Phuket, Thailand May 4-6, 2005

**Nutrition, Food Security and Health:**

*Lessons from the Needs Assessments and Relief Response, Indonesia and Sri Lanka*

Patrick Webb
Chief of Nutrition
United Nations World Food Programme
The core of this talk:

- How does food aid relate to health?
- Emergency Needs Assessments: what did they cover? [Q1]
- Nutrition and morbidity information [Q2]
- Nutrition-related relief responses [Q.3]
- Lessons learned; Issues remaining [Q4]
**How does food aid relate to health?**

Since malnutrition is an important determinant of mortality, food interventions play a role in saving lives through their impact on nutrition and health of affected individuals and populations.
Food Aid with Nutrition Goals

- **Treating Acute Malnutrition**
  - Therapeutic foods (F100; F75; Plumpynut)

- **Addressing Micronutrient Deficiency**
  - Fortified blended foods (CSB/HEBs)
  - Fortified cereals (flour/meal)
  - Fortified noodles
  - Iodized salt
  - Complementary supplements

- **Resolving/Preventing Malnutrition**
  - BP5; HDRs
  - Nutritionally tailored food basket (rations)
  - Nutrition education linked to distribution
Emergency Needs Assessments; What did they cover? [Q1]

**Sampling Approaches:**
- Common questionnaires, assessment topics (demographic impact, physical displacement, food consumption, diet diversity, nutritional status, market prices, livelihood losses, asset losses, etc),

**Sri Lanka:**
- 18 teams (106 enumerators), plus WFP/ILO teams
  - 1,860 hh interviews (8 districts)
  - 42 community key informants (priests, women’s groups, government)

**Indonesia:**
- 10 enumerators, plus WFP team
  - 72 hh interviews (18 sites)
  - 20 community group discussions
  - district administrator interviews
Location of the Villages for WFP's Emergency Needs Assessment Jan 12/05 to Jan 25/05 & Elevation Based on GTOPO30 data DI Aceh Province, Indonesia

Legend

- Sample Locations

Metres

3000+

1
Principal Livelihood Activity by Community Within 10 kms of the West Coast DI Aceh Province, Indonesia
**Broad ENA findings:**
**On assets and livelihoods**

**Indonesia**

Economic activities for rice farmers before and after tsunami

- **Formal Employment**: Before tsunami - 7%, After tsunami - 3%
- **Causal Labour**: Before tsunami - 7%, After tsunami - 7%
- **Trading**: Before tsunami - 17%, After tsunami - 7%
- **Formal Business**: Before tsunami - 10%, After tsunami - 0%
- **Other Employment**: Before tsunami - 7%, After tsunami - 3%
- **Fishing**: Before tsunami - 0%, After tsunami - 13%
- **Farming**: Before tsunami - 60%, After tsunami - 77%

Percentage of responses (%)

Tsunami Health Conference
Pakr, 4-5 May 2005

World Health Organization
Different livelihood groups that lost their income (number of people)

- Agriculture: 330,000
- Fishing: 2,500
- Manufacturing: 52,800
- Hospitality: 1,100
- Other Services: 46,000
- Retail: 110,000

Sri Lanka
**Broad ENA findings:**

**on markets and food prices**

<table>
<thead>
<tr>
<th>Item</th>
<th>Price Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staple cereals</td>
<td>100%-225%</td>
</tr>
<tr>
<td>Animal Products</td>
<td>75%-105%</td>
</tr>
<tr>
<td>Pulses</td>
<td>100%</td>
</tr>
<tr>
<td>Cooking Oil</td>
<td>95%</td>
</tr>
<tr>
<td>Soap</td>
<td>80%</td>
</tr>
<tr>
<td>Sanitary Products</td>
<td>50%-100%</td>
</tr>
<tr>
<td>Farm Inputs</td>
<td>85%</td>
</tr>
</tbody>
</table>
Food items *Not* consumed by households pre and post Tsunami

![Graph showing the percent of food items not consumed by households pre and post Tsunami.](image)

- **Pulses**
- **Vegetables**
- **Fish**
- **Meat**
- **Fruits**
- **Eggs**

*Before* and *After* Tsunami.
**ENA findings on:**

**health, water, sanitation**

**Indonesia:**
- No major outbreaks of disease
- Water bladder filter (service of Austr. Army)
- Rising morbidity in poorly-serviced camps (lacking clean water, sanitation)

Camp-based *children*:
- 43% diarrhoea,
- 70% cough
- 56% fever
- 35% vomit

Adult *women*:
- 17% diarrhoea
- 45% cough
- 26% fever
- 27% vomit
**Nutrition and health information [Q2]**

**Indonesia**

UNICEF/CDC/WFP rapid purposive survey:

