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**DEVELOPING A FRAMEWORK IN ORDER TO ASSIST PRODUCERS IN FORMING AN ALLIANCE
AS PART OF THEIR COMPETITIVE STRATEGY IN THE POTATO INDUSTRY***L. Terblanche & B.J Willemse**Department of Agricultural Economics, University of the Free State, South Africa***Abstract**

The environment in which potato producers are competing in is changing due to changes in consumer demand, market concentration and strict requirements of buyers. Producers need to be innovative and adapt their strategies in order to be competitive. The formation of alliances can be seen as a form of business model that will give producers economies of scale, decrease their transaction costs and allow producers to add value to their commodity. South Africa's agriculture is characterised by small farm units, therefore increasingly more farmers are collaborating in order to be competitive. Interviews were held with the managers of five successful alliances within the potato industry and a framework was developed that can advise managers of farm units on how to start an alliance, what are the key success factors that they should be aware of and also what the lifecycle of an alliance look like in order to determine when to expand their production. The results indicated that the key success factors were sound administration, trust and loyalty, government policy, market research and value-adding. Successful alliances will continue to reinvest in their business, providing them with new opportunities to integrate further down the supply chain. The life cycle gives an indication to these producers when to start a new process of value adding. The framework provides managers with all the critical steps to forming an alliance in order to be competitive. In conclusion, the alliances interviewed in this study indicated that as a result of collaborating, they were able to be more competitive within the industry.

Keywords: farm units, market concentration, economies of scale, farmer controlled businesses, alliances, success factors

Subtheme: Farm management

Introduction

In South Africa, about 97% of the farm units have a turnover of less than R9 999 999 (Vink & van Rooyen, 2009). It is important for these farm units to be sustainable and in order to do that, they need access to markets to grow and be successful (Vasilescu,nd, Kirsten and Sartorius, 2002).

The environment that these farms are competing in has changed; since the deregulation of the market boards, producers were forced to market their own produce and prices were no longer fixed by government but determined by demand and supply in the market (National Agricultural Marketing Council, 2001). In addition to this, consumer income in South Africa is increasing, which has lead to changes in the eating habits of consumers. The increase of income has resulted in consumers demanding meat, fruits, vegetables and dairy products instead of staple foods and starch. Urbanization is also influencing consumers to demand processed foods that are easy to cook, in order to satisfy their fast paced lifestyle (Bartazolli, 2009). These consumers are also willing to pay a premium for quality and traceability. As a result, retailers have acquired a lot of market power in the South African food retail sector. These retailers have to comply with the requirements of a demand-pull market in terms of quality, traceability and the availability of products. The five largest retailers in South Africa have a combined market share of 77%, which gives them market power within the industry, causing retailers to change their procurement systems in order to comply with

the requirements of the market they are serving. Thus they would rather procure from a few large producers than many small producers (Louw, Jordaan, Ndanga & Kirsten, 2008).

The smaller farm units have to acquire economies of scale to derive the same benefits that larger farm units possess and comply with the strict requirements from their buyers. Therefore, internationally, governments are encouraging cooperation amongst farm units to overcome the challenges they face in the agrifood chain (Vasilescu, nd. Ortman & King, 2007. Soderquist, 1996 and Hoffman & Schlosser, 2001)

Weatherspoon and Reardon (2003) concluded that the only way for smaller farm units to overcome market concentration obstacles is to collaborate and obtain economies of scale. Gonzalez-Diaz (2006) stated that producers are too far from their consumers, they need to integrate further down the supply chain, in order to make it shorter and move closer to their market. The business model Gonzalez-Diaz (2006) have developed, is called a Farmer Controlled Business⁷, in which producers are still the owners and managers of their own farm units, but they can share in the benefits of being part of a bigger collaborative organisation. International studies have found that collaboration allow smaller farm units to gain economies of scale, share resources, minimize risk, enter new markets and decrease their transaction costs (Milagrosa, 2006., English Farming and Food Partnerships, 2004)

Collaboration is a new strategy to enhance competitiveness, but farming units are not taking full advantage of it in order to improve their competitiveness (Hoffman & Schossler, 2010). In South Africa, collaboration is seen as a fairly new concept on which very little research has been done. Therefore, the aim of this study is to develop a framework in order to assist agricultural producers in forming an alliance as part of their competitive strategy. In order to achieve this, the researchers will firstly identify the critical success factors of alliances within the potato industry. Secondly, the lifecycle of agricultural alliances will be reviewed and lastly, the steps in forming an agricultural alliance will be identified.

