

INSTITUTIONAL DEVELOPMENT OF FARMER GROUP THROUGH STRUCTURAL ANALYSIS, FARMER GROUP NETWORKS, AND AGRICULTURAL SHARIA FINANCING

Purbayu Budi Santosa

Faculty of Economics and Business, University of Diponegoro,
Jl. Prof. Soedarto SH, Tembalang, Semarang, Jawa Tengah, Indonesia

Wiludjeng Roessali

Faculty of Animal and Agricultural Sciences, University of Diponegoro
Jl. Prof. Soedarto SH, Tembalang, Semarang, Jawa Tengah, Indonesia

Ariza Fuadi

Faculty of Economics and Business, University of Diponegoro,
Jl. Prof. Soedarto SH, Tembalang, Semarang, Jawa Tengah, Indonesia

Darwanto

Faculty of Economics and Business, University of Diponegoro,
Jl. Prof. Soedarto SH, Tembalang, Semarang, Jawa Tengah, Indonesia

ABSTRACT

Agricultural is a very strategic sector in economic development in Indonesia; however, several problems still need to be resolved such as farmers' welfare, access to capital, and production marketing. The existence of farmer groups and Sharia Micro Finance Institutions (SMFI) have not been able to optimize the potential of the agricultural sector. The purpose of this research was to formulate strategies and models of institutional strengthening through local farmer groups and capital strengthening through the intermediation of Sharia Financial Institution (SFI) with linkage program. The models of institutional strengthening of farmer groups and SFI financing capital might become one of the foundations of national economic development. This research applied qualitative approach using data collected by in-depth interview, focus group discussion (FGD) and observation from local agricultural sector actors, and used qualitative analysis approach of a case study with Analytical Network Process (ANP) analysis method.

Key words: Farmer Group, Institutional, ANP, Sharia Finance.

Cite this Article: Purbayu Budi Santosa, Wiludjeng Roessali, Ariza Fuadi and Darwanto, Institutional Development of Farmer Group Through Structural Analysis, Farmer Group Networks, and Agricultural Sharia Financing, *International Journal of Management*, 9 (3), 2018, pp. 42–54.

<http://iaeme.com/Home/issue/IJM?Volume=9&Issue=3>

1. INTRODUCTION

The agricultural sector has a strategic role in the national economy as its contribution to Gross Domestic Product (GDP) was 14.44% and labor absorption was 35.09% from the total national workforce (BPS, 2013). However, the problems this sector has to deal with are high-risk related productions as well as institutional and commercial issues (Santosa Purbayu, B. and Darwanto, 2015). Institutionalization is one of the essential aspects of the production process as well as processing and marketing of agricultural products.

Institutions in the farming system through farmer groups have been identified vital in developing agricultural business. Farmer groups are formed based on business equality, and togetherness in achieving goals as well as equity in fulfillment business facilities. Nevertheless, most of the members of the farmer groups are still in the state of lack of knowledge and skills on production management and marketing, not fully engage in agribusiness activities, and not fully able to run farmer group efficiently and optimally (Nasrul, 2012). The foundation of the farmers' institutions are based on top-down approaches, uniform blueprints and poorly explored local institutional structures and networks; so that, the institutional development is focused more on structural aspects without considering the strengthening of cultural aspects (Parma, 2014).

In addition to institutional issues, capital problems have been the most significant concern, as access to credit from financial institutions is still low. Global financial inclusion data in 2011 reported that only 26.03% of rural low-income countries (including Indonesia) had finance in formal financial institutions (World Bank, 2011).

2. LITERATURE REVIEW

2.1. Institutional Farmer Group

Institutionalization can be defined as a rule that must be followed and enforced well by the community, provide protection and barriers for individuals or members of the community (Arifin, 2004). In agriculture, institutionalization is necessary to protect farmers and maintain the orderliness of agricultural activities, from the production process to marketing of the agricultural product. One of the institutional forms in agriculture is represented by the existence of farmer as the main actors in agricultural development in rural areas. The farmer groups function collectively to provide farm inputs, capital, water irrigation, information, and marketing (Hermanto et al, 2011). In their establishment, a farmer group has to be developed from the existing structures and networks of the local institution; so that, the local community embraces it structurally and culturally. Unfortunately, most farmer groups are weak and incompatible with the statutes/post-secondary law (Santosa and Darwanto, 2015).

