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USAID'S HEALTH EVALUATION AND APPLIED RESEARCH DEVELOPMENT (HEARD) PROJECT

Urban Health Assessment: Nutrition & WASH Vulnerabilities among Poor Urban Children and Adolescents in Uganda

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Why Focus on WASH & Nutrition Among Urban Poor?

- **Globally**: 60% of the world will live in cities by 2030 and the "urban advantage" does not apply to all.
- **Sub-Saharan Africa**: more than half (56%) of urban population lives in slums, compared to an average of 29% across developing regions (UN Habitat, 2016).

- **Implications for the Urban Poor in SSA:**
  - 29% of deaths in children < 5 occur annually due to problems of sanitation, hygiene and nutrition (IHME, 2016).
  - 61% of diarrhea deaths are due to inadequate water, sanitation and poor hand hygiene (Prüss-Ustün et al, 2014).

What is a "slum"?

UN-HABITAT defines a slum household as a group of individuals living under the same roof in an urban area who lack one or more of the following:

1. Durable housing of a permanent nature Sufficient living space
2. Easy access to safe water in sufficient amounts at an affordable price.
3. Access to adequate sanitation
4. Security of tenure that prevents forced eviction.

Where can we start?
Informing Action with Available Evidence

Challenge: urbanization challenges are recognized, but there is often insufficient evidence to inform action & we do not use evidence we have well.

AIM: use existing evidence to assess nutrition & WASH vulnerabilities facing poor children and adolescents in the largest cities in Tanzania, Kenya and Uganda.

Contribution: lower cost design that offers a multidimensional view of the gaps/opportunities, identifies areas for action.

Implementing Partnership

Policy & Program Platform Collaborators

East Africa Research Collaborators

Technical Collaborators

Uganda and Urbanization

- Uganda among countries in Africa that is rapidly urbanizing
- Urbanization growth rate is at 5.6%; higher than all Africa average of 3.9%
- Current population estimated at over 44million(0.57% of total world population)
- 18% of Ugandans live in urban areas of which 53.6% of live in slums in (World Bank 2015)

Kampala

- Kampala has 1.6 million residents & 3.5 million day-time population
- Greater Kampala's population will be 8-10 million in 2030 making it one of the biggest cities in Africa

Rapid urban population growth is attributed to high rural-urban migration

- The increasing volume of younger people that migrate into Kampala has affected food production causing food insecurity

Nutrition situation in Kampala

- Most recent Uganda Demographics and Health Survey(2016) showed worsening trends:

  - ✓ Global Acute Malnutrition in Kampala was at 3.9% compared to 3.7% in 2006
  - ✓ Stunting at 18.1% compared to 2.7% in 2006
  - ✓ More than half (50.9%) of children were anaemic compared to 66% in 2006

- **Little was known about characteristics of urban food insecurity and malnutrition and the associated vulnerability by the urban poor**

