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ASSOCIATION OF CARIBBEAN STATES (ACS)

20th MEETING OF THE SPECIAL COMMITTEE ON DISASTER RISK REDUCTION

Port of Spain, Trinidad-and-Tobago, 22nd-23rd November, 2012

ACS PROJECT CONCEPT DOCUMENT (ACS PCD) - "GREEN RESPONSE TO DISASTERS"

ACS AEC
ASSOCIATION OF CARIBBEAN STATES
ASOCIACION DE ESTADOS DEL CARIBE
ASSOCIATION DES ETATS DE LA CARAIBE

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ABBREVIATIONS AND ACRONYMS

ACS: Association of Caribbean States

CC: Climate Change

DRR: Disaster Risk Reduction

IFRC: International Federation of Red Cross and Red Crescent Societies

SD: Sustainable Development

TTRC: Trinidad and Tobago Red Cross

I. PROJECT OVERVIEW	
A. PROJECT DESCRIPTION	
1.1 **Project name**	**"Green response to disasters"** Phase 1: feasibility study on how to reduce, in a sustainable way, the environmental impact of the products and technologies used in response to and recovery from disasters. The feasibility study will then identify green products, processes and technologies to be used in disaster response. Phase 2: identify/develop/source green response prototypes from the Caribbean region. Phase 3: test pilot green response prototypes. Phase 4: based on the deployment of the goods identified and procured in phases 1 & 2 and results of phase 3, consequently to promote and support their production for diffusion in the Caribbean countries in response to disaster.
1.2 **ACS Focal Area**	Disaster Risk Reduction
1.3 **Objectives**	The objectives mentioned are the ones of the overall project. **Overall objective**: Based on empirical evidence of the environmental and economic benefits of *green products, processes and technologies to be used in disaster response*, develop standards and regulations (framed in a Green Response Model Law) that Caribbean governments can incorporate to promote and facilitate the production and utilization of such eco-efficient and environmentally friendly products, tools and processes to be utilized for responding to and recovering from disasters impacting on their country. **Specific Objective(s)**: 1. To determine the availability, effectiveness and efficiency of green products and processes to be utilized in the case of emergency response to and recovery from disasters in the Caribbean (eg., for shelter construction, lighting, heating [as may be applicable], cooking, water supply and feeding for the affected people). 2. To develop a regulatory framework to facilitate the production of the elements mentioned in article 1 herein (with good practices, business cases, life-cycle analysis, and environmental footprint).

	3. To promote, support and organize a well-prepared manufacture and wholesale of the elements cited in a geographic location(s) that could also facilitate rapid shipping of such products. 4. To facilitate plans and preparations for the shipping to and distribution within Caribbean states of pre-stocked and/or emergency response materials that meet the specifications and criteria of Green materials. 5. To duplicate the model developed as the outcome of this proposal in Central America, South America and other regions of the world.
1.4 **Justification**	When a response to a natural disaster occurs, the mobilization most often occurs very quickly and focuses on the immediate needs, without regard to environmental efficacy; whereas a long term view (integrating the values and principles of environmental impact and sustainable development) might be more environmentally sound while maintaining economic viability. According to the mandate of the Association of Caribbean States, this project proposal is in line with the St Marc Plan of Action: • **Article 1**: "Strengthen its role as the principal forum in the Greater Caribbean for the exchange of experiences, lessons learnt and best practices in the development of national and regional coordination mechanisms". • **Article 4**: "Encourage and contribute, as appropriate, to the integration of disaster risk reduction into humanitarian and sustainable and safe development planning, programmes and frameworks, including the poverty reduction strategic frameworks. • **Article 5**: "Encourage and contribute, as appropriate, to Members' integration of all disaster risk reduction actions with climate change strategies, such as measures surrounding adaptation to climate change". • **Article 7**: " Contribute to the continuous exchange between the Conference Bodies, international cooperation bodies, the ministries in charge of planning and finance, as well as organisations specializing in disaster risk reduction". • **Article 8**: "To support the formulation of policies and the strengthening of networks among disaster risk experts, technical and scientific specialists, planners and other stakeholders".

