Strategy for Stunting Reduction & Prevention: *Clean and Healthy Lifestyle*
Indonesia: 5th highest number of stunted children

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
<th>Stunting prevalence (%)</th>
<th>Number of children who are stunted (thousands, 2008)</th>
<th>Percentage of developing world total (195.1 million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>India</td>
<td>48</td>
<td>60,788</td>
<td>31.2%</td>
</tr>
<tr>
<td>2</td>
<td>China</td>
<td>15</td>
<td>12,685</td>
<td>6.5%</td>
</tr>
<tr>
<td>3</td>
<td>Nigeria</td>
<td>41</td>
<td>10,158</td>
<td>5.2%</td>
</tr>
<tr>
<td>4</td>
<td>Pakistan</td>
<td>42</td>
<td>9,668</td>
<td>5.1%</td>
</tr>
<tr>
<td>5</td>
<td>Indonesia</td>
<td>37</td>
<td>7,688</td>
<td>3.8%</td>
</tr>
<tr>
<td>6</td>
<td>Bangladesh</td>
<td>43</td>
<td>7,219</td>
<td>3.7%</td>
</tr>
<tr>
<td>7</td>
<td>Ethiopia</td>
<td>51</td>
<td>6,758</td>
<td>3.5%</td>
</tr>
<tr>
<td>8</td>
<td>Democratic Republic of the Congo</td>
<td>46</td>
<td>5,382</td>
<td>2.8%</td>
</tr>
<tr>
<td>9</td>
<td>Philippines</td>
<td>34</td>
<td>3,617</td>
<td>1.9%</td>
</tr>
<tr>
<td>10</td>
<td>United Republic of Tanzania</td>
<td>44</td>
<td>3,359</td>
<td>1.7%</td>
</tr>
<tr>
<td>11</td>
<td>Afghanistan</td>
<td>59</td>
<td>2,910</td>
<td>1.5%</td>
</tr>
<tr>
<td>12</td>
<td>Egypt</td>
<td>29</td>
<td>2,730</td>
<td>1.4%</td>
</tr>
<tr>
<td>13</td>
<td>Viet Nam</td>
<td>36</td>
<td>2,619</td>
<td>1.3%</td>
</tr>
<tr>
<td>14</td>
<td>Uganda</td>
<td>38</td>
<td>2,355</td>
<td>1.2%</td>
</tr>
<tr>
<td>15</td>
<td>Sudan</td>
<td>40</td>
<td>2,305</td>
<td>1.2%</td>
</tr>
<tr>
<td>16</td>
<td>Kenya</td>
<td>35</td>
<td>2,269</td>
<td>1.2%</td>
</tr>
<tr>
<td>17</td>
<td>Yemen</td>
<td>58</td>
<td>2,154</td>
<td>1.1%</td>
</tr>
<tr>
<td>18</td>
<td>Myanmar</td>
<td>41</td>
<td>1,880</td>
<td>1.0%</td>
</tr>
<tr>
<td>19</td>
<td>Nepal</td>
<td>49</td>
<td>1,743</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>20</td>
<td>Mozambique</td>
<td>44</td>
<td>1,670</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>21</td>
<td>Madagascar</td>
<td>53</td>
<td>1,622</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>22</td>
<td>Mexico</td>
<td>16</td>
<td>1,594</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>23</td>
<td>Niger</td>
<td>47</td>
<td>1,473</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>24</td>
<td>South Africa</td>
<td>27</td>
<td>1,426</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

Total: 80%
Children’s failure to achieve their growth and development potential because of the cumulative effects of persistent nutrition deprivation.

What is stunting?

Children’s failure to achieve their growth and development potential because of the cumulative effects of persistent nutrition deprivation.
Long-term consequences of stunting in early childhood

- Survival
- Linear growth
- Cognitive development
- School achievement
- Economic productivity
- Birth weight

Source: Dewey K, 2011
Stunting and Brain Development

**Normal**

**Typical brain cells**
Extensive branching

**Stunting**

**Impaired brain cells**
Limited branching
Abnormal, shorter branches

Source: Cordero E et al, 1993
Stunting: A marker of national development

- Infant and young child feeding practices
  - Prevention and treatment of infections
  - Prenatal nutrition and growth
- Poverty
- Protection
- Equity
- Women and mothers
What can be done?
Indonesia: Poor feeding practices in children under two

Early Initiation
6 Months Exclusive Breastfeeding

Provision of Timely & Quality Complementary Food with Breastmilk

Optimal Feeding

Breastfeeding
Complementary feeding

Source: SUSENAS (2015); IDS (2012)
Continued Breastfeeding

Source: IDHS 1997 – 2017
Food and Diets as the Center

- Bring back **food and diets** to the center of our advocacy and programming.
- Ensure **food security**
- Strengthen our ability to ensure that **food systems** deliver healthy diets for children.
Timely Appropriate Complementary Feeding

