

Changemaker Project



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CHANGE MAKER GLOBAL PARTNERS



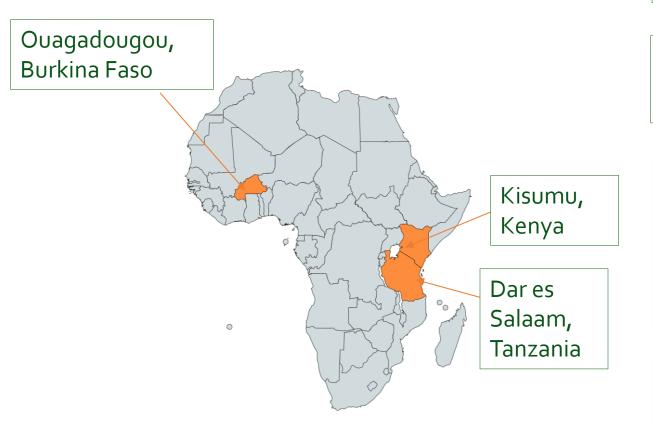




Aim

To implement and evaluate a sustainable health intervention program on health, nutrition, and environmental outcomes for the reduction in risk of adolescent obesity and other related non-communicable diseases (NCDs) together with adolescents in three rapidly urbanizing cities in Burkina Faso, Kenya, Tanzania.

Settings

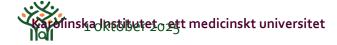


Informal Settlements

Between 1.5 to 5.2% annual increase in urban populations in the 3 sites (8,9,10)

Increases environmental degradation, sedentary lifestyles, consumption of energy dense foods = Increased risk of NCDs

School setting – site for behavior change





Settings



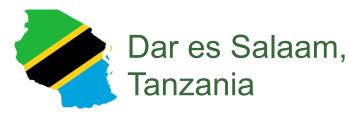
Ouagadougo, Burkina Faso

- Capital of BF
- Central and landlocked
- 45.1% of urban population
- School year runs from Oct to May
- Rainy season is between June to Octo
- 18 % of adolescents have BMI ≥25 kg/m2, 15% anemia



Kisumu, Kenya

- Port city in western Kenya
- Next to Lake Victoria
- Pop = ~1 million people
- School year runs from Jan to Nov
- Jan to March is dry and long rains, may to July is long/ short rains, sept to nov is short rains
- X % of adolescents have BMI ≥25
 kg/m2, X % anemia





- Next to the ocean
- Pop = over 8 million people
- School year runs from Jan to Nov
- Warmer period from Nov to
 March and cooler June to Aug
- X % of adolescents have BMI ≥25
 kg/m2, X % anemia









CHANGEMAKER 'SMART' OBJECTIVES



ESTABLISH A MULTI-ACTOR PLATFORM FOR MULTIPLE NEEDS FRAMEWORK

Map Stakeholders, Context and needs assessment including (social, political, cultural)

KPI 1.1: Three adolescent-led 'Intervention Taskforces' (12M) KPI 1.2: Three 'multiple needs' frameworks (18M)

Objective 1

WP 2



COORDINATE THE CO-DESIGN IMPLEMENTATION

Investigate the incorporation of the 'multiple needs' framework and the gender dimensions during the implementation process

KPI 2.1: Two status reports for each study site on knowledge, attitudes, practices, and well-being regarding multiple needs and gender (36M)

Objective 2

WP2



CO-DESIGN WITH
ADOLESCENTS A
MULTI-COMPONENT
EALTH INTERVENTION

Co-design four intervention components with Intervention Taskforces

KPI 3.1: Six completed co-design workshops on school-based, urban farming and curriculum development, incl. social media messages, and how to deliver health talks (18M)

Objective 3

WP3



GENERATE NCD TOOLS FOR PROCESSES FOR INTERVENTION IMPLEMENTATION

Synthesize the needsbased and community and stakeholder-driven intervention preferences

Develop communitydriven and co-designed measures of process and impact

KPI 4.1: Multiple needsbased and co-designed implementation manual available (18M)

KPI 4.2: Data collection tools for implementation outcomes developed (24M)

Objective 4

WP 4



CONTEXTUALIZE AND IMPLEMENT CHANGEMAKER

Ensure the co-designed intervention based on a multiple needs framework is implemented in an appropriate multistakeholder environment.

