INDONESIA STRATEGIC NATIONAL PATHWAY FOR FOOD SYSTEMS TRANSFORMATION

INTRODUCTION

As part of the Decade of Action to achieve the Sustainable Development Goals (SDGs) by 2030, the Secretary General of the United Nations will convene a Food Systems Summit in September, 2021 to establish the future direction for global food systems. In preparation for the Summit, UN Member states are encourage to convene the Food Systems Summit Dialogues (FSSD) to indentify problems and choices of game changing solution to develop pathway of food systems transformation. FFSD offers organized purposeful forum for stakeholders to come together and to share their views on how to advance progres towards food systems transformation, map their respective roles, identify and minimize potential trade-offs across sectors and intervention for comprehensive and upscaled results.

Government of Indonesia (GOI) has made bold of commitment to actively participate UN Food Systems Summit by implementing all the principles and process of the FSSD. The National Development Planning Agency (BAPPENAS) has been registered as National Convenor to prepare, organize and implement FSSD in Indonesia. BAPPENAS has organized the national and sub-national food systems summit dialogues in Indonesia, that incorporate, reinforce and enhance the principles of the summit dialogues, that are act with urgency, recognizing complexity, embrace multi-stakeholder inclusivity and build trust, respectful and commitment as foundation of collaboration.

The first Indonesia Food Systems Summit Dialogues was implemented on April, 27th 2021, that involved 239 participants (144 male and 125 female), represented a broad range of stakeholders such as national and subnational government institution across development sectors, private sectors and bussiness association, civil society organizations including small-scale producers and family farming groups, youth, women and consumers organizations, custumary communities, universities and UN-based organizations in Indonesia. The first FSSD was organized as national level dialogues to initiate national engagement with focus on comprehensive exploration of Indonesia food systems, gathering inputs on problems and ideas on possible solutions on food systems transformation.

The second Indonesia Food Systems Summit Dialogues was conducted on August, 12-13th 2021, that organized as sub-national dialogues to explore the perspetives of local stakeholders as well as the process of verification and validation of the results of the national dialogues. The dialogues were organized in six regions to cover the diversity of Indonesia food systems as archipelagic county, that were in Sumatra, Java, Kalimantan, Bali and Nusa Tenggara, Sulawesi and Maluku, and Papua. The subnational dialogues involved 1,552 participants (834 male and 718 female).

Along with member-state dialogues that organized by government, the independent dialogues that organized by civil society groups are encouraged to bring inputs for national pathways of food system transformation. On August, 31th 2021, BAPPENAS has encouraged the convenors of independent dialogues to present the results of their dialogues to contributes to the national pathway of food systems transformation.

This reports is a synthesis of the results of the FSSD in Indonesia that are presented as "Indonesia National Strategic Pathway for Food Systems Transformation." This report is an articulation of national

pathways to sustainable, resilient, equitable and healthy food systems and in a manner that contributes to realization of 2030 Agenda of SDGs.

THE AGENDA OF FOOD SYSTEMS TRANSFORMATION IN INDONESIA

Indonesia is the largest archipelago in the world, streching over 34 provinces with more that 270 million people. There are more than 6,000 inhabited islands, more than 1,300 ethnic groups and and richness in diversity of ecology, socio and culture that contributes to the diversity of food systems across Indonesia. The population growth in Indonesia is projected to increase up to 311 millions people in 2050. A growing population and middle class, and a high rate of urbanization have led to changes in food demand and consumption as well as dietary patterns. Urbanization has been increasing with 49,9% of population living in urban areas in 2010 and is projected to increase by 69,1% in 2045 (Bappenas, 2019).

Indonesia is has achieved tremendous progress in economic development and poverty reduction with average income growth recorded of 5% per year (BPS, 2020). Agri-food sector, including agriculture, forestry and fisheries, plays important roles in the Indonesian economy. The sector contributes 13.80 % to the national GDP and providing employment for almost half of its total population.

The Government of Indonesia has a bold commitment on food systems transformation. That is reflected on the regulatory framework as foundation of the transformation. *First*, Food Law No. 18/2012 is the main legal basis for food development, as well as food systems. *Second*, Presidential Decree No. 59/2021that reiterated the commitment of the GOI to implement and achieve the SDGs. *Third*, Presidential Decree No. 18/2020 on Mid-term Development Plan 2020-2024 that stated the food systems transformation has been designated as one of the national priorities. *Fourth*, recently The GOI has released Presidential Decree No. 66/2021 on National Food Agency.

