

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

Collective action: Improving smallholder rice farmers' value chain in Yogyakarta, Indonesia

A thesis presented in partial fulfilment of the requirements for the degree of

Master of AgriCommerce

At Massey University, Manawatu, New Zealand



MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

Shaf Rijal Ahmad

2017

Abstract

Collective action has been widely accepted as one of the strategies to improve smallholder farmers' capability to gain benefit from the agrifood value chain. This is also part of the working policy of the Government of Indonesia. Nevertheless, there is little empirical evidence for staple food farmers, particularly rice, in organising collective action and many such attempts have not met the policy's implementation objectives. Considering the importance of rice agribusiness in Indonesia, therefore, there is a need to investigate experiences of smallholder rice farmers who work collectively and are able to improve their value chain and gaining benefit from it. The objectives of this study were to identify and describe what benefit captured through collective action and how, and; to identify and describe how these farmers act collectively within a group and why. The research question was answered and objectives addressed by using a qualitative single case study. A farmer group named Gapoktan Sidomulyo was selected, as it was identified by the central and local government as a well-developed collective farmers' group. Data was collected through semi-structured interviews with farmers and other actors relevant to the group development.

This study found that collective action helped smallholder rice farmers to build a competitive advantage. This action enabled them to improve production capacity and product quality, as well as human capability and bargaining power. This also helped them to reduce the number of intermediaries. Therefore, they can capture the potential value offered by the rice value chain. This study also highlighted essential factors for smallholder rice farmers' collective action: Firstly, this action required incentives and support as well as a motivated group of farmers. Even when collective action was supported by government, it was essential to motivate farmers to act collectively and see the benefits for doing so. Secondly, trust and a shared vision between members of the farmer group was important element for collective action. These formed the basis for building horizontal relationships between farmers. This affected the reciprocity between them and their commitment. Thirdly, in a group that was heterogeneous, in terms of religion and reliance on farming as an income source, group cohesion could be achieved through effective group management, which means management that promoting transparency and active communication between farmers and the leadership

team, and giving an opportunity for each actor within the group to play their role. These reduced the potential of conflict and maintain the farmers' awareness on the group so that they keep engaged within the group. Fourthly, leadership with strong motivation, good interpersonal skills, social awareness, as well as administration and marketing skills were essential for the group's development. Unlike to what has been identified in many studies, the leadership could also be provided by a team of people, instead of relying on an individual. Fifthly, maintaining the active members and the leadership team's participation was essential as they were the key actors within the group. For the active farmers, this was achieved through: facilitating members to raise their voice and be involved in decision making, involving them to enforce rules, and conducting activity that attract them to attend regular meetings. Meanwhile, for the leadership team members, this could be achieved through conducting an appropriate leadership team selection process and acknowledging their effort in fostering the group. Lastly, despite there was a culture to work as a group, it was important for having trusted external agents to facilitate farmers and motivate them to act collectively, particularly when this required money in initiating the action. The support from external agents, such as technology and finance, was also important to build farmers capability in improving the value chain. In addition, this case highlighted that only some farmers were able to gain benefit through this action and they were who can produce consistently volume beyond their household requirements.

Keywords: Smallholder farmers, collective action, rice value chain, agriculture, rice, Yogyakarta, Indonesia.

Acknowledgements

All praise is due to God

I wish to sincerely acknowledge several groups of people and individuals who have contributed to the completion of this thesis.

First and foremost, my sincere thanks to my supervisors, Professor Nicola Shadbolt and Dr. Janet Reid for guiding me through this challenging journey. Your knowledge, patience, time, advice and support are important for this research. I enjoyed and learnt a lot from the discussion sessions.

The financial assistance received from Ministry of Foreign Affairs and Trade is gratefully acknowledged. I would also like to recognise and thank everyone from International Student Support Office. For Jamie Hooper and Dave Broederick, thank you for the long 'smoko' breaks. That helped me out for a while from my project and assignments.

I would like to acknowledge and thank Gapoktan Sidomulyo and its leadership team members and the farmers for their cooperation and help with this project. The field work was valuable for me. I have learnt a lot about rice agriculture and farm management directly from the farmers. I would also like to acknowledge all the participants, from the government institutions and buyers, who helped me during my data collection.

I also extend my appreciation to Fiona Bardell for your assistance during my study and Ruth Mortimer for all your help polishing this thesis.

I also thank all families and friends in Indonesia and New Zealand. For my parents, my wife (Saras) and my children (Kirana & Khasya), your prayers are essential for this achievement. For my new family here, the Fergusons and the Indonesian Community, thank you for the friendship. Having you here made me feel at home.

For the members of the fortress of knowledge - Betty, Hammish, Ling, Rithy, and Win,
- You rock guys! Veni, Vidi, Vici!

