A Presentation from Bangladesh

Workshop on “Operational Guidance on the use of Special Nutritional Products to Reduce Micronutrient Deficiencies and Malnutrition in Refugee Population

Geneva, Switzerland
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On behalf of UNHCR, WFP and ACF Bangladesh
Content

• Background info on Bangladesh

• Background info on Cox’s Bazar district & the Refugee Operation

• Nutrition Program Implementing partners

• Nutrition Programme in the Official refugee camps

• Micronutrient interventions

• Challenges and way forward
Background info on Bangladesh

- Low-lying country in the gulf of Bengal
- Neighbouring India and Myanmar
- Low-income country (World Bank)
- High rates of poverty (40% of population)
- Disaster prone (cyclones, flooding, draughts, earthquakes)
- Projected impact of climate change (up to 25% of loss of land and 50 million internally displaced by 2050)
Background info on Bangladesh

- 7th highest country in the world in terms of population (high density)
- Estimated population in 2010: 156 million (foreseen to grow by around 6 million a year and probably stabilize around 225 million after 2030)
- Malnutrition rates (source DHS 2011):

<table>
<thead>
<tr>
<th>Form</th>
<th>Global</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wasting</td>
<td>16.2% (~2.2 mill)</td>
<td>3.0% (~550,000)</td>
</tr>
<tr>
<td>Stunting</td>
<td>41.9% (~7.8 mill)</td>
<td>14.3% (~3.2 mill)</td>
</tr>
<tr>
<td>Underweight</td>
<td>41.4% (~6 mill)</td>
<td>10.3% (~2 mill)</td>
</tr>
</tbody>
</table>

Source: HFSNA 2009
Refugee operation 1: Refugee population

- Cox’s Bazar: one of the poorest district in Bangladesh in terms of social economical indicators. In addition to that around 250,000 refugees of Rohingya from the North Rakhine State (NRS) of Myanmar in fluxed as refugee since 1991/92 to present day.

- Two official camps: Kutupalong and Nayapara with a total of 30,000 registered refugees.

- Two unofficial sites: Leda and Makeshift with a total of 15,000 and 25,000 unregister refugees where ACF, MSF and MA are providing minimum life saving services.

- There are 150 - 200 thousand undocumented refugees spread in the host community.
Key Partners

- **UNHCR**: Overall management and coordination; therapeutic food supply

- **WFP**: General and supplementary food supply

- **ACF**: Implements the overall nutrition intervention (bringing additional funding)

- **GoB**: MoHFW
Refugee operation 3: Nutrition situation in Ukhia and Teknaf

Source: ACF nutrition surveys:

<table>
<thead>
<tr>
<th>Month /Year</th>
<th>Upazila (sub district)</th>
<th>GAM rate</th>
<th>C.I.</th>
<th>SAM rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct/Nov 2009</td>
<td>Ukhia</td>
<td>11.9%</td>
<td>9.5 - 14.8</td>
<td>2.0%</td>
</tr>
<tr>
<td></td>
<td>Teknaf</td>
<td>14.1%</td>
<td>11.5 - 17.2</td>
<td>1.7%</td>
</tr>
<tr>
<td>Oct/Nov 2011</td>
<td>Ukhia</td>
<td>16.5%</td>
<td>12.7 - 21.2</td>
<td>2.9%</td>
</tr>
<tr>
<td></td>
<td>Teknaf</td>
<td>20.7%</td>
<td>16.2 - 26.1</td>
<td>6.2%</td>
</tr>
</tbody>
</table>
# Trend in nutrition situation: KTP and NYP camps (1)

<table>
<thead>
<tr>
<th>Form</th>
<th>Feb-06</th>
<th>Mar-07</th>
<th>Feb-08</th>
<th>May-09</th>
<th>May-10</th>
<th>May-11</th>
<th>May-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Wasting (%) – Acute under nutrition</td>
<td>19.6</td>
<td>12.1</td>
<td>8.6</td>
<td>18.7</td>
<td>14.8</td>
<td>16.6</td>
<td>12.6</td>
</tr>
<tr>
<td>Global Stunting (%) – Chronic under nutrition</td>
<td>51.9</td>
<td>61.9</td>
<td>63</td>
<td>71.7</td>
<td>67.2</td>
<td>58.6</td>
<td>60.5</td>
</tr>
<tr>
<td>Anaemia (Hb%&lt;11g/dl) – micronutrient deficiency</td>
<td>65.4</td>
<td>64.2</td>
<td>47</td>
<td>28.9</td>
<td>49.3</td>
<td>36.5</td>
<td>30</td>
</tr>
</tbody>
</table>
Trend in Nutrition situation: KTP and NYP camps

Results of Nutrition surveys in KTP and NYP camps 2006 - 2012

- Global Wasting (%) – Acute undernutrition
- Global Stunting (%) – Chronic undernutrition
- Anaemia (Hb%<11g/dl) – micronutrient deficiency
Nutrition Program in the Refugee camps

