



Beyond collective action and the global value chain:

A case study of the different forms of collective
action and established conventions within
the Acehnese shrimp farming community

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BEYOND COLLECTIVE ACTION AND THE GLOBAL VALUE CHAIN:

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Abstract

Cluster management is a concept regarding collective action that rises in popularity within the aquaculture sector as a means to upgrade the smallholders' position within the global value chain. This study critically investigates the implementation of collective action within the Acehese shrimp farming community and the justifications of creating or joining such initiatives. By analyzing the different forms of collective action present within Aceh, Indonesia, and their goals and justifications, results show that there are certain guidelines and constraints – defined in this study as conventions – that influence economic behavior and coordination. Conflict can arise when these different justifications meet, and this is the case between the justifications of economic activity in the local- and external initiatives of collective action in Aceh. The study concludes that there is no clear-cut form of collective action concerning the approach for an upgrading of the global value chain of shrimp. Instead, facilitation of collective action should focus on 'bridging' this conflict between different justifications that exists regarding economic activity in shrimp farming – creating an alignment between the aim of upgrading the global value chain, and compliance towards established convention within the Acehese shrimp farming community.

Keywords: aquaculture, collective action, clusters, shrimp, global value chain, upgrading, Aceh, conventions

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List of acronyms

AACC	Aceh Aquaculture Communication Center
AAE	Aceh Aquaculture Enterprise
ALSC	Aquaculture Livelihood Service Center
ASD	Acheh Society Development cooperative
DKP	Dinas Perikanan dan Kelautan (Marine and Fisheries Affairs Agency)
ETESP	Earthquake and Tsunami Emergency Support Project
FAO	Food and Agriculture Organization
GAM	Gerakan Aceh Merdeka (Free Aceh Movement)
KP	Ketua- or Kontak Petambak (group leader)
NACA	Network of Aquaculture Centres in Asia-Pacific
OISCA	Organization for Industrial, Spiritual and Cultural Advancement
PN	Petua Neuheun (cluster leader)
UMCOR	The United Methodist Committee on Relief

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1. Introduction

“With its continued growth, it is expected that aquaculture will in the near future produce more fish for direct human consumption than capture fisheries and will contribute more effectively to global food security, nutritional well-being, poverty reduction and economic development by producing – with minimum impact on the environment and maximum benefit to society – 85 million tonnes of aquatic food by 2030, an increase of 34 million tonnes over the 2006 level” (Phillips & Subasinghe 2010: 35)

Aquaculture¹ in general has been increasing rapidly in the world and currently counts for nearly half of all food fish consumed. Because developing countries produce 90 percent of the global output, according to Hishamunda, Ridler, Bueno, and Yap (2008), it is argued to contribute significantly to the development of these countries by providing employment opportunities, improving incomes, and increasing the returns on resource use (Phillips & Subasinghe 2010; Hishamunda et al. 2008). Because of the expansion of worldwide trade within aquaculture and more stringent market requirements, there is a need for producers to improve the quality and safety of their products in order to gain access to those export markets. However, most of the aquaculture production is occurring within small-scale aquaculture farms and these small-scale farmers face difficulties in producing products for the export market with these stringent requirements. While 70 to 80 percent of the total farms in Asia involved in aquaculture are small-scale and are therefore prominent, these farmers become uncompetitive as they strive to meet export consumer requirements and this lack of competitiveness could drive them out of the sector, according to Phillips and Subasinghe (2010).

Within aquaculture, shrimp farming has developed as a major global industry during the decades of 1990 and 2000. The total production of shrimp creates a worth over US\$16 billion per year (FAO 2013b) and it is the largest single commodity in value terms, accounting for about 15 percent of the total value of internationally traded fishery products in 2010 (FAO 2012). Many shrimp products come from small farming communities in developing countries, where they may face difficulties in fulfilling the necessary requirements that would allow them access to higher value markets, such as in the US, Europe or Japan (Phillips & Subasinghe 2010: 36). As the demand for aquatic products – or seafood – will continue to grow, it puts an emphasis on the position of aquaculture as a food production system of global importance. Small-scale shrimp farmers should be taken into account in this global trade since their farming has a socially and economically significant role in rural communities around matters of rural development, employment, poverty reduction and meeting Millennium Development Goals. According to Phillips and Subasinghe (2010: 37), small-scale farmers producing

¹ Definition aquaculture: *“The farming of aquatic organisms in inland and coastal areas, involving intervention in the rearing process to enhance production and the individual or corporate ownership of the stock being cultivated.”* (source: FAO 2013a)

commodities like shrimps face *“increasing trade and market-related problems, including costs associated with scale and modern business structures; inequitable access to markets and market information; difficulties in access to financial and technical services; and increasingly high production standards, food safety, quality assurance and certification.”*

An approach has been developed to assist the small-scale farmers to overcome these challenges and to let the farmers effectively participate in and influence the global value chains and trade through the establishment of collective action using *“cluster management”* (Kassam, Subasinghe & Phillips 2011). Although this concept of collective action is occurring within the agriculture sector for quite some time, with its proponents and opponents, this concept – and more specifically the cluster management – is relatively new in aquaculture and there is insufficient knowledge about the way it is implemented and received by the farmers in the field. This study aims to investigate this concept of collective action and the involvement of external organizations in collective action within the aquaculture sector, to see how the concept is implemented and received by the small-scale farmers and if they benefit from it. This is done by focusing on a case study of small-scale shrimp farmers in Aceh, Indonesia, on which some background information will be provided in the next section regarding the shrimp sector and its position nationally and internationally.

1.1 Shrimp aquaculture within Aceh and Indonesia

Aceh is a province on the northern end of the island of Sumatra in Indonesia and its pond aquaculture is economically and socially important, especially in the northeast of Aceh, and a key livelihood component for many coastal dwellers according to Mills, Adhuri, Phillips, Ravikumar and Padiyar (2011: 425). The brackish-water pond where shrimp and fish are produced is locally known as tambak and mostly tiger shrimp (*Penaeus monodon*) is cultivated because of its relatively high sale price and its high demand by overseas markets. The marketing of tiger shrimps is more export oriented, rather than grown for the domestic market (Zainun, Budidarsono, Rinaldi & Adek 2007: 19). Therefore, it is important to small-scale tiger shrimp farmers to have and gain market access and to become and stay competitive in the global trade. The Acehnese black tiger shrimp is a highly valued export commodity, which has a good reputation among buyers in Medan (North Sumatra Province). Aside from being a highly valued export commodity, hardships were encountered within the shrimp sector in Aceh. First, a civil war lasting for 30 years, as stated by Phelps, Bunnell and Miller (2011), where Free Aceh Movement rebels (Gerakan Aceh Merdeka, GAM) fought for independency from 1976 until 2005. In 2005, a peace agreement was achieved between GAM and the Indonesian government, but the civil conflict and related economic hardship led *“to neglect of the [shrimp] sector, resulting in poor and run-down infrastructure, minimal technical and financial services, reduced market access and limited skill among farmers.”* (Mills et al. 2011: 425). Aside from the conflict, a tsunami occurred in 2004 that had devastating effects and it was estimated, according to Phillips and Budhiman 2005, that 47 percent of the ponds were severely damaged or lost, and that at least 40.000 people directly employed in aquaculture in Aceh had been affected. Another problem was the

disease outbreaks that have befallen Aceh around 1995 and caused major harvest failures, reducing the return farmers get and constraining investment in improved systems (Mills et al. 2011). Because of these various problems, the good reputation of tiger shrimp is difficult to maintain and in recent years, particularly since the 2004 tsunami, concerns over poor quality, use of chemicals, inconsistent supplies and poor traceability (to product origin) have reduced interest in this product (Padiyar, Phillips, Ravikumar, Wahju, Muhammad, Currie, Coco & Subasinghe 2012: 1788). External organizations have been assisting the shrimp-farming sector within Aceh after the occurrence of the tsunami, to rehabilitate the aquaculture facilities and strengthen the farmers' position within the global value chain. Aside from external organizations, the Indonesian government was also involved within the shrimp sector, which will be shortly described in the next subsection.

1.1.1 Government involvement

It often occurs that national governments and international development agencies are promoting shrimp aquaculture as a basis for rural development and stimulation of foreign exchange in developing countries (Béné 2005; Sano 2000). Collins (2007: 103) affirms that this is also the case in Indonesia as the World Bank arranged loans for financing the national industrial shrimp farming and that – for example – in South Sumatra traditional shrimp farmers had to be incorporated in the extensive farming scheme as contract farmers. However, these kinds of investment in shrimp farming already occurred before 1990 during the reign of President Suharto and his New Order regime. Gellert (2010: 41) proclaims that the significance of aquaculture grew more over time in the New Order in Indonesia and that export shifted from fish towards shrimp. The final markets where the aquaculture products end up differ according to Padiyar et al. (2012: 1788). Milkfish and freshwater fish are products mainly for domestic consumption within the household or within the province, whereas shrimp, crab and grouper are economically important commodities mainly exported to other Indonesian provinces or to other countries. Some authors like Phillips and Subasinghe (2010) and Collins (2007) assert that while government policies support rural development and poverty reduction, they should focus more on the small-scale aquaculture sector for a better improvement because shrimp production occur most with those type of farmers. Muluk and Bailey (1996 referred to in Hall 2004) state that Indonesia changed its policy towards establishing cooperative agreements between larger corporations and the local shrimp farmers. Recognition appeared within the Indonesian policy of the significance of integrating the small-scale shrimp farmers within the extensive, semi-intensive and extensive Indonesian shrimp industry.

The previous section demonstrates that the shrimp sector in Aceh encountered several setbacks relating to the capacity of creating a strong position to integrate into the global market. External and national assistance already occurred within the Acehnese shrimp-farming sector for quite some time. A concept that is rising as an approach for farmers to

strengthen their position within the global value chain is that of collective action, which will be discussed in the next section expressing the problems statement of this study.

1.2 Problem statement

Due to the marginal position that shrimp farmers have within the global value chain because of the challenges they face towards the global market and its more stringent requirements, the need for collective action is argued for strengthening the farmers' position within the global- value chain or market. Collective action is promoted by development- organizations and literature as an approach to improve the access of farmers to global markets, an access that is difficult to get because of more stringent regulations and standards and more difficulty in accessing knowledge and information. According to Kassam, Subasinghe and Phillips (2011: 12), collective action occurs *"when a group of individuals come together to solve a shared problem by establishing a set of rules that, if followed, will allow the group to meet a common goal."* Globally, the concept is getting more popular within the aquaculture sector, as demonstrated by the Third Session of the FAO Committee on Fisheries Sub-Committee on Aquaculture held in 2006, which wanted to stimulate further focus on the farmer organizations and its establishment and development. Phillips and Subasinghe (2010: 41) state that the committee is of the opinion that farmer organizations could support improving the management of the aquaculture sector and empower producers to participate in decision-making and becoming more self regulated.

The existing literature on collective action is mainly focused on agriculture, although the combination of collective action and aquaculture is more and more recognized as important in scientific literature (Umesh et al. 2010; Kassam et al. 2011; Padiyar et al. 2012; Ravikumar & Yamamoto 2009). These authors are discussing farmers' organizations, cluster management and farmer groups as a means for improving the situation of the farmer. However, according to Fischer and Qaim (2012), the empirical evidence of collective action and its effectiveness and success with other staples than high-value crops, and especially within aquaculture, is scarce. This study would like to contribute with empirical evidence relating collective action within aquaculture, focusing on how collective action is facilitated the best way regarding the wants and needs of the farmers.

Such a cluster or farmers' organizations approach towards collective action was established in Aceh by a consortium of development agencies (including the FAO, NACA, ADB and the WorldFish Centre), and was aimed at developing Aquatic Livelihood Service Centres (ALSCs) for increased farmer cooperation, dissemination of better management practices and marketing (Ravikumar and Yamamoto 2009). This project had 2639 members at its peak period and had established a systematic system of clusters and groups where farmers participated in. However, after most of the development organizations left the membership numbers declined and the ALSCs became non-active. Instead, other local forms of collective action (see Box 1) were

initiated and joined by the shrimp farmers – this interesting development shows that farmers do not want to or cannot replicate or sustain the external collective action initiative that has the goal of strengthening the farmers’ position within the global value chain. This study will clarify why established external initiatives became non-active within the Acehnese shrimp farming community and why farmers created their own local initiatives of collective action.

Box 1. Cooperatives, clusters, farmer organizations or organized groups

The nomenclature used in literature within the aquaculture regarding collective action with smallholders differs from each other and its meaning. For example, literature writes about cooperatives, farmers’ organizations or clusters. In this thesis, ‘organized groups’ are used to indicate the local initiatives of collective action within Aceh. Because collective action refers to actions performed by a group to achieve common interests, it can exist in the absence of a farmer organization per se according to Hellin, Lundy and Meijer (2007: 5). However, in this study the collective action initiatives are indeed a group structure because the farmers themselves talk about ‘the group’, its name and its function. The farmers organized themselves into a group but are not legally registered as an association or cooperative and do not call them this– that is why the term ‘organized group’ is used instead of the more formal and legally registered ‘cooperative’.

1.3 Research objective

A better understanding of the concept of collective action within the aquaculture sector - by focusing on shrimp in this study – can allow for more efficient external (or internal) assistance to strengthen the farmers’ position in the global value chain and to understand the farmers’ justifications in joining or creating such a collective action. This study will focus on the Acehnese shrimp farming community and their position towards collective action and take a critical stance towards the rising, popular forms of collective action of clustering and farmers’ organizations - established mainly with external assistance. This study is therefore divided into two research objectives. The first objective is to critically investigate the implementation of collective action within the Acehnese shrimp farming community and the justifications of shrimp farmers to join or create their own form of collective action instead of maintaining membership with – or sustaining the external initiative of collective action.

In this sense, this study will challenge the development which occurs regarding collective action within aquaculture, asking for a critical investigation in what these collective action initiatives entail and what the position of the farmers is towards those initiatives – acknowledging that there is not one ‘perfect’ form of collective action. This leads to the second objective of this study, which aims to provide a more thorough analysis towards a nuanced understanding of the facilitation of collective action with regards to connecting the farmer with the global market.

1.4 Research questions

The following main research question is derived from the two-folded research objective:

Why is there a rise and decline of different collective action initiatives within the Acehnese shrimp farming community, and how can these collective action initiatives be improved in terms of facilitation?

This main question is set up to analyze the reason(s) of the existence of different forms of collective action, which are in place within the Acehnese shrimp farming community. This helps to understand the justifications involved within different forms of collective action. Understanding the justifications that farmers (and external initiatives) have regarding collective action can help to create a collective action model (if any) which is better aligned towards the shrimp farmer's goal of coordination and his needs.

To be able to answer this main question, it will be divided into the following sub-questions:

1. What are the different forms of collective action and their orientation, within the Acehnese shrimp farming community, and why do these orientations exist?

This first sub-question can assist in giving an orderly overview of what the different forms of collective action are that exist or have existed within the Acehnese shrimp farming community. This question allows for the exploration of the differences or similarities within the different forms of collective action and the justification of their main orientation.

2. Why did the Acehnese shrimp farmers' create or join their own initiatives of collective action after the intervention of external development organizations?

This sub-question will seek justifications of the shrimp farmers to join or create other initiatives of collective action, and will show what they find important in collective action and what not (by not joining the external initiative). If these justifications are known, external intervention can align their models better on the justifications of the farmers and create a more sustaining model of collective action. If there is a difference in justifications and goals, it is important to find a way to encompass these different justifications. This leads to question 3.

3. How can (better) alignment be reached between the justifications of local- and external initiatives for collective action to improve the sustainability of collective action?

This third sub-question will seek the possibility of a combination of both these different forms of collective action. Sustainability, here, refers to the maintaining of the initiative with a long-term perspective and alignment refers to the idea of shared objectives being achieved to eventually result in a win-win situation for the stakeholders involved.

1.5 Organization of the thesis

This study is divided into six chapters. The first chapter, this introduction, gave an overview of the problem statement, the main objectives of this study and the research questions, which the study will seek to answer. The thesis will continue with chapter two in which the theoretical framework will be discussed that is used as a backbone for analyzing and discussing the issues relating to the problem statement and research questions. An elaboration will be given on the three main concepts: collective action, convention theory, and the concept of the global value chain that positions the former two concepts. Thereafter, the methodology chosen and practiced within this study will be revealed in chapter three. The justifications for specific methods will be given, together with some background of the research- area and informants, and the scope and limitations within this research. The main findings will be revealed in chapter four and chapter five. Chapter four will give an analysis about the different forms of collective action that were established within the Acehnese shrimp farming community, describing it within a services-discourse that is rising within collective action. Chapter five will give a richer analysis of the justifications of farmers' joining and creating certain collective action initiatives, by linking the justifications to established conventions within the Acehnese shrimp farming community. The study will conclude with chapter six, in which the discussion will reexamine the main objectives and research questions. A conclusion will follow and recommendations will be given with regards to theoretical- and practical concerns.

2. Theoretical framework

"Theory without data is empty, but data without theory are blind." (C. Wright Mills cited in: Eriksen 2001: 24)

Theory can be seen as a set of concepts and the proposed relationships among these and, according to Maxwell (2005: 42), a structure that is intended to represent or model something about the world. It guides every aspect of research, from formulation of the research question through operationalization and the discussion. Two main concepts can be identified for guiding and strengthening this thesis; collective action and convention theory, where the last has an important role of explaining and strengthening the first. The third concept that plays a part in this thesis is that of the global value chain and can be seen as the encompassing support in which the other two concepts are being placed. The connection made between these two theories does not occur yet in scientific literature in an obvious matter and can therefore be seen as a novel approach. The concept of collective action will be explained in this chapter and its contemporary implementation within the lives of small-scale farmers (in aquaculture). The pooling of resources and the formation of organized groups or clusters of small-scale farmers is an issue that is occurring already for quite some time in the agricultural world. However, the concept is still somewhat unknown in the aquaculture sector, but increasingly being deployed in literature and in practice as a prospective notion for the small-scale farmers within aquaculture as well. Therefore, it is important to get more information about the occurrence of collective action in practice within the aquaculture sector. However, first a background of collective action will be given in this chapter. After this, the concept of the global value chain will be explained. Small-scale farmers are part of the series of activities in which a commodity passes through from producer up to consumer. This series of different activities is labeled as the (global) value chain, and collective action often appears as a way for farmers to strengthen their position within this global value chain. The third concept used in this thesis is convention theory and has been chosen because it can enrich the understanding of collective action within the global value chain. It acknowledges that economic activity is not without any social embeddedness, that small-scale farmers can have different justifications for joining an organized group or cluster, and that those justifications are partly shaped by the farmers' (community) norms and values – or 'conventions'. The combination of these three concepts can contribute towards an improved understanding of the clustering of small-scale farmers in the aquaculture sector within the global value chain and how conventions influence the justifications farmers' have regarding to this collective action.

2.1 Collective action

The first theory that is part of the backbone of this thesis is the concept of collective action. This is discussed in the scientific world as a concept that can improve the welfare and marginal situation of smallholders by grouping themselves. In this study, collective action is used to indicate the established cooperatives or the organized grouping or clustering of aquaculture farmers. The theory can be seen as the pillar of this thesis since it is altogether about the relatively unknown field of aquaculture farmers choosing to join organized groups or in other cases prefer to work alone. This section will elaborate on the notion that collective action can be a possible development for small-scale farmers in different aspects (e.g. financial and technical) but that it is not always a success. Case studies can show that external led initiatives concerning collective action have the possibility to fail partly because of a lack of understanding of the social and cultural capital of the small-scale farmers (the agents who play a central role in that established collective action). Examples of research done in the agriculture field are given in this section to demonstrate an important factor of deciding the success of collective action – namely the farmers themselves and their participation.

In most developing countries, individual smallholders face various constraints regarding their commodities and the marketing of it, where high transaction costs in the value chain is one of the main cause. A restricted access to physical and financial resources can be seen as a first hindrance for the small-scale farmers according to Kruijssen, Keizer and Giuliani (2009: 46). These authors go on by stating that because of this limited access, the opportunity of increasing the scale of production is also limited. The increase of production could be a solution of reducing the transaction costs and an opportunity to invest in technologies that increase the efficiency and add value. Not having enough physical and financial resources that can be invested for transport or management can cause a problem of scale for efficient marketing. A second hindrance according to the authors (ibid.) is found in the fact that small-scale farmers *“often have limited technical skills, no access to training, or information on market requirements”*. Third, a lack of bargaining power can be linked to individual smallholders who work alone and do not have big volumes for trade. This lack of bargaining power triggers an unequal distribution of value within the value chain and the involved actors. Kruijssen, Keizer and Giuliani (2009: 46) indicate that this is especially the case with seasonal and perishable agricultural products. Shrimp can be seen as such a product but then within aquaculture. The crop is a vulnerable product prone to disease and has a relatively short (shelf) life once they are out of the frost, aside from this there are specific farming seasons consisting generally on one crop in the dry season and another crop in the wet season.

In the current literature about smallholders, it generally states that both research and practice shows there is a way for smallholders to overcome these setbacks mentioned earlier. To overcome market failures and maintain their market position, smallholders

should organize themselves into farmer groups or producers organizations. Smallholders act collectively when organizing themselves and therefore, according to Markelova and Meinzen-Dick (2009: 1), they

“... would be better positioned to reduce transaction costs for their market exchanges, obtain necessary market information, secure access to new technologies, and tap into high-value market, allowing them to compete more effectively with large farmers and agribusiness.” (Markelova & Meinzen-Dick 2009: 1)

This acting collectively involves interdependency among individuals, according to Sandler (2004: 7). The contributions or efforts of one individual influence the actions of other individuals, therefore implying a strategic interaction. Social capital is often referred to this interaction and the context of the formation of groups that form the basis of collective action. The concept of social capital is described by Coleman (1988: S98) as *“the structure of relations between actors and among actors”* where Kruijssen, Keizer and Giuliani (2009: 47) add in the end *“... that encourages productive activities.”* Social capital therefore enables the cooperation – collective action – and this can make a significant contribution to producer markets by providing access to information and a reduction of the costs of contracting and coordination. Other proponents of collective action, Johnson, Suarez and Lundy (2002: 2), state that

“Individuals and groups who can work collaboratively and establish and maintain both trust-based relationships and networks of contacts will have an advantage over their competitors who cannot. [work together]”

As the previous paragraphs show, collective action or more specifically the cooperative, has often been hailed as the answer for the problems and setbacks farmers encounter within the (global) value chain. Burke (2010: 3) also mentions the notion that collective action can assist the farmers to compete against socio-economic and ecological exploitations that occur within the global market, when developing countries are being used for cheap natural resources and a cheap market for goods. Because this kind of exploitation is said to be happening all over the world, collective action is therefore also occurring universally to compete against this kind of exploitation – with different commodities and with different outcomes of success. Different case studies of agricultural products and the role of collective action will be given in the next paragraph to emphasize what an important factor of success is with regards of efficacious collective action. They will show that collective action cannot always give the solution for the setbacks farmers have regarding their commodity and the market.

As has been shown in the analysis of Wollni and Zeller (2007), partaking in a cooperative with regards to coffee smallholders in Costa Rica facilitated the participation in specialty markets. This lessened some of the hardships regarding to

coffee bean production and offered higher prices in respect to the conventional coffee sector. Another progressive example can be seen in the case of two cooperatives in Paraguay that has been studied by Vásquez-León (2010: 70): one exporting organic sugar and the other one exporting bananas. Because of the support the cooperatives give towards integration in the global market and the global value chain, they illustrate processes of deep transformation that are taking small-scale producers into unexpected paths and giving them the hope of having a say in their own destiny.

