



**KEYNOTE ADDRESS
SECRETARY GENERAL, MINISTRY OF AGRICULTURE
THE REPUBLIC OF INDONESIA**

**SPECIAL SEMINAR ON FOOD SECURITY,
FOCUSING ON WATER MANAGEMENT AND SUSTAINABLE AGRICULTURE**

Niigata, Japan, September 5-7, 2013

Assalammualaikum Waramatulahiwarakatuh,

The Honorable,

Mr. Tadayoshi Nagashima, Vice Minister of MAFF Japan

Mr. Liem Hon Hin, Deputy Secretary-General of ASEAN

Mr. Hirohiko Izumida, Governor of Niigata Prefecture

Mr. Akira Shinoda, Mayor of Niigata City

Mr. Prof. Masayoshi SATOH, Tsukuba University

Distinguished delegates, participants,

Ladies and Gentlemen,

Good Morning,

It is a great pleasure for me to be here with you in this important occasion of “ **special seminar on food security, focusing on water management and sustainable agriculture**”, for the occasion of the 40th Years of ASEAN –Japan Friendship and Cooperation.

On behalf the Government of the Republic on Indonesia, it is also great honor and privilege for me to extend, our appreciation to:

1. Ministry of Agriculture, Forestry and Fisheries (MAFF) Japan;
2. ASEAN secretariat, and
3. Mayor of Niigata City,

who has initiated to organize a special seminar for food security and water management, whereby the two issues is a global issue and be our a problem. And I hope that all of the participants and delegations in this important seminar come up with the appropriate recommendation.

Distinguished Guests, Ladies and Gentlemen,

The importance and relevance of this seminar is mainly emphasized by food production and availability (quantity, quality, and access) and water management. The world population is probably will reach 8.3 billion by 2030 and could be exceed 9,0 billion by 2050. The Earth will have to feed an additional two billion people, of whom 90 per cent come from developing countries. It is therefore crucial to ensure not only that enough food can be produced reliably to feed this expanding population, but also that it is accessible to all.

Within this context, one should recall that food security greatly depends on the management and conservation of land and water in order to produced food in term of food security and sovereignty based on country local food resources.

I would like to take this opportunity to deliver a keynote address in the title: ***“Lesson Learned and Indonesian Strategies to Attain Food Security in frame of Sustainable Agriculture and Water Management”***.

Distinguished Guests, Ladies and Gentlemen,

As we all aware, the global climate change has been greatly affected agricultural performance shown by a sharp decreased on agricultural production, especially rice, as a staple food for majority of people in this region. Farmers have been substantially experiencing this unpredictable phenomenon through flood, pest and disease infestations. The government is highly alerted as well with this situation and along with the community participations; many programs have been launching for climate adaptation and find out ways to deal with various climate change conditions. Amid the influence of the global climate change, however, agricultural development is the key factor in achieving the Millennium Development Goals, especially for developing countries. An increase in production is essential in the attempt to make food available, accessible, and affordable for all people.

The role of agriculture and the rural economy is fundamental for securing sustainable development in the process to fight against hunger and poverty that would affect household food security. An increase in production is essential in order to fulfill food consumption. However, the high risk of agricultural crops should be considered as potential threat affecting harvest failure. For this purpose, policy alternatives to protect the interest of farmers should be formulated, transformed into working operation and directly applied in the field, such as agricultural insurance, agricultural micro-finance, and agricultural technology and innovation.

Overview of the development of Indonesia food supply can be shown from the achievement of food production over the past five years. In period of 2007 – 2012, the national paddy production increased from 57,1 million tons to 69,056 million tons,

an increased rate 3,6 percent/year. The maize production increased by 7.8 percent /year from 13.3 million tons to 18.9 million tons in the same period. From the others commodities which is targeted to be self-sufficient by 2014, the production in 2012 respectively 780.000 tons of soybeans; 399.000 tons of beef, and 2.7 million tons of white sugar.

Generally, Indonesia has approximately 9.45 million Ha of paddy field (BPS,2011), which consist of : **Irrigated paddy field : 7,23 million Ha (84,48%)**, Tidal lowland paddy field : 488,852 Ha; (3,37%) ; Lowland paddy field 171,994 Ha (1,18%) ; ground water irrigation paddy field 92,090ha (1,01%) and rain-fed paddy field 1,473 million Ha (9,95%) with total production 69,056 mill ton (2012).

