



PROJECT DOCUMENT

PEREZ-GUERRERO TRUST FUND FOR ECONOMIC AND TECHNICAL COOPERATION AMONG **DEVELOPING COUNTRIES, MEMBERS OF THE GROUP OF 77** GOVERNMENT OF THE REPUBLIC OF TRINIDAD AND TOBAGO

Type of project:

Inter-regional

Title:

INT/12/K07 - MADE IN THE CARIBBEAN

Sector:

Beneficiaries:

225 teachers, students and competition mentors in Barbados, Grenada,

and Tobago

Duration of project: September 2012 to September 2014

Estimated starting date: 3rd September 2012

PGTF inputs: US\$21,000.00

Other inputs: US\$ 28,450.00

Total cost of project: US\$49,450.00

Signed on behalf of:

UNDP

Mr. Henri-Francois Morand

UNDP Resident Representative a.i.

Government

Ms. Terry Ann Atkins-Huggins

Assistant Director

Technical Cooperation Unit

Ministry of Planning and Sustainable Development

Implementing Institution:

Ms. Maureen Manchouck

Secretary

Caribbean Council for Science and Technology

Date 2612 168115

Date: 15 August 2912

Part Ia. Situation Analysis

The relative lack of ability of Caribbean countries to innovate and adapt to technological change is often said to be the main competitive weakness in Caribbean economies and a main contributor to poverty. Global changes demonstrate that Science, Technology and Innovation have become central to improving the economic performance of the region and the social well being of its citizenry. Science, Technology and Innovation have however been relegated to the background in most Caribbean countries and is generally not one of the primary factors considered when devising socio-economic development strategies. Economic and strategic development plans over the past two decades within the region have focused on diversifying the productive sectors and expanding the tourism and service sectors without due regard for the value of innovation.

Most economies today are still supported by older or traditional, often larger, enterprises. Many of these, however, are on the decline or are being radically changed as new technologies and industries emerge. At the same time, there is the ascendance of the "creative tier" within economies, as societies rely more and more on creativity and innovation to nurture small and medium enterprises (SMEs). The Caribbean Regional Policy Framework states that in order to create supportive societal cultures that are conducive to scientific and technological innovation and to encourage the expansion of entrepreneurial efforts, Governments should: "Encourage the inculcation of cultural values and attitudes that create a positive climate for innovation".

In 2010, Caribbean Council for Science and Technology (CCST) launched a Caribbean Young Innovation and Invention Competition, the first of its kind in the region. Judges noted in their comments that there was no level of innovation/invention in the majority of the entries submitted. The students did not seem to know/understand that their respective project needed to have some novelty attached to it, and were therefore unable to answer the basic question as to what separated their project in question from technology which already existed. Each project was, however, a good laboratory experiment and was well documented. This led the judges to the conclusion that the mentors/teachers did not know what innovation/invention meant and they recommended that the mentors of students be educated in the concepts of innovation/invention.

Part Ib. Strategy

This project seeks to develop the foundation knowledge, skills, attitudes and behaviours conducive to the development of a culture of science, technology, innovation and entrepreneurship in the region.

National Facilitators (Teachers and Mentors) - will be trained, from three Caribbean islands (Barbados, Grenada and Tobago) to lead camps and workshops for young inventors and innovators. They will also have the opportunity to pilot such a camp under professional direction. This cadre of facilitators/trainers in each island will be trained to conduct **Technopreneurship Camps** on:

- Creative Thinking, Critical Thinking and Problem Solving.
- Conceptualizing New Ideas, Design and Planning.
- Prototype Building.
- Marketing and Entrepreneurship, including information on intellectual property.

¹Blawatt, Ken R, "Entrepreneurship & The Caribbean Economy: Defining Economies & an Enterprise Society" paper presented to the 5th Annual Conference, SALISES, The University of the West Indies, Trinidad and Tobago, 31st March – 2nd April, 2004.

² Science, Technology & Innovation for Sustainable Development – Caribbean Regional Policy Framework for Action, March 2007, CARICOM

Concept of Technopreneurship – The concept of Technopreneurship calls attention to and stresses the dynamic interrelationship of the following elements: Science and Technology, New Products and Product Ideas (i.e. innovation/invention), Creativity and Entrepreneurship (i.e. business of innovation). The Technopreneurship workshop and camp aims to develop indigenous technopreneurial capacity that will create new products and processes, using the cultural and physical milieu as a natural laboratory for experimenting with the inventive process.