The previous case studies illustrate collective action as a success in changing the farmers' lives in a positive way in certain aspects. However, there are also various case studies that illustrate something different – collective action does not per se improve market access or the financial situation in general for small-scale farmers. It should not be seen as the solution for every situation since the potential benefits of collective action are very product and context specific, and they also depend on the concrete collective activities that are pursued according to Fischer and Qaim (2011: 1267). For example, research of Jena, Chichaibelu, Stellmacher and Grote (2012) about cooperatives and certification in relation to small-scale coffee producers in Ethiopia showed that the differences in production and organizational capacities between the local cooperatives were mirrored in the extent of the benefits relating to certification for the smallholders. This demonstrates that it is important to focus on increasing the technical, financial and human capacities of the local (coffee) cooperatives since that will also increase the benefits. This focus will make them stronger and more effective partners in the value chain instead of focusing only on the grouping itself. Another example is the case study of Burke (2010) of the Brazilian cooperative – AmazonCoop – which connects indigenous Brazil nut harvesters and the multinational firm The Body Shop through trade and development projects. While focusing on indigenous symbolism to generate significant material benefits for both parties, it went a different way. According to Burke (2010: 3) the cooperative made

“ ... indigenous people more vulnerable and dependent, failed to promote participatory development, masked the effects of unfavorable state policies, and perpetuated discriminatory distinctions among indigenous people.”

Collective action can play a critical role for smallholders to get a better price for their products as well as to adapt to the changing global supply chains. Nevertheless, it should be taken into account whether or not the incentives and enabling conditions for farmer groups to form and operate successfully are present when considering the applicability and effectiveness of collective marketing. Markelova, Meinzen-Dick, Hellin and Dohrn (2009: 6) remark that if those incentives and enabling conditions are missing, collective marketing will not be as profitable or sustainable as hoped.

The existing literature is mainly focused on agriculture, although the combination of collective action and aquaculture is more and more recognized as important in scientific

literature (Umesh et al. 2010; Kassam, Subasinghe & Phillips 2011; Padiyar et al. 2012; Ravikumar & Yamamoto 2009). The literature discusses the increasing problems in shrimp aquaculture with regards to access of international markets because of standards getting higher and difficulties with accessing knowledge and information. Aside from this, small-scale farmers in the shrimp sector are generally unorganized and access to *“technological innovations and scientific applications”* is hard to acquire for them, according to Phillips and Subasinghe (2010: 39). These authors (2010: 39) further state that through recent experiences in Asia, such problems can be addressed through

“Support to building of small-scale local farmer organizations where farmers can work together to adopt better management practices and develop sufficient economies of scale and knowledge to participate in modern market chains to improve management of the aquaculture sector and empower producers to participate in decision making and self regulation.”

In line with this thinking was the Third Session of the FAO Committee on Fisheries Sub-Committee on Aquaculture held in 2006, which wanted to stimulate further focus on the farmer organizations and its establishment and development. Phillips and Subasinghe (2010: 41) state that the committee is of opinion that farmer organizations could support improving the management of the aquaculture sector and empower producers to participate in decision-making and becoming more self regulated.

Since the success of collective action is often product and context specific, as was stated previously with the case studies, it is important to not rely too much on agricultural examples and focus on the specific products aquaculture has to offer. This thesis can therefore contribute towards this relatively new field of research of collective action in aquaculture, specifically in the small-scale shrimp sector. As stated in this section, the success or demise of collective action can often be linked with the extent of participation of the farmers themselves and the (absence of) attention placed on those key actors by external organizations. This reflection suggests that by making collective action fit within the farmers' cultural and social background it could increase the success and sustainability of it.

Although successful or not, collective action by small-scale farmers can be seen as a reaction on the processes that take place within the global value chain, which the farmers are a part of. With changing regulations and standards within the chain, and with actors being positioned stronger than others, there is a certain dynamic within the value chain. The farmers react on this dynamic relating to the distribution of value, power and market access. The next section will explain this notion of the global value chain and its dynamics further.

2.2 The global value chain

The commodity of small-scale aquaculture farmers passes through different activities where production is one of them. Small-scale aquaculture farmers are part of this series of different activities. The value chain – commodity or supply chain is also applied – is a reoccurring concept in this chapter within the discussed theories and therefore needs elaboration; it is an important aspect in the small-scale aquaculture farmers' production and vice versa. Also, collective action is often established to empower the farmers' position within the global value chain. Kaplinsky and Morris (2001: 4) define a value chain as:

“The full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers and final disposal after use.”

As it becomes increasingly common that the activities (mentioned above) are spread over international borders and are not constrained within one country, the term global value chain is more suited in such a case. The definition can make it sound simplistic, but in reality it may be difficult to clearly delineate a single value chain that may contain several different strands and multiple actors. Identifying the value chain by tracing discrete steps in production through to consumption is, however, typically a first step in analyzing the value chain. Mitchell, Shepherd and Keane (2011: 11) indicate that each step represents a stage in production as encompassed by the term value chain 'node'. The use of the word 'chain' suggests a focus on vertical relationships between buyers and suppliers and the movement of a good or service from producer to consumer. Bolwig et al. (2011: 23) state that processes of coordination and competition among actors operating in the same function or segment of a particular chain are described as horizontal coordination, and are often given less attention. The importance of this horizontal coordination will be elaborated on later this section.

Along the value chain, different actors are present and coordinate or connect with each other. These actors could have the possibility to influence or steer the trajectory of the commodity through the value chain with their decisions and actions. This view corresponds to the idea of embeddedness (Granovetter 1985; Polanyi 1944). This concept suggests that economic relations between individuals or firms are embedded in actual social networks and do not exist in an abstract idealized market - in social or political isolation. Taylor (2005: 131) dwells on this and states that the apparently objective organizational imperatives of production and trade in current globalizing markets are shaped by particular constellations of social and political relations. By acknowledging the concept of embeddedness, Granovetter and others made an improvement in the understanding of market activities and the influence interacted

roles and relations have on those market activities (see a review by Biggart & Beamish 2003: 450).

The grouping or clustering (collective action) is occurring within different commodities and value chains. As stated in section 2.1, some authors argue that collective action can help strengthening the position of the small-scale farmers' within a global value chain and to upgrade the global value chain. Such an upgrading means, according to Mitchell, Coles and Keane (2009), *"acquiring the technological, institutional and market capabilities that allow resource-poor rural communities to improve their competitiveness and move into higher-value activities. In short, upgrading is the process of trading up."* Different forms of upgrading can take place, where the main forms are (Fromm 2007; Mitchell et al. 2009): the process upgrading that increases the efficiency of internal processes, the product upgrading which produces higher-value products, and the functional upgrading increases value by increasing or reducing the number of activities performed by individuals, changing the mix of functions performed by actors in the value chain.

By taking the concept of embeddedness into account, a better understanding can be made about the social aspects that are involved throughout the value chain according to Taylor (2005: 131) and specifically throughout the processes of collective action and the upgrading of the value chain. If markets, value chains and economic activity can be seen as embedded in social networks, it would be important to be aware of these broader social aspects that are involved and influence the economic activities. Studying the horizontal coordination along the production 'node' (e.g. the small-scale farmers) of the value chain could contribute towards a better understanding of these social aspects involved. According to Bush and Oosterveer (2007: 386):

"Understanding the horizontal dynamics of the chain results in a greater sensitivity to socio-political dynamics in production and consumption and also to the influence individuals can exert at each transaction, drawing in a wider group of actors, both directly and indirectly related to trade and contributing to the life history or biography of the commodity."

The focus on the horizontal dynamics could therefore give a better understanding of the commodity itself but also of the different stages it goes through and the role of the different actors involved. Nugraha (2010) states that social relations, values and norms, as well as orientation, common practices and habit exert strong influences on determining the behavior of and thus the interdependency between agents in the value chain of shrimp.

As been explained in section 2.1, these social and cultural background of the community where collective action takes place or is facilitated by external development organizations, are sometimes overlooked or not integrated within the model of

collective action. When development organizations try to build a model for collective action that will strengthen the position of farmers within the global value chain, this model is often based upon a neo-liberal approach. This approach fits most in the global market with its changing regulations and standards. The upgrading of the value chain in this way is more policy oriented – focused on how to comply with the changing market regulations and standards – and shows a more functional approach of improving the farmers' position within the global value chain. This functional upgrading of the value chain and the understanding that this is how farmers can get a stronger position within the value chain is argued to be a more individualistic and policy oriented approach (with regards to changing regulations and standards). Being functional, it tries to get the business mindset that exists on a global level (especially in developed countries), within the farmer community. However, this can partly be the cause why some collective action initiatives do not succeed in the way the development organizations want it to. A farmer lives within a community and cannot always act individually, but mostly acts within the social and cultural norms that exist within the community. These existing norms and values can influence the farmer's justifications towards collective action within the global value chain, and will be discussed in the next section with convention theory.

2.3 Convention theory

A group of French scholars, among which sociologists L. Boltanski, A. Desrosières and P. Pharo, and economists F. Eymard-Duvernay, O. Faverau, R. Salais and L. Thévenot, shared a frustration with, what they saw as, specific shortcomings within the scientific world according to Rosin and Campbell (2009: 36). The first shortcoming was accounted to the statements involving the hypothetical economic rational actor, whose decision and behavior is based on pure objective and rational thoughts. Whereas the second shortcoming related to the opposite line of thought, namely that certain independent structures in the social world restrict the behavior of an actor, making the actor not totally 'free to choose'. Those shortcomings were perceived in the purely atomistic behavior of putative economic actors on the one hand, and the overly intellectualized social structures of Marxist and Bourdieusian approaches on the other. According to Rosin and Campbell (2009: 36), the French scholars had an objective to develop explanations located in the negotiated interchange among actors that established shared understandings of the parameters within which social, as well as purely economic, exchange occurred. Their combined thinking resulted in an emergence of an approach emphasizing the role of coordination in alleviating the inherent uncertainties of human engagements and thus facilitating more efficient social interactions (Boltanski & Thévenot 2006). This approach can be entitled as convention theory and it provides the means to find a balance between existing deterministic approaches. It offers a way to step beyond the rational actor operating in such way that he or she gets the maximum (economic) benefit and to step beyond the view of structuralism, which implies that the agency of an actor is influenced (and limited) by social structure (e.g. recurrent patterns, norms and values). The idea behind conventions will be explained in the upcoming sections, stating that conventions are often agreements in terms of how a person should

act or coordinate – but these conventions are based on rules, which according to Favereau and Lazega (2002: 23) “... *do not determine behaviour mechanically because they have to be interpreted and applied.*” Convention theory therefore acknowledges the importance of norms and values in actions of economic actors but also acknowledges the role of structure in this action, creating a more nuanced view within the two opposite lines of thoughts mentioned earlier.

Contemporary literature does focus on the connection of organizations and conventions (Favereau & Lazega 2002) and even on cooperatives and the conventions linked to the quality of their commodities (Coq-Huelva, García-Brenes & Subco-i-Cantó 2012). However, the connection made between the conventions in relation to the justifications farmers have to join a group or organization and the process of that collective action is not explicitly mentioned in contemporary literature. This is quite surprising since those two concepts are evidently intertwined as will be elaborated on in this section – collective action is guided and justified by the inherent conventions of the actors, since economic activity is socially embedded. This section will elaborate on convention theory and its nature of viewing economic activities embedded in social networks. Those economic activities cannot simply be seen as objective, rational activities done for the best (economic) outcome. As previously mentioned, some initiatives of collective action do focus on this with the functional upgrading of the value chain. However, norms and values can play a big role in economic activities and this is linked to the fact that collective action can be seen as such an economic activity. Because of the emphasis on the socially embedded nature of economic activities, convention theory is selected in this study to clarify the justifications taken by small-scale farmers to join an organized group or cluster – creating a framework for studying the horizontal dynamic of production in the value chain.

2.3.1 The six cités of convention theory: six worlds of justifications in economic action

As has been explained in the previous section, convention theory argues that coordination between actors in the economic sphere is not merely grounded on a rational economic approach. Socially defined rules – the so-called conventions – also partly establish those economic coordinated activities in the economic sphere and individuals participate within collective rules. Raynolds (2002: 408) indicates that by analyzing the varied social construction and institutionalization of quality, the socially embedded nature of economic action is highlighted by convention theory and “... *the varied rules, norms, and conventions’ which foster commodity production and exchange*” is identified. This can also be said about using convention theory on analyzing the varied social construction and institutionalizing of collective action. Convention theory interprets productive activity as a form of collective action meaning, according to Storper (1997: 36), one form that relies upon the coordination of various actors. To act productively depends on the actions by others, which can render or improve the efficiency of the actor itself. At the heart of this collective action are the conventions,

which are defined by Salais and Storper (1992: 171) as “*practices, routines, agreements, and their associated informal and institutional forms which bind acts together through mutual expectations.*” Collective action can therefore be seen as economic activity that is grounded (and justified) on specific rules, norms and values that are present in the community where the economic activity takes place.

All action is justified in relation to a common set of principles, which according to Boltanski and Thévenot (2006), can be categorized into six orders of justifications or ideal typical *orders of worth* which is each linked to a general principle or *polity* (e.g. the domestic polity). Jagd (2011) clarifies that the notion of polity is an abstract model related to orders of justification. While the notion of worlds, according to Nachi (2006: 128, cited in Jagd 2011: 346), “*describes the concrete unfolding of orders of worth*” where qualifications of objects are made with respect to one particular polity. Boltanski and Thévenot (2006: 131) define these objects by “*their belonging to a specific world.*” Boltanski and Thévenot categorize these six orders of worth that are based on a general polity, in six common worlds. These six historically based worlds (i.e. *cités*) are developed of legitimate common welfare that draws on particular paradigms of moral philosophy. Each of these worlds is organized around different types of qualifications for people and objects, and forms of justifications and challenge. It can be seen as six worlds of justifications involved in economic action. An overview of these worlds will be given according to Boltanski and Thévenot (2006); Gibbon and Ponte (2005: 167); and Jagd (2011: 346). The world of inspiration places worth on the principle of common humanity, non-exclusion, and refers to grace and divine inspiration expressed by holiness, creativity or imagination. The domestic world originates on the principle of dignity and tradition, where worth rests on hierarchy, esteem and reputation. In the world of fame, worth rests upon the principle of difference and the opinion and recognition of others. The civic world is the fourth world, which centers on the notion of common welfare and “*primordial importance is attached to collective beings, not to individual persons*” (Jagd 2011: 346). The fifth world, the market world, justifies difference by sacrifice, effort, or investment and agreement is found on the basis of market principles (e.g. price). This world should not be seen as the sole world with economic relations, because these relations are based on two main forms of coordination; coordination by the market and coordination by industrial order. This industrial world is the last world, which centers on technological objects and scientific methods and worth rests on productivity and efficiency. This study combines the market- and industrial world within justifications of economic activity, which an explanation is given in Box 2 in chapter five. Malafaia, Barcellos, Pedrozo and Camargo (2010: 180) created a table (see Table 1) with an overview of the different worlds and their guiding principles.

In recent work relating to convention theory, different worlds developed aside from the six mentioned above. Justification build on the *green world*, the *information world* and the *network world* can be added to the list, according to Gibbon and Ponte (2005: 168). It

is important to keep in mind that the convention theory does not give a hierarchical value to these worlds; neither does it portray the worlds as historical inevitabilities. These six conventions should not be seen as solitary, stand-alone concepts and can intertwine with each other. There may be multiple justifications of action operating at the same time at any particular time and locality. Besides this, the theory behind these six worlds acknowledges that although there is an internal coherence in each world, there are also qualifications that bridge different worlds (ibid.). Principles or conventions present in one world can clash or coordinate with principles present in other worlds.

Table 1. The different worlds and their guiding principles (Malafaia et al. 2010: 180)

Order of the worlds	Forms of evaluation	Information format	Qualified objects	Elementary relation	Human qualification	Time	Space
Market	Price	Monetary	Products/services	Exchange	Interested	Present, short term	Global
Industrial	Productivity	Measurable (statistics)	Investments, techniques, methods	Functional link	Professional, expert	Long term, planned future	Cartesian space
Domestic	Reputation	Oral, exemplar	Property, specific assets	Trust	Trustworthy	Habitual	Polar: anchored on proximity
Opinion	Fame	Semiotic	Media, brands	Recognition	Famous	Tendency	Visibility and communication
Civic	Collective interest	Formal	Regulations, rights	Solidarity	Representative	Stable	Homogeneous
Inspired	Innovation, creativity	Emotional	Emotions (artistic, religious)	Passion	Creative	Rupture	Presence

By acknowledging the socially embedded nature of economic activity and the different justifications involved, analysis based on the convention theory investigate how actors materially and ideologically engage particular norms, rules, and quality constructions across production, distribution, and consumption arenas. It emphasizes the simultaneity of structure and agency in commodity networks, where individual and collective actors both shape and are shaped by network relations (Gibbon & Ponte 2005; Raynolds 2002). It recognizes the balance between structure and conventions within economic activity and the importance of those both. This balance will be further explained in the upcoming section and is – together with the acknowledgement of the involvement of different justifications in economic activity – an important guidance of this study by helping to understand the justifications involved in collective action and the influence that conventions have on these justifications.

2.3.2 Conventions involved in socially embedded economic activity

Conventions are generally defined as “a broad group of mutual expectations that include – but are not limited to – institutions” (Ponte 2009: 100). Institutions can be seen as collective and intentional objects that are set up for the purpose of implementing an

intention. Conventions, however, may also arise from a shared set of regularities that are unintentional. In the line of convention theory, rules are not decided prior to action but can emerge in the process of actions aimed at solving problems of coordination. Ponte (2009: 100) further state that at the same time, economic action may be tested and therefore needs to be justified by drawing on a variety of criteria of justice that are broadly accepted at a particular time. This means that convention theory connects found economic activities to widely accepted normative models within the community. It is important to keep in mind that conventions are not fixed in time and space and can be seen as dynamic – they include mechanisms of clarification that are themselves open to challenge (and change). Ponte (2009: 100) makes this clear by stating that conventions are:

“ ... both guides for action and collective systems to legitimize those actions that can be submitted to testing and discussion, leading to compromises and possible defeat.”

Seen this way, there is a complex plurality of forms of justification and coordination present in economic action. Justification points to the reasons economic agents – the small-scale farmers for example – have for their economic actions or the explanations they take for their actions. In this study it mainly covers the justifications the farmers have for joining different collective action groups. Coordination, in this respect, indicates the level of interaction that is arranged between the small-scale farmers regarding to their economic activities. According to Salais and Storper (1992: 171):

“ ... coordination between economic agents takes place within a context of pervasive uncertainty with respect to the actions and expectations of other actors. Conventions emerge as responses to such uncertainty ... ”

According to this view, the justifications and coordination are connected with the economic action and has an influence on it. This aspect of the theory and its importance has been recognized and explained in social- and economic science literature. According to Murdoch and Miele (2004; as referred to in Coq-Huelva et al. 2012: 79) the theory permits a better understanding of the interaction between the prevailing cultural norms and the behavior of the agents in the value chains. As stated in the introduction of this subchapter, convention theory wants to step away from the view of individuals as rational agents whose economic activities are only chosen for the most optimal outcome. The theory rather corresponds with the concept of embeddedness, which has already been mentioned and explained in this chapter. Proponents of this embeddedness concept state that it makes an improvement in the understanding of the market activities and the influence that interaction throughout roles and relations have on these market activities. However, some authors mention that the embeddedness approach – as it is currently configured – continues to be a partial explanation since it puts too much

emphasis on the influence of structures of markets. Krippner (2001) and Zuckerman (1999) (as cited by Biggart & Beamish 2003: 450) explain this by stating that

"In pursuing a role- and relation-based understanding of market arrangements, embeddedness scholarship treats markets as structurally determined and implicitly outside the realm of meaning, interpretation, and individual agency." (Krippner 2001; Zuckerman 1999 as cited by Biggart & Beamish 2003: 450)

Convention theory can assist in making it a more complete explanation without pointing only towards the influence structures have on economic activities. The theory views markets as being envisioned of as concepts that has concrete existence that represents agreements of mind and meaning by the actors. Those agreements are reproduced through ongoing social participation and social investment made by actors (e.g. the small-scale producers). According to Wilkinson (1997: 322) the theory permits a conceptualization of both cooperative as competitive relationships among the different stages in the value chain in which conventions are continuously accepted, contested and traded. This is one of the reasons why the theory is chosen for this study: to conceptualize the conventions involved in the economic activity within small-scale farmers when grouping or clustering and how these are accepted, contested and traded. Lazega and Favereau (2002: 1) state that for individual actors in economic activities (i.e. production, exchanges), conventions and structures represent two different types of opportunity or constraint. The authors state (2002:1) that:

"Conventions refer to values, rules and representations that influence economic behaviour. Structures refer to patterns of interests and relationships reflecting resource interdependencies among members of any social system."

Favereau and Lazega (2002) go on and state that individuals use conventions and interdependencies to forward their own interests while living in social environments where everyone does the same. Again, this combination of structure, and norms and value is acknowledged by convention theory. To construct durable organizations and viable markets, it is important for the actors to handle both. For example, according to Vollaard (2011), external influence in collective action (through NGOs or the government) has often been part of the cause that collective action failed – with a top down approach it can have a negative effect on the trust and reciprocity that has been established within a community. Storper and Salais (1997: 18) agree that convention theory applied to collective action offers the potential of a richer analysis because it accepts the central role of the tension between action (agency) and structure that people live with in the course of ordinary economic life. It does not diminish the importance of structure neither that of agency, since actors partly shape the recurrent patterns (conventions) in the social and economic world, but their agency is also socially structured (by the

existing structures) – the two concepts have a tight relationship with each other that should not be overlooked.

This thesis will focus specifically on the potential of convention theory as a means to represent economic exchange as the product of the negotiation of commonly recognized meanings and standards – referred to as conventions – that establish orders of worth (each associated with a corresponding world of justification) for the services and quality provided by collective action in the eyes of the small-scale shrimp farmers (Rosin & Campbell 2009: 37). It will engage in a perspective derived from the theory of conventions that, according to Murdoch and Miele (1999: 467), sees production and coordination as typically constructed within particular production ‘worlds’, according to a particular collection of conventions. In this thesis, specific attention will be given to the relationship of different worlds involved in the different forms of collective action, which can provide a framework for understanding certain conflicts or reconciliations related to the justifications farmers have of joining or creating a collective action initiative or not.

3. Methodology

“Unlike objects in nature, humans are self-aware beings who confer sense and purpose on what they do. We can’t even describe social life accurately unless we first grasp the concepts that people apply in their behaviour.” (Giddens 2006: 78)

The methods used in order to answer the research questions and to get more insight into the subject under consideration are qualitative of nature. Qualitative research mainly tends to be concerned with words rather than with numbers and has an inductive view of the connection between theory and research, whereby the former is generated out of the later. Aside from this, qualitative research has an epistemological position described as interpretivist. Bryman (2008: 366) describes that interpretivists place the emphasis on the understanding of the social world ensuring it by scrutinizing the interpretation of that social world by its participants. This interpretative rather than explanatory approach fits well with the convention theory used in this thesis. Convention theory and the interpretive approach deploy the same methodology stating that rules are not prior to action nor are they elaborated from outside the action. Instead, rules emerge within the process of actor coordination. These rules can be seen as dynamic representations of dialogues between the social actors and as such depend on the existence of prior commonalities among those actors involved. As explained in the previous chapter, convention theory also wants to justify social or economic phenomena by focusing on the negotiated interchange among actors who establish a shared understanding of the parameters within their world. These rules or conventions are not fixed in time and space but are developed and contested by the actors themselves through their actions. Both convention theory as the interpretive approach are convinced that those common rules do not exist in an objective or abstract world neither can those be found out by using pure rational thinking.