2.2. The Concept of Islamic Microfinance Institutions

Microfinance Institution (MFI) is defined as the provision of financial services for micro and small entrepreneurs and serves as a development tool for rural communities (Ledgerwood, 1999). Microcredit is a small lending program to the poor to finance their own projects to generate income that allows them to care for themselves and their finances.

Meanwhile, Sharia Micro Finance Institution (SMFI) is an MFI that runs its business with Islamic sharia principles. SMFI functions as an institution of deposits, loans, and payment services. As a saving institution, SMFI collects funds from the community, whether it is *wadi'ah yad al-amanah* in the form of safe deposit box and *wadiah yad adh-dhamanah* in the form of cooperation in performing financing contracts such as *musyarakah*. As a lending institution, SMFI serves as an institution providing various types of loan services, both for productive and consumptive activities. Unlike conventional MFIs that prioritize interest as an operational instrument, SMFI uses a predetermined profit-sharing ratio between the bank and its customers. In addition, SMFI also functions to provide payment services, for example with *murabahah* and *hawalalah*.

3. RESEARCH METHODS

3.1. Respondents

The respondents in this research were Stakeholders/Key Person related to farmer group. The number of Stakeholders/Key Person as respondents interviewed were six persons representing each field, i.e. farmer group, Agriculture and Estate Crop Service of Banyumas Regency, Regional Extension Agency of Banyumas Regency, Academician from Banyumas Regency, and Agricultural Expert. The methods used to gather information related to the research was an in-depth interview and completing a questionnaire of Analytic Network Process (ANP) to get priority aspect, priority problem of each aspect, priority solution offered from each aspect and institutional development strategy of farmer groups in Banyumas Regency. This research was conducted during the period of 2016 - 2017.

3.2. Analysis Method

Analytical tool used was Analytical Network Process (ANP) developed by Thomas L, Saaty (2006) to determine the policy strategy for the development of farmer group in Banyumas regency. The variables are incorporated into a hierarchy arrangement to provide numerical consideration to subjective considerations of the relative importance variables and synthesize the various considerations for determining which variables have the highest relative priority. The first step in the use of ANP is to break down the problem into its elements and set the part of the elements into a hierarchy (Saaty, 1993).

3.3. ANP Research Stages

The stages in conducting ANP method for farmer group development strategy in Banyumas Regency were modelling construction, modelling quantification, and results analysis. The construction model of ANP stage was arranged based on a theoretical and empirical review of literature and questions to experts and practitioners of agricultural clusters as well as in-depth interviews through focus group discussions (FGDs) to generate real problem and examine information deeply. Model quantification stage was done by pairwise comparison questions between elements in the ANP questionnaire in the cluster to find the dominant influence between the two and the score differences through the numerical scale of 1 – 9.

Table 1 Definition of Scale of Assessment and Numerical Scale

Definition	Intensity of Importance
Equal Importance	1
Weak	2
Moderate Importance	3
Moderat Plus	4
Strong Importance	5
Strong Plus	6
Very Strong or Demonstrated Importance	7
Very, very Strong	8
Extreme Importance	9

Source: Saaty (2006)

When the assessment is done for a pair, the reciprocity value is automatically set to the inverse ratio in the matrix. After the pairwise comparison is completely done, the vector corresponding to the maximum eigenvalue of the constructed matrix is calculated and the priority vector is obtained. The priority value is generated by normalizing the vector. In the assessment process, problems may occur in the consistency of pairwise comparisons. The consistency ratio provides a numerical assessment of how likely this evaluation may be inconsistent. If the calculated ratio is less than 0.10, the consistency is considered satisfactory.

After the pairwise comparison is done, then supermatrix calculation is conducted in three steps. The steps are : 1) unweighted supermatrix (supermatrix without weighting) is created directly from all local priorities derived from paired comparisons between elements affecting each other; 2) weighted supermatrix is calculated by multiplying the value of the supermatrix - unweighted supermatrix by the associated cluster weights; and 3) the composition of limiting supermatrix (limited Supermatrix) that it made by steaming supermatrix until stabilized.

