



*Private Bag X17, Bellville 7535, Cape Town, South Africa  
Telephone : (021) 959 3858/64 Fax: (021) 959 3865 /49*

**Report on**

**Research visit to the Center for Applied Research and Environmental Systems  
(CARES), University of Missouri, Colombia**

**Oct 14 – Nov. 3, 2016**

**By**

**Dr Mulugeta Dinbabo and  
Dr Razack Karriem**

**Host: Prof Chris Fulcher,  
Center for Applied Research and Environmental Systems (CARES)  
University of Missouri,**

**December, 2016**

## **1. Overview**

The Institute for Social Development (ISD), at the University of the Western Cape and the Center for Applied Research and Environmental Systems (CARES) at the University of Missouri, USA and – agreed to undertake a joint research project during the academic year 2015/2016. A proposal on “*Food Choices and Body Mass Index (BMI) in Adults and Children: Evidence from the National Income Dynamics Study (NIDS) and Empirical Research from Khayelitsha and Mitchell’s Plain in South Africa*” has been jointly designed and submitted to the European Union (EU), South African Office of Presidency: The Programme to Support Pro-poor Policy Development. Considering the relevance of the topic, the funding authority selected this research project from more than 100 applications. This study seeks to assess and quantify food choices and Measured Body Mass Index (BMI) in relation to *people’s self-perceived health status* and actual BMI measurement scores using the 2013 National Income Dynamics Study (NIDS) survey in South Africa. In addition, the study will use empirical field data in the two areas in the city of Cape Town identified for the analysis, namely, Khayelitsha and Mitchell’s Plain.

This cooperation is part of a strategic and scientific partnership between the University of Missouri (UM) and the University of the Western Cape (UWC). It is directly connected to the needs of and research interests of the two Universities. This partnership includes cooperation across academic staff, student activities and an exchange of expertise between the two universities. More specifically, this project addresses the problem of obesity in South Africa, which is linked to its political history where a misleading perception of ‘benign obesity’ – popularised in the early 60’s – which refers to ‘healthy obesity’ was used to keep black women fatter than their white counterparts (Van de Merwe and Pepper, 2006:316). Van de Merwe and Pepper (2006:316) note that ‘for almost three decades (1960s to the late 1980s) the notion of benign obesity was perpetuated without adequate examination of the association with its comorbid diseases including *in vivo* and *in vitro* experimentation on insulin resistance, metabolism and lipolysis’. If van der Merwe and Pepper are correct, it can be concluded that the challenge of obesity amongst black women in South Africa is in part linked to the country’s apartheid legacy.

The research collaboration programme between the two institutes aims to increase the amount of joint research projects and to exploit mutual scientific resources. It also harnesses the expertise of both departments at UWC and UM so that we can discuss issues of common interest while jointly researching this one year project.

## **2. Purpose**

The primary purpose of this trip was to work with our collaborator at UM, Prof Chris Fulcher, Center for Applied Research and Environmental Systems (CARES): to support joint research projects that bring together researchers from the two universities to develop new lines of study or to significantly advance existing areas of expertise; to finalize journal articles that will be published in South Africa’s Department of Higher Education accredited journals; to promote the active collaboration of researchers in the two departments/universities and to assist two ISD scholars by providing a concentrated period of time during which they can engage in research to advance their careers in UM.

## **3. Major activities and results**

### **3.1. Discussion on the technical aspects of the project and advice obtained (Oct 17 – Nov. 30, 2016)**

*3.1.1. Research methodology:* on October 17, 2016, a half day discussion/workshop was held with Prof Chris Fulcher. At this workshop, we provided Prof Fulcher with an update of the progress made on the project. We described the mixed-methods methodology that was utilized in the research. The quantitative and the qualitative research approach allowed for triangulation of results from multiple data collection sources and analytical techniques. Quantitatively, the study drew on the fourth wave of the National Income Dynamics Study as well as the collection of data in two localities in the Western Cape Province (Khayelitsha and Mitchells Plain) using self-administered questionnaires. This was aimed at comparing study results in the two survey localities on one hand and compare findings from these localities to NIDS results using some select indicators. To complement the surveys undertaken in Khayelitsha and Mitchells Plain, qualitative methods such as focus group discussions and semi-structured interviews were conducted targeting adults and children. Thus, data was drawn from both primary and secondary sources.

