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**CROWDFUNDING AND SMALL SCALE FARMERS IN
ESTONIA**

ÜHISRAHASTUS JA VÄIKETALUNIKUD EESTIS

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<p>Vähene juurdepääs krediitvõimalustele on teinud väiketalude pidamise Eestis keeruliseks. Seetõttu on Eesti väikepõllumeestel raskusi talupidamise edendamisel, kuna neil ei ole võimalik põllumajandustegevuste arendamiseks lihtsaid krediitvõimalusi kasutada. Selline olukord on toonud kaasa põllumajandusettevõtete vähenemise.</p> <p>Käesoleva magistritöö eesmärk on hinnata väikepõllumeeste arvamust ja suhtumist ühisrahastuse kohta Eestis.</p> <p>Eesmärgi saavutamiseks kasutati kvalitatiivset meetodikat ja andmekogumise meetodiks valiti poolstruktureeritud telefoniintervjuu. Telefoniintervjuu valiti koroonapandeemia tõttu. Analüüsi tulemused näitasid, et ainult 22% vastanutest kinnitab, et on teadlik ühisrahastusest, 7% vastanutest kinnitab, et on ühisrahastusest lugenud või sellest kuulnud, kuid pole kursis selle toimimisega alternatiivse rahastamismehhanismina. 71% vastanutest kinnitab, et ei tea ühisrahastusest midagi. Kõik intervjuueeritavad kinnitasid, et on kasutanud oma põllumajandusettevõtte edendamiseks isiklikke. Samuti mainisid kõik vastajad, et põllumajandustegevuse jätkamiseks on pidev vajadus rahaliste vahendite järele aga nad on kasutanud ühisrahastuse asemel teisi rahastusallikaid. 32% vastanutest näitas üles positiivset huvi ühisrahastuse kui alternatiivse rahastamisallika vastu põllumajanduses. Tulemused näitasid, et väikepõllumeestel on ühisrahastusest aga see võiks lahendada nende probleemid, mis on seni finantsallikaid otsides tekkinud. Ühisrahastuskampaaniad võivad suurendada nõudlust turul, luues otsese sideme klientidega.</p>			
Märksõnad: ühisrahastus, väikefarmerid, alternatiivsed, rahastusallikad, rahastus.			

Estonian University of Life Sciences Kreutzwaldi 1, Tartu 51014		Abstract of Master's Thesis	
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<p>The low accessibility to credit facilities has been devastating the small scale farmers business in Estonia. Therefore, the small scale farmers in Estonia are encountering difficulties as these farmers cannot directly access credit facilities to boom and develop their farm business activities, this has led to agricultural business upset in the country. The aim of the master's thesis is to gauge the opinion of small scale farmers on their attitude and perception about the crowdfunding in Estonia. To achieve the purpose, qualitative research method was used, as a result of social distancing for protection under Covid-19 lockdown telephone interview was adopted with the use of semi structured research questions among small scale farmers in Estonia. The thematic analysis results showed that only 22% of respondents attest having awareness about crowdfunding, 7% of the respondents attest having read or heard about crowdfunding, but are not familiar with its workings and how it functions effectively as an alternative financing mechanism. 71% of the respondents affirm that they know nothing about crowdfunding. However, 100% of the respondents had subscribed to use of personal savings at various stages of the farm activities and all the respondents mentioned that there is constant need for finance to sustain agricultural operation, while they have sourced from various alternative sources of finance aside crowdfunding. Meanwhile 32% of respondents showed positive interest to utilise crowdfunding as alternative source of finance. The findings revealed that small scale farmers have low knowledge of the crowdfunding, and would resolve funding issues they encounter sourcing for funds from financing institutions. Crowdfunding campaigns can boost demand in the market by formation of a direct link with customers</p>			
Keywords: Crowdfunding, small scale farmers, alternative source of finance, funding			

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1. INTRODUCTION

National agricultural census data indicate that there are globally at least 570 million farms, corresponding family farms to more than 90% of all farms from 167 countries and territories (FAO, 2013; Lowder et al., 2016). Small farms that are found in the European Union are particularly in peripheral regions, such as Northern Scandinavia, South-eastern Europe, Ireland and Scotland and all the Mediterranean countries (Claros, 2014). Small farms are relative to areas of marginal agricultural productivity, such as mountain ranges (e.g. Pinter and Kirner, 2014; Salvioni et al., 2014). Small farms correspond to 67% of all farms in the EU (Kania et al., 2014). Further, there is a general conception that small units (as defined by Eurostat) are characteristics of the new member state (NMS), agricultural holdings with less than 1 economic size unit (ESU) are also present in some established Member States, such as Greece and Italy (17% of farms), Sweden and Austria (21%), Portugal (34%) and the UK (40%). Interestingly, from the year 2005 to 2007, the number of these small farms increased in countries such as the UK, Sweden, Austria, and Portugal due to the implementation of the Single Farm Payment Scheme, but decreased slightly in Italy, Greece and Spain, while the Netherlands happened to be the only member state in which there are no such small farms.

Oftentimes, small farms are categorised with family farms (e.g. Gasson et al, 1988 and, Tranter, 1983), but ‘family’ and ‘small’ do not predictably mean the same concepts (Hill, 1993). This particularly applies to the newly acceded Member States from Central and Eastern Europe (e.g. Chaplin et al. 2007; Birol et al., 2006; Abele and Frohberg 2003; von Braun and Lohlein, 2003 and Kostov and Lingard, 2002). These terms are often used interchangeably as they share a common denominator, i.e. the livelihood of the farmer and his family. Family and small farms are linked to the labour capacity input rendered by the family members and whether the farming covers the largest share of the farm income (Hill, 1993). It is acknowledged that small farms differ widely, and are distributed according to different spatial patterns across Europe, fulfilling different roles according to the agriculture and territorial characteristics of each region. Western Europe are characterised with family farms where their primarily family business is farming. In contrast, farming in Central and Eastern Europe has a more diverse set of actors (Gorton et al., 2009). This affirms that European agriculture is widely heterogeneous.

