

Department of Economics

Food traceability system for Swedish origin food items

 An assessment of the application "Våga Fråga - Få En Bonde På Köpet" from a farmer perspective

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Maria Fridholm

Summary

In June 2013 a debate concerning the consumers' right to a label of origin on food packages was held in the Swedish parliament (www, Riksdagen, 2014). The debate was sparked by some food scandals where labelling was falsely used, claiming something that was not true – the horse-meat scandal, frozen strawberries infected by Hepatitis A, pork sold as beef, etc. These cases were not only wrong in terms of food safety, but also fraudulent and threating consumers' right to fair origin labelling. These scandals have caused consumers to doubt food labelling. Hence an interest in agrofood supply chain "traceability" has increased, usually named tracking and tracing. In the end of April 2013 a new form of a traceability system was launched, named "Våga Fråga – Få en Bonde på Köpet" (Dare to ask – get a farmer on the bargain). This tool allows consumers to easier learn the origin of a food product (pers. com., Boman, 2013). The tool was launched by the Swedish National Farmers' Federation (LRF) in cooperation with Swedish farmers.

The problem, addressed in this study concerns the impact that this smartphone application has for the Swedish farmers. Therefore, the purpose of this study is to determine in which extent the Swedish farmers are aware of the strengths and weaknesses of the jointly owned brand Bonde På Köpet, the aim of which is to signal the existence of Swedish raw products in food items. These strengths and weaknesses are related to the complexities stemming from the fact that Bonde På Köpet is a brand, and the awareness of the farmers is given by their understanding of the value chain operations. Therefore, the project also consists of some issues that had to be empirically investigated such as the farmers' knowledge and beliefs about Bonde På Köpet, the farmers' appreciation of the sales and profit potentials of Bonde På Köpet, and lastly the farmers' understanding of the competitive pressures in the value chain.

Bonde På Köpet is signaling messages towards the consumers, whereas the core message of this brand is the Swedish origin of the ingredients. Hence, theories used to address this study concerns branding theories such as the concept of branding, collective brands, the function of a brand, the value of a brand, the structure of brand equity, credence goods and traceability. The theories were used as a basis for a web-based questionnaire that was sent to a member panel, which serves as a basis for calculating the results.

The results show that the knowledge level of the LRF members, and in some extent the consumers, seem to be fairly limited. The overall beliefs of the farmer-members towards *Bonde På Köpet* are positive, and males are found to be more optimistic. The most evident weakness of *Bonde På Köpet* is the lacking knowledge among the farmer-members, and to some extent among consumers. The most evident strengths *of Bonde På Köpet* perceived by the member-panel are that it can affect the consumer to choose more Swedish food items, that it allows added values to companies that has joined the initiative and also some added values to the consumer, that it strengthens the relationship between the Swedish farmer and the consumer, and trustworthy origin function. The farmer-members appreciation of the sales and profit potentials of *Bonde På Köpet* are in general neutral, an indicator of that is that the member panel experience a lacking knowledge of the initiative. The farmers' understanding of the competitive pressures in the value chains are of optimistic character. The farmer-members perceive Bonde På Köpet both as a tool to compete against imported products and to that the initiative allows competitive advantages against grocery stores' own branded products.

Sammanfattning

I juni 2013 hölls en debatt i Sveriges riksdag angående konsumenters rätt till en tydlig ursprungsmärkning på livsmedelsförpackningar. Debatten behandlade även tidigare livsmedelsskandaler där framför allt märkning av livsmedel har misskötts, till exempel hästköttskandalen, frysta jordgubbar smittade av hepatit A, samt griskött som sålts som nötkött. Dessa skandaler har fått den svenska konsumenten att tvivla på livsmedelsmärkningen, varför ett intresse för spårbarheten i livsmedelskedjan har ökat. I slutet av april 2013 lanserade LRF i samarbete med svenska bönder en ny typ av spårbarhetssystem som heter "*Våga Fråga – Få en Bonde på Köpet*". Detta system hjälper den svenska konsumenten att ta reda på ursprunget av en livsmedelsprodukt.

Problemet i denna studie berör betydelsen av detta spårbarhetssystem för den svenska lantbrukaren. Syftet med studien är *att avgöra i vilken utsträckning de svenska bönderna är medvetna om de styrkor och svagheter som det gemensamt ägda varumärket Bonde På Köpet har.* Dessa styrkor och svagheter baseras dels på att Bonde På Köpet är ett varumärke och de komplexiteter ett varumärke innebär, och dels av de svenska böndernas förståelse om livsmedelskedjan. Därför undersöktes även andra problem, såsom böndernas kunskap och attityd till Bonde På Köpet, böndernas uppskattning av sälj- och vinstmöjligheterna av Bonde På Köpet, samt böndernas förstående av konkurrensen i livsmedelskedjan.

Bonde På Köpet signalerar olika budskap till konsumenten, där det viktigaste budskapet är att förmedla svenska livsmedelsprodukter, varför teoribasen främst består av varumärkesteori. De begrepp som har använts i arbetet är begreppet varumärke, kollektivt varumärke, funktioner av ett varumärke, värdet av ett varumärke, varumärkeskapitalet, varor av tilltro, samt spårbarhet. Teorierna användes sedan som en grund för en web-baserad enkät som sändes till LRFs medlemspanel. Medlemspanelens svar låg till grund för den statistiska analysen och resultatet.

Resultatet visar att LRFs medlemmars, och i viss utsträckning konsumenternas, kunskapsnivå är begränsad. Däremot är generellt alla medlemmar positivt inställda till Bonde På Köpet. Den största svagheten med Bonde På Köpet är den bristande kunskapen bland medlemmarna, och en del konsumenter. Den främsta styrkan med initiativet är att medlemmarna uppfattar att Bonde På Köpet kan påverka konsumenten att köpa mer svenska livsmedel, att initiativet medför mervärde till de företag som är med i Bonde På Köpet samt att det stärker relationen mellan den svenska lantbrukaren och konsumenten, och att Bonde På Köpet förmedlar trovärdighet. Medlemspanelens uppfattning om sälj- och vinstmöjligheter är generellt neutralt, vilket kan tyda på att respondenterna saknar en större uppfattning om initiativet. Däremot är medlemspanelen positivt inställd till att Bonde På Köpet kan agera som ett konkurrensmedel inom livsmedelskedjan. Respondenterna anser att initiativet kan vara ett sätt att konkurrera mot importerade produkter och att initiativet bidrar till konkurrensfördelar mot butikskedjornas egna märkesvaror.

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1. Introduction

1.1 Background

In Sweden, where about one quarter of the household's climate impact is caused by the food, which is consumed, the choice of food will have a major impact on the total climate footprint (www, SLV, 2014). Swedish food production, in comparison with foreign producers', will not only allow a lower environmental footprint but also a better husbandry and animal welfare (www, Bondepakopet, 1, 2013). The Swedish food industry is constantly controlled and monitored to avoid unnecessary additives which could result in worsening environment and health. Besides safety and fairness, Swedish food industry presents an open landscape and more work opportunities within Swedish boarders.

The Swedish Board of Agriculture (2014) states that Swedish consumers have much confidence in Swedish farmers. Two-thirds buy Swedish foods if possible and 63 percent pay a premium for Swedish food. Consumers' drastically increasing awareness about the impact raised by the food consumption has resulted in an increased requirement to know and understand what they actually eat (Westman, 2013). By choosing an alternative which is better in a sustainable perspective the consumer can support a more sustainable production (www, Jordbruksverket, 3, 2014). In order to choose the most sustainable product, the consumer has to be provided with more knowledge, and one way is by labelling the most sustainable goods. A problem is that a very large range of food items with various attributes are offered to the consumers who thereby may experience an overload of information. Hence, the choice of sustainable products will still remain difficult.

In June 2013 a debate concerning the consumers' right to a label of origin on food packaging was held in the Swedish parliament (www, Riksdagen, 2014). Origin labelling gives the consumer information about the geographical area the food item is produced (Carlsson et al., 2014). The debate was sparked by some food scandals where labelling was falsely used, claiming something that was not true – the horse-meat scandal, frozen strawberries infected by Hepatitis A, pork sold as beef, etc. (www, Riksdagen, 2014). These cases were not only wrong in terms of food safety, but also fraudulent and threating consumers' right to fair origin labelling. Since the consumer has few opportunities to do a critical content review and often prefer convenient food items, the trust in retailers is crucial.

These scandals have caused consumers to doubt food labelling. Hence an interest in agro-food supply chain "traceability" has increased, usually named track and tracing (Carlsson et al., 2014). In the EU legislation, traceability is defined as "the ability to track any food, feed, food-producing animal or substance that will be used for consumption, through all stages of production, processing and distribution" (European Commission, 2007). Traceability systems support actions in which knowledge and information about food attributes, origin and processing technologies are provided (Morreale & Puccio, 2011). The purpose with a traceability system is to prevent undesirable objects in the food chain, e.g. pathogen. If the unwanted object would occur anyway, a traceability system can ease the determination of where and when the undesired object was released. Moreover, Smyth & Phillips (2002) also state that a traceability system allow an ease of the identification of the contamination source of chemical or pesticide outbreak if this were to occur.

In the end of April 2013 a new form of a traceability system was launched, named "*Våga Fråga – Få en Bonde på Köpet*" (Dare to ask – get a farmer on the bargain). This tool allows consumers to easier learn the origin of a food product (pers. com., Boman, 2013). The tool was launched by the Swedish National Farmers' Federation (LRF) in cooperation with Swedish farmers. The core part of the initiative is an application, which consumers can download freely to their smart phones.

The problem, addressed in this study concerns the impact that this smartphone application has for the Swedish farmers. There are no prior studies of the importance of this tool. Hence it is not known to which extent the consumers are making use of it, what the effects are on the sales of Swedish origin products, the retail chains' and the competing food manufacturers' reaction, or the importance that the farmers attach to it. The resources that are available for this present study allow at least a part of this problem to be investigated. The next section is devoted to specifications of how the problem is interpreted in this study.

1.2 Problem analysis

The principal of Bonde På Köpet

The Swedish National Farmers' Federation, LRF, in its contemporary form, was established in 1971, when the National Association of Rural People (RLF) merged with the Farmers' Association (www, LRF, 1, 2014). As an organization with both farmers and food manufacturers as members, LRF acts in a wide spector of the green sector (www, LRF, 3, 2014). The overall purpose of the organization is also to contribute to the development of businesses working with soil, forestry, rural environment and outdoor recreation, in order to help the members to realize their ambitions of growth, attraction and profitability.

In 2009 LRF discontinued its initiative named "My Food", with a purpose of making the added values of Swedish foods more visible for the consumers (pers.com., Boman, 2014). This made the members of LRF upset, which was why a new initiative was determined on the national conference of LRF in 2010. This was the staring phase of the initiative "Våga Fråga – Få En Bonde På Köpet".

When LRF launched the application "*Våga Fråga- Få En Bonde På Köpet*", the aim was to increase consumers' awareness about food products. Since the focus is on consumers, LRF guesses that its membership is not well informed about the initiative with the application (pers. com., Boman, 2013). The present study should provide information about the LRF members' view of "*Våga Fråga – Få En Bonde På Köpet*".

Choice of perspective

The present study concerns the relationship between the smart phone application *Bonde På Köpet* and the farmers. This relationship includes complexities as there are several intermediary links, i.e. firms that are processing the farmers' agricultural products, often in several stages, the retail industry with both supermarket chains and retail outlets, and the consumers. The value chain for food products also incorporates competing firms with non-Swedish raw products throughout the chain, including importers and foreign producers.

For the traceability system *Bonde På Köpet* to be successful the various Swedish actors must be coordinated, and each actor is dependent upon all the other actors. The complexities of *Bonde På Köpet* may contribute to making it difficult for the LRF members to understand their own role in the value chain. Furthermore, the complexities are not only of a technical character, such as the usability of the application. There are also uncertainties as to how the consumer reacts to the application and how their purchasing behavior is affected, which might have an impact for the farmer-members of LRF.

The present study has the position of LRF's farmer-members as its point of departure. The ambition is to throw light upon how the farmers perceive the application *Bonde På Köpet*, with the hope that LRF gets information, on which it may base decisions about how to improve the application.

Theoretical basis

Due to the complexity of the topic of *Bonde På Köpet* different theoretical approaches may be applied. It may be approached as a marketing phenomenon, comprising marketing analyses or marketing strategies. Another approach is behavioral theories, and thence applies consumer behavior theory. Supply chain management literature is another possible basis for further analysis of *Bonde På Köpet*.

The theory used in this study is brand theory because it allows a combination of the above-mentioned approaches. Psychology is included to the extent that a brand is signaling messages to the consumer and others, and how the consumer is affected by these messages is presented in the theoretical framework. Brand theory also includes issues concerning supply chain management. Various actors and brands in the supply chain are affected and affect each other, and these relations may involve complications as described in the brand and supply chain management literature. Brand theory also describes economy in a wider sense, which implies that the brand owner continually has to invest in its brand with a qualification that it results in a larger profit than the investments.

Research approach

As no previous studies have been made on the initiative *Bonde På Köpet*, the study has an explorative approach. Due to the lack of knowledge about the initiative and similar ones no hypotheses can be stated and tested.

To explore the LRF members' view of *Bonde På Köpet* it is necessary with an empirical study among the farmer-members. To achieve reliability a survey approach was chosen. Most desirable is to have the LRF's total membership as the selection frame, but this was found impossible. Instead the selection frame is a panel of LRF members, which according to LRF is representative of the total membership.

1.3 Aim

The aim of this study is to empirically explore to which extent Swedish farmers are aware of the strengths and weaknesses of the jointly owned brand Bonde På Köpet, the aim of which is to signal the existence of Swedish raw products in food items.

These strengths and weaknesses are related to the complexities stemming from the fact that *Bonde På Köpet* is a brand name that can be assured only if a large number of actors in the value chain are well coordinated. Therefore, the awareness of the farmers concerns their understanding of the value chain operations. Hence, the project contains a number of issues to be investigated empirically, such as:

- The farmers' knowledge about Bonde På Köpet.
- The farmers' beliefs about *Bonde På Köpet*.
- The farmers' appreciation of the sales and profit potentials of *Bonde På Köpet*.
- The farmers' understanding of the competitive pressures in the value chains.

1.4 Implementation and structure

The study is structured as following. Chapter 1 is based on an introduction, problem and aim, followed by Chapter 2, which describes the initiative "Våga Fråga- Få En Bonde På Köpet" as

well as results from consumer surveys about Swedish origin food products. Based on Chapters 1 and 2, the theoretical framework is presented in Chapter 3, which ends with some theoretical conclusion that serves to guide the construction of a questionnaire to be sent to the "member panel" of LRF.

Chapter 4 presents the methodological issues of the study such as the choice of techniques for the collection and processing of data. Results are presented in chapter 5, followed by an analysis and discussion of the findings in relation to the theoretical basis in chapter 6. Finally Chapter 7 comprises conclusion.

2. Bonde på Köpet

This chapter will start of by introducing consumer surveys made by The Swedish National Farmers' Federation (LRF), where factors determining why a consumer is making a purchase are presented. These attributes concerning the consumers' beliefs have been the starting point of the initiative named *Bonde På Köpet*. How the initiative came about and how it works is presented in 2.2, and future development of the initiative is presented in 2.3.

2.1 Consumer surveys made by LRF

The LRF study

During the period of 2011-2013 LRF invested a lot in communication with an aim of supporting the green sector in general and the food and energy sector in particular (LRF, 2011). The overall purpose was to by efforts in communication strengthen Swedish consumers', not the least youngsters', and retail decision-makers' willingness to buy and goods and services made by members of LRF. The communication strategy supports the vision of LRF. It is based on the value of natural resources such as soil, forestry, rural environment and horticulture. These resources need to be used in order to contribute to the development of a sustainable society. The communication contributions resulted in consumer surveys with a purpose of influencing consumers to buy Swedish produced foods, Swedish added values, and at the same time influence consumers to see the benefits of the green sector's importance for Sweden. These consumer surveys were the starting phase of the initiative named *Bonde På Köpet*.

