# The Power of Women's Knowledge in Food Security at the Rural Families in Indonesia (The Case in South Sumatera)

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# Abstract

This article examines the power, knowledge, and role of women in the rural families in South Sumatera, Indonesia. It argues that women have knowledge and power to manage the natural and human resources as a strategy to achieve families food security. By analyzing the knowledge of women, traceable heritage knowledge, craftsmanship and knowledge gained from the various actors, this article helps to locate and give arguments to understand current women position on the poor families in Indonesia. It then, demonstrates how in the families, the women's knowledge as the power to contribute families food security and to relate with their husbands. Finally, this article concludes that heritage knowledge such as the knowledge of managing natural resources, processing and preserving food and others knowledge are the source of women power. These power provide renewed impetus for increasing role, bargaining position, and at times, creating equality in gender relation.

Keyword: Power of Women's Knowledge, Food Security, Rural Families

# Introduction

Actually, women can be an asset in the development because the number of women is proportional compared to men. It can be used to solve the problems that plagued nation. Lately, there is a fairly vigorous discourse about the food crisis that hits many parts of the world, including Indonesia. Many studies have been done to address the issue of food crisis by strengthening the food security at the level of national, community, household and family.

Moussa (2011) was studied in Kindia, Guinea, showed that the women have a critical role in the fight against poverty and food insecurity. Women farmers produce food as local consumption. Activities of women farmers as an engine of growth and provides the basis for rural life. A large proportion of agricultural production was produced by women, making them as important agents for economic development. Though, women have a critical role in food production, only 1% of women who have the right to land ownership. Without land ownership it was difficult for them to obtain loans to purchase agricultural inputs such as seeds and other essential inputs. They were also excluded from the training and networking of agriculture. Lack of knowledge about their rights make them vulnerable to land grabbing.

United Nation (UN) predicted that domestic food production by women in Africa 80%, Asia Pacific 60% and 40% in Latin America (Moussa, 2011). In general, people can access food depending on the work of rural women. Meanwhile, women's access to financial services, the expansion of agriculture, education and health, and human rights are the key to safe food supply for all (Hunger Project at <u>www.thp.org</u>).

At the level of ASEAN, Thailand occupied the highest position in the number of women working in the field of food production (60%). The next position is occupied successively Indonesia (54%), the Philippines (47%), and Malaysia (35%) (Siagian, 2007).

The role of women in agricultural production was important in determining the nutritional status of households and their contribution to household income. But there were some obstacles for increasing the role of women in development including patriarchal ideology which is motivated by culture, religion and illiteracy sanctions restricting women's freedom to choose different options that exist in the society. As a result, contribution of women in the agriculture and the other sectors was difficult in arithmetic, in particular the efforts of their economic performance. Women are discriminated against men, and they are limited in their reproductive role and ignore their access to resources that could improve their economic and social contribution to the community (Purwanti, 2010).

Food security according to the World Food Summit (1996) was a condition where people have full access, both physically and economically able to meet the food and nutrition security in providing food needs in a healthy life according to the values and culture.

Act No. 7 of 1996 defines the food security is food- fulfillment as reflected in a household food availability of sufficient quantity and quality, safe, equitable, and affordable. By definition, food security has several aspects, namely: availability, affordability, feasibility and suitability of food (Food Act 1996). Sen (1982) revealed that the requirement for community food security is not only in the food supply, but the accessibility of food for the hungry (entitlement approach). Starvation can occur for certain communities as limited and low values of local resources in some poor rural communities in the developing countries.

Failure to achieve food security means there is food insecurity. Food insecurity was the result of declining nutritional status and health of the public. One indication of the food insecurity was high prevalence of malnutrition in the children under five years olds. Analysis of SUSENAS 2003 showed that there were about 5 million children under five years old (27.5%) were malnourished. The nutritional insecurity was also characterized by low energy and protein intake (energy and protein deficit). Currently almost 50% of families experienced energy and protein deficit (average consumption of energy per capita, respectively, smaller than 2200kkal/ day and 50 grams/day).

