Factors for Successful Development of Farmer Cooperatives in Northwest China

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Abstract

Farmer cooperatives in Northwest China first appeared in the 1920s. Their development has been strongly influenced by the external environment and political approaches to cooperative promotion. Although farmer cooperatives have developed rapidly in China in the last three years, progress has not been uniform across the provinces, due to differences in farmer education levels and varying economic and social situations. In order to identify factors for the successful development of farmer cooperatives in Northwest China, two cases of provincially approved successful farmer cooperatives in Shandan county of Gansu province were chosen for this research. The results revealed that a stable legal environment; a dedicated initiator and leader; government financial and technical support; farmer understanding and participation of cooperative activities and appropriate external support from professional NGOs were the key factors for the successful development of farmer cooperatives in Northwest of China. This study also found some challenges that farmer cooperatives have faced in their development. The successful development of the cooperatives studied showed their significant influence on both their members and the local rural community.

Keywords: Chinese cooperatives, successful factors, cooperative development, Northwest China

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Introduction

Farmer cooperatives in Northwest China appeared in the 1920s. Their development has been strongly influenced by the political environment and the political approaches to cooperative promotion. Farmer cooperatives developed faster in the 1950s due to government authority changes from Kuomintang (KMD) to China Communist Party (CCP) and the implementation of the Agriculture Cooperative law in 1956. However, the implementation of government policy, which changed cooperatives into people’s communes, caused the stagnation of farmer cooperative development from the 1960s to the early 1980s. After the 1980s, farmers tried several types of economic organizations in response to the change from a planned to a market economy. Before 2007, different types of cooperatives developed in China due to the lack of cooperative policy and law and other government influences (Fock & Zachernuk 2005; Zhang 2007).

Realizing the importance of farmer cooperatives in rural development in China, the government enacted a Farmer Specialized Cooperative Law which came into force in 2007 to promote and guide farmer cooperative development. According to this law, a farmer cooperative should be set up by following the principles: (a) farmers play the dominant role amongst its members; (b) the key purpose is to serve members and act in the common interests of all members; (c) the members shall join and exit voluntarily; (d) all members are equal and cooperatives are democratically controlled; (e) surplus should be redistributed, based on the volume of members’ patronage (NPC 20061). Although this law provided a legal environment for the establishment of cooperatives in China, it is still not apparent how to successfully develop and operate cooperatives. Therefore, identifying the factors that could contribute to the successful development of cooperatives in China would help the promotion and future viability of farmer cooperatives. In the last few years, several studies have been done but most of them were based in the developed cooperative region of the eastern parts of China (Han et al. 2006; Yu 2009; Zhang and Yuan 2010). There is limited research on farmer cooperatives in Northwest China, especially in the western part of Gansu province.

The aim of this paper is to identify and discuss factors contributing to the successful development of farmer cooperatives in Northwest China and the Gansu province in particular. The aim is achieved by the following objectives: 1) to overview the evolution of farmers’ cooperatives in China; and, 2) to analyze factors influencing the successful development of farmers’ cooperatives in Gansu province.

In this paper, a successful farmer cooperative is define as follows: (a) it runs regular all-member meetings by following a democratic control principle; (b) its members are able to regularly access the cooperative’s financial reports and there are bylaws in place to guide the management in the areas of marketing, financial management and staff management; (c) it provides a standard service for all its members and demonstrates stable relationships with its members; (d) it offers technical training and it guides the process of production and marketing; (e) it implements a united production system and products are marketed together; (f) the total service and annual business income of the cooperative should be more than one million yuan (RMB 1000,000 Yuan—200,000NZD); (g) it has a close business relationship with local farmers (non-cooperative

1 Article 3/chapter 1/paragraph 4
members) and plays a leading role in the improvement of the local agriculture industry (Nongjingchu 2008).

The paper is structured in five sections. Section two summarizes the cooperative development in China. The methodological approaches used in this study are presented in section three. Section four provides analysis and discussion while the final section outlines some conclusions.

Overview of the Development of Farmer Cooperatives in China

The development of farmer cooperatives in China can be categorized into four periods: pre 1949; from 1949 to early 1980s; early 1980s to 2007; and 2007 to present.