Curative Care:

1. An integrated Stabilization Centre (SC) in the IPDs runs by MoHFW in both the camps for the treatment of SAM children with medical complication *(ACF deployed a medical doctor and medical nurse and providing technical support to MoHFW staff).*

2. Out patient Therapeutic Program (OTP) for the treatment of SAM children without medical complication.

3. Supplementary Feeding Program (SFP) for MAM children and blanket SFP for PLW
Nutrition Program

Preventive program:

1. Community based Screening of <5 children by using MUAC and Oedema for detection and referral mechanism.

2. Growth Monitoring & Promotion (GMP)

3. Blanket Feeding Program for children 6-23 months and PLW *(started in Dec 2010)*.

4. Health facility /Community based BCC

5. Micro-nutrient powder (MNP) distribution for children 6-59 months adolescent girl

6. Breast Feeding Support Group (28 groups, two per block) and Corner at OTP

7. Cooking demonstration

8. Home visiting and family meeting:
Nutrition Program in the Refugee camps

Program performance:

<table>
<thead>
<tr>
<th></th>
<th>Coverage</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GM program coverage (%)</td>
<td>&gt;90%</td>
<td>All children 0-59 months are given GM card</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNP distribution program</td>
<td>&gt;90%</td>
<td>But only around 50% of beneficiaries consuming MNP</td>
</tr>
<tr>
<td>coverage (%) 2011</td>
<td></td>
<td>at HH level.</td>
</tr>
</tbody>
</table>
Nutrition Program in the Refugee camps

Program performance:

<table>
<thead>
<tr>
<th>Program Performance an average in 2012</th>
<th>TFP (SC/OTP)</th>
<th>SFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cured rate %</td>
<td>85%</td>
<td>*60%</td>
</tr>
<tr>
<td>Defaulter rate %</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Death rate %</td>
<td>0.4%</td>
<td>0.1%</td>
</tr>
<tr>
<td>LoS (days)</td>
<td>40</td>
<td>90</td>
</tr>
<tr>
<td>GoW g/kg/day</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

* Due to the specific context in the refugee camps we were using ≥-1 SD as discharged criteria for MAM children in SFP. Since Aug 2012 shifted to normal discharged criteria since than cured rate in SFP is around 90%. 

[UNHCR logo] [WFP logo] [World Food Programme logo]
Micronutrient interventions

Population based strategies

- Food fortification
  - Super cereal/WSB plus (distribution started since Sept 2011)
  - Vitamin A fortified vegetable oil

- Production of micronutrient rich foods
  - Vegetable gardening
Micronutrient interventions (continue..)

Targeted strategies - high risk groups

• Dietary improvement
• Parasitic disease control
  • Hookworm
  • Diarrhoea
• Micronutrient supplementation
  • MNPs
  • Lipid based Nutrient supplements (Plumpy Doz
  • Iron folate tablets
  • Calcium tablets
  • Vit A supplementation (2 rounds a year)
Micronutrient interventions (continue..)

Introduction of MNPs

• Introduction in KTP - Aug 2008
• Introduction in NYP - Sep 2008
  - Training
    • Health and nutrition Staff
    • Community Volunteers
    • Community and religious leaders
Micronutrient interventions (continue..)

Implementing Partners

- 2008
  - Ministry of Health and Family Welfare (MOHFW) for 6-59 mo children and PLW
  - Research Training and Management International (RTMI) for Adolescent Girls

- 2009 to date
  - ACF (Action contre la Faim); 6-59 months, adolescent girls, pregnant and lactating.
Why Micronutrients?

• High prevalence of micronutrient deficiencies in refugee camps
  - Dependency on general food ration
  - Poor access to fresh foods/complementary foods
  - High incidence of infections

• Prevention of micronutrient deficiencies
  - Anaemia
  - Angular stomatitis-fissures at corner of mouth
Targeted high risk groups

- **P&L women**
  - SFP*
  - Iron folate tablets
  - Sprinkles*
  - calcium

- **0-5 months (PLW)**
  - Exclusive breastfeeding
  - GM

- **6-59 months**
  - Sprinkles (GM)
  - Blanket feeding (6-23.9 mo)

- **Adolescent girls**
  - Sprinkles (Monthly)
# MNP Protocol (2009 – 2011)