Overview of the South African Potato Industry

In South Africa there are 1,300 independent potato producers, of which half are emerging small-scale producers (Department of Agriculture, 2008). Of the total potato crop produced, 28% is bought by the informal market (hawkers), 19% is processed and 37% is sold by the formal market (Potatoes SA, 2009). The processing industry has grown at a fast pace during the last 5 years; this can be ascribed to the following factors: economic growth and urbanisation, expansion of the fast-food industry, higher average income of the population, urbanization and international processing companies entering the market. In 2007/2008 the average producer share in consumer rand was only 37%, which means that 63% of the income is generated further down the supply chain (Potatoes SA, 2009). In conclusion, the producer's share in consumer rand is small compared to the rest of the chain and as there are more producers than buyers of fresh potatoes, competition within this concentrated industry is fierce, forcing producers to seek innovative ways in decreasing production costs and increasing their economies of scale.

Data and Methodology

Potatoes South Africa, which is the organisation representing all potato producers in South Africa, identified their most successful alliances within the industry. These alliances are seen as successful because of the contribution they make in terms of production, marketing and hectares planted within their area. Agricultural alliances are not a well-known concept in South Africa and therefore there are very few successful ones in South Africa. Five alliances were identified, within five

⁷ From here on Farmer Controlled Business and collaborative structures will be referred to collectively as alliances.

different provinces in South Africa. An interview was held with every manager of the different alliances. During the interview qualitative information was collected, regarding the business model of the alliance. The study focused on one industry as single industry studies offer greater control over extraneous variations such as industry characteristics and problems that are specific to the industry (Mohr and Spekman, 1994, McDougall and Robinson 1990). Therefore, there are benefits in limiting the study, at least in the first instance, to a single industry and later replicating the study across other industries.

The questionnaire was pretested through conducting face-to-face interviews with producers in the potato industry as well as a representative of Potatoes South Africa. Based on these interviews, minor changes to the phrasing and composition of the questions were introduced. The questionnaire was again pretested on the same industry representatives and final adaptations to the questionnaire were made. Face-to-face interviews ensured that the respondents completely understood the questions and were able to elaborate on their answers. The questionnaire consisted of open-ended questions which ensured that the respondents could supply in-depth information about their business models, allowing a comprehensive picture to be formed about the alliance. The first part of the questionnaire focused on the organisation itself: the reason for its establishment, financing, obstacles and future outlook of the organisation. The second part focused on the contract between the members and the organisation and the third part on the contract between the organisation and the buyer; here the responsibilities of the different role players were discussed in terms of product quality and volume, marketing and payment. Part 4 & 5 captured the requirements as they are stipulated in the contract with their buyer. Assessment of the different parts of the questionnaire resulted in the achievement of the objectives of the study.

Characteristics of the alliances interviewed

Alliance A

Alliance A is doing their own production and marketing of potato tubers, they have also reinvested in the group by building their own laboratory and storage facilities. They successfully regulate the production in the area; as a result there has been a drastic decline in viruses spreading in the area. This alliance has 14 members and they have also expanded to include growers who sell tubers to the alliance on a contract basis. This alliance has identified their key success factors as follows: their management team, the fact that they have a feasible mission and vision, loyal members and specialist employees, who are able to give expert advice to the members.

Alliance B

In order to decrease their input costs, this alliance established their own fertilizer plant. A group of eleven producers were invited to join the alliance. Each of the producers has equal shareholding. The members are in close proximity and therefore perceive regular communication between members and transparency as their key success factors.

Alliance C

This alliance was first a cooperative, which then converted to a private company. They are 5 members, who pool their production and packaging in one pack-house and transport their commodity to their buyer. They also have their own laboratory on the same grounds. These members identified their standard of technology, their exclusivity (only 5 members) and their integration into the supply chain as their key success factors. They do not have a long term contract with a buyer and negotiate prices on a seasonal basis, based on the price and trustworthiness of the buyer.

Alliance D

This alliance was established as a form of marketing channel of fresh potatoes for producers. The members have to pay a membership fee, which makes them loyal to the group. This alliance gives

potato producers economies of scale as they market their produce in a pool. From a buyer's perspective, they prefer working with the alliance as they do not have to negotiate with 50 producers but rather one representative from the alliance on behalf of the 50 members. This alliance also plans to integrate further down the supply chain by processing their potatoes.

Alliance E

This alliance produces a certain cultivar, aimed at meeting the requirements of the consumer (baking, boiling, and frying). This alliance has producers that market under the brand name of the alliance. This gives producers access to new markets, specifically the retailers selling to high income consumers. These consumers will pay extra for a differentiated branded and high-quality product, which is exactly what the alliance can provide them with.