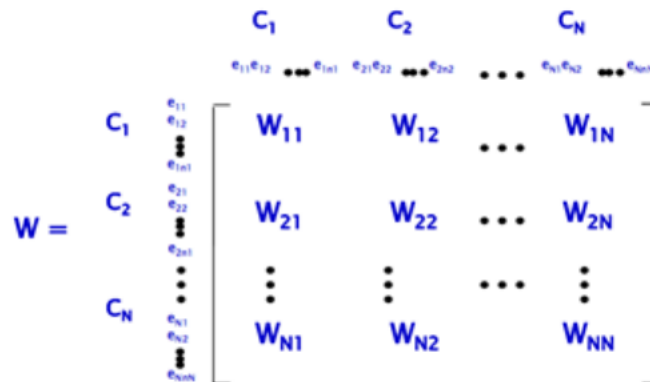


Figure 1 The Supermatrix of A Network

Source : Saaty, Vargas (2006)

Stabilization is achieved when all columns in the corresponding supermatrix for each node have the same value. These steps were performed in Super Decisions software, which is a software package developed for ANP applications. Within each sub-criteria, the same procedure was applied and the alternatives are ranked.

Results analysis stage using geometric mean and rater agreement. Geometric mean determine the results of the individual assessment of the respondents and determine the results of opinion in one group, calculating the geometric mean is conducted. The comparison

question (pairwise comparison) to the respondents will be combined to form a consensus. The geometric mean is a type of average calculation that shows a certain tendency or value which has the following formula:

$$(\Pi_i^n = 1 a_i)^{1/n} = \sqrt[n]{a_1 a_2 a_n} \quad (1)$$

Rater agreement is a measure that shows the level of agreement of respondents (R1-Rn) to a problem in one cluster. The tool used to measure the rater agreement is Kendall's Coefficient of Concordance ($W; 0 < W \leq 1$). $W = 1$ indicates perfect fit.

To calculate Kendall's (W), the first is to rank each answer and sum it up.

$$R_i = \sum_j^m = 1 r_{i,j} \quad (2)$$

The average value of the total rank is:

$$R = \frac{1}{2} m (n+1) \quad (3)$$

The sum of squares deviation (S) is calculated by the formula:

$$S = \sum_i^n = 1 ((R_i - \check{R})^2) \quad (4)$$

So, Kendall's W is obtained:

$$W = \frac{12S}{m^2(n^3 - n)} \quad (5)$$

When the W test value is 1 ($W = 1$), it can be concluded that the assessment or opinion of the respondents has a perfect fit; while, when the W value is 0 or closer to 0, then it indicates the non-conformity between respondents' answers or varied answers.

To facilitate the ANP analysis, this study used software assistance Super Decisions 2.0.8.

