1. **International Movement of Scaling Up Nutrition**

A series of papers on mother and child malnutrition, published in the Lancet, introduced nutrition interventions with evidence, emphasizing that it is very important to make progress in international nutrition measures and that the effort for tackling global undernutrition has been delayed (1). In Copenhagen Consensus, which has been held every four years since 2004, it has been concluded that micronutrient interventions and nutrition interventions for preschool children are the themes to be addressed with the highest priority based on a cost-effective evaluation (2). With such scientific evidence, the movement of the Scaling up Nutrition (SUN) evolved in 2010 with the initiative of the World Bank. Many organizations such as the United Nations organizations, donors, governments, civil societies, academic institutes and private sectors have agreed to the concept of the SUN framework, and 54 developing countries also committed to Scaling up Nutrition (3). For this reason, undernutrition interventions in developing countries are gradually expanding and the importance of undernutrition measures is increasingly recognized among many stakeholders as well as government officials. After the start of the SUN movement in 2010, financial and technical assistance toward scaling up nutrition in developing countries has been increasing as the result of the support expressed at the UN high-level meetings and G8 Summits on the concept of the SUN framework.

In November 2014, the Rome Declaration on Nutrition was adopted at the Second International Conference on Nutrition held in Rome by WHO and FAO (4). The Rome Declaration on Nutrition reaffirms the commitments of the past important world declarations related to food and nutrition, recognizing that global challenges such as undernutrition, micronutrient deficiency, overweight and obesity, and lifestyle-related diseases need to be addressed not only through a nutrition-specific approach but also through a nutrition-sensitive approach. This declaration also reaffirms the importance of political coherence and accountability to strengthen the collaboration among various sectors, countries, stakeholders and people. In view of the movement for such global nutritional efforts, scientists and experts on nutrition need to reaffirm the current nutritional situations and future agendas in Asian regions as well as in the rest of the world.

2. **The Situation of Undernutrition in World and Asia**

According to WHO information sources, the current situation of undernutrition in Asia is as follows (5):

- In 2012, 15% of <5 children in the world was underweight, corresponding to 99 million children, of which 67% live in Asia.
- The prevalence of stunting in the world is about 25%, corresponding to 162 million children, of which 56% live in Asia.
- The prevalence of wasting in the world is 8%, corresponding to 51 million children, of which 69% live in Asia.

The proportion of undernutrition is gradually decreas-
ing in Asia, but we must recognize that there is still a large number of children suffering from undernutrition in this region. The levels of public health problems were examined with underweight, stunting, wasting, and overweight for children and anemia for women of reproductive age in each Asian country using the data of the State of the World’s Children of UNICEF (6) and the data of de B. Benoist et al. (7). The public health problems were categorized into four levels: severe, moderate, mild, and low (8). The countries that showed severe public health problem (prevalence of 40% or more) in child stunting were Afghanistan, India, Pakistan, Nepal, Bangladesh, Cambodia, Laos, East Timor and Yemen. Since there are many countries showing moderate and mild level of public health risks, it is necessary for each country to promote proactive efforts to solve undernutrition (Table 1).

3. Achievement of Millennium Development Goals (MDGs)

The MDGs have a target that the prevalence of underweight is to be reduced to half the level of 1990 by 2015. The global underweight prevalence was decreased from 25% in 1990 to 15% in 2012 (9). Some countries in Asia such as China and Central Asian countries have already reached the targets for underweight prevalence set by the MDGs, but many other countries are still facing difficulty in reaching their targets. The countries with a high prevalence of underweight or stunting tend to have slow progress. Such a delay is also seen in the countries of South Asia and South East Asia excluding Thailand, Viet Nam and Bhutan. There are some coun-