- Start when the child reach 6 months
- Feed 4-5 times a day (3 +1-2)
- Feed ≥ 4 food groups
Quality Counseling Skills of Community Workforce
Reduced Stunting in Indonesia
Quality Counseling Improves Mother’s Knowledge & Feeding Practices

Children in the lowest quintile

- **Stunting**: Baseline (2011) 43.1%, Endline (2014) 33.8%
- **Exclusive breastfeeding**: Baseline (2011) 53.3%, Endline (2014) 81.7%
- **Minimum diet diversity**: Baseline (2011) 24.9%, Endline (2014) 24.9%
- **Minimum meal frequency**: Baseline (2011) 61.3%, Endline (2014) 68.9%
- **Minimum acceptable diet**: Baseline (2011) 6.9%, Endline (2014) 17.1%
- **Consumption of animal products**: Baseline (2011) 34.3%, Endline (2014) 63.2%
- **Handwashing with water and soap**: Baseline (2011) 30.2%, Endline (2014) 64.3%

* indicates a statistically significant difference.
Intrapersonal determinants:

- Knowledge
- Literacy
- Beliefs, perceptions
- Perceived risk, susceptibility
- Perceived severity
- Attitudes
- Perceived self-efficacy, agency, fatalism
- Behaviour routine
- ....
Interpersonal determinants:

• Social networks
• Social support groups
• Social norms, including gender norms
• Peer influence
• Power relations
• ....
Risk Factors for Low Birthweight

**Older people**
- Malnourished
- Inadequate food, care, health
- Inadequate fetal nutrition
- Reduced capacity for child care

**Baby**
- Low birthweight
- Higher mortality
- Increased risk of adult chronic diseases
- Impaired mental development
- Untimely/inadequate feeding
- Frequent infections
- Inadequate catchup growth
- Inadequate food, care, health

**Pregnancy**
- Low weight gain
- Increased maternal mortality
- Inadequate food, care, health

**Child**
- Stunted
- Reduced mental capacity
- Inadequate food, care, health
- Inadequate food, care, fat-free mass

**Adolescent**
- Stunted
- Reduced physical capacity and fat-free mass
- Inadequate food, care, health
Adequate Nutrition for Mothers

- 180 Iron & Folic Acid supplements during pregnancy
- Improved dietary consumption
Adequate Nutrition for Adolescents

- 52 weekly iron & folic acid supplements
- Improved dietary consumption
- Prevention of overweight & obesity
Adolescent Nutrition Intervention Package

**Nutrition Specific**
- Iron-folic acid supplements
- Nutrition education / BCC

**Nutrition Sensitive**
- Vocational & life skills training
- Handwashing & hygiene
- Reproductive health & HIV
- Child marriage & bullying
Adolescent Nutrition Intervention Strategies

- Advocacy
- Behavioral Change Communication
- Coordination
- Monitoring & Evaluation
- Capacity Building

Health Systems Strengthening
Wasting Increases the Risk of Stunting

**WASTING**

**THE GOAL**

By 2015, reduce and maintain childhood wasting to less than 5%

**WHY IT MATTERS**

- Children become wasted when they lose weight rapidly because of diets that do not cover nutritional needs.
- Wasting increases risk of stunted growth, impaired cognitive development, and non-communicable diseases in adulthood.
- Increased risk of death from infectious diseases such as diarrhoea, pneumonia, and measles.
- Wasting is linked with other global nutrition targets: stunting, anaemia in women, breastfeeding, low birth weight, and childhood overweight.

**RECOMMENDED ACTIONS**

- Scale up coverage of services for the identification and treatment of wasting.
- Improve the identification, measurement, and understanding of wasting.
- Improve coordination between key government ministries.
- Link treatment strategies for acute malnutrition to prevention strategies for wasting and stunting throughout the life-course.
- Develop evidence for effective prevention strategies.
- Rapidly develop evidence to reduce the burden of wasting, which can then be translated into policy action.

**SCOPE OF THE PROBLEM**

- Globally, 52 million children under 5 are moderately or severely wasted.
- The current global levels of severe wasting are responsible for up to 2 million deaths annually.
- A child that is wasted is 3 times more likely to die than a healthy child.

**SCALE UP TREATMENT**

- Improve the identification, measurement, and understanding of wasting.
- Improve coordination between key government ministries.
- Link treatment strategies for acute malnutrition to prevention strategies for wasting and stunting throughout the life-course.

**BUILD THE EVIDENCE**

- Develop evidence for effective prevention strategies.
- Rapidly develop evidence to reduce the burden of wasting, which can then be translated into policy action.
Effective Treatment for Severely Undernourished

- Early detection and referral
- Inpatient care for cases with medical complications
- Community-based care for cases with no complications
Multi-sectoral Response & Coordination

- Social Protection
- Agriculture
- Development & Poverty Reduction
- Education
- Women’s Empowerment
- Health

Improved Nutrition
Scaling up Water, Sanitation, and Hygiene Interventions
Stunting Free Indonesia is Possible