“Rather it has to be recursively interpreted in given situations through the way in which actors relate to a common set of objects which are mobilized through their action. The qualification of objects therefore is simultaneously the qualification of the actors involved.” (Wilkinson 1997: 318)

The last noteworthy feature of qualitative research is its ontological position defined as constructionism. This approach considers the creation of constructs and understanding between people and within societies. Construction of the social models is seen as a social process whereby rules and conventions are not simply already existing phenomena but they emerge from ongoing conversations and interactions between individuals (Bryman 2008: 366). These rules and conventions play a central role in this thesis research, which has been carried out for two months in the Aceh province of Sumatra in Indonesia after conducting a four-month internship in the same location with the small-scale shrimp farmers.

The methodological issues and aspects relating to this thesis and the research carried out will be presented in this chapter. Where the theoretical framework has shown the theoretical methodology, the building blocks that guide the analysis of the data and other aspects of the thesis, this chapter will elaborate on the practical methodology – how the data was obtained. First, an introduction of the area will be given and an explanation of the selection of the involved informants and the chosen sampling method will follow. Then it will continue by given an overview of the research methods applied during the research. The chapter will conclude with the scope and limitations of this thesis research.

3.1 The area of focus: situated in Aceh

The research of this thesis has been carried out in the Aceh province, which is a province on the northern end of the island of Sumatra in Indonesia (see Figure 1). Bireuen was the main area of research where most of the informants lived and worked in the shrimp trade. Besides this, some informants lived and worked in the districts of Lhokseumawe and Aceh Utara. Before the research began, an internship facilitated by WorldFish was conducted for four months situating at the Aceh Aquaculture Enterprise in Bireuen. This made it possible to collect data during the whole period of six months, to conduct regular field visits and to get a good relationship with the small-scale shrimp farmers in the different villages situated in the three districts. These areas were chosen because of their proximity of Bireuen and because the Aquaculture Livelihood Service Center program was conducted in these areas as well.



Figure 1. Administrative map of Aceh (Phelps et al. 2011: 422)

3.2 The informants: Acehnese small-scale shrimp farmers

The main actors that play a central role in this research are the small-scale shrimp farmers in Aceh since they are the persons who choose to join or establish a cooperative or not. By mainly focusing on the farmers during the interviews and field visits, their conventions and other aspects involved in collective action could be identified. The most important issue was to find out what drove certain small-scale farmers to either join a cooperative or not, their changes made in this choice, and what conventions were involved with this. The timing of this thesis was well-timed, because most of the developing agencies involved in developing the Aquaculture Livelihood Service Centers (ALSC) were gone of Aceh and the Aceh Aquaculture Enterprise (AAE) was just starting to set up their cooperative model. This made it possible to compare the different roads the Acehnese shrimp farmers took involving collective action after the withdrawal of the development agencies. To achieve this understanding in a most optimal way, purposive sampling was used which is part of the nonprobability-sampling category often applied in qualitative research. Mack, Woodsong, MacQueen, Guest and Namey (2005: 5) explain this entitlement of purposive since it involves sampling with a purpose in mind and a search for one or more specific predefined groups with preselected criteria relevant to the research question. A nonprobability sampling was chosen since there is no accurate numeric estimation of the total amount of farmers present in Bireuen (or the other two districts) and therefore a probability sampling with a sampling frame was not possible to carry out. Aside from this, it was impossible to randomly select farmers because the research needed farmers with specific criteria. Marshall (1996: 523) describes that a random sample is not the most successful way of getting an understanding of the complex issues concerning human behavior. Considering the aim of this study, it is therefore better not too use a pure probability sample.

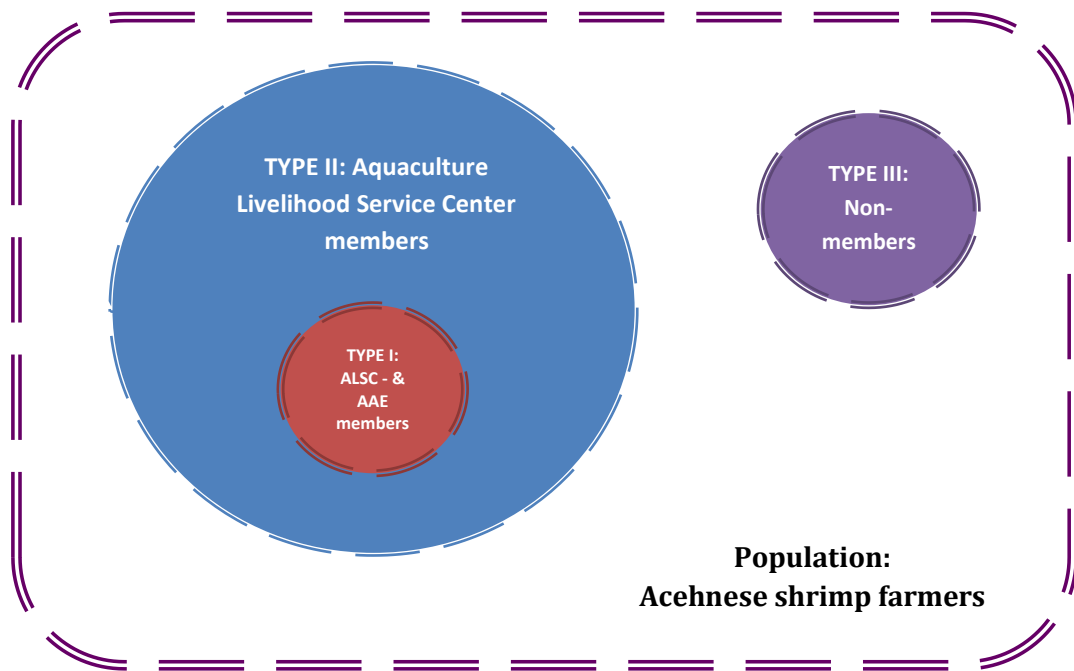
In this study, the sampling involved the Acehnese small-scale shrimp farmers' population and three subsets of this particular population were chosen. The first subset include the farmers that both joined the Aquaculture Livelihood Service Center organized by development agencies, and the Aceh Aquaculture Enterprise set up in 2011. The second subset contains the farmers that were a member of the ALSC and did not join the Aceh Aquaculture Enterprise. Finally, the third subset addresses the farmers that did not join both of these cooperatives (see Figure 2). From each subset, fifteen informants were chosen for the semi-structured interviews (elaborated on in the next section) making a total of 45 informants of farmers, whom some of them were a toke (trader) and/or a group- or cluster leader as well. In social research literature, the distinction is occasionally made between an informant and a respondent. An informant is seen as a person who can describe their culture – of the group they are in – in their own words and who is highly knowledgeable in the social phenomenon that is analyzed. Respondents, however, can be seen as the people who talk about their own experiences, their own opinions and ideas, and contribute with information about themselves (Babbie 2011: 209; Bernard 2000: 192). When looking at these descriptions, the persons

that got interviewed for this research took both the role as informant as well as respondent. Sometimes personal questions were asked about their own lives and choices whereas, in the same interview, questions could be asked about the rules of the cooperative or their community. In this thesis, the word 'informant' is used but does not mean to exclude the role respondents can have.

Along with the semi-structured interviews, two focus group discussions were carried out within each subset as well, creating a total of six. These groups were a mix of informants involved in the interviews and informants who were not. The informants were selected justified on the overview the Aceh Aquaculture Enterprise had with their membership database and the collected membership databases relating to the Aquaculture Livelihood Service Centers. Aside from this, the persons working in the AAE team could help me with choosing the farmers who fit the specific criteria since the team also had been involved with the ALSC's and they communicated daily with both member- as well as non-member farmers. Some interviews were held with farmers that did not fit neatly into the three subsets, but they were done anyway to receive extra information and because it was not polite to reject a farmer who wanted to be interviewed and had taken the time and effort already. These interviews are seen as additional interviews but are not taken into account within the 45 interviews discussed above used for comparison.

The selection of the farmers depended on logistical means, suggestions from the translators, time availability and coincidental encounters during field visits. However, they all met the criteria relating to the different subsets. It could happen that informants suggested or invited another farmer, friend or family member for an interview who corresponded with the criteria of a subset. This acquisition of informants – occurring through a process of accumulation with each informant suggesting another informant – can be seen as a network sampling method described as the snowball sampling (Babbie 2011: 208). Although this is not the main sampling method used, it did contribute to selecting informants and it does fit with the qualitative research frame. According to Bernard (2006: 193), the snowball sampling can be an effective and fast way to build up a sampling framework because people within a relatively small population are likely to know others within their population. The fact that the sampling was not completely random was already recognized by the kind of sampling chosen for this research and fits better into the aim of this thesis – describing and explaining a social and economic phenomenon (Bernard 2006: 190). This kind of sampling made it possible to dig deeper into the purpose of this thesis: to study the farmers their justifications towards collective action. An overview of the informants involved in this research can be found in Appendix 1.

Figure 2. Overview of the three subsets (types) of informants within the Acehnese shrimp farmers' population



Aside from the small-scale shrimp farmers, information was collected – mostly through informal interviews – from other experts working in the shrimp- or aquaculture business in Aceh and from the persons working in the Aceh Aquaculture Enterprise. The characteristic of informal interviews is mainly a total lack of structure or control. As reported by Bernard (2006: 210), conversations heard during the course of a day in the field (or office) need to be remembered in this kind of interaction and written down as soon as possible. Because of the (informal) interviews and conversations with these informants, a better understanding was given of the technical and economic aspects relating to shrimp farming and they elaborated on issues that farmers told during the semi-structured interviews.

3.3 Research methods

Some light has already been shed on the chosen research methods for this thesis in the previous sections which can be seen as the main methods used for collecting the data (e.g. semi-structured interviews and focus group discussions). However, in this section a detailed overview together with the justifications will be given of all the methods used. A diversity of methods is used in this study to suffice to the idea of triangulation. This concept “*entails using more than one method or source of data in the study of social phenomena*” (Bryman 2008: 379) and ensures optimal reliability and validity of the research outcomes. Misunderstandings could be discovered more easily by conducting interviews, focus groups, observation and literature study; and comparing the findings from these methods. This kind of triangulation is called between-method triangulation, which entails that two or more distinct methods are employed to measure the same phenomenon but from different angles. Arksey and Knight (1999: 23) state that the

rationale in this is that the weaknesses of one research method can be offset by the strengths of the others in a cumulative way.

This section will start by giving an elaboration of the interview methods. Followed by a subsection explaining in detail the focus group discussions. The last subsection will state the rest of the research methods used aside from the two main ones, namely observation and literature study.

3.3.1 Interviews

Interviews were used in this study to get more insight into the Acehnese shrimp farmers' lives, their participation in collective action and the involved rules and conventions. The primary interview type that has been used during the research can be defined as semi-structured. This type of interview is flexible, open-ended and discursive in nature. According to Bryman (2008: 439) it permits an iterative process of refinement where lines of thought that were identified by earlier informants can be taken up and discussed with the following informants. It fits with the interpretivist approach and convention theory since it has the capacity to provide insights into how informants view and interpret the (social) world. An interview guide has been made before carrying out the interviews and was altered and improved based on the experiences of the first couple of interviews. The final interview guide can be found in Appendix 2. An important notice is that the guide was there to follow and make the data reliable and comparable. However, when informants brought up an interesting issue it was possible to diverge from the guide and elaborate on that issue – while no haste was made trying to finish all the questions on the guide. Normally, the 'formal' interviews would last around one hour but it depended heavily on the time schedule of the farmer and on the open and loquacious character of the farmer. It often happened that interesting issues came up after the 'formal' interview was done. Counting all the completed interviews, it makes a total of 48 interviews because three farmers that did not 'fit into' the three subsets were coincidentally encountered and enthusiastic for an interview. These farmers were a member of the Aceh Aquaculture Enterprise but did not know the Aquaculture Livelihood Service Center program. However, these interviews were also valuable to the study since it made it possible to practice the interview- guide and techniques and to ask for clarification or explanation for issues that were not brought clearly by other farmers. Because this thesis evolves around abstract concepts such as 'conventions', 'norms' and 'values', the semi-structured interviews made it possible to trigger the farmer to tell his experiences and to probe for clarifying examples.

Aside from this, interviews were held during the overall period of six months that were informal in nature. These informal interviews took place while driving to the field with the manager of the Aceh Aquaculture Enterprise or with the farmers during the harvest, the weighing of a sample of shrimps or during rest time for the farmers in their outdoors *pondok* (simple, self-made shack) close to their *tambak* (the pond). Informal interviews merges with normal conversations in such a way it is a mixture of a conversation with

an embedded question in it and an implicit research agenda. This type of interviewing method also suits the interpretive and convention approach since it is useful for discovering “*what people think and how one person’s perception compares with another’s*” (Fetterman 2010: 41). This made it possible to know the informants’ thoughts and gave the opportunity to compare these thoughts. By comparing the thoughts, it made it easier to identify the shared norms and values regarding collective action with the informants – this identification is one of the main issues in this thesis. One of the characteristics of this kind of interview is that it can spontaneously happen anywhere and anytime, which entails that everything has to be remembered during the day. Notes were taken as soon as there was a possibility for it, for example when the informants were gone for a minute or when the day had ended.

The semi-structured interviews were – contrary to the informal interviews – most of the time recorded by a voice recorder with the consent of the informant. However, recording cannot be seen as a substitute for note taking because there is always the possibility that the recording did not go well (e.g. did not work, not enough flash memory). That is why notes were also taken during the interview itself about the (key) content of the interview and about the interview itself (e.g. how was the atmosphere, what was the mood of the informant). This combination made the data more reliable since the recordings could be listened to several times instead of relying only on memory and the notes could add issues that were not recorded. An observation throughout the research was that especially after finishing the interview, informants would come up with interesting issues related to the research. Because of this, the recorder was always on for as long as possible.

A good method to complement the interview methods with is the focus group discussion, which has also been carried out in the study and will be explained in the next subsection.

3.3.2 Focus group discussions

In the two months of research in Aceh, six focus group discussions were held with each discussion having four up to twelve informants. According to Bryman (2008: 474) the focus group discussions require several participants with an emphasis at the questioning on a particular, fairly tight, defined topic and the accent is on interaction within the group and the joint construction of meaning. This method features the contextual approach, which avoids focusing on the individual who is devoid of social context or separated from interaction with others. The approach acknowledges the importance of social context. A second feature stated by Wilkinson (1999: 64) of the focus group discussion is the presence of a relatively non-hierarchical style which implies a shift in power away from the researcher and towards the informants making it a good atmosphere for the informants to speak their minds.

Two different types of focus group discussions were carried out within each of the three subsets, making it a total of six focus group discussions held. One type was based on the 'participatory value chain mapping' concept. This concept, according to Albu and Griffith (2005), is used for making the somewhat abstract value chain amongst commodities more concrete by mapping all the involved actors, structures and institutions and the services that (could) support the chain. In this study, this type of focus group was mainly used to understand how the farmers perceive the stages throughout the value chain, what the relationships and conventions are between the actors and what supporting services are provided throughout the chain towards the farmers. Normally, participants of the focus group should be people involved in the different stages of the value chain, but it was chosen to only invite farmers – including cluster leaders, group leaders, village leaders and *tokes* (traders). This way, the focus could be placed on the farmers their opinions and perceptions on the shrimp market and above all on the relationships, conventions and services involved. The second type of focus group that was used for this study is the one built on the 'institutional analysis'. This type of focus group made it possible to go more in-depth into the issues spoken of in the market mapping focus group by narrowing the focus. The emphasis in institutional analysis is according to Geilfus (2008: 41) on the organizations and groups that are active in the shrimp farming community, the interaction between the farmers and those groups and organizations, and how the farmers see those organizations and their (possible) value. Again, the principle was customized to my study, inviting only the farmers to this kind of discussions to fully understand their interpretations.

These two types of focus groups were held separately from each other within one subset of farmers, lasting each around 1,5 hours. However, within the other two subsets of farmers the two different types of focus groups were combined in one session and lasted two hours each. This combining of the two different types in one session was made because of a time restriction issue (not all farmers had time to be present on two different data) and because it was observed that more fruitful discussions came up when discussing and linking both issues in one session.

The combination of interviews and focus group discussions was a fruitful one for collecting interesting data because they complemented each other. If issues discussed during the interviews were still somewhat unclear, it could be clarified during focus group discussions and vice versa. However, this study revolved around abstract concepts like norms, values and relationships, which are concepts not easily explained or thought of by the farmers themselves. Some conventions can be so normal for the farmers that it was not brought up and could only be found out because of other data collecting methods and deliberately ask about it during subsequent interviews. Observation and literature study were such additional collecting methods that were of great assistance for these kinds of situations.

3.3.3 Observation and literature study

Since interviews and focus groups are great tools to acquire information about attitudes and values of informants, observation can be a good addition as it makes it possible to know what people actually do. This creates a mixture of getting to know how something really is (by observation) and how something should be or thought to be (by interviewing). During the full six months of being situated in Bireuen, direct observation was used that is described by Bernard (2006: 413) as watching people and writing down their behavior immediately – or rather as soon as possible. The observation was overt in nature, which involves according to Bryman (2008) openness about the reason for the researcher her presence in the field of study and a need of permission is given by the group to conduct it. This kind of observation could have a disadvantage since the behavior of those who are studied may alter due to the presence of the researcher. However, since the study took six months the informants were used to this presence and, especially towards the end, openness was created and the novelty of being watched was gone for them.

The last method mentioned is the literature study, which entails that during the research relevant literature was read to get a better understanding of the situation of shrimp farmers in Aceh and the history or organizations involved with them.

Although it was tried to perform a solid data collecting by using triangulation with the previously mentioned methods, limitations are – unfortunately – also present in this study. These limitations will be discussed in the next section of this chapter, together with the scope of the study, focusing on the concept of the case study.

3.4 Scope and limitations

This study concentrates on a specific region in Aceh – mainly Bireuen – with the small-scale shrimp farmers. This kind of context-specific focus has, according to Hartley (2004: 323) the feature of a case study, which:

“... consists of a detailed investigation, often with data collected over a period of time, of phenomena, within their context. The aim is to provide an analysis of the context and processes which illuminate the theoretical issues being studied.”

Often the nature of a case study is misunderstood and not seen as a reliable basis for generalizations because of the individual case character, or that theoretical knowledge (context-independent) is more valuable than concrete, practical (context-dependent) knowledge (Flyvbjerg 2006: 221). These are, however, big misunderstandings according to Flyvbjerg (2006) since using the case study model is good in relation to the concept of falsification – when one observation does not fit with the proposition, it can be considered as not valid generally and consequently must be either amended or rejected. The timing of the fieldwork in relation to the events in Aceh are of such an unique

character that choosing a case-study for this study only makes the research stronger and more distinct. The shrimp farmers were in an in-between situation and this made it possible to compare the different paths the farmers choose to go and to observe them directly. Because these events in relation to collective action and aquaculture are not described in such a matter yet, this case study could contribute towards a better understanding of what shrimp farmers drive to form and join collective action groups.

Unfortunately, there were also several limitations in this study. The first limitation related to the gender aspect, because I was a woman in a province with the highest proportion of Muslims in Indonesia that implemented regional levels of Sharia law. The second one relates to language and interpretation and the third limitation to the fact that I was connected with the Aceh Aquaculture Enterprise.

In an Islamic region such as Aceh there is a certain view of complementarianism, meaning that men and woman have different but complementary roles and responsibilities. During the study, it was necessary to keep a certain distance and attitude towards the male shrimp farmers since I am a woman and contact between the two sexes should be based on Indonesian and Muslim behavior. Because of the implementation of Sharia law, I dressed according to this law (for example with a *hijab* covering my hair) to show respect and to have a proper appearance when visiting the field. Although I tried to fit in, some issues were just not done which restricted the collecting of data. For example, most of the shrimp farmers stay near their *tambak* during the night since they want to feed and check on the shrimp. It would be a good experience to stay there as a researcher for informal interviews and observation, however I was not allowed (to sleep) outside in the night together with the male farmers. Instead, I had to sleep in a house that was located some blocks away from the *tambak* and did not gave the same experience and opportunity to observe as it would have been when I stayed outside.

A second limitation is an issue that often comes up when carrying out research in a country with another language and the need to use a translator. The shrimp farmers did not speak English and mainly spoke the local Acehnese language, which is different than the national Indonesian language. A translator was used for conducting the interviews, focus group discussions and informal interviews. This influenced my research since nuance can get lost in interpretation or – as reported by Pereira, Marhiah & Scharff (2009: 4) – the translation cannot “*capture the richness, depth of words or expressions; meaning and symbolism is amputated when converted to another linguistic code.*” The translators that gave assistance to this study sometimes had trouble with the Acehnese language themselves, although they came from Aceh, and occasionally the feeling came up that the interpreter did not fully cover everything the farmer said. This limitation was kept in mind during the whole study and by paying attention and asking thoroughly about sentences said, it was tried to keep to a minimum.

The last limitation relates to the fact that I did my internship in Bireuen with the Aceh Aquaculture Enterprise and many shrimp farmers connected me with that organization. My interpreters also worked for AAE and this fact could made the shrimp farmers more cautious in their answers – being not completely honest but providing answers that were more suitable for AAE to hear. During the research, attempts were made to avoid this and especially during the introduction it was made clear to the shrimp farmers that I was an independent student from the Netherlands who wanted the farmers' own opinions and stories. Although the reasons of the study were explained together with the fact that there is no such thing as a wrong answer, it should be kept in mind that the shrimp farmers could be more cautious in giving their answers and spoke with less honesty.

4. Collective Action in Aceh: with a services-discourse orientation

This chapter will elaborate on the process of the Acehnese shrimp farmers grouping together or joining an established cooperative. An overview of these different groups will be given – although it is not a complete list with all the existing cooperatives in Bireuen. The focus is mainly on the groups that were exposed during the study and the externally led initiatives initiated after the tsunami of 2004. This overview (see Figure 3) shows different initiatives involving collective action within the Acehnese shrimp farming community. The occurrence of different collective action initiatives, existing and created alongside each other, demonstrate that certain organized groups are more suited to the farmers' lives and wishes than other groups.

The chapter is written in chronological order relating the collective action initiatives and starts with a description of the externally led governmental organization for shrimp- and rice farmers. This example illustrates that the concept of collective action is not novel in the Acehnese shrimp farming community. The chapter will continue with a description of the collective action initiative led by external aid organizations, which bring in a more service-oriented notion of collective action into Aceh. Collective action literature emphasizes the role cooperatives can play in providing certain services to empower the farmers and upgrade their position within the global value chain of shrimp. This services-oriented empowerment is directed at getting better market access, improving access to higher quality of – or more affordable agro-input, and getting better access towards information and technical advice regarding shrimp aquaculture. Because of the services orientation of this chapter, an overview of each organized group or cooperative and the provided services (or assistance) will be given in Table 2.

In line with the service-oriented discourse, the subsequent internal initiated organized groups will be discussed. An examination will be given of these new forms of collective action within the local Acehnese shrimp farming community and whether or not such services discourse for a functional upgrading of the value chain is incorporated in the local initiatives. The Acehnese shrimp farmers acknowledge the importance of these services but still initiate groups of their own aside from being a member of the external led cooperative. It will be discussed what the justifications were for the shrimp farmers of initiating these internal groups in relation to the services-oriented external led cooperative. The chapter will end with a description of another collective action initiative formed by both external and internal stakeholders, which wants to continue the objective of strengthening the position of the Acehnese shrimp farmers within the global value chain and that perhaps can be seen as a mixture of the services oriented initiatives and the local ones.