LRF has defined five types of consumers; latent, loyal, cool, opponents and ambassadors, which all are based on passiveness versus activeness, and also positive versus negative beliefs, see Figure 1 on next page. To achieve a successful concentration of the five defined target groups LRF saw a need for a deeper knowledge about the groups in terms of need, knowledge, beliefs, and how the target groups are reached (LRF, 2011). Interviews with 24 respondents were held in Stockholm, Gothenburg, Ängelholm and Skellefteå with three different target groups; pre family (singles/couples in the age of 25-35 without children), families (30-50 years old with children) and post family (singles/couples in the age of 50-60 with children who have moved). In total eight interviews with each target group were held, spread as two interviews per muni. Most important concerning the target groups is to make the latent consumers loyal. The loyal consumers are characterized by an interest and involvement of foods, do not use semi-finished products and value locally produced foods. The latent consumers, on the other hand, are characterized by less involvement and interest in food, worrying about the ingredients of the foods, are choosing a Swedish product based on safety, but will only buy Swedish produced foods when time and price are right. Figure 1 shows a segmentation of the consumers, and focuses on the consumers' relation to the farmer as a food producer, whereby 33 percent, representing loyal consumers and ambassadors, has a positive belief towards the farmers' offers of Swedish foods and commodities.

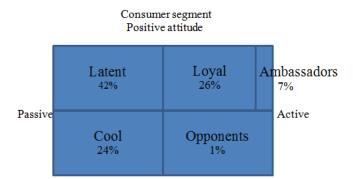


Figure 1. Five defined consumers of LRF (LRF, 2011).

Negative attitude

The involvement for foods differs greatly depending on phase of life and financial circumstances (LRF, 2011). In general, all of the target groups appreciate family and friends, but stress, children and working conditions limit the most desirable living conditions. The associations toward foods perceived by the target groups are of rational and emotional character. The rational associations are characterized by nutrition, energy and fuel, whereas the emotional associations are characterized by fun, stress, social interaction and enjoyment, and the stress association is firmly perceived by families. Associations toward foods and commodities of Swedish origin are in general perceived positive of all target groups. Rational as well as emotional values are perceived positive, whereby control, hygiene, less additives, and beautiful landscape, safety and tradition are factors perceived in a positive sense. Though Swedish foods are in general perceived positive, some obstacles are found in terms of why one might not buy Swedish food items. The main barriers are based on terms of higher price and that the demand of foods, fruits and vegetables, are season bound. Also, the target groups express a belief about what kind of value added which are created by Swedish produced foods, but are demanding evidence and information about these added values.

Meat products are a category which is dominated by varying uncertainty, where animal husbandry, deceases and antibiotics, e.g., are factors determining this uncertainty (LRF, 2011). Regardless to this fact, this is the main category where both latent and loyal consumers decide to buy meats of foreign origin. Usually this takes place when a consumer is buying either pork or beef, especially since the price gap is perceived too large between meats of Swedish versus foreign origin. Concerning milk, cream and butter a loyalty towards products of Swedish origin, in particular locally produced foods, are evident. Foreign produced fruits are less related to risk and there might not always be a fruit of Swedish origin available, which is why the acceptance concerning foreign fruits are higher, and also, specific flavors and specialties of cheese and voghurt may attract to a purchase of a foreign origin. One male, family from Gothenburg, express a willingness to buy Swedish foods "Both me and my wife prefer to buy Swedish produced food items. We care for the animals, and a Swedish production represent good quality and a good animal welfare". One woman, pre family from Stockholm, on the other hand, is expressing a need to know the value added contribution from a Swedish production "I am not totally sure, but I think the Swedish producers use less additives, fertilizers, and similarities in their production", which may be another factor explaining why a consumer in the purchasing phase do not buy a food item of Swedish origin.

The target group find strongly positive emotional feelings towards the Swedish farmer (LRF, 2011). The Swedish farmer is associated with small scale, idyll, and other values correlated to locally produced foods, but not so much with values concerning foods and ingredients of Swedish origin. In other words, the value correlation between the farmer and locally produced is more evident than the correlation between the farmer and Swedish produced. Though the Swedish farmer is related to many positive values and a great deal of empathy is found, the Swedish farmer does not serve as a driver in the purchasing phase to choose a Swedish food item. The fetch to the Swedish farmer is

perceived distant by the target group, and the farmer in a more prominent role would be appreciated. Personal communication from the individual farmer and farmers communicating the rational values as a group was suggested as a way to minimize the perceived distance to the farmer as an individual and as a group.

The Axfood study

Another survey made by Axfood (2007) also concerned a similar theme, as the consumer survey made by LRF, where the most influencing factors determining the choice of foods when a consumer is making a purchase was the main topic. In addition to this purpose Axfood (2007) determined how valuable locally and regionally produced foods are for consumers in the purchasing phase, and how it is differentiated among regions in Sweden. The survey shows factors of high quality, healthy, affordable, and produced in Sweden as most influencing for a consumer when making a purchase. In addition to the influencing factors, regionally and locally produced, organic or certificate label, and a well-known brand are no primary factors determining the choice of foods, see Figure 2. Though, locally produced are valuable when purchasing eggs, potatoes/roots and milk products, and regionally produced are valuable when buying eggs, milk products and poultry products.

Factors influencing the choice of food

Figure 2. Factors influencing the consumers' choice of food (Axfood, 2007).

Even though 100 percent want to purchase more locally and regionally produced foods, all find it to be hard and complicated, which is why the consumers choose not to buy these types of foods (Axfood, 2007). The most evident obstacle when purchasing regionally or locally produced foods is the uncertainty to recognize the origin of a product and to find this product in the store. Reasons to buy locally and regionally produced foods on the other hand, are shorter transport distances, less environmental footprint, support smaller producer, and vibrant countryside.

The Novus study

Another survey made by Novus (2013) records 80 percent valuing the origin of a food product when purchasing a specific food item. Processing of foods in Sweden is considered to be important of seven out of ten, and also, two out of three consider packaging of a food item in Sweden to be of high significance. Besides packaging and process of food, 75 percent values Swedish foods with an

origin from Swedish farms, and the same amount chooses Swedish foods in order to support the Swedish farmer.

Factors influencing the choices of which type of foods to consume are varying throughout the country, where people living in Stockholm and in the north of Sweden are each other's opposites (Novus, 2013). People living in the north of Sweden values affordable, regionally and locally produced foods, whereas people from the area around Stockholm do not. Also, foods produced in Sweden are most valued by women, elders, and people with an interest in cooking and with a lower income.

Observations of the studies

The varying consumer studies indicate an interest of Swedish consumers to purchase and be able to purchase Swedish food items. A problem though, is the uncertainty of which food items that are imported versus which are Swedish produced, and additionally the difficulty of learning the origin of foods. The surveys show a firmly similar result, whereas reasons to purchase Swedish food items are of both rational and emotional character. Higher control, less additives, shorter transportation distances, less environmental footprint, vibrant countryside, safety and tradition are the main reasons why a consumer choose to purchase Swedish foods. On the contrary, some obstacles are perceived as to why the consumers do not purchase Swedish foods, whereby higher price and demand of season bound foods, e.g., are the main barriers. Additionally, Swedish produced meats are not as valued by consumers comparative to dairy products. Also, all consumer surveys indicate on a lack of information about the Swedish added values. Hence, it would be evident for Swedish producers to find a way to communicate these added values to the consumers. Finally, the consumer surveys have been the starting phase of the initiative, and have therefore determined the whole design of *Bonde På Köpet*, i.e. how the application came about and how it works.

2.2 The design of Bonde På Köpet

Consumers' willingness to know the origin of food products has increased, but in some cases this is a hard task to learn (www, LRF, 2, 2014). In April 2013, LRF in collaboration with Swedish farmers launched a traceability system, named "Våga Fråga- Få En Bonde På Köpet", which can be translated into "Dare to ask, Get a farmer on the Bargain". The traceability system was launched in order to ease the task of learning the origin of a food product when the consumer is making a purchase, and also to increase the value on a farmer level and to sell more Swedish foods (pers.com., Boman, 2014). Besides the application which allow consumers to receive information about the origin of a food product, information concerning why Swedish foods is "smart, safe and fair" is provided on a web page, also created in collaboration with the initiative. The initiative has been given a lot of social media attention before, when and after launching, this has been done by for instance using famous people, such as bloggers etc., as marketing ambassadors. Moreover, a webpage and a twitter account have been created to reach a broader dimension of consumers (www, LRF, 2, 2014).

The mobile application is built on whether a food is of Swedish origin or not, this is shown when scanning the barcode of a product (www, LRF, 2, 2014). When scanning the food item, either a green thumbs up, a red thumbs down, or a question mark will be visible, see Figure 3. Thumbs up implies commodities of 100 percent Swedish origin, and the animal must be hatched/born, bred and slaughtered in Sweden (www, Bondepakopet, 2014). Compound foods, on the other hand, must have 70 percent of its ingredients' bred or grown in Sweden, the other foods which will not achieve these criteria will get a thumbs down. Lastly, some foods will receive a question mark, this implies that the product is not yet registered in the application. Furthermore, "The aim of the application is not to fault the products without Swedish origin, but to highlight them who have" (pers. com.,

Boman, 2013). Besides the field of scanning a food item, two more fields can be used. One of these fields are a type of search engine, where one can search any product or product category in order to learn about the origin of the specific product or product category. The third field is named "about", where one can learn more about the application and Swedish farmers. See Figure 3 of the three fields available in the application.



Figure 3. Symbols implying whether a product is of Swedish origin or not.

Another part of the initiative is called the "Farmer shelf", where selected farmers have chosen their favorite foods, and everyone get an opportunity to choose one's own favorite foods of Swedish origin and publish it on the "Farmer shelf" (www, Bondepakopet, 2014). The purpose with the "Farmer shelf" is to be a comprehensive digital store shelf purely containing products of Swedish origin. In addition, food items without a bar code are placed on the farmer shelf, since one cannot find a food product without a bar code when scanning the food item (pers. com., Boman, 2014). When the initiative finally was launched, it was faced with various opinions, both positive tributes and hard criticism, which made LRF to see a need of future development of the initiative.

2.3 The application

Over 11,000 food items are presented in the applications, some with a green thumbs up, some with a red thumbs down and some with a question mark, and the products are continuously increasing (pers.com., Boman, 2014). Of the 11,000 food items, around 5,800 are of Swedish origin and 5,300 are of foreign origin, whereas the biggest brands presented in the application are Arla, Scan and Lantmännen. Though the amount of contemporary food items in the application, LRF still has a long way to go, since food items available in a store are over 20,000.

When the application was launched, the initiative was faced with an range of criticism (pers.com., Boman, 2014). Based on following quotations one can see that the impressions of the application are many and vary, ranging the application from great to worthless, see translated quotations below. Overall, one can also see a need for the application to update its product database, see quotations below. In LRF's defense, over 10,000 products were presented when the application was launched, but varying complications came about. Some technical problems had to be dealt with, but most importantly, a larger supplier withdrew from the initiative since almost all of its food items were of foreign origin, which is why the application lost over 1000 food items during launching.

- "New products are updated daily. This application is well needed. THANKS!"
- "Good application, but misses a history feature"
- "It will probably be good over time. Have to be updated significantly"
- "I have not yet found a single product within the application. The idea is good, but the implication is worthless"

- "Very useful! This application will be used a lot. You seem to work a lot with updating new products to the application, so if continuing in this pace, the application will be great. GO LRF!"
- "Can barely scan any product, and when it can, the application cannot find the origin of the product"

In total, over 86,000 downloads of the application have been made, and the application is downloaded 100 times a day, which is something that LRF sees as a success factor. The budget for the application has before, during and after launching been constrained, which is why the marketing of the application is not based on larger and more expensive marketing techniques (pers.com., Boman, 2014). Marketing tools used are firmly based on word of mouth, marketing ambassadors for instance, and marketing which is firmly time rather than cost consuming.

LRF is continuously working with developing the application (pers.com., Boman, 2014). One upcoming development is to add a new field to the application, which consists only of the fields of scanning, searching and information about the initiative. The new field will consist of a news feed, where the added values will be more visible. Another challenge LRF is facing today is to steadily continue to increase the food item portfolio, especially pushing retailer chains who have private label products to join the initiative. And also, retail chains such as LIDL and Citygross have private label products of Swedish origin, but their barcode system does not correspond with the system used by LRF, which is why these products cannot be presented in the application.

Following chapter will handle theories concerning complexities around the initiative named *Bonde På Köpet*. The initiative is a type of brand initiated by LRF and Swedish farmers, with an aim of highlighting Swedish food items, which is why following chapter will firmly handle implications about brand management. Also, the initiative is a type of traceability system, which is why theory concerning this phenomenon will be presented and argued.

3. Theoretical framework

3.1 Introduction

Bonde På Köpet is signaling messages towards the consumers, whereas the core message of this brand is the Swedish origin of the ingredients, and is therefore a type of brand (Keller, 2007). Together with this origin, a host of other messages are associated with the initiative. The Swedish origin implies a higher standard of animal welfare than comparable imported products, the employment of Swedish labor force in the production of the products, safety in the consumption of the products, etc.

A brand is a bundle of messages that is presented from a sender to a receiver (Keller, 2007). The sender is most often an organization (commercial, social, political, or other), and the recipients are other organizations, the public, voters, consumers, or others. In some cases the sender is not only a single organization but a group of organizations, i.e. there is a collective brand, where multiple stakeholders use the same brand but are selling their own products (Ménard & Valceschini, 1999). This means extra complexities as there is not only a relationship between the sender and the recipients but also relationships between the various senders.

Likewise, a brand is associated with various functions (Melin, 1997). Depending on perspective (brand owner, consumer, competitor) the brand can be used in various ways, and thereby be used to its full potential. Though a brand may be interlinked with a number of added values, the main objective is to sustain profitability, where profitability gained most cover the investments made in the brand (Kapferer, 2012). Hence, bases of satisfied and loyal consumers are required.

Branding is also associated with complexities as there are most often multiple recipients (Ménard & Valceschini, 1999). These may have different or even conflicting interests and objectives, which may create problems for the owner of the brand as the outcome of the branding activity may become blurred. An example is that a manufacturer brand may be competing with the private brands of retail chains. And since a brand as *Bonde På Köpet*, is a form of a traceability system, it will be harder for the consumer to see the utility of this brand, a phenomenon of credence goods will occur (Darby & Karni, 1973).

Credence goods, where the utility of a product will be hard to measure and see before, during and after purchase requires a costly information contribution, e.g., a traceability system can be used (Darby & Karni, 1973). A food traceability system is associated with a number of complexities, since drivers as well as barriers are related with this sort of traceability provision (Bosona & Gebresenbet, 2013).

3.2 The concept of branding

Brand is a well-known phenomenon and has a range of varying definitions. Keller (2007, p 2) defines a brand as a "name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition", and hence one way of distinguishing oneself from the competitors'. Every time a marketer makes a sign, logo or name, a brand is established. Treffner and Gajland (2001) describe a brand as an intermediary of a message of a product or a certain service, and is especially influencing on the end consumer's behavior in the phase of purchase.

The name of a brand can be the same as the corporate brand, which is why distinction between these two objectives can be blurry, but it is essential to differentiate the two concepts apart (Treffner

& Gajland, 2001). Product brand as well as corporate brand is defined as carrier of a message, which affects the behavior of a buyer and a seller in a wider sense. Though, the corporate brand mediates a message between seller and buyer in other purchasing phases compared with a brand, such as recruitment of an employee, whereas the employee will become a seller of a certain competence, and the employer will be buyer of this competence.

3.3 Collective brands

A brand may either be singly or jointly owned. The latter case is named collective brand, where multiple organizations sell different products but are using the same brand, which may imply greater complexities (Ménard & Valceschini, 1999). There may be negative as well as positive outcomes by using a collective brand. A collective brand means extra complexities as there is not only a relationship between the sender and the recipients but also relationships between the various senders. If the brand is owned by a firm, but used by several other firms, problems concerning property rights may emerge. An incentive for using a collective brand is to at least gain the same amount invested in the brand, and hopefully more. A collective brand means that each participant will become dependent on each other, which may be beneficial as well as risky. For instance, when one actor is deceptive, all actors will sustain the deceit, i.e. there is an opportunistic behavior. When an opportunistic behavior rise, the capital all other firms have invested may be beneficial for the firm with an opportunistic behavior, while all other will suffer. Hence, the collective brand may be tarnished.