Contents

List of tables.....	iii
List of figures.....	iv
Abbreviations.....	v
Appendices.....	vi
Chapter 1. Introduction.....	1
1.1. Background.....	1
1.2. Research Problem.....	2
1.3. Research question.....	3
1.4. Objectives.....	3
Chapter 2. Study Country.....	4
2.1. Introduction.....	4
2.2. Country description.....	4
2.3. Agriculture sector in Indonesia.....	6
2.4. Indonesia Rice Agriculture.....	7
2.5. The history of Indonesia Government policies on rice agriculture.....	9
2.6. Rice consumption and rice consumers in Indonesia.....	11
2.7. The rice value chain in Indonesia.....	11
2.8. The actors within the rice value chain in Indonesia.....	14
Chapter 3. Literature Review.....	18
3.1. Introduction.....	18
3.2. Value chain.....	18
3.2.1. Defining value chain in agriculture.....	18
3.2.2. Transaction costs.....	19
3.2.3. Contract farming.....	19
3.2.4. Capturing value from value chain systems.....	20
3.2.5. Smallholder farmers' challenges within the rice value chain.....	24
3.3. Collective action.....	26
3.3.1. Collective action from the agriculture perspective.....	26
3.3.2. Collective action typology based on its drivers.....	27
3.3.3. The role of external agents.....	28
3.3.4. The organisational forms of collective action.....	32
3.3.5. Benefits offered by collective action.....	33
3.3.6. Contributing factors for collective action in improving market access.....	36
3.3.7. Challenges and constraints on collective action development.....	44
3.4. Chapter summary.....	45
Chapter 4. Methodology.....	47
4.1. Research design.....	47
4.2. Case selection.....	48
4.3. Participant selection.....	48
4.4. Data collection method.....	50
4.5. Data collection process.....	51
4.6. Data analysis.....	52
4.7. Potential risks of the study.....	52
4.8. Ethics.....	53
4.9. Chapter summary.....	53
Chapter 5. Case Description.....	55
5.1. Introduction.....	55
5.2. The Special Region of Yogyakarta.....	55
5.3. District Godean.....	57
5.4. Sidomulyo Village.....	58
5.5. The history of community-based organisations in Sidomulyo Village.....	61

5.6.	Legislation support	62
5.7.	Other support from non-government institution	65
5.8.	Gapoktan Sidomulyo organisation structure.....	66
Chapter 6.	Results.....	72
6.1.	Introduction.....	72
6.2.	How Gapoktan Sidomulyo is operating as a group	72
6.2.1.	The establishment process	72
6.2.2.	Regular Meetings.....	74
6.2.3.	Rice production and supply	77
6.2.4.	Rice processing	84
6.2.5.	Rice Marketing	86
6.3.	The benefit offered by the Gapoktan Sidomulyo.....	89
6.3.1.	From gapoktan leadership team's perspective.....	89
6.3.2.	From the farmers' perspective	89
6.3.3.	From the buyer's perspective.....	90
6.3.4.	From the government's perspective.....	92
6.4.	The key attributes of the Gapoktan Sidomulyo operation	92
6.4.1.	Motivation.....	93
6.4.2.	Financial capital.....	94
6.4.3.	Group characteristics	95
6.4.4.	Leadership.....	97
6.4.5.	Institutional arrangements.....	99
6.4.6.	The external environment	102
6.5.	Chapter summary	104
Chapter 7.	Discussion.....	106
7.1.	Introduction.....	106
7.2.	Characteristics of the case.....	106
7.3.	Improving value chain through collective action.....	107
7.4.	The influencing factors for the group's development.....	110
7.4.1.	Willingness to work collectively	111
7.4.2.	Trust building and shared vision.....	111
7.4.3.	Maintain the cohesion of the group	112
7.4.4.	Build a capable leadership team	113
7.4.5.	Maintain the leadership team and the active farmers to participate within the group	114
7.4.6.	External support.....	116
7.5.	Chapter summary	118
Chapter 8.	Conclusions and recommendations.....	120
8.1.	Introduction.....	120
8.2.	Conclusions.....	120
8.3.	Implication of the research and recommendation	122
8.4.	Methodology assessment	124
8.5.	Future research.....	124
References.....		125
Glossary		134

List of tables

Table 1 The average temperature and amount of precipitation in 2013.....	6
Table 2 Main Commodities (based on Volume) in each Island in Indonesia	6
Table 3 Rice production in some producer countries in Asia in 2014.....	8
Table 4 Rice varieties in Indonesia	8
Table 5 The participants and interview model.....	51
Table 6 Total area, farming area, non-farming area, and marginal land in District Godean	58
Table 7 Number of households, number of population, and density per square kilometre	60