	• **Article 9**: "To provide assistance, as appropriate, at the regional, national and local levels, in collaboration with the Conference Bodies, in the development and strengthening of community-based disaster risk management programmes". • **Article 10**: "Strengthen its capacity to link Members to existing disaster risk reduction initiatives of the Conference Bodies". • **Article 19**: "Encourage and contribute to the development of disaster risk reduction strategies, even their transfer through appropriate financial and investment mechanisms, including insurances, to enable ACS Member Countries to cope with post-disaster needs of the most vulnerable groups and public infrastructure". • **Article 25**: "Continue to expand the network of international and regional bodies for consultation, cooperation and concerted action without detriment to the relationship with the Conference Bodies". Moreover, this project is developed in the framework of the Memorandum and the Letter of Understanding signed between the Association of Caribbean States and the International Federation of Red Cross and Red Crescent Societies, with regard to the Red Cross civil society role in disaster response in its capacity as auxiliary to governments. Finally, this project is in line with the Ministerial Declaration of Santo Domingo, agreed by the Governments in February 2008 during the meeting of the Ministers of Environment in Latin America and the Caribbean.
1.5 **Results / Components**	Phase 1: Economic viability and related business plans for the production of emergency relief and recovery goods such as renewable electrical energy supplies (to cook, heat and light), biodegradable packaging for emergency response products and related processes for delivery, usage, and recyling, re-use or disposal. Phase 2 ,3 and 4: proof-of-concept
1.6 **Estimated Duration and Cost**	Phase 1: 140,000 USD, for Phase 1 feasibility study Phase 2, 3 & 4: to be determined according to the results of phase 1
1.7 **Project current**	Approved as permanent initiative during the XIXth meeting of the Special Committee for Disaster Risk Reduction. To be circulated

status	to ACS Members for final approval at the XXth meeting of the SCDRR as an ACS project.

B. STAKEHOLDERS	
1.8 **Entity responsible**	For phase 1: Green Response Coordinating Committee (led by a Representative of the Government of Trinidad and Tobago and a Representative of TTRC) which reports jointly to designated representatives of ACS and IFRC, being the Director of DRR and the Caribbean Regional Representative, respectively. . The entities responsible for the execution of phase 2 will be accordingly determined by the results of phase 1 Phase 3 and 4 will be coordinated amongst ACS, interested Members States, IFRC (including its Member Societies).
1.9 **Beneficiaries**	Population of Member States and Associate Members of the ACS.
1.10 **Collaborating institutions**	ACS IFRC TTRC Government of TnT Other entities identified by the Green Response Coordination Committee
1.11 **Executing institutions**	Trinidad and Tobago Red Cross, under the umbrella of the International Federation of Red Cross and Red Crescent Societies, and with the support of the ACS.
1.12 **Financing institutions**	Government of Trinidad and Tobago and other sources.

II. PROJECT INTERVENTION LOGIC

A. CONTEXT AND BACKGROUND

2.1 Features of the sector

The Caribbean is highly vulnerable to natural disasters. The region is prone to tropical storm and hurricane activity, floods, volcanic and seismic activities, droughts, bush fires, etc.

When a response to a natural disaster occurs, the mobilization most often occurs very quickly and focuses on the immediate needs, without regard to environmental efficacy; whereas a long term view (integrating the values and principles of environmental impact and sustainable development) might be more tenable.

2.2 Problems that will be addressed

- Address the lack of standards and regulations to produce and use eco-efficient products, processes and technologies
- Limit cost of energy production by using renewable energy
- Avoid accumulation of garbage/rubbish by using recyclable / reusable / biodegradable items and their packaging
- Limit the time of response to disaster by organizing the pre-positioning of stocks strategically located
- In the context of Climate Change, this project offers both mitigation and adaptation measures.

2.3 Project Proposal

The project "Green Response to Disasters" will be developed in four phases:

- Phase 1: feasibility study
- Phase 2: develop/source green response prototypes from the Caribbean region
- Phase 3: test pilot green response prototypes
- Phase 4: based on the deployment of the goods identified and procured in phase 1 & 2 and results of phase 3, consequently their promotion and production for diffusion in the Caribbean countries in response to disaster.

2.4 Other interventions

Promotion of the initiative at the international level through the ACS and the IFRC

B. OBJECTIVES

2.5 Project overall objective

Based on empirical evidence of the environmental and economic benefits of *green products, processes and technologies to be used in disaster response*, develop standards and regulations (framed in a Green Response Model Law) that Caribbean governments can incorporate to promote and facilitate the production and utilization of such eco-efficient and environmentally friendly products, tools and processes to be utilized for responding to and recovering from disasters impacting on their country.