During the pre 1949 period, both government and non-government organizations tried to promote modern cooperatives in rural China. However, due to the different understanding and approaches in promoting cooperatives, results and efforts were different. KMD followed a “three principles of cooperation” ‘top down’ approach by forcing residents’ participation. Farmer cooperatives, influenced by the CCP cooperative ideology, were established by following a ‘bottom up’ approach and were more productive and their members were more active. Producer’s cooperatives, consumer cooperatives, marketing cooperatives and credit cooperatives were the main types of farmer cooperatives developed (Jxcoop 2005).

In 1949, the establishment of the People’s Republic of China (PRC) brought a new era for the development of farmer cooperatives in China. In the 1950s, the land reform program made farmers into landowners which raised farmer’s enthusiasm (Tung 1959). A new agricultural cooperative law was enacted by the government to develop and guide farmer cooperatives. However, the government viewed the transformation from individual farmer proprietorship to collective farming as a long-term process and they recognized that collectivization was the way to mobilize rural surplus labor (Perkins & Yusuf 1984). This transformation process proceeded gradually, through three distinct phases: 1) mutual-aid team which was voluntarily formed by six or more households; 2) ‘semi-socialist’ or ‘low’ agricultural producing cooperatives, where land would be pooled and farmed cooperatively, whilst the farmers still retained their ownership of land; and 3) ‘higher’ or ‘advanced’ cooperatives, where private land ownership would be abolished (Meisner 1986). This policy resulted in the rapid growth of farmer cooperatives in rural China. In 1956, there were approximately 75,410,000 households, (or 62.6% of the nation’s members), involved in either semi-socialist cooperatives or socialist cooperatives while in 1955 there were only 16,920,000, (14.2% of the nation’s members (Tung 1959). In 1958, due to the political climate, the government forced the ‘lower level’ cooperatives to be merged into ‘higher level’ ones, which was represented by phase three of the original vision (Perkins & Yusuf 1984). As a result in the early 1960s, 26,000 communes were created and each commune comprised about 5,000 households or 40 villages. Under this commune operating system, each commune planned its own activities, including the overall management of its small industries, secondary education and hospitals. It covered almost everything related to its members’ lives (Warshaw et al. 1973; Perkins & Yusuf 1984). This ‘rushed’ government policy failed due to the lack of mass support plus bad weather. Farmer cooperatives stagnated in the 1960s and the 1970s (Tung 1959; Warshaw et al.1973).
The period early 1980s until 2007 was characterized by the implementation of the household contract responsibility system (in the 1980s) based on the central government decision in 1978 and the establishment of farmer specialized cooperatives and associations (in the 1990s). The household contract responsibility system together with remuneration linked to output was the main policy tools for the reform in rural areas. The people’s commune system was cancelled and a system of township government was restored. Farmers were given greater freedom to choose which crops to cultivate and the household became the dominant unit of production (Croll 1987; Vermeer 1987). This reform greatly enhanced and stimulated farmers’ motivation and it resulted in a sufficient increase in agricultural production and rural incomes (Vermeer 1987; Shi 1998).

Towards the end of the 1980s, various households (with common specialties) combined and specialized associations began to appear. However, since there was no prompt formulation of cooperative law, those specialized farmer associations could not register and obtain legal status as cooperative enterprises. They were unable to carry out independent economic activities. These types of new farmer associations were left to live or die (Liu 2007; Yuan 2008).

In the 1990s, earlier experiments in enterprise forms began to spread nationwide, following the publication of the Ministry of Agriculture circulars, aimed at standardizing models. At this stage, attention was particularly focused on specialized production within technical associations; the reform of township and village enterprises into shareholding cooperatives; and rural cooperative fund associations (Clegg 2006). By 1997/1998, the ground rules for the agricultural economy began to fundamentally change, as emerging national markets in agricultural produce shifted, from a supply to a demand orientation (Zhang 1999). Farmer Specialized Cooperatives had begun to emerge, especially in fruit and vegetable sectors. These specialized cooperatives were involved in pre- and post-farm production activities, in relation to purchasing, processing and marketing (Shen et al. 2005; Clegg 2006). In the 1990s and early 2000s, there were two main types of farmers’ economic organization, which included farmers’ specialized association and farmers’ specialized cooperative. The main difference between these two forms was the ownership of fixed assets and the functional activities (production, marketing, or processing). Specialized cooperatives were registered with the Administration of Industry and Commerce Bureau and had fixed assets while Farmer specialized associations were registered at the Civil Affairs Bureau and they normally did not have any fixed assets (Hu 2007). It was clear that the lack of legislation has affected the development of farmer cooperatives in China. In 2006, the Chinese Farmer Specialized Cooperative law was enacted aiming to formalize and standardize the farmers’ economic organizations and took into place in 2007.