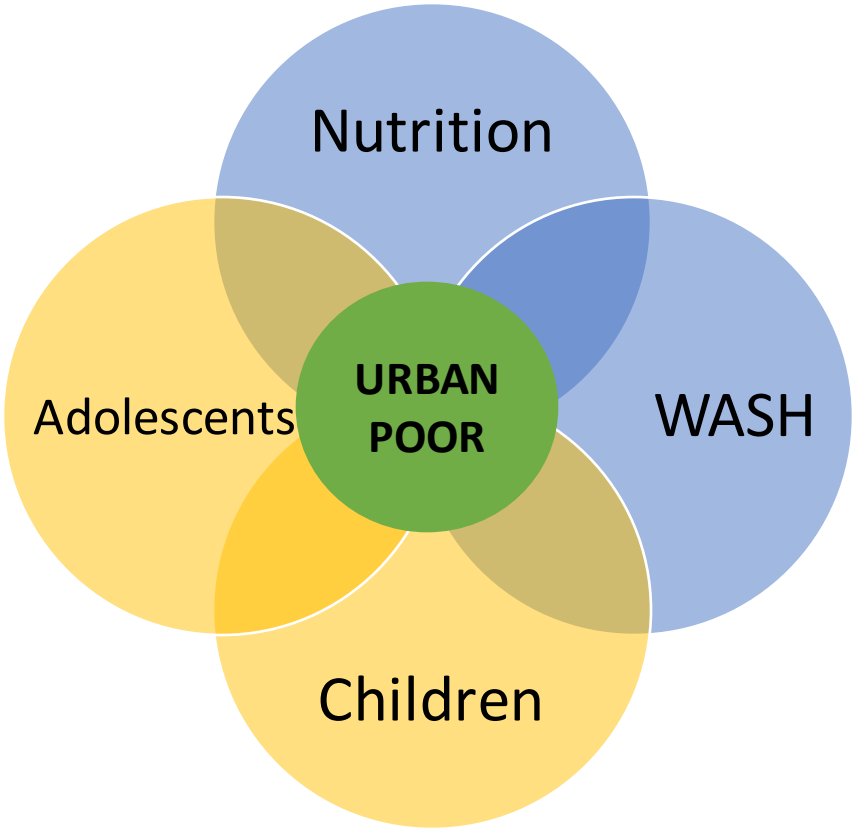
WASH situation in Kampala

Recent WHO/JMP Levels of Sanitation assessment of Kampala 2018 showed that:

- 60% of Kampala's residents live in slums; majority are low income earners
- 20% (283,608) of Kampala's residents has access to improved sanitation
- 37% (496,909) use sanitation facilities that meet minimum standard but shared by two or more households
- 43%(573,339) of Kampala's residents use unlined facilities or empty the waste into the environment
- 8% of city residents are connected to the NWSC sewerage system
- 65% of slum dwellers use pit latrines of which 30% of latrines are emptied into drainage channels

Assessment Design

Our focus is the intersection (target population) below



To understand how to improve the situation among the target population:

Review of Available Evidence

1. **Review of Literature**: grey and published literature
2. **Urban Data Inventory**: summary and description of existing quantitative datasets
3. **Policy and Stakeholder Review**: identify and review policies, programs, approaches, key actors

New Evidence Generation

4. **Community Case Study**: deeper analysis of one slum

Now, let's share the findings

Photo Credit: WaterAid Tanzania

Review of Literature

What Evidence is Available?

Aim: To document available literature on nutrition and WASH to explore the vulnerabilities facing poor urban women and children and to understand:

- Context specific, economic, cultural and social factors
- Geography and environment factors
- Nutrition & WASH practices
- Service (formal and informal services) and care vulnerabilities

Methods

- **Search engines:** PubMed, Google Scholar, hand searching websites of organizations
- **Inclusion:** urban areas, published and grey literature
- **Exclusion:** Studies not related to nutrition/WASH
- **Limit:** 2005-2018, children & adolescents aged 0-19 years
- 217 results, which were exported to endnote for screening
- Only 28 citations were left

Vulnerability Themes from Literature Review

Domain	Findings
Contextual and socio-economic and cultural factors	Low parental education associated with poor nutrition; higher malnutrition among school going children; Micronutrient deficiencies common among children in residential homes; Overweight and obesity more common among children in private schools
Geography and environment	Slums are characterized by high housing density; lack of land tenure; poor drainage ; Few toilets which often pollute water sources; high cost for constructing proper pit latrines in a slums
Decision making around food/behaviours of care givers	Over consumption of high sugar; more conveniently prepared foods; choice of food determined by cost, availability and access; having access to rural family land is associated with food security
Service and care vulnerability	Overall: Poor access and utilization of health facilities; maternal health affects utilization of health services Adolescents: Youth **un**friendly health services Children: low vaccination coverage

Gaps in Literature

- Most studies evaluated rural versus urban without considering poor urban populations/slum dwellers as unique

- Limited literature on
  - systems and services available for the urban poor with respect to nutrition
  - adolescent nutrition, health outcomes and interventions to address nutrition/WASH of the urban poor in all four thematic areas/domains

Conclusions and Recommendations

- Most studies focus on only one or two aspects of nutrition and WASH
- Studies were conducted in a few selected slums so not generalizable

- There is need for studies to assess adolescent health; interventions to address nutritional/WASH vulnerabilities

Urban data Inventory

Methods

Why was this important?

