



# CRAFTING A FRAMEWORK FOR IMPACT

ANNUAL REPORT 2016



THE UWI-TRINIDAD AND TOBAGO RESEARCH AND DEVELOPMENT IMPACT FUND



# Our Impact

**31**  
Projects  
funded

  
Total Funds  
Awarded

**\$17,432,428**

**131**  
Graduate Students



**33**  
Peer reviewed  
journal articles



**176**  
New partnerships

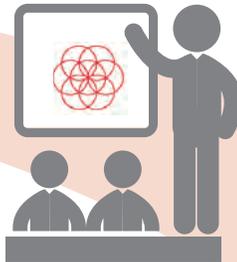


Communities reached

**31** Theses



**152**  
Presentations



**>200**



**109**  
Workshops and  
seminars



**74**  
Print media mentions

  
**\$31M**  
Counterpart support attracted  
(Cash and in-kind)



**\$21M**  
Funding for follow-  
on/spin-off projects

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## CONTENTS STATEMENT

This Annual Report, which covers the period from January to December 2016, has been prepared by the RDI Fund Secretariat in accordance with the Operational Guidelines of the Fund. This report has been submitted to the Technical Evaluation Committee and approved by the Chair, Principal and Pro-Vice Chancellor, Professor Brian Copeland. All dollar amounts used in this Annual Report are current Trinidad and Tobago (TT) dollars unless otherwise specified. Throughout this report, the terms "UWI-TT RDI Fund", "RDI Fund" and "Fund" refer to The University of the West Indies –Trinidad and Tobago Research and Development Impact Fund.

Established in 2012, The UWI-Trinidad and Tobago Research and Development Impact Fund (RDI Fund) has proven to be an effective social innovation. The Fund has successfully facilitated the activation of the **quintuple helix**, bringing together the capacity, expertise and resources of academia, government, private sector, development agencies and civil society to specifically address pressing development needs in six priority areas.



**RDI Fund projects have notably increased the opportunities for multidisciplinary research at the St Augustine Campus, breaking down internal and external silos and inculcating a culture of open collaboration.**

The Fund has also increased the relevance of the university's research agenda by actively placing stakeholders and collaborative partnerships at the centre of the UWISTA research enterprise and by bringing our researchers and potential beneficiaries closer together from project inception, through implementation and finally into uptake.



# Crafting a Framework for Impact

Research and development impact are central to the work of the RDI Fund. Capturing information related to outcomes and impacts beyond the typical outputs of academic research projects such as publications, scholarly articles, teaching/research materials, etc. is essential for ensuring that the Fund is meeting its mandate. The RDI Fund has proposed a framework for evaluating grantee projects which focuses on ten areas in addition to the academic: technology, economic, cultural, health, environmental, societal, policy, organizational, teaching/training and reputational.

As the Fund considers the issue of impact, it is keenly aware of the intersectionality between the ability to achieve impact due to the research activities being conducted and the research environment in which these activities are taking place, inclusive of both the research infrastructure available to our researchers as well as the prevailing research culture. The Fund recognizes that it is uniquely positioned to identify impediments to achieving impact and relevance in the UWI research environment and is committed to doing its part to help to address these issues for the benefit of all.

Although the Fund is only four years old, most of the reporting projects have already demonstrated impact beyond the academic and many have cross cutting impacts in several of the ten areas identified above. The Fund has also emerged as an excellent seed funding model for research and development, with grantees attracting millions of dollars in external research funding from local, regional and international donors from government, multilateral, industry and NGO sources. **The Fund is thus well positioned based on its track record, processes and portfolio to assist development, government and industry partners achieve their national and regional development objectives.**





# IMPACT

## HIGHLIGHTS

# TECHNOLOGY



## AgriNeTT LEVERAGING ICT FOR AGRICULTURE

Dr. Margaret Bernard and her AgriNeTT team **developed several apps to assist farmers and policy makers.** The team also created two open data repositories, [Maps.tt](#) and [Data.tt](#), making previously hard to find data easily accessible to policy makers, researchers, farmers, other app developers and consumers. All apps created by this team are free of charge and currently available for android phones at the Google Play store:



**AgriExpense** (4.3 star rating, 1000-5000 installs) - Aid farmers' financial management and value chain deliberations.



**AgriPrice** (2.6 stars, 100-500 installs) - provides farmers and consumers with accurate and timely data for the trade of produce locally.



**AgriMaps** (4.5 stars, 1000-5000 installs) - provide farmers, extension officers and agricultural investors with accurate land use information in real time.



**SR-Market** (5 stars, 100-500 installs) - aids interaction between buyers and sellers of goods in the Small Ruminants Industry.



**SR-Learn** (50-100 installs) - a Caribbean Small Ruminants Industry e-learning platform.



**ICT4SDG** (5 stars, 100-500 installs) - helps users to understand the ICT activities needed to support the individual targets of the United Nation's Sustainable Development Goals.



# ECONOMIC



## PRIMING THE COMMERCIALIZATION PIPELINE

Several projects funded by the RDI Fund have demonstrated techniques or new findings which have commercialization potential and can contribute to the diversification of our economy.

**Some projects developed rapid diagnostic methods and set up the requisite facilities to provide services:** Professor Jayaraj Jayaraman's project in the area of antibiotic resistance, Professor Christopher Oura's project in diagnosing pathogens in pigs and poultry and Professor Christine Carrington's project in the area of dengue detection.



Dr. Davinder Sharma's project, with the **setup of the region's first smart grid lab**, is now poised to be able to **provide paid up services**, including training and certification. The smart grid project also **produced advances in microbial fuel cell design and optimization, developed a smart home prototype, prototyped a device to enable consumers to monitor their energy usage and developed a mobile app to display potential failed components on the grid in real time.**



Dr. Govind Seepersad's project on citrus production demonstrated new technologies and research on new applications for citrus production field layout, management and harvesting with a view to revitalizing the industry by significantly increasing crop yield and lowering harvesting costs. This project's research activities led to the **establishment of an eight acre demonstration citrus orchard at the UWI South Campus**. Several farmers have already visited the field to observe the practices and the project team has **worked with the Tobago House of Assembly to establish a similar orchard in Tobago.**



Several projects funded in the RDI Fund's third call for proposals (projects led by Dr. Saravanakumar Duraisamy, Dr. Wendy-Ann Isaac and Dr. Govind Seepersad) also have implications for commercialization as they seek to develop new and more efficient methods for controlling pests, irrigation, and crop management.



# CULTURAL



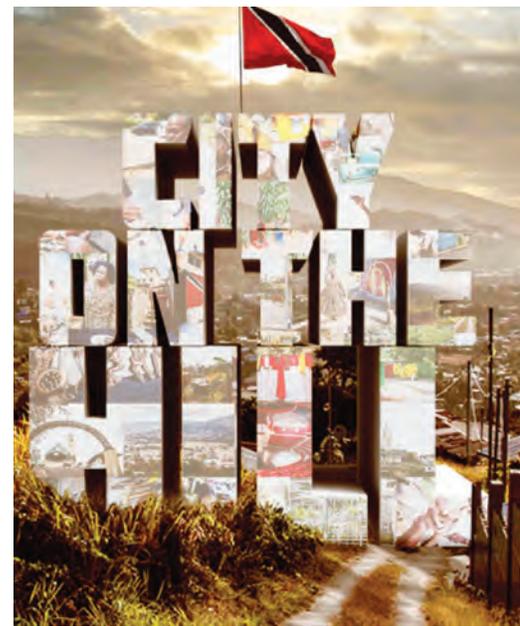
## PRESERVING HERITAGE

Dr. Asad Mohammed's project on the Built and Cultural Heritage in East POS has resulted in a better understanding of the history of development in the area and an awareness of associated activities seeking to stimulate economic activity in the area.

