Agro Ekonomi Vo. 17 No. 2 Desember 2010 hal. 201-206

Farmer's Perspective on Sustainable Agriculture
Social Aspect in Kulon Progo District

PERSPEKTIF PETANI TERHADAP ASPEK SOSIAL PERTANIAN BERKELANJUTAN DI KABUPATEN KULON PROGO

Dyah Woro Untari dan Sri Peni Wastutiningsih
Program Studi Penyuluhan dan Komunikasi Pertanian, Jurusan Sosial Ekonomi Pertanian,
Fakultas Pertanian Universitas Gadjah Mada

ABSTRACT

The objectives of this study are to investigate farmer's perspective on sustainable agriculture social aspect: (1) Socially just agricultural system principle and (2) culturally appropriate principle. The total sample was 60 farmers, 30 farmers were selected from wetland ecosystem and another 30 farmers were selected from coastal ecosystem. Those 60 samples were taken by simple random sampling method. Three ways analysis qualitative data used in analyzing the data. The result shows, on socially just agricultural system principle, there are 1,67% farmers have low comprehension on social indicator, membership in organization indicator, credit support service indicator, information and training support services indicator and family participation indicator. There are 6,67% farmers have a low comprehension on food security indicator. There are 51,67% farmers stated comprehension on postharvest facility support service indicator. On culturally appropriate principle, local wisdom for farming support comprehends by 50,00% farmers.

Keywords: *comprehension, socially just principle, culturally appropriate principle*

INTISARI

Penelitian ini bertujuan untuk mengidentifikasi perspektif petani terhadap aspek sosial dari pertanian berkelanjutan: (1) Prinsip diterima secara sosial dan (2) prinsip kesesuaian budaya. Total sampel adalah 60 petani, 30 terpilih dari ekosistem lahan sawah dan sisanya sebanyak 30 terpilih dari eksosistem lahan pantai. Keseluruhan sampel diambil dengan metode *simple random sampling*. Metode statistik yang digunakan adalah tiga jalur analisis data kualitatif. Hasil penelitian menunjukkan, pada prinsip diterima secara sosial terdapat 1,67% petani memiliki pemahaman yang rendah pada indikator sosial, indikator keanggotaan dalam organisasi, indikator layanan kredit, indikator layanan informasi dan pelatihan dan indikator partisipasi keluarga. Terdapat 6,67% petani yang memiliki pemahaman yang rendah pada indikator ketahanan pangan. Selain itu terdapat sebanyak 51,67% petani yang menyatakan paham akan indikator layanan fasilitas pascapanen. Pada prinsip kesesuaian budaya, kearifan lokal dipahami oleh 50% petani.

Kata kunci: *pemahaman, prinsip diterima secara sosial, prinsip kesesuaian budaya*

FOREWORD

Recently, agriculture is changing from friendly traditional farming to productive farming way which usually called conventional farming. The applications of hybrid seed, inorganic fertilizer and pesticide being the trend among farmers. Agriculture system shows significant production for farmers but in fact, ignores the sustainability principles for the future farming. The system can be seen from the low implementation of sustainable agriculture principles among farmers. The research on economic viability principle shows lack of input application management by not using the local seed, organic fertilizer, organic pesticide and low implementation on land conversion to organic farming even farmers has their private land. On ecologic farming there is low implementation on the use of local seed, organic fertilizer and organic pesticide for agriculture input sustainability. The socially just principle shows low implementation on agricultural training access to improve farming system. The culturally appropriate principle shows low implementation on local wisdom for farming. System and holistic approach principle shows lack implementation on the application of traditional farming, mixcropping and integrated agriculture system.

The change from traditional system into conventional system is running through process. According Reijntjes, Haverkort and Bayers (1999), in the beginning, agriculture in tropical area depends on natural resources, local knowledge, skill and institution. The traditional system developed in a constant interaction with local culture and ecology. Traditional system had a rapid changing since the colonialism by the introduction of education and foreign technology on agriculture and

health, population increase, change in social and politic relation and merging into an international market system which externally authorized. The subsistent farming system orientation has turn into market and communication orientation system and increases the consumer's demand.