Figure 3. Timeline of organized groups and cooperatives within the Acehese shrimp farming community

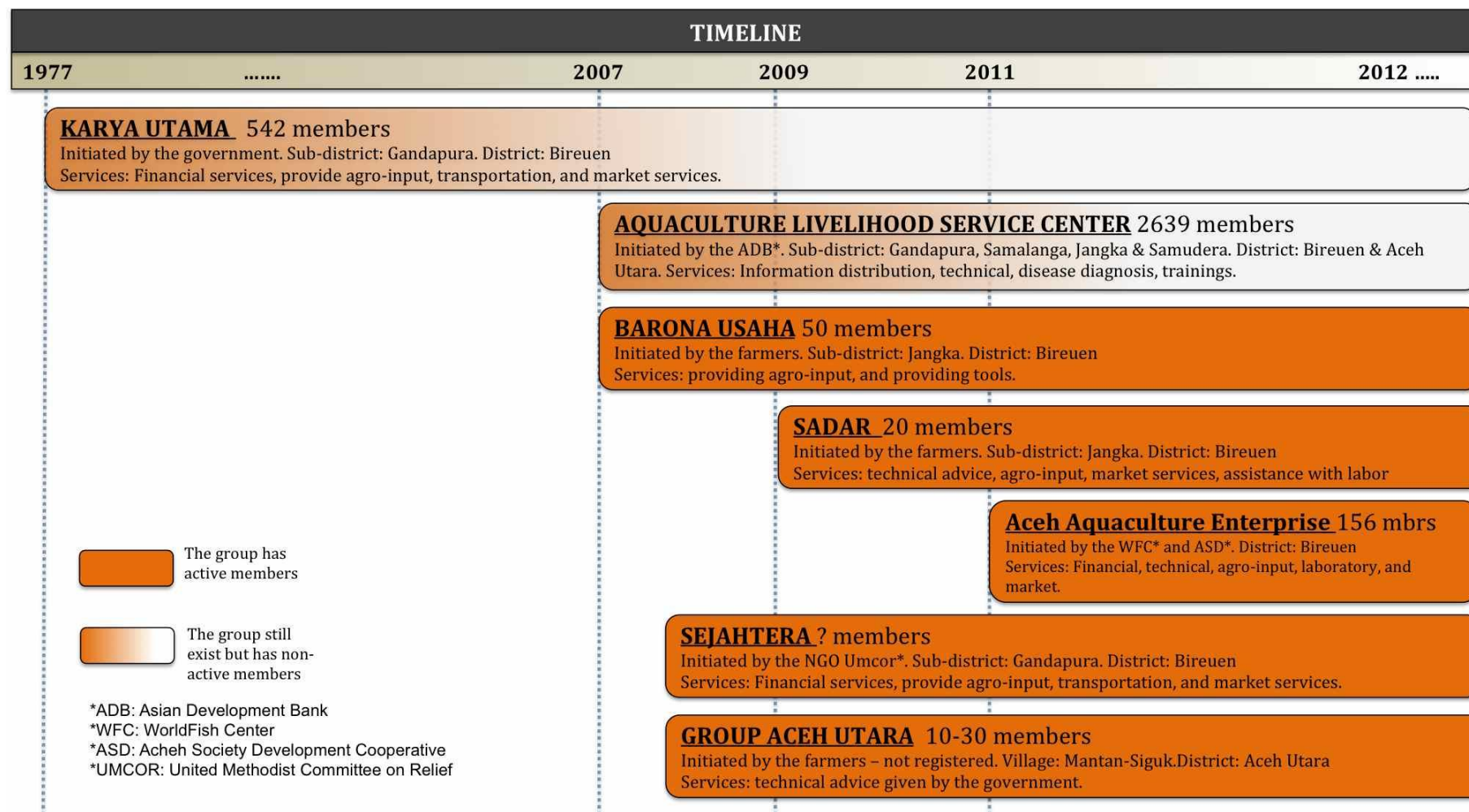


Table 2. Overview of the organized groups and cooperative, and their provided services within the Acehnese shrimp farming community

Name	Date of existence	Location	Services provided
Aquaculture Livelihood Service Center	2007 – <i>not active anymore</i> <i>In districts Bireuen and Aceh Utara</i>	Gandapura Samalanga Jangka Samudera	Information services (regarding market access) Technical information services Disease diagnosis service Training services
Aceh Aquaculture Center	2011 - ...	Headquarters in Bireuen	Financial services Technical services Agro-input services Laboratory services Market services
Barona Usaha	2007 - ... <i>Not registered officially</i>	Pulo Pineung, Jangka in Bireuen	Agro-input Providing tools (pump, net)
Sejahtera	2008 - ... <i>initiated by UMCOR</i>	Kuala Ceurape, Ulee Cueu, Alue Buya Utang, Pulo Pineung; Jangka in Bireuen	Agro-input services
Karya Utama	1977 – <i>not active anymore</i> <i>Initiated by the national government.</i>	Gandapura	Financial services Agro-input Transportation services Market services
Sadar	2009 - ...	Pante Paku, Jangka in Bireuen	‘Technical’ advice Agro-input Market services (to toke, not international) Assistance with labor or problems
Group Aceh Utara	<i>These kinds of groups are not registered officially.</i>	Mantang Siguk – Aceh Utara	Technical advice – given by the government.

4.1 Indonesian government involved in the value chain of Acehese shrimp farming

Small-scale shrimp farmers can be seen as prominent stakeholders within the global value chain of shrimp. According to Phillips and Subasinghe (2010: 36), 70 to 80% of the total aquaculture farms involve small-scale aquaculture. As was already mentioned in the introduction chapter (see chapter one), recognition appeared within the Indonesian policy of the significance of integrating the small-scale shrimp farmers within the extensive, semi-intensive and extensive Indonesian shrimp industry. The Acehese shrimp farmers expressed that the governments' involvement was indeed there and assisted them with their shrimp farming. The next section will give an example of what such intervention of Indonesian government can help create within the Acehese shrimp farming. It will focus on the cooperative *Karya Utama*, which is established by the government and shows that the concept of collective action is not new within the Acehese shrimp farming community.

Cooperative Karya Utama

During the Suharto reign from 1968 until 1998 (Emmerson 1999) and his New Order regime, aquaculture was actively encouraged and especially prawn production according to Baland and Platteau (1996: 259). Although this policy aim concentrated more on intensifying the production of traditional ponds in North and East Java, the islands of Sulawesi and Sumatra were also integrated in the policy to a lesser extent explains Hall (2004). He continues by stating that such involvement of the Indonesian government were key preconditions in contributing to the rise of Indonesian shrimp aquaculture, aside from the private sector which played a more primary role in the development.

In the sub-district of Gandapura in the district of Bireuen, a cooperative was established in 1977. This cooperative was registered at government level as *Karya Utama* and created by the government and representatives of each village in the sub-district. Shrimp farmer Bachtar² is, besides a village leader, also active in this cooperative during the time of this study. Bachtar describes that during the time of establishing the cooperative, under the president Suharto reign, a separate Department of Cooperatives³ was formed that had a strong influence on rural development. The cooperative started with 20 members and grew until today with a total membership of 542. The membership is a combination of pond farmers (shrimp and milkfish), traders, and paddy field farmers. Therefore the membership is not restricted to one field of expertise. During the start of the cooperative, it gave assistance to the members by providing rice, agro-input and transportation when needed. The government of Indonesia funded the cooperative, which used the funding to provide credit for the seed, agro-input and feed.

² Shrimp farmer 30 in Appendix 1.

³ Currently entitled the Department of Cooperatives and Small-Medium Enterprises (*Departemen Koperasi, Pengusaha Kecil & Menengah*) (DEPKOP 2013).

Aside from this, the cooperative bought the commodities from the farmers for a good price and sold it to other institutions. Unfortunately, in the eyes of Bachtiar, the subsidy from the government was withdrawn and therefore its financial- and market assistance because of lack of funding. The withdrawal of subsidy and government involvement can be partly allocated to the fact that the Indonesian government shifted their policies towards a more neo-liberal stance. The state would curb their intervention with the market and production of shrimp, and market competition and economic liberalizations would be more important instead.

Furthermore, some assistance was unavailable during the conflict, the building where agro-input was stored was burned down and transport vehicles were demolished. Because of the withdrawal of the government and the occurrence of the conflict, the cooperative is a small one now and not running as smoothly as it did before according to Bachtiar. It now has the possibility of providing a small amount of credit, an engine for producing rice, and providing computers with Internet. Because of the altered stakeholders and companies in the region, it is difficult according to Bachtiar to establish such collaborations again and reestablish the services without the funding of the government. Therefore, the cooperative is still active but in a minor manner and does not provide any assistance to the shrimp farmers directly.

The example of the cooperative Karya Utama shows that the idea of cooperatives or an organized group providing assistance towards shrimp farmers for an improved production process in the shrimp value chain is not a novel concept in Indonesia or Aceh. The production of shrimp in a global value chain was emerging during the previous decades and the government (one of the stakeholders) tried to steer the trajectory of the shrimp commodity. This recognition of the (shrimp) value chain and its new linkages in the global economy and the different stakeholders involved is emphasized in the global value chain approach which was discussed in chapter two of this thesis and is stated by Humphrey (2004). This integration of different economic actors - Indonesian government, shrimp farmers and international companies – should be possible to be managed in such a way that it produces positive effects for the majority of the participants. Gereffi, Humphrey, Kaplinsky and Sturgeon (2001) argue that with value chain research it is important to understand the coordination that is present within the various stakeholders – coordination that is often referred to as governance. The authors continue by stating the importance of the question how economic actors can gain access to skills, competences and to supportive services that are required to participate in a global value chain. Organizing groups or cooperatives are argued to be such a possible option for getting access and supportive services, but those initiatives do not always stay as successful as the government implemented Karya Utama shows.

The focus of the Indonesian government was mainly on assisting the shrimp farmers of getting a better position in the global value chain and a better market access. The cooperative supported the shrimp farmers by giving credit and by establishing a good

market relationship with interested buyers. When this market- and financial related assistance collapsed, because the government withdrew the subsidy, the participation of shrimp farmers diminished over the years since there was no direct assistance anymore for the shrimp farmers. Instead of continuing with the cooperative, the Acehnese shrimp farmers mainly went back to their own connections in the neighborhood for financial- and market assistance. The globalization of the shrimp value chain continued however, and the export of Acehnese shrimp was still seen as a possible undertaking. Because of this globalization and the tsunami in 2004 that had devastating effect for the shrimp farmers, there was another intermediation from international stakeholders a few decades after the initiated Karya Utama. These international stakeholders – which will be elaborated on in the next section – assisted the shrimp farmers by setting up a cooperative model. This externally led intervention is based upon the same principles of the governmental initiated cooperative namely supporting the shrimp farmers to get a better position within the global value chain. However, these external organizations put emphasis on the ‘services’ a cooperative can provide, creating a more business like model, and the involvement of those services in upgrading the global value chain of the shrimp. This emphasis on services can be seen as a new insight within collective action in the Acehnese shrimp farmer community, and will be elaborated on in the next section about the Aquaculture Livelihood Service Centers.

4.2 Implementing the use of services: Aquaculture Livelihood Service Center

When the earthquake and tsunami of December 2004 struck Aceh, it had devastating effects on the inhabitants including the shrimp farming communities. Coutts, De Silva and Mohan (2010) state that almost 20,000 hectares of small fishponds were destroyed by the tsunami leaving the ponds covered by debris and mud. Its effects lingered on by the time the research took place; many shrimp farmers spoke about the event and stated it had changed their lives dramatically. One farmer affirmed this

“the tsunami has defeated us all. Before, I had good ponds with a total of five tons of shrimp. The harvest was planned at 27th December, but the tsunami took all my shrimp away – a day before the harvest. Everything was gone and even now the tsunami has bad influence since I cannot produce more than one ton of shrimp per harvest ever since⁴.”

Numerous development agencies came to the region to start rebuilding the livelihoods (of the coastal regions), an occurrence which some Acehnese called “*the second wave*” of aid organizations during this study. Ravikumar and Yamamoto (2009) describe this event and state that the Asian Development Bank initiated a multi-sector project, which was named the Earthquake and Tsunami Emergency Support Project (ETESP) and it had a major component on fisheries and aquaculture in Aceh (ETESP-Fisheries). This project assisted in setting up four Aquaculture Livelihood Service Centers in the sub-districts of

⁴ Quote from shrimp farmer in Peudada (Bireuen) during fieldwork (not interview) on February 22, 2012.

Samalanga, Jangka, Gandapura, and Samudera within the two districts of Bireuen and Aceh Utara. These centers were thought of as the formation of producer associations, which could be trained with business organizational skills. These associations could have the potential, in the eyes of the development organizations, to

“help mitigate low productivity, to form networks for dissemination of better management practices, to negotiate better deals on inputs, to arrange credit from banks, to assist coordinated cropping and marketing of larger quantities, to provide a legal entity and status required for investment, and to provide traceable sources for consignments of shrimp.” (Ravikumar & Yamamoto 2009: 16).

Through these Aquaculture Livelihood Service Centers (ALSCs), the formation and clustering of various stakeholders in the value chain was enabled. Producers, suppliers, processors and trader groups all worked together through the ALSCs, which were set up as community-run businesses and technical centers. These centers were supposed to become self-sustaining units that were initially established by the farmers themselves. Each ALSC has a committee elected by the members and aside from this, the members were organized in groups which consisted each of 10 up to 20 farmers and those groups were assembled into clusters that consist of five up to ten groups. Each of those groups had a group leader (*Ketua- or Kontak Petambak*) and every cluster had a cluster leader (*Petua Neuheun*). Some of these leaders were also interviewed during this research.

The technical support and advice for the activities of the ALSCs was partly given by several government agencies' staff, such as the 'Dinas Perikanan dan Kelautan' or DKP (Marine and Fisheries Affairs Agency). Other organizations also assisted with coordinating the activities of the ALSCs beside the ETESP Fisheries project, these organizations involved were the Food and Agriculture Organization (FAO), the Organization for Industrial, Spiritual and Cultural Advancement (OISCA), the Network of Aquaculture Centres in Asia-Pacific (NACA) and WorldFish.

Presiding four centers is the Aceh Aquaculture Communication Center (AACC) that provides information and communication services related to aquaculture for the farmers, and provides this through the ALSCs. The AACC had a goal of providing several services and four of those services were fully implemented according to Ravikumar and Yamamoto (2009). The first could be seen as information services providing information on market access; product prices, suppliers (hatchery, feed, agro input supplies) and the latest articles and information related to seafood business. An interactive website was launched⁵ to provide this service and all the associated information which could be accessed in one of the ALSCs where computers were installed. The second service provided by the AACC was the technical information. This service provided all the technical aspect on aquaculture, information and technical consultation. If the

⁵ See <http://petambakaceh.org> Jaringan Petambak Aceh (Network of Aquaculture Farmers in Aceh).

committee members of the ALSCs were not able to provide the service themselves, they could forward their request to AACC. As a third service, the AACC gave diagnoses relating to disease (outbreaks). The farmers could use the laboratory facilities assisted by the center and the diagnoses, results and recommendations were promptly sent back to the ALSC. The AACC also conducted trainings as a fourth service. These trainings were centered on the identified needs of the farmer community at a certain time and could focus on technical aspects, business management or other capacity building topics. It is with this cooperative model that the AACC and the ALSCs introduced a services-discourse within the Acehnese shrimp farming community oriented towards a more neo-liberal idea of individualistic choice – the farmer can choose which services he would like to use and which he does not want to use. As stated in the introduction of this chapter, an overview of the collective action initiatives and their respective ‘services’ can be found in Table 2.

The ALSC project assisted by various development organizations was set up as a collective cluster system and, according to the readings, initiated by the farmers themselves. The project was carried out from 2006 until 2011 and had – at its peak – a total of 2639 members (farmers) divided into 155 groups and 27 clusters. Since 2010, the development organizations left Aceh. Although the ALSC clustering project was set up with a bottom up- and participatory approach, most of the buildings of the centers were abandoned and not used fully to their potential during the time when the research for this thesis was done. It turned out that shrimp farmers could not continue with the established financial and marketing services. Aside from this the buildings and facilities were abandoned or used by the community for other purposes than shrimp meetings or get-togethers. Although the cluster system with the KP (group leader) and PN (cluster leader) was – in some villages – still present, most of the 2639 previous ALSC members did not continue to be a part of the Aquaculture Livelihood Service Centers during the fieldwork of this thesis. In practice, the ALSC project of setting up organized groups can therefore be seen as non-active and perhaps even closed down. This demonstrates that participation of local farmers is important to keep the clustered group going. Even though the development organizations organized the ALSC project as bottom up, there was no binding connection between the farmers and the project in such a way that the farmers wanted to continue with the Center after the development organizations left Aceh. The ALSC centers are still there but mostly not active or used for other purposes than shrimp related activities.

In a way, a comparison can be drawn with the ALSC project initiated by development organizations and the *Karya Utama* cooperative initiated by the government. Both cooperatives started to dismantle after the involvement of the external party or parties stopped even though the shrimp farmers stated they think the provided services as important. Services were provided for the shrimp farmers to upgrade their position in the global shrimp value chain, which the farmers said, were important and much needed. However, instead of putting effort in continuing the ALSC concept or the *Karya*

Utama cooperative, the farmers choose or had to ‘abandon’ those two cooperatives. This was mainly because the shrimp farmers state that they did not want to join a cooperative without the microfinance- or credit services – technical assistance alone was not enough reason for them. Aside from this, practical issues were difficult for the farmers to carry out or to maintain without external support and funding – such as repairing the computers, printers, and Internet. Instead of continuing with the ALSC project, some shrimp farmers choose to initiate or join the other (smaller) organized groups or be a member of multiple cooperatives at one time. These organized groups, aside from the externally led Aquaculture Livelihood Service Center and Karya Utama will be discussed in the upcoming section.

4.3 The establishment of local initiatives of collective action

Although it is not an all-encompassing overview of all the cooperatives and organized groups that are active in Bireuen, Figure 3 shows that most of the known organized groups started at the same time or after the initiative of the Aquaculture Livelihood Service Centers. Some shrimp farmers who were a member of the ALSC assisted with the initiating of the other organized groups or became a member of multiple organizations. Those organized groups were not only created after the ALSC became non-active but also when it functioned – showing that the shrimp farmers were interested enough to establish something their own or joining such a local initiative. The previous involved ALSC members can integrate their established knowledge into the new organized group. All these organized groups have the characteristics of having less than 50 members and are not advocating ‘services’ as such but more the provision of assistance within the area of the market, finance, and technical advice. The shrimp farmers did, however, start to integrate the services discourse into the function of the organized groups and became more aware of the purpose such discourse can have relating to upgrading their position in the global value chain. This section will elaborate on the merging of local initiatives of collective action and the services-discourse brought (mainly) by the externally led organizations. In the overview in Table 2 of each organized group and cooperative and its services, it has been chosen to define the internal local organized group assistance also as ‘services’ to stay within a services-discourse. The different initiatives will not be listed one by one in this section, but instead it will give an impression of the differences or similarities between the local initiatives and the connection they have with the externally established ALSC and its services-discourse.

4.3.1 The local initiatives of collective action: A communal approach instead of services-oriented

*"In this group [SADAR], I can communicate with other members and they can share their experiences and knowledge with me. I am still a young farmer, but there are some well experienced senior shrimp farmers in this group. We work together and solve problems together, which is better than to just work alone and to think alone."*⁶

The local initiatives of collective action within the Acehnese shrimp farming community show a communal approach towards their members. Although some informants were not official members of an organized group (i.e. did not pay the membership registration fee or monthly fee), they did get some shared benefits from it. For example in Pulo Pineung, the organized group of Sejahtera buys the agro-input communally through the group and sells it to their members for a non-profitable price. However, the shrimp farmers living in the village and who are not members can also buy the agro-input for the advantageous price without paying the registration and membership fee. This membership fee is used for providing the capital to buy the agro-input and sell it all in one place – making it easier to acquire for the shrimp farmers.

Aside from this, most informants were members of more than one organized group. For example, three shrimp farmers in Pulo Pineung were both a member of Barona Usaha and Sejahtera. They thought this was a good opportunity to get the best from both cooperatives. One farmer gave the example of buying feed from the cooperative. He normally buys it from the organized group Barona Usaha, but since it was not available at that time, he bought it from the cooperative Sejahtera. This shows being a member of two organized groups has an advantage since they can complement each other whenever a service or assistance is unavailable at one organized group. It is also not seen as dubious to be a member of several organized groups according to the shrimp farmers.

This multiple membership also gave the opportunity to the shrimp farmers to integrate their established knowledge into the local initiatives, which happened in every organized group. For example in the organized group of Sadar, one shrimp farmer member assisted with the initiative, using his knowledge from his position as vice-chairman of the ministry of Marine Affairs and Fisheries (DKP⁷). This assistance was needed for the management aspects of the group, such as keeping a membership-registration and administration and an agenda of organized meetings. The farmers interviewed in Pulo Pineung were members of Barona Usaha and also of the ALSC. This made the farmers more knowledgeable about technical aspects, for example stocking

⁶ Quote from Zulkifar, shrimp farmer 10 in Appendix 1. Member of Sadar.

⁷ DKP: Dinas Perikanan dan Kelautan.

together decreases the risk of disease. This knowledge was integrated into the local initiative. Another example is Khalilullah, a shrimp farmer and a member of the committee of Barona Usaha. He affirmed that they started Barona Usaha because of the accumulated knowledge they got with experiences with cooperatives in Aceh and Indonesia in general.

Most of the local initiatives of the organized groups do not offer the ‘whole package of different services’ towards their members. Most of the organized groups provide the agro-input and the opportunity to communicate with each other about certain problems or required assistance. In the organized group of Barona Usaha, the assistance towards the shrimp farmers is mainly focused on providing agro-input for the pond (such as fertilizer, saponin⁸, tools for the harvest and feed).

“We do not have the knowledge to give technical advice. Aside from this, we do not provide marketing services, since there are many Tokes in this area who already provide these services. We focus on agro-input and selling them without any charge or interest and farmers can even pay it back after their harvest – this cooperative gives a good social community feeling.”⁹

The group decided not to focus on market assistance since they do not want to replace the market responsibility of the toke. A toke is a local trader who has connections for market purposes and can assist the shrimp farmer with credit and agro-input. However, the organized group Sadar uses the communal capital for buying seed and feed collectively (and therefore cheaper), and the credit assistance that the toke can provide is not needed. These two examples illustrate that the local initiatives mainly focus on one specific ‘service’ and still make use of the other responsibilities the toke can supplement and therefore not diminishing the toke within shrimp farming.

The members of Sadar perceive a feasible collaboration with the Aceh Aquaculture Enterprise (AAE: explained in the next section) and their own organized group including the toke. They think the AAE can give them a good market price and the staff of AAE can give technical advice during fieldwork. They joined the ALSC and the AAE mostly because of the technical advice regarding water quality/salinity, soil quality and disease. Toke Alansha is a member of this group and most of the farmers still sell their shrimp to him because he is a big toke – meaning he has connections with Medan or Banda Aceh within the shrimp trade. Toke Alansha’s services are still seen as important – if AAE does not want to buy the shrimp, the members can still use Toke Alansha’s market services, the same can be said for the credit service. Toke Alansha can be seen as a back up for when the services or information of AAE is unavailable. It is also not possible for the shrimp farmers to break the relationship with their Toke (Alansha) that easy, because it is a relationship accumulated over the years earning mutual trust and respect

⁸ Saponin: a natural plant extract that kills fish but does not affect shrimp (Smith 1999: 29).

⁹ Quote from Khalilullah, shrimp farmer 28 in Appendix 1.

and because the token is integrated into the community its lifestyle. These issues that do not involve the provision of services per se but are of equal importance for the shrimp farmers will be elaborated on in chapter five.

A concluding aspect that the shrimp farmers indicated as a reason for initiating their own organized group is that they needed such an initiative close by their home and working place. A member of Sadar mentioned *“during the ALSC project, technical assistance was available, but because Pante Paku is a little bit further away from the ALSC they did not come often to this place.”*¹⁰ This could be seen as one of the reasons why they started their own organized group so that there is a place close by to meet with each other and to ask for help.