The project team has also created maps detailing the built and cultural heritage of Belmont, Piccadilly and Picton which are being structured in GIS format for easy accessibility by other researchers and policy makers. Based on the spatial data collected and the engagement of community stakeholders, the project team was

able to **develop an innovation model to be used to leverage the built heritage and cultural assets of EPOS into wealth creation, business start-ups and sustainable livelihoods.**

As part of the research activities of the project, the documentary "City on the Hill" was produced. The documentary captures the built and cultural heritage of East Port of Spain and explores how the contributions made by this urban settlement may be harnessed for economic growth. It is quite noteworthy that this **documentary won the People's Choice award at the Trinidad and Tobago Film Festival 2015.**



Dr. Benjamin Braithwaite's project on heritage languages resulted in **the first deaf native signer of Trinidad and Tobago Sign Language being employed as an interpreter at a major national event**, The 2015 National Budget Presentation. This has become a staple feature of the annual budget presentation since.



## TACKLING ANTIBIOTIC RESISTANCE

Professor Jayaraj Jayaraman's project team **characterized at least 500 isolates of bacterial pathogens from hospitals across Trinidad and Tobago.** The team successfully **developed rapid high-throughput diagnostic procedures for determining antibiotic resistance as well as monitoring the prevalence and emergence of strains.**

The techniques developed by this team have the capability **to reduce current diagnostic times in Trinidad and Tobago from several days or even weeks to a few hours.** Some of the isolates tested

could not be detected using PCR techniques and could potentially include some novel strains.

The project team successfully **established an antimicrobial resistance working group in Trinidad and Tobago** consisting of approximately 40 members who meet regularly including microbiologists, lab techs, researchers, students, health professionals, health authority representatives, physicians, policy makers and members of local communities. The team has hosted one highly subscribed training session on the new techniques and stakeholders have expressed strong interest in an annual opportunity to avail themselves of such training.



# ENVIRONMENTAL



## VALUING ECOSYSTEMS

Professor John Agard's project in the Caroni Swamp has allowed stakeholders and high-level policy makers to access capacity building support in the area of economic valuation of ecosystem services and the implications for policy and decision making. **As a result of the work done on the project and the engagement with key stakeholders, the GORTT was approached by UNEP to be involved in a GEF funded project to incorporate valuation of ecosystems in the National Accounts.**

Findings from this project also resulted in **the commissioning of the project team to design the methodology and analyze the data collected for a National Wildlife Survey**, the first in the region. To date, more than 90 people from CBOs, NGOs, conservation groups and hunters have been trained in the field methodological techniques used in conducting the national wildlife survey. **Since then the project team was also commissioned by the THA to perform a Tobago Wildlife Survey.** The skills and data developed are also being used in a **GEF/FAO Ecological Baseline Study, the results of which will inform management plans for six protected areas:** Matura, Caroni Swamp, Nariva Swamp, Trinity Hills, Speyside and Main Ridge.



The project's activities have resulted in the identification of new species in the Caroni Swamp. It has also helped in the identification of the uses of the swamp and the specific locations therein for extraction of goods and services by various stakeholders including crab catchers, vendors, poachers, tour boat operators and recreational users. The project's research activities have resulted in several key findings which will provide

data for sound policy development in biodiversity and natural resource management.

One such finding will impact on the areas in the swamp designated as protected areas as it was found that some areas which may need to be considered for protection currently lie outside of the existing boundaries.

# SOCIETAL



## QUALITY OF LIFE

Several projects have societal impacts, and a few of these address some of the critical challenges facing our society today. Addressing the issue of crime, Professor Derek Chadee and his team **completed the first nationwide crime and victimization survey** which provided much needed data on crime victimization, an estimation of the 'dark figure' of crime and an in-depth assessment of fear of crime levels in Trinidad and Tobago. **The Trinidad and Tobago Police Service (TTPS), recognizing the value of this project from inception, came on board very early with more than**

**a half million TT dollars in counterpart support.** The TTPS has also expressed an interest in conducting a national crime victimization survey biennially.

The findings and recommendations are already being used by the TTPS to inform their strategic planning to reduce crime nationwide. **Key insights from this project also contributed to the development of interventions and policies to reduce crime victimization and fear of crime by several key stakeholders,** including government ministries, non-governmental organizations, community-based organizations, various branches of national security, and the business community.



Professor Patricia Mohammed's project addresses another critical challenge: work/life balance. This project is already achieving interesting outcomes through the development of indigenous methodologies and leveraging local and regional partnerships, particularly with the private sector. In Trinidad, the team has developed a collaborative

partnership with T&TEC which saw the group **conducting work/life balance seminars at each of T&TEC's 13 station locations** throughout Trinidad and Tobago, interfacing with more than 500 staff members. The group is **also partnering with NIBTT to do similar activities as well as examine issues related to the retirement age.**



## WASTE MITIGATION AND LANDFILL REMEDIATION

Dr. Denise Beckles' project at the Guanapo Landfill produced a comprehensive report on the chemical, hydrological and environmental aspects of the landfill, inclusive of recommendations for mitigation which became the subject of a Joint Select Committee Meeting of the Trinidad and Tobago Parliament and numerous media reports. The report has since been used to direct SWMCOL policy as well as provide information to the Land Settlement Agency (LSA).

**SWCOL has adopted several of the recommendations** made by the project team in their final report which was submitted to both SWMCOL and WASA, including waste diversion strategies to limit the amount and type of waste entering the landfill. On the basis of the data and recommendations provided in that report, **SWCOL requested funding from GORTT PSIP 2016 to fund the implementation of mitigation strategies at the Guanapo landfill.** In fact, the project report was submitted with the application to provide scientific justification for the request. The application was successful and **SWCOL was granted TT\$1M to establish a pilot leachate treatment system scheduled to be installed in 2017.**

Based on this successful collaboration, **SWCOL** was subsequently named as the host of a GEF funded **contaminated site remediation demonstration project** which is part of a larger regional project entitled “Development and Implementation of a Sustainable Management Mechanisms for POPs in the Caribbean”. This project partnership has also resulted in the development of a much longer term **university-industry collaborative relationship** as SWCOL continues to allow access to their

sites for research purposes to both undergraduate and postgraduate UWI students, with two new student projects currently underway examining the efficiency of new leachate treatment systems at SWCOL.

**The LSA has also used the project’s data to better evaluate the relocation efforts it was considering in the interest of the illegal residents currently residing at the landfill.**



# TEACHING/TRAINING



## SKILLS DEVELOPMENT AND CAPACITY BUILDING

Most of the projects funded have had significant teaching and training outcomes, many of which go beyond the classrooms of The UWI. However, it is important that the research that is being undertaken is also informing the training of our graduates, ensuring that the knowledge they are gaining is at the cutting edge in their respective fields.

Dr. Govind Seepersad's Citrus project produced three citrus technology videos which have been used for training of farmers and students as well as disseminated online. These videos looked at issues affecting the industry regionally and internationally, trained viewers on grafting methods, and new technologies to improve competitiveness and resilience to the greening diseases. **Two of these videos are currently being used for the preparation of CAPE students by the Ministry of Education.**

Dr. Benjamin Braithwaite's project on Endangered languages has resulted in **new courses being introduced at The UWI in Patois and Trinidad**



and Tobago Sign Language (TTSL) resulting in more people learning these languages as adults than ever before. This project created language archives for TTSL, Patois and Bhojpurī as well as 11 podcasts documenting the three languages. The project's activities also resulted in the creation of a TTSL medical information website: [deafft.com](http://deafft.com) to provide crucial medical information to deaf people in T&T in their native language TTSL. **This information has never been publicly available before.**

The AIMS project, led by Dr. Saravanakumar Duraisamy has hosted **several training sessions on diagnosis and biological control of pests and**

**diseases, training more than 50 farmers as well as 23 agricultural extension officers from the Ministry of Agriculture.**

The ADOPT project, led by Dr. Wendy-Ann Isaac, has developed several training modules, including some units which are now income earning. **The ADOPT team has trained over 275 persons to date in protected agriculture techniques,** including children as young as 5 attending their summer camps.

