

A Collaborative Project of the
Ministry of Health Uganda Government and the
Isingiro Ntungamo and Sheema Districts and the
World Diabetes Foundation

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Summary

Uganda remains among the poorest and least developed regions of the world, and has long faced a heavy burden of infectious diseases, with malaria, tuberculosis, HIV and, more recently the Corona Virus Disease 2019 (COVID-19); with improvements on health barred by transitioning to non-communicable diseases and injuries (NCDIs). Yet in most parts of the country – and especially in those areas with the greatest health care needs – the data available to health planners to better understand and address these problems are extremely limited. Uganda relies on periodic household-level surveys to provide some epidemiological and demographic profile of the population (1). We sought to address the difficulties of constructing a comprehensive picture of the current epidemiological situation at a national or even sub-national level, let alone understanding how the epidemiological situation is changing over time, with the ultimate goal of improving the health of the population, beginning with setting up an epidemiological surveillance system in three typical districts of Western Uganda. This was prompted by a study that looked at metabolic syndrome among predominantly cattle keepers in Ngoma, Ntungamo District versus predominantly subsistence farming in Kigarama, Sheema District, with data showing that the two areas had similar levels of risk factors for metabolic syndrome despite being rural and in traditional methods of living (2). Therefore, coupled with interventional programmes to improve the health of this population, it is important to understand the cultural, social and behavioural determinants of health (i.e. those determinants other than medical intervention and the material standard of living) in this population. This underpins the concept of *Health of a Population in Epidemiological Transition (HOPIET)- Isingiro-Ntungamo-Sheema (INS) Hub Project*. Given the salient and progressive nature of diabetes, it is epidemiological analyses that have provided a framework for identifying populations and subgroups at risk of diabetes and its complications (3). Diabetes will therefore be a good entry point to the study and management of other non-communicable diseases. The HOPIET-INS Hub programme will be an integrated community-based disease intervention program in the Districts of Isingiro, Ntungamo and Sheema, in Western Uganda, that will seek to understand the health of the population in epidemiological transition by using large data sets that will be collected overtime.

Goal of HOPIET Uganda

To improve the health the Ugandan population.

Aim of HOPIET-INS Hub Programme

To establish a longitudinal demographic surveillance that will provide data on cultural, social and behavioural determinants of health of a population transitioning from malnutrition and infectious diseases to non-communicable diseases and collectively the policy makers, tax payers and planners change the ecosystem, build capacity and improve the clinical practice environment with the ultimate goal of improving the health of the population.

Objectives of World Diabetes Foundation (WDF19-1721) Project:

- Establish baseline data on cultural, social and behavioural determinants of health in the districts of Isingiro, Ntungamo and Sheema
- Develop a digital health information system - In addition to providing electronic health records, the digital system should aim at extending geographic access to healthcare; enhancing patient communication with the health provider; improving disease diagnosis and treatment;

improved data quality management; and improved monitoring of clinic stock and inventory.

- Use data to transform disease care and patient lives – practitioners will systematically collect data during routine practice and to use these data effectively to evaluate solutions, and drive changes at patient, system, and policy levels to prevent and control diabetes and other non-communicable diseases.
- Prevention, early detection, prompt diagnosis, and continuing care with regular monitoring and ongoing evaluation to reduce the growing burden of diabetes and its complications.
- Management of disease comorbidity – Diabetes and depression, anxiety and suicidality and associated complications.

An integrated approach will be done for the management of NCDs at primary and secondary levels (World Diabetes Foundation Project 19 – 1721).

A standardized protocols will be developed to include monitoring trends and determinants of common NCDs including mental illnesses, specifically depression, anxiety and suicidality (4, 5). In addition there will be a process evaluation that will document the intensity of interventions, their outreach costs, their short- and medium-term impacts and most importantly a tracking of the processes that lead to these impacts (6, 7). Programme directors will pay special attention to the ways in which the programmes work and how they can be made more cost-effective. They will also identify the variables and processes that either facilitate or hinder the uptake and dissemination of effective interventions.