*3.1.2. Self-administered household questionnaires:* a total of 532 and 519 structured questionnaires were administered to randomly selected households in Khayelitsha and Mitchells Plain, respectively. Given the objectives of the study, the household questionnaire targeted adults (persons eighteen years and above) and children between the ages of five (5) and eleven (11) years. Specific information captured using the household questionnaire included household profiles, household characteristics, employment and income sources and food consumption and sources using a 24-hour dietary recall. In addition, information on respondents' eating habits, weight management practices, perception of health status, and perceptions of obesity were captured.

*3.1.3. Anthropometric measurements:* In order to compute the body mass index of respondents, anthropometric measurements were taken for at most four household members (adults and children between the ages of 5 to 11 years in the two case study areas). These included weights and heights measured in kilograms and centimeters, respectively. The weights were captured using scales used for collecting anthropometric data for NIDS by SALDRU. The height measurements were taken using instruments obtained from UWC's Department of Public Health. As indicated earlier, we used a single 24-hour recall dietary assessment method, which is one of the most widely used individual dietary assessment methods (Steyn and Labadarios, 2000). It is easy to administer compared to other dietary assessment methods (Nelson and Bingham, 1997 cited in Steyn and Labadarios, 2000). For this study, the 24-hour dietary recall was incorporated in the household questionnaire where food consumption records were taken from at most four household members if applicable. This comprised adults and children between the ages of 5 and 11 years.

*3.1.4. Research instruments:* In designing the household questionnaire, we took into consideration other existing research instruments used for similar assignments particularly within the South African context. Specific research instruments that our study drew on included the National Income Dynamics Study (NIDS) Wave 3 HH Questionnaire; Medical Research Council/Departments of Health & Education 'Youth Risk Behaviour Survey' (YRBS) Questionnaire; Demographic and Health Survey (DHS) questionnaire; World Health Organization's Global Physical Activity Questionnaire (GPAQ) - Analysis Guide; DANA-FARBER Cancer Institute's Eating Habits Questionnaire, and World Food Programme's Comprehensive Food Security & Vulnerability Analysis HH Questionnaire. Besides, expert views outside of the core research team were sought particularly from the UWC's Department of Public Health, SALDRU and RIA.

*3.1.5. Field piloting:* Prior to the actual field data collection, the household questionnaire was piloted in two stages. The first was a desktop pilot which involved core research team members especially research assistants administering the questionnaire to each other and identifying any gaps. The second

step involved field piloting of the fine-tuned household questionnaire from the desktop piloting. Field piloting took place in Westridge, where a total of 29 households (50 individuals) were interviewed, making up about 2.5% of the entire proposed sample size of 1200. Feedback from pilot study informed the fine-tuning of the household questionnaire along five main themes: respondent comprehension, sampling, coding and analysis, interviewer tasks performance and questionnaire formatting.

**3.1.6. Training workshops:** An important activity prior to the actual data collection was enumerator recruitment & training. Both surveys were conducted using student recruits from the University of the Western Cape as well as recruits from the local communities where the research took place. Such a mix made entry into EAs a lot easier especially in areas that were classified as not-too-safe. In all, 19 data collectors besides the core research assistants were recruited for data collection in Khayelitsha and Mitchells Plain. Approximately 75% of the recruits were local residents in Khayelitsha and Mitchells Plain while the remaining 25% student recruits from ISD, UWC. Training workshops were organised to brief these recruits on the project and the household questionnaire as well as capacitate them with the necessary data collection skills. Methods and techniques used included presentation, group discussion, mock interviews (role play) and feedback session. Other aids included presentation slides, enumerator manual, and flip chart.

**3.1.7. Empowerment of students:** One of the project objectives was to empower historically disadvantaged South African postgraduate students in quantitative research methodologies/statistical packages such as the use of STATA, SPSS etc. Accordingly, six postgraduate students were awarded research fellowships through a competitive process taking into consideration several criteria, including the student's academic record, letter of motivation and letters of recommendation. To be considered for the programme, applicants provided proof of their registration for the postgraduate degree programme at the Institute for Social Development, University of the Western Cape; good standing with Honours/Masters Programme in terms of completion of tasks and overall mark averages; confirmation that they were from historically disadvantaged groups, and have some previous research experience.