According to Mid-term Development Plan 2020-2024, the food development is focused on:

- (i) Increasing availability, access and quality of food consumption, including promoting local food, diversification of food consumption, fortification and biofortification, and provision of nutritious food for specific groups such as children and maternal health groups,
- (ii) Increasing access, price stability and sustainability of food production, that includes strengthening national seed production system, eco-agriculture and enhancing strategic food production, including aquaculture-based food production,
- (iii) Enhancing productivity and quality of human resources development in agricultural sector, such as develop the data base of farmers, education and training, farmers corporation, agricultural insurance, inclusive financing and market access,
- (iv) Enhancing the sustainability of agricultural resources supports, such as increasing efficiency and quality of soils and water, promoting agroecosystem health, providing infrastructure and agricultural technology as well as digitalization of agriculture,
- (v) Developing food system and governance, including strengthening national logistic system and sustainable food systems.

With respect to the complexity and diversity of Indonesia as archipelagic country and the challenges of food system drivers such as demographic, economic, socio-culture and climate change, the food systems transformation will be implemented on the basis of three approaches: (i) comprehensive and integrated of cross-sectoral, issues and action areas of devlepoment, (ii) inclusiveness, through national platform that involves multi-stakeholders collaboration and partnership, and (iii) food systems regionalization through promoting localizing food systems across Indonesia.

The regulation framework, existing programs and approaches is the basic foundation of the food systems transformation in Indonesia, as key factors to achieve 2020 SDGs targets.

VISION AND EXPECTED FOOD SYSTEM TRANSFORMATION IN COMING DECADE

The stakeholders at national and sub-national level FSSD have agreed that vision of the food systems transformation is toward more healthy, equitable, sustainable and resilient food systems in Indonesia. Strategy of the food systems transformation should recognize the diversity of ecology, socio-economic and culture of Indonesia as an archipelagic country.

By 2030 all Indonesian will benefits from healthy and nutritious food, equitable livelihood, sustainable food consumption and production, established resilience that are contributed from food systems transformation. This, will contribute to the 2030 SDGs targets, particlarly on reducing poverty, zero hunger, good health and well being, reduce inequality, responsible consumption and production, climate action, life on land and partnerships for the goals.

In searching of strategy and national pathways, the national and sub-national dialogues process have adopted the framework of UNFSS 5 Global Action Tracks, that consists of :

- 1. Ensuring access to safe and nutritious food for all (enabling all people to be nourished and healthy, progressive realization of the right to food)
- 2. Shifting to sustainable consumption patterns (promoting and creating demand for healthy and sustainable diets, reducing waste)
- 3. Boosting nature-positive production at sufficient scale (acting on climate change, reducing emissions and increasing carbon capture, regenerating and protecting critical ecosystems and reducing food loss and energy usage, without undermining health or nutritious diets)
- 4. Advancing equitable livelihoods and value distribution (raising incomes, distributing risk, expanding inclusion, promote full and productive employment and decent work for all)
- 5. Building resilience to vulnerabilities, shocks and stress (ensuring the continued functionality of healthy and sustainable food systems)

Visioning Indonesia food systems transformation should be placed on Indonesia diversity in the context of archipelagic country. This requires the transformation of the food systems governance to be more inclusive and accomodating the roles of sub-national government and local stakeholders. The concept of regionalization of food systems or localizing the food systems governance is foundation of the national dialogues process. The organization of food systems summit dialogues in Indonesia has designed to promote the regionalization of food systems through implementing sub-national dialogues that covers the diversity of Indonesia food systems, in the six regions, that were Sumatra, Java, Kalimantan, Bali and Nusa Tenggara, Sulawesi and Maluku, and Papua.