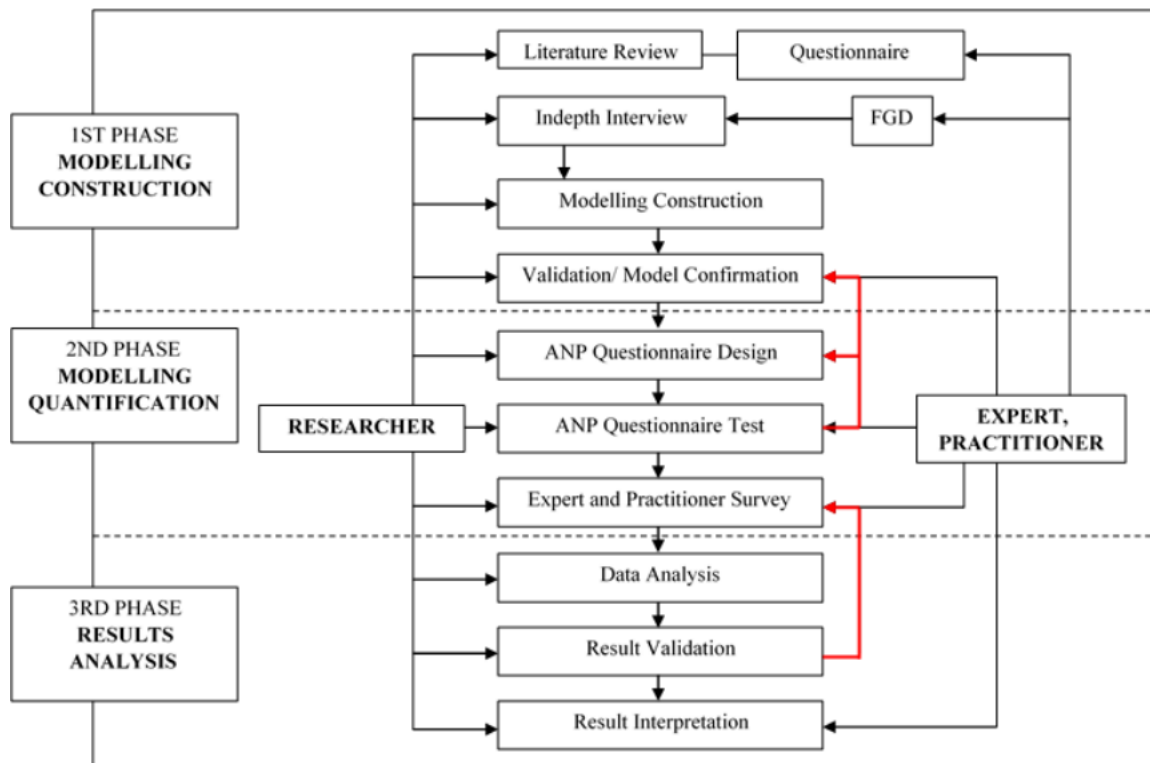


Figure 2 Research Stages using ANP

Source: Ascarya (2010)

4. RESULT AND DISCUSSION

4.1. The Aspect of Farmers Group Development

The study resulted in criteria to form the model of this research, among which are: 1) human resources aspect; 2) social, economic, and cultural aspect; 3) institutional aspect; 4) facilities and technological aspect; 5) knowledge and education aspects; 6) marketing aspects; 7) government policy aspects; 8) financing aspects. Human resources aspects related to the aspect of the farmer group. Social economic, and cultural aspect related to community's social life, economy, and local culture. Institutional aspect (organization) related to the aspects that referred to roles and functions, norm, and farmers' contribution to farmer group. Facilities and technological aspect related to facilities (structure and infrastructure) and technologies applied by farmer group. Knowledge and education aspects related to knowledge and education of the farmers as a member of the farmer group. Marketing aspects related to the aspect conducted by farmer group to market their product. Government policy aspects related to law or policy about agriculture and farmer group as well as the role of the government in developing agricultural sector and farmer group. Financing aspects related to source and state of farmers' capital in supporting their farming activities.

Each aspect which forms the model of this research has an impact on developing farmers' group especially farmers' group in Banyumas Regency, but there is a priority aspect among others. The results of the data from every respondent produced supermatrixes that prioritized aspects according to each respondent shown in Table 2. Based on Table 2, the results of pairwise comparisons of each aspect in the development of farmer groups produced priority aspects. The top priority aspects among the eight aspects were a human resource (HR) with the average value of 0.1945. Meanwhile, the last priority aspect of the eight aspects was the aspect of Government Policy with an average value of 0.0628.

Table 2 Results of the Comparison Aspects of Farmer Group Development

Aspects	Average Score	Rank
HRD	0.1945	1
Social, Economic, and Cultural	0.1007	6
Institutional	0.1803	2
Facilities and Technology	0.1017	5
Knowledge and Education	0.1042	4
Marketing	0.1583	3
Government Policy	0.0628	8
Funding	0.0933	7

Source: Primary Data, 2017 processed

4.2. The Problem of Farmers' Group Development

Each aspect of farmers group development, especially in Banyumas Regency has problems. The problem of human resources aspect are : 1) role, less optimal of members/farmers in farmer group organization; 2) creativity, farmers do not have creativity; 3) skills, not many farmers are skillful in managing farmer group organizations; and 4) innovation and contribution, lack of innovation and contribution/constructive input for early adopter (awareness, interest, judgement, try out, and apply). The problem of social, economic and cultural rights aspects are : 1) openness, farmer group is not yet fully open the renewal; 2) social capital, erosion of social capital in farmer groups; 3) norms, the weakening of local norms and institutions in society; and 4) views/ratings, agriculture is seen as a way of life and subsistence. The problem of institutional aspects are : 1) organization, less optimal

performance of board and members of farmer group; 2) function and roles, fewer functions and roles of the organization for members of the farmers groups; 3) regulation, inconsistent implementation of written regulations with the statutes/post-secondary law; 4) innovation, lack of innovation from farmer groups and tend to follow current flow; and 5) contribution, constructive contribution inputs to the early adopters (awareness, interest, judgement, try out, and apply).

The problem of facilities and technology aspects are : 1) structure and infrastructure, lack of structure and infrastructure to support farming activities; 2) media, promotional media is still limited and there is no information facility to promote farming product; 3) technological advances, radio and television are still limited in exposing the regional potencies; 4) type of technology, limited type of technology applied (still in the stage of adoption and technology consciousness), and 5) uses and needs, technological discrepancies provided through assistance to those required by farmers. The problem of knowledge and education aspect are : 1) updating information, lack of knowledge of farmers in farmer groups related to updated information; 2) program motivation, lack of motivation within farmer groups in adjustment of programs from government or other stakeholders; 3) expertise, limitations in farmers' skill in farmer groups due to low level of education; and 4) training, limited training related to improving farmers' skills in farmer group).