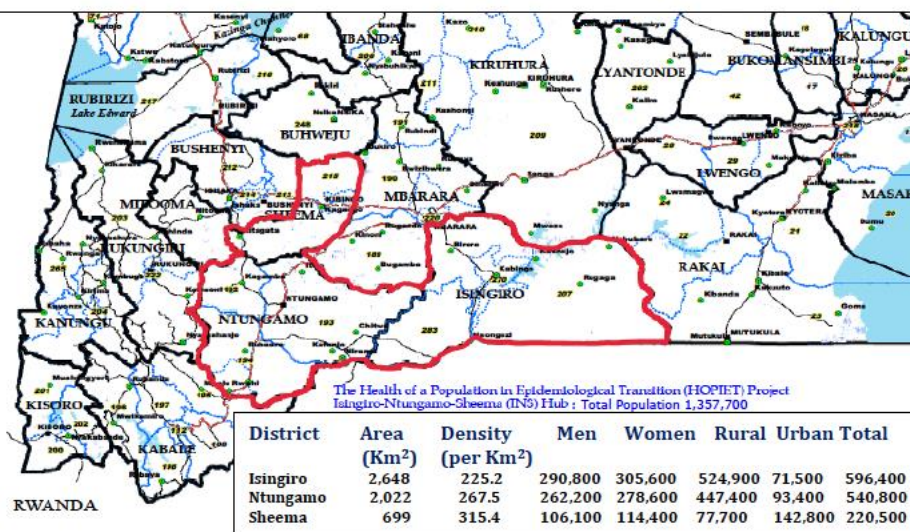
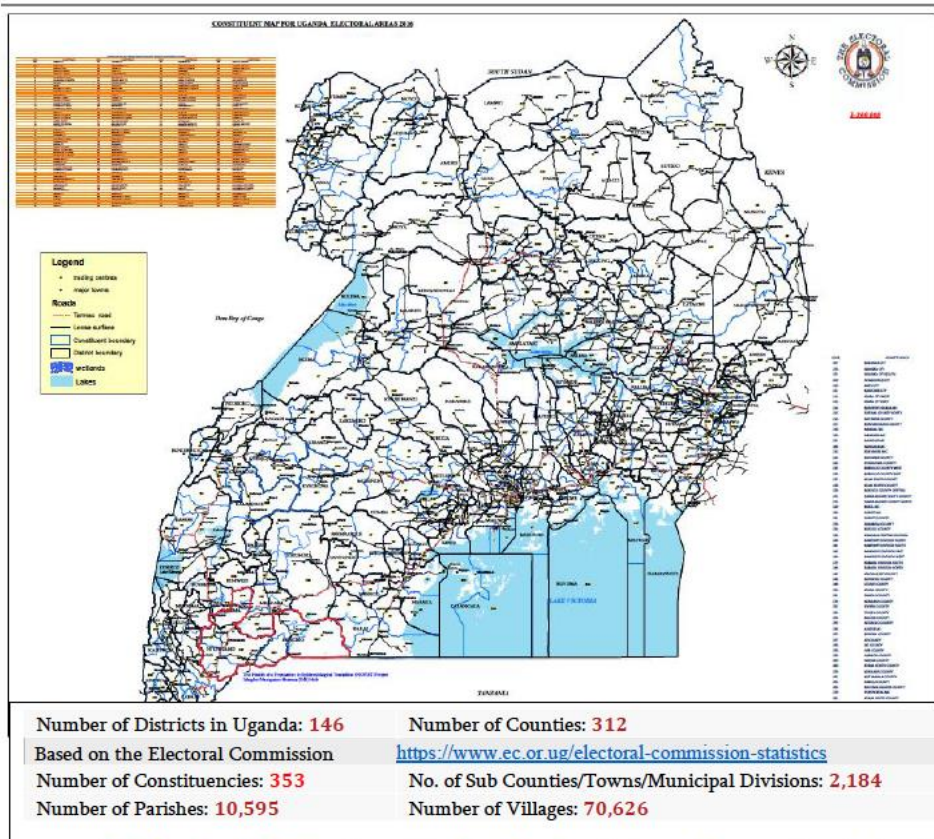
Five years strategic plan for the interventions using different strategies including policy and legislation, community empowerment, health education and health workers capacity building and guidelines development is planned to take place in a workshop on December 2021. The intervention areas of the project will include: promotion of physical activity and supportive environment, dietary habits, tobacco control and prevention and road traffic and domestic accidents, and safe use of alcohol. Monitoring and evaluation of the project is planned basing on a district wide integrated non-communicable diseases intervention guidelines (8).

Key words: Health Transition, Western Uganda, non-communicable disease, Cultural, Social, Behavioural.

Context

The districts of Isingiro, Ntungamo and Sheema in Western Uganda, on the border with Northern part of Tanzania and South Eastern part of Rwanda. The location of HOPIET-INS Hub is shown in Fig. 1.

Fig 1: Map of Uganda showing location of Isingiro-Ntungamo- Sheema Hub of the HOPIET Project



The three districts of Isingiro, Ntungamo and Sheema have an estimated population of 1,357,700 people with a population growth rate of 3.6% per annum. The main language and ethnic group that dominates in the area is Runyankole - Rukiiga, but there are also other groups in the district who include the Banyarwanda, Bahaya, Bakoki and Baganda. There is also common usage of English, Kiswahili and Luganda.

Like most districts in Uganda, the districts of Isingiro, Ntungamo and Sheema are predominantly agricultural, relying on farming for employment and income. The people keep livestock including cattle, goats, sheep and pigs.

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