Results

Objective 1

After analysing the questionnaire, the success factors of the alliances were identified. The factors described below are critical when starting an alliance and can therefore assist consultants as well as producers who want to form an alliance.

- Administration/Finances

It is vital that someone is responsible for the basic administration of the alliance. The other option is that one of the members should do the administration of the group (often voluntarily) but then factors like trust and leadership or seniority sometimes become a concern. The best option would be if the members invest capital when joining the alliance, which is then used for all administration purposes. As the group becomes stronger and more successful, a levy can be reserved for every litre/ton they sell, this levy can be utilized for expansion or investment in new assets for the alliance. The alliances who were interviewed indicated that they would prefer not to make use of loans in order to start a group, they would rather invest a little of their own equity. In terms of risk and to ensure that there is an invested interest, it is better that each producer invest some equity in the alliance.

- Trust

The interviewees have indicated that they have to trust the management and members of the group before they will join such a group. Milagrosa (2007) found that producers, who trust their church, their leaders and who are actively involved in their communities, are more likely to be trusted by the producers in their area, as they are well-known and are able to function as a group.

- Government policy and attitude towards agriculture

They feel that Government's attitude towards agriculture should be positive and that investments should be made in research and development within the industry, in order to ensure that the industry (emerging and commercial) remains sustainable. An environment should also be created that makes it easier for producers to form alliances and improve their competitiveness.

- Complying with the requirements

The FCB's interviewed have indicated that individually it was difficult for them to comply with the requirements stated in the contract of their buyers, in terms of volume, quality, delivery and that they lack economies of scale to negotiate better prices for their produce. When they collaborated, these alliances indicated that they were able to sign contracts with

their buyers and negotiate the terms and conditions of delivery, quality and quantity. As a relationship developed over time between the buyer and the group, they were able to negotiate better prices with their buyers.

- **Commitment and loyalty from members**

This obstacle is linked to trust as the members must believe in the mission and vision of the group and show loyalty towards the group. For this reason, many of the groups would initially start with 3 to 5 members and as they become more successful, they will allow more members to enter the group. The alliances interviewed clearly stated that they would prefer the group to stay small, rather than allowing new members to enter who do not comply with the requirements of the alliance.

The competition in the market is fierce; many competitors do not want these alliances to succeed because it gives bargaining power to the producer. The larger agribusinesses have the power and resources to force these producer groups out of the market and therefore it is important that the members are loyal to the alliance and its objectives.

- **Access to updated information**

Many of the interviewed alliances will do market research in terms of producer, input and consumer prices as well as supply and demand as a group or will employ a person responsible for communicating all major market trends to the members of the alliance. This is important for their strategic planning for the long- and short term.

- **Traceability of the commodity**

The traceability of the commodity is becoming more important to the consumers and therefore also to the buyer. The interviewees indicated that in order for them to earn a premium, they are marketing their cultivar under a brand name. They have also developed new packaging, informing consumers on the attributes of the cultivar. This also assists the consumer to buy the potatoes more suitable for the required needs (baking, cooking boiling).

- **Marketing**

In the case of marketing, the scenario is the same. Marketing as a group is more affordable and more effective if they pool their produce as this provides the alliance with more marketing power. In turn, they may obtain the opportunity to negotiate better prices. Many of the alliances have indicated that they do not market in collaboration with their buyer. They market their produce as a group to their buyer, who then sells to the rest of the chain.

Objective 2

The lifecycle of a collaboration model, as depicted in Figure 1 consists of the creation phase, where the members are chosen and as a group they decide on its internal abilities and how they can be used to meet the strategy of the alliance. The second phase is the justification phase in which the members negotiate with their buyer and amongst themselves and also sign contracts with their buyer and the members of the alliance. In the maturation phase the groups has now established mutual beneficial relationships amongst themselves and also with their buyer. Profits are made and knowledge is exchanged in the group. The final phase is the dissolution phase, in which the members decide if they would like to continue with the group or exit the collaboration (FAO, 2003). Many successful alliances do not get to the dissolution phase, because as they grow, they will reinvest in the alliance and expand their operations. The alliances who were interviewed, have indicated that they started just by pooling their harvests in order to supply a specific buyer and as they started making profits, (maturation phase) they either bought new trucks to do their transport or build cooling-plants for storage purposes. As a result, they keep on growing and expanding by

reinvesting in a new venture (line B) as soon as the previous one (line A) reached the maturation phase.

