

Indonesian Food Security Assessment

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➤ Background

In 2008, up to 38 million Indonesian lived under poverty. Food supply in some parts of Indonesia up to today is still insecure. Most people rely on their own crops harvest. With stagnating agriculture productivity, many people are unfavourably affected. But the national food production data actually shows contradictive figures. Recent statistics show that from 1999 to 2006, total Indonesian food production is stable between 50-57 million tons annually. While the total consumption is much lower at only 32.7 million tons, assuming per capita consumption is 141 kg annually. Therefore, it can be safely assumed that food insecurity in some parts of Indonesia is caused by other factors than insufficient production.

➤ Material and Method

This literature review looked for the potential causes of Indonesian food insecurity in the household level. There is an abundance of statistical data from Indonesian government, Food and Agriculture Organisation and World Food Programme that is sufficient to create preliminary assumption of the potential factors contributing to food insecurity in Indonesia.

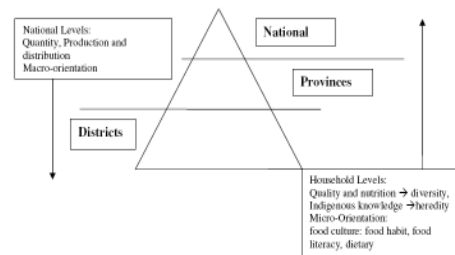


Fig.1. Indonesian food security
Source: Author

➤ Result



Fig. 2 Local knowledge and food culture in West Sumatera, Indonesia
Source: Author



Fig.3 Landscapes of agriculture in West Sumatera, Indonesia
Source: Author

On the production level, the potential factors of food insecurity are decreasing arable land due to alteration to other purposes than agriculture, long drought season and flood due to the climate change, availability of seed, plant protection and natural catastrophes. On the distribution level, there is a high price disparity between consumers and farmers due to the lack of distribution policy, low transparency of food production and inadequate transportation systems. Furthermore, low post harvest technology decreases the quality and the quantity of the commodity. On the consumption level, low accessibility of food caused by poverty and undesirable dietary pattern stemming from the food culture. The result of Desirable Dietary Pattern (DDP) study shows that the demand of cereals is still high. Even though Indonesians has sluggishly changed their food consumption proportion and energy intake from mainly cereals to include more oil and fat in the diet, resulted an increase in daily calorie consumption from 66.2 to 71.8 (DDP score) between 1993-2002, this may not reflect an increase in animal products consumption since Indonesians consume a lot of fried foods. Therefore further research was conducted to look for the possibilities of indigenous knowledge utilisation in reaching adequate nutritional levels.

➤ Conclusion

Further research was conducted in Minangkabau (West Sumatra) Indonesia, as a case study, to study further the potential of indigenous knowledge and food culture development in reaching adequate nutritional intake (food security in household).

Literature:
Altieri, M. (2001). Traditional agriculture. *Encyclopedia of biodiversity* p109-118. Elsevier
Altieri, M. (2002). The socio-cultural and food security impacts of genetic pollution via transgenic crops of traditional varieties in Latin American centre of peasant agriculture. *Bulletin of science technology society* p 350-359. SAGE
Atkinson, R. (1998). *The Life Story Interview*. London: Sage.
Benda-Bockmann, Franz von. (1979). Property in social continuity, continuity and change in the maintenance of property relationships through time in Minangkabau, West Sumatra. *Martinus Nijhoff, the Hague, The Netherlands.*
Brown, A.H.D and Hodgkin, T. (2007). Measuring, managing and maintaining genetic diversity. In *Managing biodiversity in agriculture*. (Ed) Jarvis, D. I Et al. Columbia University press, NY
Carlos, R. F., 2004. Social capital construction and participatory rural planning. *Proceeding of seminar on Social Capital Construction and Participatory rural planning.*
Carol J. Perez Collier Dan W. Gil Fahmuddin Agus. (1988). An indigenous agricultural model from West Sumatra. A source of scientific insight. *Indonesian J. Soc. Sci.* Pages 191-209
Janowski, M and Kerlogue, F. (2007). Kinship and food in South East Asia. *Word*. Institute of Asian studies SRM production Berhad Sdn, Malaysia.
Lipowitz, N. et al. (2001). Contemporary Minangkabau food culture in West Sumatera, Indonesia. *Asia Pacific Journal of Clinical Nutrition*, Vol.10 Issue 1, p 10-16. Blackwell Science Asia.
Tansley, Geoff. (2006). *The future control of food: A guide to international negotiations and rules on intellectual property, biodiversity and food security*. Earth scan, London.
Van Esterik, Penny. (2008). *Food Culture in South East Asia*. Greenwood Press, Westport, USA.