Dr. Sameer Dhingra's team has **educated more than 240 health care professionals throughout Trinidad and Tobago to date on adverse drug reactions and the importance of reporting compliance.**

# ORGANIZATIONAL



## REPOSITIONING THE COCOA RESEARCH CENTRE

The Cocoa Research Centre, led by Professor Pathmanathan Umaharan, put forward a proposal for funding from the RDI Fund which sought to leverage the genetic comparative advantage of the International Cocoa Gene Bank to attract funding for cocoa research. The research activities conducted by the CRC as part of its RDI Fund grant have attracted significant local, regional and international attention since the project was approved in 2012. This attention has allowed this project to emerge as a star among the projects funded by the RDI Fund in terms of

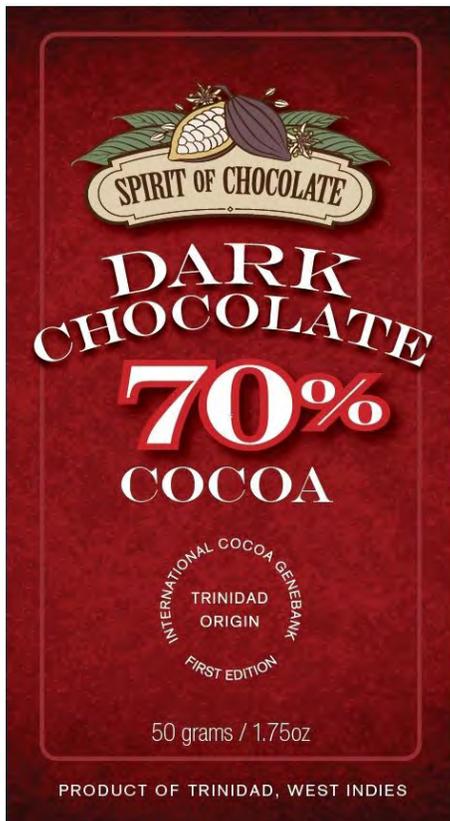
attracting counterpart funding to support the research mandate of the CRC as well as proving its relevance to its stakeholders and potential beneficiaries.

In 2012, the CRC proposed to leverage the genetic resources of the over 2200 varieties of cocoa held in the International Cocoa Genebank to transform the CRC into a world renowned research centre. The destiny of the CRC was very intricately woven into the RDI Fund project as the project is engineered to stimulate research in the functional research groups of the Centre: Conservation, Genomics, Pathology, Quality, Agronomy, Form and Function and Value Addition.

The overall goal of the project was to understand the genetic control and the identifying markers for various functional traits of cocoa including yield, pod characteristics, disease resistance, cadmium bioaccumulation, rooting characteristics and flavor. Ready access to the largest collection of cocoa varieties in the world presents a significant comparative advantage in the performance of these genomic studies. Many major global players have taken note of this and are coming onboard to support the CRC's research mandate. The CRC has now been repositioned as a global cacao DNA reference centre and is uniquely poised to exploit the resultant competitive advantages in terms of the products and services it can potentially offer.

In addition to the \$24 million in counterpart support attracted while the project was being implemented,





the project has been successfully leveraged to attract substantial follow-on funding due to the collaborative relationships established with local, regional and international collaborators along the entire value chain.

**Based on the early research successes of the project, the EU/ACP committed € 2.6 million to establish the International Fine Cocoa Innovation Centre.** The Centre will seek to seed innovations along the entire cocoa value chain based on CRC's research output and international best practices, facilitating technology development and transfer. Through this Centre, the CRC will provide training on all aspects of the value chain, serve as a pilot demonstration facility for showcasing best practices and provide a range of technology and business services which will include traceability, certification, incubation and other technology

services. This three-year project commenced in March 2014 and has already **supported the virtual incubation of three startups** and provided technical support for industry, institutions, networks and NGOs.

**The CRC was also able to leverage on its early results on cadmium bioaccumulation to secure €500,000 in funding from ECA/CAOBISCO/FCC for a 5 year project on mitigation of cadmium in cocoa.** The project was initiated in June 2014 and has already garnered interest throughout the Caribbean and Latin America, due to the implications of cadmium bioaccumulation in cocoa as a food safety issue and the potential effects it can have on cocoa exports from these regions to the lucrative European market.

**The MARS chocolate company is also funding a joint cocoa genome sequencing project, where the CRC/UWI has partnered with Stanford University in the US. This project has received US\$200,000 in funding and, upon its completion, will position cocoa at the forefront of genomics with the most accumulated genomic information for any crop.** The USDA has also provided US\$120,000 in funding to the CRC to conduct additional genomic studies to map genes for self-incompatibility, a trait that adversely affects cocoa yield.

Based on the fermentation research activities in the CRC's RDI Fund project, **the CRC also launched a chocolate bar** which has been widely acclaimed as a top bar. The Trinidad Fundare bar, rebranded in collaboration with Woodblock Chocolate based in the US as a conservation bar, retails at US\$100 per bar. All proceeds from the sale of the bar contribute to the maintenance and sustainability of the International Cocoa Genebank's "living library" of cacao.

In addition to consultancies with local, regional and international farmers, and providing training for farmers, chocolatiers and other key stakeholders along the value chain, the CRC is also now in a position to offer several other commercial services to local, regional and international clients, **already earning more than US\$38,600**. To date the CRC has provided certification, postharvest support, chocolate making support, DNA fingerprinting, breeding support and diseases screening services for clients throughout Latin America and the Caribbean region including Belize, Jamaica, Nicaragua, Honduras, Bolivia, Peru, Ecuador, Colombia, Grenada, Dominica, Haiti and the USA, **positioning the Centre to be a notable foreign exchange earner**.

**The CRC has also played an instrumental role in the creation of new networks** such as: The Partnership in Conservation (a network of 57 farmers representing all the cocoa producing regions of Trinidad and Tobago), the Chocolate Guild (a network of chocolatiers, bakers and chefs who use local cocoa in their product

development), CocoaNext (a network of regional cocoa stakeholders – nationals, NGOs and other groupings), Cacaonet (a global body committed to the conservation of cacao genetic resources), and the Caribbean Cocoa Breeders Network.

The RDI Fund approach not only helped to streamline the research project but facilitated data collection and analysis, thus enabling a more astute selection of research partners, aligning the research agenda more closely to the needs of their stakeholders and making their work more attractive for external funders. Consequently, since the project's completion, a number of new projects have been developed leveraging the outcomes of the project as well as the relationships, partnerships and collaborations established during its implementation, attracting additional research funds, as well as funding for developmental projects and outreach activities. As a result, the project **has attracted approximately TT\$18.3M in follow-on funding**. The CRC has thus been able to widen the scope and reach of its research agenda, becoming even more embedded in the value chain.



# REPUTATIONAL



## AWARD-WINNING RESEARCH

The reputational impacts accruing due to the activities of RDI Fund projects are numerous and include both the tangible and the intangible. Focusing on the tangible, **project teams have been awarded several UWI-NGC Research Awards in 2016** including the category “Best Research Team - Encouraging Multi-Disciplinary Research” (Dr. Margaret Bernard, Dr. Nelleen Baboolal and Dr. Denise Beckles) and to Dr Beckles’ team for Most Impacting Research Project.

The AgriNeTT team, led by Dr. Bernard, also garnered international acclaim. The team was recognized by the 2016 World Summit on the Information Society (WSIS) for its contribution to the United Nations’ Sustainable Development Goals (SDGs). **AgriNeTT was among five projects from around the world selected in the e-Agriculture category at WSIS Forum 2016** linked to SDG Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

The AgriNeTT team was also selected by the Latin American and Caribbean Internet Address Registry (LACNIC) for the FRIDA Award 2016 for its contribution to Digital Innovation in Latin

America and the Caribbean. **The AgriNeTT project was one of two winning awards decided by the LACNIC Selection Committee after evaluating 551 proposals submitted from 23 Latin American and**

**Caribbean countries.** The award presentation took place at the Internet Governance Forum in Mexico in December 2016.



**SUPPORT  
&  
SUCCESS**





# FUNDING

## USE OF FUNDS

Since the Fund's sole donor, the GORTT, took a decision to defund the RDI Fund in 2013, that funding has not been reinstated and no new donor has come on board. As such, the RDI Fund continues to operate on funding that was committed before 2013. Given the current financial standing of

the Fund, as well as the challenging economic and strategic environment, the Fund's Technical Evaluation Committee continues to maintain its position that as much of the Fund's financial resources as possible will be dedicated to funding projects.