Indonesia as a tropical area also has the same problem, a great number of citizens were succeeding in gaining high socio-economic status eased from off-farm occupation because they have high level educational background. Citizens who work in agriculture sector were reducing while the population number increased and the agriculture area conversed as settlement. Agricultural production decreased and then unable to balance the population growth, this situation caused the issue of starvation.

This worry could never be appear among farmers, when the harvest is on the limit, subsistence were taken. Next question is, how about another food consumer outside farmers? There should be a way, but off course not by defend the conventional agriculture system, it needs another agriculture system that doesn't fulfil the quantity target, but also the quality target.

Sustainable agriculture in Indonesia develops with the increase of world society's awareness on the risk of conventional farming system. According to Untung (---) The Earth Summit in Rio de Janeiro 1992 which resulted the Agenda 21 consist of sustainable developing action program agenda that agreed by the world leaders. Chapter 14 of Agenda 21 titled Promoting Sustainable Agriculture and Rural Development (SARD) consists of Sustainable Agriculture concepts and programs that need to be done by all country. In 2002, a decade after The Earth Summit, The 10th Summit held in Johannesburg to evaluate the activity of Agenda 21. The FAO evaluation result on the activity of Agenda 21 about SARD shows many countries (including Indonesia) did not do the SARD policies and program that agreed and signed in Rio in 1992.

RESEARCH METHOD

Descriptive method is used in the research. This method is developed to find a broad knowledge of research object in a mean time. Descriptive research is a research which meant to collect information about status of variable or theme, symptoms or real condition which means condition of symptom based on the reality when the research occur (Widodo & Mukhtar, 2000).

A. Sampling Method

The research located in Kulon Progo District. Sampling method is explained as follow:

1. Sub District sample are taken by purposive method. Chosen wetland area is Nanggulan Sub District with the consideration, the widest wetland area in Kulon Progo District (1,508 ha). Chosen coastal area is Panjatan Sub District, which was the only coastal area in the district (945 ha).
2. Village sample determined by purposive sampling. From Nanggulan Sub District (wetland area), chosen 3 villages i.e. Wijimulyo Village, Kembang Village and Tanjungharjo Village. For the Panjatan Sub District (coastal area), chosen 3 villages, i.e. e. Bugel Village, Pleret Village and Garongan Village.
3. From each village, it was chosen 2 farmer groups by purposive sampling for both area, wetland and coastal area.Total farmer groups are 12.
4. From each farmer group, it was taken 5 farmers by simple random sampling.

Total amount of respondents are 60 farmers. Sampling scheme can be seen from Picture 1.

