1. The earthquakes and tsunami occurred on December 26<sup>th</sup> 2004 and March 28<sup>th</sup> 2005, have caused significant loss to the Nanggroe Aceh Darussalam (NAD) and North Sumatra. Close to 250,000 persons are reported dead or missing, and also infrastructure has been destroyed in the worst-affected areas, leaving people without water, food and shelter. It was estimated, especially in coastal areas, that 654 villages in 13 out of 21 districts in NAD and 219 villages in 3 out of 25 districts in North Sumatra were seriously affected by tsunami.

2. Given the damage to infrastructure, in particular roads, and the lack of suitable transportation means, logistical difficulties have hampered the distribution of food and health services to the affected population. Besides, the massive destruction of essential infrastructure has also impacted on the availability of water and sanitation, bearing a serious risk of waterborne diseases. In the health sector, the Government lost 270 employees and an additional 413 persons are missing. 26 health centers, 37 sub-health centers, and 172 village maternity post are destroyed; 33 health centers, 127 sub health centers, and 419 village maternity posts severely damaged.

3. The President has declared a state of emergency for the NAD and North Sumatra provinces. The coordination of the disaster response is directly under the Vice-President who is heading the BAKORNAS PBP (the National Coordinating Agency for National Disaster and Refugee Relief) within the Coordinating Ministry for People’s Welfare (Menko Kesra). Special crisis groups have been activated within all line ministries involved in the provision of assistance. The ministry of health responded to the crisis since day 1, preventing disaster-related illness and death through an operation coordinated by “Health Crisis Center” to mobilize provincial health office and also providing guidance and expertise on the spot. The guidance for nutrition in emergency that has been published since 2000 was transformed into practical step and completed with the guidance for food distribution considering the criteria that should be followed, especially for infant, pregnant and nursing mother.

4. For protecting infants, the MOH applying the recommendation from joint statement of WHO-UNICEF-IDAI on January 7<sup>th</sup> 2005 for the province (affected areas) to follow the guideline for infant feeding during the emergency which is include: a) protection of breastfeeding mothers to continue breastfed the baby (exclusive breastfeeding); b) hygienic infant formula for orphan infants and non-breast fed babies; and c) complemenary food for infants and children under 2 years old,

5. There have been spontaneous positive responses from governments and nations all over the world. The Government of Indonesia issued an appeal for international aid, formulated under the guidance of the UN, comprising efforts as undertaken by the Government of Indonesia (especially TNI, and line ministries), foreign military units, USAID, AUSAID, UNICEF,
WHO, UNHCR, OCHA, IRC, and international NGOs. By January 25, 3298 health staffs (784 from international agencies, and 2538 from GOI) were mobilized to fill most critical gaps. Among others, medical services were provided by international agencies around the IDP camps to grant displaced people access to medical care during the emergency phase. Daily coordination meetings on the spot also at central level have been implemented as well as nutrition group meetings every Wednesday in Banda Aceh. These services have contributed to revitalizing the health system in the affected areas, which was collapsed immediately after the disaster.

6. In terms of food aid and nutrition intervention, preliminary assessment by WFP highlighted the needs among 700,000 displaced persons (IDPs) and an additional 90,000 vulnerable persons who were not displaced, but had lost their livelihoods as well as access to income and markets. A rapid preliminary nutrition assessment was undertaken in mid January 2005 by UNICEF and Nutrition Research Center in Banda Aceh and Aceh Besar, indicated a serious malnutrition problem among IDPs in these districts. The prevalence of acute malnutrition among children under five (<-2SD of weight for height) was 12.7%, and severe malnutrition was 1.5% (<-3SD of weight for height). The health condition of the children was very poor with 42.6% reported diarrhea, 69.7% cough, 55.9% fever, and 34.6% vomiting in the past 2 weeks. Among women of reproductive age 18-45 years, the prevalence of low body mass index (BMI<18.5) was 15.3%. This information explained that 3 weeks into the disaster there is a rapid decline in health and nutrition among the population, and the health condition indicated that poor water and sanitation condition in the affected areas.

7. In view of these alarming findings, the MOH developed Plan of Action for controlling nutritional problems for both affected provinces. The general objective is to recover and improve nutritional status of community and victims of disaster. The target population estimated approximately 704,000 IDP and estimated the number of vulnerable groups (infants 0-11 months, infant orphan and not-breastfed, children 12-23 months, and orphan 12-23 months, children 24-59 months, pregnant mother, lactating mother, and elderly). The policies are: a) nutrition services for all disaster victims provided free of charge; b) mobilization, transportation and distribution of food commodities and nutrition services conducted on the urgent basis with special procedures; c) every food and nutrition aid both from local and international should be in line with the government regulation as long as is in accordance with the needs and does not conflict with the rules applicable; d) implementation of nutritional services involving inter-programs as well as sectors particularly with the Minister of Social Welfare as the responsible unit for food provision; e) priority of nutritional services is given to those in high-risk groups and in strategic locations. These policies translated into strategies and activities that consist of three phases: emergency (12 months), rehabilitation (2 years), and long-term phase (5 years).