## APPROVED PROJECTS

Climate Change & Environmental Issues				
Year Awarded	Title of Concept Note	Team Leader	Amount Awarded \$TTD	Status
2012	Evaluation of the Economic Value of Caroni Swamp: Implications of Climate Change using the UNEP TEEB protocol	Prof. John Agard	\$954,854	Completed
2012	The Impact of the contaminants produced by the Guanapo Landfill on the surrounding environment	Dr. Denise Beckles	\$1,000,000	Completed
2013	Terrestrial Flood Risk and Climate Change in the Caroni river basin: Adaptation Measures for Vulnerable Communities	Dr. Matthew Wilson	\$550,000	Scheduled End Date 2-Dec-15
2015	Society, turtles and environmental change in Grande Riviere Bay-towards sustainable management of a vulnerable community: an investigation into the interrelationships between terrestrial and coastal systems which impact the beach habitat of the endangered leatherback turtle.	Dr. Junior Darsan	\$300,000	Scheduled End Date 31-Oct-17
2015	Promoting Agriculturally Important Microorganisms To Address The Challenges In Food Safety And Food Security In The Caribbean	Dr. Saravanakumar Duraisamy	\$600,000	Scheduled End Date 30-Apr-18
2015	Technological Solutions for improved Agro-environment and Sustainability of Agricultural Development	Dr Wendy-Ann Isaac	\$332,800	Scheduled End Date 30-Apr-18

2015	An Assessment of the Beach Erosion and the Coastal Flooding Hazards at selected sites along the Trinidad and Tobago coastline through correlation analyses of the short- to medium-term variations in the morphological, hydrodynamic and environmental conditions and through detailed numerical modelling.	Dr. Deborah Villarroel-Lamb	\$400,000	Scheduled End Date 30-Apr-18
			<b>\$4,137,654</b>	
<b>Crime, Violence &amp; Citizen Security</b>				
2012	Analysis of Intervention and Counseling for At Risk Youth to Reduce Crime, Violence and to Improve Outcomes for the Individual, The Schools, and the Family	Dr. Sandra Celestine	\$500,000	Completed
2012	A Multi-centre phase 3 cluster randomized controlled trial of a manualized anger management intervention for prisoners at risk for uncontrolled anger and aggression	Prof. Gerard Hutchinson	\$999,396	Completed
2013	Crime Victimization and Fear of Crime Survey in Trinidad and Tobago	Dr. Derek Chadee	\$549,600	Completed
2013	Adult Sexual and Physical Intimate Partner Violence Survey & Public Health Intervention (ASaP IPV Survey & Public Health Intervention)	Prof. Gerard Hutchinson	\$547,000	Cancelled
2013	A Matter of Survival: A life course approach to understanding the decision-making and economic livelihoods of school dropouts in T&T	Dr. Priya Kissoon	\$500,000	Completed
2015	Situational Analysis of Children of Prisoners in Trinidad and Tobago	Ms Karene-Anne Nathaniel	\$258,400	Cancelled without Prejudice
			<b>\$3,354,396</b>	
<b>Economic Diversification and Sector Competitiveness</b>				
2012	Understanding Built and Cultural Heritage in East Port-of-Spain	Dr. Asad Mohammed	\$800,000	Completed
2012	Towards Re-development of a Competitive Citrus Industry in Trinidad and Tobago and the Greater CARICOM Area	Dr. Govind Seepersad	\$600,000	Completed

2012	Leveraging the International Cocoa Gene Bank to Improve Competitiveness of the Cocoa Sector in the Caribbean, using modern genomics	Prof. Pathmanathan Umaharan	\$1,500,000	Completed
2013	Language and Competitiveness: Positioning T&T for Sustainable Development	Dr. Beverly-Anne Carter	\$500,000	Completed
2015	Genetic Evaluation, Breeding and Propagation of Germplasm for the development of Dairy Goat Industry in Trinidad and Tobago	Dr. Nandakumar Puliath	\$300,000	Cancelled
			<b>\$3,700,000</b>	
<b>Public Health</b>				
2012	Use of next generation molecular and evolutionary epidemiology to strengthen surveillance and develop models to predict and prevent the spread of Dengue	Prof. Christine Carrington	\$800,000	Completed
2012	Identification of the reservoirs of animal influenza viruses in Trinidad and Tobago	Dr. Christopher Oura	\$800,000	Completed
2012	Surveillance, characterization and management of antibiotic resistance in common bacterial pathogens in Trinidad and Tobago	Dr. Jayaraj Jayaraman/ Dr. Patrick E. Akpaka/ Dr. Adesh Ramsubhag	\$550,000	Scheduled End Date 2-Jun-16
2013	Noise Induced Hearing Loss in Various Occupations / Environments in Trinidad and Tobago	Dr. Ricardo Clarke/Dr. Nikolay Zyukiov	\$330,000	Scheduled End Date 4-Jun-16
2013	Mitigating the Dementia Tsunami in Trinidad and Tobago	Dr. Gershwin Davis/ Dr. Nelleen Baboolal	\$550,000	Completed
2013	An investigation into the Trajectory of Neurobehavioural Development of Primary School Children in Trinidad and Tobago	Dr. Farid Youssef	\$464,000	Scheduled End Date 21-Nov-16
2013	A New Volcanic Emissions Monitoring Network: Integrating Community Engagement and Public Health Hazard Management through the application and transfer of low-cost technology	Dr. Erouscilla Joseph	\$298,610	Completed

2015	Pharmacovigilance Programme for Assuring Medication Safety in Trinidadian Population	Dr. Sameer Dhingra	\$198,000	Scheduled End Date 30-Apr-18
			<b>\$3,990,610</b>	
<b>Technology &amp; Society: Enhancing Efficiency, Competitiveness &amp; Social and Cultural well-being</b>				
2012	Documentation and Digital Development of Heritage Languages in Trinidad and Tobago	Benjamin Braithwaite	\$249,768	Completed
2012	AgriNett, An Agriculture Knowledge ePortal: Research on Intelligent Decision Support for enhancing Crop and Livestock Enterprise Management	Margaret Bernard	\$800,000	Completed
2013	Capacity Building and Research on Smart Grid Technology in the Caribbean Region	Dr. Davinder Sharma	\$500,000	Scheduled End Date 22-May-16
2015	Work/Life Balance; Its Impact on the Productivity of Working Men and Women and on the Wellbeing of Ageing Populations in Trinidad	Prof. Patricia Mohammed	\$300,000	Scheduled End Date 30-Apr-18
2015	Development of advanced precision agriculture techniques for crop management and risk assessment in Trinidad and Tobago	Dr Govind Seepersad	\$400,000	Scheduled End Date 30-Apr-18
			<b>\$2,249,768</b>	