The problem of marketing aspects are : 1) promotion means, lack of promotional tools to promote farmer groups' products; 2) cost, relatively high cost of promotion like participating in exhibitions and promoting by pamphlets, brochures and others; 3) marketing media, marketing media is still simple and traditional; and 4) regional marketing, marketing area coverage is still limited to few regions; has not been widespread. The problem of government policy aspects are : 1) urgency, overlapping policies issued by various agencies likes having their own urgency/importance; 2) policy change, changing in leadership will change the direction/path of the implemented policy; 3) benefit, benefit of existing policies has not been optimized due to inconsistency with the situation in the field (a generalized policy); and 4) influence of globalization, similar products imported are more attractive and inexpensive. The problem of funding/financing aspects are : 1) the type of financing, government assistance domination in financing agricultural sector resulted in conventional and sharia financial institutions have not been able to reach because most farmers do not have collateral; 2) investors, only a few investors interested in opening a business in agricultural sector because it is considered high risk; 3) the financing information, lack of information on financing caused by poor communication between farmers and conventional of sharia financial institutions; and 4) the financing scheme, financing scheme is inconsistent with real situation of farmers in the field (e.g. monthly deposit must be done; whereas, seasonal based harvesting is the real one).

Table 3 Results of Problems Comparison in The Development of Farmer Groups

Aspects	Problems	Average Score	Rank
HRD	Role	0.199	3
	Creativity	0.177	4
	Skills	0.248	2
	Innovation and Contribution	0.375	1
Social, Economic, and Cultural	Openness	0.266	2
	Social Capital	0.215	3
	Norm	0.317	1
	Value	0.202	4
Institutional	Organization	0.244	2
	Function and Role	0.272	1
	Rule	0.147	5
	Innovation	0.153	4
	Contribution	0.183	3
Facilities and Technology	Facilities and Infrastructure	0.251	2
	Media	0.210	3
	Technology Advancement	0.116	4
	Usability and Needs	0.421	1
Knowledge and Education	Information Updated	0.155	4
	Motivation Program	0.186	3
	Expertise	0.289	2
	Training	0.369	1
Marketing	Promotion Facilities	0.309	1
	Cost	0.282	2
	Media Marketing	0.224	3
	Marketing Area	0.184	4
Government Policy	Urgency	0.202	3
	Policy Change	0.344	1
	Benefits	0.187	4
	Globalization Influence	0.265	2
Funding	Type of Financing	0.223	4
	Investor	0.230	3
	Financing Information	0.274	1
	Financing Scheme	0.272	2

Source: Primary Data, 2017 processed

Table 3 shows the comparison results in terms of problems. There are eight aspects of the problems, each of which has sub-criteria problems. Sub-criteria Innovation and Contribution Problem of human resources aspect was the main priority with the average score of 0.375. The main priority of the social, economic, and cultural aspects was the sub-criteria of the weakness of norm in society with an average value equal to 0.317. Meanwhile, the main priority of the Institutional Aspect was sub-criteria Function and Role as less optimal of function and role of the farmer group with average value 0.272.

Furthermore, the main priority of the facility and technology aspect was sub-criteria usability and needs that technological mismatch with the requirement of a farmer with an average score of 0,421. Knowledge and education aspects saw from the sub-criteria had the top priority that the limited training of farmer groups with an average score of 0.369. The main priority of the marketing aspect based on sub-criteria was still lack of means of promotion of a product with an average score of to 0,309. The main priority of government policy aspects based on sub-criteria was the policy direction that always changed with the

change of leadership with an average score of 0.344. The main priority of funding/financing aspect based on sub-criteria was the lack of agricultural financing information with an average score of 0.274.

4.3. The Solution of Farmers' Group Development

The solution of farmer's group development is defined by each aspects' problem. The solutions for human resources aspect are optimizing the role of farmer group members through regular activities/meetings, creativity improvement of farmers through training within farmer groups, providing training on good and structured organizational management, and increasing innovation and contribution for farmers to farmer groups, especially during regular farmer group meetings. The solutions for social, economic, and cultural aspects are opening the farmers' horizons regarding renewal in agriculture, building social capital for farmers to become stronger, growing and re-implementing norms to develop community's institutions and changing the way people view agriculture with innovation and more creative agricultural development.