The impact of food insecurity experienced by women because the women were constructed as a person that responsible for family food and the other reproductive work. Social construction of gender inequalities makes woman more blamed if they didn't meet family food than man. *Food is profoundly gendered*. Throughout the world, women are primarily responsible for the purchasing and cooking of food, and they have a central role in the allocation of food that impacts the nutritional status of family members. Women play an important role in food production. (Kimura, 2013)

The efforts to tackle the food insecurity was to build a solid food security. To build a solid food security is closely related to social security, economic stability, political stability and national defense as a whole. Development of food security faced the decreased quality and quantity of natural resources, such as land and water resources. In the period 1983 to 1993 the agricultural land has decreased from 16.7 million hectares to 15.6 million hectares, or about 110 thousand hectares per year. The decrease occurred mainly in Java, which has serious implications in the production of rice the major food commodities. (Riyadi 2002).

According to the Socio-Economic Analysis Center Agricultural Research Agency (2006), about 70% of rice farmers were laborers and small-scale farmers. Generally, they have limited access to services, especially farm financing services. Approximately 60 percent of farmers is net-consumer of rice and within subsistence condition. In this case, farmers have strategic position on food security. Farmers as food producers as well as the largest consumer. (Yunita 2011).

Poverty among the farmers occurred not only on the rice farmers in Java but also in the lowland (tidal areas). Swampy wetlands were mostly utilized for the development of rice cultivation which can be sorted in the pattern (1) eastern lowland rice (*paddy rintak*) and (2) western lowland rice (*paddy Surung*). *Rintak* wetland always floods during rainy season, so it was only planted in the dry season. When used for planting rice Surung (*Surung rice*), paddy is cultivated during the rainy season. Preparations began when it was dry (*Macak-Macak*), which is in September-October and harvested in January-February when a puddle of water is quite high (1.0 to 1.5 m).

Rintak rice is generally prepared in April, depending on the state of inundation. *Surung* rice is rice water, which have traits and characteristics, higher and extends with the increase in puddles (Noor 2007).

South Sumatera is a province that has a fairly large swampy wetlands which reached 2.98 million hectares. Of this amount has been utilized as much as 368,690 hectares, consist of 70,908 acres of swampy shallow, swampy mid 129,103 acres and swampy lowland in 168.67 hectares (Noor 2007, Yunita 2011). Swampy land is potential for agriculture, especially food crops.

The two districts of South Sumatera with the large swampy land area are Ogan Komering Ilir (27.8%) and Ogan Ilir regency (20.6%) of the total swampy land in South Sumatra. Swampy land used for various types of agriculture especially rice plant. Uncertainty of climate change brought impact to rice farms. This can lead to food insecurity for farming family.

Problem solving of food insecurity was done by Food Security Agency and the Department of Agriculture. The effort to empower farmers was done through some agricultural extensions. But in fact, these activities have not shown real results for family food security. Yunita (2011) showed that household food security of the rice farmers was classified in the low category.

The contemporer food policies also bring a peculiar visibility to women. From government's and expert's perspective, women food knowledge, cooking ability, feeding practices and breast-feeding pattern are the means to solve the food problem, precisely because they are the origin of that problem. In this sense, women's visibility is rooted in comitting a sin and the providing a solution (Kimura 2013).

Based on the research, this article is to examines the power, knowledge, and role of women on the poor family in rice farmer. The power of knowledge is very beneficial not only for women themselves but also for their families and communities. Therefore, power of knowledge becomes the dominant factor not only for the fight against poverty but also beneficial for the women when they interact with men.

## Methodology

This study used qualitative method to got the data. The types of data collected were primary and secondary data. The primary data was the information directly from the informants of the study. The secondary data was information supporting the primary data, which can be obtained from the literature or other materials. The primary data was obtained through in-depth interviews to the informants such as women farmers, their husbands, leaders community, and government apparatus. There were 20 informants who gave information in this research. The observation of the environment and women's activities were also conducted to obtain the primary data. The secondary data was collected through literature review/literature relevant to the research themes. This research run from September 2012 to March 2013

The analyzing of the data used qualitative analysis. Analysis of the data in this study began since data collection, but the process of intensive analysis was conducted after data collection completed. The data was collected using an interview guide. After the data collected will be analyzed by mapping data. The data obtained/derived organized into patterns, categories, units of description and a theme that resulting in a formula.

# Frame Work

The concept power of knowledge of the women in this article refers to the concept of knowledge and power of Foucault. The knowledge is not sourced on the subject but in the power relations (Foucault 2002).

