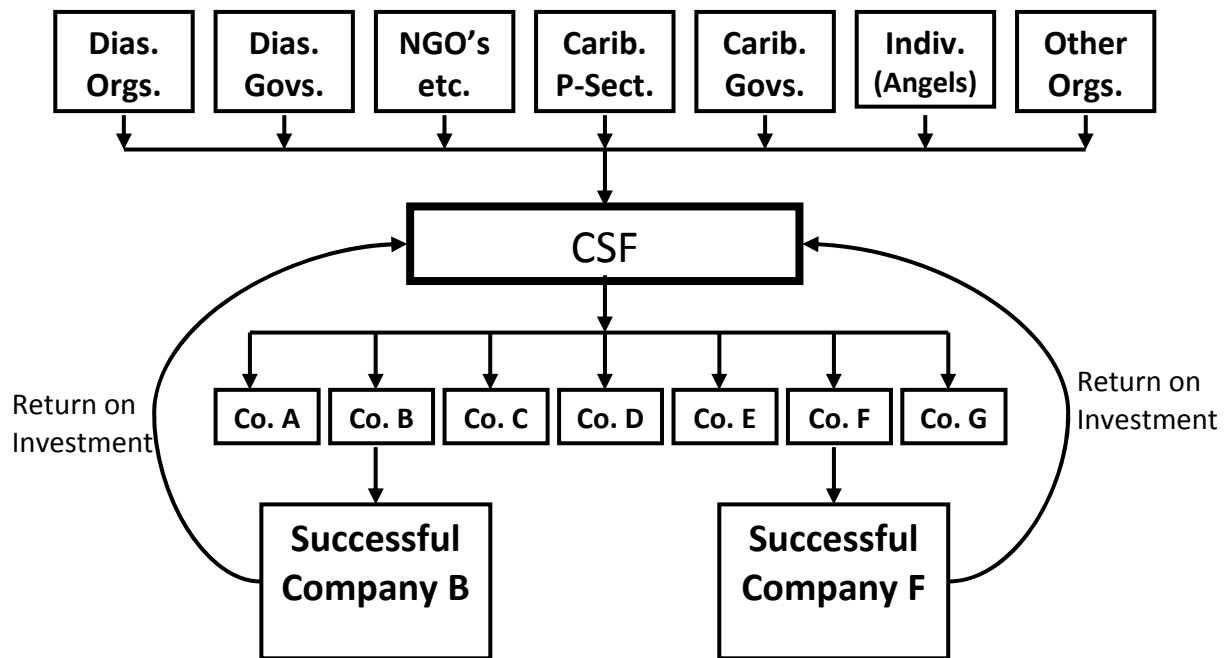


Figure 2. Sustainability model

## J. IMPLEMENTATION

The Private-Sector/Fund-Raising committee of CADSTI is currently preparing the initial three-year plan for the CSF. This committee comprises the following individuals:

Mr. Nicholas Brathwaite, Partner & CTO - Riverwood Capital  
 Dr. Basil Burke (UWI Consulting)  
 Mr. Dodridge Miller, CEO - Sagicor Insurance  
 Mr. Hollick Rajkumar, CEO - HRC Associates  
 Prof. Harold Ramkissoon (UWI-TT)  
 Mr. Robert Riley, CEO - BP Trinidad  
 Prof. Cardinal Warde (MIT) – Chair  
 Mr. Gervase Warner, CEO - Neal & Massy

It is expected that a number of other individuals and consultants will review and add input the plan as it evolves.

## K. ACKNOWLEDGMENTS

The assistance of my many colleagues and friends who continue to provide numerous suggestions to the CSF concept and edits to this document is gratefully appreciated. They include Professors Harold Ramkissoon, Baldwin Mootoo, Maya Trotz and Wayne Hunte, Drs. Basil Burke, Suren Gajraj, Dinah Sah and Arnolando Ventura, and all the members of the Board of Directors of CADSTI and the above-named individuals of the CADSTI Private-Sector/Fund-Raising Committee (see <http://www.cadsti.org>).