Nevertheless, a collective brand is associated with advantages as well (Ménard & Valceschini, 1999). Since the brand is jointly owned, the single stakeholder does not have to invest in its own brand, instead every firm can favor from achievements made by all firms together. Another benefit is that a collective brand may create a stronger name which can result in a stronger impact and profitability. In order for a collective brand to operate well standards and rules are necessary, followed by continuous controls, which all brand users must adjust to. The standards and control mechanism will decrease the risk of opportunism and other factors that may harm each brand user.

3.4 The function of a brand

The functions of a brand appear in various ways (Melin, 1997). These functions of a brand can be viewed in four perspectives, namely the legislator, brand owner, consumer and the competitor, but the legislator will not be used in this paper.

3.4.1 The function of a brand in a brand owner perspective

A brand can provide a range of valuable functions for the brand owner (Keller, 2007). The consumer is expecting a certain and even quality of a brand (Melin, 1997). The brand will thereby be a valuable carrier of information, where concrete facts of e.g. quality, price and content are provided, and are firmly based on the functional attributes of a product. The brand owner is also provided with an opportunity of building the structure of the brand as a carrier of identity, especially when the brand is protected by an ownership right. Hence, the brand may function as a contractual relationship between brand owner and consumer, where a signal is sent from the former to the latter (Ménard & Valceschini, 1999).

The identity structure can be said to be a sophisticated form of marketing which is trying to refine, often subtle, differences between various branded products (Melin, 1997). Various factors may have an influence of a unique brand identity. The name of a product, historic background, geographical origin, and type of commercial and content are factors determining a unique brand identity (Keller, 2007). By using commercial of a brand building character, the identity can be mediated (Melin,

1997). This type of commercial is based on emotional arguments, while when information is mediated it is done in a rational manner.

Based on the brand owners' segmentation of the market, the brand can be used as a successful positioning tool (Melin, 1997). This can be illustrated by a company which can choose to serve a market with multiple brands, where each of the brands is positioned based on the claims of the target groups and to the competing companies' positioning on the market. A company may also choose to serve a specific segment with various brands but with a similar positioning.

One of the most valuable functions of a brand is the ability of a brand to allow the brand owner to communicate immediately with the consumer, without taking the detour by using a retailer (Melin, 1997). This allows the brand owner to use the brand as a competition tool. A company with a range of brand loyal consumers is developing its brand to a strong competition tool in relation to other branded products. This is foremost evident when companies are distributing their products via retailers, especially when the brand owner gets a dominating position in the supply chain and a good basis of negotiation. The negotiating position of a brand owner may also be strengthened further by high turnover and profitability of branded products. However, if the brand is somehow tarnished, either by the company itself or the retailer, the company will suffer great losses. Hence, the relationships with retailers as well as with consumers are most precious. The relationship with a retailer will therefore evidently rely on trust and the other party not acting opportunistic. If this is the case, a retailer acting opportunistic, the brand and the company may tremble.

A brand with a broad category of brand loyal consumers can use the brand's inner potential as a growth generator (Melin, 1997). This can be turned to an advantage by licensing or brand extension targeting either current or new markets, e.g. A brand with a number of loyal consumers may also be a growth generator by acting as an entrance barrier to other firms (Keller, 2007).

3.4.2 The function of a brand in a consumer perspective

The brand as an information source plays an important role, both for the brand owner and for the consumer (Melin, 1997). The brand as an information source serves to mediate product attributes such as price, quality and function. By using the brand as an information source the consumer may experience an ease in the purchase phase, since the consumer can compare the products and lastly decide which one is the best. Within each product category a number of various products are offered. A brand can in this situation allow the consumer to easier orientate on the market, and also to ease the choice of purchase. When the consumers finally has made up its mind about which product is best suited for them, the brand will facilitate of a potential repurchase, which will decrease the transaction costs. The brand may also be cost and time saving for the consumer.

One of the most important functions for the consumer concerns the security with which a well-known brand bring about, the guarantee function is significant (Melin, 1997). A branded product does not necessary guarantee high quality, rather consistent quality. Potential brand loyalty will primarily be based upon satisfaction of the claims of the consumer. Noticeable is the unlikelihood of a brand owner to deliberately decrease the quality of a brand, since it will reduce the reputation of a brand, which in turn, explains why a brand owner seldom reduces the quality of a brand, the brand is more likely to be improved in product quality. By using the brand as a guarantee, the brand will also serve as a risk reducer. This is foremost applied to products associated with risks of an economic, social and physical nature. A well-known and established brand may reduce the risk perceived by the consumer.

The brand may also serve as an image creator for the consumer (Keller, 2007). The information which is provided to the consumer are of an emotional as well as of a rational character, which give

the brand a symbolic meaning (Melin, 1997). The image of a brand has historically been valuable for more exclusive products, but has over the years also increased among groceries, such as foods. The image of a brand is in this situation vital for the consumer's self-identity, but also for the image that the consumer wants to mediate to others. Hence, the brand may act as a tool for the consumer as self-fulfilling as well as becoming socially accepted (Keller, 2007).

3.4.3 The function of a brand from a competitive perspective

The brand owner is in a sort of partnership with its consumers, which hopefully results in a brand loyalty. The competitors of the brand owner are constantly trying to break this partnership, in order to gain the consumers for himself (Melin, 1997). To gain a successful breakage of the partnership the brand has an important role to play as an information source, and the competitor has to decode the information provided by the brand to the consumer in order to break the partnership between the brand owner and the consumer. This means that the competitor has to analyze the characteristics of the brand which makes the brand unique and satisfies the claims of the consumer.

A brand with a leading market position will often get archetypal traits and function as sort of role model for the competitors. The leading brand may therefore serve as a prototype, whereas the competitors will risk being perceived as followers with a copy of the already existing and original product, which may lead to a struggle for the competitor to establish its own brand.

Thus, well-known brands limit the ability for new actors to enter the market, since the well-known brands will serve as an entry barrier, whereas the most influential entry barriers are awareness of a brand and brand loyalty of the consumers. Though well-known brands may act as entry barriers, they may also serve as possibilities of establishment, since acquisition of a well-known brand can be a shortcut to a market. Hence, functions of a brand may serve as development of the brand value.

3.5 The value of a brand

A well-functioning brand will serve as a valuable asset. The functions as described earlier result in added values for a range of stakeholders, but a brand can also imply added values for the company itself. The brand as an asset requires substantial and continuous investments and enforceable and well-defined property right to ensure sufficient return (Ménard & Valceschini, 1999). Kapferer (2012) sees a brand firmly in monetary terms, which consists of intangible assets.

"Brand value is the ability of brands to deliver profits. A brand has no financial value unless it can deliver profits. To say that lack of profits is not a brand problem but a business problem is to separate the brand from the business" (Kapferer, 2012, p 15).

The brand value is named brand equity and can be defined as "the added value with which a given brand endows a product" (Farquhar, 1989, p. 24). Which means that the product which is marketed under a certain brand or the operation that is associated with a specific corporate brand, shall generate a larger cash flow than which should have been generated without the brand or the corporate brand (Treffner & Gajland, 2001).

3.6 The structure of brand equity – from a consumer perspective

The consumer behavior when making a purchase is determined by individual traits and the decision process itself (Melin, 1997). The individual traits are often related with factors of demography, cultural and socio-economic variables. These variables will not be considered in this paper, instead the role of the brand when a consumer is making a purchase will be used. The brand's role for the consumer is not always evident, since the product and the brand may be well correlated from time

to time. The difference between the two concepts, though, may be well expressed in following quotation: "A product is something made in a factory; a brand is something that is bought by the customer. A product can be copied by a competitor; a brand is unique. A product can be quickly outdated; a successful brand is timeless." (King, 1984, p 3)

The overall goal of a brand owner is to build a large base of loyal consumers. Hence, the structure of a strong brand requires a good relation between the brand owner and its consumers. The main challenge will thereby be to offer a branded product with a unique and attractive added value, which is satisfying the consumers' claims (Keller 2007). To achieve this it is essential to understand how the brand creates added values to the consumer, and how this affects the consumer's decision making. The structure of brand equity is built upon the trust of a consumer, which according to Melin (1997) is affected by six factors; *engagement*, *brand sensitivity*, *brand awareness*, *brand associations*, *added value* and *brand loyalty*, see Figure 4.

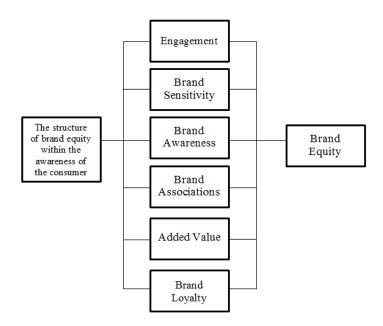


Figure 4. The structure of brand Equity (Melin, 1997, p 39).

The amount of *engagement* of the consumer is strongly correlated with the amount of brand loyalty, based on the fact that low engagement often results in a lack of brand loyalty. Engagement though, is a subject hard to define, but is often defined in terms of interest and significance of the consumer (Melin, 1997). Furthermore, the amount of engagement is influencing the consumer's sensitivity of information, and hence the decision-making process. This has resulted in a division of two product categories; low engagement and high engagement products. When marketing low engagement products the consumer is considered to be passive recipient of information, and is therefore hard to reach out to. Groceries are a product often associated as low engagement products. When a consumer, on the other hand, is purchasing a product of high engagement the consumer is actively searching for information in a decision of purchase, which is complex. The amount of engagement is determined by three factors; the product, the individual, and the situation itself. Furthermore, these factors are compound of four variables of personal interest, perceived risk, symbolic value and value of satisfaction. Therefore, when brand owners are influencing these variables, they can thence affect the amount of engagement.

A brand sensitive consumer is using the brand as a primary information source when choosing a product (Melin, 1997) Based on the term *brand sensitivity* two perspectives can be seen; high versus low brand loyalty. The brand owner always endeavors at achieving high brand loyalty. The

desirable brand loyalty is based either on low or high brand sensitivity. High brand sensitivity results in a higher loyalty, whereas low brand sensitivity may lead to a lacking loyalty. *Brand awareness* is the result of a brand owner's efforts to make the consumers aware of the existence of a product, and is defined as "the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category (Melin, 1997, p 41). The fundamental difference between the terms "recognize" and "recall" is that the latter is based on a spontaneous reminder whilst the first term is associated with assistance when reminding.

"Brand recognition is consumers' ability to confirm prior exposure to the brand when given the brand as a cue. In other words, when they go to the store, will they be able to recognize the brand as one to which they have already been exposed? Brand recall is consumers' ability to retrieve the brand from memory when given the product category, the needs fulfilled by the category, or a purchase or usage situation as a cue." (Keller, 2007, p 54)

Brand awareness is a qualification for *brand associations*, and is thence a first step in creating a connection between the product and the consumer (Melin, 1997; Keller, 2007). It creates sympathy and familiarity, both of which are important factors together acting as a condition when creating preferences of the consumer. Brand association is also of importance since the consumer assumes that a well-known brand is representing a good product. The consumer therefore embraces a well-known product as a guarantee of continuity. One of the most important brand associations is perceived quality. Perceived quality, though, may be distinguished from actual quality, whereas the first quality is based on subjectivity and the latter on objectivity. The brand owner therefore has to translate the actual quality to the quality expectations, which can be done when making quality associations to the brand's existing qualities and external attributes. The quality associations stresses the functional values of a brand, but creating brand association based on emotional values is as equally important. These associations may be based on life style, geographic origin, and performance, and can be used either individually or in combination. The most important though, is to create a holistic picture which has a clear and consistent *image* in the mind of the consumers.

All products within a given product category is satisfying a certain basic need (Melin, 1997). When a consumer is making a purchase the *added value* of a product will determine which product that will be consumed. Added value is a term used to describe the difference between a branded product and a generic product, or the added value which the consumer is willing to pay extra for. The added value needs to be relevant relative to a generic product and competitive relative to other branded products. The added value, which is based on the consumer's brand associations, should create brand preferences which shall generate brand loyalty.

Brand loyalty is a complex phenomenon without any clear stated definition (Melin, 1997). The definitions are many with a range of varying points of departure. Brand loyalty should be viewed as a continuum from freely brand changing to certain repurchase of the same brand. High brand loyalty is desirable for a brand owner, since this creates good conditions for stable sales and good profitability.

3.7 Credence goods

Brands may play an important part of signaling a certain product characteristic towards the consumers (Keller, 2007). Some goods though, are easier to measure, in terms of quality, comparative to other goods (Darby & Karni, 1973). One can distinguish between three type of goods; search goods, experience goods and credence goods, where the first two goods are those which are easier to measure. *Search goods* are products with qualities that can be ascertained prior to the purchase such as color, size, style and weight (Darby & Karni, 1973; Keller, 2007).

Experience goods are products with qualities that can be discovered only after purchase, i.e. trough experience. An example of an experience good is automobile tires, only trough experience one can be ascertain of service quality, safety, durability, etc. For experience goods the reputation of the product is significant (Ménard & Valceschini, 1999). A reputation serve to build a strong brand name, where signaling of a products qualities can be provided. Though reputation can build a strong brand, it may be related to risk as well. The greater the reputation of a brand, the greater the harm will be in case of defect.

The third type of good named *credence good*, are goods with qualities impossible to measure in normal use (Darby & Karni, 1973). In order for a consumer to see these qualities, additional information is required, which may be of a costly character. An example of credence good is insurance coverage, where the user seldom learns the product attributes (Darby & Karni, 1973; Keller, 2007).

Most of all agro-food items, both processed or fresh, are credence goods, if though, a specific food item would result in for instance immediate illness after consumption, it may be considered as an experienced good (Darby & Karni, 1973). The product attributes of most agro-food items are of a complex character and under continuous quality control, which is why manufacturers of food items tend to create a strong name of their brand in order to distinguish oneself from those of competition. Though most agro-food products can be considered as credence goods, one can also see these items as experienced goods, or in particular, a combination of the two. The distinction between the two types of goods is not always sharp.

"Experience qualities are known costlessly only after purchase, and credence qualities are expensive to judge even after purchase." (Darby & Karni, 1973, p 69).

Products named credence goods are associated with number of complexities. Since the consumer does not know the qualities either before, during or after purchase, a credence good require a need for creditable signaling of its product qualities.

3.8 Traceability

Consumers tend to completely rely on a single brand as a guarantee of quality when making a purchase, instead of depending on an understanding of the origin of a food product (Schuster, 2009). The food supply chains should provide the consumers with information concerning country of origin, food attributes and animal welfare, which may in some cases be legally required, but not always. This is why a food traceability system has been implemented by many companies, with a purpose of reducing the uncertainties originated from the food processes, by providing information concerning all stages in the food supply chain in terms of safety and quality from farm to fork (Chen & Huang, 2013).

In the literature, a number of definitions concerning traceability are presented. When defining traceability, the terms tracking and tracing are often used and interpreted as: "exploration of an entity (e.g. food product) under consideration (in the supply chain) in the upstream direction and downstream direction respectively" (Bosona & Gebresenbet, 2013, p 34). Hence, traceability covers both tracking and tracing and is not only a mono-oriented act in the supply chain.

3.8.1 Drivers for traceability

Often, a number of factors in combine are determining the choice of a firm to implement and develop a food traceability system (Bosona & Gebresenbet, 2013). Drivers for using a food traceability system can be identified in five categories; regulatory, social, economic, food safety and quality, and technological concerns.

New regulations and legislations can be considered an important driver when implementing a food traceability system (Bosona & Gebresenbet, 2013). In order to in forehand fulfill potential regulations, avoid ownership disputes and to keep its market position companies implement a food traceability system (Hobbs, 2004). Pressure from politicians, as well as keeping loyal consumers are drivers for developing and investing in traceability.

Increasing the consumers' confidence in a firm's food products, consumers' increasing interest in health and society, and increasing income and changing lifestyle of consumers are *social concerns*, which motivates a firm to integrate a food traceability system in their production (Bosona & Gebresenbet, 2013). An improvement of food management facilitates food security and safety, and hence an establishment of liability can be achieved (Hobbs, 2004).