After 2007, with the release of the Farmers’ Specialized Cooperatives Law (2007) and various governmental support polices, farmer cooperatives developed very rapidly in rural China. According to the data from the Ministry of Agriculture (MOA), there were 310,000 registered farmer cooperatives with 26,000,000 households members (about 10% of the total national farmer households) in June 2010. These farmer cooperatives have shown remarkable results in the acceleration of the agricultural development and an increase in farmers’ revenue (Yuan 2008). Therefore, the development of farmer cooperatives has become a highlight in the innovation of China’s agricultural management organizations and systems (MOA 2011).
Methodology

Qualitative methodology was employed in this research using a case study approach. Shandan County (in Gansu Province) was chosen as the study site for its location (Northwest China), its uniqueness in having a local (county level) professional cooperative development NGO, lower levels of both industrial and rural cooperative development — and offered easy access for the researcher. Dongwan Lvdadi Melon and Vegetable Growing Cooperative and the Ronghua Growing cooperative were selected for this study following the recommendations from the county Agriculture Bureau and the Shandan Cooperative Federation (NGO-independent organization). The evolution of these two cooperatives reflects the development of farmer cooperatives development in this region (see Appendix 1). They also met the criteria and went through an approval process (see Appendix 2) deeming them in the top 100 provincial cooperatives. This criteria is mainly reflected in cooperative annual income and its impact on the local community.

Secondary data were collected from reports (both published and unpublished) undertaken by the Agriculture Bureau of national, provincial, district and county level and the Shandan Cooperative Federation (NGO) and government. Data, such as the cooperatives’ constitution and bylaws of financial management, relating to the cooperatives were also collected from the cooperatives studied.

Primary data were collected through face-to-face semi-structured interviews. Interviewees were selected using purposive sampling and included cooperative leaders, cooperative members, government officials and NGO representatives. Nineteen interviews were conducted using a questionnaire. Data were analyzed using categorizing and pattern-matching structure (Yin 1994). Ethics issues were a high concern in this research, particularly relating to the participants’ privacy and confidentiality.

This study was limited as it involved only two farmer cooperatives in Shandan County, Northwest China due to time and capital limitations. The ‘household’ membership structure and the future successful cooperative development with a higher number of cooperatives involved needs to be further studied.

Results and Discussion

The Dongwan Lvdadi Melon and Vegetable Growing cooperative is located in Dongwan village (Weiqi township) of Shandan county (Figure 1). It was initiated by Wang Deqin, who is a farmer but also a party secretary of the Dongwan village party commission. This cooperative produces mainly onions and markets them using contracts. Seventy-nine melon and vegetable growers formed the initial establishment in 2007, and grew to 486 members (some of them coming from outside of Dongwan village) by 2010. The cooperative also has 1,500 associate members who produce the same products but cannot vote (see Appendix 3). At the end of 2009, this cooperative was approved by the Gansu provincial government as one of the 122 pilot cooperatives, within Gansu province. It was also evaluated as one of the top 100 provincial cooperatives by Gansu provincial government (Nongjingchu 2009).
The Ronghua Growing cooperative is located in Shanyangpu (Dongle township of Shandan county (Figure 1). It was initiated by Yin Huawen, an ordinary farmer who has large contract land. Initially, 18 farmers joined and established this cooperative in 2007. This is the first officially registered farmer cooperative in Shandan County. In 2010, the number of membership has increased to 106, and they are all from the same village. This cooperative produces maize seed, Chinese herbs, and now tries to grow some vegetables. They market maize seed by contract (only about 60% of its products) and sell the other products locally (see Appendix 3). In 2009, Ronghua cooperative was approved by Gansu provincial government as one of the 122 provincial model cooperatives.

**Figure 1: Map of Shandan**

**Legal Environment and Government Policy**

Several key factors influenced the successful development of the two cooperatives. First, a stable legal environment and appropriate government policy were important for the successful development of the cooperatives studied. This is similar to Sargent’s (1982) comparative analysis of cooperative development in seven countries which included UK, Ireland, the USA, Denmark, the Netherlands, France and Italy. This is also similar to a few studies (Han et al. 2006; Yu 2009; Zhang and Yuan 2010) of farmer cooperatives development in the middle and eastern area of China.