The solutions for institutional aspect are improving the performance of farmer group leaders with various activities that support the development of farmer groups, improving the function and role of farmer group organizations through various activities related to farmer groups, implementing existing rules through synchronization with the statutes/post-secondary law, increasing innovation from farmer groups to gain renewed and uniqueness in agriculture, and the optimizing contribution of group members to be aware, interest, judge, try out, and apply. The solutions for facility and technology aspects are providing structure and infrastructure for farmer groups through government assistance, optimizing promotion by using various media to disclose information related to farmer groups, media optimization (TV and Radio) to inform or expose local area potencies, adjusting the needs of farmer groups with the type of assistance provided for synchronization. The solutions for knowledge and education aspects are increasing farmers' knowledge related to the latest information through agricultural extension, increasing motivation of farmers in adjusting and running programs from the government of other stakeholders, improving farmers's skill through training or agriculture-related courses, and increasing the types of training that work to improve the skills of farmers in farmer groups. The solution for marketing aspects are optimizing various types of promotion media to promote farmer groups' products, choosing low-cost promotion media, modernizing methods to promote farmer groups' products, and expanding marketing areas of farmer groups' products.

The solutions for government policies aspects are synchronizing related institutions to avoid overlapping policies, existing policies are expected not to be changed following changing in leadership/authority, synchronizing policies with the real needs of farmers to avoid inconsistencies between policies and real situation in the field, and improving the loves of local product program (producing and consuming local products). The solutions for financing aspects are increasing the role of non-government financial institutions of both conventional and sharia to provide agricultural financing programs, increasing the value added of agricultural products through creative innovation to attract investors to invest in agricultural sectors, synchronizing and synergizing farmers and conventional or sharia financial institutions in relation to agricultural financing, and adjusting financial scheme from both conventional and sharia institutions to facilitate farmers to get agriculture based financing.

Table 4 Results Comparison of Solutions in the Development of Farmer Groups

Aspects	Problems	Average Score	Rank
HRD	Role	0.273	2
	Creativity	0.184	3
	Skills	0.078	4
	Innovation and Contribution	0.297	1
Social, Economic, and Cultural	Openness	0.272	2
	Social Capital	0.306	1
	Norm	0.154	4
	Value	0.266	3
Institutional	Organization	0.197	3
	Function and Role	0.137	5
	Rule	0.156	4
	Innovation	0.121	2
	Contribution	0.219	1
Facilities and Technology	Facilities and Infrastructure	0.237	3
	Media	0.290	1
	Technology Advancement	0.204	4
	Usability and Needs	0.268	2
Knowledge and Education	Information Updated	0.272	2
	Motivation Program	0.269	3
	Expertise	0.306	1
	Training	0.152	4
Marketing	Promotion Facilities	0.258	2
	Cost	0.188	4
	Media Marketing	0.307	1
	Marketing Area	0.245	3
Government Policy	Urgency	0.303	2
	Policy Change	0.307	1
	Benefits	0.164	4
	Globalization Influence	0.225	3
Funding	Type of Financing	0.224	3
	Investor	0.310	1
	Financing Information	0.172	4
	Financing Scheme	0.293	2

Source: Primary Data, 2017 processed

Table 4 shows the paired comparison results between the solution aspects in the development of farmer groups. Every aspect of the solution has sub-criteria that describe the solutions offered to solve problems in the development of the farmer groups.

The main priority of human resource aspects was sub-criterion that was to increase innovation and contribution in the farmer group with an average score of 0.297. The main priority of social, economic, and cultural aspect was sub-criterion that was to build social capital of farmers to be stronger with an average score of 0.306. The main priority of institutional was sub-criterion that was optimized the contribution of a group member to be aware, interest, appraise, try out, and applies with an average score of 0,219. The main priority of facility and technology aspect was sub-criterion that was optimizing promotion by using various media available to disclose information related to farmer groups with an average score of 0.290. The main priority of knowledge and education aspect was sub-criterion that was improving farmers skills through training or courses related to agriculture with an average score of 0.306. The main priority of marketing aspects was sub-criterion that

was increasing the way of promotion of farmer group products to be more modern with an average score of 0.307. The main priority of government policy aspects was sub-criterion that was the existing policy, which was expected not to be changed following the change of leadership power with an average score of 0.307. The main priority of funding/financing aspects based on sub-criteria was that to increase the selling value of agriculture through creative innovation in order to attract investors to invest in agriculture with the average score of 0.310.