The definition of a small farm (or a smallholder) is relatively opaque and non universally accepted (Davidova and Thomson, 2014). Farm size can be assessed using farm structural size,

labour force, economic size, herd size, and market participation (that is how farm purchase inputs, crop sales) (EC, 2011), although the farmland area has been the most commonly used criterion for this purpose. Small farms are usually defined using thresholds on these different farm size indicators (Davidova and Thomson, 2014; Lowder et al., 2016). Based on the structural size, small farms are defined by EUROSTAT and the Food and Agriculture Organization (FAO) as those with an agricultural area measuring less than 5 ha (Davidova et al., 2012), and this threshold has been used in different publications (Davidova, 2014; Galluzzo, 2015; Papadopoulos, 2015). The definition of the threshold is strongly correlated by the analysis of geographical context since the distribution of farm sizes are very heterogeneous across countries and regions (e.g. Hazell et al., 2010; Lowder et al., 2016).

In Estonia, small-scale farms are family farms that were constituted based on the restitution of land reform, the disintegration of former collective farms, or the expansion of household plots (Viira, 2014; Jürgenson, 2017). The land reform law and then the agriculture reform law both favoured agriculture founded on small farms (Kasepalu, 1991; Lillak, 2003; van Dijk, 2007; Pöder, 2017). The first decade of regaining independence, there was increased number of farms in Estonia, grown from 7.4 thousand in 1991 to 55.7 thousand in 2001 (Viira, 2014). Large number of small agricultural users developed (Viira, 2014; Pöder, 2017), while later in the preceding years this number decreased (Grubbström & Sooväli-Sepping, 2012; OECD, 2018; Jürgenson & Rasva, 2020). Large-scale producers are largely co-operative or corporate farms, with a few exceptions in individual or private farms that have established and will continue to develop (Viira, 2014).

However, farm size is universally appealing as they are relatively easy to apply and allow simple differentiation across countries and world regions, but farm size doesn't capture all the complexities of farm systems. Ideally, where data is available, additional characteristics might be used, (eg; labour force; farm produce; farm income or sales and farm degree of specialization. All these characteristics are related to specific types of farming and are of limited use for a general assessment of the spatial distribution of small farms (e.g. EFSA et al., 2015 used a threshold of 75 cows and a family workforce of at least 80% to classify the small-scale dairy farms). The Economic size, which is widely used for statistical and policy purposes within the European Union (EU) farms with less than 8 Economic Size Units (ESU) of Standard Gross Margin (SGM) are considered as small farms (EC, 2011). This threshold was used by Angelova and Bojnec (2012) to separate very small and small farms from high-income farms.

Using only one group of characteristics will hinder overall relevance and applicability classification systems intended for a general assessment of small-scale farming systems.

Furthermore, one of the major characteristics for description of small farms is with funds capacity or capital accessibility. Small-scale farms often have difficulties to raise funds through debt financing as an external finance source, where dependent on banks to provide loans (Treur, 2012). Debt financing can be referred as a financing practice that involves payments of interest, that are not directly proportional to profit achieving activities. For instance, in the agricultural sector, farmland or other assets are required as collateral. (Hisrich et al., 2008). Conventional lending requires collateral to reduce risks from the lender to the borrower. The common mortgage kind of collateral commonly requested by the banks is not often time readily available by those farms (Miller and Jones, 2010). However, whenever small firms want to obtain loan from the banks, the interest rate is more than the large firm and this will eventually reduce the profitability ratio that small firms can earn from engaging such an investment (Fu et al., 2002).

Therefore, entrepreneurs in the agricultural sector may have two reasons looking for alternative sources to finance their farm operations. Firstly, the class of entrepreneurs that are not certified for debt financing from the commercial banks because of trust issues and insufficient certainties (Veen et al., 2009). Secondly, the class of entrepreneurs do not want to seek debt financing because alternative sources of financing better suit their farm operations plan (Veen et al., 2009). For both reasons aforementioned, those alternative sources of finance could be non-banking financial sources. Eventually, crowdfunding is the leading and fast upcoming alternative finance source. Crowdfunding can be described as a collective effort of people who gather to network and pool financial resources together often through internet platforms, and charge into business activity, in exchange of returns (Fisk et al., 2011). Crowdfunding has already gained promising results in agricultural practice in some countries; UK, Germany, Netherland, Italy, Sweden, India etc.

Therefore, this thesis explore to gauge the opinion of small-scale farmers on issues related to their attitudes and perceptions about the crowdfunding system in Estonia agriculture. Also, the thesis will provide an insight to the economic viability of Estonian farms with reference to small farm size using information from small farms through use of qualitative research method with semi structured questionnaire. The purpose is to explore the factors that are associated with economically viable farms, identifying viability in Estonian farms, according to their size and available funds. The thesis questions to be expressed, what kind of fund is available for the

small farms in recent times, what are the issues with current funding system and how can crowdfunding system support small scale farmers. The following chapter shows methodological approach to derive the answers to thesis questions and results are analysed, discussed and conclusion are drawn.

2. LITERATURE REVIEW

2.1. Different sources of funds available for farmers

2.1.1 Common Agricultural Policy (CAP) – European fund

One of the European public policies formulated and adopted within the European Union is the Common Agricultural Policy (C.A.P). The implementation of CAP can only be possible by using a specialized, decentralized system coming from the European level and adapted to the national one. At inception, C.A.P. was established to provide solutions to some of the currently dysfunctional agricultural systems of the EU member states. The decision of a repeatedly coordinated agricultural sector was a direct cause of the negative influence of the Second World War at the level of agricultural production and on the agricultural market (Institutul European din România, Human Dynamics 2003,).