Government policy also had a strong influence on farmer cooperative establishment and development. The evolution of farmer cooperatives in China, in the 1950s and from 2007 onwards, showed the importance of government policy in fostering farmer cooperative development. The case of Northwest China where government policy affects almost all economic activities in some
form or another though differs from Bekkum (2001) who identified in his research that government policy has a limited impact on cooperative development in liberalized countries.

The implementation of the cooperative law (with its stricter specifications) also speeds up and standardizes the establishment of farmer cooperatives at the early stage of their development. The unsuccessful experience of farmer cooperative development in the 1950s in China provided a good lesson for both the government officials and farmers today. Cooperatives successfully develop only when members work for the community instead of just for their own gains (Cheney 1999).

Another interesting finding was that although the government supported policies such as free registration, free training, easy access to capital and financial support, all aimed to foster the cooperative development; some farmers may join without being fully committed to the cooperative and its operations.

Cooperative Initiator and Leadership

The establishment and development of the two cooperatives shows that a dedicated initiator with vision, business and management capacity, who is well educated, with an enthusiasm for innovation and being open-minded and who also has excellent communication skills, is critical for the success of the farmer cooperatives studied. This is similar to Banaszak (2008) analysis in Poland who also stated that the initiator/s of the cooperative/s were key factors for success. Similarly, Zhang and Yuan (2010) further argued that people who found the cooperatives, often as cooperative core leaders had a big influence on cooperative development. Therefore, in order to ensure ongoing successful development, cooperative initiators need to continually enhance the strength of leadership. This strength of leadership may include their vision and spirit as well as a time commitment to the organization, together with their honesty and openness.

This study also found that the roles that the initiators played were very complicated. They had three roles. As a board member, the initiator had the role to show his vision and governing ability for the cooperative to develop. As a member of management, the initiator had the responsibility to administer the cooperative properly to achieve the cooperative’s goals. As a member of the cooperative, the initiator had to produce a certain amount of products to complete the contract with the cooperative and commit to the future development of the cooperative. The two initiators of the cooperatives under study here played key roles for the success of their cooperatives. This has been a challenge for cooperatives like the Ronghua cooperative where the majority of cooperatives members have a very low level of education and technical skills, and lack of capital resources.

Cooperative Members

The study of these two cases showed that cooperative members are fundamental to the success of their cooperative. As the literature suggests, the success of a cooperative is determined by the members’ knowledge of their organization; their education level; technical skills; participation; commitment; and the relationship between members and managers (Harris at al. 1996; Fulton 1999). The results of this study suggested similar results and identified members as an important
factor for success. It further revealed that members’ knowledge of their cooperative, member technological skills and their participation at cooperative meetings and training courses were especially important for the successful development of farmer cooperatives in the less developed area of Northwest China.

This study also showed the influence of the household membership structure on the development of farmer cooperatives in Northwest China. The cooperative membership is based on household, which meant each household/member has one vote in the cooperative. In the early stages of cooperative development the household membership contributed positively to the successful development of the cooperatives. However, in the future changes can occur as to who represents the household and who does the actual farming. This study suggested that mainly women were doing most of the farming while men (traditionally head of the household), working as migrants somewhere else, were attending the cooperative meetings and participating in the decision making process. In the future, women might start requesting more voice in the cooperative representation and decision-making.

The change of membership from homogeneity to heterogeneity is another issue in the case of the Dongwan cooperative. Research of cooperative development in Poland revealed that homogeneity was a factor that influenced the success of cooperatives (Banaszak 2008). The study of Dongwan cooperative suggested that the change from homogeneous (members only from one natural village) to heterogeneous (more associate members from other villages and townships) could help the cooperative grow and increase its income. However, this change is likely to affect the cooperative’s future development in both positive and negative ways. In a positive way, the increased size of the cooperative will support the cooperative growth. This will help the cooperative to produce more and increased market power, which will lead to increasing the members’ income. The importance of market power and scale is consistent with Brunyis et al. 2001 that found that adequate business volume and adequate marketing agreements were critical success factors for cooperatives. But the increased number of cooperative members has the potential to cause conflict amongst the members—and the members and management. Furthermore, conflicts could exist between formal members and associate members. These conflicts have the potential to influence the effectiveness of the cooperative’s operation.