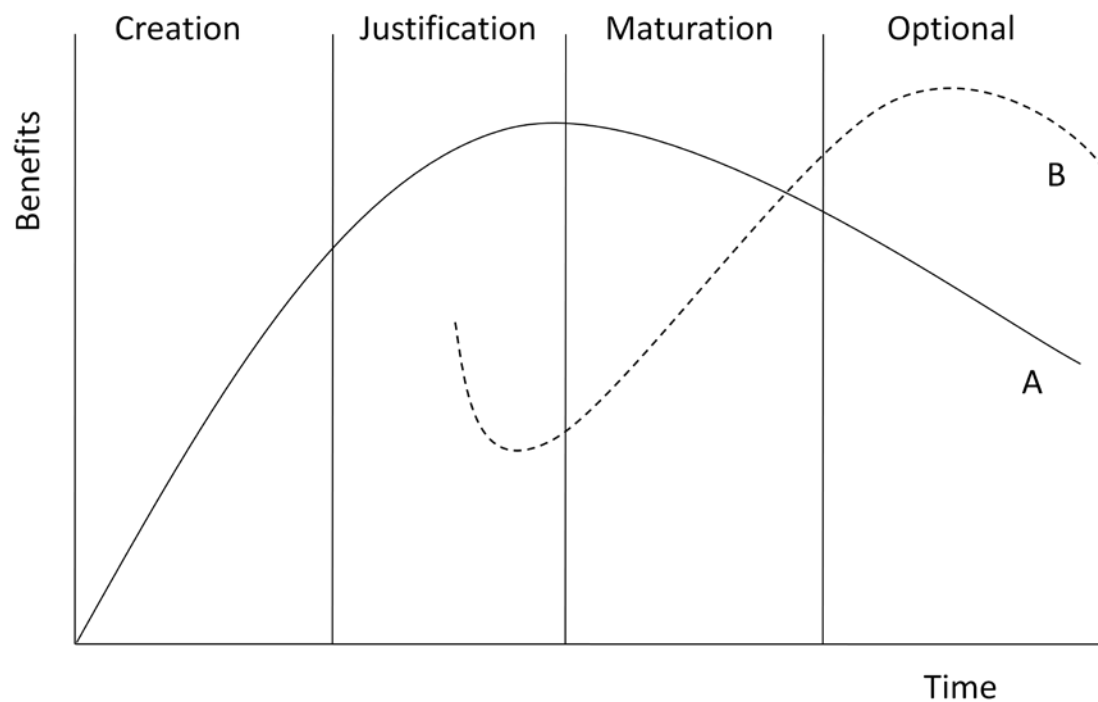


Figure 1: Life Cycle of a collaboration model

Adapted from Regional Office for Latin America and the Caribbean of the Food and Agricultural Organisation of the United States (2003)

Objective 3

The third objective was to develop a framework that producers and consultants can use when starting an alliance. The steps mentioned below were compiled from the interviews held with the managers of the respective alliances.

Framework for establishing an alliance	
Phase 1 - Establishment <ol style="list-style-type: none"> 1. Identify members 2. Mission, vision and objectives of alliance 3. Initial capital investment 4. Decide on type of legal entity 	Consider the following elements <ol style="list-style-type: none"> 1. Skills, background, trust, location 2. Clearly defined & measureable 3. Debt or equity 4. Company, cooperative etc
Phase 2 - Membership <ol style="list-style-type: none"> 1. Production process 2. Technical processes 3. Ownership and use of assets 4. Fees & dividends 5. Barriers to entry and exit 	<ol style="list-style-type: none"> 1. Inputs, volumes, quality, delivery 2. Traceability, branding 3. Investment in new assets 4. Membership fees and reinvestment/dividends 5. Requirements to join or exit
Phase 3 – Buyer <ol style="list-style-type: none"> 1. Volumes 2. Quality 3. Transport 4. Marketing 5. Penalties 6. Price determination 	<ol style="list-style-type: none"> 1. Volumes required by the buyer. Surplus? 2. Quality requirements/monitoring and testing 3. Who will do transport/payment 4. Brand name, joint, market information 5. Surplus, late delivery, quality 6. Change seasonally/monthly. responsible

Conclusion and recommendations

The South African agricultural environment is characterised by a large number of small farming units. These farming units have to compete in a concentrated market, driven by economic growth and urbanisation and therefore by a consumer demanding processed foods instead of basic staple foods. These farm units are struggling to compete in this environment, as buyers demand a high quality product and large volumes on a continuous basis. International studies have found that producers should form alliances, as these alliances can provide producers with economies of scale and decreased transaction costs. In South Africa, this is a fairly new concept, which is gaining popularity but there is no framework to assist producers in establishing such an alliance. This study provides producers and consultants with the key success factors that can determine the success of an

alliance, as well as sets out the life cycle of an alliance to determine when new ventures should be attempted or when an alliance should rather be disbanded. The results found that sound administration, trust and loyalty between members and management, access to market information and continue expansion and reinvestment in the alliance will assist producers to be competitive. Finally, the study concludes with a framework, containing all the vital steps producers should follow when deciding to form an alliance.