B. Analysis Method

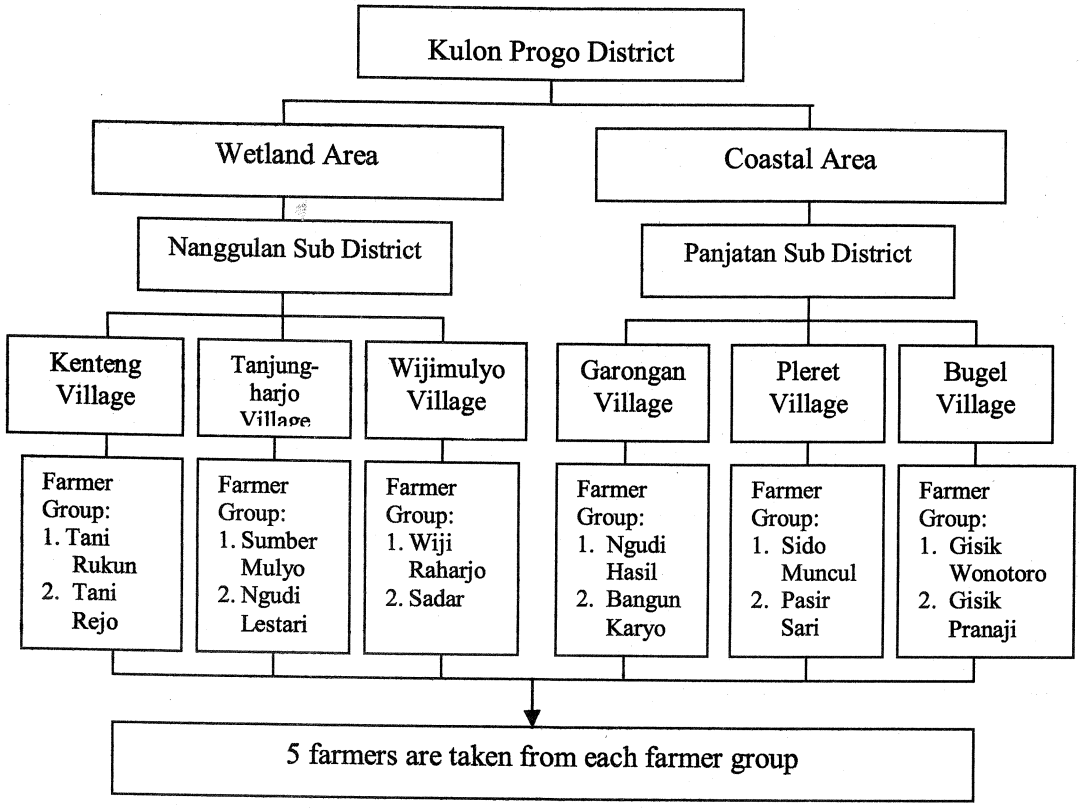
Objective analysis use the three path qualitative data analysis according to Miles & Huberman *cit* Sitorus (1998):

a. Data reduction, raw data determination and simplification.
b. Arranging the result of data reduction in order to gain conclusion.
c. Conclusion.

RESULT AND DISCUSSION

Farmer's Perspective on Sustainable Agriculture Social Aspect

There are two principles in sustainable agriculture social aspect, 1) socially just agricultural system principle and 2) culturally appropriate agricultural system principle. According to Zamora (1995), socially just agricultural system principle respect the dignity and rights of individuals and groups and treats them fairly. The system allows access to information, market and other farm-



Picture 1. Sampling Method

related resources, especially land. Equal access is provided to all irrespective of sex, societal standing, religion and ethnicity. The systems also address both inter- and intra-generation inequity. Culturally appropriate agricultural systems give due consideration to cultural values, including religious beliefs and traditions in the development of the agricultural systems, plans and programs. Farmer's perspective on sustainable agriculture social aspect based on socially just agricultural principle and culturally appropriate principle:

1. Socially Just Agricultural System Principle

Socially just agricultural system principle consists of some indicators; social indicator, membership in organization indicator, food security indicator, credit support service indicator, information and training support services indicator, postharvest facility support service indicator, family participation indicator

a. Social Indicator

Social indicators are education, health, housing and amenities. Higher levels of prioritization for education and health rather than amenities or luxuries) are deemed contributory to sustainable agriculture. Sixty five percent of Kulon Progo farmers have a comprehension that education and health have higher priority than amenity and housing. Less comprehension on education and health priority stated by 1,67% farmers. Education or health will be less meaningful without the existence of house as the centre of daily activity.

Farmers have the fair priority for man and woman on education, this was stated by 71,67% farmers. Farmers were open mind on the education opportunity base on gender. The low comprehension on education and health caused less contribution on sustainable agriculture, farmers do not put a priority on good and healthy human resources as the ultimate of sustainable agriculture development.