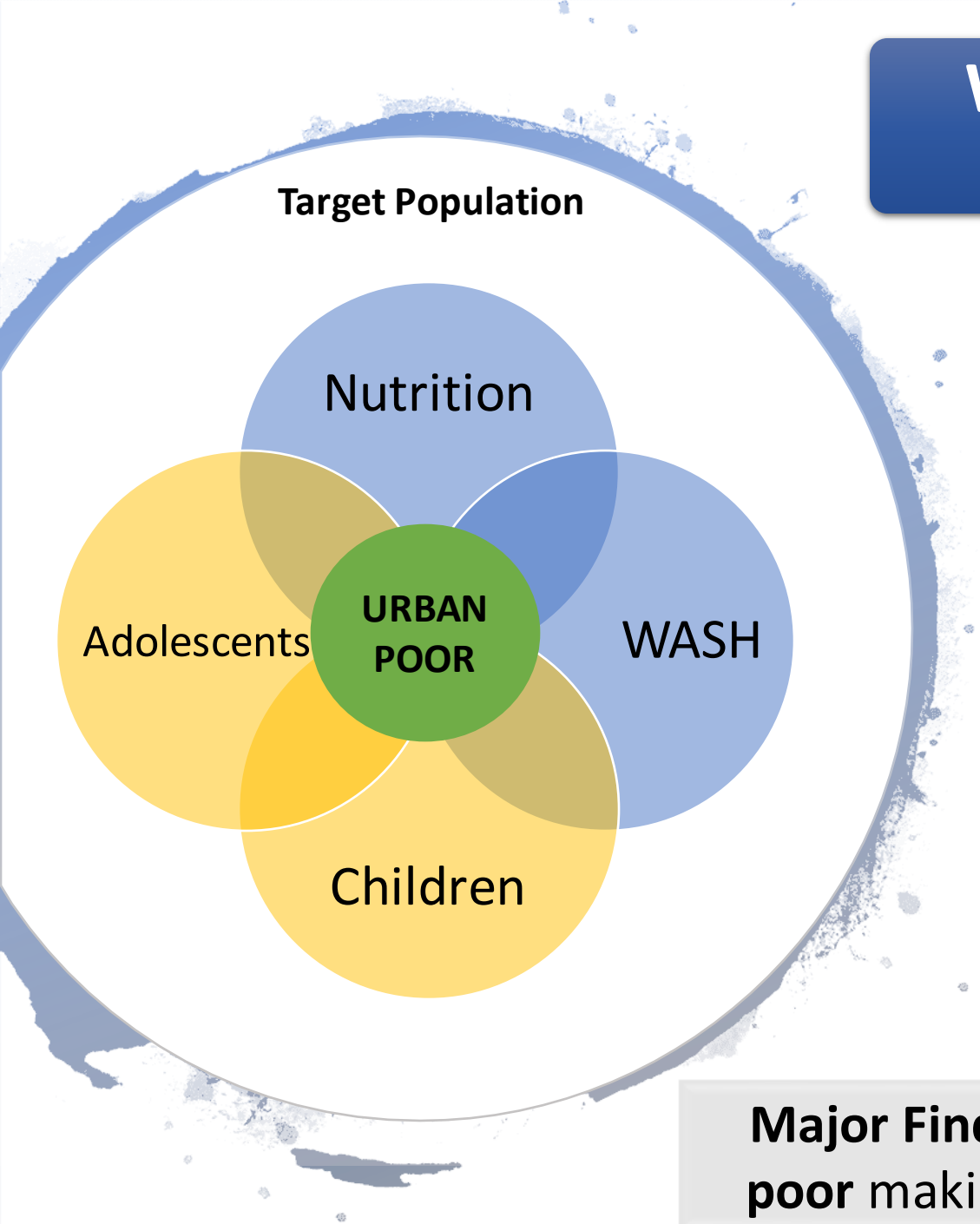
Without these indicators being tracked we can't understand prevalence, trends, where to target efforts

Search identified databases with indicators related to nutrition/WASH:

- **Nutrition indicators:** wasting, stunting, underweight, pallor, night blindness, goitre, feeding practices, dietary diversity, food security
- **WASH indicators**: access to water and sanitation facilities

Inclusion: Only datasets from urban contexts and datasets with indicators related to nutrition/WASH

What quantitative data is available to analyze our target population?



