A Webinar on Status of Nutrition in PAKISTAN
Facilitators

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A Webinar on Status of Nutrition in PAKISTAN

Objectives

- Sensitize “Issues around Nutrition”
- Share Magnitude of Problem
- Discuss Solution of the problem
Mal - Nutrition
MalNutrition

**Acute** = Short Term

**Chronic** = Long Term

Different types of childhood malnutrition

- **Normal**
- **Wasted** (Low weight for height)
- **Stunted** (Low height for age)
- **Underweight** (Low weight for age)
Situation in Pakistan

Percentage of < 5 children with different types of Malnutrition

NNS2011

Provinces / Administrative Areas

Stunted  Wasted  Underweight

Pakistan Overall  Balochistan  Khyber Pakhtunkwa  Sindh  Punjab  AJK

0  10  20  30  40  50  60

15.1  16.1  17.2  17.5  13.6  17.6

31.5  39.6  24.1  39.2  29.8  25.8

43.6  52.2  47.8  49.8  39.2  31.7
Stunting is Irreversible
Situation in Pakistan

Figure 1 National malnutrition trends among children under five.

Source NNS (2011).
<table>
<thead>
<tr>
<th>Indicator</th>
<th>NNS 2001-02</th>
<th>NNS 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wasting % (Low Weight for Height)</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>2. Stunting% (Low Height for Age)</td>
<td>31%</td>
<td>44%</td>
</tr>
<tr>
<td>3. Under Weight% (Low Weight for Age)</td>
<td>42%</td>
<td>32%</td>
</tr>
<tr>
<td>4. Anemia (Children)</td>
<td>51%</td>
<td>63%</td>
</tr>
<tr>
<td>5. Anemia (Pregnant women)</td>
<td>29%</td>
<td>51%</td>
</tr>
<tr>
<td>6. Iodine Deficiency (Children)</td>
<td>63%</td>
<td>36%</td>
</tr>
<tr>
<td>7. Iodine Deficiency (Women)</td>
<td>76%</td>
<td>36%</td>
</tr>
<tr>
<td>8. Vitamin A Def (Children)</td>
<td>13%</td>
<td>54%</td>
</tr>
<tr>
<td>9. Vitamin A Def (Non-pregnant women)</td>
<td>6%</td>
<td>42%</td>
</tr>
<tr>
<td>10. Zinc Def (Mothers)</td>
<td>41%</td>
<td>47%</td>
</tr>
<tr>
<td>11. Zinc Def (Children)</td>
<td>37%</td>
<td>39%</td>
</tr>
<tr>
<td>12. Vit D Def (Mothers)</td>
<td>-</td>
<td>68%</td>
</tr>
<tr>
<td>13. Vit D Def (Children)</td>
<td>-</td>
<td>40%</td>
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</tbody>
</table>
Healthcare expenses and lower productivity due to malnutrition costs Pakistan US $7.6 billion that makes up three percent of its GDP per year, according to a report launched by the Pakistan Scaling Up Nutrition (SUN) Secretariat at the Ministry of Planning Development and Reform (MPDR), done in collaboration with the UN / WFP.
According to the report, more than 177,000 children die annually in Pakistan before their fifth birthday due to their or their mothers’ malnutrition. Because this constitutes as future lost workforce, it costs the country estimated US$2.24 billion per year.
And more than two-thirds of Pakistan’s children suffering from anemia, iodine deficiencies or stunting will suffer deficits in mental and physical health, which results in lower school performance and lower productivity as adults. This depresses the GDP by US$3.7 billion annually.
Assessment of Children

- Severely Acute Malnutrition (SAM)
- Mid Upper Arm Circumference (MUAC)  
  \(< 11.5 \text{ cm} (< 115 \text{ mm})

- Moderately Acute Malnutrition (MAM)
  - MUAC 12.5 cm – 11.5 cm (125 – 115 mm)
  - Age of Child (06 – 59 months)
Cut of Values Adults

- Malnourished
  MUAC < 21.0cm (< 210 mm)

- Status
  Pregnant or Lactating
More than 15% Wasting is an Emergency
Based on Body Mass Index:

The BMI is defined as the body mass divided by the square of the body height, and is universally expressed in units of kg/m², resulting from mass in kilograms and height in metres.
Malnutrition is Multisectoral Issue
(Selected Sectors)