There is no relationship of the power without the formation related to the field of the knowledge, and there was no knowledge that does not presuppose and do not form the power relations. All the knowledge is politics because of the requirements likely rooted in the power relations. The political anatomy suggests that the technique of the power, production and the knowledge born from the same source. Each power has its own knowledge. The power spread everywhere and it comes from everywhere. The Power relations can't be separated from the relationships that exist in the economy. The Power is a direct result of the separation, inequality and imbalance. Foucault defines the power by showing its characteristics: the power can't be localized, an order of discipline and connected to the network, giving the structure of activities, not repressive but productive, as well as the inherent desire to know. According to him, there are five characteristics how power operates.

First, the power can't be obtained, taken or distributed; the power goes from various points in the game and the unequal relationship as moving.

Second, power is liquid because where ever a difference, so power relation opens.Power relations are immanent, that power relations are a direct effect of the distribution, diversity, inequality and imbalance. Third, power relations are not on the superstructure relationship. Power comes from below, it means there is no binary opposition between the dominant and the dominated. Power relationships were formed and played in the production apparatus such as families, groups, institutions, entire social body. Fourth, the power relations was intentional. Fifth There is no power without any target (Haryatmoko 2010).

The knowledge and the power of women in meeting family food to have been owned by the women since the beginning of human civilization. In the hunting and the gathering society, the women are responsible for the family food and care of family members. History of plantation was also preceded by women, it is no wonder the emblem and symbol of fertility and the food is Dewi Sri. This means that since the beginning of civilization there was a division of role based on sex that became known by the term gender.

## **Result and Discussion**

This article examines the power of the knowledge of women contribution to meet the availability and stability of food families through farming and non-farming at the farmer family in South Pemulutan Ogan Ilir regency in South Sumatra.

Farmer families are rely on rice yields to feed the family. The Rice is the staple food so its availability is very important. However, the ecological conditions only allow farmers to plant rice once a year. They usually grow rice from April to September depending on the climate and the receding water in the swampy where they grow rice. Yields were not stabilized in accordance with the current rainfall to grow crops.

The farmers diversify work to feed families. At the time of their planting season had finished, the man migrated out of the village to work as construction workers, laborers tap rubber, went to the other area to be a laborer in the irrigated fields, and fishing in the river for sale. Meanwhile women are weaving '*songket*', working as laborers, and utilizing the yard to grow vegetables to fulfill family food.

The children of farmer families were also involved to earn money, especially those who were no longer in school. Those boys work as wage laborers, follow their parents out of the village to get the money. Their daughter weave 'songket' and they take wages from woven.

## Women's Knowledge in the Agriculture

Women's involvement in the production of rice among others: they open land (*macak-macak*), cleaning pasture with grass poison, choosing seeds, planting seeds (*nugal*), moving the seedlings and replanting the rice fields ready for planting time. At the time of harvest season most women involved for harvesting the rice. They cut rice plant with a sickle, and their husband erode it with a machines. Usually the men operate machine and also transporting rice to the house or the street. Practices of agricultural production by women are the application of knowledge gained over the years. Knowledge of women in the swampy rice farms have been owned for a long time and acquired hereditary. The role and contribution of women to meet availability food is very real.

If traced historically, there are some historical milestones of knowledge in swampy rice farming, in which before the entry of agricultural technology (the green revolution) and after the entry of agricultural technology. Before green revolution, according to local indigenous leaders; around 1955, farmers planted swampy rice namely *'pegagan'* as superior local rice varieties. Farmers still hold traditional values, in the management of rice fields. Harvesting the rice should have rituals before and after harvest.

Before the rice harvesting, farmers should do custom event, the owner went surround of paddy fields, and then cut the chicken to be burned and shared to neighbor as alms. There are many rituals performed by farmers in working the land, among others, at the time of harvest should not be performed simultaneously, finished in harvest some parts, after 2 to 3 days ready to harvest again. Moreover it should not be done simultaneously, harvesting more than 4 fields. Amid fields also prohibited whistling and shouting. Through this way the results obtained rice is believed to be blessed.

Women with local knowledge could be involved in the process of farming because harvesting high rice used an '*ani-ani*'. At the time of alms before planting rice, women also have the power of knowledge to cook meals for the wherewithal.

At the time of harvest, it should not be performed simultaneously, so many women including the older women are involved in the harvesting process. There is a pull systems of harvesting, which allows crop harvest can be done alternately.