## FUNDING/PROJECTS BY FACULTY

### FACULTY OF MEDICAL SCIENCES



### FACULTY OF SCIENCE & TECHNOLOGY



### FACULTY OF FOOD & AGRICULTURE



### FACULTY OF SOCIAL SCIENCES



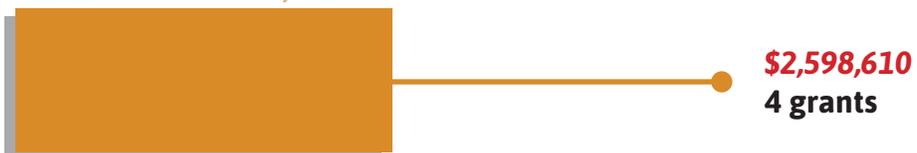
### FACULTY OF HUMANITIES & EDUCATION



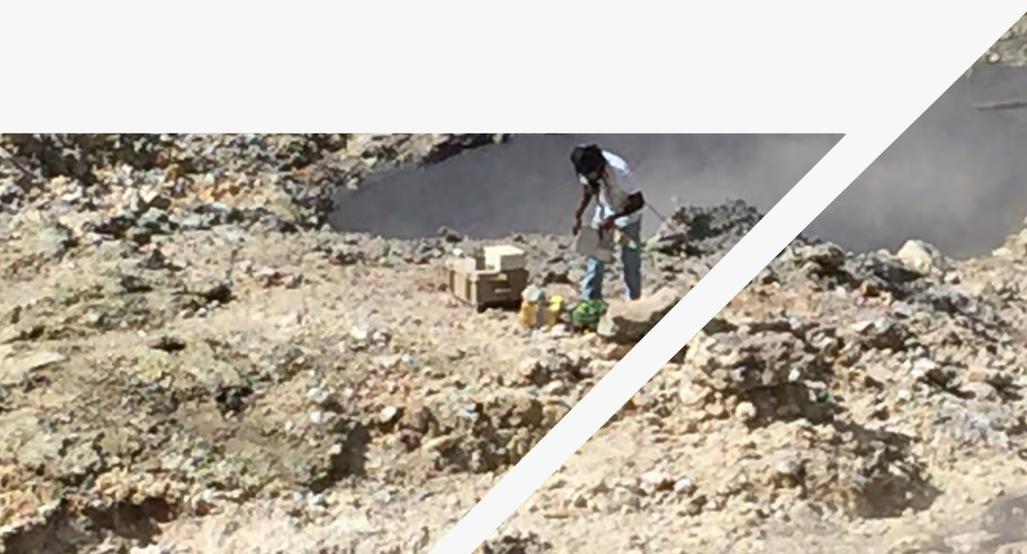
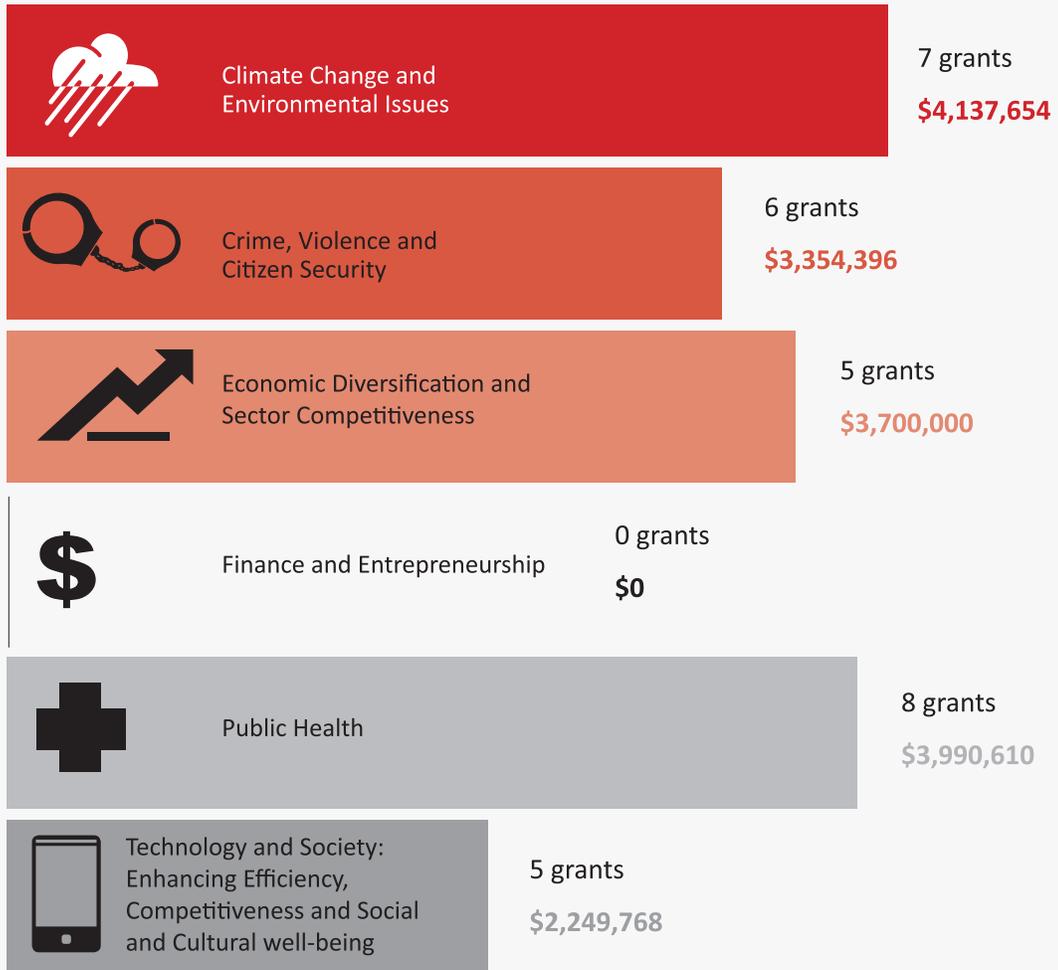
### FACULTY OF ENGINEERING



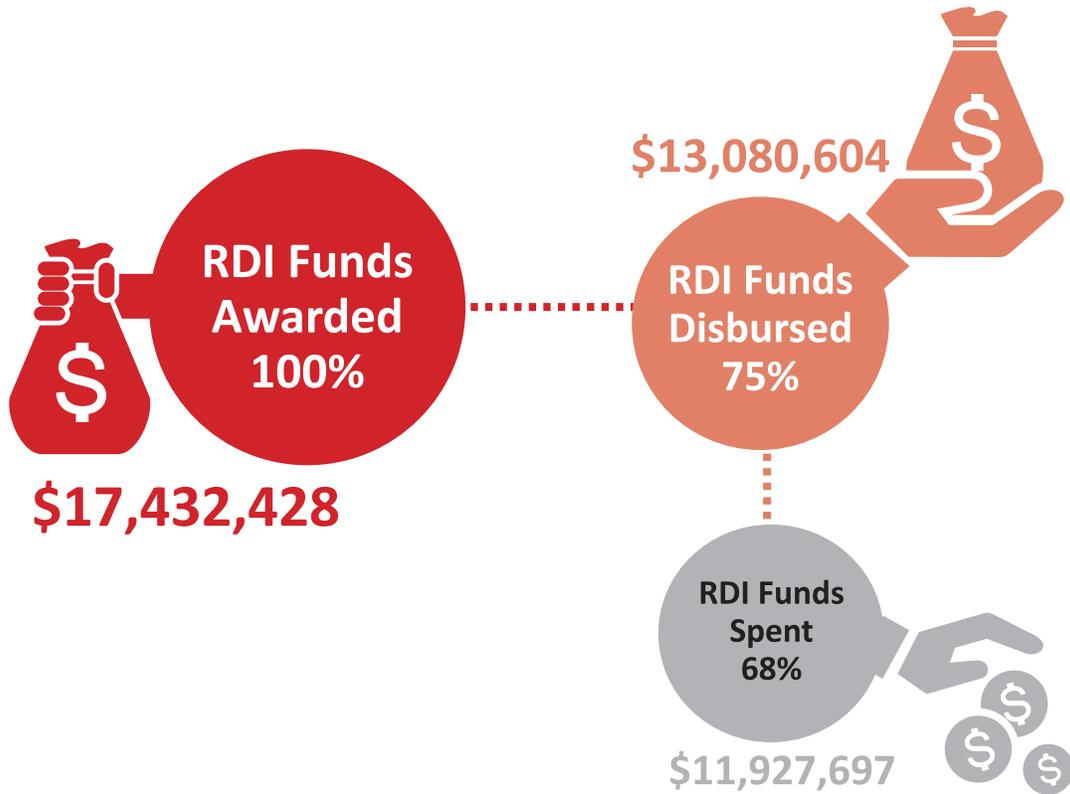
### RESEARCH UNITS, CENTRES & INSTITUTES