Like others countries in Asia, rice is primary food for more than 248 million inhabitants in Indonesia (2012) , and in order to ensure food security in the country, the President's Republic of Indonesia give the directive to the Ministry of Agriculture should be able to achieve a surplus of 10 million ton of rice in 2014. The main purpose of this government policy is to strengthen our rice self-sufficiency as the main sources of food security at the national level as well as at the household level. To support additional target of rice production, the MOA develop program called National Rice Production Movement (P2BN), core of the program the government provide support for farmers in term of better quality seeds, subsidy of fertilizer in order to help them increasing rice yield per unit area, and providing financial scheme including interest subsidy, and introduced high yield variety including water-saving cultivation techniques.

Distinguished Guests, Ladies and Gentlemen,

Another challenge is related with land distribution and total number of persons employed in agriculture. The total number of persons employed in agriculture remained relatively stable over the last two decades, 41.6 million in 2009 compared with 42.3 million in 1990. In 2009, the agricultural land-to-labor ratio ranged from almost 5 hectares per worker in Kalimantan to below 0.4 ha for Java. While in Java this ratio remained almost unchanged over the last two decades. In 2010, Indonesia's average land-to-people ratio at 558 meter square was lower than Vietnam (960), Thailand (5.230) and India (1.230).

Agriculture development in the next future will not only need to produce enough food and energy for population, but will also be the key to conserve the environment (land and water) for a sustainable food production. Indonesia's agricultural development program in the 2010-2014 period has 4 (four) main goals: **first**, increased national food security through higher production and lower food imports; **second**, food diversification; **third**, increased value added and competitiveness of agricultural products; and **four**, improved the quality of life of farming households.

Distinguished Guests, Ladies and Gentlemen,

The current Agricultural Development Plan, identifies a series of key challenges: **First** for near-term agricultural development, namely ways to “increase the productivity and added value of products through an environmentally friendly agricultural system, **Second** restore and develop land and water infrastructures; **Third** provide disadvantaged farmers and livestock breeders with access to low-interest financing; **Fourth** strengthen competitiveness in the global market and improve the weak economic growth resulting from the global crisis; **Fifth** strengthen the institutions for productive economic activities in rural areas and respond to the demand for food supply; and **Sixth** accelerate determination of Agricultural Land Sustainable Food (LP2B) in accordance with law No. 41/2009 which set out in the Spatial Plan (Spatial) Provincial and District.

To respond the above challenges, innovation and technology will not only need to improve the efficiency with which inputs are turned into outputs, but also conserve scarce natural resources included water resources /watershed. Even though Agriculture Technologies have contributed to the strong growth in agricultural productivity in Indonesia, especially to the smallholder farmer.

The main strategy is to narrow the gap between food demand and supply through: (1) avoid loss on production capacity due to variety of stresses and obstacles, such as climate variability and change, land degradation and shrinking resources, infrastructure and socio-economic constraints, (2) increasing the capacity of food production and resource growth with climate risk and minimum environmental impact, and (3) accelerating the food diversification while reducing the demand for food commodities which are vulnerable to climate change and wasteful of resources, such as rice, and substitute with local food.

Distinguished Guests, Ladies and Gentlemen,

With regard to water management for food security in Indonesia, the Ministry of Agriculture should be responsible for the irrigation water management at farm level (tertiary canals). Water is one very important element in food production. If water is not available then food production will be impossible to maintain. As in many other countries, the condition of water resources in Indonesia has reached the stage where concerted action is needed to reverse the current trend occurring consist of excessive water use, pollution, and the increasing threat of drought and flood. This means that water resources becomes a key factor for the sustainability of agriculture.