8. There were a lot of activities to improve food security and nutrition. The nutrition team that consists of Directorate of Community nutrition and all involved donor agencies (WHO, UNICEF, WFP, HKI, ADB, CARE, Save the children, Plan International, WVI, CRS, etc) as well as local NGO work together for implementing Plan of Action by preparing proposal, capacity building for health staffs that will work in affected areas, and nutrition surveillance integrated with diseases surveillance. The Government of Indonesia requested WFP to provide food rations to all IDP in camps and with host families, as well as to other vulnerable populations especially those in severely affected areas. WFP food aid programs are conducted in close coordination with BAKORNAS PBP at the national level and with the existing local structures in the affected areas. The daily per capita rations consists of: 400 grams rice, 50 gram canned fish, 20 grams vegetable oils. In addition, supplementary feeding is extended to
children under 5, primary school children and pregnant and lactating mothers, providing 75 grams fortified biscuits and 250 grams fortified noodles per person per day. The Ministry of Health distributed Fortified Blended Food for children 6-24 months and also vitamin A capsule integrated with measles vaccination. UNICEF, HKI, and other agencies have provided micronutrient supplements (iron tablets, zinc, sprinkle, fortified soy sauce). While WHO has focused on nutrition intervention for severely malnourished children. The plan of action for nutrition intervention has been made to coordinate all involved stakeholders to minimize the overlapping. (See table 1).

9. While all of the activities continue for food security and nutrition intervention, a rapid nutrition assessment was carried out between February 22 to March 15, 2005 in 13 affected districts in NAD province to generate epidemiological data on the nutrition and health status, food security, livelihood, and health service utilization patterns of the population. This rapid nutrition assessment was a collaborative effort between the Ministry of Health, Provincial and district health offices, UNICEF, other UN agencies, NGO (Local and International), and Academic institutions.

10. The results of the survey indicated that prevalence of wasting for all children under five was 11.2% (7.1 to 16.9%); underweight 41.5% (33.2 to 49.7%); stunting 36.7% (24.1 to 52.8%); and anemia 48.3% (25.0 to 70.4%). The incidence of morbidity was relatively high for fever and coughing/ARI in almost all 13 districts, with the average of 52.3% (fever) and 46.5% (cough/ARI). In general, children in west coast had higher morbidity rates (diarrhea, cough/ARI, fever, and vomiting).

11. Among women, the prevalence of anemia was 30.3% (15.95 to 49.73%) while prevalence of under nutrition (BMI < 18.5) was 10.64% (6.77% to 15.68%). The incidence of morbidity in general was lower than among children under 5. The survey indicated that 20% of women suffered from ARI and fever, while 8.4% from diarrhea. As in the case of children, the women in west coast district recorded highest prevalence of under nutrition, ARI, fever, and anemia.

12. Different pattern in term of prevalence were observed among IDP and Non-IDP population. While there was no difference recorded in terms of wasting, however the prevalence of underweight, stunting, anemia among the IDP children was higher than non-IDP children. The same pattern was observed with regard to morbidity where IDP children were found more at risk, especially for diarrhea, than non-IDP children, the only exception being measles which was more prevalent among non-IDP children.

13. For women, there are no significance differences recorded among IDP and non-IDPs, except that non-IDP women had a higher prevalence of obesity than IDP women. The same pattern with children, where IDP women were found more at risk than non-IDP women.

14. The results gave the evidence that food security and nutrition in NAD, especially in 13 affected districts, are serious public health problems. The reduction of wasting prevalence in two affected districts (Banda Aceh, and Aceh Besar) between January and March 2005 showed that the food aid has reached the population at risk and averted a major deterioration among the high risk communities. However, the high prevalence of malnutrition, in both for IDP and non-IDP population needs serious attention not only through macronutrient but also micronutrient supplementation.
15. The evidence of high prevalence of malnutrition and some of infectious diseases partly due to the disruption of food supply, lack of water and sanitation facilities, lack of health and nutrition services, and poor transportation and communication as the effect of disasters. Even though the coordination and collaboration have been implemented, there are difficult to monitor all food aid enter to the affected areas and all IDP’s camp. Several issues that created problems, such as: food received already expired, “hallal-food”, like and dislike because of food habit or cultural issue, food sent without distribution/handling cost, etc. Besides, there are location preferences from some NGO; s who want to distribute food that created an unequal food distribution. More serious problem is an issue of uncertain committed budget from donor agencies whiles the allocation from government also very limited.

16. The Government of Indonesia under the National Planning Bureau has coordinated all institutions (central and provincial offices) to come up with a master plan for short-term (emergency) and longer-term (rehabilitation and reconstruction) to assist the two affected provinces. Assistance is structured in three phases: an emergency phase covering January to June, rehabilitation phase from June to December 2005, and a reconstruction phase from January 2006 to December 2009.

