Nutrition Causal Analysis (Link NCA) in Kule and Pugnido 1 Camps
Gambella Region

Presentation of results
Addis Ababa, Ethiopia
Objectives of the presentation

1. Overview of Link NCA methodology
2. Presentation of Link NCA findings
3. Group work on solutions
A structured, participatory and comprehensive study based on the UNICEF causal framework, to build a case for nutrition causality in a local context.

Source: UNICEF

- Inadequate food intake
- Diseases
- Insufficient access to FOOD
- Insufficient CARE practices (women and children)
- Poor environmental health and inadequate HEALTH services

Resources, Institutions, Political and ideological framework, ...

Immediate causes

Underlying Causes

Fundamental causes
Multi-sectoral analysis of the causes of undernutrition – LINK NCA

The Method – Key steps

1. Identification of causal hypothesis

2. Quantitative survey

3. Qualitative survey

4. Prioritization and participatory validation of causal hypotheses

5. Communicating results and planning for a response

- Results of the qualitative survey presented and discussed in the villages of the qualitative survey
- Results presented, discussed and voted in a final workshop
## Why a Link NCA in Gambella?

### Prevalence of Acute malnutrition for children 6-59 months 95% C.I 2017

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>TIERKIDI</th>
<th>KULE</th>
<th>PUGNIDO 1</th>
<th>NGUNYIEL</th>
<th>PUGNIDO 2</th>
<th>JEWI</th>
<th>OKUGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Acute Malnutrition (GAM) (W/H &lt; -2 z-score and/or oedema)</td>
<td>23.0% (19.4 - 27.2)</td>
<td>23.9% (16.6 - 33.2)</td>
<td>16.8% (13.2 - 21.0)</td>
<td>29.7% (26.0 - 33.7)</td>
<td>16.0% (12.6 - 20.0)</td>
<td>24.6% (21.0 - 28.7)</td>
<td>22.8% (15.6 - 32.0)</td>
</tr>
<tr>
<td>Severe Acute Malnutrition (SAM) (W/H &lt; -3z scores and/or oedema)</td>
<td>6.9% (4.9 - 9.7)</td>
<td>6.1% (2.2 - 16.1)</td>
<td>3.4% (1.9 - 5.8)</td>
<td>8.0% (6-10.7%)</td>
<td>2.9% (1.6 - 5.2)</td>
<td>6.1% (4.2 - 8.6)</td>
<td>5.3% (2.6 - 10.5)</td>
</tr>
<tr>
<td>Total Stunted</td>
<td>12.8% (10.0 - 6.2)</td>
<td>10.3% (6.8 - 15.2)</td>
<td>9.1% (6.5 - 12.6)</td>
<td>11.9% (9.4 - 15.0)</td>
<td>2.4% (1.3 - 4.4)</td>
<td>15.0% (12.0 - 18.6)</td>
<td>14.5% (6.5 - 29.2)</td>
</tr>
<tr>
<td>Severely stunted</td>
<td>1.8% (0.9 - 3.6)</td>
<td>1.2% (0.2 - 8.1)</td>
<td>1.4% (0.6 - 1.4)</td>
<td>1.2% (0.5 - 2.5)</td>
<td>0.3% (0.0 - 1.5)</td>
<td>2.0% (1.0 - 3.7)</td>
<td>3.9% (1.2 - 12.6)</td>
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</table>
Major causal risk factors and pathways to under-nutrition
Poor opportunities for livelihoods

Low possibility of increasing the diversity of households’ incomes
- Limited access to agricultural land outside the camps
- No means to buy animals
- Theft of animals due to Murle attacks
- Animal diseases causing death
- Competition for grazing land/ limited access
- Inadequate water during the dry season

Copying strategies
- Collect and sell firewood, grass and leaves (conflict with host communities, insecurity,)
- Produce charcoal and sell it, produce artisanal alcohol (1L=20 ETB) and sell it
- Daily agricultural worker in investor farms,
- Solidarity network: borrow, equip system, Relatives help from Gambella and diaspora
- Sell GFD ration commodities (oil, beans, sorghum) to buy other food items and NFIs
Inadequate food availability at household level due to the sale of part of the food rations