Since traceability system is related to and requires significant investments, which are resource and capital intense, *economic concerns* are considered as a less strong driver when implementing a food traceability system (Bosona & Gebresenbet, 2013). Nevertheless, a traceability system may allow governmental funding, better access on the market, better food prices and a higher quality standard of the food items provided.

Recent food crises and incidents have made *safety and quality concerns* more important (Bosona & Gebresenbet, 2013). Hence, safety and quality concerns are a strong driver for a firm to invest in a traceability project. Implementation of food traceability may limit and hinder potential outbreaks of diseases related to foods. A firm tackling food safety will lead to additional value and value preservation in the supply chain. Though a food traceability system in itself cannot eliminate the risk of food quality or safety crisis, it may be helpful determining when and where the crisis occurred, and therefore decrease the possible costly consequences which may follow (Chen & Huang, 2013). Also, "Extracting market premiums could never be the driver for developing a traceability system. In and of themselves, traceability systems do not motivate quality—they simply trace it" (Smyth & Phillips, 2002, p.32).

An efficient traceability system may require more complex systems and devices, which food companies find too complicated and expensive (Bosona & Gebresenbet, 2013). On the contrary, emerging cheaper and new *technologies* motive firms to provide information related to a firm's products through all stages of the supply chain, especially since decreased costs and advanced technologies are becoming more available.

3.8.2 Barriers for traceability

Enforcement and implementation of a food traceability system may be related with drivers, as well as with barriers (Bosona & Gebresenbet, 2013). The barriers can be identified in five categories; information, resource, awareness, capacity, and standard limitation.

Traceability in the agriculture is associated with uncertainties, which makes it more difficult to obtain timely, accurate, complete and certain information at all phases of the supply chain, hence *information limitations* exists. In some situations consumers require unpacked products, fresh

produced products e.g., which will be considered as challenging when realizing the traceability information flow (Manos & Manikas, 2010).

Resource limitations are associated with higher costs as well as potential complicated tasks (Bosona & Gebresenbet, 2013). Additionally, allocation of the partners in a supply chain will be related with both time and cost consuming operations, which may lead to resistance between the actors in the supply chain. A traceability system also requires more administration work, especially when the system is implemented for the first time (Kher et al., 2010).

Capacity limitations exist due to the fact that effective food traceability systems require skilled employees for implementation, development and management (Bosona & Gebresenbet, 2013). This is especially evident for small producers which may experience a lack of employee capacity. Actors in the supply chain may also have conflicting goals concerning a food traceability system, and not enough skill or employees to make an efficient implementation of a food traceability system, which makes traceability throughout the whole supply chain more complex.

Standards are essential when exchanging and recording information, but no general or standardized data and means exists for food traceability, which is why *standard limitations* is associated with the system (Bosona & Gebresenbet, 2013; Pizutti et al., 2013). Lack of transparency and integration in obtaining traceability information throughout the supply chain, i.e. there is an information asymmetry problem, is also a barrier.

If considering a traceability system as an extra burden for a company, barriers such as lack of evident information about the benefits one might gain by using a traceability system and the absence of willingness to implement this form of system among food supply actors are problems of *awareness limitation* (Bosona & Gebresenbet, 2013; Alfaro & Rábade, 2006; Hobbs, 2004). Hence, efficient education and training programs are needed to decrease the actors' awareness limitations.

3.9 Theoretical conclusions

Due to the fact that the present study has an explorative ambition, this section aims at presenting conclusions from the sections above. It is not possible to state any hypotheses because there is no prior research about farmer's perception concerning traceability systems. The conclusions are classified according to the preceding sections.

The concept of branding

- Branding is a way to distinguish oneself from competitors.
- A brand can be used to influence the behavior of a consumer.

Collective brands

- A collective brand, where multiple stakeholders use the same brand, may result in benefits as well as disadvantages to the participating firms.
- Brand owners have to invest in their brands, while in the case of collective brands the various participants have an incentive not to invest sufficiently much.
- A problem of free riders may emerge when using a collective brand. If one actor is deceptive, all others will suffer.

The function of a brand for a brand owner

- The brand is used to provide valuable functions for the brand owner.
- The brand is an important carrier of information, where attributes such as quality, price and content of a brand are provided.

- The brand provides signals from the brand owner to the consumer, which can be done in an emotional and rational manner.
- The brand functions as a way for the brand owner to gain loyal consumers.

The function of a brand for a consumer

- The brand functions as a carrier of information for the brand owner and the consumer, where the brand as an information source may ease the purchase phase and facilitate a repurchase for the consumer.
- The brand serves as a guarantee of quality and risk reducer.
- The brand may be used as a tool for self-fulfillment, i.e., an image creator for the consumer.

The function of a brand from a competitive perspective

- A brand can be used to differentiate the brand owner's product from that of competing firms
- A brand with a leading market position will function as a role model and entrance barrier, which the competitors are trying to outshine.

The value of a brand

• Brand value may be seen as a way to endow a product with an added value, but is firmly viewed in terms of money.

Brand equity

• The structure of brand equity is a significant factor determining the consumer's behavior when making a purchase, where engagement, brand sensitivity, brand awareness, brand associations, added value and brand loyalty are all influential factors.

Credence goods

• A brand contains a large number of attributes such as quality, taste, price worthiness, modernity, origin, and youth. Products with a credence good character have attributes that consumers have difficulties to assess before, during, and after consumption so for these a brand may be utterly decisive.

Traceability

- Traceability is used to explain the origin of a food item, and hence a way to provide the consumers with information about a food's attributes.
- Implementation of a traceability system is associated with drivers as well as barriers. The drivers for using a traceability system are *regulatory*, *social*, *economic*, *food safety and quality*, *and technological concerns*. Barriers are *information*, *resource*, *awareness*, *capacity*, *and standard limitation*.

Each of the theoretical conclusions has to be empirically explored, which is why these conclusions serve as a basis for the questionnaire.

4. Methodological issues

4.1 Methodological approach

As a basis for determining the farmers' perception of the strengths and weaknesses of the jointly owned brand *Bonde På Köpet*, an empirical approach is essential. The results should hopefully help LRF decide about the future development of the initiative. Hence the findings of this study should be valid for the membership of LRF. No previous study of *Bonde På Köpet* exists and neither any other study of how farmers view a smartphone based food traceability system, this study has an explorative approach.

It is not practically possible to select a sample of respondents among the membership of LRF. To protect individuals' integrity Swedish legislation demands that an organization is not allowed to hand out persons' contact information. Instead the selection frame for this project is a panel that LRF has, comprising a number of LRF members. It was created in 2010 and consists of 96 people. According to LRF it is representative of the total LRF membership (Boman, 2014; Rappe, 2014). It is the only available selection frame of LRF members, unless commercial firms or Statistics Sweden should conduct the study, and that is not possible due to the resource limitations. Hence the data collection is conducted by using the LRF member panel.

To investigate the farmers' perception about *Bonde På Köpet*, a web survey was made, which will reach the respondents in a resource saving manner (Denscombe, 1998). A quantitative research method in form of a web survey will give a broad and comprehensive coverage. Gathering of data can generally be done also through postal surveys, telephone interviews and personal interviews (Denscombe, 1998; Olsson & Sörensson, 2011). Each of these is associated with advantages as well as disadvantages. Since the study is carried out during a short period of time and the data is gathered from a fairly large amount of people, a web survey is chosen for the data collection.

The response rates in various types of surveys are affected by how easy it is for the respondents to answer and hand in the answers. A planned follow-up of the non-responses will increase the response rate. There have been some concerns that a web-survey will result in a low response rate, but research shows that a postal survey and a web survey give relatively similar response rates (Denscombe, 1998). A qualification for using a web survey is that all respondents have internet access. The participants of the LRF member panel have voluntary agreed to join the panel, and a requirement for being a member of the panel is that the member has an e-mail address. Hence, the risk of the respondents to not understand how to access the survey is eliminated. A web survey will allow automatic calculations of all respondents' response data, which is resource-saving and reduces the risk of lost and mishandled data.

The questionnaire was sent to the respondents' e-mail addresses as an internet link. The questionnaire is personally linked to each respondent, which allows just one respondent per questionnaire. While a web survey reduces the time for handing in the answers (Denscombe, 1998; Olsson & Sörenssön, 2011). The respondents may mistake the questionnaire as a junk mail but also not open their e-mail on time. Since the participants of the LRF member panel have agreed to answer these types of questions, this is not seen as a major obstacle. As the mail is sent with a specific LRF representative as a sender the members should not mistake the mail as junk. Since a reminder will be sent after one week to those who did not respond in the first round, the risk of people missing the expiry date is reduced.

4.2 Questionnaire design

A questionnaire (Appendix 2) was constructed based on the theoretical conclusions presented in section 3.9. To answer the questions the respondent need instructions about how the questionnaire shall be answered (Denscombe, 1998). Instructions are given both in the covering letter (Appendix 1), which is sent to the respondents e-mail addresses, and in the beginning of the questionnaire (Appendix 2). The questionnaire consists of 35 questions. The first five ones concern background variables such as gender, age, and acreage. The following questions concern the members' perception about the initiative *Bonde På Köpet*. The respondents were asked to assess a specific number, range different alternatives, or answer a claim at a Likert scale from 1 to 5, where 1 represents disagree strongly, 2 disagree, 3 neutral, 4 agree, and 5 agree strongly.

The mail containing the questionnaire and covering letter was send to the respondents Friday the 11th of January 2014. The questionnaire and covering letter were in advance approved of by the contact persons at LRF. These persons also advised as concerns the timing and the response limit of one week as well as the reminder to the members who had not answered within the stipulated time.

4.3 Response rate and non-responses

The selection frame (in this case the entire member panel of LRF of 96 persons) should be as representative as possible for the population (the totality of LRF members) (Denscombe, 1998). The small selection frame may make the survey more doubtful, since the risk of the respondent to avoid answering some of the questions or no question at all may increase. However, the LRF contact persons claim that the member panel is representative of the total membership of LRF (Boman, 2014; Rappe, 2014). Without access to data from all the LRF members it is not possible to check the correctness of this claim. If the member panel is not randomly sampled, there is a risk for a distorted selection frame, where different member categories are over- and underrepresented compared to the total population.

Answers were received from 33 out of the 96 panel members, which gives a response rate of 34.5%. One week after the questionnaire was sent to the respondents, 28 respondents had handed in their answers. A reminder to those who did not answer resulted in six more respondents. According to LRF, this is a slightly low response rate. Most often the response rate of the member panel is 40-50 respondents (pers.com., Rappe, 2014). A possible explanation to the low response rate is that some of the panel members did not know much about *Bonde På Köpet*. Many of the filled-in questionnaires indicate that the panel members felt too uninformed.

One of the respondents did not answer the questionnaire at all, and was therefore not included in the 33 respondents. This probably indicates that this respondent only opened the questionnaire but chose not to answer the questions. Reasons for this may be because the respondent found the questions too hard, the questionnaire too long, or did not have time or an interest to answer. Positive though, is that the other respondents rarely skipped any questions.

The large number of non-responses may indicate that the respondent found the question too hard based on that the respondent felt uninformed about that question, or because the respondent missed the question for some reason.

4.4 Test of concordance

To determine the significance of the theoretical conclusions, a statistical test of the empirical material has to be made. In this study a test of concordance, named Kendall's tau-b, is carried out to

ensure possible similarities or differences among the LRF-members' perception about the jointly owned brand *Bonde På Köpet*. Kendall's tau-b is a nonparametric measure for ordinal data. The ordinal data are rankings of different alternatives on a Likert scale with a natural ordering, such as from least valuable/important to most valuable/important (pers.com., Andersson, 2014). Since the results provided from the LRF members are of the same charactes, i.e natural ordering, Kendall's tau-b was determined most suitable. Furthermore, it is used in cross tabulation, measuring the relationship between two ordinal variables.

The indicator of Kendall's tau-b ranges either that all pairs agree (1.0) to all pair disagree (-1.0). A positive result suggests that the rankings of the variables increase together, whilst a negative result suggest that the rankings of the variables decrease together. Hence, if the statistical test is used to calculate the correlation between a person's fitness level and comfort level, and Kendall's tau-b is 0.6129, the calculation indicates that a person's comfort level is positively correlated with the personal fitness level (Minitab, 2014). When determining if the calculation will be rejected or accepted, one can also evaluate the rating of the p-value. A p-value of 0.05 indicates that the risk of the calculation being random is 5%. If the p-value exceeds 0.05, the calculation is not seen as significant, since the risk of the calculation being random is too large.

4.5 Background variables

The background variables are the first five questions in the questionnaire, and consist of gender, age, acreage, type of production and years as a member of LRF. These questions are not part of the result, but serve as a basis for the statistical analysis and cross variables, to see if there are any statistical significant difference or similarity how, for instance, gender affect how the respondents have answered each question. The question concerning the respondents' gender resulted in two missing observations. Out of the 31 respondents, seven were women and 24 were men, see Figure 5.

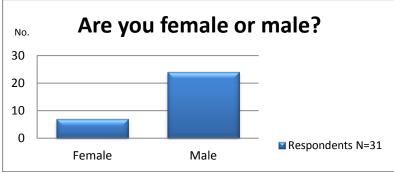


Figure 5. Gender.

The age of the respondents was ranked on a scale from <20 to 70< and all respondents answered the question, see Figure 6. None of the respondents were in the age of <20 or 20-30. Three respondents were in the age of 31-40, four were in the age of 41-50, twelve were in the age of 51-60, 13 were in the age of 61-70, and one of the respondents was in the age of 70<.

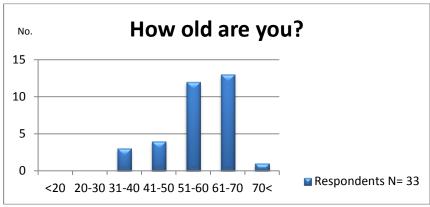


Figure 6. Age.

The question concerning the members' acreage resulted in two missing responses, see Figure 7. Four respondents owned 0-30 hectares, nine owned 31-60 hectares, five owned 61-90 hectare, three owned 91-120 hectares, one owned 121-150 hectares, and nine respondents owned 151 < hectare, 29%.

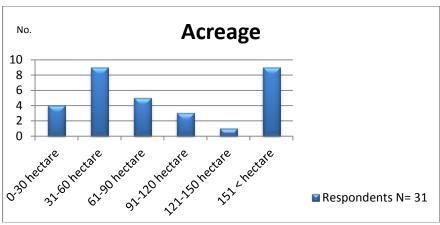


Figure 7. Acreage.

The question concerning main type of production allowed the respondents to choose multiple answers, which is why the numbers in Figure 8 are higher than number of respondents. Seven out of 33 have crop production, 16 have silviculture, and 13 have livestock and four have construction services. Eleven of the respondents have another type of production, such as egg production, rental of dwellings, horse activities and sheep farming.

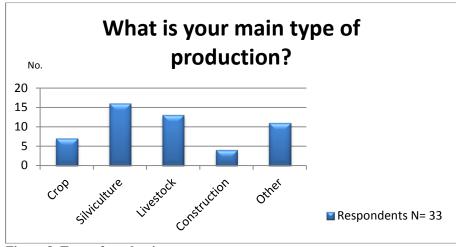


Figure 8. Type of production.

The question about years as a member of LRF was ranked on a scale from 1 to 21< years. Figure 9 shows that none of the respondents had been a member less than five years. Seven respondents have been a member for 6-10 years, three have been a member for 11-15 years, seven have been a member for 16-20 years, and 16 respondents have been a member for 21 < years.



Figure 9. Type of production.

5. Results and analysis

This chapter presents the results and analyses of the questions in the questionnaire. It is structured as the theoretical conclusions in Chapter 3. Each of the theoretical conclusions are statements that may explain the farmer-members' knowledge, belief, appreciation and understanding of the initiative *Bonde På Köpet*. All questions are analyzed in relation to the four background variables gender, age, acreage and years as a member of LRF. The respondents were given an opportunity to answer some of the questions in a Likert scale from 1 to 5, where number 1 is disagree strongly, 2 disagree, 3 neutral, 4 agree, and 5 agree strongly. Furthermore, each y-axis represents the number of respondents while the x-axis represents one of the background variables (gender, age, acreage, or years as a member of LRF). The Likert scale, y-axis and x-axis apply to all figures in the following subsections, except for Figures 13, 21, 22, 24 and 25.