- Health
- Education
- Water, Sanitation and Hygiene
- Agriculture
Nutrition – SDGs

GOAL 2

END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

SUSTAINABLE DEVELOPMENT GOALS
More at sustainabledevelopment.un.org/sdgsproposal
Nutrition – SDGs

Aid allocated to nutrition has high returns a $1 investment in nutrition has demonstrated a $16 return in economic growth

War and conflict are major underlying factors of nutrition insecurity

Soil degradation threaten our ability to grow food

Climate change may reduce food production and cause water scarcity

Tackling resource use and degradation is key for sharing resources and improving access to quality food

High levels of malnutrition in some countries may result in an 11% loss to GDP

Access to safe water and sanitation is an absolute prerequisite for nutrition

Being poor limits the ability of individuals to access adequate food

Agriculture and food security are cornerstones of nutrition

Up to 45% of deaths in children under 5 are caused by undernutrition

Learning and focusing in school is difficult without a sufficient diet

When women control the family income, children’s health and nutrition improve at a greater rate
Nutrition – Basic Human Right

• Freedom from hunger and malnutrition is a basic human right.

• According to UN Article 24, states are mandated to provide medical assistance & health care to all children, combat disease & malnutrition through provision of adequate nutritious foods, safe drinking water & adequate sanitation and provide families with information about the advantages of breast feeding.
Nutrition Interventions

- Nutrition Specific Intervention
- Nutrition Sensitive Interventions
Definitions

- Nutrition specific interventions: are those that address immediate and some intermediate causes of malnutrition (especially caring for children)

- Nutrition sensitive interventions: are interventions of other sectors that incorporate nutrition objectives
Nutrition specific interventions*

• Addressing immediate causes of malnutrition:
  – Treatment of severe acute malnutrition
  – Disease management (e.g. oral rehydration salts for diarrhea)
  – Maternal and child micronutrient supplementation

• Addressing some intermediate causes:
  – Infant and young child feeding practices
    • Exclusive breastfeeding
    • Minimum dietary diversity, minimum acceptable diet*
    • Responsive feeding
  – Access to health services
  – Hygiene and sanitation

Indicators and country data:
http://www.unicef.org/nutrition/files/1YCF_Indicators_part_III_country_profiles.pdf;
Nutrition sensitive interventions and programmes

• Address intermediate causes of malnutrition:
  – Food security
  – Caregiving resources at maternal, household and community level

• Address underlying causes: diverse sectors
  – Agricultural interventions and programmes
  – Social safety nets
  – Schooling

They explicitly incorporate nutrition goals and include indicators to monitor nutrition impact
They can serve as delivery platforms for nutrition specific interventions
Nutrition sensitive agricultural interventions and programmes

Pathways by which Ag can influence nutrition:

- Increase own production and household food availability: dietary diversification
- Increase income and access to food in markets: access to more diverse foods
- Impact on food prices (differential impact for net sellers and net buyers)
- Women’s empowerment*

* women’s involvement in agriculture can also carry risks
Examples of nutrition sensitive Ag interventions (1): home gardens

Home gardens and homestead food production:

- Examples: Production of vegetables, small livestock rearing (poultry, dairy), orange-fleshed sweet potato
- Effectiveness on maternal and child malnutrition status proven only for vit A
- Effectiveness on dietary diversity
Examples of nutrition sensitive Ag interventions (2): biofortification

• Biofortification: breeding staple crops specifically rich in micronutrients
  Useful to prevent micronutrient deficiencies outside the 1000 days

• Conditions for effectiveness:
  – Target concentration in crop
  – Retention of micronutrient & bioavailability
  – Farmer adoption and consumption by targeted populations

For the time being only vitamin A biofortification (OFSP) has shown effectiveness at population level. Studies underway for iron and zinc fortified crops (cereals, legumes) (See HarvestPlus program of IFPRI.)
Women’s implication in agriculture: opportunities and risks

• Women’s participation in agriculture:
  – Can increase their control over assets and resources
  – Increase their decision making power regarding food allocation, health & care
  – Can affect their time allocation and balance with time devoted to care
  – Affect their health: exposure to diseases, increase in energy needs
Thank You