Reasons for sale of food resulting in food lasting 7-20 days

- payment of borrowed food/money
- payment for grain milling, transport of food from distribution site to the house, pharmacy bills, cloths or even rent of rooms in Pugnido town for some displaced people after the Murle attack
- Purchase of food that the miss eating that is not part of GFD (fresh fish, meat, sugar, vegetables)
- buy missing items in GFD (sugar, salt)
- Buy some non food items e.g soap
Access:

Household Food Source by group of food in Pugnido 1 (Agnuak site) camp

- Market
- General Food Distribution
- Humanitarian aid/food assistance from NGO partners
- Loan
- Sharing/gift/social network
- Own production
- Not eaten

Access to different food groups in Pugnido 1 (Agnuak site) camp.
Limited household food diversity

Food Consumption score

- **Acceptable**: 34.44 % of HoH in Pugnido 1, 21.21 % of HoH in Kule
- **Bordeline**: 52.32 % of HoH in Pugnido 1, 42 % of HoH in Kule
- **Poor**: 13.25 % of HoH in Pugnido 1, 36.8 % of HoH in Kule

Diet diversity score
- 10% of households in Pugnido eat 3 groups of food or less
- 45% of households in Kule eat 3 groups of food or less
# Poor maternal care practices

### First to eat in the household

- Children: 98.68% in Pugnido and 97.4% in Kule.
- Father/men: 1.33% in Pugnido and 2.6% in Kule.

### Second to eat in the household

- Children: 83.44% in Pugnido and 91.78% in Kule.
- Father/men: 1.33% in Pugnido and 2.17% in Kule.
- Mother/women: 14.57% in Pugnido and 6.06% in Kule.
- Both men and women: 0.66% in Kule.

### Last to eat in the household

- Father/men: 87.42% in Pugnido and 94% in Kule.
- Mother/women: 11.92% in Pugnido and 6% in Kule.
Person seen by the mother for antenatal care for her last pregnancy

- Nobody: 3.9
- Relative/friend: 0.7
- Traditional birth attendant/healer, Community health worker
  - Health professional (Doctor, nurse, midwife): 3.3

% of women in Kule: 87.45
% of women in Pugnido: 84.14

Number of visits with a health professional

- % of women in Pugnido:
  - Less than 4 times: 15.86
  - More than 4 times: 84.14
- % of women in Kule:
  - Less than 4 times: 58.71
  - More than 4 times: 41.29
# Early pregnancies

## Age when the woman got married

<table>
<thead>
<tr>
<th>Age of the mother when she first gave birth</th>
<th>% of women in Pugnido 1</th>
<th>% of women in Kule</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-15</td>
<td>6.2</td>
<td>1.7</td>
</tr>
<tr>
<td>16-17</td>
<td>24.7</td>
<td>15.2</td>
</tr>
<tr>
<td>18-25</td>
<td>67.7</td>
<td>79.6</td>
</tr>
<tr>
<td>25 and more</td>
<td>1.4</td>
<td>3.5</td>
</tr>
</tbody>
</table>

## Age of the mother when she first gave birth

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<td>13-15</td>
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<tr>
<td>16-17</td>
<td>23.3</td>
<td>32.5</td>
</tr>
<tr>
<td>18 and more</td>
<td>55.5</td>
<td>61</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of women in Pugnido 1</th>
<th>% of women in Kule</th>
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<td>% of women in Pugnido 1</td>
<td>% of women in Kule</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ideal Age marriage woman</th>
<th>Pugnido 1</th>
<th>Kule</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>15-19</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age 1st baby</th>
<th>Pugnido 1</th>
<th>Kule</th>
</tr>
</thead>
</table>
| 15 to 20     | 16-17    |     | Often decided by the family
Overload of work for women

- Women work daily from 6am to 10pm
- Routine Household chores, childcare and visiting the market and fetching water
- Special workload; collection of GFD, firewood and working as a labourers for investors

- Consequences
  - Less time for care for children sometimes older siblings under 12 care for the children
  - Physical pains
  - Risk of SGBV during firewood collection
Poor Psychosocial well-being of women

Main caregiver feel supported

<table>
<thead>
<tr>
<th>Feeling Supported</th>
<th>% of Caregivers in Pugnido 1</th>
<th>% of Caregivers in Kule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely</td>
<td>9.5</td>
<td>23.2</td>
</tr>
<tr>
<td>Somewhat</td>
<td>29.9</td>
<td>26.5</td>
</tr>
<tr>
<td>Not very</td>
<td>16</td>
<td>38.4</td>
</tr>
<tr>
<td>Not at all</td>
<td>11.9</td>
<td>44.6</td>
</tr>
</tbody>
</table>