Searched for URBAN datasets that included WASH, nutrition, SES (to disaggregate for poor) among children, adolescents.

Publicly available datasets

National Census ((2002 & 2014)	National
UDHS (2001,2011,2016)	National
National Panel Survey and the Uganda National household survey	National
Nutritional Anthropometric Survey of Children Under Five Years of Age in Informal Settlements in Kampala City	Small scale

Major Finding: Four of the datasets are not specific to **urban poor** making it difficult to analyze status of target population.

Policy, Strategy & Stakeholder Review

Methods

Aim: Identify policies and strategies, programs/initiatives/services, key actors and platforms

- **Search terms:** policies, action plans, framework, guidelines, strategies, nutrition, water, hygiene, sanitation, adolescent, children, urban, Uganda
- **Inclusion:** nutrition/WASH specific and sensitive policies
- **Exclusion: o**ld versions of updated documents
- **Limit:** Published from 1995 onwards
- **Verification:** By IDI's senior search strategist and librarian; meetings with Principal Nutrition Policy Analyst at the Office of the Prime Minister; Ministerial policy focal points; KCCA, CBOs, etc.

Findings

Nutrition in national policy frameworks: Uganda's commitment to national and international nutrition initiatives evident by UNAP

Nutrition governance: A well established institutional framework for policy coordination that engages all levels of government(Parliament, central and local)

High level commitment to nutrition shown by establishment of:

- Secretariat of Uganda Food and nutrition coordination committees at the Office of the Prime Minister
- nutrition coordination committees at sector and sub-national levels facilitated by nutrition focal points

Policy and Strategy Findings

Uganda National Nutrition Policy (UNAP 2019-2025).

UNAP is implemented through 10 strategies:

- Constitution of Republic of Uganda (1995)
- The National Water Policy (1999).
- The second Ministry of Health National Health Policy (NHPII) 2010
- The Uganda Nutrition Action Plan (UNAP) 2011
- The National Agriculture Policy (NAP) (2013)
- The National Policy on Monitoring and Evaluation (2013)
- The Social Protection Policy (2015)
- The Male Involvement Strategy (2015)
- The National Integrated Early Childhood Development (NIECD) Policy (2016)
- The Education Sector Strategic Plan (ESSP 2017-2020)

KCCA is drafting first ever urban health policy

Gaps in Policies & Strategies

- Most studies evaluated rural versus urban without considering poor urban populations/slum dwellers as unique

- Limited literature on
  - systems and services available for the urban poor with respect to nutrition
  - adolescent nutrition, health outcomes and interventions to address nutrition/WASH of the urban poor in all four thematic areas/domains

Gaps in Policies & strategies

- Lack of policies supporting adolescent nutrition/WASH in general
  - Needs of older adolescents are not addressed (not in school); school health policy targets younger children

- Overall all policies are generic, none specific to urban poor children & adolescents
  - Ray of hope with upcoming KCCA's urban health policy

- Government commitment to nutrition evident through UNAP
- Strong inter-sectoral collaboration in policy development, governance and implementation
- Need to revise current policies to reflect needs of poor urban populations

Stakeholder Mapping Exercise

Aims: To understand who is doing what, where, with whom and at what level so as to understand the delivery mechanisms and operational scale-up of interventions

Methods: web search of key actors in urban nutrition/WASH; search of organisations' websites to understand activities and status; five-day assessment visits for identified stakeholders

Inclusion and exclusion: Organisations/NGOs currently or in the past were involved in nutrition/WASH

Verification: One-on-one conservations were with Directors and Executives of agencies from public and private sectors, academia, etc.

Stakeholder Mapping Findings

Coordination: All nutrition-related activities are coordinated by the nutrition unit in the Community Health department of the MOH

Programs: An intervention matrix with organisations engaged in Nutrition/WASH; their activities past/ ongoing; areas/districts and the specific interventions

- We found 23 nutrition/WASH-oriented programs (14 Nutrition, 9 WASH)
- All programs funded by development partners mainly USAID
- Only one organization is targeting children in Kampala district as a whole

