Update on new IDRC funded project

Improving Household Nutrition Security and Public Health in CARICOM (FaN)

Alafia Samuels on behalf of the FaN Research Collaboration

HCC Caribbean NCD Forum Supporting National Advocacy in Lead up to the 2018 High Level Meeting on NCDs

April 23-25, 2018, Kingston, Jamaica
PROJECT OVERVIEW
FIRST ACTIVITIES

Prof Alafia Samuels,
Director, George Alleyne Chronic Disease Research Centre, UWI, Barbados
Principal Investigator
Goal

• Promote the sustainable production, processing, distribution, preparation, sale and consumption of safe, affordable, nutritious, high-quality Caribbean food
Follow up from 2 previous IDRC-funded projects

• Evaluation of the CARICOM Heads of Government POS Declaration 2014-2017

• Farm to Fork: 2011-2014
  – Project website: https://www.mcgill.ca/globalfoodsecurity/research-initiatives/caricom-project
  – piloted in four countries (Guyana, Trinidad & Tobago, St. Lucia, and St. Kitts & Nevis)
Farm to Fork Approach - Core elements

**Technology & Training**
- Drip Irrigation/green house prod’n.
- Post harvest quality & food safety
- Forage conservation
- Environmental quality

**Food Delivery Systems**
- Produce procurement
- School Feeding program
  - Kitchen infrastructure & HAACP
  - Menu design, diet quality & meal acceptance
  - Personnel training

**Gov’t & Community Support**
- Agriculture; Education; Health
- Community engagement
  (workshops and media)
- Regional partnerships

**Objective**
Improved child nutrition and health
Agricultural technologies for diet diversity and quality

Drip irrigation

Drip + mulching

Protected agriculture

Measuring & improving Post-harvest losses (Penetrometer)

Forage (Mulato grass) conservation for small ruminants
School Feeding Interventions and Outcomes
## Lunch Menu Change

<table>
<thead>
<tr>
<th>Menu</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
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<tbody>
<tr>
<td><strong>Control</strong></td>
<td>“Cook-up” (Rice, Chicken, Carrots, Onions)</td>
<td>Spaghetti and Turkey</td>
<td>“Cook-up”</td>
<td>Chicken Soup</td>
<td>Bread &amp; Cheese</td>
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<td></td>
<td>Sugary drink</td>
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<tr>
<td><strong>Test Menu</strong></td>
<td>Curried Mutton</td>
<td>Oven Fried Chicken</td>
<td>Stewed Turkey Wings</td>
<td>Minced Meat in Tomato Sauce</td>
<td>Vegetable Pizza</td>
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<td>Steamed White Rice</td>
<td>Seasoned Sweet Sweet Potatoes</td>
<td>Rice and Pink Beans</td>
<td>Spaghetti w Mixed Vegetables</td>
<td>(sweet pepper, tomato, carrots, corn, onions)</td>
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<td>Steamed Carrots &amp; String Beans</td>
<td>Tossed Salad (Lettuce, tomatoes, cucumber)</td>
<td>Carrot &amp; Raisin Salad</td>
<td>Lemonade/Tamarind Drink</td>
<td>Carrot- milk Drink</td>
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<td>Mixed Fresh fruit</td>
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<td>Watermelon</td>
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**FaN Overall goal**

1. Build a shared understanding amongst stakeholders of the complex adaptive systems driving local food production and consumption in English-speaking CARICOM states;

2. Implement coordinated packages of interventions within national food systems
   - that promote sustainable livelihoods of vulnerable groups, including rural populations and women, and combat obesity and diet-related NCDs.
Research question

• What are the most effective, gender-sensitive ways to improve food sovereignty, household food security, and nutrition in CARICOM states?
Aim

• To improve the quality and diversity of the diet
  – In 3 study countries (Jamaica, St Vincent and the Grenadines, and St Kitts and Nevis)
• by engaging with stakeholders
  – in designing, implementing, and evaluating integrated packages of interventions that
• address key “leverage points” within their food systems
• disseminate the lessons learnt throughout CARICOM.
Specific Objectives

A. Objectives for information collation to identify intervention components

B. Objectives to design and assess the intervention packages

•
A. Objectives for information collation to identify intervention components

Objective 1:
To describe, by gender, age and socio-economic group, the current nutritional NCD risks in children, women and men, and to investigate what factors influence their food sources and dietary patterns.

Objective 2:
To engage with stakeholders, undertake critical appraisals of available evidence and data, in order to understand how local food systems currently determine the dietary patterns of populations in the three study countries.
B. Objectives to design and assess the intervention packages

Objective 3:
Develop, implement and assess an integrated, adaptable and gender sensitive package of interventions that leverage local food systems to increase healthy eating and sustainable rural livelihoods.