Last pregnancy was wanted then, later or not at all

<table>
<thead>
<tr>
<th>Timing</th>
<th>% of Caregivers in Pugnido 1</th>
<th>% of Caregivers in Kule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Then</td>
<td>1.4</td>
<td>15.6</td>
</tr>
<tr>
<td>Later</td>
<td>90.4</td>
<td>82.7</td>
</tr>
<tr>
<td>Not at all</td>
<td>8.2</td>
<td>1.7</td>
</tr>
</tbody>
</table>

% of caregivers in Pugnido 1 | % of caregivers in Kule
Most of the women are sad, anxious, often stress and have sleeping problems because of:

- Everything is on their shoulder (all the responsibilities, planning and well being of family)
- Many are heads of households (women without men support are very vulnerable)
- Heavy workload and lack of support
- Decrease of GFD ration leads to stress
- GBV: beaten, insulted, etc.
- They don’t feel safe in the camp and their shelter (night, drunkards, risk of house fire)
- Evolution in decision making: No men in household and in many cases they became independent
- Murle attacks in Pugnido (2016: 4 deaths and 5 children kidnaped) and they are scared for next January
- Consequences of displacements due to Murle attack (town/inside the camp): some even change blocks (face challenges to rebuild shelter), firewood collection, insults and tensions with relatives and neighbourhood on water source point
Infants and young child feeding practices

- In Kule, some women believe that colostrum causes diarrhoea to their babies.
- Generally caregivers said that they could not afford to provide age-appropriate food for their children (introduction of solid and semi-solid foods)
Inadequate access to safe water

Main source of water for the household by season in Pugnido 1 (%)

- Groundwater: 1.30 (Dry Season) 0.70 (Rainy Season)
- Roof rainwater: 0.70 (Dry Season) 0.70 (Rainy Season)
- Piped supply: 59.60 (Dry Season) 98.00 (Rainy Season)
- Sealed bottled water: 4.00 (Dry Season) 0.70 (Rainy Season)
- Surface water: 35.10 (Dry Season) 0.70 (Rainy Season)
- Other: 4.00 (Dry Season) 0.70 (Rainy Season)

Main source of water for the household by season in Kule (in%)

- Surface water: 38.5 (Dry Season) 1.3 (Rainy Season)
- Piped supply: 39.80 (Dry Season) 92.20 (Rainy Season)
- Roof rainwater: 0.90 (Dry Season) 21.70 (Rainy Season)
- Groundwater: 5.60 (Dry Season) 21.70 (Rainy Season)
Inadequate water storage and collection containers

**Contamination risks due to container and storage**

- The water storage left open/uncover: 28.1% in Kule, 47.7% in Pugnido 1
- The container used to carry water left uncovered during transportation: 35.1% in Kule, 50.3% in Pugnido 1
- The container used to carry water is dirty: 29% in Kule, 49.7% in Pugnido 1

**Sources of contaminants in drinking water;**
- Jerrycans are not clean enough, have holes, no covers
- Few jerrycans used to collect water from different sources
### Inadequate access to sanitation facility

#### Utilisation of latrines

<table>
<thead>
<tr>
<th>Description</th>
<th>% in Kule</th>
<th>% in Pugnido 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index using latrine</td>
<td>72.85</td>
<td>84.42</td>
</tr>
<tr>
<td>Utilisation of latrine/toilet present in the household</td>
<td>59.6</td>
<td>98.21</td>
</tr>
<tr>
<td>Presence of a latrine/toilet in the household</td>
<td>72.73</td>
<td>98.89</td>
</tr>
</tbody>
</table>

#### Reasons for not using latrine/toilet

<table>
<thead>
<tr>
<th>Reason</th>
<th>% in Kule</th>
<th>% in Pugnido 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don't like latrine or prefer open defecation</td>
<td>2.44</td>
<td></td>
</tr>
<tr>
<td>Lack of maintenance</td>
<td>63.89</td>
<td></td>
</tr>
<tr>
<td>Not enough latrines/toilets</td>
<td>36.11</td>
<td></td>
</tr>
<tr>
<td>Too far</td>
<td>9.76</td>
<td></td>
</tr>
</tbody>
</table>
Poor hygiene practices due to behaviour