5.1 The concept of branding

The concept of branding is the first theory used in the study, and here follows the results and analysis from the theoretical conclusions from that section.

- Branding is a way to distinguish oneself from competitors.
- A brand can be used to influence the behavior of a consumer.

A question concerning whether the respondents consider *Bonde På Köpet* to make the consumer to choose more Swedish foods was asked. The aggregated results in Figure A10, Appendix 2, shows that almost half of the respondents agree, 14 out of 32 respondents, nine respondents were neutral, and five respondents agreed strongly. The other four respondents either disagreed or disagreed strongly.

There is a significant difference between how females and males answered the question, p-value= 0.017. This is strengthened by the Kendall's tau-b= 0.356, see Figure 10. Males have a more positive belief towards *Bonde På Köpet* as a way to make Swedish consumers to purchase more Swedish foods. The background variable age shows no significant difference how varying age categories answered, p-value=0.164. There is though a small tendency when examining Kendall's tau-b=0.149, which can be explained by a larger number (4) agreed to this claim in the age of 51-70. No significant difference was seen among acreage or years as a member of LRF. Since the purpose of *Bonde På Köpet* is to benefit LRF's farmer-members and sell more Swedish foods, a positive belief of LRF's members towards the initiative is essential. A positive belief indicates a support from their members and that they believe that the initiative will be beneficial for the members, and hence a good way to make the consumers to purchase food made from the LRF members.

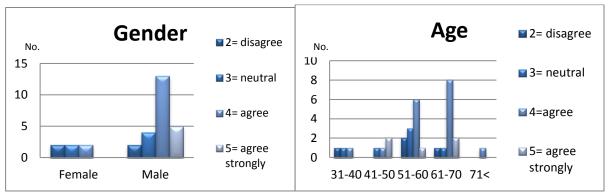


Figure 10. Results from the question "Våga fråga- få en bonde på köpet is a way to make the consumer to choose more Swedish foods.

5.2 Collective brands

Collective brand is the second theory used in the study, where three theoretical conclusions was stated and is listed below.

• A collective brand, where multiple stakeholders use the same brand, may result in benefits as well as disadvantages to the participating firms.

All parties in a collective brand are mutually dependent on each other so if one is deceptive all will suffer. Hence, a question, concerning the reliability of the search function that warrants a Swedish origin, was asked. The aggregated results in Figure A11, Appendix 2, shows that 18 out of 31 respondents agreed, six are neutral, four agreed strongly and three either disagree or disagree strongly.

The respondents' age and years as a member of LRF showed no significant differences. On the contrary, gender had a significant p-value of 0.0074 and Kendall's tau-b of 0.4227 was found, see Figure 11. Though acreage shows a p-value of 0.0938, which is close to being significant, the Kendall's tau-b result of 0.208 indicates a variance of how the age difference determine how the respondents answered. Overall, when analyzing both gender and acreage the results indicate a rather high and positive view of the reliability of *Bonde På Köpet*. When using a collective brand trust is essential. If one actor of the *Bonde På Köpet* were to deceive the others by claiming to produce foods of Swedish origin but does not, it would result in tarnishing the reliability of all actors using the collective brand. Hence, a positive belief of the members towards the reliability of the collective brand indicates support from the members of LRF.

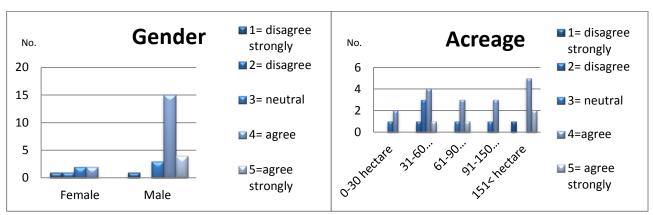


Figure 11. Results from the question "The consumer can trust that *Våga fråga – få en bonde på köpet* search function, which shows the products origin, will guarantee that a product is made out of Swedish raw products".

Another question about the beliefs towards a collective brand concerned whether the grocery stores want their own branded products registered in the *Bonde På Köpet* application. The results show that most of the respondents were neutral (3) or agree (4), see question 31, Appendix 2. No significant results were found for any of the background variables, though age showed a p-value of 0.129, which is close to significance. When the application was launched, it was faced with some criticism for example "I have not yet found a single product within the application. The idea is good, but the implication is worthless". In one question the panel was given an opportunity to mention any other comment. One the panel member commented on the lack of products registered in the application – "I have just scanned ten products, but only two were registered in *Bonde På Köpet*. Hence, one can see a need and interest required from the members for more firms to register their products in order for the application to become more successful.

Brand owners have to invest in their brands, while in the case of collective brands the various participants have an incentive not to invest sufficiently much.

A problem of free riders may emerge when using a collective brand. If one actor is deceptive, all others will suffer.

When using a collective brand, a free-rider problem may emerge, which is why the users of a collective brand might not invest sufficiently much. Based on this idea a question, if the food companies with Swedish ingredients registered in the application experience an added value of being part of the initiative, was asked. As Figure A28, Appendix 2, indicates, the respondents estimate a fairly high experienced added from the food companies with Swedish ingredients registered in the application. No one disagreed strongly, only two disagreed, and most (16 respondents) answered to agree. *Bonde På Köpet* faced some criticism when and after launching, where one main criticism was the lack of products registered. If the registered food companies experience an added value in the initiative, it should not be hard to find more producers of Swedish ingredients to join and register their products. Also, if the added value of being part of the initiative is high, this may result in a domino effect, which initiates other firms with foreign ingredients to choose to produce Swedish origin foods. When analyzing the question with the four background variables, no significant p-value or Kendall's tau-b was found.

Free-riding may also lead to other companies not wanting to join the collective brand. Hence, a question was asked if the farmer can induce their buyers (food industry companies) to be a part of *Bonde På Köpet*. When analyzing question 31, Figure A31, Appendix 2, the results indicate that out of all respondents most are neutral, followed by agreeing. If the farmers were to affect their buyers to join the initiative, more products could be added to the product portfolio, so that more products were to be scanned. None of the background variables showed any statistically significant results.

5.3 The function of a brand for a brand owner

Theoretical conclusions listed below, concerns the function of a brand owner. After the conclusions, follows the results and an analysis based on the answers from the questionnaire.

The brand is used to provide valuable functions for the brand owner.

The brand is an important carrier of information, where attributes such as quality, price and content of a brand are provided.

The functions of brand for a brand owner are many and of different character, where one is as a carrier of information. In order to determine if the brand *Bonde På Köpet* is a carrier of information it is interesting to see if the farmer-member even knows *Bonde På Köpet*.

Most respondents, 23 out of 33 knew the initiative, while the other 10 did not. No significant results were found either when comparing the question with the background variables. Though most of the respondents, 70%, knew what the initiative is, it is vital for the farmer-member to know the initiative. If not even LRF members know the initiative, one cannot expect that consumers know it. Hence, further marketing may be necessary.

To analyze whether the farmer-member perceive the application to be successful, a question about how many people had downloaded the application was asked. The aggregated results in Figure A7, Appendix 2, show that most respondents said that 5.000 people had downloaded the application, eight respondents thought 10,000 people, six thought 40,000, and the rest said less than 1,000, 60,000 or more than 100,000. If comparing this number with the actual number of downloads, 86,000 persons, the member panel perceives the application less successful than it really is.

A significant p-value was found when analyzing the question and the background variable gender, p-value= 0.05 and Kendall's tau-b= 0.26. In Figure 12, one can see that most men think that around 5,000 to 10,000 people have downloaded the application, and most females think that around 5,000 people have downloaded the application.

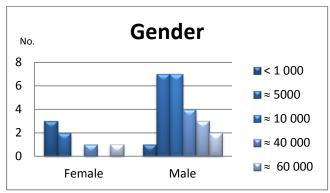


Figure 12. Results from the question "How many people do you think have downloaded the application $V^{\dot{a}ga}$ fråga – få en bonde på köpet?"

Furthermore, if the brand should serve as a source of information, a range of products should be registered in the application, so that the consumer can see which products are of Swedish origin. Hence, a question concerning how many products the member panel thought are registered in application was asked. Though no significant results were shown when compared with the four background variables, Figure A8, Appendix 2, shows that the member panel largely underestimates the product portfolio of the application. Most respondents answered that only 2,000 to 3,999 products are registered. Only three out of 32 respondents answered that more than 10,000 items are found in the product portfolio, remaining respondents underestimated the actual amount of food items. Though it may be hard to estimate the actual amount of food items, a major underestimation may indicate that the members of LRF perceive the application to be less of success than it really is.

As two previous sections indicate, the member panel underestimates both the amount of people that have downloaded the application, and the amount of products that is registered in the application, hence a need for LRF to inform more about the initiative *Bonde På Köpet* may be required. This question, how LRF could inform the consumers more about the initiative, was also asked to the member panel. The question allowed multiple answer-possibilities, which is why more responses are given than amount of respondents, see Figure 13 in next page. Most respondents said that TV-commercials is the way to market *Bonde På Köpet* more, followed by a farmer as a representative in a store, collaboration with the food industry and displaying in stores. Though TV-commercials is an efficient tool, it is also expensive and the budget of the initiative is constrained, which is why no

TV-commercials are made earlier. Instead, marketing techniques of a more time consuming character rather than cost consuming character is preferable.

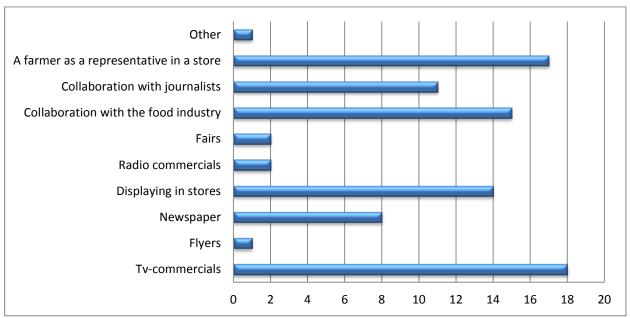


Figure 13. Results from the question "How do you think LRF should inform the consumers more about Våga fråga – få en bonde på köpet?"

The brand provides signals from the brand owner to the consumer, which can be done in an emotional and rational manner.

If a brand functions as the brand owner's way to signal to the consumer, the brand is a form of marketing technique. Since one of the purposes of the initiative is to facilitate purchase and repurchase of Swedish produced foods, a question concerning if *Bonde På Köpet* is a good way to market Swedish food production towards the consumer was asked. The aggregated results in Figure A10, Appendix 2, indicate that most respondents agreed that *Bonde På Köpet* is a way to market Swedish food production, nine respondents are neutral, and the rest agreed strongly, disagreed or disagreed strongly.

A significant result was found when analyzing the background variable gender, p-value=0.009 and Kendall's tau-b=0.392. As Figure 14 indicates females are more pessimistic or neutral than males. Out of all men, three disagreed (2), three were neutral (3), while the remaining either agreed (4) or agreed strongly (5). Though the background variable age did not result in a significant p-value, p-value= 0.09, Kendall's tau-b of 0.194 indicate a tendency that there is a slight difference how each age categories answered. The most optimistic age category was 71< and 41 to 50, who agreed or agreed strongly. If the *Bonde På Köpet* was to function as a good way to market Swedish food production, the initiative could facilitate the consumers' purchasing phase.

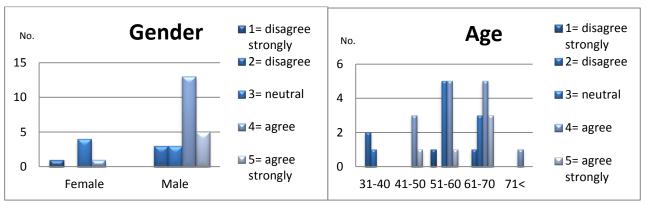


Figure 14. Results from the question "Våga fråga – få en bonde på köpet is a good way to market Swedish food production towards the consumer".

The brand functions as a way for the brand owner to gain loyal consumers.

A question if *Bonde På Köpet* strengthens the relationship between the farmer and the consumer was asked. The aggregated results in Figure A14, Appendix 2, show that most respondents, 13 out of 32 agreed, nine were neutral, five agreed strongly, four disagreed and one disagreed strongly. A significant result was found for the background variable gender, p-value of 0.013 and Kendall's tau-b of 0.372. As Figure 15 shows, no females agreed strongly nor disagreed strongly, instead most of females was neutral or disagreed. Most men answered agree followed by strongly agree. Though the background variable age shows a close significant result with a p-value of 0.072, Kendall's tau-b of 0.219 indicates that there is a slight difference how the respondents of each age category answered. The most optimistic age categories were 71< and 41 to 50, who either agreed or agreed strongly. Even though consumers want to buy Swedish produced foods, some do not, maybe because they do not see why they should. Hence, if *Bonde På Köpet* is a tool for strengthening the relationship between the farmer and the consumer, these added values the consumers receive by choosing Swedish food items could be more visible.

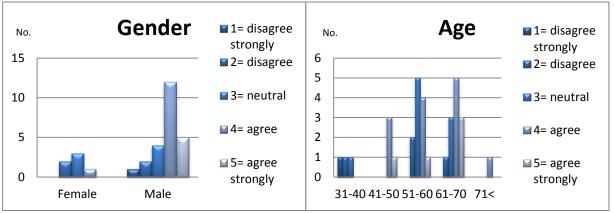


Figure 15. Results from the question "Våga fråga – få en bonde på köpet strengthen the relationship between the Swedish farmer and the consumer".

5.4 The function of a brand for a consumer

The function of a brand for a consumer is the fourth theory used in the study, and here follows the results and analysis from the theoretical conclusions from that section.

The brand functions as a carrier of information for the brand owner and the consumer, where the brand as an information source may ease the purchase phase and facilitate a repurchase for the consumer.

A brand may function as an information source for the consumer. The consumers' view of *Bonde På Köpet* determines the strengths or weaknesses of the application, which is why a question was asked if the consumer experience *Bonde På Köpet* as a good source of information. As the aggregated results in Figure A15, Appendix 2, indicate, most respondents agreed, ten respondents were neutral, four agreed strongly, and the rest either disagreed or disagreed strongly.

No significant results were found for any of the background variables except for gender, which showed a p-value of 0.035 and Kendall's tau-b of 0.312. Figure 16 shows that none of the female disagreed strongly nor agreed strongly that *Bonde På Köpet* is a good information source. Males seem to perceive the application more as a good source of information. Hence, if *Bonde På Köpet* can function as a good information source for the consumer, previous food scandals may not repeat, so that the consumers can increase their confidence in the foods they purchase. Also, if the application is a good information source for the consumers, this may lead to a deeper understanding about the added values of Swedish produced foods and thus repurchases of Swedish foods.

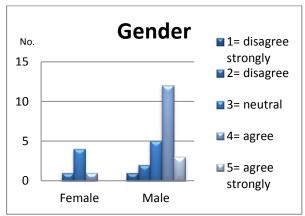


Figure 16. Results from the question "The consumer experience Våga fråga – få en bonde på köpet as a good source of information".

The brand serves as a guarantee of quality and risk reducer.

The brand may be used as a tool for self-fulfillment, i.e., an image creator for the consumer.

A brand also serves as a tool for self-fulfillment for the consumer, which is why the member panel was questioned if the consumer sees Swedish foods as a part of their life style. The aggregates results in Figure A16, Appendix 2, show that most respondents, 15 out of 32 agreed, nine were neutral, five agreed strongly, four disagreed and none disagreed strongly. The statistical analysis shows a significant p-value of 0.05 and Kendall's tau-b of 0.261. This indicates that there is a difference between how men and women think that consumers see Swedish foods as an image creator. Though neither males nor females disagreed strongly, Figure 17 indicates a more positive response of males. Most males agree (4) while most females are neutral (3). If Swedish produced food is an image creator for the consumer, this can be used as a marketing technique with an aim to strengthen the relationship between Swedish farmers and the consumers, and hence make the consumer to purchase and repurchase more Swedish origin foods.