From the interviews, the researchers can advise producers that forming an alliance takes time and effort and that it would not automatically lead to higher producer prices but first to a reduction in input cost, sharing of skills and a reduction of risk. Then, as the alliance progresses and reinvest in itself, the members will add value to their commodity and integrate further down the supply chain, which should enable them to negotiate better prices.

Further research is needed in terms of the entrepreneurial abilities of the members and how assets and finances can be optimally managed within the alliance.

References

- Agricultural Organisation of the United States (2003). Life cycle of a collaboration model. [internet] Retrieved from <http://www.fao.org>. on 12/10/2007
- Bartazolli, A., Fiorinini A., Gehelfi, R., Samoggia, A., Mazzotti, V. 2009. Food Chains and value system: the case of potato, fruit and cheese. 113th EAAE Seminar. "A resilient European food industry and food chain in a challenging world", Greece. September 3-6, 2009.
- Department of Agriculture. South Africa. 2009. *The National Agricultural Handbook/Directory 2009*. Rainbow SA
- EFFP (English Farming and Food Partnerships). 2004. *Farming and food: Collaborating through profit*. Available online at: <http://www.effp.com/documents/publications/Collaborating%20for%20profit.pdf> (Retrieved: 20 November 2007).
- Gonzalez-Diaz, F.; Newton, D. & Alliston, J. C. 2006. Co-operation to introduce a supply chain/consumer focus in farmer-controlled businesses. *International Journal of Co-operative Management*, 3(1): 27-33.
- Hoffman, WH. And Schlosser, R., 2001. Success factors of strategic alliances in Small and Medium-sized enterprises – An empirical study. *Long Range Planning* 34 (2001) pg 357 – 381
- Louw, A.; Jordaan, D.; Ndanga, L. & Kirsten, J. F. 2008. Alternative marketing options for small-scale producers in the wake of changing agri-food supply chains in South Africa. *Agrekon*, 47(3): 287-308.
- Kirsten J.F. & Sartorius, K. 2002. Linking agribusiness and emerging farmers in developing countries. Is there a new role for contract farming. *Development Southern Africa*. Vol. 17, No. 4. October 2002
- Milagrosa, A. 2007. *Institutional economic analysis of vegetable production and marketing in northern Philippines: Social capital, institutions and governance*. Ph.D. thesis, Wageningen University. Available online at: <http://library.wur.nl/wda/dissertations/dis4136.pdf>

- Mohr, J & Spekman, R (1994) *Characteristics of Partnership Success: Partnership Attributes, Communication Behavior, and Conflict Resolution Techniques*, Strategic Management Journal, Vol. 15, No. 2, pp. 135-152 (USA)
- McDougall, P. and Robinson, R.B. 1990. New venture strategies: An empirical identification of eight “archetypes” of competitive strategies for entry. Strategic Management Journal 11(6):447-467
- NAMC (National Agricultural Marketing Council). 2001. *Report on the investigation into the effects of deregulation on the dairy industry*. Pretoria: NAMC
- Ortmann, G. F. & King, R. P. 2007. Agricultural cooperatives 1: History, theory and problems. *Agrekon*, 46(1): 40-63.
- Potatoes SA. 2008. Processing industry. [online] Retrieved from <http://www.potatoes.co.za/home.asp?pid=43> on 12/05/2010.
- Potatoes South Africa, 2009. Industry information. Retrieved from <http://www.potatoes.co.za/industry-information/information-by-region.aspx> on 30/03/2010
- Regional Office for Latin America and the Caribbean of the Food and
Soderquiste, K. 1996. Managing innovation in SME's: a comparison of companies in the UK, France, and Portugal. *International Journal of Technology Management*. Vol. 17. Pp 393 – 305.
- Vasilescu LG. (no date) Incentives for development of agribusiness clusters. *Lucari Stiintifice, Seria I, Vol XI (2)*
- Vink, N. & van Rooyen, J. 2009. The economic performance of agriculture in South Africa since 1994: Implications for food security. *Development Planning Division*. Working paper series No 17
- Weatherspoon, D. & Reardon, T. 2003. The rise of supermarkets in Africa: Implications for agrifood systems and the rural poor. *Development Policy Review*, 21(3): 333-355.