- **600 < 5s in camps**: GAM (wasting) = 12.7%
- Severe acute malnutrition = 1.5%
- Adult women (BMI <18.5) = 15%
- Women at risk chronic energy deficiency (MUAC <23.5cm) = 22%
Nutrition and health information [Q2]

Indonesia

Additional malnutrition/morbidity surveys:
* HKI – Banda Aceh
* SCF – Eastern coast/Banda Aceh
* HKI and others Nias-Simuleu
* UNICEF/MOH/WHO/WFP surveillance system first round (Aceh province)
Malnutrition among preschoolers in Aceh

<table>
<thead>
<tr>
<th></th>
<th>Wasting</th>
<th>Stunting</th>
<th>Underweight</th>
<th>Anemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDP HH</td>
<td>11.2</td>
<td>43.6</td>
<td>48</td>
<td>59.1</td>
</tr>
<tr>
<td>Host HH</td>
<td>12.0</td>
<td>34.7</td>
<td>38.4</td>
<td>50.5</td>
</tr>
<tr>
<td>Non IDP HH</td>
<td>11.4</td>
<td>37.9</td>
<td>42.9</td>
<td>46.7</td>
</tr>
</tbody>
</table>

a Anemia – Hb <11 g/dl
Nutritional status of children (n=878) in Sri Lanka

<table>
<thead>
<tr>
<th>Condition</th>
<th>Tsunami victims</th>
<th>DHS-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunting</td>
<td>20.2</td>
<td>13.5</td>
</tr>
<tr>
<td>Wasting</td>
<td>16.1</td>
<td>14</td>
</tr>
<tr>
<td>Underwt</td>
<td>34.9</td>
<td>29</td>
</tr>
</tbody>
</table>

CONSTRAINTS to ENAs

- **Logistics**
  - Lack dedicated helicopter assets (USS Lincoln’s ‘displacement’ effect)
  - Road constraints
  - Working conditions

- **Human Capacity**
  - Overload of national MOH staff
  - Lack institutional capacity and skill

- **Insecurity**
  - Fired at
  - ‘No go’ zones (ENA representativity?)
Nutrition Relevant Emergency Responses [Q.3]

- Food aid, logistics (for other agencies),
- Supplement distribution
- Links with shelter, water, sanitation
- Rebuilding national institutional capacity

- All the same constraints…
WFP Relief Activity
(April 15, 2005)

Sri Lanka: 133,100 beneficiaries
- Food Basket (rice, fortified wheat flour, fortified oil, sugar, FBF, iodized salt)

Indonesia: 720,000 beneficiaries
- Food Basket (rice, canned fish, fortified oil, fortified noodles, fortified biscuits, iodized salt + IOM)
- Surveillance system (linking food security with nutrition)
- Coordination with NGOs/UNICEF on supplements.
- Expand development programming with MOH into Aceh

Myanmar: 15,000 beneficiaries

Maldives: 42,000

Somalia: 31,000
<table>
<thead>
<tr>
<th>EMOP</th>
<th>Relief Phase</th>
<th>Recovery Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>January – February</td>
<td>March</td>
</tr>
<tr>
<td>Tsunami affected Chronically food insecure</td>
<td>845,000</td>
<td>650,000</td>
</tr>
<tr>
<td>Total</td>
<td>845,000</td>
<td>650,000</td>
</tr>
<tr>
<td>Food needs per month</td>
<td>12,200 MT</td>
<td>9,600 MT</td>
</tr>
<tr>
<td>Activities in Sri Lanka</td>
<td>General Food Distribution</td>
<td>General Food Distribution</td>
</tr>
</tbody>
</table>
Provision of Safe Water

<table>
<thead>
<tr>
<th></th>
<th>Mineral or Tap</th>
<th>Truck</th>
<th>Protected well</th>
<th>Unprotected</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDP HH</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Host HH</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>80</td>
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<tr>
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<td>80</td>
<td>100</td>
</tr>
</tbody>
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Tsunami Health Conference
Phuket, 4-4 May 2005

World Health Organization
Lessons learned [Q4]: Positives

- Multi-agency coordination good within sectors — but across sectors? Where does nutrition live?

- Micronutrients were not invisible

- ENAs were multi-issue assessments, not simply focused on health only, or food only.

- Action was very quick—few post-crisis deaths.
Lessons: Remaining Issues

- Over-dramatization of crisis complicates action; don’t pre-judge the context.
- Role of assts (like USS Lincoln) must be carefully re-assessed in light of information gained vz. cost, and in relation to value to other agencies.
- Role of purposive (convenience) sampling when ‘representative’ is out of the question…
- Better screening of incoming health/food materials.