| Countries             | Area in Asia | Underweight (<5SD) 1990–1997 | Stunting (<5SD) 1990–1997 | Wasting (<5SD) 1990–1997 | Overweight (<5SD) 1990–1997 | Anemia of women <15 years | Pregnant women <15 years |
|-----------------------|-------------|-------------------------------|--------------------------|---------------------------|-----------------------------|--------------------------|-------------------------|
| Afghanistan           | S           | 56                            | 36                        | 41                        | 6                           | 3                        | 33                      |
| Bangladesh            | S           | 81                            | 48                        | 7                          | 2                           | 3                        | 33                      |
| Bhutan                | S           | 82                            | 45                        | 7                          | 2                           | 3                        | 33                      |
| Cambodia              | S           | 84                            | 46                        | 7                          | 2                           | 3                        | 33                      |
| China                 | S           | 87                            | 49                        | 7                          | 2                           | 3                        | 33                      |
| India                 | S           | 89                            | 52                        | 7                          | 2                           | 3                        | 33                      |
| Indonesia             | S           | 89                            | 53                        | 7                          | 2                           | 3                        | 33                      |
| Japan                 | S           | 90                            | 54                        | 7                          | 2                           | 3                        | 33                      |
| Korean Republic       | S           | 91                            | 55                        | 7                          | 2                           | 3                        | 33                      |
| Mongolia              | S           | 92                            | 56                        | 7                          | 2                           | 3                        | 33                      |
| Nepal                 | S           | 93                            | 57                        | 7                          | 2                           | 3                        | 33                      |
| Pakistan              | S           | 94                            | 58                        | 7                          | 2                           | 3                        | 33                      |
| Philippines           | S           | 95                            | 59                        | 7                          | 2                           | 3                        | 33                      |
| Sri Lanka             | S           | 96                            | 60                        | 7                          | 2                           | 3                        | 33                      |
| Thailand              | S           | 97                            | 61                        | 7                          | 2                           | 3                        | 33                      |
| Vietnam               | S           | 98                            | 62                        | 7                          | 2                           | 3                        | 33                      |
| Brunei                | S           | 99                            | 63                        | 7                          | 2                           | 3                        | 33                      |
| China                 | S           | 100                           | 64                        | 7                          | 2                           | 3                        | 33                      |
| India                 | S           | 101                           | 65                        | 7                          | 2                           | 3                        | 33                      |
| Indonesia             | S           | 102                           | 66                        | 7                          | 2                           | 3                        | 33                      |
| Japan                 | S           | 103                           | 67                        | 7                          | 2                           | 3                        | 33                      |
| Korean Republic       | S           | 104                           | 68                        | 7                          | 2                           | 3                        | 33                      |
| Mongolia              | S           | 105                           | 69                        | 7                          | 2                           | 3                        | 33                      |
| Nepal                 | S           | 106                           | 70                        | 7                          | 2                           | 3                        | 33                      |
| Pakistan              | S           | 107                           | 71                        | 7                          | 2                           | 3                        | 33                      |
| Philippines           | S           | 108                           | 72                        | 7                          | 2                           | 3                        | 33                      |
| Sri Lanka             | S           | 109                           | 73                        | 7                          | 2                           | 3                        | 33                      |
| Thailand              | S           | 110                           | 74                        | 7                          | 2                           | 3                        | 33                      |
| Vietnam               | S           | 111                           | 75                        | 7                          | 2                           | 3                        | 33                      |

1. Data sources are the State of World’s Children 1996 and 2014 by UNICEF.
2. Data source is de Benoist et al. (5), World Health Organization Anemia report 1995–2005, WHO Global Database on Anemia, WHO, 1998.
3. Areas in Asia: C = Central Asia; E = East Asia; IP = High Income Asia Pacific areas; S = South Asia; SE = Southeast Asia and W = West Asia.
4. Public health risk: 1 is low, 2 is medium, 3 is moderate, and 4 is severe. Data source is Nutrition Landscape Information System Country Profile Indicator, Interpretation, WHO, 2010.
5. O means that the indicator has reached the MDG target.
6. Since public health risk level of overweight is not clear, the following assumption was prepared: 1 (normal) < 5%, 2 (medium) 5% ≤ 9%, 3 (moderate) 10% ≤ 15%, and 4 (severe) > 15%.

NOTES
- Data not available.
- Public health risk is moderate.
- Public health risk is severe.
tries with no available data on nutritional status; thus their progress is not measured.

4. Overweight

The prevalence of overweight and obesity of <5 children tends to increase in the world. According to recent statistics (10), the average prevalence of overweight of <5 children is 6.7% in the world, 6.1% in developing countries and 11.7% in developed countries. Meanwhile the average in the Asian region is 4.9%, being lower than in other regions. It has been pointed that the rate of increase is mild. However, the average prevalence of overweight in West Asian countries is as high as 14.7%, showing the rapidly increasing trend in the recent decades. Such a trend has induced public health problems.