KPI 5: Coordination protocol to link the stakeholders and health sector (18M) KPI 5.2: 3 workshops with key health promoters (24M) KPI 5.3: 3 workshops with agronomist, adolescents teachers (24M)

Objective 5

WP 2



CHANGEMAKER 'SMART' OBJECTIVES



DETERMINE EFFECTS OF MULTI-COMPONENT INTERVENTION

Design, conduct, and analyze 3 cRCTS for the effectiveness of the multicomponent intervention on nutrition, health, and environmental outcomes

KPI 6.1: 190 adolescents (each school) and one of their parents have baseline examinations (30M) KPI 6.2: 3 publications on the effectiveness of the intervention at sites and one scientific publication on the pooled effectiveness (42M)



DEFINE UPTAKE. CAUSAL MECHANISMS. **AND ENABLING FACTORS**

Planning, conduct, and analysis of a mixedmethods implementation and impact evaluation including costeffectiveness

KPI 7.1: 3 multi-actor workshops on the performance of the intervention (36M) KPI 7.2: Refined 'ToC' frameworks for sustainability and scalability disseminated (48M)



Co-development of frameworks and platforms to foster the utilization of project evidence

KP 8.1: 3 social media strategies, targeting the prevention of NCDs among adolescents in three cities (36M) KP 8.2: Policy dialogue and communication report (48M)

Objective 7

WP6

Objective 8

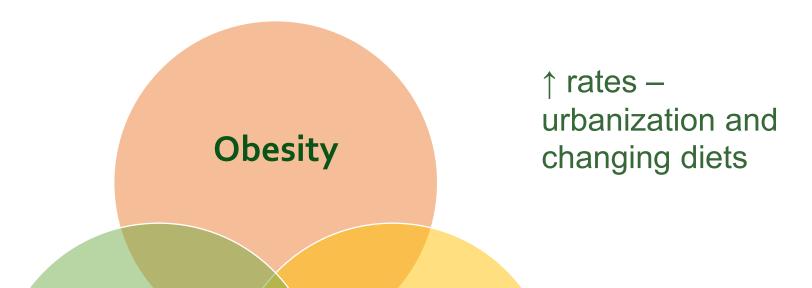




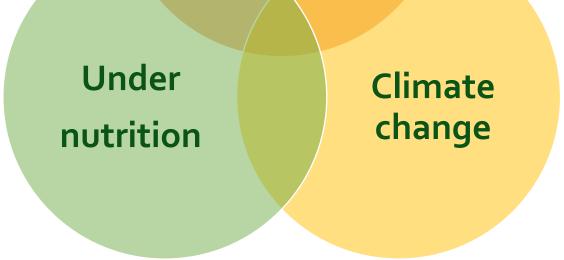




The Global Syndemic



↑ rates – food insecurity



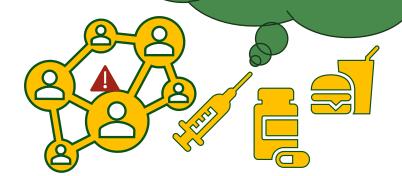
Vulnerabilities threaten food production



Why focus on adolescents?

Critical time-period when lifelong behavior patterns are established

~70% of premature adult deaths from behaviors started in adolescence



By 2050 SSA suspected to have largest adolescent population globally



Unless action is taken to curb NCDs, young population will add tremendous pressure to health systems



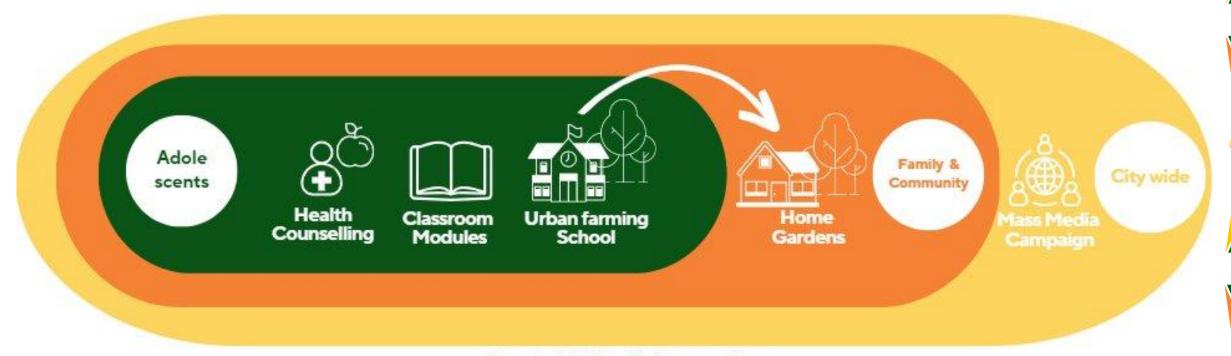


Sustainable Health Interventions

"A multi-sectoral area for study, research and practice, that places priority on improving determinants of health and wellbeing and implementing knowledge through resilient systems to achieve health equity for all people worldwide WHILE staying within planetary boundaries that sustain lifesupporting ecosystems"