However, after the implementation of the green revolution, local seed (Pegagan) was replaced with IR 42 seed that a relatively short, it make female role in the agriculture process reduced. Harvesting process that usually using an 'ani-ani' is replaced by using a sickle.

The changing seed by farmers was resulted the changing of production. Moreover, IR 42 should graze, in the other hand, local rice unnecessary graze. Local rice more resistant compared to the rice now, following the narrative of informants:

"local paddy was more resistant to pests, .. because the seed was very hard so the birds didn't like to eat.... and heat resistant"

So for the case of swampy rice farming, adoption of green revolution in the form of seeds as well as increased productivity bring a risk, among others, are not resistant to pests (crop failure) and depends on low tide and storm water. In the last two years, in this area, crop failure happened due to drought and have no rain for long time. The green revolution got critics among others critics have pointed out negative ecological impacts from the intense of use agrochemicals as well as the widening of social inequality. The input-intensive Green Revolution tended to add debt for farmer (Shiva 1997)

Many program of green revolution was directed to the head of household (man) such as agricultural extension information, group of farmer and some innovation of agricultural technology. It is relevant with Boserup's arguments in early 1970s, development efforts focused on men as the recipients of the new technology and inputs. Women were thought to do the drudgery of subsistence food production, whereas men were targeted for the intensified commercial cash crops. Development process usually harms or overlooks women farmers and that man often garner the development "goodies" (land, capital, technology, project services, and so on) for themselves and restrict women's access (Spring, 2000).

## Women's Knowledge in the Non Agriculture

The women always try to meet the food family by using the knowledge both of agricultural and non agricultural (such as the knowledge of weaving songket, pursuing a strategy of adaptation to the swampy ecology and experience set menu meal in the family). Some women who can weave 'songket' transmitted their knowledge to other women. The wage of weaving approximately 250 to 450 thousand rupiah depending on the results of 'songket'. Within a month, the women can produce a pair of songket (cloth and shawl). If a young girl could even finish two pairs, because she has more time than women that have children. Surely the revenue from songket can be used to meet the needs of family life.

According to Spring and Mc Dade, 1998, women who were involved in commercial production and sale had more food and more money to buy food (of better quality and in greater quantities) as well as other commodities, including land. The so-called natural link of women and food system was played out in more complex ways (Spring 2000).

The knowledge and life experiences of women in swampy ecology, makes them recognizing all sides and angles of swampy life. The women used the knowledge and experience to explore a variety of potential possibilities that might be used to meet food family. For example, when the water began recede, they grow vegetables, beans, corn in the place that have a rather high position or side of their stilt houses. In addition, they also raise chickens and ducks for sale when they need money. As Foucault, said that the knowledge has produced the power. In this case, the women with their knowledge have the power to get the money.

The knowledge of women can be coping strategy of the family's food problems. It can an affect in the gender relations at the family. Both of husband and wife work together to meet the family food. In many cases the husbands and wives have alternately roles and complementary roles. For example, while wives are busy cooking, the husband would help continue weaving. It shows knowledge of weaving that was originally owned by women were also studied by men in order to earn money for their family subsistence. Some times, the men willing to do domestic work such as sweeping, washing dishes and others, while his wife is busy weaving or cooking.

The gender difference is not a big gap in the conducting interactions and relationships in fulfillment food. The women do commercial activities have better strategy for food security and provides a better life for them and their families than subsistence production or dependency on spouses or male kin (Spring 2000).

#### Conclusion

The knowledge of women have contribution to the fulfillment of family food. In addition, women with the knowledge have the power when interact and relate to men in a family. In this case, there is very real relationship between knowledge and power. Desire to know is will to power. Each power has its own knowledge. Power spread from everywhere, the power comes from everywhere as Foucault said. Power is no longer on a particular structure that rigid and repressive but it come from the bottom and it can be productive.

The power of women's knowledge is very beneficial not only for women themselves but also for their families and communities. Therefore, knowledge becomes the dominant factor not only to fight poverty but also beneficial to women reaching the equility to men.

#### Recommendation

Based on this conclusion the power of women's knowledge is very beneficial not only for women themselves but also for their families and communities, so it is very important to improve the knowledge and the skill of women by giving exercising and opportunities in both agriculture and non agriculture.

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## References

Baxter, Judith, 2003. Positioning Gender in Discourse, (A feminist Methodology). London: Palgrave Macmillan.