2.6 Project specific objective(s)

1. To determine the availability, effectiveness and efficiency of green products and processes to be utilized in the case of emergency response to and recovery from disasters in the Caribbean (eg., for shelter construction, lighting, heating [as may be applicable], cooking, water supply and feeding for the affected people).
2. To develop a regulatory framework to facilitate the production of the elements mentioned in article 1 herein (with good practices, business cases, life-cycle analysis, and environmental footprint).
3. To promote, support and organize a well-prepared manufacture and wholesale of the elements cited in a geographic location(s) that could also facilitate rapid shipping of such products.
4. To facilitate plans and preparations for the shipping to and distribution within Caribbean states of pre-stocked and/or emergency response materials that meet the specifications and criteria of Green materials.
5. To duplicate the model developed as the outcome of this proposal in Central America, South America and other regions of the world.

2.7 Expected results

Phase 1:

a. A draft Model Law for Green Response to Disasters that encompasses specifications and regulations for environmentally-appropriate practices, products and processes covering disaster risk reduction, preparedness, response and recovery.
b. To determine the economic viability and related business plans for the production of emergency relief and recovery goods such as renewable electrical energy supplies (to cook and light), biodegradable packaging for emergency response products, etc.
c. To identify expert sources for the support and implementation of the project amongst government, institutions, academia and the private sector.

d. To research the availability of existing standards, guidelines and regulations for the technical specifications of products and processes that meet the Green Response criteria.
e. To determine an initial baseline by which efficacy of implementation can be measured for the purpose of cost benefit analysis.

Phase 2, 3 and 4: proof-of-concept

C. STAKEHOLDERS

2.8 Beneficiaries

Population of Member States and Associate Members of the ACS.

2.9 Participating institutions

This project is developed in the framework of the Memorandum signed between the Association of Caribbean States and the International Federation of Red Cross and Red Crescent Societies, with regard to the Red Cross civil society role in disaster response in its capacity as auxiliary to governments.

Name of institution: Association of Caribbean States (specifically its Direction for Disaster Risk Reduction)			
Name and last name of legal representative: Alfonso Munera, Secretary General ; Eduardo Gonzalez, Director of DRR, Mathieu Fontanaud, Adviser of DRR.			
Address: 5-7 Sweet Briar Road, St Clair		**City:** Port of Spain	
Country: Trinidad and Tobago			
Tel: 868 622 9575	**Fax:** 868 6221653	**Email:** mail@acs-aec.org	**Website:** www.acs-aec.org

Name of institution: IFRC (International Federation of Red Cross and Red Crescent Societies) Caribbean Regional Representation Office			
Name and last name of legal representative: Howard Arfin, Regional Representative/Head of Office			
Address: 110 Picton Street		**City:** Port of Spain	
Country: Trinidad and Tobago			
Tel: +1 868 628 7289	**Fax:** +1 868 628 9715	**Email:** howard.arfin@ifrc.org	**Website:** www.ifrc.org

Name of institution: IFRC (International Federation of Red Cross and Red Crescent Societies) Americas zone office			
Name and last name of legal representative: Xavier Castellanos, Director-Americas Zone; Nelson Castaño, Disaster Risk Management Coordinator			
Address: Ciudad del Saber, , Clayton		**City:** Ciudad Panamá	
Country: Panamá			
Tel: +507 317 3050	**Fax:** +507 317 1811	**Email:** xavier.castellanos@ifrc.org	**Website:** www.ifrc.org

Name of institution: TTRC (Trinidad and Tobago Red Cross)			
Name and last name of legal representative: Ms. Jennifer Gonzalez, Director General			
Address: 7a, Fitz Blackman Drive, Wrightson Road P.O.		**City:** Port of Spain	
Country: Trinidad and Tobago			
Tel: (1) (868) 627 82 15	**Fax:** (1) (868) 627 88 13	**Email:** jgdgttrcs@gmail.com ttrc@tstt.net.tt	**Website:** http://www.caribbeanredcross.org