4.3.2 Concluding remark: multiple pathways towards collective action

This section has elaborated on the main justifications shrimp farmers gave for initiating or joining a local organized group, instead of solely being a member of the externally led cooperative (ALSCs). Most of the local initiatives of collective action started because of the fact that they wanted an organized group closer to their home and working place. This makes it easier to communicate with each other and help each other in case of need. Another important remark is that the local initiatives included the responsibilities of the token into their organized groups instead of replacing those responsibilities with specific ‘services’. The externally led ALSC gave the shrimp farmers the opportunity to accumulate knowledge and expertise for upgrading their position in the global value chain. However, by initiating their own organized groups the shrimp farmers combined such established knowledge with their own shrimp-farming network.

By describing the emergence of these local initiatives, this study wants to show that there was apparently a need for the Acehnese shrimp farmers to initiate another form of collective action that they find more appropriate to their requirements and needs. However, within the services discourse, it is difficult to find out the real justifications of the shrimp farmers for this development of another form of collective action beside the ALSCs. Since the farmers all expressed their enthusiasm for the ALSC and its services, and did not tell about any conflicting issues, it is difficult to find out if there are any underlying reasons for the establishment of this other form of collective action. However, this establishment does demonstrate that there is not simply one perfect form of collective action, implemented by external forces, that gives farmers a stronger position in the global value chain but that there are, indeed, multiple pathways towards the creation of collective action. Another pathway towards collective action is the Aceh Aquaculture Enterprise, which was created after the ALSCs became less active and after the creation of the local initiated forms of collective action. The AAE, initiated by the external WorldFish and the local Aceh¹¹ Society Development Cooperative, responded

¹⁰ Quote from Buni, shrimp farmer 9 in Appendix 1.

¹¹ This is not a spelling error – the cooperative decided to use Aceh instead of Aceh intentionally.

to the movement of farmers creating their own local initiative of collective action and aims at combining the professional services-discourse with the local existing forms of assistance, which the local initiatives focus on. This form of collective action will be discussed in the next section.

4.4 The Aceh Aquaculture Enterprise: built upon the established ALSC

Another cooperative model – the Aceh Aquaculture Enterprise or AAE – was established together with WorldFish and the Aceh Society Development (ASD) cooperative in 2011. The AAE builds on the established knowledge and structure of the previously mentioned Aquaculture Livelihood Service Centers and the Aceh Aquaculture Communication Center, which became less active because of the development organizations leaving. When the development organizations started to leave Aceh, there was also obtained knowledge and experience left behind from the project of the ALSCs and AACC amongst the shrimp farmers and the Acehnese staff. WorldFish wanted to build upon this established knowledge and experience and initiated the Aceh Aquaculture Enterprise. An enterprise which has the possibility, according to Kassam, Subasinghe and Phillips (2011), to enable the farmers to work together, to improve (the reliability) of production, to develop sufficient economies of scale and knowledge to participate in modern market chains, to increase the farmers' ability to join certifications schemes, and to reduce production risks such as disease. The AAE initiative is carried out within the already established Aceh Society Development Cooperative (ASD) which can be seen as a cooperative in the traditional sense described by Kassam, Subasinghe and Phillips (2011: 21) as *“controlled and owned by their members, who have equal shares and who each have a say in the running of the cooperative through equal voting rights.”* The Aceh Aquaculture Enterprise builds on this cooperative model and on the cluster system initiated by the ALSC period with the group leader (KP) and cluster leader (PN) – although these leaders were not all equally active anymore during the period of conducting the research for this thesis.

The services that the AAE provide can be divided in five categories. The first one is focused on the financial services, providing microfinance loans to the farmers for buying shrimp seed and feed. Technical services can be given as the second category, focusing on the field facilitators and monitoring and evaluator staff present who can give advice on certain issues such as crop progress, shrimp disease, estimation or input requirements or assist with placing purchase orders with input suppliers. The third category involves the input services, where the AAE team collaborates with specific selected hatcheries for seed procurement and with non-GMO¹² shrimp feed, so that the farmers can enjoy the best quality of seed and feed. Aside from this, the team has a partnership with a laboratory for the testing of soil, pond water and post larvae, which can be seen as the fourth service. As a fifth and last service, AAE provides a good connection with the (inter-) national market and the management required for such a

¹² GMO: Genetically Modified Organism

trade. Started at the end of the year 2011, the enterprise had 152 members during the first production season in 2012 from February until August. This decline in membership compared to the amount of members during the ALSC period is due to the fact that most farmers said they wanted to wait first for the outcome of the program with the existing members. This argument was built upon the issue of the experience the farmers had with the ALSC having made no development (in their eyes) in relation to export trade or their income. One farmer confirmed this stating that

"I will wait first and see what kind of organization AAE is. There is trust that needs to be built first before I will jump into becoming a member. Let's see how it will go with my friends who became members and if they are happy with the results – I will join as well."

But the farmers that did join justified their choice in several ways. Some farmers stated that they joined because the field facilitators involved in AAE were familiar since they also worked as field facilitators in the ALSC period – their knowledge was known and trusted as true advice. Also the fact that Mr. Ganaraj¹³, a shrimp expert who was active during the ALSC project, was present during the first field visits of AAE made farmers join. They saw him as an important expert making their product a success without disease or other calamities. When some farmers did not seem to understand the question whether or not they joined the ALSC project, it would be formulated as *"the project with Pak Ganaraj"* which the farmers definitely understood. Other farmers pointed to the fact that AAE could give financial services or credit to the farmers, which is something they really needed. This was an interesting observation, since the farmers who already had their own financial resources stated that the technical advice or services were an important incentive to join the AAE. One farmer made the value of this technical advice towards financial services clear by stating:

*"Credit or loans can be given by the bank as well. If the interest of the credit is lower at the bank than at AAE, I can and will go to the bank of course. But this is about credit; I am still in need of technical advice. Knowledge is never finished; with the always-changing shrimp farming it is important to have up-to-date knowledge about how to produce successfully. That is the value of AAE."*¹⁴

This shows that the Acehnese shrimp farmers in Bireuen see the value of the provided services and state that they are in need of services such as getting credit for their seed and feed, and getting technical advice of their quality of production. Also some of the shrimp farmers that are a member of the Aceh Aquaculture Enterprise are at the same time a member of other organized groups mentioned in this chapter. This would perhaps not be the case if the shrimp farmers choose a organized group solely for their

¹³ The real name has been changed for an alias because of privacy reasons.

¹⁴ Quote from Ridwansyah, shrimp farmer 19 in Appendix 1.

provided services since one organization would prove to be enough of value to them. The next section and specifically the next chapter will go further than looking solely to the services-discourse to perceive if there are more justifications for farmers' economic activity.

4.5 Conclusion

Seen from these cases regarding the shrimp farmers and collective action it can be said that there are many different forms of collective action present in Aceh and that the shrimp farmers do see some benefit in joining or creating such a group. Farmers seemed more participative in groups they have created on their own in comparison to the externally led cooperatives. The chapter started with an explanation about the externally governmental led organization Karya Utama, which had a value to the Acehnese shrimp farmers but got less participation after some policy changes and the withdrawal of the government. Some members of Karya Utama joined the cooperative that was initiated much later by aid organizations after the tsunami struck in 2004. The Aquaculture Livelihood Service Center was a big project and got 2639 members at its peak. Still, during this program another organized group was initiated – Barona Usaha – with some farmers being a member of both the ALSC and of Barona Usaha. Other organized groups were initiated different villages and all of those had some farmers which were a member of the ALSC, which could mean the farmers used the acquired knowledge and information in the newly established organized groups. While those small groups subsisted, the aid organizations withdrew from the Aquaculture Livelihood Service Center and the shrimp farmers did not have the (financial) means or will to maintain the cooperative model. The established cluster system and earlier appointed farmer leaders were used by the newly initiated Aceh Aquaculture Enterprise to create cooperation between the shrimp farmers and employers of the Aceh Society Development cooperative. Some shrimp farmers want to wait a bit before becoming a member to see what the AAE entails, others become a member after being an ALSC member, and other farmers combine the membership with their village cooperatives and the AAE.

Although some of the services or assistance that the different groups provided are the same (e.g. financial services or market services) the farmers still chose not to continue with the ALSC project but instead to pick another direction or to combine different clustered groups all together. When focusing on the perspective regarding the provision of services, it is difficult to get a complete understanding of the choices the farmers made, especially since the services are often the same in the different organizations and therefore – in theory – it would not matter which organization to join. It is important to keep in mind that the Acehnese shrimp farmers do act out of rationality – they stated during the study that they do want to earn as much money as possible. However, to consider the shrimp farmer as someone who acts only out of rationality and decides individually to join or create an organized group is a neoclassical view of economics (the market). But those individuals are working together in an organized group and such a

"... collective being is not only a moral being ... but also an object that is as real as a specific person, and even more 'objective'." (Boltanski & Thévenot 2006: 29)

This shows that it is important to recognize the individual but that there is another (moral) side accompanying the individual and that the justifications of shrimp farmers go beyond individualistic economic behavior (e.g. solely looking at the services).

This chapter wanted to demonstrate the existence of different forms of collective action in Aceh and the development of four – overlapping – ‘pathways’ of forming collective action: one cooperative initiated by the Indonesian government, another cooperative initiated by external development organizations, few organized groups initiated by local Acehnese shrimp farmers, and one cooperative initiated by an external organization and a local cooperative. Remarkable is that all three the external initiated forms of collective action are focused on getting the farmers’ a stronger position within the global shrimp value chain regarding export market and new regulations and standards. This goal of getting a better position into the neo-liberal market with its changing regulations and standards creates a business like model of the cooperatives to fit the neo-liberal market most. Their services are also within a neo-liberal view and oriented towards the individual and free choice – creating a ‘package’ of services of which the member can decide from which one to use and which not. However, the local initiated initiative of collective action is less oriented towards a functional upgrading of the global value chain and does not explicitly focus on specific services to provide their members. These local initiatives are more focused on facilitating exchange and sharing of information and tools needed, while the external oriented initiatives do orientate themselves more on the global value chain and its upgrading.

Although the composition and the orientation of the different collective action initiatives is more clear now, it does not give a full image of why this distinction is there within the different initiatives of collective action and why the farmers do not fully replicate the services-discourse of external initiatives. Convention theory can help getting a more detailed image of the justifications present for the farmers’ their economic action, stressing that individual decisions and actions are located within collective structures of judgment. The emphasis will be on the collectively established social values and norms (e.g. conventions) that exist within the Acehnese shrimp farming community and that can also influence the path farmers take in relation to collective action because of conflicting conventions.

5. Examining the worlds and conventions amongst Acehnese shrimp farmers

By scrutinizing the different organized groups or cooperatives that are present in the province of Aceh together with the services they provide, it still does not give a full clarification of the justifications farmers have to join or establish such a group. The Acehnese shrimp farmer should not be seen as an individual justifying his choice for merely rational economic reasons. Shrimp farmers are involved with their community and their fellow shrimp farmers and, according to Revue Économique (1989, cited in Rallet & Motlow 1995: 177), *“agreement between individuals, even when it is limited to a commercial contract, is not possible without a common framework, without a constitutive convention.”*

This chapter will elaborate on the more social and collective elements that relate to the justifications of the farmers within economic activity and more specifically: conventions. Following the thoughts of Whiteside and Mah (2012: 929) conventions create moral codes amongst the Acehnese shrimp farmers that identify ‘good’ and ‘bad’ behaviors, transactions, attitudes, assessments, and measurements among others. Practical examples of these conventions influencing economic activity will be given in this chapter organized by various categories that are relevant within the global value chain of shrimp. The categories used for this chapter, financial, labor and market access are issues that are recurrent when thinking about the services that cooperatives often offer. Collective action discourse and the services-discourse often emphasizes the need for an improvement of the technical knowledge, and improvement regarding finance and market access, when a functional upgrading of the value chain is wanted. The justifications for economic activity made regarding these three categories are linked with existing conventions in the shrimp farming community that guide or constrain the economic activities.

However, this chapter will show that shrimp farmers sometimes do not simply have a choice regarding the improvement of their market access, financial situation or technical knowledge for a functional upgrading of the global value chain of shrimp. Conventions are established within a community and the farmers should act according to these conventions – influencing the choices and actions he can make regarding shrimp farming and collective action (his economic activity). At the end of each section, a short review will be given about the discussed category and involved convention. Alongside an explanation will be given of which of the six worlds within convention theory of these justifications of economic action are based upon and are embedded in the behavior of the Acehnese shrimp producers. Table 1 in chapter two can be used for an overview of the worlds and their guiding principles within economic activity. The chapter will conclude by shortly reflect on the different worlds and their influence on the farmers’ economic activity and how this relates to the external forms of collective action and the justifications farmers have in creating or joining such collective action.

5.1 Financial: credit and religion within domestic world

This subsection will elaborate on the domestic world and related convention which influences, guides, and constrains the economic activity of the Acehnese shrimp farmers in relation to financial matters and religion. The domestic world puts worth on reputation and tradition and being trustworthy as a human.

One of the most important necessities for the shrimp farmers is that of having or acquiring credit for the procurement of shrimp seed, shrimp feed or other agro-input. During this study, the Acehnese shrimp farmers mentioned that they often do not have the right amount of money at once for buying those aforementioned procurements for their shrimp production. A farmer can have multiple options to acquire such credit, some more used (e.g. the *toke*, explained later in this chapter) than others (the bank). Regularly, cooperatives or organized groups also provide credit as a service for their members – in this case the Aceh Aquaculture Enterprise has such a credit service. The AAE can give out a microfinance loan to their members for purchasing seed and feed. The members have to pay 50% of the total price and can get the other 50% from the AAE, which the farmer can pay back after a successful harvest with an interest of 20% per year.

However, the domestic world based on reputation and tradition as worth constrains farmers to take the (much-needed) credit. The reputation and tradition can be connected with the religious background of Aceh, complying towards the religious aspects is seen as tradition and when a farmers does not comply, his reputation gets damaged. Religion is an important aspect in the lives of the Acehnese inhabitants and therefore also for the shrimp farmers. In this study, 38 out of the 45 informants placed religion and God as the most important value in their live – above family or friends and other values. That is not that surprising since the province of Aceh has the highest proportion of Muslims (Aceh 2012) and they mainly live according to Sharia customs and laws. According to Miller (2004) the sharia law in Aceh is an Islamic legal system that cannot be influenced by any party and would be only enforced for people with Islamic religion. This complying towards religion and keeping your worth in reputation and tradition also influences the justification of joining an organized group. Abdul, a shrimp farmer of 63 years old who did not join any organized groups, indicated that he did not want to join the Aceh Aquaculture Enterprise because of the interest charged relating to taking credit for feed. This 20% interest per year is a problem according to Abdul:

“I do agree with the program of AAE – I would like to join because of the technical assistance it can provide. However, there is an Islamic law called Sharia and according to this law, asking for interest on the credit that farmers take – that is not in line with Islam law.”¹⁵

¹⁵ Quote from Abdul Salaam, shrimp farmer 34 in Appendix 1.

This shrimp farmer does acknowledge the value of joining a cooperative because of the technical assistance it can provide. However, Abdul does not want to join because this credit aspect of the cooperative does not conform to the religious Islamic thinking in the farmer's. Abdul does not agree with the fact that AAE asks for a 20% interest on the given credit for feed and seed because then they make money out of money. While this is normal in orthodox banking, the Islamic banking or finance has to comply with Sharia law. According to Beck, Demirgüç-Kunt and Merrouche (2013: 433) '*... Sharia-compliant finance does not allow the charging of interest payments (riba), as only goods and services are allowed to carry a price...*' This situation shows that although Abdul is in favor of joining AAE because of the technical service it can provide, he does not want to join or cannot join because the lending system does not comply within religious law and would damage his reputation and its tradition – which is highly placed within the domestic world. The Aceh Aquaculture Enterprise, however, is also in principle following the Sharia law according to the management staff of AAE. They do not use the interest for personal gain but for the salary of the AAE team and for the transportation costs – it is not interest but a service charge. When this was explained to Abdul, the shrimp farmer stood ground by the communal convention and saw it as an obstacle for joining the cooperative.

Aside from the previous example relating to religion, there is another example of the existence of an established convention in the Acehnese community. Some villages – like Blang Mangat – have a religious ceremony every time the shrimp farmers stock the seed in the ponds. Shrimp farmers, representatives of the Ministry of Marine Affairs and Fisheries (*Departemen Kelautan dan Perikanan*), of the sub district office, of the World Wide Fund for Nature (WWF) and of the Aceh Aquaculture Enterprise were all together and present during the ceremony. In this ceremony, a religious leader will lead the prayers to Allah and ask for the blessing of the stocking with a successful crop and harvest and a chance to send the shrimp to the United Kingdom market. Besides this prayer, some representatives from the different organizations and government give a speech about their involvement in this crop and what the planning will be. One farmer stated that it is important that these ceremonies are held "*because of faith*" and that many stakeholders are present – this shows their involvement and seriousness in shrimp farming to the farmers and to God.

This category and its existing conventions can be appointed mainly towards one type of world thought of by Boltanski and Thévenot (2006)– a concept discussed earlier in chapter three of this thesis. The domestic world, which is according to Gibbon and Ponte (2005: 167) "*founded on the principle of dignity and agreement is founded on the basis of tradition*", can be found in the behavior of the Acehnese shrimp farmers towards their economic action. The religious law and the ceremony can be seen as dignified and traditional because it has been there for quite some time and the shrimp farmers have to 'obey' the religious law and all that encompasses it. Farmers stated during the ceremony

in Blang Mangat, that it would be bad if a farmer would not show up during the ceremony and that God would not bless the stocking of the seed for him. The farmer would show disrespect towards God, which damages the farmer's reputation in the eyes of the other shrimp farmers – a worth that should be kept high within the domestic world. There is no economic gain for the farmer to be present at the ceremony, especially because it cuts time during a working day, but it is seen as important in the sense of collectivity. The constraint of lending credit can become a conflict when external initiatives ask interest for their provided credit. As this case demonstrated, farmers cannot simply chose to take advantage of financial services, provided by an external initiative, by taking the credit – since it does not comply towards the guidelines within the domestic world which the whole community complies to within economic activity. The external initiative of collective action – with its financial services – justify their economic action mostly on the market-, and industrial world (refer to Box 2) since price and productivity are worth the most, especially because this is needed for a functional upgrading of the global value chain. In this example, the domestic world in which the shrimp farmer justifies his economic action on is in conflict with the market-, and industrial world on which the external initiative of collective action justifies its economic activity.

Box 2. The market-, and industrial world connected

Convention theory does separate the market world from the industrial world, stating that the market world put worth on market principles (such as price) during coordination, and the industrial world puts worth on productivity and measurable data during coordination. Boltanski and Thévenot (2006) argue that economic actions are based on at least these two main forms of coordination (market-, and industrial), and should each not separately be confused with a sphere of economic relations. This study has chosen to combine the two worlds to indicate the main justifications in economic activity within the external forms of collective action. These forms are mainly focused on an upgrading of the value chain within the global, neo-liberal market with changing regulations and standards, and put worth during coordination on price and productivity (market-, and industrial world). While this could simplify the theory and be argued if this specific combination of worlds can be made so easily, this study chooses to do so and will not get too caught up studying the worlds themselves and their relations with each other – the worlds are used in this study to enriches the analysis of the different forms of collective action and to demonstrate the possibility of conflict and compromises.

5.2 Labor and community: within the inspirational- and the civic world

This subsection will elaborate on the inspirational world and the civic world, and related conventions which influences, guides, and constrains the economic activity of Acehnese shrimp farmers in relation to labor. The inspirational world puts worth on innovation, common humanity, and non-exclusion, while the civic world puts worth on the collective interest and common welfare.

This section will elaborate on the issue of labor related to the Acehnese shrimp farming. Organized groups can set up a system for assisting shrimp with labor during specific periods of the shrimp crop (e.g. during the harvest). Shrimp farmers would explain their labor situation during interviews, stating that they often needed more labor than normal during harvest time. Some organized groups would create a harvest team to assist from the members of that group – to help the shrimp farmer. In the Aceh Aquaculture Enterprise, there was talk about hiring a specialized harvest team from the processor in Medan for specific ponds to get the maximum amount and best quality of output possible. However, this idea of using workers for specific periods during the shrimp crop can conflict with established conventions. For example, in the village of Calok in Peudada (Bireuen district) it was said they have a special rule created by the community itself. Since there is a problem of unemployment amongst the young men in this village a rule was established aiming at improving their situation with help of the shrimp farmers in the village. Shrimp farmers should employ the young men of the village for the harvest period and pay them for this service.

A youth group – *kelompok pemuda* – that exists in every village is in charge of gathering and distributing the money paid for the harvest. The youth group is created for social purposes and the group will provide or arrange the needed items for any social event that is planned in the village. Together with the money paid for the harvest workers, the shrimp farmers also have to give money to the mosque per each kilogram of harvested shrimp – which can be linked at the previous section where the religious aspect was mentioned. All the shrimp farmers in Calok have to pay 300 IDR per kilogram of harvested shrimp for the youth workers and 150 IDR per kilogram of harvested shrimp to the mosque. The village had a meeting about this and appointed the *ketua pemuda*, which is the youth leader or chairmen of the group, to be in charge of collecting and distributing the money. The youth group exists of all the young men in the village of 17 up to 40 years old – within that age everybody can be a member. However, not every *kelompok pemuda* is involved in shrimp farming. The whole village community initiated such a rule in village meetings – therefore not every village has such a rule or it is different than the rule in Calok. This donation to the mosque can be seen as a *kewajiban* – an obligation or responsibility – for the farmers. The community will use this amount of money for example to build a mosque or to assist the orphans in the village and the rule has been here in Calok for ten years now.

In the village of Meunasah Blang there is another rule established by the community. People in Meunasah Blang should be hired for loading certain goods in trucks, such as fiber boxes for collecting the shrimp. One farmer responded on the question why these rules are so different per village:

"Because the community – the village people – makes those rules. Like in Meunasah Blang, if the truck comes to bring everything, they should have the special people do it - to load the goods in the trucks. In Meunasah Blang you have to hire specific people, in other village you can choose whomever you want. But like in Lhokseumawe [another town], if I bring the fiber there I cannot do by myself, the people of the village have to load – so I pay them."¹⁶

These different kinds of rules can become important to keep in mind during the process of collective action (grouping) and wanting to use specific labor for certain operations during shrimp production. When an external initiative provides the services of employing a specialized labor force, while normally farmers act accordingly to the established convention, a conflict will arise. Punishment or sanction was given to the shrimp farmers in Calok who did not use young village men for the harvest – the community would make sure that the farmer could not sell his shrimp or take the shrimp outside the village. In present days, the sanction is not so hard but the villagers still try to let the farmers enforce the rule – for example by stopping the transportation where the shrimp has been put on. The punishment is now more socially intertwined within the community instead of a concrete 'no selling' sanction. If farmers join a cooperative that does not keep track of those rules, the community or the village itself can protest about this and the farmer could get in trouble.

This 'rule of the village' is a good example to show that established conventions are not static and wholly deterministic but have a certain dynamic nature, making room for the actors to shape and shift (a little bit). Within convention theory, the justifications of the shrimp farmers for their economic action can become *"conventionalized, taken-for-granted beliefs about why certain acts and practices are normal and right"* according to Biggart and Beamish (2003: 456). The community reacted on the unemployment situation and over time the justification of using the unemployed youth became conventionalized within the shrimp farming community. According to Gibbon and Ponte (2005: 167), convention theory states, which this section confirms, that

"... rules are not decided prior to action, but emerge in the process of actions aimed at solving problems of coordination. Conventions are then mechanisms of clarification that are themselves open to challenge."