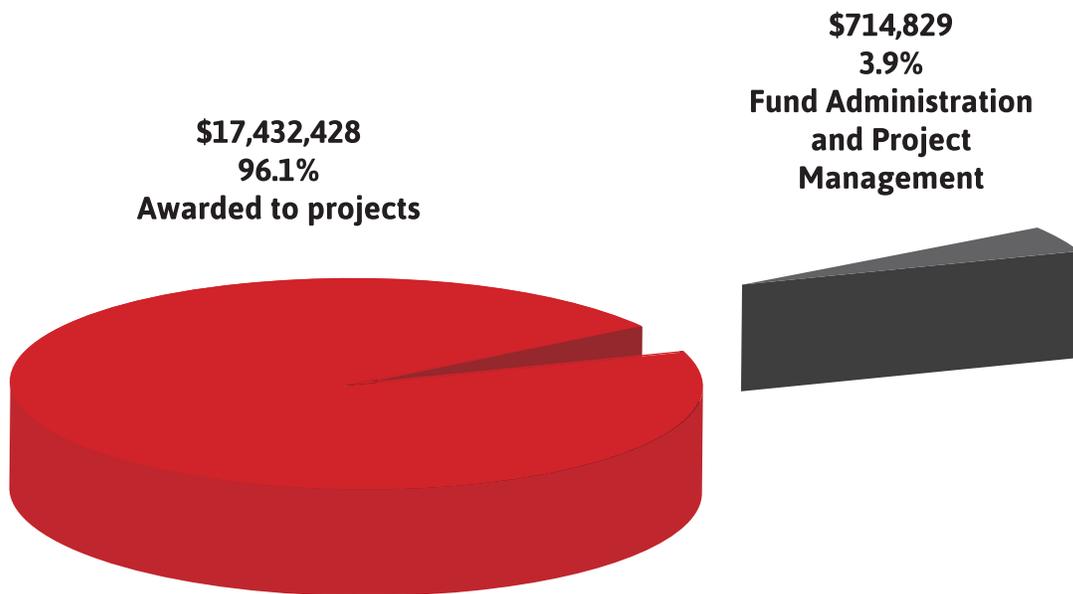
## FUNDING/PROJECTS BY THEMATIC AREA



## FUNDING AMOUNT AWARDED/ DISBURSED/ SPENT

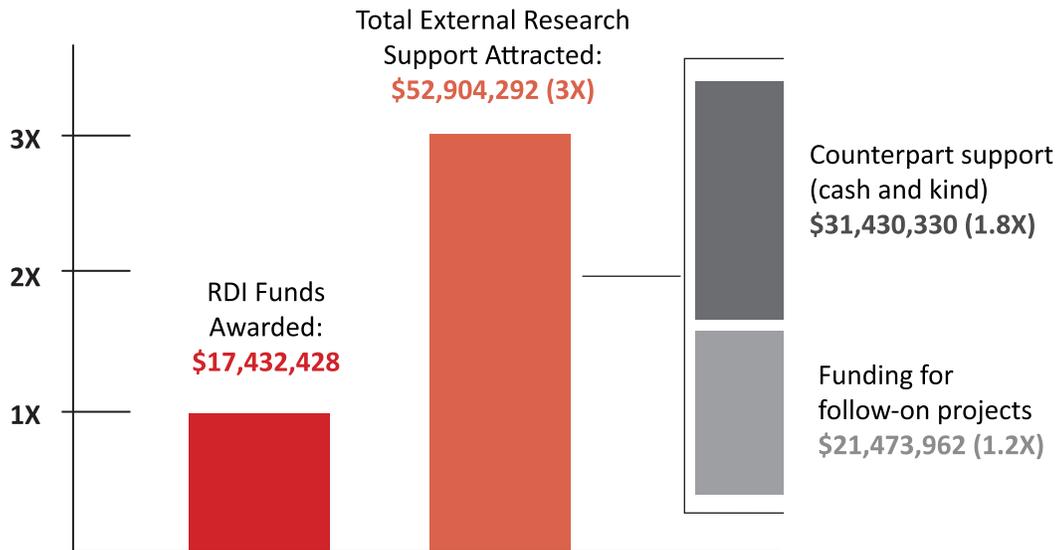


## RDI FUND EXPENDITURE (2012-2016)

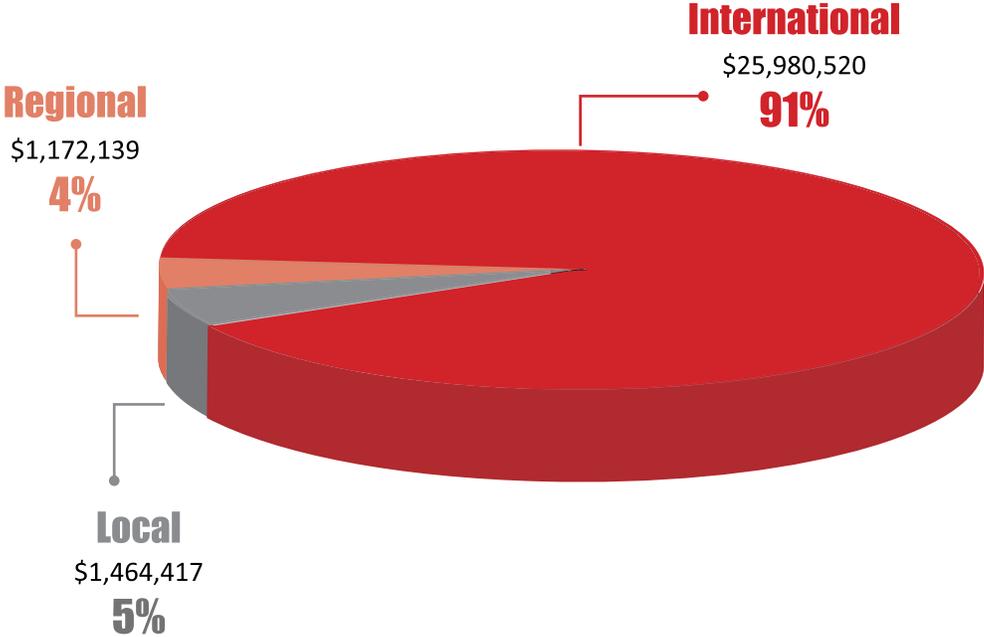


# EXTERNAL FUNDING

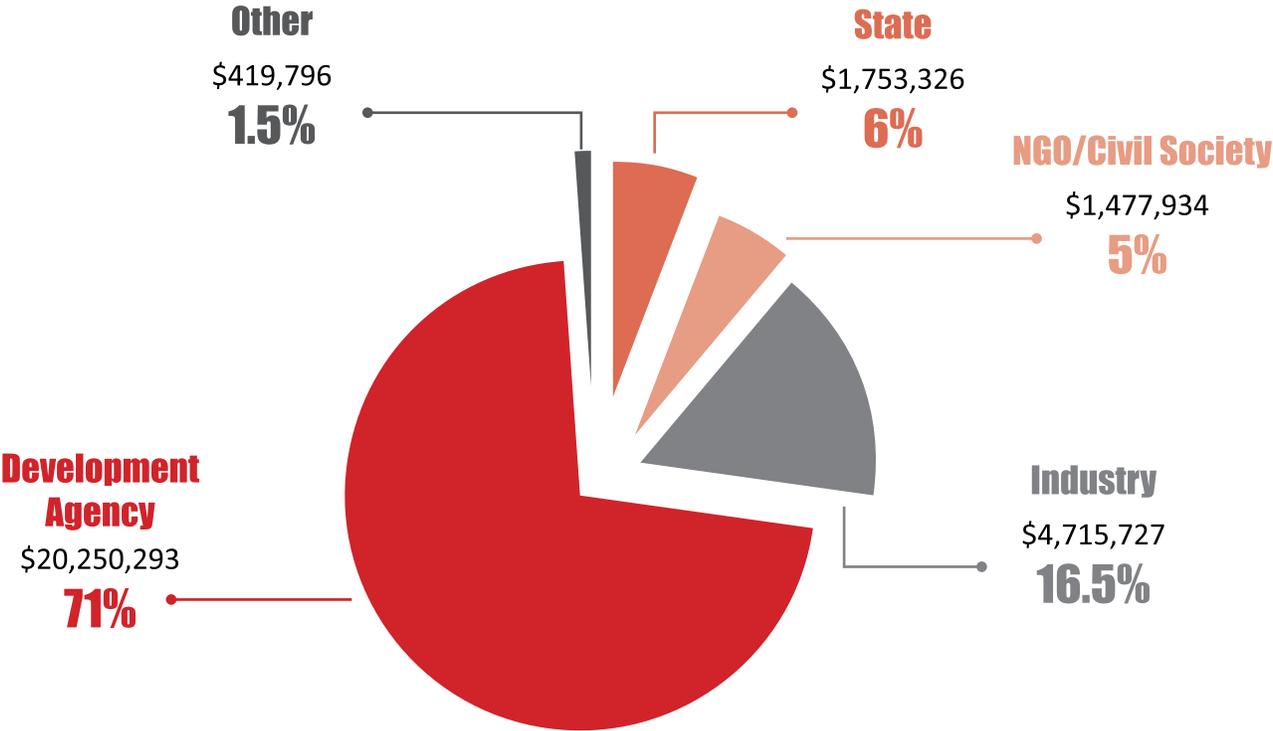
## EXTERNAL FUNDING SUPPORT ATTRACTED



**COUNTERPART FUNDING SOURCE (GEOGRAPHIC LOCATION)**

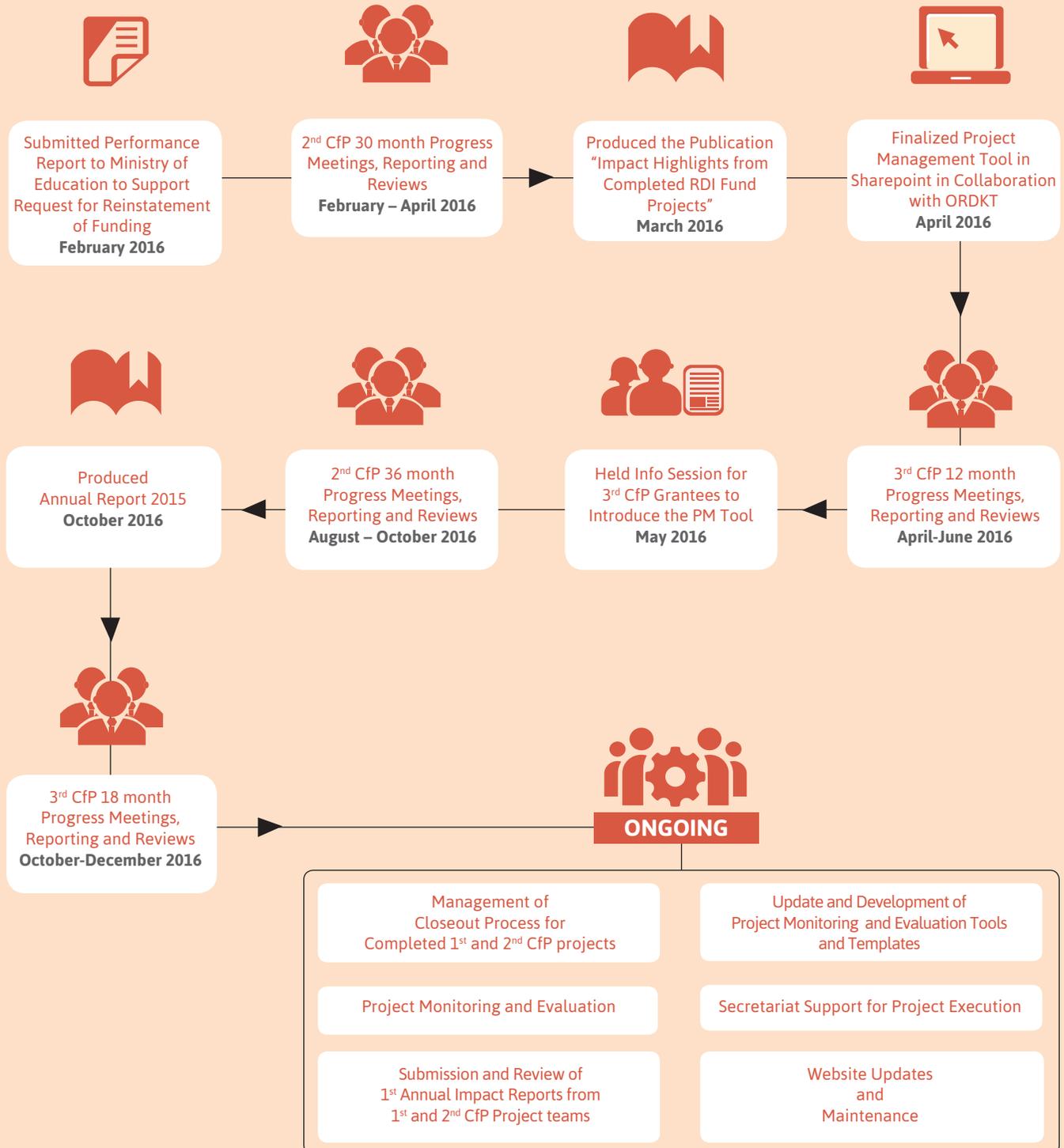


**COUNTERPART FUNDING SOURCE (SECTOR)**



# PROGRESS

## RDI FUND WORK PROGRAMME



# VISIBILITY



ExporTT CEO: Faster growth needed



Wesley Gibbings  
Published: Wednesday, January 13, 2016

Chief executive officer of ExporTT Adrian Theodore is arguing that the country needs to urgently move out of its 'incremental' approach to development and begin seeking 'exponential answers'.

Theodore's remarks came as the University of the West Indies' (UWI) Centre for Language Learning (CLL) launched its Language and Competitiveness website Monday and discussions followed on the value of foreign language competencies in the conduct of business and trade.

"We are in an age where we need to seek exponential answers in terms of our growth," Theodore said.



Two-day training on plant disease diagnosis

Published on Jul 19, 2016, 11:00 pm AST



Successful completion: Senator Avinash Singh, Parliamentary Secretary in the Ministry of Agriculture, Land and Fisheries presents a certificate of completion to agricultural extension officer, Jyoti Singh.

A two day training on Plant Disease Diagnosis was conducted in the Department of Food, Faculty of Food and Agriculture, The University of the West Indies, St Augustine from July 13 to 14 to agricultural extension officers of Trinidad and Tobago.