In 1957 C.A.P was being mentioned in the Treaty of Rome and signed, which founded the European Economic Community because C.A.P was seen as a priority right from the beginning. Based on the agricultural interests and priorities of the founding members, C.A.P. received during the first years of existence, an impressive part of the European budget, namely 75% (Bărbulescu 2006, 236). This percentage was continuously reduced until it reached about 36% (Bărbulescu 2006, 211) in the financial perspective for the 2007-2013 period. Towards fulfilling the general objectives for sustainability and reinforcement of the European agricultural system as well as the national agricultural systems, C.A.P. operates in two financial processes. The First one is the European Agricultural Guarantee Fund (E.A.G.F.), through which about 71% of CAP spending as direct payments to farmers and 4% to market measures regulation as well as the investments and the export refinances are assured. The second one is the European Agricultural Fund for Rural Development (E.A.F.R.D.), which with the remaining 25% of funding supporting programs in rural development and environmental measures finances initially approved by the national governments (European Commission 2007). The most important aims of the CAP are to support farmers' income, improve agricultural productivity and competitiveness, ensure a stable supply of affordable food, and support rural development, climate action, and sustainable resource management. Although, the CAP has faced wide-ranging criticism, as well as increasing income inequalities and for under-resourcing goals for rural development and environmental protection by overfinancing ineffective income support. The CAP is currently under reform for 2021–2027. The European Commission has conveyed that the future CAP should be developed in line with the Sustainable

Development Goals. European funds is not necessarily an easy task. Obviously, is to fulfil a series of formal conditions in order to apply for financial support. These norms and rules are either imposed, such as the administrative reform or the creation of specialized institutions which are capable of handling the European funds, or recommended through programmes such as the institutional twinning process (Papadimitriou and Phinnemore 2004, 627) and the yearly reports made by the European Commission.

EU member states are obligated to report spending to comply with the EU's principle of transparency, including regulations with specific obligations for publishing CAP payment recipients. Specifically, in Article 111 of Regulation (EU) No. 1306/2013, 14 member states are required to report the following information on a single website for at least 2 years following publication: payment beneficiaries (first and last names of individuals or full legal name of associations or companies), the municipality where the beneficiary is registered (and postal code "where available"), the amounts of payment corresponding to each measure, and "the nature and description of the measures" for both EU and member state contributions. The European Commission maintains a web page with links to each country's CAP payments reporting website, where they state, "To ensure full transparency, EU countries publish information relating to the beneficiaries of all common agricultural policy (CAP) payments on their national websites". Presently, all farmers or farms have an individual ID number, but the procedure depends on the individual member state, and there is no common procedure in the EU (R. Hießerich, Federal Ministry of Food and Agriculture Germany, personal communication, May 8, 2020). These reports offer information about the current situation and make a series of recommendations aiming at resolving the existing problems (Mihai 2005).

Practically, getting an overview of CAP spending is currently extremely difficult at a finer level than the national summaries published by member states or aggregated EU analyses issued by the European Commission, because data are fragmented and incomplete. Every member state maintains its own database for reporting CAP spending and uses a different format and includes different information. Data access is a problem; most of these transparency portals allow only specific searches (it is not possible to search for or download all the data without writing one code), and often most portals delete data older than 2 years. Importantly, there is no universal standard for the "nature and description of measures" that member states are required to report, so there has been no way to harmonize the data (by which we mean standardize payments so that their purpose, recipient, and location can be compared and aggregated between member states). Data harmonization is needed to gain a comprehensive overview of

CAP spending and for what purpose, as well as to combine the CAP data with other datasets, such as, environmental and social outcomes that the CAP is intended to promote, to assess the policy's effectiveness in practice.

2.1.2 European Agricultural Fund for Rural Development (E.A.F.R.D.) - LEADER Approach

The word 'LEADER' originated from the French acronym for "Liaison Entre Actions de Développement de l'Économie Rurale", which means 'Links between the rural economy and development actions. LEADER is carried out under the national and regional Rural Development Programmes (RDPs) of each EU Member State, co-financed from the European Agricultural Fund for Rural Development (EAFRD). In the programming period for 2014-2020, the LEADER procedure has been extended under the broader term Community-Led Local Development (CLLD) to three additional EU Funds: European Maritime Fisheries Fund (EMFF), European Regional Development Fund (ERDF), European Social Fund (ESF), (European Union, 2020). LEADER is obligatory only under the EAFRD, a single action can now be supported under two or more of the four EU Funds at the same time through the principle of multi-funded CLLD. In this case, it enables LAGs to comprehensively incorporate local demands and solutions and helps to reinforce the links between rural, urban and fisheries areas. (European Union, 2020). Leader has been a vital and useful instrument to foster the development of European rural areas. The focus of the Leader approach is the public- and private-sector partnership principle and the inclusion of local-level expertise. Including local-level actors, the EU aims at fostering effective implementation of EU policies.

Decentralisation in connection with monitoring has the advantage that local-level actors, such as Leader LAGs, know the situation on the spot much better than more centrally positioned institutions. Regional, national, and supranational authorities profit from the fact that local peculiarities might be taken into consideration better than before. For local residents, this translates that institutions that are geographically closer to them implement those policies. With the involvement of non-public actors, according to the partnership principle, even local residents can participate in EU policy-making. It helps to bring the EU closer to its citizens. It might contribute to the enhancement of visibility and credibility of the EU. In the places where LAGs have been selected to implement projects funded by Leader, the additional resources made available by the EU were very remarkable. This helped to create new jobs, restructure

the local economy or create new and qualitative space for the local residents. EU has further expanded both its activities in different policy-fields and the territories covered with those policies for not only the Member States and their meso-levels are affected but also Local-level administrations, for instance in executing regulations and guidelines, are increasingly under the impact of EU integration and Europeanisation. (Kull 2007, Kull 2009). As Bruckmeier (2000) has stated that Leader is a new governance model for autonomous regional and local development.

Kováč (2000) considered Leader to potentially be the essence and dominant principle of the EU's rural development policy and the European response to globalisation scheme. Leader should be perceived in a way to reform the entire EU (rural) development system (Kováč 2000). In the Leader programming period between 2007-2013 came with the establishment of the Leader approach, and the Member States had the obligation to portion only the minimum 5% of funding from the National Rural Development Plan's financial resources to Leader. The requirement for the new Member States was even lower than that, only 2.5% (Council Regulation (EC) No 1698/2005, Article 17). The idea and the ideal was that the Leader approach consolidates, as a horizontal method, different areas of the rural economy. In practice, the main focus of pillar-two funding was agricultural sector and in many cases, only the minimum obligatory requirement was implemented. In addition, for the period 2007-2013, the Leader approach is being expounded and also used for Fisheries Local Action Groups, called FLAGs, all over the EU.