5. Risk Factor for Disability Adjusted Life Years (DALYs)

Undernutrition-related issues, such as underweight, suboptimal breastfeeding, and micronutrient deficiency, were the major risk factors for health assessed by the Global Burden of Disease (GBD) around the world in 1990, whereas they had been replaced by NCD-related issues such as dietary risks, high blood pressure, smoking, high BMI and high fasting blood glucose in 2010 (11). On the other hand, underweight, suboptimal breastfeeding, iron deficiency, vitamin A deficiency and zinc deficiency remain as important risk factors in most low-income countries even at the present time.

NCD-related issues are ranked as leading risk factors for DALYs in most Asian countries although undernutrition-related issues are also highly ranked together with NCD-related issues in South Asian countries and some countries of Southeast Asia and West Asia. This replacement of the risk factors is associated with the increase in the population of the aged and the decrease in the child mortality due to infectious diseases. In these countries, the cause of death of the aged has become mainly NCDs.

In regard to the DALYs in children aged 1 to 4, underweight, suboptimal breastfeeding and micronutrient deficiencies are highly ranked as risk factors. This tendency is explicit in South Asian countries and some countries in South East Asia, but those rankings are lower in East Asia and West Asia excluding Yemen.

The prevalence of anemia is estimated to be 47% in <5 children and to be 42% in pregnant women in the world (7). Unfortunately the situation of anemia has not been clearly improved. It is ranked among the top risk factors for DALYs especially in women of childbearing age (11). Anemia of children and women is very critical not only in South Asia but also in Southeast Asia and Central Asia.

It is common among Asian countries that with advancing age, dietary risk becomes high as a risk factor for GBD and disability. The dietary risk includes multiple risk factors such as low fruit intake, high sodium intake, low nut intake, low vegetable intake, low whole-grain and cereal intake and low omega-3 fatty acid intake. In West Asia countries, high BMI is the most significant risk factor for all aged groups. A similar trend has been observed in Central Asia as well.

6. Nutritional Measures to Be Prioritized

Considering the results of risk factors for DALYS and public health risk levels in Asian regions, we have to keep a high priority in addressing undernutrition (underweight, stunting and wasting) and micronutrient deficiencies (vitamin A deficiency, iron deficiency and zinc deficiency) for <5 children in all countries of South Asia and some countries in the other Asian regions except for HIP A countries.

In terms of overweight in <5 children, we have to give priority to tackling this problem in most countries in West Asia, some countries in Central Asia and in the other Asian regions which have child groups with risk of overeating and lack of physical activity.

In addition, we need to focus more on addressing anemia problems for women of reproductive age as well as <5 children in most of the countries in Asia.

At the same time, we need to consider giving a high priority to taking actions to reduce dietary risks and the other NCD-related risk factors in middle-income or high-income countries in Asia.

Each country has to assess what risk factors are leading for the global burden of diseases and obstacles to health for its people and decide what kind of measures should be taken with high priority considering a limited share of national budget.

REFERENCES
1) Horton R. 2008. Maternal and child undernutrition: an urgent opportunity. Lancet 371: 179.
2) Copenhagen Consensus. 2014. How to Spend $75 Billion to Make the World a Better Place. (Bjørn Lomborg, eds), Copenhagen Consensus Center.
3) SUN Movement Secretariat. 2014. SUN Movement: Annual Progress Report. September 2014.
4) FAO, WHO. Rome Declaration on Nutrition. Second International Conference on Nutrition. November 2014.
5) UNICEF, WHO, World Bank. Levels and Trends in Child Malnutrition. http://www.who.int/nutgrowthdb/sum mary_jme_2013.pdf?ua=1 (Accessed 2014-11-24).
6) UNICEF. 2014. Table 2. Nutrition. Statistical tables. In: The State of the World’s Child 2014, p 36–41. UNICEF, New York.
7) de Benoist B, McLean E, Egli I, Cogswell M. 2008. Worldwide prevalence of anaemia 1993–2005, WHO Global Database on Anaemia. WHO, Geneva.
8) WHO. 2010. Nutrition Landscape Information System (NLIS) country profile indicators: Interpretation Guide. WHO, Geneva.
9) UN. The Millennium Development Goals Report 2014. UN, New York.
10) de Onis M, Blössner M, Borghi E. 2010. Global prevalence and trends of overweight and obesity among preschool children. Am J Clin Nutr 92: 1257–1264.
11) Institute for Health Metric and Evaluation. 2014. Global Burden of Diseases (GBD). http://www.healthdata.org/gbd (Accessed 2014-11-24).