Are Our Children Learning?
Malnutrition and learning outcomes
What is Uwezo?

• Citizen-led learning assessment
• Kenya, Tanzania and Uganda.
• All children 7-16 (in Tanzania) tested at Standard 2 level
• Kiswahili, English, Maths
• All mainland districts
• Over 10,000 local partners and volunteers
Beyond learning

• Cascade model
• Strong infrastructure for data collection
• People:
  o district coordinators and assistants (coordinating, managing)
  o regional coordinators (monitoring)
  o volunteers (collecting data)
• Data on other services can be collected
Sharing the infrastructure

- Ministries of Health, Water and Education were given opportunity to use the Uwezo infrastructure in 2015
- 4 panelists from TFNC, ministries of education, health and water
Process

• Uwezo+ questions developed by panelists
• Relevant ministries (health, water, education) could insert questions
• Questions incorporated into tools, pre-tested and piloted
Selected topics

water sources (home and school)

school meals

nutrition (Mid-Upper Arm Circumference (MUAC) test

meals and eating habits (home)

iodine test in salt

guidance and counseling (school)
Reach

- **159** districts
- **68,588** households (meals)
- **55,011** households (iodine test)
- **197,451** children (6 months-14yrs – MUAC test)
• MUAC Test: circumference of the left upper arm, measured at the mid-point between the tip of the shoulder and the tip of the elbow

• IMUAC assesses nutritional status / malnutrition risk
# Reading MUAC

<table>
<thead>
<tr>
<th>Age</th>
<th>MUAC measurement</th>
<th>Nutritional status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5</td>
<td>less than 11.5cm</td>
<td>severe malnutrition</td>
</tr>
<tr>
<td></td>
<td>11.5cm - 12.4cm</td>
<td>moderate malnutrition</td>
</tr>
<tr>
<td></td>
<td>greater than / equal to</td>
<td>no malnutrition</td>
</tr>
<tr>
<td></td>
<td>12.5cm</td>
<td></td>
</tr>
<tr>
<td>5 - 9 years</td>
<td>less than 13.5cm</td>
<td>severe malnutrition</td>
</tr>
<tr>
<td></td>
<td>13.5cm - 14.4cm</td>
<td>moderate malnutrition</td>
</tr>
<tr>
<td></td>
<td>greater than / equal to</td>
<td>no malnutrition</td>
</tr>
<tr>
<td></td>
<td>14.5cm</td>
<td></td>
</tr>
<tr>
<td>10 - 14 years</td>
<td>less than 16cm</td>
<td>severe malnutrition</td>
</tr>
<tr>
<td></td>
<td>16cm - 18.4cm</td>
<td>moderate malnutrition</td>
</tr>
<tr>
<td></td>
<td>greater than / equal to</td>
<td>no malnutrition</td>
</tr>
<tr>
<td></td>
<td>18.5cm</td>
<td></td>
</tr>
</tbody>
</table>
Malnutrition

Figure 1: Nutrition status of children up to 14 years, by age groups

Why does malnutrition appear to be worse among slightly older children?
District Variations

- Children under 5 with severe malnutrition, worst district: Songea Mjini (23.9%)

- Children under 5 with severe malnutrition, best districts: Musoma Urban (0.3%) Tabora Urban (0.3%)
Links to learning

Figure 2: Learning outcomes among children aged 10 to 14 years, by nutrition status

<table>
<thead>
<tr>
<th>Subject</th>
<th>Severely malnourished</th>
<th>Moderately malnourished</th>
<th>Well nourished</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numeracy</td>
<td>35.5%</td>
<td>37.7%</td>
<td>53.4%</td>
</tr>
<tr>
<td>English</td>
<td>17.9%</td>
<td>16.4%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Kiswahili</td>
<td>46.3%</td>
<td>51.3%</td>
<td>65.8%</td>
</tr>
</tbody>
</table>
At home
- 50% of the families can afford 3 meals a day
- 3.8% of Tanzanians survive on 1 meal a day

At school
- Nationally, only about one in five schools have a lunch feeding program (23%).
- Kilimanjaro region 79% schools provide lunch, in Geita 5%
District Variations

Figure 3: Districts with more than 85% households that can afford 3 meals

<table>
<thead>
<tr>
<th>District</th>
<th>Affordance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mbulu</td>
<td>97.6%</td>
</tr>
<tr>
<td>Kishapu</td>
<td>88.2%</td>
</tr>
<tr>
<td>Mafinga Mji</td>
<td>88%</td>
</tr>
<tr>
<td>Tunduma</td>
<td>86.4%</td>
</tr>
<tr>
<td>Moshi Mji</td>
<td>86%</td>
</tr>
</tbody>
</table>
In 8 districts, less than 50% of families can afford 3 meals.
Conclusion

1. Relationship between nutrition status and learning outcomes.

2. Malnutrition is more severe among older children. Schools could and should be important sites for interventions

3. Many schools in Tanzania do not provide meals.
Reflections

1. So what? Is research confirming common sense?

2. Should the fifth phase government to release a statement encouraging parents to contribute to feeding programs at school?