Related to that responsibilities the government set up the program and activities through investment approach such as:

- Establishing new irrigation system and improving the function of irrigation network.
- Rehabilitation and optimization farming level irrigation channel (village irrigation/ JITUT), rural irrigation channel (JIDES), micro water channel development (TAM), and exploiting pressure Irrigation (Drip and Sprinkler Irrigation)
- Development of alternative and small scale of water resource (shallow and deep ground water, surface irrigation and management of irrigation participation
- Development and water conservation Small dam, farming water reservoir (Farm Pond), and infiltration/recharge well.
- Participatory Irrigation Management (PIM) program, in developing the capacity and capability of WUA/WUAFs in implementation of participatory irrigation scheme management.

Distinguished Guests, Ladies and Gentlemen,

For the efforts to achieve a surplus of paddy rice, the farmers used a treatment through vegetative planting called "Salibu". Rice plants to grow again after the rest of the harvest cut stems, buds will appears from the stem that is in the soil, the roots will issue new buds. The advantages rice "Salibu" are : shorter rice age; 30-40% water efficiency; lower production costs and harvest can be done 4 times a year (still under pilot project in West Sumatera).

The other food production story from Indonesia is the Food Reserve Garden for Sustainable Agriculture (KRPL). The rationale of this program is because of population increase, limited availability of agricultural land, climate change and competition between food and energy. On the other side, Indonesia has great potential of garden that accounts 14% of agricultural land in Indonesia or about 10,3 million Ha.

The use of garden for planting fruits and vegetables, called Food Reserve Garden for Sustainable Agriculture, is a solution of challenges above. Moreover, this program could increase the nutrition level, income, and welfare of the Indonesian society and applied in 33 provinces.

Ladies and Gentlemen,

Before I close this message, I would like to repeat Indonesia's perspectives, which are also my concern related to sustainable agriculture that can cope the global climate change effect as well as ensuring food security.

First, the role of agricultural sector is increasing in importance parallel with the increasing trend of population growth, demand for high quality of food, and

variation in international trade development. On the other hand, the cost of production is also increasing significantly amid the risks faced by the farmers in production process due to natural disaster and man-made natural threats leading to environmental degradation and disadvantage for the people. This problem has been very much influencing the farmers to improve their capacity in developing their farms. Food diversification, on the other hand, should also be prioritized to reduce dependency on certain grains and crops. This situation encourages various efforts with main objective to achieve more efficient and better agricultural practices, from production fields to processing plants and marketing places. In this context, agricultural cooperation is highly expected to lead to a more efficient production, better processing, and effective marketing activities.

Second, agricultural production should be maintained to feed the nation and keep pace with the above mentioned population growth. It is realized that a high increase in domestic food production will reduce dependency on imports, hence saving foreign exchange and improving accessibility to food for everyone. The availability of food will also help to reduce domestic turmoil and improve political stability and economic condition. The question now is how food security (specifically rice, corn, soybean, sugar, and meat) could be achieved taking into account the economic and political insecurity, unemployment, poverty, and increasing food prices that reduce the bargaining power of the people? Agricultural and food production, therefore, should be strengthened and stabilized.

Third, agricultural cooperation is one of the responses to world food scarcity and global trend of agricultural development. Again, with the increasing total world population, demand for food and other agricultural products should also be increased significantly. The global climate change, lack of water supply for irrigation and the high competition in agricultural products are among the challenges to provide safe food for the people, feed for the livestock, and bio-fuel for the energy. Innovations in agricultural sector need to be created to the highest possible level for mutual benefit. Understanding on the challenges ahead of the innovations should maintain a rapid change of conditions to which such innovations are directed. The available knowledge, data and information should contribute to the diversity of technology innovations at which the cooperation among the countries in Southeast Asia region (ASEAN). With such cooperation, efforts to strengthening the linkage between agricultural and industrial sectors will encourage the development of high competitive agro-based industry products. Agricultural cooperation could offer secondary or tertiary food alternatives in rural areas and at the same time could also support every country to enter and deal with global market.

Ladies and Gentlemen,

We believe that through this seminar we're all will share knowledge, experiences and expertise how to address the issue of food security, focusing on water management and sustainable agriculture in the Region of Asia.

I really hope that this seminar will come up with recommendation for the ASEAN – Japan government to solve the problems we are facing presently and to deal with some challenges in the future.

Thank you,

Secretary General, Ministry of Agriculture /
Indonesia SOM-AMAF Leader

HARI PRIYONO