

## Strengthening the Response to Food Crisis and Sustainable Agriculture in the Global and National Contexts: *A Framework for Discussion*

By

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*Presented at*

22 Maret 2011, Ruang Nusantara, Gedung Utama, Lt. 2, Kementerian Luar Negeri, Jakarta.  
Badan Pengkajian dan Pengembangan Kebijakan (BPPK) c.q. Pusat Pengkajian dan Pengembangan Kebijakan pada Organisasi Internasional (Pusat P2K-OI) Kementerian Luar Negeri  
*bekerjasama dengan Indonesian Council on World Affairs (ICWA)*



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## Strengthening the Response to Food Crisis and Sustainable Agriculture in the Global and National Contexts: *A Framework for Discussion*

Key Words for Discussions:

• **Response (strengthening)**

• **Food Crisis**

• **Sustainable Agriculture**

• **Global and National Contexts**

**FOCUS of Discussion**



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## 1. FOOD CRISIS

- *What is Food Crisis?*
- = *Food Insecurity?*
- **FAO (1996) : Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.**
- **Anything less than “food security” is “food insecurity”?**



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## 1. FOOD CRISIS

### Food Security Aspects and Their Indicators

#### Food availability

- Quantity
- Quality
- Nutrition adequacy
- Safety

#### Accessibility

- Physical, economic and social accessibility
- Compliance to preferences
- Compliance to food habit and culture
- Compliance to belief and religion

#### Consumption sufficiency

- Intake sufficiency
- Quality of household food processing
- Quality of household sanitation and hygiene
- Quality of water
- Quality of child care

Stability/  
sustainability  
of food  
availability/  
supply,  
accessibility  
and  
consumption

Active  
and  
Healthy  
life of  
Individual




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### 1. FOOD CRISIS

#### Food Security Indicators - INDONESIA

- CBS (BPS No. 38/07/Th. X, 2 Juli 2007)
  - Number of people under poverty line = 37,17 mio (16,58 % of population).
  - Poverty line : earning of  $\leq$  IDR 166.697 per cap per month  $\rightarrow$  IDR 123.992 for food + IDR 42.704 for non-food.
- 3 x total poor population  $\rightarrow$  vulnerable for micronutrient deficiency
  - Prevalence of Iron deficiency : 50.4% (SKRT 1995).
- Malnutrition and Micronutrient deficiency may cause :
  - Reduced cognitive potential
  - Increased maternal morbidity
  - Reduced nutritional status of newborn babies
  - Reduced productivity

Active and Healthy life of Individual ?


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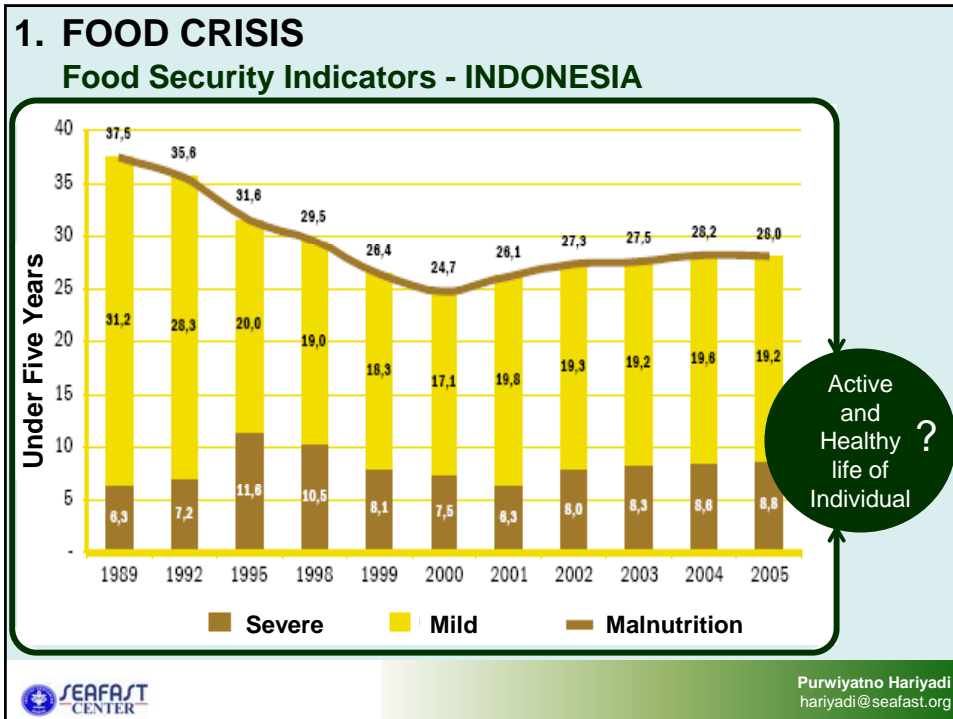
### 1. FOOD CRISIS

