IMPROVING FOOD SECURITY IN RURAL JAVA:
Prospects and Challenges of the Local Foods

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A monophagous nation

A warning from Soemarwoto & Conway (1985):

.....Indonesia is becoming increasingly monophagous: the ratio of consumption of rice to other staples climbed from 0.4 in the late 1960s to over 0.8 by the early 1980s. Such dependence on a single staple food carries with it the risks of serious socio-economic and political problems should major crop failure occur...
THE CONTEXT

- Dependency on rice as staple food (*monophagous*)
- Java as the source of rice for the rest of the country
- Irreversible loss of agricultural lands along the North Coastal Regions, especially rice fields & fish ponds, due to:
  - disasters (esp. land subsidence)
  - urbanization & settlement development
  - industrialization & deindustrialization
  - infrastructure development
  - decentralization
- Shifting to the South Coastal Regions would convert rice fields, *sawah surjan* & home gardens as the basis of (local) food production to more dominant built-up areas
Importance of rice fields, *sawah surjan* & home garden in the production of local food

- **Rice fields** – irrigated rice cultivation 2-3 crops/year with high productivity
- **Sawah surjan*** – irrigated rice cultivation 1-2 crops/year in combination with various cash crops from its raised beds
- **Home garden (pekarangan)** – dry land surrounding the house as the basis for producing carbohydrate, vegetables, fruit, herbs and animals (protein) for the household own consumption.

*) *Sawah surjan* – a special farming systems developed in the south coastal region of Yogyakarta. It comprises a unique combination of two different but complementing land uses, i.e.: the raised beds for various cash crops and the sunken beds for rice and fish. The system is categorized as a local genius developed by farmers collectively in managing land resources with poor drainage.
Food production in the home garden

• Low production and productivity
• Continuity in production is more important for subsistence
• Diversified commodities of crops and animals
• Locally available within the human food shed
• Low transportation costs and low pollution
• Reduce food miles dramatically
• Freshness and safety
• Ecologically stable
The Local Food Facts

• Not less that 50 species of local crops are not consumed due to lack of knowledge of the present generation, and bias of agricultural development policy towards rice as staple food across the nation
• Four decades of neglect has led to difficulties in regaining the important role local foods as a part of the local diet
• Diversification of local diet towards re-consumption of the local foods are important aspects of food security to reduce dependency on rice from international market
The Local Food Facts

• Growing awareness of the strength and importance of local foods in food security among government bodies at various levels

• Local foods are abundantly available from the pekarangan of our research areas, but they have been neglected for about 4 decades and for three groups of reasons: policy related, land factors and technical factors.
Policy related factors

• National policy bias towards rice
• Habit bias towards rice as staple food
• Difficulties in linking policy to practices
• Scarcity of information on local food across regions
• Penetration of non-local foods in local market, partly through mobile vendors
• Contra-productive policies in the past
Land related factors

- Expanding rice fields, zero sum game in rice production, at the cost of loss of dry lands many other commodities
- Continuous fragmentation of farm and home gardens leads to diseconomy of scale on local food production
- Strong cultural preferences of landed houses has stimulated further agricultural land conversion
- Decreasing role of home garden as sources of food stuff
- Slow or lack of process of farmer regeneration
- Lack of effective measures to control land conversion
- Decreasing pressure to agricultural lands due to rural depopulation
Technical factors

(1) inferiority of local food products compared to fast foods
(2) difficulties on preparation, risk of contagion for several types of foods, and scarcity of processing technology
(3) seasonal availability of local food commodity
(4) low production and productivity of local food commodity
(5) lack of knowledge, technology, and practice in production and processing of local food
(6) dearth of young generation’s knowledge and practice to sustain local food commodity
(7) higher price as a result of goods scarcity in the market
(8) attitudes towards local food commodities as secondary products
(9) bias information in marketing whereas local market is very small.
To sum up...

- Food security situation in Java is among the strongest in Indonesia. There is a threat to the continuity of production of rice due to land conversion for urban expansion, housing, infrastructure development, industrial estates, commercial and non-commercial facilities.
- The contribution of local food in food security improvement is challenged by many socio-economic and political factors.
- Socio-economic transformation at the community level in the last 40 years has led to new lifestyle and preferences toward new types of food obtained from other parts of the country or abroad through international and interregional trade.
- Even in the rural small community in Kulonprogo Regency the consumption of food from other parts of the country are the rule rather than exception, neglecting the locally available foods.
- Local food can be an important component to improve food security, through a diversification of diet, but under the lack of effective measure from the government it is not feasible to expect its real contribution to improve food security in the short term.
- A *national movement* to improve the awareness of the people on the importance of local food for food security may have to be initiated.
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THANK YOU

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WHY THE SOUTH COASTAL REGIONS?

- Central government initiatives for the development of arterial roads
- Provincial government policy to stimulate farming, trade and fishery sectors in the south (*among tani, dagang, layar*)
- Investments on international airport and its supporting infrastructure (railway, toll roads)
- Capital intensive shrimp farming
- Iron ore mining
- Naval base development
- Aero-city development

Marginalizing the sharecroppers and the landless