Objective 4:
Work with public, private and civil society partners to expand project impact across the CARICOM region through innovative knowledge sharing, communications and policy action platforms.
Inception Workshop
Decisions

• Governance:
  – Project Advisory Committee: high level oversight
  – SWAG: Steering and Working Group
    • Researchers and Collaborators
    • Country Teams (1 rep each)

– Country Teams
  • Ministries of Health, Education and Agriculture
  • Suggested membership and TORs to be recommended by the first SWAG meeting
  • Help with Ethics approval
First Activity

- Stakeholders interviews in July in the 3 countries
- To find out
  - How the food system works
  - Possible leverage points to improve healthy eating
- To be identified: names, contact information

**Government:** Chief Technical officers or nominees from Ministries of Health, Education, Agriculture, Trade, Finance, Tourism

**Civil Society:** Consumers Association, Farmers Associations, Women’s associations, Health associations

**Private Sector:** Farmers, Manufacturers Association, Food importers, Wholesalers, Distributors, Retailers, Bottling companies, Fast food – local chains, Supermarket chains, Small shopkeepers, Street vendors,
Second Activity

• 2 Stakeholders workshop
• SVG and SKN: 20\textsuperscript{th} – 21\textsuperscript{st} Nov 2018
• JAM
  – Ministries of Health, Education, Agriculture
  – Stakeholders in the food system
    • Producers – farmers, importers, distributors, restauranteurs, shop-keepers, consumers, others
    • To review the food system
    • To recommend interventions to improve healthy eating
Research Partners and Collaborators

- **UWI**
  - George Alleyne Chronic Disease Research Centre / Caribbean Institute for Health Research
  - Public Health Group, Faculty of Medical Sciences, Cave Hill
  - Institute of Gender and Development Studies, Mona
  - HEU, Centre for Health Economics, St. Augustine
- **University of Technology, Jamaica**
- **McGill University, Canada**
- **Cambridge University, UK**
- **Canadian International Development Research Centre**
- **FAO Food and Agriculture Organisation of UN**
- **IICA – Inter-American Institute for Cooperation on Agriculture**
- **CARDI – Caribbean Agriculture Research and Development Institute**
- **CARPHA - Caribbean Public Health Agency**
- **CARICOM Health Desk**
- **CARICOM Agriculture Desk**
- **Healthy Caribbean Coalition**
- **Pan American Health Organization**
- **Ministries of Health, Education and Agriculture SKN, SVG, JAM**
Community Food and Health: Project Overview

Nigel Unwin
MRC Epidemiology Unit, Global Diet and Activity Research Group
University of Cambridge
Small Island Developing States (SIDS) (28 States)

NON-UN MEMBERS/ASSOCIATE MEMBERS OF REGIONAL COMMISSIONS (20)

- American Samoa
- Bermuda
- Commonwealth of Northern Marianas
- Guam
- New Caledonia
- Sint Maarten
- Anguilla
- British Virgin Islands
- Cook Islands
- French Polynesia
- Martinique
- Niue
- Turks and Caicos Islands
- Aruba
- Cayman Islands
- Curacao
- Guadeloupe
- Montserrat
- Puerto Rico
- U.S. Virgin Islands
- Palau
- Kiribati
- Nauru
- Solomon Islands
- Timor-Leste
- Vanuatu
- Micronesia (Fed. States of)
- Marshall Islands
SIDS share similar vulnerabilities:

– Highly vulnerable to climate change and natural hazards

– Economically vulnerable, high reliance on tourism

– Nutritionally vulnerable, high levels of nutritionally related diseases
Link between food systems and high burden of NCDs in SIDS

% Overweight and Obesity

Source: Global Burden of Disease Study 2014

Food Import Dependence Ratio

Source: FAO 2016
Project objectives (1)

• 1. To update and expand existing **systematic evidence appraisals**

• 2. In **SVG and Fiji** ... **to develop and test methods** designed to answer:
  – What is the current nutritional adequacy of local diets, and the contribution of community-based food production initiatives (CFPIs)?
  – Who is involved in CFPIs.....and what economic and social benefits do they receive?
  – What are the environmental impacts of CFPIs?

• 3. **To determine the major challenges and successes** in establishing and sustaining one or more selected CFPIs
Project objectives (2)

• 4. To **collate and integrate the findings** from meeting objectives 1-3 in order to derive an evaluation framework and refine methods

• 5. To **design a programme of work** to robustly evaluate and compare CFPIs in the Caribbean, Pacific and Africa
Evidence reviews
Appraisal of available data
Stakeholder interviews
Community focus groups / in-depth interviews

Methods development to link food sources to dietary adequacy

Methods development to estimate environmental Impacts of CFPIs

Economic assessment of consumer responses to taxation and subsidies
Healthiness of government baskets subsidised foods
Group model building with Stakeholders to map food systems
Design and evaluation of interventions
Web-based monitoring tool for food security vulnerability
Knowledge exchange and dissemination

Improving Household Nutrition Security and Public Health in the CARICOM

Community Food and Health
Thankyou