ADOPTING U-THEORY IN THE FOOD SYSTEMS SUMMIT DIALOGUES

Implementing multi-satekholders dialogues process, we are adopting the principles of U-Theory. U-Theory is a framework and social methodology that integrates systems thinking, leadership and learning from the viewpoint of an evolving human consciousness – transformative process through *open mind*, *open heart* and *open will* (Scharmer, 2009). With the U Theory, FSSDs allow participants to share their perspectives on food systems based on :

- 1. Their knowledge and experiences (downloading, seeing and sensing).
- 2. Reflecting their roles and responsibilities in the food system (*presencing*).
- 3. Co-creating of new pathway and models of food systems transformation in Indonesia (*crystallizing*, *prototyping* and *performing*)

THE PRIORITIES AND POTENTIAL GAME CHANGING SOLUTIONS

The national and subnational food systems dialogues have indentified priorities and potential game changing solutions for the food systems transformation. These are reflection of changes to be made and decisions that must be worked in coming three years to meet with defined expectation in 2030.

Priorities

1. End hunger, improve diets, promote coastal and ocean based food

Food systems should enable all people to get benefits from healthy and nutritious food. The healthy food should be available and accessible to all people at affordable price. The national social safety-net and poverty reduction should incorporate healthy food as part of the program. Food systems should be transformed through sustainable consumption pattern, improving the desirable dietary pattern, increasing food literacy and diversification of consumption, promoting local food, and enhancing efficiency throuh reducing food loss and waste.

Game changing solutions: (ii) Integrating healthy and nutritious food aid to the social safety net system, Fortification and biofortification at affordable price; (ii) Supporting capacity of SMEs on producing healthy food including food safety; (iii) Promoting food literacy, education and campaign on healthy food; (iv) Reducing food loss and waste by enhancing technological innovation in handling food loss to encourage production efficiency and reduce greenhouse gas effects simultaneously; (v) Research and innovation of local food development, (vi) Promoting culinary heritage and Indonesian traditional food.

2. Protect and restore natural resources

Food systems should cover sustainable agriculture and aquaculture as mode of food production, enhancing sustainability of agro-ecosystem (i.e. soil fertility, water efficiency, etc), as well as reducing the rate of conversion of agricultural land.

Game changing solutions: (i) Strengthening land use plan policy to reduce agricultural land conversion; (ii) Promoting sustainable agriculture practices, agroecology and conservation agriculture; (iii) Promoting integrated farming and circular economic model.

3. Inclusive business

Food systems should provide opportunities to increase income and welfare for small-scale producers, enhance the fairness in food value change, farmers regeneration, engine for rural development to enhance rural economies, and inclusive participation of women, youth and local communities.

Game changing solutions: (i) Promoting partnership and inclusive bussiness model; (ii) Improving value food value chain and fair trade; (iii) Enhancing youth participation in agriculture/farmers regeneration; (iv) Supporting farmers capacity building on technology and innovation, including digital transformation; (v) Strengthening farmer institutions in the form of farmer cooperatives and corporations to increase economies of scale, increase added value, access to finance and marketing.

4. Resilient and local food systems

Food system should cover the resilient on food production and farming system, adaptation and mitigation to climate change, readiness to the natural disaster and promoting local food reserves, maintaining biodiversity, promoting local wisdom and knowledge as well as reducing the food insecurity.

Game changing solutions: (i) Optimalization of marginal land and home garden farming for resilience; (ii) Research and innovation on resilience farming system; (iii) Promoting local food reserves and local knowledge/wisdom; (iv) Promoting climate-smart agriculture.

5. Inclusive Governance

Food systems should strengthen national logistic system in relation with food stock, access and distribution,

Game changing solutions: (i) Supporting the food logistic and infrastructure that enables food access for all people in Indonesia; (ii) Supporting regionalization of food systems in term of planning, policies and governance; (iii) Strengthening national and local food systems planning capacity, by integrating indicators of nutritional quality/value and diversified consumption in food systems planning; (iv) Providing economic and fiscal incentives regarding healthy food; (iv) Promoting research and innovation on sustainable food systems; (v) Developing food systems dashboard for monitoring the food situation as well as a reference for decision making and policy formulation

Based on the result of sub-national dialogues, there are specific issues that need to be addressed in each regions of food systems :

- Sumatra: food quality and safety due to the increasing food distribution in the region, competition of land use for food production and plantation.
- Kalimantan: protection of custumary agricultural land, food insecurity in the country border areas
- Java: increasing rates of agriculture land conversion, improvement of food value chain
- Bali and Nusa Tenggara: protect local seed and germ-plasm, utilization of marginal land and home garden for food production
- Sulawesi and Maluku: promoting coastal and marine based food, managing local food stock and distribution
- Papua: promoting local food such as sagoo, tubers and others food local food sources, infrastructure and logistic support for food distribution