- Hand washing practices: key moments known but not enough soap
- Children often don’t use latrine, faeces are buried near compound.
- Animals faeces and urine in compound
- Dry season (March/may) not enough water: cook, drink, wash and so on refugees hygiene practices
Inadequate malaria prevention

- Not all refugees sleep under mosquito nets and a number have holes
- Children, PLW or grand mothers have priority to sleep under mosquito nets
- Refugees need material to keep their surrounding clean and avoid mosquito propagation: machette, sickle, hoe, ax, spade, rake, wheel, barrow
- Displaced refugees after Murle attacks are more vulnerable (hosted by relatives in other blocks they do not sleep under mosquito nets)
- Refugees understand and appreciate the importance of mosquito nets
- Good treatment is available and free
Gambella Nutrition Causal pathway

- Poor management of water
- Non-optimal defecation practices
- Utilization of unsafe water points
- Inadequate access to safe water in dry season
- Vulnerabilities to contaminations
- Poor quality of health care (shortage, or queue, failure)
- Poor hygiene practices (hand, body, food, baby environment)
- Poor birth spacing
- Early marriages
- High women workload
- Inadequate shelters and household environments
- Poor men and women well-being and conflict within the household
- GBV
- Alcohol consumption
- Insecurity within and outside of the camps
- Poor access to food and incomes
- Migration of men
- Non-optimal GI: 1500Kcal ration and missing sugar and non preferred
- Inadequate utilization of resources: Sell the ration to purchase other type of food or non food items and alcohol or production of alcohol
- Losses of assets from conflict in south sudan
- Dependency to humanitarian aid
- Poor opportunities of livelihoods
3. Proposed solutions
WASH-water infrastructure

- Increased water access to 20l/p/d in all the camps
  - Increase pumping hours and back up electromechanical equipment
  - Drill additional 3 boreholes in ITANG
  - Increase water storage capacity at household level - Jerrycans
  - Water harvesting methods for use in the dry season
WASH-latrines and hygiene

- Reduced open defecation
  - Construct HH latrines
  - Strengthen/establish structures for routine maintenance and cleaning
  - Decommission filled latrines regularly

- Improved hygiene practices
  - Provide adequate water
  - Provide standard amount of soap
  - Harmonise messaging on hygiene - WASH, Health and Nutrition COAs
Protection

- Reduce SGBV, GBV and early marriage
  - Conduct baseline assessment on GBV risks and barriers in accessing services
  - Dialogue with community and existing structures
  - Strengthen community GBV working groups

- Increased security inside and outside the camps
  - Peaceful co-existence through events and platforms to discuss conflict resolution mechanisms
  - Strengthen/establish community based conflict resolution structures
Protection

- Improved psychosocial well being of men women and children through reduced alcoholism
  - Engage men and youths
    - Livelihoods and IGA activities
    - Peace clubs
    - Sport
  - Referral for psychosocial support
  - Referral of affected children for routine monitoring
Protection

- Reduced women workload
  - Energy
    - Alternatives to firewood for cooking energy
  - Food distribution
    - Increase efficiency of food distribution
  - Enhanced social protection community structures to feed children
    - Work with Nutrition program to pilot feeding of children under community care groups in place
- Water storage
  - Provide water storage containers
Nutrition

- Improved consumption of nutritious foods
  - Feeding in care groups
  - Promote importance of supercereal plus
  - Promote nutritious foods for U5s where there are food vouchers
- Increased coverage of nutrition programs
  - Strengthen screening at community and center level
- Review and print IEC materials
Health

- Disease management and prevention
  - Routine monitoring of incidences of diarrhea by location and coordination with WASH
  - Engage diarrhoeal patients or care givers on hygiene prevention
- Birth spacing
  - Dialogues with community on barriers to service provision
- Mental health
  - Improved community/ sectoral referrals-training
  - Monitoring of children in HH affected by mental health
Livelihoods and Food security

- Improved veterinary service provision
  - Establish linkages with structures in the host community
- Provide local breeds that are more resistant to disease
- Increase access to agricultural land
  - CRRF (outside the camps)
- Increase utilisation of available land
  - Expand back yard gardening
- Increase provision of vouchers
  - Fresh food vouchers
  - Cash food assistance
THANKS FOR YOUR ATTENTION!

QUESTIONS?