In the case of Estonia, the possibility for implementing the Leader approach in Estonian rural areas came about in 2004 with the accession Estonia to the EU. The concept of Leader is relatively new for the Estonian rural areas. The development strategies had to be submitted by the last day of June 2008. The implementation of projects for the 2007-2013 period began after that. The formation of LAGs has not been enforced by the ministry. LAG areas were established through mutual agreements between locals, where local municipalities were presumably most prominent. There can be two distinctive reasons. The first reason is connected to the national Leader regulation, as the territory of an LAG is the territory of participating municipalities. The second reason is that municipalities have the possibility to support LAGs financially, because as a rule the expenses of LAGs are covered a posteriori. The allocation of funding for LAGs is 10% of the Estonian Rural Development Plan 2007-2013, which were 4 times more than the minimum requirement according to the Council Regulation. There are 26 LAGs implementing their strategies in 2012. The main objective of Leader is to promote

local initiative, contributing to the improvement of competitiveness of agriculture and forestry, of the environment and the countryside, and especially to the improvement of the quality of life and to the diversification of economic activities, through mobilising the internal development potential of the rural area (Ministry of Agriculture 2011). There is only 1 local municipality which is not a member of any LAG, while over 99% of rural area are covered by LAGs.

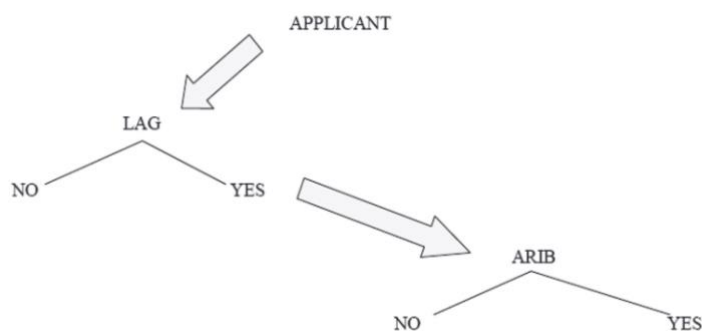


Figure 1: for an illustration of the journey of an application

Adopted from: Vivia Aunapuu-Lents 2013: 135

The juridical form of LAGs in Estonia is a non-profit organisation. Most of those organisations (80%) were formed in 2006 so that the applications could be submitted to ARIB. Due to the small size of Estonia there is only one managing authority (Ministry of Agriculture) and one paying authority Estonian Agriculture Register and information Board (ARIB), this greatly helps to decrease the complexity of the decision-making process, and it should decrease the time for getting a positive decision. There could be danger that the LAGs would be transformed into political bodies led by political decisions and not by necessities of the region. (Kull 2007). Where an LAG, which also acts as decision-making authority, would create a new public authority. The function of the LAG is to evaluate project applications (usually a special evaluation committee has been set up for that purpose) and also to choose applications from ones submitted, which are most suitable for the development of a LAG's area (meaning in accordance with the aim of the LAG area strategy). ARIB has no power to question that decision, but ARIB is obligated to check the eligibility of the applicant and the application (costs), see also Figure 1 above for illustration of journey of application.

In the beginning of 2009, the first projects were submitted to LAGs by project applicants. By the end of 2011, estimatedly 4500 very different project proposals were submitted to ARIB (www.pria.ee). Every LAG has designed 3-16 measures in its strategy. There are 2-4 full time employees every LAG. Compared to the number of applications submitted by LAGs with the number of projects approved by ARIB, the approval percentage is approximately 50 both in 2009, and 2010. The main basis for rejections in the case of LAGs, is the limited budget, (only the best projects can get funding), and in the case of ARIB, ineligible costs.

2.1.3 Value chain finance

Value chain finance is an alternative source of finance. It can be described as one that consists of a series of value-added activities to the final product before sell out. The valuing chain starts from production to the processing of the final product and ends stage with marketing and sales to the customer (Wenner and Arias, 2006). The chain links and the security of market-driven demand for the final product can provide producers, processors, suppliers and marketing companies with more secure access to the production and process of products. This chain links reduces costs and risks of doing business and also improves access to services (Miller and Jones, 2010).

Value chain finance equally allows integration of all key players in the chain link, which is based on sharing and trading such as machinery and information. However, it helps in reducing possible business risks and increase growth (Wenner and Arias, 2006). Value chain finance can also be referred to as channelling funds to and among the different links in the value chain (Miller and Jones, 2010). Value chain finance can be described as any of or all of the financial services, products and services channelling to or via a value chain to address the demands and constraints of the chain. For instance, we talk of services inquire to procure products, to secure sales, to reduce risks and/or improve efficiency within the chain. This is a considerable method, not only that it focuses on the direct borrower but, also analyses the whole chain links (Miller and Jones, 2010).

Value chain finance can be grouped into two strains; The internal value of chain finance takes place within the value chain. For instance, when a leading firm advances funds to a market intermediary or when an input supplier supplies credit to the potential farmer. The external value of chain finance is made possible by value chain relationships and mechanisms. For

example, when a farmer receives a loan from a bank that is based on a contract with a trusted buyer.

Value chain finance recipient gets offers of a mechanism to obtain finance that may not be easily accessible due to availability of collateral or transactions costs of securing such loan. In addition, it can be a way to guarantee a market for products. Miller and Jones (2010) and Wenner and Arias (2006) stated that the main modalities of value chain finance are; Identify financial needs for strengthening in the chain, adopt financial products to fit the needs of all participants in the chain, and also reduce financial transaction costs through direct discount repayments and delivery of financial services and use value chain linkage and knowledge of the chain to reduce possible business risks.

Value chain finance is both an approach for financing and also a set of financial instruments for promoting and improving the financial demands in the chain links. It is a strategy to finance recognizes the entity of the chain and responds to the specific financial commitment (Miller and Jones, 2010). Customized approaches can be said to finance production or harvest, to purchase products or labour, to provide overdrafts in credit lines, to fund investments or to reduce risk and uncertainty (Miller and Jones, 2010)

Factoring is an example of value chain finance, a mode of account receivable financing. The entrepreneur usually transfers his billing and credit risk to the bank, in exchange for a small fee towards the company. The entrepreneur receives his payment almost immediately instead of waiting sometimes 90 days until such bills are paid (Steeman and Hondel, 2014). The credit for a company is proportional to the sales. Therefore, factoring is also called “growth financing”.

The farmer’s cost of using value chain finance as an alternative financial source is the interest that the farmer has to pay on the lent asset for his farm (Wenner and Arias, 2006). Factoring attracts a small fee towards the company for receiving the money.