4.4. The Strategy of Farmers' Group Development

Each prioritized problems and alternative solutions of each aspect was formed to be compared so the alternative strategy for developing farmers' group (especially in Banyumas Regency) can be obtained. The alternative strategies of farmer's group development were formulated as follows : 1) optimizing the role of the farmer group members through scheduled activities/meetings; 2) changing the way community's perception of agriculture by innovative and creative agricultural development; 3) implementing existing rules by synchronizing them with the statutes/post-secondary law; 4) adjusting farmers group needs with any types of assistances; 5) improving farmers' motivation in adjusting and conducting government or stakeholders programs; 6) optimizing facilities/promotion media to promote farmer groups' products; 7) synchronizing policies with real situation in the field (farmers' needs) to avoid inconsistency; and 8) adjusting financial scheme from conventional and sharia financial institutions to facilitate farmers.

Table 5 Comparison of Alternative Strategies for The Development of Farmer Groups

Alternative Strategies	Average Score	Rankings
Optimizing the role of the members of the farmer group through regular activities/meetings	0.193	1
Changing community's perspective on agriculture through innovation and creative agricultural development	0.129	4
Applying the existing rules through synchronizing with Statutes/Post-Secondary law	0.090	7
Adjusting the needs of farmer groups with the type of assistance provided	0.114	5
Increasing the motivation of the farmers in adjusting and conducting programs from the government or other stakeholders	0.068	8
Optimizing various means/promotional media to support farmer groups' product	0.141	3
Synchronizing policies with field conditions (farmers' needs) to avoid any inconsistency between needs and policies	0.108	6
Adjusting financing schemes of conventional or sharia financial institutions that facilitate and adapt to the farmer's real situation	0.154	2

Source: Primary Data, 2017 processed

Table 5. Describes the results of the paired comparison based on alternative strategies aspect in developing farmer group. The strategy aspects were obtained through a combination of problems and solutions covering aspects of human resources, socio-economic and cultural, institutional, facilities and technology, knowledge and education, marketing, government policy, and funding/financing. The main priority of the alternative strategy was optimizing the role of the members of the farmer group through regular activities/meetings with an average score of 0.193. The second priority was adjusting or seeking financing scheme of conventional or Sharia financial institutions, which was easier and adjusted to farmer

condition with an average score of 0154. The third priority was optimizing various promotional media to support farmer groups' product with an average score of 0141. The fourth priority was changing community's perspective on agriculture through innovation and creative agricultural development with an average score of 0.129. The fifth priority was adjusting the needs of farmer groups with the type of assistance provided for synchronization with an average score of 0.114. The sixth priority was synchronizing policies with field conditions (farmers' needs) to avoid any inconsistency between needs and policies with an average score of 0.108. The seventh priority was applying the existing rules through synchronizing with Statutes/Post-Secondary law with an average score of 0.090. The eighth priority was to Increasing the motivation of the farmers in adjusting and conducting programs from the government or other stakeholders with an average score of 0.068.

5. CONCLUSION

Based on the results of the analysis and discussion, the conclusions drawn from this study are : 1) the main priority strategy in the development of farmer groups is to optimize the role of the members of the farmer group through activities that support farmer groups and regular meetings that need to be re-activated to foster the spirit in organizing; 2) the second priority strategy is to adjust or find financing scheme of both conventional and Sharia financial institutions that make farmers easier reach and adapt to the situation of farmers in the field; and 3) the third priority strategy is to optimize the various promotional media to support farmer groups' products to be acknowledged by communities. This study has limits on the scope of the study and the time period of the study.