Stakeholder Mapping Findings

Stakeholders and Systems

Government, Ministries, Departments, and Agencies

- Ministry of Agriculture Animal Industry and Fisheries (MAAIF)
- Ministry of Education and Sports (MoES)
- Ministry of Finance, Planning, and Economic Development (MoFPED)
- Ministry of Gender, Labour, and Social Development (MGLSD)
- Ministry of Health (MoH)
- Ministry of Local Government (MoLG)
- Ministry of Trade, Industry, and Cooperatives (MTIC)
- Ministry of Water and Environment (MWE)
- National Planning Authority (NPA)

District Nutrition Coordination Committee Initiative Partners

Office of the Prime Minister
USAID/Uganda, Food and Nutrition Technical Assistance III Project (FANTA)
FHI 360 and Wageningen Centre for Development Innovation

Implementing Partners and Stakeholders

- Communication for Healthy Communities (CHC)

Implementation challenges

- Most programs target rural communities
- All programs are donor funded so unsustainable
- Poor information sharing systems between organisations
- Inadequate funding
- Lack of organizations for adolescents

Community Case Study in Katwe II

Background & Aim

- Although the consequences of urbanization on diverse socio-economic groups are well documented, how to address the health and development needs of the most vulnerable is poorly-understood

- A community case study was conducted in Katwe II slum to gain in-depth understanding of the factors that contribute to poor nutrition/WASH among poor urban children and adolescents and to identify the best approaches to addressing these problems

Study site

- Katwe II slum, home to over 7,500 households
- Over 50% of the residents are aged 0-19years

Methods

Study design: Qualitative case study triangulating four methods of data collection

Specific objectives: The specific objectives were thus to explore:

i. Formal/informal food systems and services in the community

ii. Environmental factors that can influence potentially adverse exposures

iii. Key actors and platforms that influence nutrition/WASH of children & adolescents

iv. Socio-cultural and economic factors that influence behaviors related to child & adolescents nutrition/WASH in poor urban contexts

v. Programs and initiatives that shape nutrition and WASH

Data collection & analysis

Four methods of data collection used:

- Community mapping to capture key actors
- 8 FGDs with primary caregivers of children <5 including adolescent mothers/fathers
- 16 KIIs with already known stakeholders: Midwives involved in Maternal New-born and Child Health(MNCH) services, Day care and Local Council Representatives
- 1 Community workshop with community and opinion leaders to validate information collected from above methods
- Community workshop, FGD & KII sessions were audio-recorded and transcribed. Transcripts were subjected to thematic content analysis using Atlas.ti version 8.0.
- Community mapping: Geographical locations of key actors were recorded into the handheld GPS device and later imported into a GIS environment using an open source application, QGIS (Quantum GIS) to produce a GIS map of the actors

General health & nutrition of children & adolescents

- Health is generally poor due to poverty, teenage pregnancy, flooding and high influx of refugees causing competition for the limited resources

"When they come here, we must compete for everything; schools, health facilities, public toilets, housing, and even the price of food in the market has increased because of the demand. The challenge is that while they have support from government and other organisations like the UN, for us who are citizens do not….." FGD adult primary care givers

Formal/informal food systems & services

- Food is accessed as raw or cooked from inside and outside the settlement
- Over consumption of carbohydrates
- Lack of exclusive breastfeeding because mothers are the main bread winners
- High consumption of street food

"I feed my child on kikomando (street roasted Tortilla with beans) every day because it was I can afford…." FGD participants aged 15-19

Access to health and nutrition services

- Poor access to health and nutrition services by children and adolescents
  - No public health facility
  - Cost
  - Long waiting hours
  - Strong presence of herbalists
  - Poor interactions with health staff
  - Lack of drugs

- Adolescent unfriendly services due to
  - Lack of privacy
  - Absence of youthful providers
  - Long waiting hours
  - Stigma from adults

"We would have loved to be treated near where we stay but we don't have money. Most times you wait until you are very sick and go to Nsambya Hospital but even when you go there you just come with a paper with medicine to buy yet you have no money…." FGD female primary care giver

Key actors & platforms that influence NUT/WASH

- Various key actors were identified during the mapping exercise
- **Institutions**
  - Formal day care centers
  - Informal day care centers
  - Nursery schools & Kindergartens
- **Home**
  - Mothers
  - House maids
- **Organizations:** Child's Eye Foundation, NUTRAC, Shelter and Settlement Alternatives (SSA) & IDI