## Painter of memories

THESE ARE THE BEST OF TIMES for the painter of memories. The artist, who has spent the last 15 years of his life painting memories of his childhood, is now in his 70s and is still painting. The artist, who has spent the last 15 years of his life painting memories of his childhood, is now in his 70s and is still painting. The artist, who has spent the last 15 years of his life painting memories of his childhood, is now in his 70s and is still painting.



Good Morning T&T Live Telecast in C TV on 14 July, 2016  
294 views  
Published on Sep 1, 2016  
Training in Plant Disease Diagnosis

## AgriNetT Wins Global Recognition

Recognized for contribution to SDGs

AgriNetT, an Agriculture project within UWI, has been recognized for its contribution to the Sustainable Development Goals (SDGs) by the International Development Research Centre (IDRC). The project is recognized for its contribution to the Sustainable Development Goals (SDGs) by the International Development Research Centre (IDRC).



WORK/LIFE BALANCE AND AGEING NEWSLETTER

ISSUE 1 | NOVEMBER 2016

UWI, RDI/FUND, IGDS, SOCIAL WORKS UNIT

### WORK/LIFE BALANCE AND AGEING NEWSLETTER

ISSUE 1 NOVEMBER 2016

This issue serves as a compendium of project activities from December 2015 to September 2016.

**CONTENTS**

- Update on our Partners
- Data Collection
- Logo and Website Launch
- Conferences
- Outreach and Other Activities

The Institute for Gender and Development Studies (IGDS) and the Social Work Unit, Department of Behavioural Sciences, Faculty of Social Sciences is currently engaged in a three-year project entitled: Work/Life Balance and Ageing in Trinidad: Studying the Productivity and Wellbeing of Working Men and Women, funded by the Research Development Impact Fund of The University of the West Indies.