Table 1. Distribution of Farmer's Social Indicator Comprehension on Socially Just Agricultural System Principle in Kulon Progo District 2007

Indicator	Answer Category	Total	%
Education and health as priority	SC	39	65,00
	C	20	33,33
	N	0	0
	M	1	1,67
	SM	0	0
		60	**100,00**
The fair education priority for man and woman	SC	43	71,67
	C	17	28,33
	N	0	0
	M	0	0
	SM	0	0
		60	**100,00**

Source: Primary Data Analysis
Note:
SC = Strongly Comprehend
C = Comprehend
N = Neither agree nor disagree
M = Miscomprehend
SM = Strongly Miscomprehend

Table 2. Distribution of Farmer's Organization Membership Indicator Comprehension on Socially Just Agricultural System Principle in Kulon Progo District 2007

Indicator	Answer Category	Total	%
Activism in Organization	SC	36	60,00
	C	21	35,00
	N	2	3,33
	M	1	1,67
	SM	0	0
		60	**100,00**

Source: Primary Data Analysis
Note:
SC = Strongly Comprehend
C = Comprehend
N = Neither agree nor disagree
M = Miscomprehend
SM = Strongly Miscomprehend

b. Membership in Organization Indicator

Farmer comprehends the important of being active in organization to reach the better human resources quality. Active in organization were comprehend by 60,00% farmers, those farmers said it gives much profit, farmers able to know the information about cultivation technique, pest management technique and commodity price. The indirect profits are gaining the leadership ability and keeping friendship among farmers. Farmer's mind openness and knowledge gained by the activity in organization for example farmer group.

There are 1,67% farmers that less comprehend the benefit of being active in organization. Active in organization considered as a formality to get socialized. Farmer membership does not require an age limitation, all farmers allowed to join this group so there is collaboration between young and old generations.

c. Food Security Indicator

Food supply for farmers is stable because their rice consumption was provided by their own. There are 51,67% farmer stating stable food supply reduces the price fluctuation and guarantees harvest marketing sustainability. Some farmers (6,67%) stated low comprehension because they have unstable food supply as the result of narrow land ownership.

Food accessibility comforted farmers to be focused on their farming, it was stated by 46,67% farmers. This can be understood because farmers are the producers of foods. Mostly farmer's rice harvest are not sold because of the narrow land ownership, the average of their lands is 2,875 m^2.

Table 3. Distribution of Farmer's Food Security Indicator Comprehension on Socially Just Agricultural System Principle in Kulon Progo District 2007

Indicator	Answer Category	Total	%
Stable food supply	SC	31	51,67
	C	23	38,33
	N	2	3,33
	M	4	6,67
	SM	0	0
		60	**100,00**
Food accessibility comforted farmers to be focused on their farming	SC	28	46,67
	C	29	48,33
	N	3	5,00
	M	0	0
	SM	0	0
		60	**100,00**

Source: Primary Data Analysis
Note:
SC = Strongly Comprehend
C = Comprehend
N = Neither agree nor disagree
M = Miscomprehend
SM = Strongly Miscomprehend

d. Credit Support Service Indicator

Simple credit access supports farming were comprehend by all farmers. Farmers will still accept credit from government if it has simple requirement, beside farmers need a big amount of capital for farming. Credit access considered supports farming for example to buy seed and fertilizer. Credits come from farmer group's loan and *Bantuan Pinjaman Langsung Masyarakat* (Direct Society Loan) from The Department of Agriculture, which mechanism is distributed by farmer group. However, 1,67% farmer does not seem to be eager to the credit if they can fulfil their own needs, because the credit obtained often used as non farming needs so it gives difficulty for them to pay the loan. General credit procedure from another credit source is simply comprehended by farmers; survey for lenders feasibility and collateral.