2.1.4 Leasehold

Leasehold can be described as the wholesome right on the full usage of property or asset which is owned by another individual (Peffer et al., 2010). The difference between leasehold and tenancy is that leasehold is pledged to property and not to the individual. Therefore, the lessee can transfer the leasehold to third parties to apply and obtain a mortgage from the bank. For

example, farmland that is under a long lease usually has a minimum duration of 26 years (ASR, 2015). The farmer's cost of using leasehold as an alternative financial source is the interest that the farmer has to pay and the lessee does not have to buy the land, but annually pays the agreed sum which results in increased working capital for the farm. The agreed sum to be paid to the lesser is usually at the beginning lower than the mortgage payments but possibly grow over time by indexing (ASR, 2015).

2.1.5 Angel capital

The equally vital source for start-up capital generation is angel capitalist (Wong et al., 2009). Angel capitalists are also referred to as business angels, who are individuals that invest part of their wealth in an equity stake of an entrepreneurial venture. Angel capitalist can be compared to a venture capitalist. Although, angel capitalist use their own private money for investing while venturing capitalist use money obtained from many different investors bundled into an organisation (limited partnership) for investment purpose (Metrick and Ayako, 2011). Angel capitalist satisfied the financial gap that exists between family or friends and venture capital firms funding. Angel capitalist will continue to exist because it mainly impossible for family and friends to finance large sum of money whereas venture capitalist rather not accept the smaller deals (Wong et al., 2009).

Usually, angel financed business receive their venture capital funding from early-stage or before the business start to generate any income from its production. Therefore, angel financed business is much new in business when they receive their initial funding compared to venture finance business (Wong et al., 2009). In other words, this may suggest that angel capitalist are more likely willing to deal with more risks in financing firms with high instability than a venture capitalist.

The farmer's cost of using angel capitalist as an alternative financial source is the dividend that the farmer pays the investors when the firm start to make a profit and also management fee for advice and active management monitoring by shareholders (Applegate et al., 2010).

2.1.6 Venture capital

Venture capitalist major in financing and advising innovative start-ups firm. Investment occurs in start-ups when venture capitalist firms gather all the money from institutional investors through a channel called funds and via the deal flow between the entrepreneurs and venture capitalist fund. Thus, through the flow between the venture capitalist fund and its investors, relating to fundraising compensation structure plus return distributions to venture capitalist. This process of underlying the fund is traditionally referred to as a partnership (Cumming and Johan, 2013). Venture capitalist performs exceptional functions as investing and monitoring (Metrick and Yasuda, 2011). Part of the fundamental attributes of a venture capitalist is leverage; adding money to increase the growth of investment (Smolarski and Kut, 2011). It is necessary for a venture capitalist to observe the different fortune for investments. They decide if they are willing to invest in projects where the outcome uncertainty is high. Asymmetric information is initial risks known with funding, the entrepreneurial firms, which makes control and selection necessity to the success of the venture capitalist firm (Smolarski and Kut, 2011).

There are two main streams to invest as venture capitalist which are lump-sum and incremental investing. The lump-sum financing is arranged in a manner all funds are received at a time (Smolarski and Kut, 2011). Incremental investing can be referred to as stage financing, which indicates that venture capitalist took a step to invests a pre-agreed amount of capital and then add further capital when certain milestones are met.

The farmer's cost of using venture capitalist as an alternative financial source is the dividend that the farmer pays the investors when the firm start to make a profit, and a management fee for the advice and active management monitoring by shareholders (Cumming and Johan, 2013).

2.1.7 Private equity

Investors (shareholders) may get to buy firm shares which mostly result in an increase of capital volume available for the business to utilise and the business are obliged to share income among the shareholders or investors. Whenever the business makes a profit, shareholders receive a dividend (Kay et al., 2012). There is always a high risk been associated with this kind of investment; shareholders are expected to receive a relatively high rate of returns on their investment (Atrill and McLaney, 2011). Private equity funds are referred to as financial

intermediaries between entrepreneurial firms and sources (Cumming and Johan, 2013). Private equity funds usually invest in non-listed companies and invest in mature firms. Private equity is often exempted from public disclosure of investment requirements (Kaplan and Schoar, 2005). Private equity can be divided into two divisions; limited partners, which consists of institutional investors and wealthy individuals that invest the bulk of their money, and general partners. They search for specific investments and tend to look out for angels capital investments, venture capital investments or buyouts. Mostly, when a general partner recognises an investment opportunity, it may source money from its limited partners such as income or pension funds. Generally, private equity funds play a frequently important part in the financial sector (Metrick and Yasuda, 2010). The main difference among the equity funds, angels capitalists and venture capitalists are that venture capitalists and angel capitalists prefer to invest in earlier-stage firms (seed or start-up firms).

The farmer's cost when private equity is used as an alternative financial source is the dividend that the farmer pays the investors when the firm is making a profit (Kay, 2012).

2.1.8 Investment Funds

This type of financial source allows various investors such as individuals, pension funds or insurance companies can join an investment fund, to invest their money into firms. There are two different types of investment funds: (1) Investment funds from informal investors, this is when a group of informal investors come together to form their investment fund. They decide by votes, to decides whether or not to (collectively) invest in an offered project (Mulder, 2015). (2) Investment funds from investment companies; this kind of fund is led by a fund manager. This manager has no full rights to make decisions. The right to make a decision is in agreement with the management or supervisory board, regularly consist of persons who invest in the investment fund (Mulder, 2015). The investment funds share risks and liabilities as much as possible by investing in various companies in different sectors of the economy. After the amount of money gained from the investment is plotted on several entrepreneurs, the investment fund must be in total par value yield for investors (Mulder, 2015).

The farmer's cost of using investment funds as an alternative financial source is the dividend that the farmer pays the investors when the firm is making a profit and management fee for the advice and active management monitoring from shareholders (Mulder, 2015).