REFERENCES

- [1] Antonio, M. S. 2001. *Bank Syariah: Dari Teori Ke Praktik*. Jakarta: Gema Insani.
- [2] Arifin, B. 2004. *Analisis Ekonomi Pertanian Indonesia*. Jakarta: Penerbit Buku Kompas.
- [3] Badan Pusat Statistik. 2014. <http://www.bps.go.id>
- [4] Bank Indonesia. 2004. *Linkage antar LKS*. Jakarta: Bank Indonesia.
- [5] Bank Indonesia. 2007. *Perbankan Syariah h. 37*. Jakarta: Bank Indonesia.
- [6] Bank Indonesia. 2010. *Generic Model Linkage Program*. Jakarta: Bank Indonesia.
- [7] Davy, H. 2015. *Pedoman Pembiayaan Pertanian sesuai Syariah*. http://www.academia.edu/3594207/Pedoman_Pembiayaan_Pertanian_sesuai_Syariah, accessed in April, 19 2016.
- [8] Hermanto, dan Swastika, D.K.S. 2011. *Penguatan Kelompok Tani: Langkah Awal Peningkatan Kesejahteraan Petani*. *Jurnal Analisis Kebijakan Pertanian*, Vol 9 No.4: 371-390.
- [9] Ledgerwood, J. 1999. *Microfinance Handbook: An Institutional and Financial Perspective*. Washington DC: Banco Mundial.
- [10] Maryati, S. 2014. *Peran Bank Pembiayaan Rakyat Syariah dalam Pengembangan UMKM dan Agribisnis Pedesaan di Sumatera Barat*. *Journal of Economic dan Economic Edeucation* Vol. 3 No. 1: 1-17.
- [11] Mi'raj, D.A., dan Hadi Ryandono, M.N. 2015. *Linkage Program Bank Syariah dengan BMT : Tinjauan Kritis bagi Pengembangan Sistem Keuangan Islam yang Lebih Kaffah*. *JESST* , Vol. 2, No. 10 : 850 – 864.
- [12] Mulyaningsih, Y., Nunung, N., Rina, O., Carunia, M. 2015. *Analisis Jangkauan LKMS bagi Rumah Tangga Miskin Sektor Pertanian di Perdesaan Bogor, Jawa Barat*. *Jurnal Ilmu Pertanian Indonesia* Vol. 20: 182-190.
- [13] Nasrul, W. 2012. *Pengembangan Kelembagaan Pertanian untuk Peningkatan Kapasitas Petani Terhadap Pembangunan Pertanian*. *Jurnal Menara Ilmu*, Vol. III No. 29.

Institutional Development of Farmer Group Through Structural Analysis, Farmer Group Networks,
and Agricultural Sharia Financing

- [14] Nasution, R.E.F., dan Habib, A. (2015). Outreach and Profitability Trade-Off : Does Synergy Between Islamic Banking and Islamic Microfinance Institutions Matter. *Islamic Capital Market Review*, Vol. 7, No. 2 : 57 – 73.
- [15] Pagura, M., dan Kristen, M. 2006. Formal – Informal Financial Linkages : Lessons From Developing Countries. *Small Enterprise Development* 17 (1) : 16 – 29.
- [16] Parma, P. G. 2014. Pengembangan Model Penguatan Lembaga Pertanian Sebagai *Prime Mover* Pembangunan Kawasan Daerah Penyangga Pembangunan (DPP) Destinasi Wisata Kintamani-Bali. *Jurnal Ilmu Sosial Humaniora*, Vol. 3, No. 1.
- [17] Saaty, T.L and L. Vargas. 2006. Decision Making with the Analytic Network Process:Economic, Political, Social and Technological Applications with Benefits, Opportunities, Costs and Risks. New York: Springer.
- [18] Sakti, A. 2013. *Pemetaan Kondisi dan Potensi BMT : Kemitraan Dalam Rangka Memperluas Pasar & Jangkauan Pelayanan Bank Syariah Kepada Usaha Mikro*. *Jurnal Al Muzara'ah*, Vol. 1, No. 1: 1– 17.
- [19] Santosa, P. B., & Darwanto. 2015. *Strategi Penguatan Kelompok Tani Dengan Penguatan Kelembagaan*. *Jurnal Ekonomi Pembangunan*: 33-45.
- [20] Saptana, Pranadji, T., Syahyuti, Elizabeht, E. 2003. *Transformasi Kelembagaan Tradisional*. Bogor: PSE.
- [21] Oktavendy, G. A. 2015. *Peran Pembiayaan BMT untuk Pengembangan Pertanian di Desa Berbasis Pertanian*. Malang: Jurnal Ilmiah Fakultas Ekonomi dan Bisnis UB.
- [22] Wibowo, H., dan Hayati, N. 2013. *Strategi Program Pengembangan Usaha Agribisnis Pedesaan Dalam Pembentukan Lembaga Keuangan Mikro Syariah Berbasis Agribisnis*. Proceeding Seminar Nasional dan Call For Papers Sancall 2013.
- [23] World Bank. 2011. Global Financial Inclusion Database. <http://databank.worldbank.org/data/ views/reports/tableview.aspx> accessed on April, 18 2016.