#### Food Security Indicators - INDONESIA

- The poor is the most vulnerable (  $\rightarrow$  what is indicators of “poor” is essential)
- Most of most vulnerable  $\rightarrow$  children (under five; or under two years old) and pregnant women)
- Need “intervention” scheme for rescue  $\rightarrow$  preventing the lost of generation

Active and Healthy life of Individual ?

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### 1. FOOD CRISIS

#### Food Security Indicators - INDONESIA

Tabel 3.1.  
Persentase Balita menurut Status Gizi (BB/U)\* dan Provinsi, Riskesdas 2007

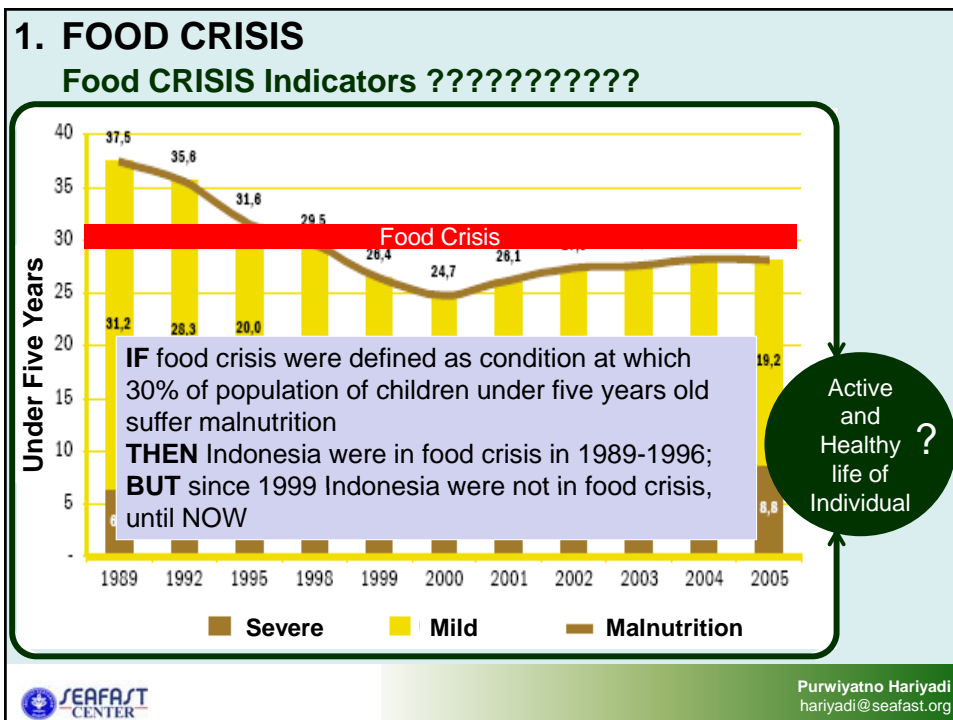
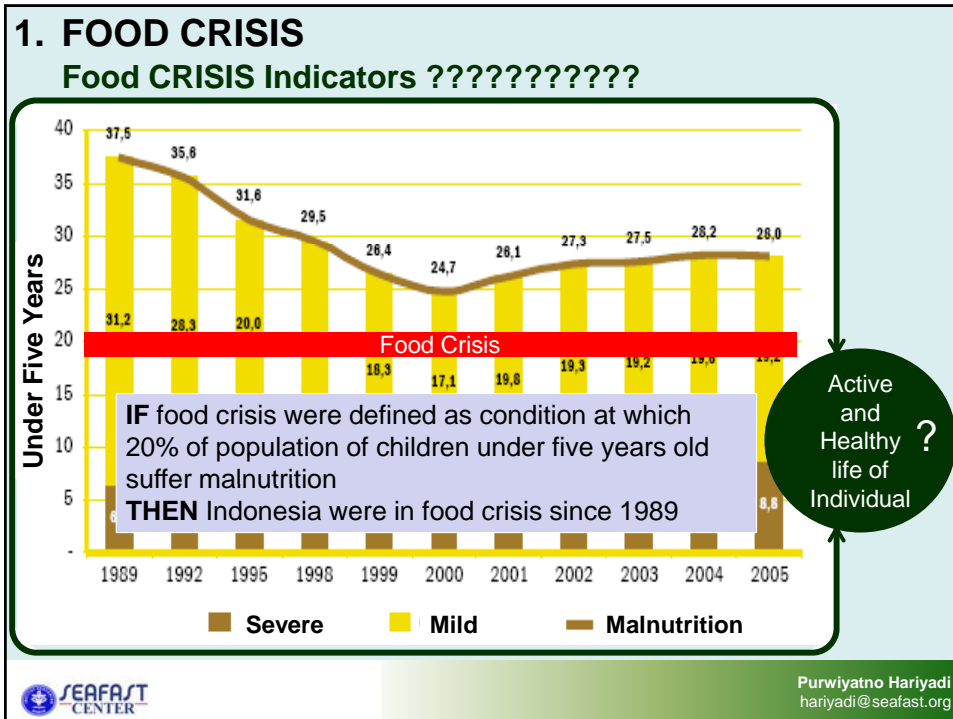
Provinsi	Kategori status gizi BB/U			
	Gizi buruk	Gizi kurang	Gizi baik	Gizi lebih
NAD	10,7	15,8	69,2	4,2
Sumatera Utara	8,4	14,3	72,7	4,5
Sumatera Barat	5,9	14,3	77,0	2,8
Riau	7,5	13,9	73,3	5,3
Jambi	6,3	12,6	75,8	5,3
Sumatera Selatan	6,5	11,7	75,0	6,7
Bengkulu	4,8	11,9	77,2	6,0
Lampung	5,7	11,8	78,3	4,2
Bangka Belitung	4,6	13,7	76,4	5,4
Kepulauan Riau	3,0	9,4	81,5	6,1
DKI Jakarta	2,9	10,0	80,6	6,5
Jawa Barat	3,7	11,3	81,5	3,5
Jawa Tengah	4,0	12,0	80,4	3,6
DI Yogyakarta	2,4	8,5	85,0	4,0
Jawa Timur	4,8	12,6	78,0	4,5
Banten	4,4	12,2	79,9	3,4
Bali	3,2	8,2	83,9	4,7
Nusa Tenggara Barat	8,1	16,7	71,4	3,7
Nusa Tenggara Timur	9,4	24,2	64,4	2,0
<b>Indonesia</b>	<b>5,4</b>	<b>13,0</b>	<b>77,2</b>	<b>4,3</b>