At present, the project is in its second phase, data collection. Data was collected from talking circles, journaling and interviews. Secondary data was also collected. Data analysis is ongoing and will be carried out in greater detail when the data collection is completed. Further information can be found on page two.

Several opportunities have arisen to engage in outreach activities as well as to present at various conferences. During this time a logo for the Work/Life Balance project was also developed.



## STAKEHOLDER ENGAGEMENT EVENTS HOSTED BY GRANTEES IN 2016

### Dr. Duraisamy

Farmers Meeting on Crop Disease Diagnosis  
Agricultural Innovation Park (Orange Grove Farm)  
January 6

### Prof. Chadee

Effects of Crime on Victims: Police Response Seminar  
TTPS Guard and Emergency Branch, Aranguez  
February 16th

### Prof. Chadee

Procedural Justice In Legitimising Policing meeting  
TTPS Administration Building, Port of Spain  
February 16th

### Dr. Isaac

Launch of ADOPT Secondary School Competition  
UWI, St Augustine, FFA  
February 23rd

### Prof. Umaharan

International Fine Cocoa Innovation Centre (IFCIC)  
Project Focus Group Consultation - Partners in Cocoa  
Conservation 'Developing a Labour Solution for Cocoa  
Producers in Trinidad and Tobago'  
Institute of Critical Thinking, Centre for Language  
Learning, UWI, St. Augustine,  
March 3<sup>rd</sup>

### Dr. Duraisamy

CABI, Trinidad Mass Extension Event on Christophene  
Production in Trinidad  
Norris Deonarine Wholesale Market, Macoya  
March 12th

### Dr. Isaac

Launch of young growers programme (funded by  
Repsol)  
Guayaguayare RC Primary School  
March 20th



### Dr. Sharma

3rd smartgrid consultation meeting life sciences  
conference room natural sciences building UWI St  
Augustine  
March 21st

### Prof. Mohammed

Press conference and launch of project website  
and logo  
IGDS, UWI St Augustine  
March 31st

### Dr. Duraisamy

Farmers training on Pest Identification in vegetable crops  
& their management  
Agricultural Innovation Park (Orange Grove Farm)  
April 23rd

### Prof. Mohammed

Talking Circles  
UWI, St Augustine  
May 14 and 21

### Dr. Dhingra

Raising Awareness among healthcare professionals  
Sangre Grande Hospital, Arima District Health Facility,  
EWMSC, Mt. Hope, Sangre Grande Hospital, Couva  
District Health Facility  
June 22-24 and 29<sup>th</sup>  
and October 19th



**Dr. Isaac**

Adopt Secondary Schools competition finals  
UWI, St Augustine

**June 30th**

**Dr. Isaac**

Adopt summer camp AGRO-GALAXY 21st century  
UWI, St Augustine FFA

**July 11-22**

**Dr. Duraisamy**

Plant Disease Diagnosis for Agricultural Extension  
Officers

UWI, St Augustine FFA  
July 13th and 14th

**Dr. Sharma**

Smart Grid Cyber Security Training  
Design Office 1, 2nd Floor, Engineering Block 13, The UWI  
St. Augustine Campus

**5th August**

**Prof. Jayaraman**

Bacterial antibiotic resistance and new  
molecular methods for identification of drug resistance  
Training Workshop  
Conference Room, Department of Life Sciences, Faculty  
of Science and Technology

**16th August**



**Prof. Mohammed**

T&TEC work/life balance lecture series

**August - October**

1. Head Office - #63 Frederick Street, Port-of-Spain
2. Distribution North - Corner Park and Flament Streets, Port-of-Spain
3. Mt. Hope - Stanley P. Ottley Building, #7 Uriah Butler Highway(North), Mt. Hope
4. Distribution East - Tumpuna Road, Arima
5. Distribution Central – Point Lisas Boulevard, Couva
6. Distribution South - LP 75-77 Gooding Village, San Fernando
7. Supplies Department - L.P. 846 Southern Main Road, King Village, California
8. Distribution Tobago - Wilson Road, Scarborough
9. Public Lighting Department - 172-184 Gasparillo Bye Pass Road, Reform Village, Gasparillo
10. Transmission Division - HCU Building, Off Uriah Butler Highway, Freeport
11. Point Fortin Area Office, Depot and Customer Service Area - 71-81 Point Fortin Main Road, New Village, Point Fortin
12. Rio Claro Area Office, Depot and Customer Service Area - Naparima Mayaro Road, Rio Claro
13. Cove Power Station - Cove Industrial Estate, Tobago

**Dr. Isaac**

3 day greenhouse basics course  
Mayaro

**September 16th**

**Dr. Dhingra**

Symposium on pharmacovigilance and medication  
safety  
FMS

**October 3rd**

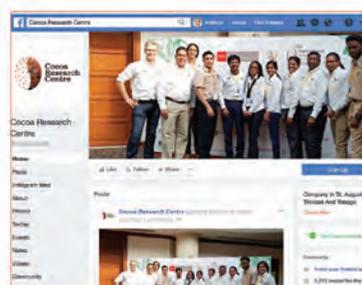
**Dr. Villarroel-Lamb**

Data Handing-over event  
Coastal Protection Unit Ministry of Works and Transport  
Head Office, 6th Floor, Corner of Richmond and London  
Street, Port-of-Spain

**December 12th**



# PROJECT WEBSITES AND SOCIAL MEDIA PLATFORMS





## **PARTNERSHIPS & COLLABORATIONS**

In addition to those already documented in previous reports, RDI Fund projects have led to new/strengthened collaborations with numerous local, regional and international partners in 2016 including:

**University of California, San Francisco (UCSF), Atreca Inc (CA, USA), Telecommunication Authority of T & T (TATT), Caribbean Industrial Research Institute (CARIRI), The Societe D'economie Mixte D'amenagement De La Ville Du Lamentin/Company of Mixed Economy of Management (Semavil) (Martinique), Trinidad and Tobago Electricity Commission (T&TEC), Rotary Club of Trinidad and Tobago, National Insurance Board of Trinidad and Tobago (NIBTT), Division of Ageing, Statistics and Social Development Unit, The United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Behavioural Management Solutions Limited, Angostura Holdings Limited, Qualitech, The National Gas Company of Trinidad and Tobago Limited (NGC), International Telecommunications Union (ITU), Caribbean Agricultural Research and Development Institute (CARDI), Forestry Division, Ministry of Health, Association of Pharmacy Professionals, Boston's Children Hospital, Harvard University, J. Craig Venter**

## **THE OUTGOING MANAGEMENT TEAM**

### **Members of the RDI Fund Technical Evaluation Committee**

#### **Chair –Professor Clement Sankat**

Former Pro Vice-Chancellor and Campus Principal  
University of the West Indies,  
St Augustine

#### **Professor Wayne Hunte**

Former Pro Vice-Chancellor, Research  
University of the West Indies

#### **Ms. Patricia Harrison**

Former Campus Bursar  
University of the West Indies,  
St Augustine

#### **Professor Samuel Ramsewak**

Former Dean (retired)  
Faculty of Medical Sciences  
University of the West Indies,  
St Augustine

#### **Professor Kit Fai Pun**

Former Campus Coordinator for Graduate Studies and Research  
University of the West Indies,  
St Augustine

#### **Professor Funso Aiyejina**

Former Dean (retired)  
Faculty of Humanities and Education  
University of the West Indies,  
St Augustine

## **MEMBERS OF THE RDIFUND SECRETARIAT**

#### **Mrs. Debra Coryat-Patton**

Former Senior Programme Manager  
Office of the Campus Principal  
University of the West Indies  
St Augustine

#### **Ms. Lois St Brice**

Project Management Officer  
Office of the Campus Principal  
University of the West Indies

#### **Ms. Karisse Jackman**

Senior Secretary  
Office of the Campus Principal  
University of the West Indies  
St Augustine

Contact Us:  
rdifund@sta.uwi.edu  
<https://sta.uwi.edu/rdifund/>

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The University of the West Indies, St Augustine Campus.  
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