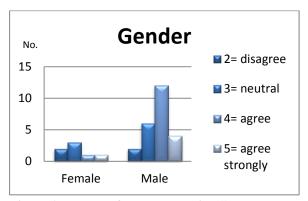


Figure 17. Results from the question "The consumer sees Swedish foods as a part of their life style".

5.5 The function of a brand from a competitive perspective

The function of a brand in a competitive perspective is the fifth theory used in the study, where two theoretical conclusions was stated and is listed below.

A brand can be used to differentiate the brand owner's product from that of competing firms.

A brand with a leading market position will function as a role model and entrance barrier, which the competitors are trying to outshine.

A question about whether *Bonde På Köpet* is a good tool to compete against imported products was asked. The aggregates results in Figure A29, Appendix 2, show that 20 out of 32 respondents agreed, six agreed strongly, four disagreed strongly and two were neutral. Only when statistically examining the background variable of age a significant p-value of 0.02 and Kendall's tau-b of 0.302 were found. Though two-thirds is said to buy Swedish foods if possible and 63 percent pay a premium for Swedish food, the rest choose to purchase foreign origin food items. Influential factors for choosing a foreign alternative are the price gap between foreign and Swedish foods and that some Swedish foods are seasonally bound. A way to make Swedish origin food items competitive is to differentiate them from the foreign ones. *Bonde På Köpet* may be a way to inform the consumers, and making the added values of Swedish foods more visible. As Figure 18 indicates almost none disagreed strongly (1) and none disagreed (2) about the application being a competition tool. The age category of 51-60 years is most optimistic that the application could be a competitive tool; in this category ten people agree to that.

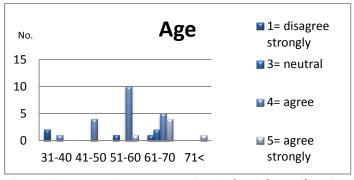


Figure 18. Results from the question "Våga fråga – få en bonde på köpet is a good tool to compete against imported products".

One question concerned if *Bonde På Köpet* gives the registered food companies competitive advantages against grocery stores' own branded products. Figure A30, Appendix 2, show the aggregated results of all respondents, where most respondents, 14 respondents, agreed, eleven were neutral, four agreed, two disagreed and one disagreed strongly. Here, no significant results were

found for any of the background variables except for gender, which shows a p-value of 0.029 and Kendall's tau-b of 0.321, see Figure 19. Though some female agree, most females are neutral, while most male are more optimistic. Most men agree while many others are neutral and agree strongly. An optimistic view from LRF's members indicates a support to the initiative to be a way to compete against foreign produced products. If registered products in *Bonde På Köpet* found the initiative to be a helpful competition tool and a role model, the grocery stores might see the advantages of selling Swedish produced foods.

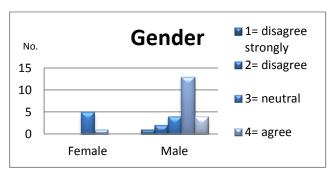


Figure 19. Results from the question "Våga fråga – få en bonde på köpet gives the food companies registered in the application competitive advantages against the grocery store's own branded products".

5.6 The value of a brand

Theoretical conclusions listed below, concerns the value of a brand. After the conclusions, follows the results and an analysis based on the answers from the questionnaire.

Brand value may be seen as a way to endow a product with an added value, but is firmly viewed in terms of money.

The value a brand brings is associated with a range of added values, but in order for a brand to be successful it has to be profitable in terms of money. Hence, a question was asked if the member panel experience that *Bonde På Köpet* contributes to long run profitability for the Swedish farmer, and also exceeds the investments made by LRF. The aggregated results in Figure A9, Appendix 2, indicate that 18 out of 32 respondents were neutral, seven agreed, three disagreed strongly, two disagreed and two agreed strongly. A significant result was shown for the background variable age, p-value= 0.05 and Kendall's tau-b of 0.241. Though the background variable gender did not show a significant result, p-value= 0.08, Kendall's tau-b showed a fairly high result of 0.23, which indicates that there is a difference how males and females answered the statement. As Figure 20 indicates females are more pessimistic than males, either females were neutral or disagree strongly. Most males, on the other hand, are neutral or agreed. Even though the initiative concerns marketing and informing consumers about Swedish production, it has to be lucrative in order to continue. Hence, a belief of the members that the initiative will contribute to profitability for the Swedish farmer is a signal that the LRF members support the initiative.

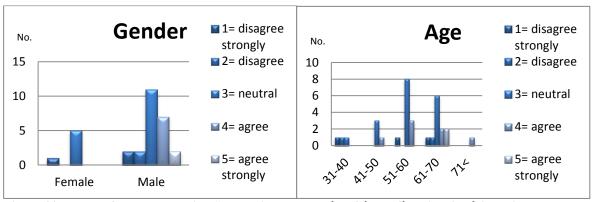


Figure 20. Results from the question "I experience that Våga fråga – få en bonde på köpet in the long run contributes to profitability for the Swedish farmer, and also exceeds the investments made by LRF".

The brand value is named brand equity and can be defined as "the added value with which a given brand endows a product" (Farquhar, 1989, p. 24). This means that products which are marketed under a certain brand shall generate a larger cash flow than which should have been generated otherwise (Treffner & Gajland, 2001). In order for this to happen, a good reputation is required. Hence a question if *Bonde På Köpet* has a good reputation among the consumers was asked. As Figure A25, Appendix 2, shows, most respondents were neutral, agreed, or agreed strongly. No statistically significant results were found when comparing the claim with the background variables.

5.7 Brand equity

Brand equity is the seventh theory used in the study, and here follows the results and analysis from the theoretical conclusion from that section.

The structure of brand equity is a significant factor determining the consumer's behavior when making a purchase, where engagement, brand sensitivity, brand awareness, brand associations, added value and brand lovalty are all influential factors.

In order to identify which types of added values, brand associations, brand awareness, etc the consumer perceive Swedish origin food item as, a question was asked to the member panel why the consumer chooses Swedish foods. This question allowed the respondents to give multiple answers, which is why the response is larger than the amount of respondents. Also, since the respondents answered the question vary differently, no statistically test was possible to do. Most respondents said that high quality and fair animal husbandry is the main reasons to why a consumer chooses Swedish origin foods, see Figure 21. High quality was not described in the questionnaire.

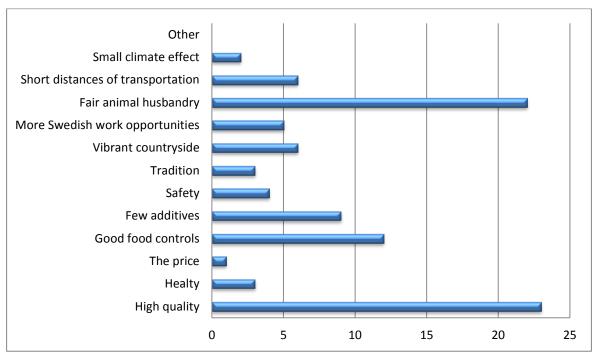


Figure 21. Results from the question "Why do you think you as a consumer choose Swedish foods?"

A question about why the consumer does not choose Swedish foods was asked to the panel. This question allowed multiple answers, hence the response rate is greater than the amount of respondents and no statistically analysis was possible. As Figure 22, next page, indicates, the price is determined the most influential factor to why a consumer chooses not to buy Swedish foods, followed by a lacking knowledge about the difference between and foreign and Swedish foods. Other influential factors determined by the member panel is disinterest of the consumer and that the consumers perceive it too hard to know which products are of Swedish origin. Though the price of Swedish foods may be hard for LRF to affect, the other three factors identified as to why the consumer chooses not to purchase Swedish foods, are something that LRF and *Bonde På Köpet* could handle. *Bonde På Köpet* purpose to facilitate the choice of the consumer that want to buy Swedish produced foods but maybe find it to hard or time consuming to find out by himself, hence the factor or both hard to know which products are Swedish and lacking knowledge of differences between foreign and Swedish produced foods may be eliminated. A later project of the initiative is to make the Swedish added values more visible for the consumer; hence the factor disinterest may lead to an interest instead.

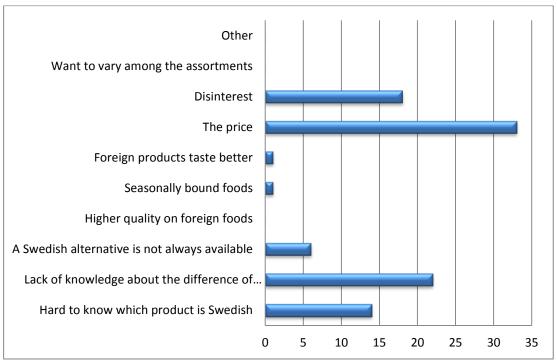


Figure 22. Results from the question "Why do you think that you as a consumer do not choose Swedish foods?"

Bonde På Köpet serves to facilitate the consumer behavior when making a purchase. Hence, a question if consumers use the application on a regular basis when they are buying a food item was asked. When analyzing how all respondents answered the question, see Figure A12, Appendix 2, most respondents, 13 in each category, said to be neutral and disagreed. Only one person agreed and none agreed strongly. Hence, the figure indicates that the consumers are believed not to use the application on a regularly basis. Though this may be seen as something negative, but it does not necessary have to be so. Why the consumer do not use the application may be explained by following quotation: "Can barely scan any product, and when I can, the application cannot find the origin of the product". Another explanation is that the consumer has already scanned the products that he or she usually buy, and hence learned the origin of each product. No significant results were shown for any of the background variables.

A barrier of why a consumer chooses not to buy Swedish origin products may be a large price gap between the Swedish and the foreign product. An indicator of success for *Bonde På Köpet* is if the consumer chooses Swedish origin food items in spite of the price difference. Hence, a question if the consumer is willing to pay extra for a Swedish food item was asked. When analyzing the results of how all respondents answered the question one can see that the respondents are not united. Though most respondents, ten persons, agreed to the statement, nine said to be neutral, eight disagreed, two disagreed strongly, and three agreed strongly. If the consumer is not willing to pay extra for a Swedish food item, stronger marketing techniques may be required. No significant results were found for any of the background variables.

5.8 Credence goods

Credence goods is the eight theory used in the study, where one theoretical conclusions was stated and is listed and analyzed below.

A brand contains a large number of attributes such as quality, taste, price worthiness, modernity, origin, and youth. Products with a credence good character have attributes that consumers have difficulties to assess before, during, and after consumption so for these a brand may be utterly decisive.

Bonde På Köpet is a brand to market Swedish produced food items. The added values that LRF uses are, however, hard for the consumers to see before, during and after consumption. Hence the products are credence goods. As to this, three statements were presented to the panel concerning if the consumer sees Bonde På Köpet as 1) a guarantee for fair animal husbandry, 2) safe foods and 3) vibrant countryside. The aggregated results in Figure A20, Appendix 2, of fair animal husbandry, show that 22 out 32 respondents agree, six agree strongly and four were neutral. Only when analyzing if the member panel thought if Bonde På Köpet represents fair animal husbandry with the background variable gender, a significant result was shown, p-value= 0.033 and Kendall's tau-b= 0.322. Though males are more optimistic towards the statement, most of males agree followed by agree strongly, females are also slightly optimistic, see Figure 23. The appreciation of the member panel that Bonde På Köpet indicates fair animal husbandry is positive not only for LRF, but for the entire Swedish animal sector.

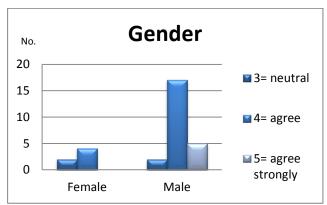


Figure 23. Results from the question "The consumer sees $V^{a}ga$ $f^{a}ga$ $f^{a}ga$

The second added value is safe foods. Figure A21, Appendix 2, indicates that none of the respondents disagreed or disagreed strongly. Instead most respondents agree, followed by the equal number that agree strongly and was neutral. No significant results were found when analyzing the claim with the background variables.

The third added value of credence character is vibrant Swedish countryside. Figure A22, Appendix 2 informs that most respondents have an optimistic view of *Bonde På Köpet* as a representative of vibrant Swedish countryside. Out of all 32 respondents 13 agreed, followed by ten respondents agreeing strongly, eight being neutral and one disagreeing. No statistically significant results were found.

Though LRF does not market Swedish foods as an indicator for high quality, it is interesting to see if the member panel thinks that the consumer sees *Bonde På Köpet* as a guarantee of high quality. When analyzing how all respondents answered, one can see that the most respondents agreed that the consumer see *Bonde På Köpet* to be of high quality, followed by some respondents who agree strongly, see Figure A23, Appendix 2. Though quality was not described, and may hence be interpreted differently, it is a term usually described as something positive. No significant results of differences among the background variables were found.

5.9 Traceability

Theoretical conclusions listed below, concerns traceability. After the conclusions, follows the results and an analysis based on the answers from the questionnaire.

Traceability is used to explain the origin of a food item, and hence a way to provide the consumers with information about a food's attributes.

Implementation of a traceability system is associated with drivers as well as barriers. The drivers for using a traceability system are regulatory, social, economic, food safety and quality, and technological concerns. Barriers are information, resource, awareness, capacity, and standard limitation.

Since traceability is used to explain the origin of a food item, and the implementation is associated with drivers and barriers, it was essential to ask a question about these barriers and drivers. In order to identify the member panel's perception about the drivers for implementing a traceability system, a question about what the main reasons to launch *Bonde På Köpet* was asked. This question allowed multiple answers, which is why the response rate is more than the amount of respondents, and also why no statistical test was possible to do. Most reasons were perceived fairly equal as drivers for LRF to implement the traceability system *Bonde På Köpet*, one driver stood out, see Figure 24. This driver was to make more consumers to buy Swedish foods. This driver may be seen as a range of factors in combine that determined LRF to implement and develop *Bonde På Köpet*. Why LRF want more consumers to buy Swedish produced products are a combination of social concerns, economic concerns, safety and quality concerns. The social concern of LRF may be correlated with increasing the consumers' confidence in Swedish foods. The safety and quality concern of LRF may be related to hinder to repeat earlier food scandals, while economic concern is related to by achieving the social, safety and quality concern the initiative will in the long run result in profitability for the Swedish farmer.

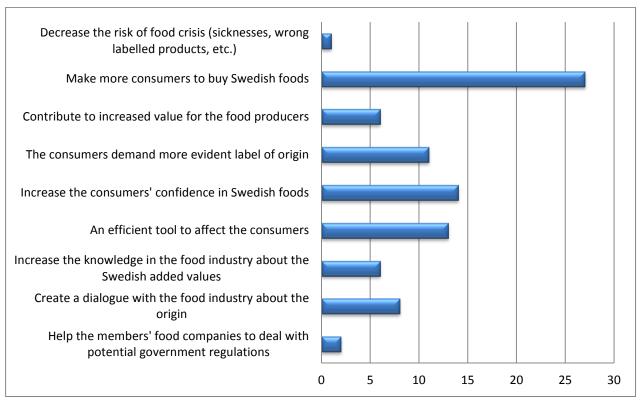


Figure 24. Results from the question "What is the main reason for LRF to launch Våga fråga – få en bonde på köpet?"

A traceability system is not only associated with drivers, but barriers as well. Hence, the member panel was asked which barriers they thought LRF experienced related to launching $Bonde\ På$ K"opet. The three main barriers identified by the member panel were the dialogue with the retailer, hard to make the food producers to join the initiative and the dialogue with other food actors, see

Figure 25. Both the dialogue with the retailers and that with other food actors can be identified as a barrier of resource limitation. The barrier that it is hard to make the producers to join the initive can be identified as an awareness limitation, which is related to absence of willingness to implement this form of system.