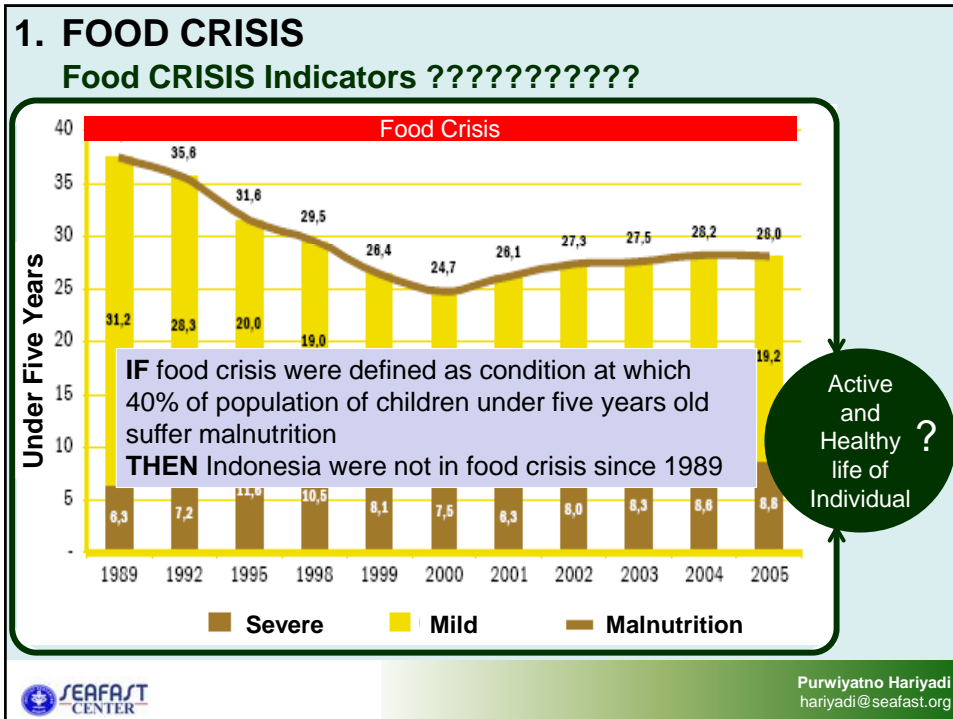
Active and Healthy life of Individual ?