**Cooperative Governance**

This study found that the governance structure of the two cooperatives was well defined due to the criteria for cooperative registrations (following the cooperative law). It is clear that a well-informed governance structure is important for the success of a cooperative (Chaddad & Cook 2004). It is about the relationships between the cooperative’s members and their board and management (Bird 2001). However, this study also found that although farmer cooperatives in Northwest China have a well formed governance structure due to the requirement of official registration, this did not necessarily mean that all the members fully understood why and how cooperatives worked. This is quite different to other studies, where the organizational innovations often showed a long initial phase of build-up and experimentation before they were functional (Fairbain 2004).
Cooperative Management

Study of the two cooperatives showed that high level efficient internal management, transparency, democracy and excellent communication between members and management were important for the successful development to the cooperatives. This is similar to the studies, such as Sargent’s (1982) in USA, Suksawang’s (1990) in Thailand and Han et al (2006) in China in the Zhejiang, Shandong and Hebei provinces. However, this study further focused on the importance of members’ understanding, communication and support for their management. The cooperatives studied identified that management and governance work were done on a voluntary basis (no pay) in the early stages of development.

Literature revealed that management of cooperatives is a crucial factor to success or failure. Indicators, such as sound finance, increased income, marketing capability and business planning and management could all be used to measure the economic and business outcomes of the success of farmer cooperatives (Suksawang 1990; Bruynis et al. 2001; Fulton 2004; UN 2005). This study demonstrated that the financial and business management of the cases studied was successful as the members increased their income, their turnover also increased and there was significant market development in the last two years. However, the results also revealed that the selection of a core product which fit the natural resources and market needs (like Dongwan cooperative mainly producing onions) was also important for the success of the cooperative. This is similar to Pan’s (1999) research of farmer vegetable growing cooperatives in Shandong province in China.

Another important finding was that working with contracts, both with the ‘customer’ companies and its own members, played a significant role for their success of business management. Signing contracts with customers, in the case of the Dongwan cooperative, guaranteed them markets, which reduced their markets risks and allowed them to plan their business ahead. Signing contracts with members was also a good business practice, at their early stage of cooperative development, adopted by both cooperatives.

Training and Education

Training and education, as one of the cooperative principles, has been recognized as an important factor for the successful development of cooperatives worldwide. The results revealed that regular training has partially increased members’ understanding and knowledge on cooperatives and their potentials. This study further suggested that the participatory approach such as role playing is an efficient training tool for the members with limited education. In the Ronghua cooperative most of the women (around 40 years old) involved in the cooperative activities had only two to four years education. With the limited level of literacy, trainers (Shandan Cooperative Federation) developed hands-on and role-play methods that help the members to gain some general cooperatives skills. Furthermore, finding the balance between technical and cooperative training was also important for the successful development of farmer cooperatives in Northwest China.

Problems and Opportunities for Future Cooperative Development

Cooperatives face five general problems in their development such as horizon problem, free rider problem, portfolio problem, control problem and influence on cost problems (Cook 1995; Zeuli
Although this study has demonstrated that farmer cooperatives in Northwest China could be successfully established and developed, there were also signs that these two cooperatives have also faced some common problems. First, following the cooperative business expansion and increase in income, members might ask for more income instead of investing further in the cooperative which would appear as a ‘horizon problem’. Second, the increasing number of cooperative associate members in the case of the Dongwan Cooperative suggested a ‘free-riders’ problem. Third, the increasing gap between larger producers and smaller producers might cause decision-making problems. Furthermore, smaller producers might gradually lose their confidence in the cooperative if only the larger producers formulate the policy and become dominant in the cooperative business. Fourth, as the cooperatives grow, especially in size, misunderstanding between members and governance and management might arise and cause ‘control problem’. Fifth, the cost of management has been increasing which might become more demanding on committee members’ time and finances as cooperatives become bigger, indicated as ‘influence on cost problem’. Last, due to the characteristics of ‘household’ membership, there could be conflict among the household members when the incomes from their cooperative economic participation increase. Who participates in the meetings could also affect the successful development of cooperatives. It seems likely that farmer cooperatives in Northwest China such as the Dongwan and Ronghua cooperatives, will face the common development problems described above thus the board, management and members of the cooperatives in Northwest China tended to address these issues in their future planning.