Creativity Workshops/Camps will comprise a programme of fun hands-on activities for stimulating creative and critical thinking and will include design and building activities. Puzzles, brainstorming, experimentation and object play will be some of the techniques and tools used to stimulate out-side-the box thinking and brain development, which are crucial to inculcate creativity. The workshops/camps will target secondary school students. Teachers can also use the techniques taught in the workshop as a pedagogical tools to enhance classroom delivery. They will also be trained to act as mentors for participants of the young inventor's competition. Mentors can then efficiently guide the entrants to develop their ideas, ensuring that they launch into projects, which are feasible in terms of time, resources and finances.

The Technopreneurship Camps of NIHERST in Trinidad and Tobago will be adapted and used as the model for this project.

It is also expected that this project will assist in promoting Youth Innovation and Invention on a regional scale. It should encourage national governments, non-governmental organizations and other internationally-based institutions, to provide much needed investment in the areas of science education and innovation awareness. Although it will take some time before the Caribbean region to be known for its "knowledge" industries or research centres, stimulating young people to innovate and think will ensure that they see the world in unconventional ways that will spur their entrepreneurial spirit and ensure future success.

Part II. Results Framework

PROJECT RESULTS AND RESOURCES FRAMEWORK

Intended Outcome: An established innovative and inventive culture in the Caribbean.

Outcome indicator:

- Increased support from governments to encourage efforts in creativity in science and technology in young people in the Caribbean.
- Technopreneurship workshops continued to be carried out in at least 2 of the beneficiary countries

Project title and number: Made in the Caribbean (Ref. # INT/12/K07)

Intended Outputs	Activities	Inputs	Budget Line	Budget (Year)
Curricula developed and	Develop curricula	Experts need to be		US\$10,000
training materials produced to	and training	recruited to		
stimulate and develop mentors	materials to suit the	contextualize		=US\$2000 x 5
and students' innovative	particular needs of	teaching materials		modules
potential at the workshops and	the participating	working with		
camps.	Caribbean countries.	contributions from		
		educators in		
		participating		
		Caribbean		
		countries.		
2. A cadre of facilitators/mentors	Train a cadre of	Trainers from		US\$17,190
trained to lead camps for young	national facilitators.	Trinidad & Tobago/		
inventors and innovators.		NIHERST will		US\$3,930 x 3
		travel to countries		countries
		to conduct training		=US\$11,790
		of local teachers		* 1004.50
		and mentors.		US\$150
		Science kits will be		x4daysx3persons x
		used to explore		3 countries
		creativity. Manual		=US\$5400
		and workbooks will		
		be provided.		110000 050
3. A piloted Technopreneurship	Pilot	NIHERST's		US\$22,050
camp.	Technopreneurship	facilitators will		11000 000
	camp.	guide newly trained		US\$6,000 >
		educators in		3countries =
		conducting a camp		US\$18,000
		for 50 students for		US\$150 x3night
		two days. Science		x3persons x 3
		kits will be used to		countries =US\$4050
		explore creativity. Workbooks will be		Countries -03\$4030
		provided. Execution Fee 1%		GMS- US\$210
		Total		49,450\$U\$

Part III. Management Arrangements

Management arrangements.

The Caribbean Council for Science and Technology (CCST) will be responsible for implementing the project. As the implementing agency, CCST will be responsible for the reporting and financial requirements foreseen under the UNDP's national execution procedures and guidelines. A Project Coordinator will be appointed by CCST. The Project Coordinator will supervise the general progress of the project and co-ordinate the development of the program components. Additionally, the Project Coordinator will carry out periodic reviews and monitoring of the project to determine the progress made and verifying the degree to which obligations have been met. All staff appointed by CCST will not hold UNDP contracts.

Execution Arrangements.

The Ministry of Planning and Sustainable Development shall execute the project under the United Nations Development Programme (UNDP) National Implementation Modality (NIM) and shall subcontract the implementation of the project to Caribbean Council for Science and Technology (CCST) in accordance with UNDP procedures. The sub-contract shall be awarded within a month of signature of this document and shall be the basis of a separate document to be signed by the two parties.

Project Work Plans.

A work plan prepared by the implementing institution is attached as Annex I to the project document. It will be revised when the first allocation is made.

Monitoring and evaluation; lessons learned.

The Caribbean Council for Science and Technology (CCST) will provide summary reports to the staff from the UNDP Trinidad and Tobago Country Office or Perez-Guerrero Trust Fund, and the Executing Agency, the Government of Trinidad and Tobago, every three (3) months including the following information:

- Attendance lists from courses
- Actual cost of activities executed
- · Counterpart resources expended
- Summary of training course executed
- Deliverables accomplished in the quarter
- Issues and problem areas
- Percentage of planned activities accomplished

Progress monitoring will be conducted by the Executing Agent (the Government of Trinidad and Tobago). However, any staff from the UNDP or Perez-Guerrero Trust Fund may undertake monitoring activities in line with managerial roles above.