¹⁶ Quote from Bachtar Hussain, shrimp farmer 30 in Appendix 1.

This refers to the dynamic nature of conventions and the construction of it within the shrimp farming community that has become – over time and through practice – external to them in a sense that the convention must be respected but can be changed gradually again when needed. Storper (1997: 126) continues with this reasoning and state that in convention theory, the *“construction of conventions allow actors to act in a coherently coordinated fashion that generates economically viable innovations.”* Which is a good addition to the fact that employing the youth workers is indeed an economic viable innovation for the whole community.

Conventions within the Acehnese shrimp community involving labor can be primarily linked to two different types of worlds, which are embedded in the behavior of the farmers on the basis of organizing principles. The inspirational world can be recognized, which *“rests on the principle of common humanity and non-exclusion”* according to Gibbon and Ponte (2005: 167). This can be found in the arrangements relating to the unemployed youth and the collected mosque money for community development, which include the less fortunate (e.g. the orphans). The second world that can be found within the coordination of the shrimp farmers is the civic world, which *“is based on the notion of common welfare and agreement is founded on the fact that individuals are sensitive to changes in common welfare.”* (Gibbon & Ponte 2005: 167). Boltanski and Thévenot (2006: 190) state that by sacrificing particular and immediate interests, worth is attained. This implicates that one has to transcend oneself and place collective interests before individual interests. The youth committee and community meetings deciding for example the rule that shrimp farmers must employ the unemployed youth shows it – even if the farmer has other more skillful labor at his command, the collective interest should be seen as most important. This demonstrates that the farmer cannot simply decide to make use of the specialized labor service that an external initiative of collective action provides, he has to comply with the established communal conventions. Because using specialized labor will contribute towards higher productivity, better quality and therefore a better price – the external initiative of collective action justifies its services (economic action) on the market-, and industrial world. However, since the employment of specialized labor is not possible with the farmers who justify their economic action within the inspirational-, and civic world – another conflict is demonstrated between the market-, and industrial world and the worlds that the farmers justify their actions on.

5.3 The *toke* and market access: within the market-, industrial- and domestic world

This subsection will elaborate on the market world, the industrial world, and the domestic world, and related conventions which influences, guides, and constrains the economic activity of Acehnese shrimp farmers primarily in relation to market access. The market world puts worth on price and its focus of relationship on exchange, while the domestic world puts worth on reputation and tradition, and being trustworthy as a human. The industrial world, which is explicitly linked in this thesis with the market

world (refer to Box 2), puts worth on productivity and qualifies persons on being professional or an expert.

Organized groups, clusters or cooperatives are often hailed in the literature for creating better market access towards the farmers. This can be made possible, for example, because of establishing certain connections with actors in the export market but also because of upgrading the commodity in such a way that more stakeholders are interested in buying. However, such a service of creating better market access provided by specific actors already exists within the shrimp value chain – an actor who in Aceh is defined as *toke*. All the informants spoke at least once about their ‘toke’ and the role he played in the shrimp farmers’ life. A *toke* is the Indonesian word for trader, but is more than simply a businessman who buys and sells the shrimp. He is a person that should not be overlooked when analyzing the possibilities for collective action because he is actively engaged in the shrimp farming. A *toke* within the shrimp farming community can be described within a patron-client framework. This framework refers to, according to Landé (1977; cited in Ruddle 2011: 226), “...a vertical dyadic alliance; that is, an alliance between two people of unequal status, power, or resources each of whom finds it useful to have as an ally someone superior or inferior to himself.” Face-to-face contact between the *toke* and the farmer is part of the relationship as well as reciprocity, according to Powell (1970; referred to in Ruddle 2011: 226). This superior-inferior position, although the basis, is not the only aspect of such patron-client relationship.

In general, a *toke* can provide the shrimp farmer with credit (financial services) for seed or agro-input. This can happen in cash but the *toke* can also provide the seed or agro-input without the need of lending money to the farmer first. Either way, the shrimp farmer has created a debt towards the *toke* and this debt has to be reimbursed as soon as possible (e.g. with the following harvest). The shrimp farmer normally solves this by selling his harvested shrimp to the respective *toke*.

“Why I should sell my shrimp to the village toke? Because I take money from that toke, it is the custom here. If a farmer takes money from a toke, he should sell his shrimp to that toke – it is a natural custom.”¹⁷

However, even when a farmer has the capital to pay the *toke* back instead of waiting for the harvest – the shrimp will often still be sold to that *toke*. This is because they have an emotional relationship with the *toke* since they know the *toke* for a long time and it is someone close in the same village. Aside from this, the *toke* can withdraw the farmer from his credit services for the next year if the shrimp farmer did not sell his shrimp to the *toke*. This is something the shrimp farmers do not want because credit is often needed when buying all the seed at once. The *toke* is also not so keen on abandoning the patron-client relationship.

¹⁷ Quote from Muhammed Haji, shrimp farmer 47 in Appendix 1.

During interviews, tokes stated that they seldom withdraw a farmer from his credit service, because a farmer often pays it back (even if somewhat later) and the toke does not want to 'throw away' the established patron-client relationship between him and the farmer. In the eyes of the shrimp farmer, the toke is strict but just and also quite forgivable and flexible:

*"If you cannot pay the toke because of failed harvest, he will always be very angry – always like that. But when I want to continue the next period for another crop, the toke will give again – he is not angry anymore. We Acehnese people are like that – emotional."*¹⁸

Shrimp farmer Sayed¹⁹ explains that this is often the case but not always, he can sell his shrimp to whichever toke he wants. He only borrowed the money for seed this time and he has the capital to pay the credit back and sell his shrimp to another smaller toke.

However, the tokes should not be depicted as sole friendly and just persons. These tokes do have influence on the whole process of the shrimp farmers' production. The toke gives advice, lends certain agro-input, decides which seed the shrimp farmer uses, and sells the shrimp to specific parties – he is part of the value chain of the shrimp. Aside from the influence they have, there is also complexity in the difference there is between certain tokes. A basic overview of the complexity of these different tokes is given in Figure 4. The shrimp farmers talked about a small toke, which is usually a village toke who buys the shrimp and sells it to the local market or to a big toke who has more connections to the traders in the big cities like Medan or Banda Aceh. This big toke is often a sub district toke who has more connections with other small tokes and with other buyers in Medan or Banda Aceh. Informants also talked about *toke banku*, which can be seen as a petty trader who has more direct relations (or access) to the local market. Aside from these different kinds of tokes, there is also an agent active within shrimp farming. An agent can be seen as a main connection between the farmer and the toke – if the shrimp farmer does not have the connections himself. This agent is not as trustworthy as a toke according to the shrimp farmers. Sometimes the agent does not have the capital to pay for the shrimp directly, therefore making the payment slow. A toke normally has enough capital to pay for the shrimp on the same day of the transaction and is therefore more reliable.

As was stated in the previous paragraph, tokes have a certain kind of power over the process throughout shrimp farming. The shrimp farmers look up to them since the tokes have experience, connections, capital and knowledge about shrimp farming. A statement of a representative of a shrimp processor in Medan could verify this assumption:

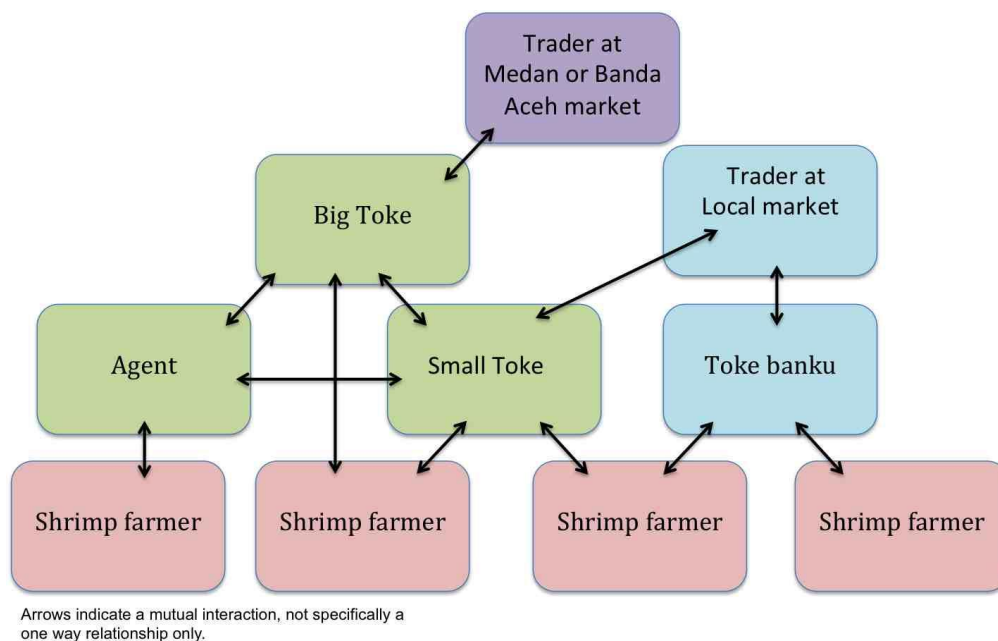
¹⁸ Quote from Abdul Salaam, shrimp farmer 34 in Appendix 1.

¹⁹ Shrimp farmer 31 in Appendix 1.

“For suppliers and processors, there is not a lot of business in Aceh. If they get contacted by someone not familiar they might refuse doing business with you. The tokes in Aceh usually cause problems: Our team once got held up for several days when wanting to transport the shrimp from Aceh to Medan. We got held up because we did not get permission from the toke.”

This is a practical example of the influence that tokes have on the progression of the shrimp trade and that they should be included within a cooperative model. The Aceh Aquaculture Enterprise does take notion of this and include the toke into its cooperative model and collaborates with those important traders for example buying the shrimp from the toke instead of individual farmers. Toke Azhar²⁰ - who is a member of the AAE – explains that being a member benefits him since he does not have the connections for the export market but AAE does. By selling his own shrimp to AAE he will get a good price for it and he can still continue buying and selling the shrimp from non-AAE members as a toke; *“With good collaboration and transparency, we can all benefit from each other.”*²¹

Figure 4. An overview of the stakeholders involved within the regional market circuit



Aside from this, the toke can also use that power for his own (economic) benefit. It was told that the toke could easily alter the balance where the harvested shrimp is weight on, making it seem the shrimp weighs less to buy it for less money and sell it for more. Moreover, some shrimp farmers do not have the latest information regarding the shrimp price and therefore can get less money than they could actual have gotten. Still, the

²⁰ Shrimp farmer 12 in Appendix 1.

²¹ Quote from Azhar, shrimp farmer 12 in Appendix 1.

Acehnese shrimp farmers often stay with the *toke* they trust the most and is the most transparent. Although getting the maximum amount of money for the shrimp has been stated as most important – some shrimp farmers said they prefer to stay connected with the *toke* they know the longest, acting not solely on economic reasons but also on reputation and previous experiences. However, if the *toke* would give a lower amount of money than other *tokes* for a few subsequent years – the trust and reputation will decline and the shrimp farmer will find a better patron for its production business.

By scrutinizing the role of the *toke* within the value chain and the economic activity inside this chain, three different worlds can be found where the *toke* his economic activity is based upon and also the farmers' economic activity. The behavior of the *toke* vis-à-vis the shrimp farmer can be ascribed towards the domestic world. According to Boltanski and Thévenot (2006: 171) this world is characterized by its importance of hierarchy – which exist with the *toke* having a 'higher' function than the farmer, and its allocation of certain duties that the more worthy beings have with respect to their clients. This can refer to the fact that the *toke* has to provide financial assistance to the farmer. Also the need for agreement to be found on the basis of tradition and loyalty applies in this case, because the patron-client relationship is partly based on loyalty with for example the need of repaying the received credit (or agro-input). Aside from the domestic world, the *toke* and the shrimp farmers justify their economic action towards two other worlds: the market- and industrial world. The market world places more significance in finding agreements based on market principles such as price and convention of competition that encompasses the principle of coordination according to Boltanski and Thévenot (2006: 196). This competition is being placed through an evaluation of market worth (i.e. the price) which can be found in the fact that shrimp farmers want to have the best price for their shrimp – while the *toke* want to buy the shrimp for the most profitable price. The industrial world places worth on productivity and being professional. If a *toke* is not professional enough or does not have enough knowledge or expertise, a farmer would (gradually) not coordinate with the *toke* anymore since the worth is placed on these issues.

While in the previous sections, it seemed that most of the worlds that the local shrimp farmers justify their economic action on are conflicting in relation to the market-, and industrial world on which the external initiatives of collective action justify their economic actions on. However, as this subsection demonstrates, there can be economic action or coordination when the market-, and industrial world are present together with another world (in this example the domestic). Although both the shrimp farmer and *toke* need to act accordingly to the domestic world to maintain the patron-client relationship; they also place worth on price and productivity, which places their justifications of economic actions within the market-, and industrial world. This shows that there does not always have to be conflict within coordination that is based on two (or more) different worlds, but that they also can overlap with each other.

5.4 Conclusion

The previous subsections made an attempt of demonstrating that there is more than simple individuality and choice within the Acehnese shrimp farming community. The shrimp farmers justify their economic actions within specific worlds and conventions which are communally established and retained, and cannot be simply overthrown. Convention theory, hereby, gives opportunity for an enriched analysis in relation to the shrimp farmers and their justifications of joining or creating a collective action initiative. Conventions influence, guide and constrain the choices or directions the shrimp farmers' take regarding to collective action. The three categories used (financial, labor, and market- access) are aspects that (external) collective action initiatives focus on for a functional upgrading of the global value chain. However, this chapter demonstrated that these issues are already embedded within the shrimp farming community, for example having to use unemployed youth as labor for the harvest. The services of the external initiatives of collective action are mainly justified on the market-, and industrial world, as became clear in this chapter. The neo-liberal view of the external initiatives within collective action and the services-discourse, therefore, does not align with the fact that the shrimp farmers do not (and cannot) always justify their action on individual choices. In the given examples, it was demonstrated that the services and concept of the external initiatives of collective action can be in conflict with the existing conventions and that therefore; the farmer does not join or choose to use the service. However, the subsection concerning the toke revealed that acting within different worlds, the market-, industrial world against the other worlds, does not always give conflict. This opportunity of avoiding this kind of conflict will be deliberated in the next chapter, the discussion, and what it implies for external initiatives of collective action regarding possibilities of avoiding such conflict.

6. Discussion and conclusion

The combined main findings of this study, described in chapter four and five, will be discussed in this chapter and connected to the main theories used throughout the study. The questions in chapter one, which were sought to answer, are being revisited in this section and being placed in the whole context of the study.

This thesis was created in such way to critically reflect on the development that is happening within the aquaculture sector according to collective action. The concept of collective action is argued to be a way for small-scale farmers to strengthen their position within the global value chain. The position of small-scale farmers needs strengthening because they have difficulty with accessing the (global) market and complying with the more stringent market requirements. Because aquaculture is a fast growing food-producing sector globally and it has the potential to make a significant contribution to the increasing demand for aquatic food, the market regulations are getting more stringent as well within this sector. Although collective action is occurring within the agriculture sector for quite some time- which there are opponents and proponents of - the concept of clustering is new for the small-scale farmers within the aquaculture sector. Although relatively new, clustering and collective action is getting more popular within the aquaculture sector and promoted as the way for functional upgrading of the global value chain - strengthening the farmers' position within the chain. Since collective action is a relatively new development within aquaculture, not much is known about how it is carried out in practice and whether or not it is successful in strengthening the farmers' position within the global value chain. This study wants to contribute to this unknown area of expertise with its main question related to what is happening in Aceh with small-scale shrimp farmers and collective action: why is there a rise and decline of different collective action initiatives within the Acehnese shrimp farming community, and how can these collective action initiatives be improved in terms of facilitation?

This idea of clustering or collective action, and its possibility of strengthening small-scale farmers' position within the global value chain, was implemented within the small-scale shrimp farming community in Aceh by various development organizations such as NACA, FAO and WorldFish (Ravikumar & Yamamoto 2009). Oriented towards a functional upgrading of the global shrimp value chain, this initiative of the ALSCs provided certain services towards its members grounded upon a neo-liberal approach based upon individuality and choice. During this period, farmers created collective action initiatives themselves and did not replicate the model of the external initiative of collective action when the development organizations left Aceh; neither did the shrimp farmers sustain it. This demonstrates a certain conflict or non-alignment of the goals, orientation and approach between the external initiatives- and local initiatives of collective action. For a better facilitation of strengthening the farmers' position within

the global value chain within collective action, it is important to find out why this conflict is there and how such a conflict can be avoided.

This chapter will discuss the questions asked in chapter one using the established knowledge received from the previous chapters and combine this knowledge. First, the occurrence of different forms of collective action within Aceh will be discussed in terms of their goals and provided services. The second theme discusses the added value of convention theory, which aims towards the existence of justifications based on different worlds within one form of collective action, showing that these do not always have to be conflicting or constraining with each other. Suggesting that a metaphorical 'bridge' can be found between economic actions justified by different worlds. The last theme will challenge the 'received wisdom' of the collective action- and services discourse being essential for the improvement of smallholders' position in the global value chain. Advocating that there are different pathways towards collective action instead of only the external interventionist approach and the need of farmers to replicate or sustain that collective action initiative. Then, a short section will reflect on the theories used throughout the study. Finally, the chapter will end with the conclusion of this thesis and some recommendations for further research and facilitation concerning collective action.

6.1 Discussion

6.1.1 Different forms of collective action within the Acehnese shrimp farming community and the global value chain

In current literature and practice, it is often said that farmers can overcome market failures and maintain their market position by organizing themselves into farmer groups or producer organizations – an act that can be referred to as collective action (Markelova & Meinzen-Dick 2009; Sandler 2004; Johnson, Suarez & Lundy 2002). Such notion of collective action was also thought of by international development organizations for the shrimp farmers in Aceh after the tsunami of 2004 – to empower them and upgrade their position in the global value chain of and joined by the Acehnese shrimp farmers (Ravikumar & Yamamoto 2009); and the Aceh Aquaculture Enterprise was initiated to build upon the established system of the ALSC and has a goal of integrating the farmers' participation more in the concept. And before all this, the government was involved with collective action for the farmers as well. As has been stated in chapter 4, this whole process regarding collective action within Aceh can be seen as a partaking in four different forms of collective action regarding services and orientation. An overview of these four different forms of collective actions can be found in Table 3 below.

The main observation is that most of these forms of collective action are quite oriented towards getting the producers' a stronger position in the global shrimp value chain. The collective action initiatives that are created mainly by external parties are more focused on the global value chain and have a more distinct services-discourse.

Table 3. Overview of the different forms of collective action initiatives and their main characteristics

Main input of the Collective action initiative	Orientation or goal	Registration status	Services <i>(guided mainly regarding to the dominant worlds →)</i>	Dominant* worlds where economic activity is justified upon
I. Government	- Upgrading of the global value chain of shrimp	Legally registered to the government	- Financial - Agro-input - Transportation - Market	Market- and industrial world
II. External development aid organizations (ALSC)	- Upgrading of the global value chain of shrimp - Passing on (global) knowledge/information about shrimp farming	Partly registered to the government	- Information (regarding market access) - Technical information - Disease diagnosis - Training - (financial/credit)	Market- and industrial world
III. Acehnese shrimp farming community (local initiatives)	- Facilitating exchange and sharing knowledge - Communal provision of agro-input - Good price for their product	Not officially registered to the government	<i>More focused on assistance</i> - Agro-input - Provision of tools - Technical advice - Market (<i>toke</i>) - Labor assistance	Civic-, domestic- and inspirational world
IV. External Worldfish and local Acheh Society Development cooperative	- Upgrading of the global value chain of shrimp - Assist in possibility of partaking in certification scheme - Integration of <i>toke</i> and local practices	Legally registered to the government	- Financial - Technical - Agro-input - Laboratory - Market	Market- and industrial world
* This does not mean that the actors within that collective action initiative do not justify their actions on other worlds – but these are the most dominant ones to be found.				

Meaning that the external initiatives of collective action advocate their cooperative in terms of services that would strengthen the position of the farmers within the global value chain. All these external initiatives of collective action ensure a type of financial services (providing credit) and a focus on services providing a better market access – such as establishing market connections or provide information regarding the market. These services fit into the aspiration of getting a better position within the global shrimp value chain by facilitating the economic means for getting such better position, and the required knowledge and information about the global market and its regulations and standards.

During the ALSC project and after it became non-active, several other local initiatives of collective action were created. These initiatives did not simply replicate the ALSC model, neither did they tried to sustain the ALSC model when the development organizations went away from Aceh. On the contrary, the local initiatives of collective action have a different kind of focus relating the ‘services’; they provide a more general assistance and do not have a list with services their members’ can chose from. Their focus is not directly towards the global value chain and the different forms of upgrading, but more in terms of a facilitation of exchange and sharing regarding knowledge, labor or specific tools. This shows quite a different form of collective action than the external initiated forms have with their services-discourse.

This services-discourse is mainly established because of the more stringent market requirements within the global value chain of shrimp. New regulations and standards want to verify that the quality and safety of products is high for the (export) market. The development organizations (e.g. NACA, WorldFish, FAO) that established the ALSC made an attempt to upgrade the value chain of shrimp in a functional way and designed the provided services specifically for this upgrading. These services could empower the Acehnese shrimp farmers and increase their compliance towards the more stringent market requirements. The services are specifically focused on different forms of value chain upgrading, mentioned in chapter two, but mainly on the functional upgrading. According to Mitchell et al. (2009), this functional upgrading excludes intermediaries and redistributes their functions to other vertical stakeholders. If, for example, a member lends credit from the ALSC, which provides this as a service, it replaces the credit assistance that the token has within the Acehnese shrimp farming community. In theory, the functional upgrading of the value chain connected to collective action can shorten the chain and make it more (cost-) effective and would be beneficial towards the farmers.

However, this notion that this services-discourse within a collective action initiative would empower the small-scale shrimp farmers within the global value chain did not appear to be true in practice. The Acehnese small-scale shrimp farmers did not continue with the ALSC project, neither did they replicate its model within the community; instead they created or joined a local initiative of collective action, which is less oriented

towards upgrading the global value chain or a services-approach and more oriented towards facilitating exchange and sharing. This demonstrates that the ALSC, an external initiative of collective action, with a services approach is not a form of collective action that the Acehnese shrimp farmers prefer. This could be because the services-discourse is based upon a neo-liberal approach, which provides an individual with services that he can choose from. The local initiatives of collective action focused, instead, on a more communal approach of facilitating exchange and sharing (knowledge, tools, etc.) which could indicate that this is what the shrimp farmers prefer in terms of collective action.

By revisiting sub-question 1, it is made clear in this section that there are different forms of collective action that (did) exist within the Acehnese shrimp farming community. With a main distinction of the external initiatives focusing on a functional upgrading of the value chain, a services-discourse approach and the strengthening of the position of the shrimp farmer; while the local initiatives of collective action focused more on the communal assistance approach, and facilitating exchange and sharing. The external initiative of the ALSC was not continued by the farmers when it became less active, neither did the farmers replicated the exact model in their local initiatives. Apparently the services-discourse, with its individualistic approach of one individual choosing these services and another individual choosing another combination of services, cannot be sustained by the farmers and does not attract the Acehnese shrimp farmers per se. The farmers are also not justifying their economic actions solely on need of upgrading the value chain and strengthen their position within the global value chain – this was not the main orientation within the local initiatives of collective action. With this section, it is still not clear why the farmers would not replicate or sustain the external initiatives of collective action although these initiatives would get them – in theory – a stronger position in the global value chain and a better price and productivity for their shrimp. The justifications of the external initiatives for economic action (and therefore collective action) are quite clear: they want to upgrade the global value chain and realize a stronger position for the farmer within the global value chain. However, the justifications of the farmers' economic activity within the initiatives of collective action are not aligned with the justifications of the economic action within the external initiatives of collective action – otherwise the farmers would not have created and joined their own initiatives of collective action. This makes the step towards the next research sub-question of why this difference exists in goals and justifications of collective action? For this question to be answered, a step needs to be taken away from the individualistic, services oriented, and upgrading of the value chain approach; but instead go behind this approach and seek the justifications within economic activity and collective action of the Acehnese shrimp farming community. Seeking a more collective approach, convention theory will be applied in the next section – realizing that established conventions guide and constrain the justifications of economic activity within the Acehnese shrimp farming community.