Table 4. Distribution of Farmer's Credit Support Service Indicator Comprehension on Socially Just Agricultural System Principle in Kulon Progo District 2007

Indicator	Answer Category	Total	%
Simple credit access supports farming	SC	27	45,00
	C	33	55,00
	N	0	0
	M	0	0
	SM	0	0
		60	**100,00**
Simple credit access from another credit source	SC	20	33,33
	C	30	50,00
	N	3	5,00
	M	6	10,00
	SM	1	1,67
		60	**100,00**

Source: Primary Data Analysis
Note:
SC = Strongly Comprehend
C = Comprehend
N = Neither agree nor disagree
M = Miscomprehend
SM = Strongly Miscomprehend

e. Information and Training Support Services Indicator

There are 51,67% farmers comprehend the need of information and training access to support their farming. Only 1,67% farmer stated low comprehension on the need of information access to support their farming because the information that they obtained are the general information. Farmer who has high information access is comprehended to have a better farming.

There are 56,67% farmers who have high comprehension that training access can support their farming. This is also one of the reasons for farmers to get active in farmer group, to get knowledge and information from another member, and to get information from extension officer. Only 1,67% farmer miscomprehend this indicator, this might be caused by the rare training chance for farmer so farmer can not feel the training advantage. Easy information and training access believed to be able to support farming especially in cultivation technique and market price.

f. Postharvest Facility Support Service Indicator

Comprehension of postharvest facility access supports farming stated by 51,67% farmers. The access is Rice Milling Unit (RMU). There are two kind of RMU; stated RMU and unstated RMU. Farmers prefer on unstated RMU for its practical using which none additional cost for transportation and man power unit needed.

Table 5. Distribution of Farmer's Information and Training Support Services Indicator Comprehension on Socially Just Agricultural System Principle in Kulon Progo District 2007

Indicator	Answer Category	Total	%
Simple information access supports farming	SC	28	46,67
	C	31	51,67
	N	0	0
	M	1	1,67
	SM	0	0
		60	**100,00**
Training access support farming	SC	34	56,67
	C	24	40,00
	N	1	1,67
	M	1	1,67
	SM	0	0
		60	**100,00**

Source: Primary Data Analysis
Note:
SC = Strongly Comprehend
C = Comprehend
N = Neither agree nor disagree
M = Miscomprehend
SM = Strongly Miscomprehend

Table 6. Distribution of Farmer's Postharvest Facility Support Service Indicator Comprehension on Socially Just Agricultural System Principle in Kulon Progo District 2007

Indicator	Answer Category	Total	%
Postharvest facility access supports farming	SC	29	48,33
	C	31	51,67
	N	0	0
	M	0	0
	SM	0	0
		60	**100,00**

Source: Primary Data Analysis
Note:
SC = Strongly Comprehend
C = Comprehend
N = Neither agree nor disagree
M = Miscomprehend
SM = Strongly Miscomprehend

g. Family Participation Indicator

The management practice on the total family member participation in farm comprehends by 51,67% farmers. It assumed it is able to make crop maintenance more effective without spending cost for labours. There are 1,67% farmer has low comprehension on the important of family member participation because some family members were on educational age thereby it is not a must for them to participate in farming, also some family members were working in non-farm sector because of limited land ownership.

Comprehension on socially just agricultural system is generally comprehended by farmers. There are only some farmers with small percentage who have low comprehension on some indicators.

2. Culturally Appropriate Principle

Culturally appropriate agricultural system principle are local wisdom as farming support and local wisdom as prior source of agricultural activity program. Local wisdom for farming support comprehend by 50,00% farmers. Local wisdom inherit from farmer ancestor has proven able to save the food stock for the whole family and became the ultimate of recent agricultural activity program such as compos organic fertilizer production activity, application of manure fertilizer an application of organic pesticide.