Name of institution: T&T ODPM (Office of Disaster Preparedness & Management of Trinidad and Tobago)			
Name and last name of legal representative: Dr. Stephen Ramroop, Chief Executive Officer			
Address: # 4A Orange Grove Road		**City:** Tacarigua	
Country: Trinidad and Tobago			
Tel: 868 640 1285 or 789 2779	**Fax:** 868 640 8988	**Email:** sramroop@mns.gov.tt publicinfo.odpm@gmail.com	**Website:** www.odpm.gov.tt

List of other potential stakeholders of the project:

- Ministry of Housing and the Environment of Trinidad and Tobago
- Regional Universities and Research Centres

D. BENEFITS, RISKS AND SUSTAINABILITY

2.10 **Benefits**

Environmental impact: eco-efficient products and processes; production of renewable energy; green technologies
Social impact: reduced time of response to disaster, efficient and effective recovery
Economic impact: development of the production sector (job creation and economic stimulation)

Also development of norms and standards relating to eco-efficiency

2.11 **Critical risks and Sustainability**

Critical Risks	**Risk Rating**	**Risk Mitigation Measures**
Lack of expertise (to perform the feasibility study)	Low	Involve regional universities and research centres
Lack of production capacity	Low	Capitalize on existing industries and manufacturers
Lack of space and facilities to stock the products	Low	Capitalize on IFRC, TTRC and ODPM facilities
Lack of transport capacity	Low	Capitalize on existing logisticians and shippers

2.12 **Ex-post sustainability**

The business plans should make provision for the long term implementation of this initiative (in Trinidad and Tobago as well as in other locations amongst Member States)

III. PROJECT IMPLEMENTATION

A. COMPONENTS AND ACTIVITIES

3.1 Components description

1. To determine green products and processes to be utilized in the case of emergency response to and recovery from disasters in the Caribbean; for shelter construction, lighting, heating (as applicable), cooking, water supply and feeding the affected people.
2. To facilitate the production of the elements mentioned in 1 (with good practices, business cases, life-cycle analysis, and environmental footprint).
3. To organize a well-prepared manufacture and wholesale of the elements cited in 2 in a geographic location that could also facilitate rapid shipping of such products.
4. To facilitate the shipping of pre-stocked elements mentioned earlier to neighbourhood Caribbean countries.
5. To duplicate the model in Central America, South America and other regions of the world.

3.2 Expected schedule

Years	1					2	3
Months	1	2	3	...	12		
Component 1							
Component 2	To be determined according to the results of phase 1						
Component 3							
Component 4							
Component 5							

B. EXECUTION

3.3 Physical means required

- Production facilities (industries, manufacturer)
- Wholesalers and distributors
- Stocking and pre-positioning storage facilities
- Means of eco-efficient transportation

3.4 **Expertise required**

- Business cases
- Life-cycle Analysis
- Environmental footprint
- Manufacturing
- Storage and distribution logistics
- Standards, guidelines and regulatory research

3.5 **Project Team**

For phase 1: Green Response Coordinating Committee (led by a Representative of the Government of Trinidad and Tobago and a Representative of TTRC) which reports jointly to designated representatives of ACS and IFRC, being the Director of DRR and the Caribbean Regional Representative, respectively.

Phase 2: The entities responsible for the execution of phase 2 will be accordingly determined by the results of phase 1

Phase 3 and 4 will be coordinated amongst ACS, interested Members States, IFRC (including its Member Societies).

3.6 **Matrix of Responsibilities**

Component	Role / Responsibility	Actor
1	Identification of the products/processes	Project team, IFRC experts, contracted consultant
2	Production of items identified in 1	Companies, industries and manufacturers located in Trinidad and Tobago (or proximate)
3	Wholesale of item produced in 2	ODPM/ IFRC
4	Shipment of items stocked in 3	ODP/IFRC and T&T shipping agents
5	Duplication of the model in other countries	IFRC-ACS

C. COST

3.7 Financing Matrix

Phase 1: 140,000 USD for Phase 1

Phases 2, 3 & 4: to be determined according to the results of phase 1

The Government of Trinidad and Tobago will contribute with 70.000 USD (50.000 in cash and 20.000 in kind), to start the project immediately upon approval, and to make the initial payment towards the feasibility study of Phase 1.

As well, ACS has engaged in a process of negotiation with its partners to mobilize the remaining 70.000 USD.