6.1.2 Bridging global markets and local communities: finding a compromise between the different worlds and conventions

This existence of different forms of collective action could be attributable, according to Moursli and Cobbaut (2006; cited in Jagd 2011: 349), to *“the fact that each harbor different criteria, on the basis of different higher order beliefs, to define minimally acceptable standards of ‘quality’ for their respective establishments.”* These different criteria that are based on ‘different higher order beliefs’ are recognized in convention theory. They are categorized as different types of justifications that serve to coordinate action and each form of coordination is placed within a world with guiding principles. The division between the external forms of collective action and the local initiatives of collective action exist because the justifications of economic activity within the different forms of collective action are based upon the different worlds. The external forms of collective action act mainly upon the market- and industrial world where, according to Boltanski and Thévenot (2006: 196), the significance is placed in finding agreements based on market principles such as price and productivity. Whereas the local initiatives of collective action justify their economic activity mainly within the civic-, domestic-, and inspirational world, placing worth on collective interest, reputation, and innovation or creativity. The creation of different forms of collective action and the developed division between external and local initiatives, demonstrate a conflict between the different justifications and the difference placed in worth by the different forms of collective action. In practice, the shrimp farmers do not have the free choice that the services-discourse and neo-liberal approach of the external initiatives of collective action imply. If a farmer would like to employ specialized labor forces for his harvest by choosing this service within an external collective action initiative, this is not simply possible because he is expected to employ local unemployed youth for this – worth is respectively placed upon productivity (industrial world) and common welfare (civic world) in these two different type of coordination and are conflicting with each other.

This section will elaborate and discuss how a form of collective action can exist that justifies economic activity guided by different worlds and conventions, showing that different justifications within economic activity do not always conflict or constrain each other. Jagd (2011) discusses this focus on the understanding of the existence of plural orders of worth in an organization, which Thévenot (2001; cited by Jagd 2011: 347) labels *“compromising machines”*. Acknowledging the occurrence of different worlds creates a possibility for an alignment regarding the external collective action initiatives with their services-discourse and justifications of economic action in the market- and industrial world, and the local initiatives of collective action with justifications of economic activity mainly within the civic-, domestic- and inspirational world.

The different worlds can be seen as frameworks where the shrimp farmer acts accordingly to and justifies his action in. These worlds should not be seen as stand alone frameworks, which an actor cannot shift in. One actor can engage in different types of worlds with success and even within a short period of time, confirms Thévenot (2002).

This is also demonstrated in this study. For example, an Acehnese shrimp farmer can engage in (religious) ceremonies for a successful harvest and act accordingly to the domestic world. Then, the same shrimp farmer relies on the employment for his harvest accordingly to the inspirational world, using the unemployed youth and hereby acknowledging the principle of common humanity and non-exclusion (Gibbon & Ponte 2005: 167). The shrimp farmer can then participate in a market transaction and act accordingly to the market world, requiring detachment from the commodity and persons he is dealing with. Thévenot (2002: 192; refers to Stark 1996) summarizes this activity within the different worlds as:

“A complex universe impels actors to make a responsive shift from one form of justification to another, thus preventing them from considering each world as a closed system of determinations.”

These justifications based upon multiple worlds make it clear that economic activity cannot be reduced to one simple unique world, because in each world there is something else that matters most. This difference in importance can create conflict between the different worlds and has the possibility to inflict a crisis because the encounters between several worlds create different kinds of realities and justifications within economic activities. The harvest employment mentioned previously in chapter five could illustrate this problem. A farmer would likely get more revenue by hiring a specialized labor team for a professional and efficient harvest with use of the services-discourse of the external initiative of collective action. This would be most important according to the market- and industrial world, however he cannot simply use that team without conflicting the importance of the civic- and inspirational world – using the unemployed youth.

To avoid these kinds of conflicts or crisis, three different types of agreements can be made, according to Boltanski and Thévenot (2006). The first agreement can make one (the most dominating) world the most significant, which will go at the expense of the other competing worlds. An example can be given when the market-, and industrial world will get most dominant in justifying economic activities and a shrimp farmer decides to take credit – which would assist him in increasing his productivity – although it is against his guiding principles of the domestic world (worth placed on reputation and tradition). The second agreement can be found in a local agreement, which is *“aimed at a temporary and local agreement round specific decisions”* according to Jagd (2011: 347). This sort of agreement could happen – in theory – when the shrimp farmers hire a specialized harvest team for one time only, justifying their actions on the market-, and industrial world (productivity), but will also pay some money towards the unemployed youth, satisfying the community and justifying their actions within the domestic-, and civic- world. The third agreement or reconciliation is one that aims at a more sustainable and durable agreement, which is constructed on each specific world that is involved in the justifications. This type of agreement is named a ‘compromise’. For

successful coordination, persons can and should avoid such conflict by making a compromise, according to Thévenot (2002: 194), and *“go beyond the tension between two worlds, by aiming at a common good which would encompass both.”* This is done within the economic activity and coordination between the Acehnese shrimp farming community and their local initiative of collective action– the shrimp can be seen as the common good and central issue of importance displaying a common justification based on the different worlds.

The acknowledgement of these different worlds in convention theory and the different forms of coordination undermines the idea of one common world that, according to Thévenot (2002: 182) is *“a basis for the objective character of a unique form of coordination.”* This encourages the acknowledgements of the different forms of coordination within economic activity and not a sole market or global regulation. When these different forms of coordination within local communities are taken into account when external or international parties want to assist in collective action, there might be more involvement or participation of the farmers’ themselves. The acknowledgement of the existence of different worlds that farmers justify their economic action fits neatly with the existence of different forms of collective action because such forms are based upon these different worlds and conventions. The local initiative of collective action places the shrimp as the common good and a central issue of importance within the farmers’ economic activity, which creates a compromise between the different worlds. In theory, since the local initiatives of collective action found a compromise of the different worlds, the external initiatives of collective action should be able to do the same. These local initiatives also justify their action within a market-and industrial world because the selling of shrimp is their main source of income. The toke, as explained in chapter five, plays an important part in such compromise within collective action between the market- and industrial world and the other worlds present within the Acehnese shrimp farming community. The toke, as a trader, justifies his actions mainly based upon the market- and industrial world by examining the shrimp of its quality and worth based on price. However, he also establishes a patron-client relationship with the farmers, which is partly based on loyalty and trust. The toke is also part of the community and has knowledge about conventions that guide and limit the justifications of the shrimp farmers and also act accordingly to these. In this case, the toke can be seen as a bridge uniting the market- and industrial world with the civic-, domestic- and inspirational world and create a successful collaboration and collective action.

With regards to the research question of why there are different forms of collective action and their justifications, this section demonstrates – with the help of convention theory – the division between external initiatives- and the local initiatives of collective action exists because of the forms of justifications (worlds) which coordinates their actions, and on the different principles worth is placed upon – which do not align with each other and can be in conflict. Aside from that, this section expresses that such

conflict could be avoided by focusing on a compromise, or a bridge, between the different worlds. This revisits the third research sub-question mentioned in chapter one, of how these different justifications for economic activity and collective action can be aligned or bridged. Because the toke seems to be the impersonation of such a bridge, it would be wise for the external initiatives of collective action to focus on empowering such an existing 'bridge' into the market- and industrial world (new market regulations and upcoming certifications schemes) instead of providing services which do not easily unite the different worlds where the shrimp farmers justify their actions on with the justifications on economic activity of the external initiatives of collective action. The Aceh Aquaculture Enterprise does try to integrate the toke and his assistance towards the farmers into the cooperative model instead of replacing it in its entirety. This shows that the interaction between external- and local initiatives is developing within Aceh at this moment and that the acknowledgement is growing with the importance of a collective action concept that fits (partly) within the local community and conventions. This acknowledgement and change in Aceh within the collective action discourse took some time, mainly because of the existence of a predominant discourse of collective action in the current development world. The next section will elaborate on this predominant discourse and its consequences towards the process of collective action within the Acehnese shrimp farming community.

6.1.3 Shifting conventions in the global value chain and within the Acehnese farming community: collective action as received wisdom

Aside from the fact that the different worlds and their corresponding conventions can influence and constrain the justifications farmers have in collective action – its influence should not be seen as wholly deterministic. Gibbon and Ponte (2005: 176) argue that actors can (partly) shape the formulation of conventions, although some actors are more powerful in this 'shaping' than others. This shaping also contributes to the validity of the possibility of finding a compromise since this cannot happen when actors are locked up tight within the worlds and their guiding principles. The toke can be taken as an example, again, of shifting the balance between the different worlds with his connections with- and knowledge of the market. If a new buyer comes up with new demands for the products, the toke could shift the importance more into the direction of market- and industrial world. Not only persons can influence this shifting and shaping in the formulation of conventions. Within the global export market of shrimp, there is an increase of stricter market regulations for quality standards and the need for higher productivity, which create a shift towards the need of justifying economic actions on the market- and industrial world.

The services-discourse within the external initiatives of collective action takes this shift towards a more market- and industrial world within the global value chain into account. In that perspective, a more individualistic neo-liberal composition of collective initiatives would fit the neo-liberal organization of the global market. In development-literature and practice, this discourse of collective action and its high value towards

strengthening the position of smallholders' in the global value chain can be seen as a 'received wisdom' about producers within agriculture and aquaculture. Leach and Mearns (1996: 445) describe the concept of received wisdom as *"an idea or a set of ideas held to be "correct" by social consensus, or "the establishment"."* These authors continue by stating that such received wisdom can be sustained through labeling and grounded in a specific cultural policy paradigm, and therefore it can be understood as a form of discourse. This thesis has been centered on this collective action discourse and examined the concept and its implementation within the Acehnese shrimp farming community regarding a stronger position in the global value chain.

In a way, this study can partly be seen as a counter-narrative which, according to Walker (2006), does not only expose the flaws of the received wisdom but also disrupt it by replacing it with another description of it. As seen in this case study, the external initiatives of collective action with its services-discourse can be seen as a relevant development but not in the way the received wisdom of it introduces it. The shrimp farmers did not replicate the exact structure of the collective action and its services, because they could not find a compromise between the different worlds and conventions guiding economic action. However, conventions can shift and be shaped, although not instantly, and should not be seen as static guidelines and constraints for the coordination of the farmers within economic action. Instead, the shrimp farmers took notice of conventions involved with the external initiatives, relating more to the market- and industrial world, which could assist them in creating a more productive and efficient production, and shaped them accordingly to the established conventions in the shrimp farming community: creating a compromise and a multiple world-orientation within economic action. The shrimp farmers did learn from the external initiatives of collective action and they still can be seen as useful and important in developing a stronger position within the global value chain. However, this is not the initial impact the external initiatives wanted to have within the received wisdom perspective. The impact or intention of the collective action discourse in general should therefore not be seen as a one-way implementation of the concept and the farmers replicate it as such. Instead, it is better to view external initiated collective action as a tool of having the farmers integrate the market- and industrial world with the other worlds within a community. By doing so, the farmer can develop their own approach towards collective action in an organically way which fit their way of life the most and has a more sustainable outcome.

This section demonstrates that the current idea of collective action as a received wisdom – a concept that, when implemented, will strengthen the farmers' position within the global value chain and upgrading it – is not necessarily true as shown in practice and should be stopped being received as such. This revisits the main research question of the existence of different forms of collective action and how they can be facilitated best. Collective action should not be seen as one model that can be implemented in every

location and will be received by the farmers willingly and will strengthen their position within the global value chain 'automatically'.

Within aquaculture, the concept of collective action as a received wisdom is developing and is becoming a popular concept in practice as an attempt to strengthen the position of farmers' in the global value chain. This collective action model is often set up within a neo-liberal approach, which would strengthen the farmers' position and integration within the neo-liberal market that currently exists within aquaculture, with its more stringent regulations and standards. Within the aquaculture- sector and literature, this neo-liberal model of collective action is currently described as the best way to incorporate smallholders within the global- value chain and market, by organizations such as NACA, FAO, the World Bank and ADB. When the ALSCs were set up by development organizations, with good intentions, farmers did not replicate the model or try to sustain it when the development organizations left Aceh. Making the collective action model look like a failure on first sight. However, the intervention of development organizations did stimulate the development of different forms of collective action, which was an outcome not intended by the development organizations. Local initiatives of collective action were established, not focusing too much on upgrading the global value chain of shrimp, but more focused on shrimp farming in the local market combined with established conventions within the community. Groups like Sadar or Barona Usaha are small groups that focus more on facilitating exchange and knowledge and are embedded within the community and its norms and values. The toke can be seen as a bridge within these local initiatives, linking the justifications of economic action within the market-, and industrial world together with the justifications of economic action within the civic-, domestic-, and inspirational world. This creates a successful collaboration of the market regulations and conventions: although mainly within a local or provincial scale, not necessarily on the global level and export market. However, this demonstrates the existence of such a bridge and that compromises do exist when different justifications in economic activity are present in a community. For a successful upgrading of the global value chain of shrimp, such a bridge should be formed between the external initiatives and these local initiatives – which the Aceh Aquaculture Enterprise demonstrates its existence of and gives an example of an institutional bridge. The AAE, which is a form of collective action between an external organization (WorldFish) and a local cooperative (ASD), incorporates established conventions within the community and the changing regulations and standards of the global value chain of shrimp – functioning as an institutional bridge. This demonstrates that the farmer community is interested in collective action and that the concept of collective action should not be abandoned per se, but the neo-liberal discourse that is created around collective action should be altered if it wants to sustain within a community where established conventions guide and constrain the economic activities of the farmers.

Therefore, an external initiative of collective action should perhaps not intervene within a community solely with the neo-liberal approach of collective action and the need to

bridge the farmers' within the global market with its standards and regulations. Instead they should alter their approach from the beginning onwards, going a step back, and focus on bridging established conventions within a farmer community with the global market and established conventions which the global market justify its economic action on. In practice this development is already occurring in Aceh with the Aceh Aquaculture Enterprise, which was initiated by WorldFish and ASD, creating an example of an institutional bridge. This institutional bridge has knowledge of the more stringent market requirements within the global value chain of shrimp, and knowledge of established conventions within the Acehnese shrimp farming community. This collective action initiative therefore functions as an institutional bridge by combining the upgrading of the global value chain of shrimp with established conventions.

6.1.4 Theoretical reflection: applying convention theory within collective action and the upgrading of the global value chain

Although the main arguments of this thesis have been discussed in the previous sections, this section wants to reflect on the main theories used as the backbone of the thesis and then primarily about the use of convention theory. As has been previously mentioned, the direct connection with convention theory in relation with collective action has not been made so explicitly in previous literature as in this thesis. This is quite surprising, because collective action encompasses actors coordinating with each other within economic activity. Convention theory put the analysis on the justifications of farmers within their economic activity and by applying the set up framework; these justifications could be analyzed neatly within the different worlds and conventions. This made a seemingly chaotic situation of different forms of collective action seem more orderly and concrete, and more justifiable. This strength of the theory – having a framework of different worlds and their guiding principles within economic activity – could be used more in current literature for creating a more orderly and concrete overview of different justifications within economic activity or within one organization/organized group.

Aside from the six initial worlds that Boltanski and Thévenot (2006) developed, a development found place that other worlds are created in literature built upon reality, which was described in chapter two. According to Gibbon and Ponte (2005: 171) the network world can be seen, rather than another category of convention, as a new way of achieving a compromise between the industrial- and market world within a world influenced by financialist prescriptions. Interesting to consider is that the compromise found in this case study between market- and industrial and the other worlds (domestic, civic and inspirational) within collective action can also be seen as an additional world within the theoretical framework. This illustrates the dynamic nature of the interaction between actors within different worlds and conventions and that compromise can be found if sought for.

The last remark is a critical remark regarding the position convention theory takes between the agency- and the deterministic approach. The theory acknowledges the fact that conventions can collectively guide but also constrain actors in their economic actions, meaning that they sometimes cannot act in the way they want to because of underlying conventions. However, explicated by Gibbon and Ponte (2005), the theory also acknowledges the fact that actors are not 'helpless' in this situation and that they do have a say in the formulation of conventions – they do have a certain agency in their economic action. It does assign this agency within a certain level of power, since some actors can be more influential than others (e.g. the patron-client status of the toke). In practice within collective action, this should be important to keep in mind, because such agency can strengthen the compromises that can be made between different worlds and the development of the collective action initiative. In current literature of convention theory, this role of agency and the chance of shaping conventions is not yet applied that much and concrete examples are missing. This makes it difficult to understand how actors can shape conventions and how actors can influence justifications towards economic action and finding compromises by shaping and shifting within established conventions.

Lazega and Favereau (2002) explore this aspect of combining conventions, structure and agency and state that structural dynamics can take place. They elaborate further that (2002: 24) *“a dynamic approach to conventions and structures needs to leave behind a narrow form of interactionism that does not take into account the multilateral, multiplex and multi-level dimensions of relational structures.”* The authors (ibid.) continue by explaining that the regulation of interactions *“creates structures, and in such structures actors elaborate further, ‘second order’, rules and conventions.”* This can be seen as the concept of conventions - collectively established until it becomes conventions that actors have to act within/accordingly to – having a layer of elementary structures underneath. Actors hereby ‘create’ conventions regarding the specific structure of relational investments that use opinions, ideas, representations and norms combined with the primary elementary substructures – which make conventions a second order of institutions (Lazega & Favereau 2002: 24). This suggests a sort of niche for external initiatives or organizations such as WorldFish to manipulate the first ‘layer’ of structure in such way that the ‘creation’ of the second order (rules and conventions) can be steered towards a specific world or economic action which is more appropriate within the global market (for example). How this steering can take place, however, should be studied more in-depth.

6.2 Conclusion

In this study, it is argued that the current collective action discourse within aquaculture, with a neo-liberal approach and a services-orientation, should not be seen as the concept per se that will strengthen smallholders' position within the global value chain. The services-discourse within collective action in aquaculture is mainly built upon a neo-liberal view of economics and the idea of individuals having a choice. Findings of this study are in line with the theories about economic action and its social embeddedness, that there are certain collective guidelines and constraints within a (shrimp) farmer's economic activity that also guides and constraints his choices towards collective action.

These guidelines and constraints are defined in this study as conventions and can influence economic behavior and coordination. This study indicated that there are different forms of collective action present within Aceh. These different forms exist because the actors within these different forms justify their economic actions within different worlds, which each has specific guiding principles and different viewpoints on worth. External initiatives of collective action mainly place worth on efficiency, productivity and price, which are guidelines within the market-, and industrial world, justifying this coordination to get a good connection towards the global value chain and its more stringent regulations and standards. The local form of collective action initiatives within Aceh mainly places worth on tradition, dignity, common welfare and hierarchy, which can be linked to the civic-, domestic-, and inspirational world. The main orientation of these local initiatives is facilitating exchange and knowledge, not specifically towards an upgrading of the global value chain of shrimp. At first, these two main forms of collective action, justifying their economic actions upon different worlds, seem to be in conflict with each other. This is demonstrated in practice, because the Acehnese shrimp farmers do not attempt to replicate or sustain the external collective action initiatives. The neo-liberal approach of the external initiatives within collective action and its services-discourse, therefore, does not align with the fact that the shrimp farmers do not (and cannot) always justify their action on individual choices.

However, this study demonstrated it is possible to avoid such a conflict by creating a compromise, which is constructed around all the different worlds involved in the justifications of economic activity within collective action. This compromise can be created by going beyond the tension between the worlds and by aiming at a common good which would encompass all the involved worlds. In this case study, shrimp can be seen as the common good and central issue of importance displaying a common justification based on the different worlds – which can be selling, producing it within a certain environment, or performing a ceremony for a good harvest. For such compromise to take place, a 'bridge' should be created that connects the need for an upgrading of the global value chain of shrimp with the established conventions within the shrimp farming community. This 'bridge' can be a persons or an institution, as long

as it has the experience and knowledge of the different justifications and orders of worth within economic activity within the different sides it has to bridge.

These concepts of a 'bridge' and a compromise show potential for realizing a reconciliation of the global market, with its quality- and certification standards based on mainly the market- and industrial world, with the local Acehnese shrimp farming community and conventions based on the domestic-, civic- and inspirational world. External initiatives of collective action can contribute towards this reconciliation but should not be seen as a received wisdom stating that this concept will as such strengthen the smallholders' position within the global value chain. Instead, it should be seen as a facilitating tool to support established conventions instead of opposing them and find a compromise between the market- and industrial world where the global market mainly acts upon, and the civic-, domestic- and inspirational world where the Acehnese shrimp farmers mainly justify their actions on. This facilitation can happen by supporting the already existing 'bridges' within the community or an external initiative of collective action can function as an institutional bridge itself by combining the need for the upgrading of the global value chain of shrimp with the established conventions within the Acehnese shrimp farming community.

Following this conclusion, this section will provide recommendations that are important to keep in mind for further research or for further practical matters such as the facilitation of collective action. The first recommendation, be it a bit repetitive throughout this thesis, is that collective action should not be seen as the concept that – as a received wisdom – can bring farmers always willingness together and strengthen their position in the global value chain automatically. Aside from this, when facilitating collective action, it is important to first go into the field and community and seek the underlying or established conventions on which the community bases their economic action on – this is difficult because it took 6 months of field study to have an overview of some established conventions. Perhaps when more research is done towards the justifications of economic action of shrimp-, or more general, aquaculture farmers within established conventions, some general guidelines and constraints (conventions) can be found within aquaculture producers. However, this needs to be studied more elaborate and more empirical studies are needed. When some of these guidelines can be found, the orientation of the collective action initiative should be aligned as much as possible with those established conventions. This alignment (or compromise) can be made, for example, throughout an institutional bridge such as the Aceh Aquaculture Enterprise. This AAE incorporates the tokes within their model and does not replace them and their assistance; also, the AAE (or another institutional bridge/organization) can incorporate the labor system that employs unemployed youth during the harvest, meaning that they can train the unemployed youth to become more experienced or professional harvesters. This way, an effective and productive harvest will take place and the community is content with the unemployed youth being employed during harvest.

Another recommendation is that this bridge or better alignment between the neo-liberal world (or the upgrading of the global value chain) and established conventions can be found within the community itself in specific persons. These 'bridges' can be empowered to find the alignment themselves. For example, the toke can be empowered by given trainings or new market connections and the toke would then incorporate the new established knowledge more organically into the shrimp farming community – without the explicit need of an external collective action initiative. This empowerment can be given by organizations or by the government. Which leads us to another recommendation regarding the government. This thesis did not specifically shed light on the role that the government can have within this bridging or within collective action in general. Although a short introduction was given on the government's involvement in shrimp farming and that it facilitated a collective action initiative – this role of the government should be clarified on some more and further research should be done, especially linked towards the possibility of being a 'bridge'. During fieldwork, many farmers stated that the government was not so involved as the farmers wanted it to be and did not visit the field or invest in specific arrangements that could benefit the farmers (e.g. policy arrangements, but also better roads).