Denzin, N.K. dan Y.S. Lincoln. 2009. Handbook of Qualitative Research. Edisi Bahasa Indonesia. Pustaka Pelajar. Yogyakarta. Indonesia. Ellis, Frank. 2000. Rural livelihoods and Diversity in Developing Countries. New York: Oxford University Press.

- Foucault, Michel. 1980. Power/knowledge, edited by Colin Gordon. New York: Pantheon Books, Harvester Press.
- Foucault, Michel. 2002. Pengetahuan dan Metode. Terjemahan Aesthetic, method, and epistemology Essensial Works of Foucault1954-1984. Yogyakarta: Jalasutra.
- Haryatmoko. 2010. Kekuasaan-Pengetahuan sebagai Rezim Wacana. Sejarah Seksualitas; Sejarah Pewacanaan Seks dan Kekuasaan menurut Foucault. Makalah Kuliah Umum Michel Foucault tentang Seksualitas. Komunitas Salihara Juni 2010.
- Handayani, C.S. dan A. Novianto. 2008. Kuasa Wanita Jawa. LKIS Yogyakarta. Yogyakarta Indonesia. 236 hal.
- Hubeis, V. Aida, 2010. Pemberdayaan Perempuan dari masa ke masa. Bogor. IPB Pers
- Ihromi, dkk. 1991. Kisah Kehidupan wanita untuk Mempertahankan Kelestarian Ekonomi Rumah tangga, Jakarta: Yayasan Ilmu-ilmu Sosial.
- Kimura, A. Hirata. 2013. Hidden Hunger: Gender and the Politics of Smarter Foods. USA. Cornell University Press.
- Megawangi, Ratna. 1999. Membiarkan Berbeda? Sudut Pandang Baru tentang Relasi Gender. Bandung: Mizan.
- Moghadam, M Valentine. 2000. Transnasional Feminist Networks; Collective Action in an Era of Globalization. Illionis: Sage Publication McEwan, Cheryl. 2001. Postcolonialism, feminism and development: intersections and dilemmas. Birmingham: Sage Publication
- Moussa, Camara. 2011. Impact Assessment of Women Farmer Activity on Poverty Reduction and Food security: A case of Kindia
- Region/Guinea. Journal of Agriculture Science. Canadian Centre of Science and Education.
- Nasution, Zahri. 2008. Gender dalam Rumah Tangga Masyarakat Nelayan. Balai Riset Sosek kelautan dan perikanan dan Badan Riset Kelautan dan Perikanan. Jakarta
- Poloma, M.M. 1984. Sosiologi Kontemporer. terjemahan: Contemporary Sociological Theory. CV. Rajawali. Jakarta. Indonesia. 445 hal.
- Purwanti, P. 2010. Model ekonomi Rumah Tangga Nelayan Sekala Kecil dalam Mencapai Ketahanan Pangan. Universitas Brawijaya Press. Malang. Indonesia. 192 hal.
- Siagian, Albert. Peranan Perempuan dalam Peningkatan Ketahanan Pangan keluarga. USU. Medan

Shiva, Vandana. 1997. Bebas dari Pembangunan; Perempuan, Ekologi dan Perjuangan Hidup di India. Jakarta: Yayasan Obor

- Spring, Anita. 2000. Women Farmer and Commercial Ventures: increasing Food Securuty in Developing Countries. USA: Lynne Rienner Publisher, Inc
- Sukiyono, et al. 2008. Status Wanita dan Ketahanan Pangan Rumah Tangga Nelayan dan Petani Padi Di Kabupaten Muko-Muko Provinsi Bengkulu. Jurnal Agro Ekonomi Volume 26 no 2 Oktober 2008.
- Wahono, Francis dkk. 2005. Pangan Kearifan Lokal dan Keanekaragaman Hayati. Yogyakarta: Cindelaras.
- Walingo, M Khakoni. 2009. Role of Livestock Projects in Empowering Women Smallholder Farmers for Sustainable Food Security in Rural Kenya. AJFAND Vol 9 No 7 Tahun 2009.
- Yunita. 2011. Strategi Peningkatan Kapasitas Petani Padi Sawah Lebak menuju Ketahanan Pangan Rumah Tangga di Kabupaten Ogan Ilir dan OKI Propinsi Sumatera Selatan. Disertasi. IPB