The four intervention components



Sustainable Health Intervention



Sustainable Urban Farming

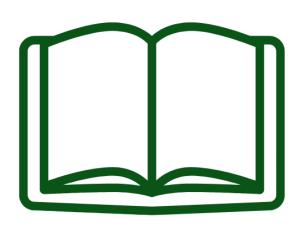


Changemaker shall establishing urban farms as a space for students to learn about gardening and participate in fruit and vegetable cultivation.

- Select the most nutritious and climate appropriate crops.
- Fruits and vegetables would be used during school lunches or snacks.
- Encourage the students to take these practices of urban gardening into the homes or community.



Sustainable Classroom Health Modules



Co-developed a sustainable health modules targeted at improving adolescent knowledge and changing behavior.

- Integrated into the existing school curriculum
- Standardized delivery of content and scalability.
- Topics:

Urban farming, Diet (diversity and fruits /vegetables), Composting (waste management), physical activity, Diet (sugary drinks and ultraprocessed food, wellbeing, and a topic specified during co-design



Health Counseling with MI



The Changemaker implementor (HCW, CHW, teacher, etc.) will conduct individual or small group health counseling using the motivational interviewing (MI) strategy for behavior change.

- MI uses ideas of intrinsic motivation and goal setting to help generate behavior change.
- Together with the adolescent, the implementor will develop a specific and achievable plan for behavior change that includes specific goals, strategies, and action steps.



Mass Media Campaign



Changemaker shall implement a mass media campaign that considers the cultural and social factors that affect the behavior and attitudes of adolescents.

- The campaign materials will be co-created in a way that is
 - o engaging and culturally relevant.
 - resonate with adolescents and ensure they are easily understood.
- Disseminated through various communication channels such as television, radio, billboards, social media, and community events.

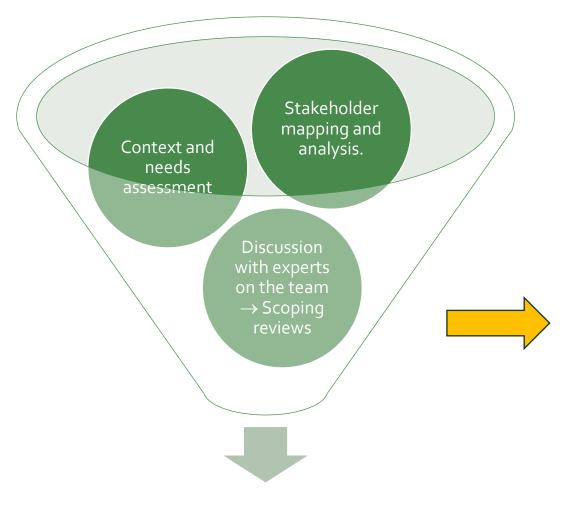








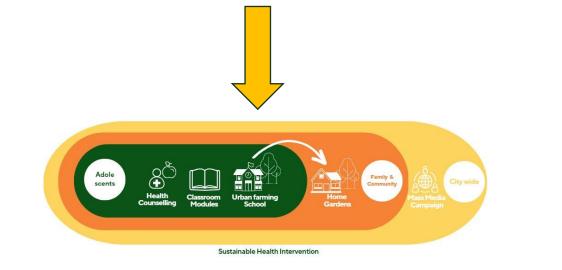
How will we implement? The Formative Phase