"We have many children and we serve them locally available foods such as porridge. Some young ones however have poor appetite so they refuse the food…."
KII participant

"As a working mother, you can leave home having prepared milk for your child and tell the maid to feed the child but what they do is to eat what is meant to be for child….." Leader in a community workshop

Platforms for Social Behavior Change Communication strategy for nutrition/WASH

- Various from which residents access information
  - Health centers
  - Large bill boards
  - Radio- CBS most popular Radio station
  - Television -NTV
- Some bill boards were blamed for negatively affecting nutrition

"My children do not want to eat the local food we cook at home, they want to eat chips (French fries) and chicken which we cannot afford because we are poor…" FGD participant of male primary care givers

*"Me and my wife are young, most of the time she does not want to cook so we eat takeaway with our son who is 2years.It is expensive but we work to get money to go and buy and to show our neighbours that we are rich. Don't you see my weight; it shows that I'm healthy."……*FGD participant aged 15-19

Socio-cultural & economic factors influencing child & adolescent nutrition

- Low household income causing food insecurity
- ***Large family size leading to under nutriti***on
- Some religious practices affect child & adolescent nutrition
- High burden of HIV,TB and heart disease among caretakers
- Age of care giver: Young care givers ignorant about child nutrition and care

- ***Fathers have neglected their child care roles and responsibilities***

"I have sixteen children that I take care of, most of them are orphans of my late siblings. In the morning I prepare warm water without sugar and serve them each with a piece of cold posho this enough for the day. In the evening I prepare either rice or posho with beans and we all eat…" **FGD adult participant**

"If fathers were providing for their families as they should, we would definitely sit at home and take care of the children. But this is not the case, that is why you find that in many homes, the little children have been left to the care of the housemaid or caretaker who cannot provide the attention that the mother would have given…." Female leader in community workshop

Coping strategies for children & adolescent nutrition challenges

- Social networks/friends help in form loans to buy food or give them food
- Buying food in bulk from large markets
- Sending children to the village
- Scavenging
- Doing several jobs to get money food and medication: common jobs include washing other people's clothes and running errands which pays between 5,000-10,000 shillings

Water Sanitation and Hygiene

- **Adequate access to water**
  - Well water looks clean but mostly contaminated
  - Water from public taps is cheap(20litres UGX 100)
- **Poor access toilets**
  - Very few poorly maintained toilets
  - Only one public toilet in this settlement
  - Cost of toilets in public places
  - Open defecation and *"flying toilets"* common
- **Poor waste disposal**
- **Lack of proper drainage**
- **Poor housing affected by flooding**