References

- Aceh (2012) *Videos* Retrieved December 13, 2012 from <http://aceh.net/videos>.
- Albu, M. & A. Griffith (2005) 'Mapping the Market: A Framework for Rural Enterprise Development Policy and Practice' *Practical Action: Markets and Livelihoods Programme*: 1-36.
- Arksey, H. & P. Knight (1999) *Interviewing for Social Scientists* London, SAGE publications.
- Babbie, E.R. (2011) *The Basics of Social Research* Wadsworth, Cengage Learning.
- Baland, J. & J. Platteau (1996) *Halting Degradation of Natural Resources: Is there a Role for Rural Communities?* Great Britain, Food and Agriculture Organizations of the United Nations.
- Béné, C. (2005) 'The Good, the Bad and the Ugly: Discourse, Policy Controversies and the Role of Science in the Politics of Shrimp Farming Development' *Development Policy Review* 23-5: 585-614.
- Bernard, H.R. (2000) *Social Research Methods: Qualitative and Quantitative Approaches* California, SAGE publications.
- Bernard, H.R. (2006) *Research Methods in Anthropology: Qualitative and Quantitative Approaches* Oxford, AltaMira Press.
- Biggart, N.W. & T.D. Beamish (2003) 'The Economic Sociology of Conventions: Habit, Custom, Practice, and Routine in Market Order' *Annual Review of Sociology* 29: 443-464.
- Boltanski, L. & L. Thévenot (2006) *On Justification: Economies of Worth* Princeton, Princeton University Press.
- Bolwig, S., S. Ponte, L. Riisgaard, A. du Toit & N. Halberg (2011) 'A Methodology for Integrating Development Concerns into Value Chain Analysis and Interventions' in: J. Mitchell & C. Coles (eds.) *Markets and Rural Poverty: Upgrading in Value Chains* United Kingdom, Earthscan: 21-46.
- Bryman, A. (2008) *Social Research Methods* Oxford, University Press.
- Burke, B.J. (2010) 'Cooperatives for "Fair Globalization"? Indigenous People, Cooperatives, and Corporate Social Responsibility in the Brazilian Amazon' *Latin American Perspectives* 37-6: 30-52.
- Bush, S.R. & P. Oosterveer (2007) 'The Missing Link: Intersecting Governance and Trade in the Space of Place and the Space of Flows' *Sociologia Ruralis* 47-4: 384-399.
- Coleman, J. (1988) 'Social Capital and the Creation of Human Capital' *American Journal of Sociology* 94: supplement S95-S120.
- Collins, E.F. (2007) *Indonesia Betrayed: How Development Fails* USA, University of Hawai'i Press.
- Coq-Huelva, D., M.D. García-Brenes & A. Subco-i-Cantó (2012) 'Commodity Chains, Quality Conventions and the Transformation of Agro-Ecosystems: Olive Groves and Olive Oil Production in two Andalusian Case Studies' *European Urban and Regional Studies* 19-1: 77-91.

- Coutts, R., S. De Silva & C.V. Mohan (2010) 'Boosting Aquaculture Livelihoods in Post-Disaster Aceh, Indonesia' *Indonesia Disaster Risk Management* 23.
- DEPKOP (2013) *Kementerian Koperasi dan Usaha Kecil dan Menangan Republik Indonesia* Retrieved January 4, 2013 from <http://www.depkop.go.id/>
- Emmerson, D.K. (ed.) (1999) *Indonesia Beyond Suharto* New York, M.E. Sharpe Inc.
- Eriksen, T.H. (2001) *Small Places, Large Issues: An introduction to Social and Cultural Anthropology* London, Pluto Press.
- FAO (2012) *The state of World Fisheries and Aquaculture (SOFIA)* FAO publication.
- FAO (2013a) *Glossary of Aquaculture* Retrieved January 20, 2013 from http://www.fao.org/fi/glossary/aquaculture/spec-term-n.asp?id_glo=15334&id_lang=TERMS_E&lang=en
- FAO (2013b) *Global Production Statistics* Retrieved January 26, 2013 from <http://www.fao.org/fishery/statistics/global-production/en>
- Favereau, O. & E. Lazega (eds.) (2002) *Conventions and Structures in Economic Organization: Markets, Networks and Hierarchies* Cheltenham, Edward Elgar Publishing Limited.
- Fetterman, D.M. (2010) *Ethnography: Step-by-Step* California, SAGE publications.
- Fischer, E. & M. Qaim (2011) 'Linking Smallholders to Markets: Determinants and Impacts of Farmer Collective Action in Kenya' *World Development* 40-6: 1255-1268.
- Flyvbjerg, B. (2006) 'Five Misunderstandings about Case-Study Research' *Qualitative Inquiry* 12-2: 219-245.
- Fromm, I. (2007) 'Upgrading in Agricultural Value Chains: The Case of Small Producers in Honduras' *GIGA Working Papers* 64.
- Geilfus, F. (2008) *80 Tools for Participatory Development: Appraisal, Planning, Follow-up and Evaluation* Costa Rica, IICA.
- Gellert, P.K. (2010) 'Extractive Regimes: Toward a Better Understanding of Indonesian Development' *Rural Sociological Society* 75-1: 28-57.
- Gereffi, G., J. Humphrey, R. Kaplinsky & T.J. Sturgeon (2001) 'Introduction: Globalisation, Value Chains and Development' *IDS Bulletin* 32-3: 1-8.
- Gibbon, P. & S. Ponte (2005) *Trading Down: Africa, Value Chains and the Global Economy* Philadelphia, Temple University Press.
- Giddens, A. (2006) *Sociology* Cambridge, Polity Press.
- Granovetter, M. (1985) 'Economic Action and Social Structure: the Problem of Embeddedness' *American Journal of Sociology* 91-3: 481-510.
- Hartley, J. (2004) 'Case Study Research' in: C. Cassell & G. Symon (eds.) *Essential Guide to Qualitative Methods in Organizational Research* London, SAGE Publications Ltd.
- Hellin, J., M. Lundy & M. Meijer (2007) 'Farmer Organization, Collective Action and Market Access in Meso-America' *CAPRI Working Paper No. 67*: 1-28.
- Hishamunda, N., N.B. Ridler, P. Bueno & W.G. Yap (2009) 'Commercial Aquaculture in Southeast Asia: Some Policy Lessons' *Food Policy* 34: 102-107.
- Humphrey, J. (2004) *Upgrading in Global Value Chains* Geneva, Working Paper No. 28.

- Jagd, S. (2011) 'Pragmatic Sociology and Competing Orders of Worth in Organizations' *European Journal of Social Theory* 14-3: 343-359.
- Jena, P.R., B.B. Chichaibelu, T. Stellmacher & U. Grote (2012) 'The Impact of Coffee Certification on Small-Scale Producers' Livelihoods: A Case Study from the Jimma Zone, Ethiopia' *Agricultural Economics* 43: 429-440.
- Johnson, N., R. Suarez & M. Lundy (2002) 'The Importance of Social Capital in Colombian Rural Agro-Enterprises' *CAPRI Workin Paper* No. 26.
- Kaplinsky, R. & M. Morris (2001) *A Handbook for Value Chain Research* IDRC, <http://www.srp-guinee.org/download/valuechain-handbook.pdf>
- Kassam, L., R. Subasinghe & M. Phillips (2011) 'Aquaculture Farmer Organizations and Cluster Management, Concepts and Experiences' *FAO Fisheries and Aquaculture Technical Paper* 563.
- Kruijssen, F, M. Keizer & A. Giuliani (2009) 'Collective Action for Small-Scale Producers of Agricultural Biodiveristy Products' *Food Policy* 34: 46-52.
- Lazega, E. & O. Favereau (2002) 'Introduction' in: O. Favereau & E. Lazega (eds.) *Conventions and Structures in Economic Organization: Market, Networks and Hierarchies* Cheltenham, Edward Elgar Publishing Limited.
- Leach, M. & R. Mearns (1996) 'Environmental Change and Policy' in: M. Leach & R. Mearns (eds.) *The Lie of the Land: Challenging Received Wisdom on the African Environment* Oxford, James Currey: 1-33.
- Mack, N., C. Woodsong, K.M. MacQueen, G. Guest & E. Namey (2005) *Qualitative Research Methods: A Data Collector's Field Guide* North Carolina, Family Health International.
- Malafaia, G.C., J.O.J. Barcellos, E.A. Pedrozo & M.E. Camargo (2010) 'Convention Economics and Coordination Mechanisms in Collective Actions: The Uruguay Certified Beef Case' *Journal of Development and Agricultural Economics* 2-3: 178-187.
- Markelova, H. & R. Meinzen-Dick (2009) 'Collective Action for Smallholder Market Access' *CAPRI Policy Brief* No. 6.
- Markelova, H. & R. Meinzen-Dick, J. Hellin & S. Dohrn (2009) 'Collective Action for Smallholder Market Access' *Food Policy* 34: 1-7.
- Marshall, M.N. (1996) 'Sampling for Qualitative Research' *Family Practice* 13-6: 522-525.
- Maxwell, J.A. (2005) *Qualitative Research Design: An Interactive Approach* California, Sage Publications.
- Mills, D.J., D.S. Adhuri, M.J. Phillips, B. Ravikumar & A.P. Padiyar (2011) 'Shocks, Recovery Trajectories and Resilience Among Aquaculture-dependent Households in Post-Tsunami Aceh, Indonesia' *Local Environment* 16-5: 425-444.
- Mitchell, J., C. Coles & J. Keane (2009) 'Upgrading Along Value Chains: Strategies for Poverty Reduction in Latin America' *COPLA Trade and Poverty in Latin America* briefing paper.
- Mitchell, J., A. Shepherd & J. Keane (2011) 'An Introduction' in: J. Mitchell & C. Coles (eds.) *Markets and Rural Poverty: Upgrading in Value Chains* United Kingdom, Earthscan: 1-20.

- Murdoch, J. & M. Miele (1999) "'Back to Nature": Changing "Worlds of Production" in the Food Sector' *European Society for Rural Sociology* 39-4: 465- 482.
- Nugraha, D.S. (2010) 'Extending the Concept of Value Chain Governance: An Institutional Perspective, Comparative Case Studies from Dairy Value Chains in Indonesia' *Dissertation University of Berlin*.
- Padiyar, P.A., M.J. Phillips, B. Ravikumar, S. Wahju, T. Muhammad, D.J. Currie, K. Coco & R.P. Subasinghe (2012) 'Improving Aquaculture in Post-Tsunami Aceh, Indonesia: Experiences and Lessons in Better Management and Farmer Organizations' *Aquaculture Research* 43-12: 1787-1803.
- Pereira, M.M., N. Marhia & C. Scharff (2009) 'Special Issue Graduate Journal of Social Sciences: Interrogating Language Difference and Translation in Social Science Research: Towards a Critical and Interdisciplinary Approach' *Graduate Journal of Social Science* 6-3: 1-12.
- Phelps, N.A., T. Bunnell, M.A. Miller (2011) 'Post-Disaster Economic Development in Aceh: Neoliberalizations and other Economic-Geographical Imaginaries' *Geoforum* 42: 418-426.
- Phillips, M. & A. Budhiman (2005) 'An Assessment of the Impacts of the 26th December 2004 Earthquake and Tsunami on Aquaculture in the Provinces of Aceh and North Sumatra, Indonesia' *Food and Agriculture Organizations of the United States – Fisheries Tsunami Emergency Programme*
- Phillips, M. & R. Subasinghe (2010) 'Small-Scale Shrimp Farmers and Global Market – Trends, Future Prospects and Adaption' in: V. Alday-Sanz (ed.) *The Shrimp Book* Nottingham, Nottingham University Press: 35-45.
- Ponte, S. (2009) 'Quality Conventions and Governance in the Wine Trade: A Global Value Chain Approach' in: D. Inglis & D. Gimlin (eds.) *The Globalization of Food* Oxford, Berg publishers: 97-116.
- Polanyi, K. (1944) *The Great Transformation: The Political and Economic Origins of our Times* Boston, Beacon Press.
- Rallet, A. & D. Motlow (1995) 'Convention Theory and Economics' *Réseaux* 3-2: 167-186.
- Ravikumar, B. & K. Yamamoto (2009) 'Aquaculture Livelihoods Service Centers in Aceh, Indonesia: A Novel Approach to improving the Livelihoods of Small Scale Fish Farmers' *Aquaculture Asia Magazine* 14-4: 16-22.
- Raynolds, L.T. (2002) 'Consumer/Producer Links in Fair Trade Coffee Networks' *Sociologia Ruralis* 42-4: 404-424.
- Rosin, C. & H. Campbell (2009) 'Beyond Bifurcation: Examining the Conventions of Organic Agriculture in New Zealand' *Journal of Rural Studies* 25: 35-47.
- Ruddle, K. (2011) "'Informal" Credit Systems in Fishing Communities: Issues and Examples from Vietnam' *Society for Applied Anthropology* 70-3: 224-231.
- Salais, R. & M. Storper (1992) 'The Four "Worlds" of Contemporary Industry' *Cambridge Journal of Economics* 16: 169-193.
- Sandler, T. (2004) *Global Collective Action* USA, Cambridge University Press.

- Sano, A. (2000) 'Social Actors in the Global Market: Socio-Economic Impacts of Shrimp Aquaculture in South Sulawesi, Indonesia' *Institute of Social Studies Working Paper* 316.
- Smith, P.T. (ed.) (1999) 'Coastal Shrimp Aquaculture in Thailand: Key Issues for Research' *ACIAR Technical Reports* 47: 1-131.
- Storper, M. (1997) *Territorial Development in a Global Economy: The Regional World* London, The Guilford Press.
- Storper, M. & R. Salais (1997) *Worlds of Production: The Action Frameworks of the Economy* Cambridge, Harvard University Press.
- Taylor, P.L. (2005) 'In the Market but not of it: Fair Trade Coffee and Forest Stewardship Council Certification as Market-Based Social Change' *World Development* 33-1: 129-147.
- Thévenot, L. (2002) 'Conventions of Co-ordination and the Framing of Uncertainty' in: E. Fullbrook (ed.) *Intersubjectivity in Economics* London, Routledge: 181-197.
- Umesh, N.R., A.B. Chandra Mohan, G. Ravibabu, P.A. Padiyar, M.J. Phillips, C.V. Mohan & B. Vishnu Bhat (2010) 'Shrimp Farmers in India: Empowering Small-Scale Farmers through a Cluster-Based Approach' in: S.S. De Silva & F.B. Davy (eds.) *Success Stories in Asian Aquaculture* Dordrecht, Springer: 41-66.
- Vásquez-León, M. (2010) 'Free Markets and Fair Trade, Collective Livelihood Struggles and the Cooperative Model: Two Case Studies from Paraguay' *Latin American Perspectives* 37-6: 53-73.
- Vollan, B. (2011) 'Pitfalls of Externally Initiated Collective Action: A Case study from South Africa' *World Development* 40-4: 758-770.
- Walker, P.A. (2006) 'Political Ecology: Where is the Ecology?' *Progress in Human Geography* 30-3: 382-395.
- Whiteside, N. & A. Mah (2012) 'Human Rights and Ethical Reasoning: Capabilities, Conventions and Spheres of Public Action' *Sociology* 46-5: 921-935.
- Wilkinson, J. (1997) 'A New Paradigm for Economic Analysis?' *Economy and Society* 26-3: 305-339.
- Wilkinson, M.J. (1999) 'How useful are Focus Groups in Feminist Research?' in: J. Kitzinger & R.S. Barbour (eds.) *Developing Focus Group Research: Politics, Theory and Practice* London, SAGE Publications Ltd.: 99-112.
- Wollni, M. & M. Zeller (2007) 'Do Farmers Benefit from Participating in Specialty Markets and Cooperatives? The Case of Coffee Marketing in Costa Rica' *Agricultural Economics* 37: 243-248.
- Zainun, I., S. Budidarsono, Y. Rinaldi & M.C. Adek (2007) 'Socio-Economic Aspects of Brackish Water Aquaculture (Tambak) Production in Nanggroe Aceh Darussalam, Integrated Natural Resource Management & Livelihood Paradigms in Recovery from the Tsunami in Aceh' *ICRAF Working paper* 46.

Appendix 1. Detailed overview of informants

No.	Name	Age	Profession	Subset/Type	Location <i>tambak</i>
1	Murtalabuddin	41	Farmer	ALSC & AAE (type I)	Peudada - Bireuen
2	Ramli Basyah	53	KP; PN	ALSC & AAE (type I)	Neubok Naleung
3	H. Sayuti	40	Farmer	ALSC & AAE (type I)	Neubok Naleung
4	Usman N. Nur	37	KP	ALSC & AAE (type I)	Angkin Barat – Samalanga
5	Irwansya	37	KP; secretary ALSC	ALSC & AAE (type I)	Sangso – Samalanga
6	Syarwani	35	Farmer	ALSC & AAE (type I)	Sangso – Samalanga
7	Abdurrahman Isya	57	Farmer	ALSC & AAE (type I)	Sangso – Samalanga
8	Amajid Hanafiah	44	KP; Leader of SADAR	ALSC & AAE (type I)	Pante Paku - Jangka
9	Buni Amin	38	KP	ALSC & AAE (type I)	Pante Paku – Jangka
10	Zulkifar	24	Farmer	ALSC & AAE (type I)	Pante Paku - Jangka
11	Safrizal	28	Farmer	ALSC & AAE (type I)	Sawang – Geudong
12	Azhar	38	Toke; KP	ALSC & AAE (type I)	Blang Mangat - Teunung
13	Marzuki	48	Farmer	ALSC & AAE (type I)	Blang Mangat – Teunung
14	Erya Darma	43	KP	ALSC & AAE (type I)	Samalanga – Sangso
15	Idris A.	44	KP; Toke	ALSC & AAE (type I)	
16	Surya Bachtiar	31	Secretary ALSC	ALSC (type II)	Samalanga – Sangso
17	Asnawi AR	40	Farmer	ALSC (type II)	Sangso
18	Ruslam	35	Farmer	ALSC (type II)	Sawang – Geudong
19	Ridwansyah	50	Farmer	ALSC (type II)	Calok – Peudada
20	Burhanudin	34	Small Toke	ALSC (type II)	Nasee Barat – Pandrah
21	M. Yusuf	55	Small Toke	ALSC (type II)	Uteng Karut – Pandrah
22	Bachtiar	32	Farmer	ALSC (type II)	Timak Mur – Gandapura
23	Yusri Hussain	45	KP; Toke; Secretary ALSC	ALSC (type II)	Timak Mur – Gandapura
24	Mukhtarrudin	50	Farmer	ALSC (type II)	Blang Ruu – Gandapura

25	Ismail Muhammad	40	Farmer	ALSC (type II)	Samuti Kerung – Gandapura
26	Maimun	35	Farmer	ALSC (type II)	Matang Pasi – Peudada
27	Anwar	43	Farmer	ALSC (type II)	Calok & Matang Pasi – Peudada
28	Khalilullah	40	KP; PN	ALSC (type II)	Pulo Pineung – Jangka
29	Abdul Salam	52	Farmer	ALSC (type II)	Pulo Pineung – Jangka
30	Bachtiar Hussain	52	Village leader; Chairman ALSC and Karya Utama	ALSC (type II)	Gandapura
31	Sayed Hamzah Al Mahdali	52	Farmer	Non-member (type III)	Beurawang
32	Jakfar	56	Farmer	Non-member (type III)	Neubok Naleung
33	Sudirman	30	Farmer	Non-member (type III)	Calok – Peudada
34	Abdul Salaam	63	Farmer	Non-member (type III)	Mantak Siguk – Aceh Utara
35	Zainal Abidin	46	Farmer	Non-member (type III)	Lueng Baro – Lapang – Aceh Utara
36	Miswar Sulaiman	27	Farmer	Non-member (type III)	Calok – Peudada
37	Muktharrudin	40	Farmer	Non-member (type III)	Blang Kubu – Peudada
38	T. Riansyah	18	Farmer	Non-member (type III)	Sawang – Peudada
39	Muliardi	28	Farmer	Non-member (type III)	Sawang – Peudada
40	Mirza	30	Farmer	Non-member (type III)	Sampo Inip – Bahtia – Aceh Utara
41	M. Zaman	65	Farmer	Non-member (type III)	Pulo Pineung – Jangka
42	Mukhtar	32	Toke	Non-member (type III)	Lapang Barat – Gandapura
43	Ibrahim	30	Farmer	Non-member (type III)	Samak Timok Mur
44	(Anonymous I)		Farmer	Non-member (type III)	Jangka (Pulo Pineung)
45	(Anonymous II)		Farmer	Non-member (type III)	Jangka (Pulo Pineung)
46	Syahrul Basri	40	Farmer	AAE member	Blang Kubu
47	Muhammed Haji	57	Farmer	AAE member	Calok – Peudada
48	Afrianur	47	Farmer	AAE member	Calok - Peudada

ALSC: Aquaculture Livelihood Service Center

AAE: Aceh Aquaculture Enterprise

PN: Petua Neuheun (cluster leader)

KP: Ketua Petambak (group leader)

Appendix 2. Semi-structured interview guide

Explain who I am and what the research is about.

Assure anonymity

Explain I want to know what they think and why I want their cooperation

Ask permission to record

Encourage interrupting for additional information on questions

Name:

Age:

Location:

Highest level of completed education:

Family size:

Previous member of ALSC:

Member of AAE:

(individual characteristics and production information)

1. Pond size & number of ponds
2. Description of production system
 - monoculture/polyculture
 - stocking density and stocking cycles per year
 - who is involved in different stages of productions (pond preparation, stocking, feeding, harvest). Which stages require more (or less) support in terms of labor, capital or other services.
 - BMP procedures (use overview page of BMP)
3. Using hired labor (yes/no), who and why?
4. Using chemicals? Who provides these chemicals, how and why
5. Do you work together with other (shrimp) farmers? (or alone)
6. How many hours do you spend on your farm on average per day? During which period more?
7. What are the main difficulties relating to shrimp farming in your eyes; do you experience any difficulties? What kind?
(disease; environment; quality of seed or feed; capital; not using pesticide; feed management practices; removing organic black waste from pond bottom; maintain a pond book; remove any algae and hydrilla; regularly check the shrimp for health and growth)
8. Who are in your eyes the most important actors (people) needed for shrimp farming and marketing?
9. To whom do you sell your shrimp and do you know where he/she sells it to?
From who do you get your seed?
10. Other major household income sources:
11. Which individual characteristics do you recognize in yourself (show them the character cards). Can you pick 6 cards which fit your personality best?

(norms and values)

does the community assist in shrimp farming?

12. Personal values ranking system (value card pack 1 and pack 2). Ask yourself: what is most important in my life? Then put the cards in order of importance

(formal and informal services)

13. Can you give a list of the services you get during shrimp farming, which are most important? From whom do you receive these services, and why from them? (see table)
14. Why did/didn't you become a member of ALSC and/or AAE?
15. Who is your KP (group leader) and do you think he is good in this position? Why?
16. Who is your PN (cluster leader) and do you think he is good in this position? Why?
17. Who is your toke (trader/middle men) and do you think he is good in this position? Why?
18. Does the village leader play any role in your shrimp farming? What role?
19. Does the religious leader play any role in your shrimp farming? What role?

FORMAL			INFORMAL		
AAE	ALSC	..	TOKE	..	
Technical assistance	Technical service				
Credit	Trainings		'Credit'		
Feed	Traceability		Feed		
Seed	Computer training		Seed		
Marketing	Laboratory services		'social'services		
Compliance FT	(credit and savings Facilities)				
Auditing FT	Good market access				
Traceability					

Thank the farmer for his time. Sometimes ending with "is there anything else you'd like to tell me?" might be a powerful tool to get some important aspects in the farmer his eyes. I might also ask if I can contact the informant later in case I have additional questions or remarks.

Appendix 3. Photo impression of the fieldwork in Aceh