Other problems influencing farmer cooperative development in Northwest China would be the danger of government over-intervention. Although this study revealed that government support was very important for the establishment of farmer cooperatives, it also indicated that government over-intervention could negatively affect these cooperatives. Therefore, government officials have to find a balanced approach to foster, guide, support but not to intervene in cooperative management.

This study also outlined some opportunities for farmer cooperatives in Northwest China. The stable legal environment together with government supporting policy in rural development has created a better social environment for developing farmer cooperatives. These support policies for training and financial support might enable cooperatives to develop faster and grow larger in a short period of time. The current land leasing policy also facilitates cooperative growth. Increased market demand (local, provincial and national) for safe and high quality agricultural products is another opportunity for farmer cooperatives in Northwest China. As the farmer cooperatives develop, the small cooperatives might get together and form federations, which would increase their market power and provide more services for their members. Therefore, cooperation with other cooperatives in different regions could be perceived as another opportunity for farmer cooperative development.

**Conclusion**

Farmer cooperatives in Northwest China first appeared in the 1920s. Their development has been strongly influenced by the political environment and the political approaches to cooperative promotion. Although the newly enacted Farmer’s Specialized Cooperative Law (2007) aims to promote successful development of farmer cooperatives, the level of cooperative development varies in different regions of China due to different economic development and different levels.
of cooperative understanding. The farmer cooperatives in Northwest China are still at their initial stage. Factors such as a stable legal environment, government support, a dedicated initiator, farmers understanding and participation of cooperative activities, transparent and efficient internal management; product orientation, cooperative and technical training, and appropriate external support from professional NGOs could contribute to the successful cooperative development in Northwest China.

The successful development of these two cooperatives in Shandan county showed their significant influence on both their members and the local rural community. A stable legal environment and government policy builds up farmer confidence in the potential of cooperatives. Farmer cooperatives in Shandan County, Northwest China could grow bigger and stronger with better management capability, better member participation and better understanding of the nature of cooperatives. Farmer cooperatives could play a significant role in fostering local, social and economy development. More and different types of farmer cooperatives could be established in Northwest China to the benefit of future cooperative members.

References


Han, J., Z. Qin, Y. Zhang & D. Luo. 2006. The current development and problems of Chinese cooperative development. *Zhongguo Jingji shibao*


### Appendix 1:

Evolution of Shandan Cooperative

<table>
<thead>
<tr>
<th>Time</th>
<th>Number of cooperatives</th>
<th>Number of households</th>
<th>Other items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>116 (mutual-aid groups)</td>
<td>812</td>
<td>6.9 % of total farm households</td>
</tr>
<tr>
<td>1953</td>
<td>1132 (261/871) (mutual-aid groups)</td>
<td>6885</td>
<td>53.2 % of total farm households</td>
</tr>
<tr>
<td>1954</td>
<td>3 (primary farmer cooperatives)</td>
<td>108 (642 farmers)</td>
<td>Labor force 208 Land: 4323.5mu 2-3 managers to manage plan, finances etc.</td>
</tr>
<tr>
<td>1955</td>
<td>76 (low level)</td>
<td>5222 (39%)</td>
<td></td>
</tr>
<tr>
<td>1956</td>
<td>196 (higher level)</td>
<td>All farmers joined</td>
<td>547799 mu (total)</td>
</tr>
<tr>
<td>1957</td>
<td>37 (reformed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1958</td>
<td>3 people commune</td>
<td>29 bridge; 176 production team</td>
<td></td>
</tr>
<tr>
<td>1965-1982</td>
<td>10 people commune</td>
<td>91 bridge team; 532 producing team</td>
<td>1752 households per team (average)</td>
</tr>
<tr>
<td>1982</td>
<td>11 townships</td>
<td>2.4314 rent 54.7588 mu land</td>
<td>Household responsibility system established</td>
</tr>
<tr>
<td>1980-2006</td>
<td>60 farmer economic organizations (associations and cooperatives)</td>
<td>15,530 household from 115 villages in 11 townships</td>
<td>Household responsibility system</td>
</tr>
<tr>
<td>2007-2009</td>
<td>62 farmer economic organizations (45 officially registered farmer cooperatives)</td>
<td>15,630 households from 115 villages in 9 townships</td>
<td>Cooperative law took effect</td>
</tr>
</tbody>
</table>

*Source:* Shandan Xianzhi, 169-175. Data from report of Shandan Agriculture and Economic Administration. 2010.
Appendix 2.
Criteria and process for the approval of the top 100 cooperatives in Gansu Province

1. Criteria:

   - Registration as a cooperative at the Industrial and Commercial Bureau, according to the Farmer Specialized Cooperative Law.