17. The improvement of nutritional status is an integral part of community development and important for overall well-being of the population in NAD and North Sumatra as well as any other affected areas from disasters. Depending on the magnitude of the problem and its related factors, every district should capable to develop an appropriate combination of intervention for improving the health and nutrition situation.

18. In terms of preparedness, it is important to note several lessons learned:

- immediate response should be done with integrated package for food, nutrition, and diseases prevention;
- rapid assessment should start immediately after a disaster strikes to facilitate the right planning for emergency situation;
- integrated surveillance for food including food safety, nutrition, and diseases as part of monitoring and evaluation system should be implemented to anticipate the dynamic changes in the population/affected areas;
- implementation of strict guidance for infant feeding;
- controlling the donor for food aid;
- capacity building from international and national volunteers for the purpose of transfer knowledge and responsibilities for local health authorities;
- Due to Indonesia is at risk of disasters, the government (national as well as local government) should provide floating budget for emergency as well as special food for emergency that ready to eat with expiration date for more than 2 years
- improve coordination,
- start with health and nutrition promotion for affected population
- collaborate with agriculture for community empowerment to consider local food production

19. The following recommendations are being made to strengthen our cooperation on food security and nutrition:

- Improve coordination among Government and aid partners to avoid overlapping of activities
✓ Develop and strengthen a planning and response mechanism with the local government to transfer ownership and address the problems holistically and effectively
✓ Build up the national capacity to preempt and deal with disasters
✓ Build a forum for discussion on achievements, lessons learned and new challenges to improve our disaster management capacity.

Reference:

1. Master Plan for Rehabilitation and Reconstruction of NAD and North Sumatra Provinces, Health Sector – Pokja VI, Bappenas 2005
2. Policy and Strategy for WHO/EHA action in Aceh, WHO March, 2005
3. Tsunami Emergency Food Security Assessments, overview of preliminary findings, WFP, February 2005
6. WFP brief report No. 2 to 17 on tsunami crisis, January to March 2005.
7. MOH daily report, Health Crisis Center, January to March 2005
8. Homepage searching: Bakornas PBP, BPS.
<table>
<thead>
<tr>
<th>Line Minister, Donor Agency, NGO</th>
<th>Committed Intervention</th>
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<tbody>
<tr>
<td><strong>BAKORNAS PBP</strong></td>
<td>Food rations for all affected population: Rp 3000/cap/day during the emergency phases</td>
</tr>
<tr>
<td><strong>MOH</strong></td>
<td>Fortified Blended Food and biscuit for children 6-24 months; Vitamin A capsules for children 6-59 months, and postpartum mothers (for 500,000 population); Capacity building and training for nutrition staff that will be recruited for satellite health post and hospitals Management support for nutrition intervention</td>
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<tr>
<td><strong>UNICEF</strong></td>
<td>680,000 vitamin A capsules; 1,300,000 albendazole; 270,000 iron tablets; Preliminary nutrition survey in Banda Aceh and Aceh Besar; Rapid nutrition assessment for 13 affected districts in NAD; Proposed posyandu revitalization; Anthropometric equipment for Posyandu; Nutrition Surveillance; Capacity building; training for nutrition; operational cost for nutrition intervention for NAD and North Sumatra</td>
</tr>
<tr>
<td><strong>WFP</strong></td>
<td>General food distribution for 790,000 beneficiaries (rice, canned fish, and vegetable oil) for all affected areas (Jan-March); Through relief and Food-for-assets programs: and food to support training of 2000 teachers (March/April); Fortified biscuits and noodles for 340,000 primary school children, 130,000 children under five; and 55,000 pregnant and nursing mothers; 8000 orphans and children in day care centers starting April 2005 Revitalize Food and nutrition surveillance system for NAD province (April 2005) Capacity building, dissemination nutrition education material (starting April 2005).</td>
</tr>
<tr>
<td><strong>WHO</strong></td>
<td>Part of UN flash appeal, nutrition is proposed for supporting and managing severe malnourished through therapeutic feeding centers at 41 health centers and referral hospitals; Operational cost for nutrition intervention; Technical assistance and coordination improvement;</td>
</tr>
<tr>
<td><strong>HKI</strong></td>
<td>Distribution of 750,000 red and 195,000 blue vitamin A capsules; 1,125,000 zinc tablets; 15,000,000 sachets sprinkles; 17,000,000 sachet iron fortified soybean sauce – all affected areas in 2005. REAP (Rapid Emergency Assessment and Prioritazion in 73 camps in Banda Aceh and Aceh Besar; 7 villages in Nias, and 5 villages in Simeuleu; 200 vitamin A promotion kits</td>
</tr>
<tr>
<td><strong>ADB</strong></td>
<td>Health and Nutrition Promotion for IDP and Non-IDP; Nutrition Intervention; Training for nutrition staff; posyandu cadres at selected areas (proposed for 2005 and 2006)</td>
</tr>
</tbody>
</table>