**3.1.8. National symposium:** Acknowledging that childhood obesity can lead to a number of long-term health issues, and recognizing the important role that collaboration plays in promoting healthy weights for children, the national, provincial and local level Department of Health and/or Health Promotion/Healthy Living strategy moved into action. They have recently endorsed *Curbing Childhood Obesity: A national, provincial and local level Department of Health Framework for Action to Promote Healthy Weights*, which outlines a vision, strategies and priority areas to address this issue. As part of this initiatives, the project team has been working together with various stakeholders across different national, provincial and local level Departments. In this regard, preparations are being made to undertake a national Conference. In this regard, a National symposium on Food Choice and Obesity in South Africa will be held on January 19, 2017, Protea Hotel Tyger Valley. The Conference aims to bring together leading academic scientists, scholars, researchers, postgraduate students, government departments and other participants to exchange and share their experiences and research results on all aspects of Obesity. The National Conference is also expected to provide a premier interdisciplinary platform for participants to discuss on the current situation and challenges relating to the Food Choice and Obesity in light of the project outputs. The Conference will be divided into substantive sessions and working groups, providing participants the opportunity to focus on specific areas from their own perspective and national experiences. The main conclusions of the Conference will be reflected and incorporated into the Policy Document and Policy Brief.

### **3.2. Technical project team meetings**

As part of project implementation strategies, 4 project meetings were held every with technical team members. An important output from these meetings was that they provided the platform to regularly discuss and review the set of research instruments and tools to be used for the research. Besides, it afforded the project team the opportunity to make collective decisions regarding the inclusion of selected postgraduate students within the Institute for Social Development in the project. Other major highlights of these technical team meetings included decisions to draw on the vast experience of University of Missouri. This enabled the sharing of specialised expertise on certain key issues concerning the project. Regular meetings have been also used to establish contacts with some departments and to gain their input into discussions.

### **3.3. Communication and visibility actions through Community Commons**

With the objective to ensure the EU participation in the project different types of communication and visibility actions have been discussed. These included that briefing about the support received from EU at different levels, issuing of news in the campus newspaper, briefings, written material, press conferences, presentations, invitations, signage, and a number of others tools have been analysed. The project team also decided to organize communication and visibility actions such as display panel, banner, vehicle panels, caps, t-shirts, brochures, leaflet, newsletter, etc. during the workshops/conferences.

In addition, as part of project publicity strategy, it was decided that Community Commons platform to be used as possible entry points for information dissemination concerning the project. Community Commons enhance workflows with single-source data, keep your information current and accurate as well as ensure visibility of the research outputs, the research team agreed to use the existing platform of Community Commons. In general, it is a place where data, tools, and stories come together to inspire change and improve communities. Community Commons provide public access to thousands of meaningful data layers that allow mapping and reporting capabilities. The main aim of the Community Commons is to make custom tools publicly available whenever possible and partners understand and support this public-good mission.

### **3.4. IT and development**

The rapid technological innovation of the past few decades has produced numerous opportunities for improving the quality of life. Our ability to take advantage of these opportunities depends on how well innovative uses of new technologies into the fabric of community life. The Center for Applied Research and Environmental Systems (CARES), University of Missouri, involves working toward such technology integration with its complex of interwoven processes. We viewed CARES as a logical next step a proposal to extend its own technology integration and implementation processes to ISD. Accordingly, it was proposed that the CARES technical staff members, first to make a visit to ISD/UWC and make a seminar presentation on the use of IT and development. Second it was also agreed that a one-week block course to be launched to ISD Postgraduate students. Depending upon the feedback received, a new course, i.e. IT and development will be designed.

### **3.5. Additional Noteworthy Activities**

**3.5.1. Prof Mansoo Yu, University of Missouri (Meeting held on Oct 27, 2016):** We met with Prof Yu who serves as Doctoral Program Director. As Doctoral Program Director, he strives to integrate feedback from students and faculty to create a program that prepares students for rigorous research

while also preparing them for teaching and other professional responsibilities after graduation. He has been working closely with the Curriculum Committee to determine new approaches and content to link theory to research design, to include teaching experiences within the program, and to provide professional development that will better prepare and position students for successful job placement.