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\*BB/U= Berat Badan menurut Umur

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### 1. FOOD CRISIS

#### Food CRISIS Indicators ????????????

**Are we now in food crisis situation??**

**Active and Healthy life of Individual?**

**Tabel 3.1.**  
Persentase Balita menurut Status Gizi (BB/U)\* dan Provinsi, Riskesdas 2007

Provinsi	Kategori status gizi BB/U			
	Gizi buruk	Gizi kurang	Gizi baik	Gizi lebih
NAD	1,7	1,6	89,7	4,2
Sumatera Utara	8,2	4,3	77,2	4,5
Sumatera Barat	5,1	4,3	70,0	2,8
Riau	7,5	13,9	73,3	5,3
Jambi	6,3	12,6	75,8	5,3
Sumatera Selatan	6,5	11,7	75,0	6,7
Bengkulu	1,8	1,1	77,2	6,0
Lampung	7,7	11,3	78,3	4,2
Bangka Belitung	4,6	13,1	76,4	5,4
Kepulauan Riau	3,0	9,4	81,5	6,1
DKI Jakarta	2,9	10,0	80,6	6,5
Jawa Barat	3,7	11,3	71,5	3,5
Jawa Tengah	4,0	2,0	80,0	3,6
DI Yogyakarta	4,4	8,5	85,0	4,0
Jawa Timur	4,8	12,6	78,0	4,5
Banten	4,4	12,2	79,9	3,4
Bali	3,2	8,2	83,9	4,7
Nusa Tenggara Barat	8,1	16,7	71,4	3,7
<b>Indonesia</b>	<b>5,4</b>	<b>13,0</b>	<b>77,2</b>	<b>4,3</b>

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**1. FOOD CRISIS**  
**Food CRISIS Indicators ????????????**

**Tabel 3.1.**  
**Persentase Balita menurut Status Gizi (BB/U)\* dan Provinsi, Periode 2007**

*We don't know! Simply because we have not defined what is "Food Crisis"*

Provinsi	Kategori status gizi Balita			
	Gizi buruk	Gizi kurang	Gizi baik	Gizi lebih
NAD	10,7	15,8	69,2	4,2
Sumatera Utara	8,4	14,3	72,5	4,5
Sumatera Barat	5,9	14,8	77,0	2,8
Riau	7,5	13,9	73,3	5,3
Jambi	6,3	12,6	75,8	5,3
Sumatera Selatan	6,5	11,7	74,0	6,7
Bengkulu	6,8	11,9	72,2	6,0
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**Active and Healthy ?  
 life of Individual**

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**1. FOOD CRISIS**  
**Food CRISIS Indicators ????????????**

**We need to define**

- What is FOOD CRISIS
- Who to declare FOOD CRISIS?
- When are we going to declare FOOD CRISIS?  
 (When to response to FOOD CRISIS?)
- What response to FOOD CRISIS  
 (Response to Crisis → should be bussines as usual  
 → Need extraordinary measure to rescue the potential lost generation)

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## 2. SUSTAINABLE AGRICULTURE

→ *Providing better value of foods*

$$\text{Value of Food} = A \times B \times \left( \frac{X}{Y} \right)$$

The diagram illustrates the components of food value. It shows a box labeled "Safety Factor" containing "Psychological Safety" and "Physiological/Physical Safety". This is multiplied by a larger box labeled "Quality Factor" which includes "Taste", "Nutrition", "Local Content", "Availability", "Functionality", "Variety", "Sensory", "Eco-Friendliness", "ETC", "Price", and "Time to prepare".

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## 2. SUSTAINABLE AGRICULTURE

→ *Providing better value of foods*

$$\text{Value of Food} = A \times B \times \left( \frac{X}{Y} \right)$$

Role of Food Entrepreneurship :

- Industrialization of local-based food diversification
- Empowerment of Micro- and Small Food Enterprises
  - Empowerment of local food cultures

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## 2. SUSTAINABLE AGRICULTURE

→ *Providing better value of foods*

$$\text{Value of Food} = A \times B \times \left( \frac{X}{Y} \right)$$

Sustainable Agriculture should be able to providing better value of foods to feed all human being :

- As healthy as possible → to reach Individual with active and healthy life,
- With as little damage to nature as possible,
- In ways that enhance individual and communal life, and
- Ensure that future generations can feed themselves



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Thank you



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