The project may be audited by the Perez-Guerrero Trust Fund.

Part IV. Legal Context

This project document shall be the instrument referred to as such in Article 1 of the SBAA between the Government of Trinidad and Tobago and UNDP, signed on 20 May 1976.

Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP's property in the executing agency's custody, rests with the executing agency.

The executing agency shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The following type of revisions may be made to this project document with the signature of the UNDP Resident Representative only, provided he or she is assured that the other signatories of the Project Document have no objections to the proposed changes and submit such in writing:

- a) Revisions in-, or addition of any of the Annexes of the Project Document;
- b) Revisions that do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the re-arrangement of inputs already agreed to or by cost increases due to inflation;
- c) Mandatory annual revisions, which re-phase the delivery of agreed project inputs, or increased expert, or other costs due to inflation, or take into account agency expenditure flexibility.

As stated in the SBAA, the cost of items constituting the Government's contribution to the project and any sums payable by the Government in pursuance of this article, as detailed in the 'Project Budget' section of this document, shall be considered as estimates based on the best information available at the time of preparation of such budgets. Such sums shall be subject to adjustments whenever necessary to reflect the actual cost of any such items purchased thereafter. Further to this provision, any such changes in costs, particularly in the case of overruns, must be discussed and agreed to by both parties, after which time the Government of Trinidad and Tobago will be responsible for meeting these costs under this project.

Project Budget

INT/12/K07 - Made in the Caribbean

Budget "A"

Main Source of Funds: Perez-Guerrero Trust Fund.

Bud. Line	Description	Exe. Agy Ministry of Planning and Sustainable Development	Total US\$	Year 1 US\$
71600	TRAVEL	bevelopment		
	Facilitators Airfare for 3 trainers from NIHERST to conduct training of local teachers/mentors in participating		2,100	2,100
	Caribbean islands Per diem – 3 countries; 3 persons; 7 days each		13,650	13,650
	TOTAL for Travel		15,750	15,750
75700	TRAINING COMPONENT Equipment (for Science Kits to be used at Technopreneurship camp)		5,040	5,040
	TOTAL for Training Component		5,040	5,040
75100	EXECUTION FEE		210	210
	Execution Fee (1%)		210	210
	Line Total		210	210
	BUDGET TOTAL		US\$21,000	US\$21,000

Total inputs for the project: US\$49,450.00

This comprises US\$ 21,000.00 PGTF. The other counterpart contributions totaling USD \$28,450 are as follows:

Inputs from NIHERST and Caribbean Council for Science and Technology (CCST): US\$28,450.00.

This will meet expenses associated with Project Management, technical knowledge and human resources in the form of highly experienced facilitators and course materials, including handouts and certificates of participation.

Work plan for the next 8 months INT/12/K07

Revision: B

Outcome	Output	Activities and Management Actions	mo/yr	mo/yr	mo/yr	mo/yr	mo/yr	mo/yr
T01	01	Activity 1	07/12	08/12	09/12	10/12	11/12	12/12
		Action 1: Developing curricula and			09/12	10/12	11/12	12/12
		training materials to suit the needs of						
		the particular Caribbean island.						
		Responsibility: The project office is						
		responsible for hiring a consultant with						
		suitable experience to formulate the						
		curricula and module development						
		with local educators						-11.0"-11.00ks (**14.00ks **14.00ks **14.00ks **
		Action 2: Consultants begins work						
		researching, gathering information and						
		liaising with local educators						
		Responsibility: Consultant responsible						
		for gathering all necessary information						
TP0.4	0.0	suitable to the needs of the country.	/ 02/12	04/12	<u> </u>	T	1	
T01	02	Activity 2	03/13			<u> </u>	<u> </u>	
		Action 1: Training a cadre of national	03/13	04/13				
		facilitators.						
		Responsibility: NIHERST personnel						
		from Trinidad and Tobago will travel to countries to conduct workshop with						
		teachers and mentors. They will utilize						
		science kits, manuals and workbooks						
		to explore creativity.						
T01	02	Activity 3	04/13			1		
101	02	Action 1: Piloting a Technopreneurship	04/13			1		
		Camp (for 1 country TBD).	0 1, 10					
		Responsibility: NIHERST facilitators						
		from Trinidad and Tobago will be						
		present to guide newly trained						
		educators in conducting a						
		Technopreneurship Camp.						