NATIONAL PLATFORM OF COLLABORATIVE FOOD SYSTEMS TRANSFORMATION

BAPPENAS has initiated a national platform that is developed in line with national and sub-national dialogues process. FSSDs in Indonesia have been conducted through multi-stakeholder collaboration involving representives of government, private sectors and civil society organizations, from planning to implementation. Moreover, this platform has also used to establish Indonesia Delegation on Food System Pre-Summit in Rome, and will be continued to Food Systems Summit in New York, September 2021. The collaborative platform will be enriched with national scientific task force and champion network of food systems in the future. There is also expectation that this platform will be replicated in the subnational level. This reflected the commitment of the GOI to build inclusive, participatory and multistakeholders platform of collaborative food systems transformation at national and sub-national, during the food systems summit process and beyond.

CONNECTION TO OTHER NATIONAL PLANNING DOCUMENTS

Based on regulatory framework, this national strategic pathway documents is related with Presidential Decree No 59/2017 on the implementation of SDGs and No 18/2020 on Mid-term Development Plan 2020-2030. This document will also contributes to the NDCs regarding Indonesia position on UNFCCC COP 27 on November 2021. This national strategic pathway document will contribute as reference for upcoming Long-term Development Plan in the future.

THE KEY MILESTONE IN THE PATHWAY OF FOOD SYSTEMS TRANSFORMATION

Priority	Milestone		
	2024 (including RPJMN target)	2030 (including SDGs target)	
End hunger, improve diets, promote coastal and ocean based food	 Improved diets Desirable Dietary Pattern 95,2 Energy Intake 2.100 kkal/cap/day Protein Intake 57 gram/cap/day Prevalence of Undernourishment (PoU) 5,0 Food Insecurity Experience Scale (FIES) 4,0 Fish consumption 62,00 kg/cap/year Meat consumption 14,7 kg/cap/year Animal-based protein consumption 11,04 gram/cap/day Vegetable and fruit consumption 316,3 gram/capita/day Safety of fresh food 85-95 % Organic food share 20 % Healthy and nutritious food aid is integrated into to the social safety net system Poor family access to biofortified rice 100 ton Fortification and biofortification at affordable price are available in the markets Biofortified rice production: 20.000 ha Increased capacity of SMEs on producing healthy food including food safety Food literacy, education and campaign on healthy food are done Technological innovation in handling food loss to encourage production efficiency and reduce greenhouse gas effects simultaneously is available Culinary heritage and Indonesian traditional food are promoted. 	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.	
Protect and restore natural resources	 Land use plan policy to reduce agricultural land conversion is enforced Legalized protected paddy field 100 % Sustainable agriculture practices, agroecology and conservation agriculture are promoted Integrated farming and circular economic model are promoted 	By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.	

Priority	Milestone		
_	2024 (including RPJMN target)	2030 (including SDGs target)	
Inclusive business	 Increased capacity of farmers on technology and innovation, including digital transformation Farmers access to technology 80-95 % Farmer cooperatives and corporations to increase economies of scale, increase added value, access to finance and marketing are established Value added per labor in agriculture Rp 59,8 million/agricultural labor Farmer's terms of trade 105 Partnership and inclusive bussiness model are promoted Improved value food value chain and fair trade Youth participation in agriculture/farmers regeneration is enhanced 	By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment. Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.	
Resilient and local food systems	 Local food reserves and local knowledge/wisdom are promoted Plant and animal genetic resources 4.250 accession Marginal land and home garden farming for resilience are optimalized Research and innovation on resilience farming system are done Climate-smart agriculture are promoted 	By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	
Inclusive Governance	 Global index Global food security index 69,8 Food logistic and infrastructure that enables food access for all people in Indonesia are in place Regionalization of food systems in term of planning, policies and governance is in place Indicators of nutritional quality/value and diversified consumption are integrated in food systems planning Economic and fiscal incentives regarding healthy food are stipulated Research and innovation on sustainable food systems are promoted Food systems dashboard for monitoring the food situation as well as a reference for decision making and policy formulation is in place 	Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries. Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.	