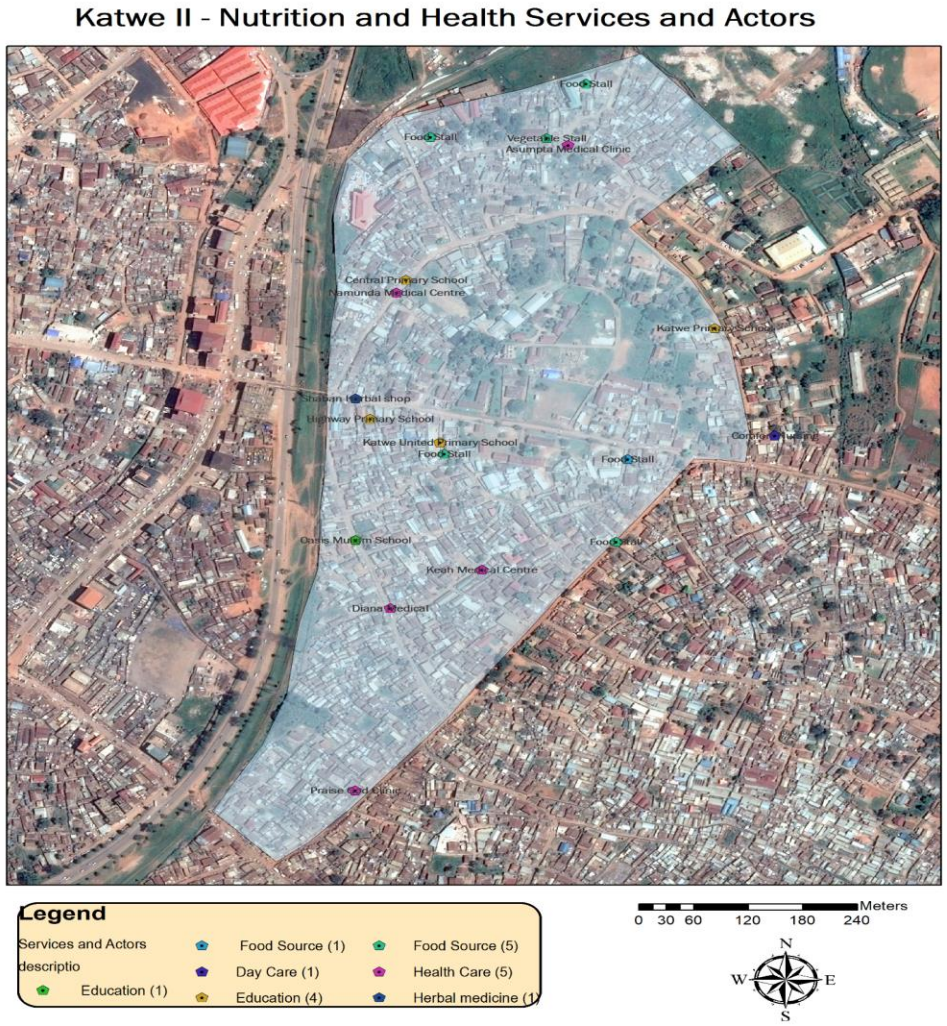
Programs & key actors that shape nutrition/WASH

- Several programs identified:
  - Educational Institutions
  - Infant and young child nutrition at health facilities
  - Economic empowerment
  - Child protection
  - Sexual and reproductive health

- Key actors: government(KCCA), NGOs, CBOs
- Slum Improvement Programs:
  - WEYONJE translated as “Clean up yourself”
  - Settlement and Shelter Alternatives(SSA)
  - Child Eye Foundation
  - NUTRAC

Most successful Intervention in the settlement

- WEYONJE



Appraisal for WEYONJE

Strengths

- Effective community sensitization using the door-to-door approach
- Community participation
- Evident reduction in number of f improper pit latrines
- Sensitization of land lords and pit latrine owners

What needs to be improved:

- Project staff not readily available

"Whenever we call them, they tell us that they can only come to sensitize the community when funding from Water for People is available, and when it is not there you cannot see them..." Leader in community workshop

Conclusions and Recommendations

- Poor access to health and nutrition services
  - Need for more one-stop public health facilities
  - Address negative health worker attitude
  - Poverty alleviation strategies to improve access to quality food & health services
  - Address challenges paused by high influx of refugees

- General lack of knowledge about proper child nutrition

- Water, hygiene and sanitation vulnerabilities
  - Improve both housing & toilet infrastructure
  - Adopt modern technology toilets

- Programs and interventions
  - Community involvement, create employment for community members, coordination and transparency among actors

General Conclusions & recommendations

Improve Data for Decision-making

- Intentional sampling of urban, label cluster in Demographic Health Surveys
- Conduct larger scale slum surveys
- Improve data sharing: make available other existing urban poor datasets

Strengthen the Policy Environment

- Revision of current nutrition/WASH and agriculture policies to reflect the needs of the urban poor

- Involvement of urban poor in the policy development

Photo credit: Urban Water and Sanitation Poverty in Tanzania. Evidence from the field and recommendations for successful combat strategies. Pauschert et al. 2012

Enhancing Evidence Base

- Gaps: WASH among children and adolescents; dietary practices among adolescents

- Implementation science on promising approaches and multi-sectoral efforts e.g. innovations in waste management/drainage; integration of ECD and nutrition; development of service delivery models for adolescents

Photo credit: URC/TRAction

Programs and Interventions

- Strengthening stakeholder involvement & cooperation
- Need for integrated service delivery packages across sectors
- Transparency and coordination among actors
- Involve the community & prioritize their most pressing needs
- Create employment opportunities for the community

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Stakeholders in Nutrition & WASH

Non-governmental and Community-based Organizations

AcTogether Uganda

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