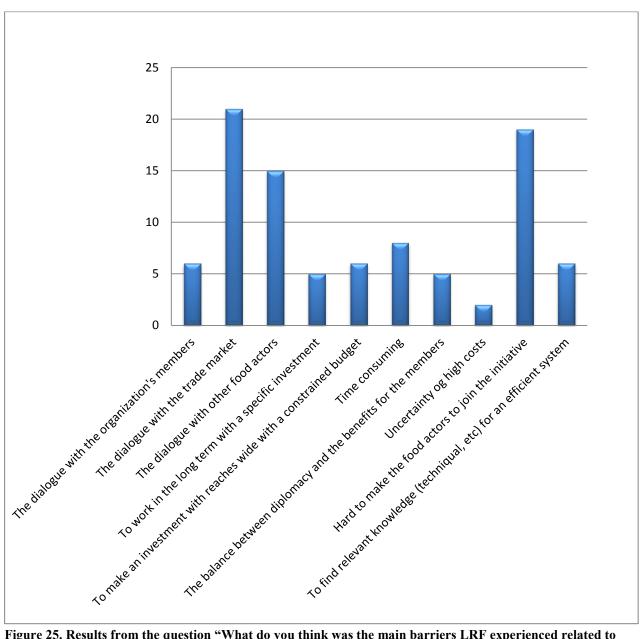


Figure 25. Results from the question "What do you think was the main barriers LRF experienced related to launching *Våga fråga – få en bonde på köpet*?"

6. Discussion

Because this is an explorative study there is no ambition to arrive at any theoretical development. Nevertheless, it is interesting to relate and discuss the results to the theoretical basis, presented in Chapter 3.

Bonde på Köpet can be regarded as a brand name according to the conceptual framework of branding (Keller, 2007). A brand is also used to distinguish oneself from competitors, which the initiative of *Bonde På Köpet* purpose to do by affecting the consumers to choose more Swedish origin product as a result of making the added values of Swedish food production more visible.

Bonde På Köpet can also be considered as collective brand, where multiple parties, i.e. parties whose products are registered in the application, are mutually dependent on each other (Ménard & Valceschini, 1999). A collective brand may involve problems of free-riders, and so if one is deceptive all other will suffer. A free-rider problem that could occur is if one party registered in the application deceives the others by claiming to have a Swedish origin product when not having one. The effect if this occurs would tarnish the whole brand, not only the deceptive party. Fortunately, the farmer-member of LRF did not see this as a likely event to occur. Both the farmer-members and other users state a need for the application to update its product portfolio. The problem though, is not really that the product portfolio is too small, but that too few companies choose not to join the initiative, which, of course, results in a smaller product portfolio. As to why companies chooses not to join may be related to the fact that their products have not Swedish ingredients. Though, the initiative is said to "not fault the products without Swedish origin, but to highlight them who have", a subjective value is found for them without Swedish ingredients by giving them a red thumbs down. Another explanation to not join the initiative may be related to the fear of free-riders and tarnishing one's brand.

The results and analysis indicate that *Bonde På Köpet* may provide valuable functions for the brand owners, i.e. the producers with Swedish ingredients who have registered their products in the application. For example, the farmer-members of LRF is said to believe that the application may function as a way to strengthen the relationship between the consumer and the Swedish farmer and to function as good way to market Swedish food production. On the other hand, for Bonde På Köpet to serve these functions, the brand has to be well known. Thirty percent of the farmer-members said that they did not know about the initiative before they read the cover letter to the questionnaire. The farmer-members' appreciation of the amount of downloads and amount of products registered in the application was a largely underestimation. These two first factors may together indicate that the farmer-members have lacking knowledge about the initiative. Also, the member panel does not believe that the consumer uses the *Bonde På Köpet* application on a regularly basis and they are neither certain that the consumer is willing to pay extra for a Swedish food item, which is an evident weakness of the initiative and an indicator that the consumer has lacking knowledge about the initiative. Hence, a need for further marketing of the initiative may be required in order for a more successful effect on the consumers, as well as the members of LRF. TV-commercials, farmer as a representative in a store and collaboration with the food industry was given the highest ranking for a solution to market Bonde På Köpet more. TV-commercials though, do not correspond with the budget constraints of the project, but the other two may.

The farmer-members perceive that *Bonde På Köpet* may function as an information source and a tool for consumer self-fulfillment, which is an evident strength of the initiative. The function of *Bonde På Köpet* as an information source and a tool for self-fulfillment is just as any other brand attributes that the brand signals to the consumer (Melin, 1997; Keller, 2007). The product attributes of this brand is well correlated of the product attributes of a credence good, which one cannot see before, during or after consumption (Darby & Karni, 1973). LRF has marketed *Bonde På Köpet*, i.e.

Swedish food production, as the added values of fair animal husbandry, safe foods and vibrant country side. As the results and analysis suggest, the farmer-members appreciation of and beliefs towards the initiative is well correlated with what LRF want to market- that the initiative supports and mediates these added values.

The farmer-member of LRF understand *Bonde På Köpet* as a way to compete against imported products and the grocery stores' own branded products, and therefore an initiative to manage the competitive pressure in the value chains, which is a strength and an example of the function of a brand in a competitor perspective (Melin, 1997). Earlier studies by Axfood, LRF and Novus indicate that price is one of the most influential factors determining why a consumer chooses a foreign product over a Swedish one (Axfood, 2007; Novus, 2013; LRF, 2011). The price is also perceived as the highest barrier to why a consumer chooses not the buy Swedish foods by the member panel. As to if the credence attributes of Swedish food production where to be marketed to a larger extent it might be possible that *Bonde På Köpet* will be a tool for competing against imported and the grocery stores' own branded products.

The purpose of *Bonde På Köpet* is to contribute to profitability for the Swedish farmer, but this is not evidently experienced by the member panel, which is neutral to this statement. On the other hand, the farmer-members appreciate the brand to have a positive attributes such as good reputation among consumers, and as a way to affect the consumers to purchase more Swedish foods. The farmers' appreciation of the sales and profit potentials of *Bonde På Köpet* may hence be an indicator of lacking knowledge about the initiative.

Traceability is used when explaining the product attribute origin of a food item, and *Bonde På Köpet* is a form of traceability system (Bosona & Gebresenbet, 2013). This origin attribute is marketed in Bonde På Köpet case, as scanning a bar code of the food item, and then the consumer can see if the product has Swedish ingredients. When performing this sort of system barriers as well as drivers are associated with the implementation. The farmer-members of LRF, in general, find making consumers to buy more Swedish foods the most strong driver, while other drivers such as increasing consumers' confidence in Swedish foods and an efficient tool to affect the consumers were perceived as an equally strong driver. Why LRF wants more consumers to buy Swedish produced products is a combination of social concerns, economic concerns, safety and quality concerns. The social concern may be correlated with increasing the consumers' confidence in Swedish foods. The safety and quality concern of LRF may be related to hinder further food scandals, while economic concern is related to achieving the social, safety and quality concern the initiative will in the long run result in profitability for the Swedish farmer.

The three main barriers identified by the member panel were the dialogue with the retailers, hard to make the food producers to join the initiative and the dialogue with other food actors. Both dialogue with the retailers and other food producers can be identified as a barrier of resource limitation (Bosona & Gebresenbet, 2013). The barrier that it is hard to make the food actors to join the initiative can be identified as an awareness limitation, which is related to absence of willingness to implement this form of system.

The findings of the survey may be useful for LRF especially in terms of the farmer-members' appreciation of the weaknesses and strengths of the initiative. Most useful though is not the strengths of *Bonde På Köpet* identified by the member panel, but the weakness. As to identifying the weakness of *Bonde På Köpet*, the initiative can be better. The most evident weakness is the lacking knowledge about the initiative and other issues identified by the farmer-members and to some extent by the consumers. A way to solve this problem is by further marketing of both the initiative and Swedish added values are provided.

The survey contains some shortcomings and limitations. One of those is that the member panel turned out to have only few members, 96 members. Also, the response rate was unfortunately low, only 34%. These two factors make the findings uncertain, which a larger number of respondents would have hindered. Furthermore, the present study has a brand theoretical approach. Other theoretical approaches possible is marketing, comprising marketing analyses or marketing strategies. Another approach is behavioral theories, and thence apply consumer behavior theory. Supply chain management literature is another possible basis for further analysis of *Bonde På Köpet*. It is not possible to judge to which extent any other theoretical basis would have given other results. It is, however, not likely that the results obtained would have been contradictory.

7. Conclusions

The purpose of this study was to determine in which extent the Swedish farmers are aware of the strengths and weaknesses of the jointly owned brand *Bonde På Köpet*, the aim of which is to signal the existence of Swedish raw products in food items. These strengths and weaknesses are related to the complexities stemming from the fact that *Bonde På Köpet* is a brand, and the awareness of the farmers is given by their understanding of the value chain operations. Therefore the project also consist of some issues that had to be empirically investigated such as the farmers' knowledge about and belief towards *Bonde På Köpet*, the farmers' appreciation of the sales and profit potentials of *Bonde På Köpet*, and lastly the farmers' understanding of the competitive pressures in the value chain. Here are the conclusions from the study:

- The knowledge level of the LRF members seems to be fairly limited. Furthermore, the respondents indicated that also the consumers may have limited knowledge, since they are not believed to use the application on a regularly basis. These limitations concern what *Bonde På Köpet* is, amount of downloads, amount of products in the product portfolio, and appreciation of the sales and profit potentials.
- The overall beliefs of the farmer-members towards *Bonde På Köpet* are positive, though males are found to be more optimistic. Most useful though is not the strengths of *Bonde På Köpet* identified by the member panel, but the weaknesses. As to identifying the weakness of *Bonde På Köpet*, the initiative can be improved.
- The most evident weakness is the lacking knowledge identified by the farmer-members and in some extent by the consumers. A way to solve this problem is by further marketing the initiative so that the Swedish added values become more visible.
- The most evident strengths *of Bonde På Köpet* perceived by the member-panel are that it can affect the consumer to choose more Swedish food items, that it allows added values to companies that have joined the initiative and also some added values to the consumer, that it strengthens the relationship between the Swedish farmer and the consumer, and creates trustworthiness.
- The farmer-members appreciation of the sales and profit potentials of *Bonde På Köpet* are in general neutral. An indicator is that the member panel has poor knowledge of the initiative.
- The farmers' understanding of the competitive pressures in the value chains are of optimistic character. The farmer-members perceive *Bonde På Köpet* both as a tool to compete against imported products and that the initiative allows competitive advantages against grocery store's own branded products.

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Appendix 1. Cover letter

Tyck till om LRFs konsumentsatsning Bonde På Köpet

Hei!

I april 2013 lanserade LRF satsningen "Våga Fråga – Få en Bonde på Köpet" på uppdrag av medlemmarna och efter beslut på LRFs riksförbundsstämma 2012. Den inkluderar en mobilapplikation, det vill säga ett tillämpningsverktyg på mobilen, som hjälper konsumenten att hitta mat med svenska råvaror. På hemsidan, www.bondepakopet.se kan man läsa om varför man ska välja svenskproducerad mat och om böndernas roll för den justa, säkra och smarta maten.

Syftet med satsningen är att på ett lättförståeligt sätt lyfta mervärdena av svensk livsmedelsproduktion, hjälpa konsumenterna att hitta svenska produkter i butik, öka deras intresse för att välja svenskt och på så vis öka värdet på gårdsnivå.

Satsningen använder dels LRFs folkrörelse ute på marknader och mässor där man möter konusmenter, den används som en dörröppnare och för en dialog med konsumenterna. Dessutom förs en aktiv konsumentdialog på internet/i sociala medier/Facebook/Twitter och i media i form av PR som debattinlägg, insändare och med pressmeddelanden.

Dagens enkät görs då LRF vill veta vad ni medlemmar tycker om satsningen för att kunna förbättra och utveckla den. Jag som gör undersökningen heter Maria Fridholm och studerar på Sveriges lantbruksuniversitet, SLU. Studien är mitt examensarbete i företagsekonomi och görs på uppdrag av LRF.

Genom att svara på formuläret bidrar du till att LRF kan vidareutveckla initiativet. Dina svar är anonyma, och alla de som svarar får en sammanställning av resultatet när det är klart. Sista svarsdag är den **21 april.**

Vi ser fram emot dina åsikter och tankar för att kunna förbättra och utveckla Bonde på köpet än mer framöver!

Har du frågor eller funderingar är du välkommen att kontakta mig på:

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Vänliga hälsningar Maria Fridholm, SLU

Genom

Christin Rappe Ansvarig LRFs Medlemspanel 08-787 51 40

Appendix 2. The questionnaire

- **1.** Are you female or male?
- **2.** What is your age?
- **3.** What is your acreage?
- **4.** What is your main type of production?
- **5.** How many years have you been a member of LRF?
- **6.** Before you read the covering letter, did you know what *Våga fråga få en bonde på köpet* was?
- 7. How many people do you think have downloaded the application *Våga fråga få en bonde på köpet*?
- **8.** How many products do you think are registered in the application *Våga fråga få en bonde på köpet*?
- **9.** I experience that $V \mathring{a} g a f \mathring{r} \mathring{a} g a f \mathring{a} e n bonde p \mathring{a} k \ddot{o} p e t$ in the long run contributes to profitability for the Swedish farmer, and also exceeds the investments made by LRF.
- **10.** *Våga fråga få en bonde på köpet* is a good way to market Swedish food production towards the consumer.
- 11. The consumer can trust that $Våga\ fråga få\ en\ bonde\ på\ köpet$ search function, which shows the products origin, will guarantee that a product is made out of Swedish raw products.
- **12.** When the consumer is buying food items, he/she uses the application $V \mathring{a}ga fr \mathring{a}ga f \mathring{a}en$ bonde $p \mathring{a} k \ddot{o}pet$ on a regularly basis.
- 13. Våga fråga få en bonde på köpet is a way to make the consumer to choose more Swedish foods.
- **14.** *Våga fråga få en bonde på köpet* strengthen the relationship between the Swedish farmer and the consumer.
- **15.** The consumer experience *Våga fråga få en bonde på köpet* as a good source of information.
- **16.** The consumer sees Swedish foods as a part of their life style.
- 17. Why do you think you as a consumer choose Swedish foods?
- **18.** Why do you think you as a consumer *do not* choose Swedish foods?
- **19.** How do you think LRF should inform the consumers more about *Våga fråga få en bonde på köpet*?
- **20.** The consumer sees *Våga fråga få en bonde på köpet* as a guarantee for fair animal husbandry.
- **21.** The consumer sees *Våga fråga få en bonde på köpet* as a guarantee for safe foods.
- **22.** The consumer sees *Våga fråga få en bonde på köpet* as a guarantee for vibrant Swedish countryside.
- **23.** The consumer sees *Våga fråga få en bonde på köpet* as a guarantee for high quality.
- **24.** The consumer is willing to pay extra for a Swedish food item.
- **25.** *Våga fråga få en bonde på köpet* has a good reputation among the consumers.
- **26.** What is the main reason for LRF to launch *Våga fråga få en bonde på köpet*?
- **27.** What do you think was the main barriers LRF experienced related to launching *Våga fråga få en bonde på köpet*?
- **28.** The food companies with Swedish ingredients registered in the application experience an added value of being part of the initiative.

- **29.** *Våga fråga få en bonde på köpet* is a good tool to compete against imported products.
- **30.** *Våga fråga få en bonde på köpet* gives the food companies registered in the application competitive advantages against the grocery stores' own branded products.
- **31.** The grocery stores want their own branded products registered in the application *Våga fråga få en bonde på köpet*.
- **32.** The farmer can affect their buyers (food industry companies) to be a part of $V \mathring{a}ga fr \mathring{a}ga f \mathring{a}$ en bonde $p\mathring{a}$ köpet.
- **33.** Other comments or something else you would like to share?