List of figures

<i>Figure 1.</i> Map of Indonesia	4
<i>Figure 2.</i> Generalised rice value chain in Indonesia.....	13
<i>Figure 3.</i> Options to upgrade value	20
<i>Figure 4.</i> The external agents' involvement.....	29
<i>Figure 5.</i> The power and weaknesses of the external agents.....	32
<i>Figure 6.</i> Benefits offered from collective action for farmers and local people.....	35
<i>Figure 7.</i> The leadership characteristics that influence group's performance.....	41
<i>Figure 8.</i> The Java Island Map	55
<i>Figure 9.</i> The proportion of employees in the Special Region of Yogyakarta based on the field work 2014.....	57
<i>Figure 10.</i> The area in each district in Sleman Regency, 2014 (Hectare)	57
<i>Figure 11.</i> Special Region of Yogyakarta Map	59
<i>Figure 12.</i> A farmer in Sidomulyo Village removes weeds on his farm	60
<i>Figure 13.</i> The national programs delivering system to farmer group	62
<i>Figure 14.</i> The external organisations and its support to Gapoktan Sidomulyo.....	66
<i>Figure 15.</i> The organisation structure.....	67
<i>Figure 16.</i> Gapoktan Sidomulyo members	70
<i>Figure 17.</i> The processes of group pre-establishment and post-establishment.....	74
<i>Figure 18.</i> The raw material supply in Gapoktan Sidomulyo.....	77
<i>Figure 19.</i> The illustration of connection between Gapoktan Sidomulyo and block coordinator	80
<i>Figure 20.</i> The connection between Gapoktan Sidomulyo, group supervisor, and their partner (other poktan/gapoktan).....	84
<i>Figure 21.</i> Rice processing unit at Gapoktan Sidomulyo's plant.....	84
<i>Figure 22.</i> The process of rice manufacturing	86
<i>Figure 23.</i> The illustration of broken rice (left) and the 5 kilograms package (right) with the tag line "taste good, nice texture, and healthy"	87
<i>Figure 24.</i> Gapoktan Sidomulyo's market chains compare to rice market chain in Indonesia in general	88
<i>Figure 25.</i> The establishment background.....	94

Abbreviations

ADPO	: Agriculture Department Provincial Office
AEHRD	: Agriculture Extension and Human Resources Development Body
AIU	: Agriculture Input Unit
AMFU	: Agriculture Micro Finance Unit
AMU	: Agriculture Machinery Unit
CBIYO	: Central Bank of Indonesia Yogyakarta Office
DGPMAC	: Directorate General of Processing and Marketing of Agricultural Commodities
FSU	: Food Stock Unit
Gapoktan	: Gabungan Kelompok Tani
GHP	: Good Handling Practices
GMP	: Good Manufacturing Practices
IFAP	: International Federation of Agricultural Producers
Kades	: Kepala desa
LFDP	: Local Food Distribution Program
MoA	: Ministry of Agriculture of Republic Indonesia
NFSA	: National Food Security Agency
NGO	: Non-Government Organisation
POFSD	: Provincial Office Food Security Department
Poktan	: Kelompok Tani
RADP	: Rural Agribusiness Development Program
ROAD	: Regency Office Agriculture Department
ROADFSD	: Regency Office Agriculture Department Food Security Division
ROADPMD	: Regency Office Agriculture Department Processing and Marketing Division
RPDU	: Rice Processing and Distribution Unit
RPURP	: Rice Processing Unit Revitalisation Program

Appendices

Appendix 1 Hierarchical diagrams of factors contributing to collective action development..	135
Appendix 2 Hierarchical diagrams of the motivation to work collectively	135
Appendix 3 Hierarchical diagrams of trust building and gaining a shared vision	136
Appendix 4 Hierarchical diagram of how to build a capable leadership team	136
Appendix 5 Hierarchical diagram of how to maintain group cohesion	137
Appendix 6 Hierarchical diagram of maintaining participation rate of active members and leadership team.....	138
Appendix 7 Hierarchical diagram of the value of collective action for farmers' in improving their value chain	139
Appendix 8 Hierarchical diagram of improving financial capacity.....	139
Appendix 9 Hierarchical diagram of product marketing	139
Appendix 10 Hierarchical diagram of managing the market demand	140
Appendix 11 Instruction sheet for pest management in the rice storage	141
Appendix 12 Standard operation procedures sheet in Gapoktan Sidomulyo.....	141
Appendix 13 Organic product certificate.....	142
Appendix 14 Gapoktan Sidomulyo's rice processing plant	142
Appendix 15 Monitoring form for partner group supervision	143
Appendix 16 Paddy field around Gapoktan Sidomulyo	143
Appendix 17 Rice sortation and packaging room	144
Appendix 18 Weekly farmer market.....	144
Appendix 19 Participants interview prompts.....	145
Appendix 20 Low risk notification	146
Appendix 21 Information sheet in English	147
Appendix 22 Information sheet in Bahasa Indonesia	149
Appendix 23 Consent form.....	152