   - In 2007, the total service and business income of the cooperative is more than one million yuan (RMB 1000,000 Yuan—200,000NZD) and it has a close business relationship with farmers and plays a leading role in the improvement of the local agriculture industry.

   - It has a fully structured governance body. According to its constitution, all sections of governance and management have to be set up and regular all members meeting must be held, which are based on a democratic control principle. Members are able to regularly access the cooperative’s financial reports. There are bylaws in place to guide the management in the areas of marketing, financial management and staff management.

   - There is a standard service for all its members. The cooperative demonstrates stable relationships with its members, when sharing information about purchasing raw agricultural materials. It offers technical training and it guides the process of production and marketing. It implements a united production system and products are marketed together (those cooperatives, which have formed a product brand, have this priority to consider).

2. Process and approval:

   - Applying should be voluntary. Any cooperative can undertake a self assessment, by following the above criteria and filling in application forms to hand in to their local county level Agriculture Bureau. The Farmers awareness, willingness, knowledge and skills about cooperative are fundamental for cooperative establishment and development.

   - Local County Agriculture Bureau assesses the candidate (cooperative) and if it meets the criteria, then they report this to the Agriculture Bureau at district level.

   - The Agriculture Bureau at district level has to re-check or verify the candidate cooperative and then report to the Provincial Agriculture Bureau

   - The Provincial Agriculture Bureau will invite an expert committee to assess the candidate cooperative, by following the criteria set out previously and they will publicise the results of their assessment

   - After a certain time, acceptance will be confirmed and approved and then publicised to the public.

   (Gannongjinghan 2008)

## Appendix 3.

Key findings of the two cooperatives studied.

<table>
<thead>
<tr>
<th>Items</th>
<th>The Dongwan Lvdadi Cooperative</th>
<th>The Ronghua Growing Cooperative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Close to center town of the county</td>
<td>Far from the center town of the county</td>
</tr>
<tr>
<td>Background of initiator</td>
<td>Farmer, also village Party secretary</td>
<td>Farmer</td>
</tr>
<tr>
<td>Members motivation for establishment</td>
<td>More income and new technical skills, marketing information</td>
<td>More income and new technical skills, marketing information</td>
</tr>
<tr>
<td>Membership</td>
<td>Based on household</td>
<td>Based on household</td>
</tr>
<tr>
<td>Number of funding members</td>
<td>79</td>
<td>18</td>
</tr>
<tr>
<td>Percentage of small scale (less than 20 mu/1.3ha members)</td>
<td>64%</td>
<td>77.8%</td>
</tr>
<tr>
<td>Farmer’s contracted land resources</td>
<td>4.3 mu/0.3 ha</td>
<td>3.2 mu/0.21 ha</td>
</tr>
<tr>
<td>Members experience as farmer association</td>
<td>Five years before cooperative</td>
<td>No</td>
</tr>
<tr>
<td>Number of cooperative member in 2010</td>
<td>486</td>
<td>106</td>
</tr>
<tr>
<td>Members structure</td>
<td>From different villages</td>
<td>Only from one village</td>
</tr>
<tr>
<td>Associate members</td>
<td>1,500 (different villages)</td>
<td>No</td>
</tr>
<tr>
<td>Governance structure</td>
<td>Well formed by following the law</td>
<td>Well formed by following the law</td>
</tr>
<tr>
<td>Decision-making</td>
<td>One member one vote</td>
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</tr>
<tr>
<td>Main products</td>
<td>Onions, melon and other vegetables</td>
<td>Maize seeds, vegetable and Chinese herbs</td>
</tr>
<tr>
<td>Business management</td>
<td>Work on contracts (90% of its products)</td>
<td>Working on contracts (60%) and depend on current market (40%)</td>
</tr>
<tr>
<td>Financial management</td>
<td>Have special bylaw, maintain transparent</td>
<td>Have special bylaw, maintain transparent</td>
</tr>
<tr>
<td>Training and education</td>
<td>Regularly include both cooperative and technology</td>
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</tr>
</tbody>
</table>