Appendix 3. Results from the questionnaire

34. Are you female or male?

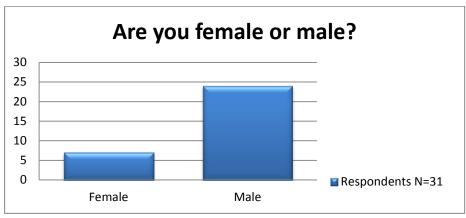


Figure A1. Gender

35. What is your age?

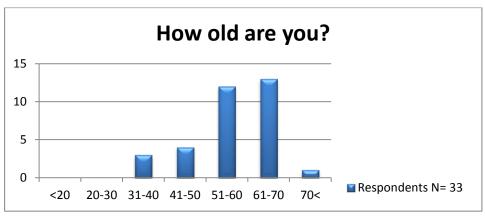


Figure A2. Age

36. What is your acreage?

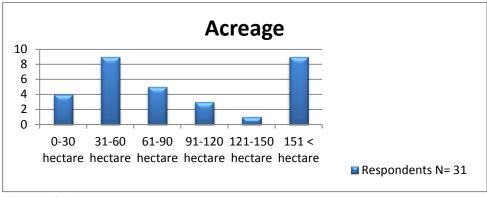


Figure A3. Acreage

37. What is your main type of production?

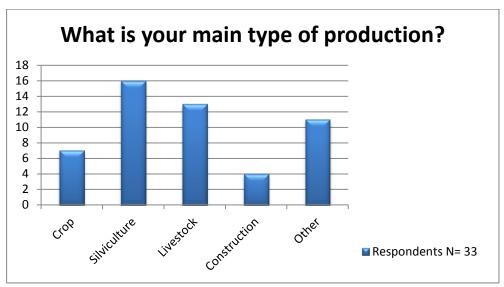


Figure A4. Main type of production

38. How many years have you been a member of LRF?

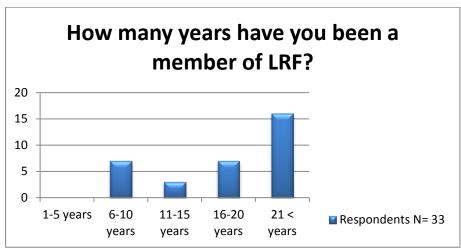


Figure A5. Years as member of LRF

39. Before you read the covering letter, did you know what *Våga fråga – få en bonde på köpet* was?

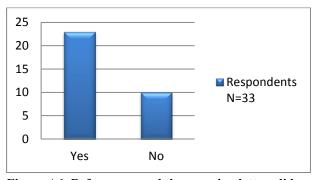


Figure A6. Before you read the covering letter, did you know what $V \mathring{a}ga$ $f \mathring{r} \mathring{a}ga - f \mathring{a}$ en bonde $p \mathring{a}$ $k \ddot{o}pet$ was?

40. How many people do you think have downloaded the application $V \mathring{a}ga fr \mathring{a}ga - f \mathring{a}$ en bonde $p\mathring{a}$ $k\ddot{o}pet$?

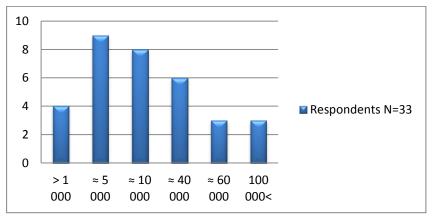


Figure A7. How many people do you think have downloaded the application Våga fråga – få en bonde på köpet?

41. How many products do you think are registered in the application *Våga fråga – få en bonde på köpet*?

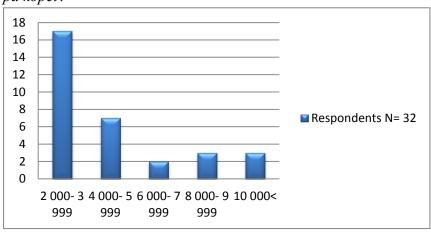


Figure A8. How many products do you think are registered in the application $V \mathring{a} g a f \mathring{a} g a - f \mathring{a}$ en bonde $p \mathring{a}$ köpet?

42. I experience that $V \mathring{a} g a f r \mathring{a} g a - f \mathring{a} e n bonde p \mathring{a} k \ddot{o} p e t$ in the long run contributes to profitability for the Swedish farmer, and also exceeds the investments made by LRF.

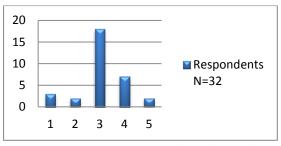


Figure A9. I experience that *Våga fråga – få en bonde på köpet* in the long run contributes to profitability for the Swedish farmer, and also exceeds the investments made by LRF.

43. *Våga fråga – få en bonde på köpet* is a good way to market Swedish food production towards the consumer.

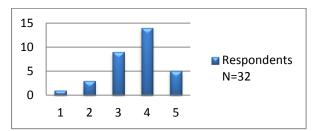


Figure A10. Våga fråga – få en bonde på köpet is a good way to market Swedish food production towards the consumer.

44. The consumer can trust that $V \mathring{a}ga fr \mathring{a}ga - f \mathring{a}$ en bonde $p \mathring{a}$ köpet search function, which shows the products origin, will guarantee that a product is made out of Swedish raw products.

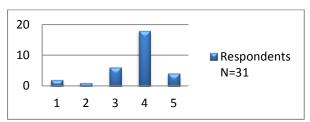


Figure A11. The consumer can trust that $V^{\dot{a}}ga$ $f^{\dot{a}}ga - f^{\dot{a}}en$ bonde $p^{\dot{a}}$ $k\ddot{o}pet$ search function, which shows the products origin, will guarantee that a product is made out of Swedish raw products.

45. When the consumer is buying food items, he/she uses the application $V \mathring{a}ga fr \mathring{a}ga - f \mathring{a}en$ bonde $p \mathring{a} k \ddot{o}pet$ on a regularly basis.

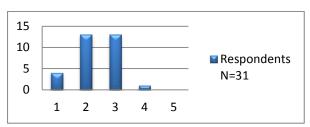


Figure A12. When the consumer is buying food items, he/she uses the application $V \mathring{a}ga fr \mathring{a}ga - f \mathring{a}$ en bonde $p \mathring{a}$ köpet on a regularly basis.

46. *Våga fråga – få en bonde på köpet* is a way to make the consumer to choose more Swedish foods.

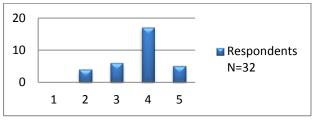


Figure A13. Våga fråga – få en bonde på köpet is a way to make the consumer to choose more Swedish foods.

47. *Våga fråga – få en bonde på köpet* strengthen the relationship between the Swedish farmer and the consumer.

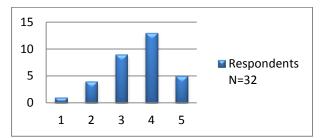


Figure A14. *Våga fråga – få en bonde på köpet* strengthen the relationship between the Swedish farmer and the consumer.

48. The consumer experience *Våga fråga – få en bonde på köpet* as a good source of information.

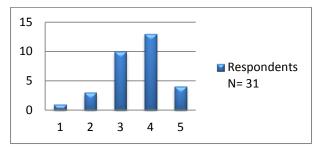


Figure A15. The consumer experience Våga fråga – få en bonde på köpet as a good source of information.

49. The consumer sees Swedish foods as a part of their life style.

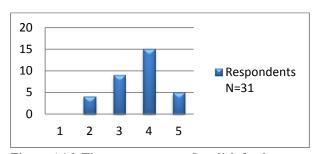


Figure A16. The consumer sees Swedish foods as a part of their life style.

50. Why do you think you as a consumer choose Swedish foods?

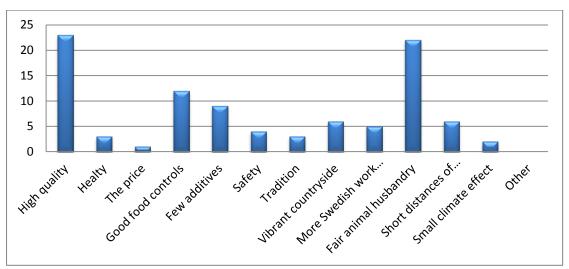


Figure A17. Why do you think you as a consumer choose Swedish foods?

51. Why do you think you as a consumer *do not* choose Swedish foods?

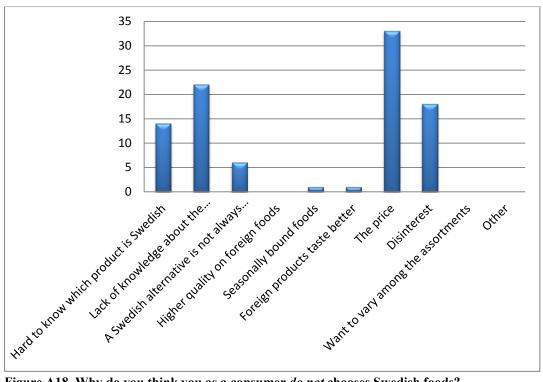


Figure A18. Why do you think you as a consumer do not chooses Swedish foods?

52. How do you think LRF should inform the consumers more about *Våga fråga – få en bonde på köpet*?

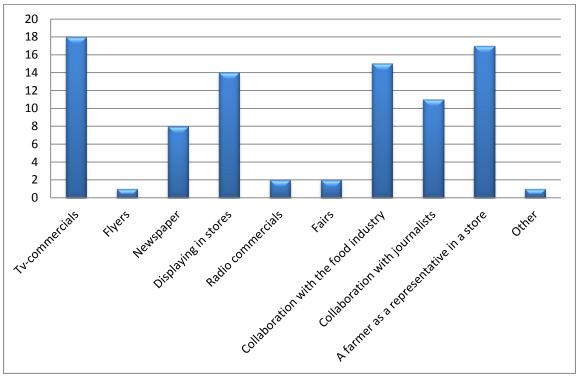


Figure A19. How do you think LRF should inform the consumers more about $V \mathring{a} g a f \mathring{a} g a - f \mathring{a} e n bonde p \mathring{a} k \ddot{o} p e t$?

53. The consumer sees *Våga fråga – få en bonde på köpet* as a guarantee for fair animal husbandry.

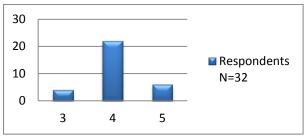


Figure A20. The consumer sees Våga fråga – få en bonde på köpet as a guarantee for fair animal husbandry.

54. The consumer sees *Våga fråga – få en bonde på köpet* as a guarantee for safe foods.

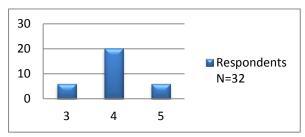


Figure A21. The consumer sees Våga fråga – få en bonde på köpet as a guarantee for safe foods.

55. The consumer sees *Våga fråga – få en bonde på köpet* as a guarantee for vibrant Swedish countryside.

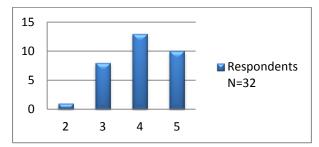


Figure A22. The consumer sees Våga fråga – få en bonde på köpet as a guarantee for vibrant Swedish countryside.

56. The consumer sees *Våga fråga – få en bonde på köpet* as a guarantee for high quality.

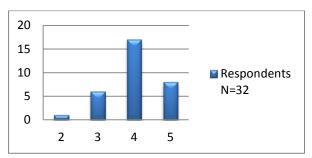


Figure A23. The consumer sees Våga fråga – få en bonde på köpet as a guarantee for high quality.

57. The consumer is willing to pay extra for a Swedish food item.

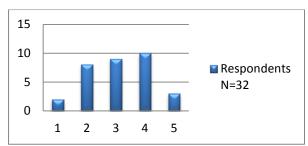


Figure A24. The consumer is willing to pay extra for a Swedish food item.

58. *Våga fråga – få en bonde på köpet* has a good reputation among the consumers.

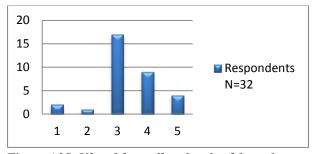


Figure A25. Våga fråga – få en bonde på köpet has a good reputation among the consumers.

59. What is the main reason for LRF to launch *Våga fråga – få en bonde på köpet*?

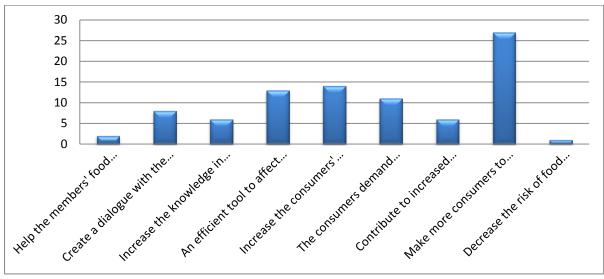


Figure A26. What is the main reason for LRF to launch Våga fråga – få en bonde på köpet?

60. What do you think was the main barriers LRF experienced related to launching *Våga fråga – få en bonde på köpet*?

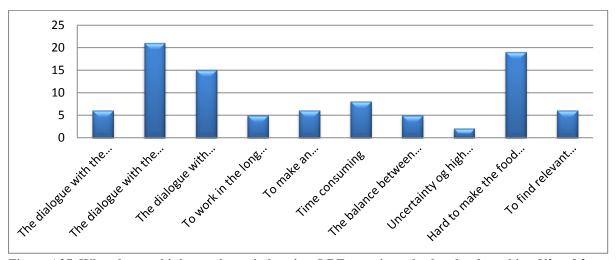


Figure A27. What do you think was the main barriers LRF experienced related to launching Våga fråga – få en bonde på köpet?

61. The food companies with Swedish ingredients registered in the application experience an added value of being part of the initiative.

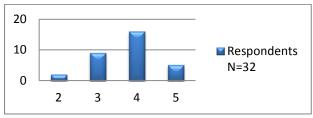


Figure A28. The food companies with Swedish ingredients registered in the application experience an added value of being part of the initiative.

62. Våga fråga – få en bonde på köpet is a good tool to compete against imported products.

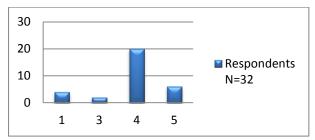


Figure A29. Våga fråga – få en bonde på köpet is a good tool to compete against imported products.

63. *Våga fråga – få en bonde på köpet* gives the food companies registered in the application competitive advantages against the grocery stores' own branded products.

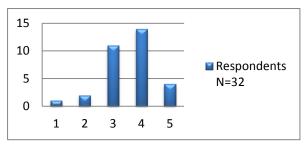


Figure A30. $Våga\ fråga - få\ en\ bonde\ på\ köpet$ gives the food companies registered in the application competitive advantages against the grocery stores' own branded products.

64. The grocery stores want their own branded products registered in the application *Våga fråga* – *få en bonde på köpet*.

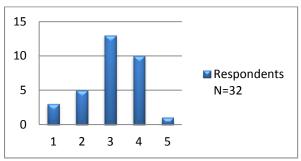


Figure A31. The grocery stores want their own branded products registered in the application *Våga fråga* – *få en bonde på köpet*.

65. The farmer can affect their buyers (food industry companies) to be a part of $V \mathring{a}ga fr \mathring{a}ga - f \mathring{a}$ en bonde $p\mathring{a} k \ddot{o}pet$.

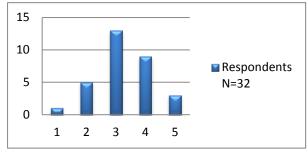


Figure A32. The farmer can affect their buyers (food industry companies) to be a part of Våga fråga -få en bonde på köpet.

66. Other comments or something else you would like to share?

"Har inte provat själv"

"Dessa frågor borde LRFs styrelse besvarat innan dom satsade på appen. Dessa frågor är ju bara vad jag tror frågor och ger ju ingen bild av hur lyckad eller misslyckad appen varit. Jag har just skannat 10 produkter som är svenska enligt de företag som tillverkat dom men endast 2 av dessa fanns med i appen. Detta gör att appen inte är intressant för konsumenten."

"Svårt att svara när man inte är insatt i frågorna"

"Jag har ingen sådan telefon och jag vet inte vad våga fråga är för något. Trots att jag är bonde. Kan därför inte svara på enkäten."

"LRF skall KRÄVA att appen Få en Bonde på köpet skall ligga till grund för all offentlig upphandling. I TV reklamen skall vi locka med ett pris för den som är extra flitig med APPEN Hon/Han får en bonde som kommer hem o grillar en kväll i Juli."

"Jag tror inte detta ökar försäljningen av svenskproducerade livsmedel. Det är så krångligt och tidsödande så endast redan insatta ägnar det tid och intresse."

[&]quot;Vet mycket lite om "Våga fråga...""