Table 7. Distribution of Farmer's Family Participation Indicator Comprehension on Socially Just Agricultural System Principle in Kulon Progo District 2007

Indicator	Answer Category	Total	%
Family Participation in farming	SC	31	51,67
	C	25	41,67
	N	3	5,00
	M	1	1,67
	SM	0	0
		60	**100,00**

Source: Primary Data Analysis

Note:

SC = Strongly Comprehend
C = Comprehend
N = Neither agree nor disagree
M = Miscomprehend
SM = Strongly Miscomprehend

Table 8. Distribution of Farmer's Culturally Appropriate Agricultural System Principle Comprehension in Kulon Progo District 2007

Indicator	Answer Category	Total	%
Local wisdom supports farming	SC	19	31,67
	C	30	50,00
	N	4	6,67
	M	6	10,00
	SM	1	1,67
		60	**100**
Local wisdom as farming program source	SC	11	18,33
	C	37	61,67
	N	4	6,67
	M	6	10,00
	SM	2	3,33
		60	**100**

Source: Primary Data Analysis

Note:

SC = Strongly Comprehend
C = Comprehend
N = Neither agree nor disagree
M = Miscomprehend
SM = Strongly Miscomprehend

Those local wisdoms were comprehended by farmers as able to support their farming. Unfortunately those local wisdoms have not already become the prior source of agricultural activity program in research location. This was caused by 3,33% farmers which have not done the positive local wisdom.

Farmers were realize that environment safety affect production sustainability, however the application of organic inputs as included in local wisdom have not done wholly. Local wisdom that still believed by farmers is *lebotan* (one kind of social capital) that considered able to keep the production sustainability.

The kind of low comprehension in culturally appropriate principle are not comprehend the main purpose of sustaining positive local wisdom and local wisdom were not become the prior source of agricultural activity program.

CONCLUSION

1. Socially Just Agricultural System Principle

a. Social Indicator
There are 1,67% farmers do not put a priority on good and healthy human resources as the ultimate of sustainable agriculture development.

b. Membership in Organization Indicator
There are 1,67% farmers that less comprehend the benefit of being active in organization. Active in organization considered as a formality to get socialized

c. Food Security Indicator
There are 6,67% farmers stated low comprehension because they have unstable food supply as the result of narrow land ownership.

d. Credit Support Service Indicator
There are 1,67% farmers who does not seem to be eager to the credit if they can fulfil their own needs, because the credit obtained often used as non farming needs so it gives difficulty for them to pay the loan.

e. Information and Training Support Services Indicator
There are 1,67% farmer stated low comprehension on the need of information access to support their farming because the information that they obtained are the general information. There are 1,67% farmer miscomprehend training acces indicator, this might be caused by the rare training chance for farmer so farmer can not feel the training advantage.

f. Postharvest Facility Support Service Indicator
Comprehension of postharvest facility access supports farming stated by 51,67% farmers.

g. Family Participation Indicator
There are 1,67% farmer has low comprehension on the important of family member participation because some family members were on educational age thereby it is not a must for them to participate in farming, also some family members were working in non-farm sector because of limited land ownership.

2. Culturally Appropriate Principle

Culturally appropriate agricultural system principle are local wisdom as farming support and local wisdom as prior source of agricultural activity program. Local wisdom for farming support comprehend by 50,00% farmers. The kind of low comprehension in culturally appropriate principle are not comprehend the main purpose of sustaining positive local wisdom and local wisdom were not become the prior source of agricultural activity program.

LITERATURE

Reijntjes, C, B. Haverkort & A. W. Bayers. 1999. *Pertanian Masa Depan.* Kanisius. Yogyakarta.

Sitorus, M. T. F. 1998. *Penelitian Kualitatif Suatu Perkembangan. Kelompok Dokumentasi Ilmu Sosial.* Bogor.

Untung, K. ---. ***Penerapan Pertanian Berkelanjutan untuk Meningkatkan Ketahanan Pangan.*** http://kasumbogo.staff.ugm.ac.id diakses 11 April 2008.

Widodo, E. dan Mukhtar, 2000. *Konstruksi ke Arah Penelitian Deskriptif.* Avyrouz. Yogyakarta.

Zamora, O. B. 1995. *Contextualizing the Indicators for Sustainable Agriculture* dalam *Sustainable Agriculture Indicators.* SEAMEO-SEARCA. Los Banos.