<table>
<thead>
<tr>
<th></th>
<th>6-59 mo GMP</th>
<th>6-59mo SFP</th>
<th>Adolescent Girl</th>
<th>Pregnant Woman</th>
<th>Lactating Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dose</strong></td>
<td>1 Sachet every other day</td>
<td>1 sachet for everyday mixed with porridge (Home)</td>
<td>2 sachets for every other day. Mixed with rice</td>
<td>2 sachets every other day mixed with porridge</td>
<td>2 sachets every other day mixed with porridge /rice</td>
</tr>
<tr>
<td><strong>Distribution</strong></td>
<td>15 sachets per month.</td>
<td>7 sachets per week.</td>
<td>30 sachets per month</td>
<td>6-8 sachets per week</td>
<td>6-8 sachets per week</td>
</tr>
<tr>
<td><strong>Mode of distribution</strong></td>
<td>GMP on a monthly basis</td>
<td>SFC on a daily basis</td>
<td>Community centers on a monthly basis</td>
<td>SFC on a daily basis</td>
<td>SFC on daily basis</td>
</tr>
</tbody>
</table>
Supplementation protocol revised in August 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>Supplement</th>
<th>Procedure</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children 6 - 59 months in GMP</td>
<td>MNP</td>
<td>Every third day</td>
<td>*1 sachet (10 sachets per month)</td>
</tr>
<tr>
<td>Children 6 - 59 months MAM in SFP</td>
<td>MNP</td>
<td>Every third day</td>
<td>**1 sachet (10 sachets per month)</td>
</tr>
<tr>
<td>Adolescent girls (13-18 years)</td>
<td>MNP</td>
<td>Alternative day</td>
<td>Two sachets (30 sachets per month)</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>Iron/folic acid</td>
<td>Daily</td>
<td>200 mg ferrous sulphate + 0.20 mg folic acid-1 tablet</td>
</tr>
<tr>
<td></td>
<td>Calcium</td>
<td>Daily</td>
<td>Calcium lactate-300 mg-1 tablet</td>
</tr>
</tbody>
</table>

* Children 6-59 months in SFP MNP distribution as home take to be mixed with porridge
** Children 6-59 months in GM MNP distribution as home take to be mixed with family meal
Why PD?

- NUT survey 2009 high GAM rate among children 6-24 months.
- High rate of micronutrients deficiency among children 6-24 months (Iron deficiency Anaemia).

<table>
<thead>
<tr>
<th>Nut survey 2009</th>
<th>GAM</th>
<th>Anaemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children 6-59 mo</td>
<td>18.7%</td>
<td>29%</td>
</tr>
<tr>
<td>Children 6-23 mo</td>
<td>27.3%</td>
<td>37%</td>
</tr>
</tbody>
</table>
Operational studies

- **Sprinkles** (6-59 months, n=409)
  - Cohort study (Aug’08 to Feb’09)
  - Prevalence of anemia reduced from 63.6% to 48.2% (15.4%)
  - 9.8% [71.8%-62.0%] reduction in anaemia prevalence among 6 to 11 months olds (n=71)

- **Plumpy doz** (6-36 months, n=433)
  - Cohort study (Sep ‘09 to Jan ’10)
  - Prevalence of anaemia 61.2% to 39.5% (21.7%)
  - 29.4% [74.9% to 50.0%] reduction in prevalence of anaemia among 6 to 11 months olds (n=68)
Anaemia prevalence (6-59 months)
PD: Lesson learnt

- PD well accepted by all the beneficiaries (favourite taste, easy to feed, easy to carry and easy to store at home).

- Most of families reported, since our children started receiving PD they look healthy, strong and happy.

- High sharing of PD at HH level among family members (some older children reported my father and mother are also eating PD).

- After PD distribution beneficiaries from all age groups started demanding PD instead of MNP, SFP ration (especially children 36 -59 months families were refusing MNP and asking PD).

- The rate of absentees and refusal in MNP program among other age groups increased (because they were not receiving PD).

- Once stopped PD was stopped no body was ready to receive MNP.

- Short term intervention like PD distribution is not good for program sustainability (especially for protected refugee operation)
Future planned micronutrients intervention

• Continue MNP distribution according to the revised protocol.

• For 2013, WSB++ distribution for children 6-59 months in the camps.

• To explore the possibility of other micronutrients products (e.g. Unimap).

• To consider the supplementation of Iron folate tablets for lactating mother (6 weeks postpartum period) recommended in national and international protocols).

• To consider the de-worming program for adolescent girls (national guideline).
Challenges

• Inadequate food ration: lacking animal protein and vegetable/fruits in one hand and in other hand;

• 5000 (22%) of registered refugees are not receiving general food ration.

• Sharing and selling of the general food ration and even some times SFP/BF ration to buy other needs.

• Inadequate care practices

• Misconception of MNP, that it causes vomiting and skin diseases

• Limited opportunities for income generating activities (IGA).

• Inadequate supply of cooking fuel (CRH) the refugee didn’t cook SFP and BF ration for U5 children.
Way forward

- The general food ration require improvement in terms of quantity and quality.

- Integrate Infant and Young Child Feeding (IYCF) in the all other services (MoHFW)

- Strengthening community mobilization and awareness on preventive health and nutrition education through BCC methods.

- Improve water and sanitation situation in the camps (especially in NYP camp which is <5 liters of water per person) compared to 20 liters UNHCR guideline.

- Emphasize on community development projects.
Photo Gallery
Cox’s Bazar District
KTP official refugee camp
KTP and NYP camps
Thank you!