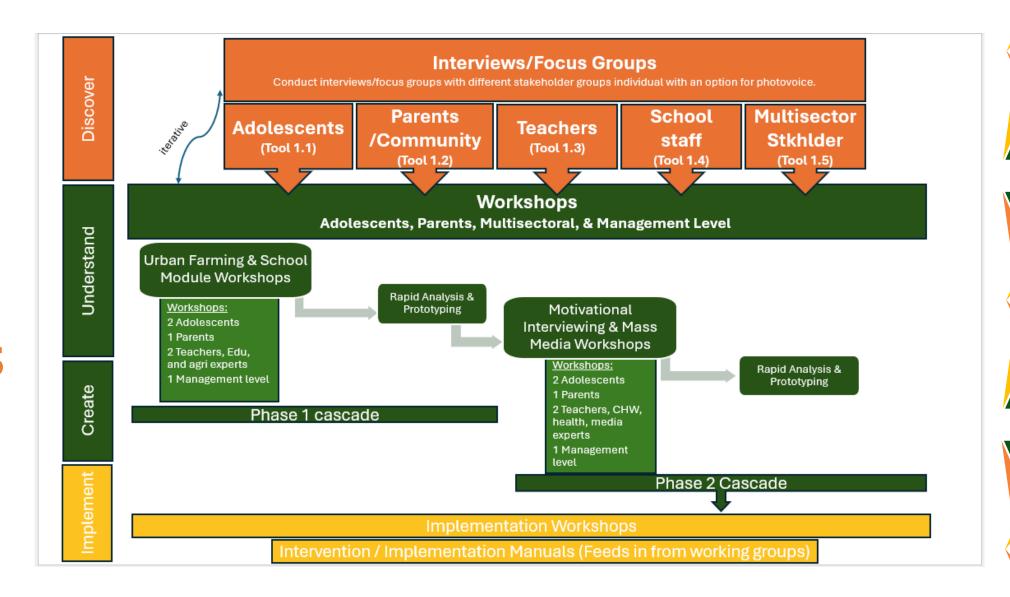
Remaining questions?

Co-design workshops with the intervention taskforce to address:

- Remaining questions
- Intervention components
- Implementation processes



Co-Design Process





How will we evaluate it? Three cluster-randomized controlled trials and process evaluation

Randomization



4 schools with each 190 adolescents aged 11-16 years*

Intervention





Control

Outcomes

Nutrition and health

Climate and environment

MUAC z-score Hemoglobin

Waste management score

Anthropometry, diet quality, physical activity, WASH, wellbeing, urban farming knowledge

- *sample size: 150 participants per school, if ICC=0.025,
- α =0.05, 1- β =0.8, Δ MUAC z-score: -0.175; 20% drop-out

- Intention-to-treat
- Random effects regression
- Accounted for cluster-design





How will we evaluate it? Impact evaluation outcomes and methods

Process evaluation

Reach (Coverage, representation, motivations/barriers)

Adoption (delivery agents, mechanisms, support and supervision to deliver)

Implementation (coverage against target, fidelity, any changes, reasons)

Activity logs
Observation reports
Feedback loops
Quantitative surveys with stakeholders
Costing logs

Qualitative investigation

Effectiveness (positive/negative impact on individual and organizational outcomes)

Maintenance (willingness to institutionalize intervention activities, changes needed, reasons, sustaining positive individual/organization impact)

Iterative focus group discussions and interviews with selected stakeholders during implementation

Workshop with intervention task force three during implementation and one at the end of implementation (design methods)



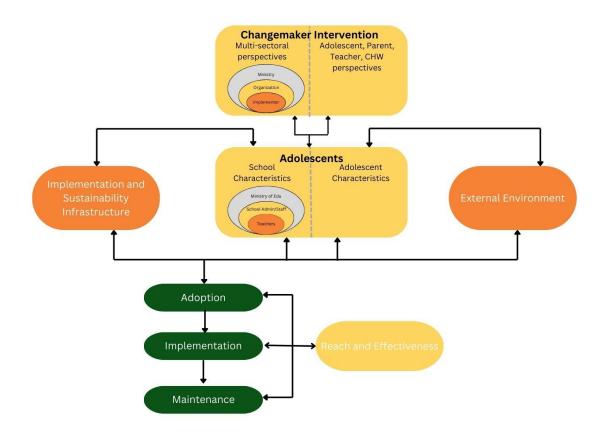








PRISM Framework













Potential Ethical Considerations



Voluntary participation – potentially difficult for adolescent and families to understand



Protection from obesity and overweight stigma – during all phases need to be aware of existing stigmas



Respect for adolescents' time – this project adds additional tasks and responsibilities for adolescents, particularly with co-design.



Data privacy and confidentiality – follow country specific guidelines



Implementors or data collections may face sensitive issues – how best to ensure they are addressed



Power imbalance – perceived role of adolescents and their decision-making power



Equal opportunity to participate in research - ensure both genders, ethic minorities, diverse socio-econ have opportunity to participate









Thank You!

