2.1.9 Family loans

Family loans are loans financed by family. Small scale farmers regularly have difficulties in obtaining bank loans, they might look inwards more regularly for a source of finance in the family scope (van der Meulen and Venema, 2005). In agriculture and horticulture, family loans have played a crucial part as a financing source by a firm takeover, as former possessor leave part of their assets in the firm (van der Meulen and Venema, 2005). Moreover, in the service industry, the use of family loans as a source of finance is not prominent (Romano et al., 2001). Bank loans usually have more rigorous terms and conditions to abide by than family loans (Romano et al., 2001). Family loans are famous on small (start-up/growth) family firms especially in land-based arable and dairy farming (Berkhout, 2013). This explains that family business owners are debt-averse; they want to maintain control and reduces financial risk as low as possible (Sonnenfeld and Spence, 1989). The costs for the farmer when family loans are used as an alternative financial source is the interest that the farmer pays and the repayment when the time during the loan has finished (van der Meulen and Venema, 2005).

2.1.10 Financial leases

Financial leases are a kind of leasing, which are predominately used by small and medium-sized firms (SMF) (Deloof et al., 2007). Most of all the leases in agricultural industries are financial leases likewise operating leases when an asset or machinery is being leased (Kloppinger-Todd and Sharma, 2010). Whenever financial leasing is used as an alternative source of finance, the financial lease agreement between the lesser and the lessee must be documented, especially when the business did not purchase the asset but leases (Kay, 2012). Usually, the economic ownership of the asset or machinery would be transferred to the lessee and the lease agreement would be transferred to the user with all rewards and risks related (Kay, 2012, Deloof et al., 2007). A lease contract can be classified depending on either the lesser or lessee practically owns the leased item and the benefits and risks (Sharpe and Nguyen, 1995). The ownership's benefits like possession of the asset and entitlement from asset value appreciation, and the right of use. In operational leases, the lessor maintains ownership. This can happen if the lessor still has a meaningful residual interest in the item under a lease agreement (Sharpe and Nguyen, 1995). However, the selection between ownership of the item or not is complex because the identification of ownership may differ depending on whether the

lease agreement is made for financial accounting purposes or for legal/tax purposes (Sharpe and Nguyen, 1995).

Traditional finance theories state that corporate debt and lease are substitutes; more use of finance leases is usually associated with more debt financing. Leases and debt are both fixed, while contractual obligations are those with the firm's debt capacity (Deloof et al., 2007). The major benefit of financial leasing is that a business obtains possession of an asset without paying the cost of acquiring the asset, which results in more working capital for the business. Financial lease is a flexible source of finance, advantageous when the sector undergoes rapid changes in the number of assets that are used from year to year (Wolfson, 1985). Kay et al. (2012) stated that it is often cheaper for a business to lease or rent assets than to purchase or own an asset. For instance, in the beginning, farmers can lease land cheaply than owning it. Additionally, Sharpe and Nguyen (1995) suggest that the most common set of motivation involves the good use of leases to reduce transaction costs that arise when a firm project the life of capital equipment to exceed its prospective usefulness. However, this investment will contribute to a general feeling of uncertainty about the business future, because of the danger that the part of the land the farmer used for farming can be lost on short notice or slow equity accumulation, without the ownership of land, equity-only can be accumulated by machinery, livestock (Kay, 2012). Finally, cash flow challenges and poor liquidity are the important influence on the decision to lease in a firm (Beattie et al., 2000). The costs for the farmer when using financial leases as an alternative financial source is the lease payment the farmer pays when the term of the loan has finished (Kay, 2012).

2.1.11 Credit Unions

Credit unions are generally self-help cooperative financial organizations of entrepreneurs in a particular sector in the same region. Credit Union collect deposits or shares and give loans. They are focus to achieve economic and social goals for their members (McKillop and Wilson, 2011). Entrepreneurs who want to invest a maximum of a directive of € 250,000 can lend the money to a Credit Union (Berkhout, 2013). Every member exercise an equal voice, regardless of the amount of savings contributed or loans they have with this Credit Union. Moreover, Credit Union managers have not dashed any extra bonuses. Compare to most financial services organizations, Credit Union are not obligated to simultaneously fulfil shareholders gainful expectation and unsatisfied the needs of their customer (McKillop and Wilson, 2011). Instead,

Credit Union exist to achieve the social and economic goals for their members. Entrepreneurs comprise their membership towards the Credit Union and whenever surplus money generated from related business activities belonging to the members. McKillop and Wilson (2011) state that, the distribution of surplus money may take a number of forms; (i) Allocation of money among members in accordance with their transactions (b) Establishment of common services for the benefit of all of the members (c) Establishment of the business for the Credit Union, the Credit Union conduct business solely with their members (in turn the owners of Credit Union). An amalgamation of coincidence of ownership and consumption takes place at this time. Therefore, it is often observed about the risk of a potential conflict between borrowing members (those who want access to the lowest possible credit) and the saving members (those who want the highest rate of return on funds invested) (McKillop and Wilson, 2011). The costs for the farmer when using Credit Union as an alternative financial source is the interest that the farmer will pay and the repayment when the term of the loan has finished (McKillop and Wilson, 2011).

2.2. How different ways sources of funding have been used

Currently, debt finance is widely used as a source of finance in the agricultural sector in Europe. In the year-end, 2012, Netherlands, has an average long-term debt in agricultural and horticultural which was approximately € 765,000, and about € 700,000 are also debt financing while about € 50,000 were family loans (Berkhout, 2013). Wardrop et al. (2015) reported that there is a growing rise in the utilization of alternative financing sources in different sectors of the Netherlands.

Furthermore, the funding mix formation is the future for the agricultural sector. Funding mix can refer to making use of two or more financing sources to satisfying financial needs. One of the advantages is that it can save a lot of money and also combine enough funding for investment. The funding mix could be that alternative sources of finance is added with debt finance and/or other alternative sources of finance (Wardrop et al., 2015, Berkhout, 2013). Alternative finance sources have proven to provide a solution for the financial challenges in the agricultural sector, instead of the smaller credits additional from the bank loans. Small loans which are from the bank are less interesting because they are relatively high costs with a limited amount of loan (Berkhout, 2013).

