Generating Sustainable Human and Institutional Capacity in Uganda

Looking Beyond a Decade of Accomplishments in Nutrition
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Towards Inclusive Human and Institutional Capacity Development for Nutrition in Uganda

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THRUST/MOTIVATION

Going beyond the traditional model that focuses on graduate training.
1. **Deliberate focus on the nexus among agriculture, health and nutrition**: Our capacity building efforts have looked beyond traditional nutrition into pathways by which agriculture contributes to improved nutrition and health outcomes.

2. **Multisectoral**: engaging Ministries of Agriculture and Health. Leveraging the overall coordination role of the Office of the Prime Minister (OPM).
3. **Multistakeholder**: entailing traditional players (line ministries, OPM, UN agencies), and nontraditional players (the National Planning Authority (NPA), Universities, National Agricultural Research System (NARS), Non-governmental organisations (NGOs) and Local governments

4. **Multidisciplinarity**: bringing on board other disciplines and skills beyond nutrition including plant breeders, food scientists, agricultural economists, gender specialists etc
KEY TENETS (3)

5. Rallying the political debate and consensus around the issues of nutrition:

- Having nutrition mainstreamed in the Second and subsequent National development Plans,
- Nutrition mainstreamed and budgeted in district development plans,
- Nutrition focal offices established at district level
- Strengthened nutrition focus in MAAIF
6. **Catalyzing interest in nutrition training**

- Increased interest in graduate level nutrition training including from non-nutrition disciplines
- Increased number of universities offering nutrition and related courses/programs
7. **Evaluation**: Impact assessment, Panel surveys, Birth Cohort, Self assessments by the CC etc

8. **Publicity and visibility**: Well attended and publicized National level symposia, district dissemination workshops, magazine (nutritionist), many academic publications, media appearances
DEVELOPMENTS THAT WILL SHAPE FUTURE CAPACITY BUILDING EFFORTS

- Covid 19 pandemic lockdowns and restricted movements
- Recent policy focus on food systems
- Climate change and global warming
Capacity Building for Extension Agents as Community Nutrition Educators

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BACKGROUND:

Undernutrition remains a problem in Uganda with prevalence of stunting estimated at 29% and prevalence of anemia at 53% among children 6-59 months and at 32% among women 15-49 years.

Uganda Nutrition Action Plan (I & II) mandates Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and Ministry of Health as key sectors with primary responsibility for uplifting the nutrition situation in the country

- Many ongoing multi-sectoral efforts focused on enhancing production and utilization of nutrient-rich foods plus public health interventions

Agricultural extension workers (AEWs) remain underutilized in nutrition interventions, although they:

- Constitute the largest educated workforce (Diploma or higher) under MAAIF
- Already have skills in engaging farming households in education and extension services; and
- Are well-distributed within the country (government employees at sub-county level)
Data on nutrition education and extension competencies and training needs of agricultural extension workers in Uganda remain scanty.

Some research reveals discrepancies between the perceived competencies and perceived training needs of public and private AEWs (Shimali et al, 2021).
CAPACITY BUILDING FOR AGRIC EXTENSION WORKERS

1. Contributed to long-term capacity building by improving student training and research to improve interventions in agricultural extension-nutrition nexus

2. Nutrition education of AEWs guided by available data for concrete solutions to bridge gaps in AEWs competencies

3. Supported technical and adaptive capacity of academicians, students, & AEWs using the training-of-trainers model

4. Challenged extension workers to realize their role in the ecosystem of community and household dietary diversity

5. Strived to achieve regional, cultural and gender equity in selection of participants and trainees (students & AEWs)
CAPACITY BUILDING IN MONITORING FOR ACCOUNTABILITY

ILRI 2014
“Emmere ezimba omubiri”
[Body-building foods]

“Emmere ekuma omubiri”
[Protective foods]

“Emmere ereta amanyi”
[Energy-giving foods]
DIVERSITY ACROSS AND WITHIN FOOD GROUPS

Add other vegetables, staples, and legumes to increase the volume and improve nutritive value.

What would you add to these eggs?

1 food group

2 food groups

3 food groups
Instead of bread you can serve with yams, potatoes, maize, beans etc.

Are farmers including ENOUGH MEATS in their diets?

- All meats contribute to a healthier diet
- Meats is not a luxury; we all need 1-2 servings of meats daily
DIVERSITY ACHIEVED IN FOOD PREPARATION & PROCESSING

Promote diversity in processing & food preparation to enhance food and nutrition security

<table>
<thead>
<tr>
<th>Food State</th>
<th>Kcal/100 g</th>
<th>% Carbohydrate</th>
<th>% Protein</th>
<th>% Fats/oil</th>
<th>% Ash</th>
<th>% Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh roots</td>
<td>160</td>
<td>71%</td>
<td>8%</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flour</td>
<td>314</td>
<td>18.8%</td>
<td>16.6%</td>
<td>33%</td>
<td>8%</td>
<td>100%</td>
</tr>
<tr>
<td>Boiled</td>
<td>112</td>
<td>71%</td>
<td>8%</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steamed</td>
<td>112</td>
<td>71%</td>
<td>8%</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roasted</td>
<td>165</td>
<td>71%</td>
<td>8%</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fried</td>
<td>377</td>
<td>18.8%</td>
<td>16.6%</td>
<td>33%</td>
<td>8%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Promote processing using simple technologies

Farmers should process roots, tubers and starchy vegetables to improve food security and energy density
PROCESSING FOR FOOD SAFETY & NUTRITION SECURITY

Focused on common practices that impact the quality of local staples & emerging health concerns

Poor Chipping is a recipe for Aflatoxin contamination

Molding large chunks, splits dried on bare ground, and cubes often molded inside result in molds inside.
WHAT DID WE LEARN?

Training of agricultural extension workers as trainers has potential to improve REACH than would be achieved by training traditional nutritionists

- COVID-19 context?

Need for **continuous in-service training and strong linkages with nutritionists** to enhance AEWs' skills to communicate **VALIDATED** nutrition content and technologies to farmers

Need to **engage extension agents in intervention evaluations** to enhance their capacity to assess the impact of their nutrition education activities on farmers’ agronomic and dietary practices