**3.5.2. Prof Daniel Domingues, University of Missouri (Meeting held on Oct 26, 2016):** Prof u Domingues is currently working on a manuscript examining the issue of who Africans regarded as eligible for enslavement and sale into the transatlantic slave trade.

**3.5.3. Prof Wilson Majee, University of Missouri (Meeting held on Oct 25, 2016):** Research Areas: Community Development, Global Public Health, Course Taught: P\_HLTH 7160 Interdisciplinary Perspectives in Global Public Health

**3.5.4. Good Hope Educational Initiative.** (Oct 24, 2016, Time: 7:00 - 9:00 P.M): We have attended the the Seventh Annual GHEI South African Wine Tasting event to raise funds to support needy school children in South Africa on Oct 24, 2016, at the Columbia Art league, 207 South Ninth Street, Time: 7:00 - 9:00 P.M. The Good Hope Education Initiative provides much- needed assistance to schools in the townships near Cape Town, i.e. Kalksteentfontein Primary School (KPS). The programme also supports a scholarship for a needy student to attend the University of the Western Cape.

#### 4. Next activity plan and implementation schedule (Dec 2016 to June 30, 2017)

Major activities	Responsible body
• Undertake regular project team communication	Project Team
• Finalise both quantitative and qualitative data analysis	Project Team
• Draft policy engagement plan and pulling it together	Project Team
• Produce obesity policy brief document	Project Team
• Undertake national symposium in January 19, 2017	Project Team
• Prepare final report of the project	Project Team
• Prof Chris Fulcher (March 12-20, 2017)	Prof Chris Fulcher
• Pretoria Conference meeting on (March 15 & 16, 2017)	Prof Chris Fulcher & selected project team members,
• Seminar presentation on the use of IT and development	Prof Chris Fulcher

#### 5. Conclusion

In conclusion, considering the achievements thus far, we are convinced that the research trip to UM has been positive overall. The project also appears to have been successful in relation to its plan and major achievements enabling a range of research interventions which targeted obesity in South Africa. Our engagement with the Center for Applied Research and Environmental Systems (CARES), University of Missouri, is one of the key elements for achieving the project goals. There is clear evidence that at the institutional level partnerships with different stakeholders is key for the successful implementation of the project. We also believe that the use of stakeholder's level of power, plays a key part in institutional alignment of interest in the policy/programme.

### **Dr. Mulugeta F. Dinbabo**

Dr. Dinbabo obtained his Doctoral Degree in Development Studies from the University of the Western Cape. He also has two MA degrees in Development Management and Development Studies, from the Ruhr University Germany and University of the Western Cape, South Africa, respectively. He is a Senior Lecturer at the Institute for Social Development. He is a member of the Council for the Development of Social Science Research in Africa (CODESRIA); South African Development Studies Association (SADSA) and Childwatch International, Research Network.

Dr. Dinbabo has participated in the high-level dialogue on international migration and supervised Postgraduate students in the area development studies. He has a sound knowledge of the fields of compiling a local economic development profile, social and economic development, microsimulation modelling and Evidence-based policymaking (EBP) approaches. His recent work on international migration examines empirically the macroeconomic determinants of 'pull' factors of international migration to South Africa. He also has a keen interest strengthening research partnership on international migration nationally, regionally and globally. He has published many papers in academic journals and produced research reports and other publications.

### **Dr. Abdulrazak Karriem**

Razack Karriem obtained his PhD in City and Regional Planning from Cornell University in Ithaca, New York. Prior to joining the Institute for Social Development at UWC, he taught in the Department of City and Regional Development at Cornell University and in the Growth and Structure of Cities Program at Bryn Mawr College in Philadelphia, Pennsylvania. Dr Karriem also worked for the Department of Land Affairs (on land reform and rural development) and at the Department Constitutional Development (on provincial and local governance).

Dr Karriem research interests are in urban and rural development, the role of social movements in promoting development from below, as well as urban sustainability and climate change. He has researched and written on the Brazilian Landless Movement's struggles for land reform and an ecologically sustainable rural development model. His current research project focuses on the housing struggles of Abahlali Base Mjondolo or the Shackdwellers Movement of South Africa.