2.2.1 Value Chain Finance

Currently, value chain finance is increasing annually from 20 % to 30 % in many sectors in the Netherlands. Rich Dutch investors are developing better value chain finance. They stated that working capital will be optimally increased but, machinery will be financed and relations with their suppliers will be improved and steady (Douma, 2012). In Spain, value chain finance is a popular financing source that is commonly used in agriculture (Douma, 2012). In other words, value chain finance is commonly used only for some big strategic suppliers in the Netherlands. There is no standardization for value chain finance and a lack of procedure for payment has been the reason, that makes it cumbersome to start value chain finance (Steeman and Hondel, 2014). Consequentially, there is no further information about the agricultural sector available. For example, Superunie is using factoring as a value chain finance procedure. Superunie is a purchase organization for grocery stores like the likes of 'Spar'. It makes use of prepaying with the support of banks supplier invoices. They mostly pay for the invoice as the regular thirty, sixty or ninety days agreed internal depending on the organisation. However, transfers of money are not towards the supplier, but towards the bank. Another example is the local brewery, which supplies the supermarket with crates of beer, they receive their invoice payment after five to fifteen days after such invoice has been approved. This invoice is been credited by the bank. The bank charges the supplier for the prepay of the bill called a fee, which is lower than the financing cost for outstanding invoice (Steeman and Hondel, 2014).

2.2.2 Leasehold

The top three highest providers of leasehold financing (Pendrecht and Cortgene, Fagoed and Rhoon, ASR) indicated that farmers are most comfortable and interested in leasehold financing. However, farmers are only compelled to make use of leasehold financing whenever they are obtaining a loan from the bank is impossible (ASR, 2015). Currently, in the Netherlands, the leasehold financing is on approximately 5 % usage of the culture acreage (ASR, 2015). Although, it can be stated that the use of leasehold financing is yet to evenly spread in the Netherlands, especially, in the eastern part of the Netherlands entrepreneurs are often reluctant to use leasehold, the reason being that the ownership of farmland in this region is held in high esteem. Flevoland has the highest number of leasehold financing in agriculture. The entrepreneurs in this area were used to lease land in the past (ASR, 2015).

2.2.3 Angel Capital

Recently, there are approximately 200 business angels active in Netherland spread overall kind of sectors. The business angel is acting like as real “angels”. They do not want to be noticed in the public. They are the absolute opposite of the ones in the United States, who rather prefers to be noticed in the public with enough publicity (Bom, 2010). For example, Amazon.com is a firm funded by angel capital (Wong et al., 2009). As a result of the technology boom of the late 1990s, many business angels invested their capital in computer-related industries (Wong et al., 2009). Unfortunately, agriculture is yet to have further information available in the literature on business angel investment.

2.2.4 Venture Capital

In all kind of sectors, venture capital industry has achieved massive growth over the past three decades, meanwhile, the US is currently dominating the market in all sectors, and the half of the total investment flow financed are maintained by Europe and Asia (Kaplan and Lerner, 2010). The record shows that, worldwide in all the sectors, during the boom years of 1999 and 2000, venture capital has increased about € 150 billion of capital and launch into early investments in recent time successes like Google (US), Skype (EU) and Baidu (Asia) (Metrick and Yasuda, 2011).

2.2.5 Private Equity

Conclusively, the private equity industry has grown intensely over the past ten to fifteen years partially because of its increase in returns on equity in all sectors (Bernstein et al., 2010). But when compared with the realized returns on equity for the agricultural sector shows that private equity could be hardly an option. It shows low returns, follow suggest low attractiveness for private equity funds (Berkhout, 2013). Simply, few greenhouse farms could meet up the requirements, but even then, probabilities are limited. In the greenhouse sector, it takes a ten to fifteen years investment cycle which does not reflect the plan of private equity funds, because interested investors in the business after five years are on the average with profit earnings (Berkhout, 2013).

2.2.6 Investment Funds

The investment fund has experienced growth as an alternative source of finance in recent time because of the reluctance and rigidity of banks loans provided to the agricultural sector (Mulder, 2015). For instance, 'Israëlische GreenSoil Investments' which started in the Netherlands as an investment fund with a total amount of € 50 million for European food and agribusiness. Co-founder Gideon Soesman expects that in the next five years, half of his investment fund in the Dutch agricultural firms would have multiplied (Smit, 2015).

2.2.7 Family loans

This alternative source of funding stated that commonly family loans play a vital part as a financing source by a firm takeover, the former owners leave some of their assets in the firm in the agriculture and horticulture sector (van der Meulen and Venema, 2005). Presently, the family loans form plays a vital role by realizing farm takeovers. Records show that about € 50,000 for investments was financed by family loans in 2012, annually, the total amount of money financed by family loans shows rather increased (Berkhout, 2013). Berkhout (2013) also shows that in other to finance farms investments, they will largely dependable on family loans and/or own assets.

2.2.8 Financial leases

Financial leasing is mostly used in the agricultural sector for machinery leasing. In recent times, a reduction of the total lease market was observed during the financial crisis (Boerenbusiness.nl, 2011). However, the financial lease market for agricultural machinery was stable. In the Netherlands, the total lease market reduced from € 5,3 billion in 2008 to € 3,2 billion in 2010. Although, the lease market for agricultural machinery experienced expansion from € 130 million in 2008 to € 172 million in 2009 (Boerenbusiness.nl, 2011).

2.2.9 Credit Unions

Credit unions as an opportunity as an alternative financial source in the agricultural sector. They are based in a specific sector or region. It is commonly and connects to the growing local-food initiatives that established. It has been considered an interesting concept, especially for

quitted farmers, who are committed to investing in start-up farmers with their equity (peer-to-peer investments). There is a high increase growth rate for founding a credit union in the Netherlands. However, the agricultural sector is yet to record any credit union in the Netherlands (Berkhout, 2013). This is because it is complicated to establish a credit union in the Netherlands due to legislation and bureaucracy. Certainly, it is still unclear if a credit union by the law is referred to as a 'closed circle' that may be considered. If De Nederlandsche Bank believes that, the credit union cannot be considered as a 'closed circle', then a banking license might be needed for credit union establishment (Dijsselbloem, 2013). An example of an agricultural credit union is the 'Community 1st' Credit Union in Iowa in the US. Credit Union as of 2009, is 49.330 credit union across 98 countries in all kinds of sectors. Although, there has been a great diversity within those credit union across these countries, caused by different economic, cultural and historical heritage (McKillop and Wilson, 2011).

2.3. The main issues and administrative obstacles hiding farmers to access available funds

One can identify numerous obstacles and dysfunctions that may be referred to as causes of the issues with existing European funds and other sources of funding. The issues range from the human resources to the procedural problems regarding the periodical and frequent changes of the rules and codes of conduct or to the incomplete information received from the officials or from the farmers. One of the administrative dysfunctions is that there are too many payment agencies, departments and branches and their responsibilities are not clearly defined. In other words, their overlapping tasks contribute to a considerable delay of the administrative processes (Wegener et. al. 2011). Accordingly, the General Directions, which are subordinated to the Ministry of Agriculture and Rural Development, have official offices at the county and local level. One could also notice a series of administrative lacks regarding the procedure of distribution of information. On the one hand, the exact moment marking the beginning of a specific programme is not entirely known to the farmers. When a specific date is announced, that date marks the intention of beginning a procedure and not the exact start of the process. For example, the farmers who choose to do their projects before the official start of the sessions may find out that these sessions will not start as scheduled. In some cases, the procedural rules may possibly change requiring a redoing of these files (Dărășteanu 2010, 30). At the same time,

the lack of experience among farmers or officials when it comes to project execution is a direct cause of rejections due to administrative inefficiencies (Lungu 2012, 10).

Therefore, most farmers who are not educated or used to signing documents, filling applications, and submitting official papers, are usually farmers who own small scale farms size (Wegener et. al. 2011). These farmers are not informed with a world of bureaucracy; therefore, the consultant would be needed to get through these administrative processes. Basically, considering hiring a good agricultural consultancy firm, to get the help they need the farmers will have to pay a specific price. This amount of money could consist into a major problem for small scale farms owners, who therefore become scarcely eligible. They probably would spend more on consultancy than they will eventually receive at the end of the payment process. Besides, there is no guarantee that when hired less paid consultant, would be able to put up together an eligible file for the paying farmer (Lungu 2012, 11).

Therefore, the farmer will probably decide to create and submit the project files himself. Therefore, the probability of their exclusion from the payment scheme is considerable. Additional important dysfunction is the leniency of the Government on the quantity and not the quality of the fund distribution. In this regard, the local councils lobbied at the city halls to determine them to write as many projects as possible. Consequently, these projects are task-oriented and are frequently rejected due to their inconsistency (Dărășteanu 2010, 30). Moreover, entire field actions are organized using human resources coming from the county offices as well as from the national institutions, whose goal is collecting data directly from the source, thus from the farmers (Wegener et. al. 2011). From a different perspective, an institution that initiates such field actions has supposedly enough employees to go around which can compensate the need of front office executives and who can also maintain contact with the subjects in the field. But this is not the case of the payment agencies in EU member states. The payment agencies and Management Authority do not have adequate and competent staff and thus cannot handle the great number of requests coming from the farmers. This situation is a consequence of the major agricultural land fragmentation which have made many farmers ask for European financial support. Besides, most of the farmers choose to submit their requests just before the ends of the sessions. As a result, the staff does not manage to resolve a large number of late requests from farmers (Wegener et.al. 2011). The lack of personnel builds up informal connections among institutions, with the purpose of human resources exchange. For instance, the two payment agencies, with relatively different tasks, find themselves unable to solve the problems without sharing officials and field agents (Wegener et. al. 2011).

Therefore, the exchange of human resources does not represent a solution, but rather a situation in which both institutions are affected when it comes to efficiency. In other words, the staff has no work motivation. The officials' income does not match the volume of the work they perform. The officials who work in central offices of the agricultural organizations are better paid than the officials from the local offices, whereas their tasks are fundamentally the same. Moreover, the salaries of the state officials can not compete with those of private officials. In this regards, there is continuous migration of officials towards a superior level takes place, therefore, leaving the local authorities without any qualified person. Whereas towards the private sector, where for the same tasks and the same responsibility, the officials will be paid more (Dacian and Neamțu 2007).

Corruption can also be an outcome of the low wages earned by the officials working within the agencies or the agricultural organizations. Most public officials are not permitted to get a second job (Dacian and Neamțu 2007) to increase their incomes, which might leads many of them will go corrupt. Politically invested managers and leaders of the agencies and organizations represents yet another dysfunction of the human resources sector (Dărășteanu 2010). This situation leads to disregarding the importance which a leadership position has for the good running of the entire organization. In addition, the proof of political affiliated leaders together with the corruptibility presumption drives to a general distrust in institutions. There are also a series of procedural dysfunctions regarding the frequent legislation and conduct guides change, as well as the incomplete information among institutions and between institutions and applicants. On the one hand, despite the wanted decentralization, the regional, county, and local agencies often rely on the central offices. The procedural manuals and conduct are often written within the central agency (Wegener et. al 2011). Many times, these written manuals have gone through frequent changes and additions, which resulted not only in the requests processing but as well as the whole process of creating and submitting files.

Basically, the farmers were forced to adapt to the new rules (Dărășteanu 2010). Regarding the causes of these changes, there is more than one opinion available. A number of theorists affirm that the written manuals are frequently changed in order to adapt to the local specific background, or to the requests coming from the European Union (Wegener et. al. 2011). Contrarily, other theorists claim these changes exist due to the inconsistency of the manuals written by inexperienced Management Authorities (Dărășteanu 2010). However, the manner it looks seems the procedural textbooks make room for interpretation, thus implementing procedures and project evaluation are not universal, but vary from county to county (Wegener

et.al.2011). This reality can be placed according to the regional specifics, which must be accurately interchanged in the texts of conduct manuals. In this regards, such an approach, which may be different by region, could naturally create confusion among the farmers and may also generate processing difficulties at the national level. The excessive bureaucracy might be yet another obstacle when it comes to submitting the files containing these applications (Greco 2009).

2.4. Crowdfunding and benefits

There is a number of benefits Crowdfunding offers for entrepreneurs. The most well-known function of crowdfunding is financing new ideas or existing business (Lehner 2013). Additionally, crowdfunding can also serve marketing purposes (Hörisch 2018), as it may grow awareness among potential customers, the general public, and the media (Burtch et al. 2014; Lambert and Schwienbacher 2010; Mollick 2014). Similarly, crowdfunding can be used as a market test that signals whether potential customers are interested in the respective offering of a crowdfunding campaign (Bellefamme et al. 2014; Lam and Law 2016). Moreover, crowdfunding can fulfil a validate function if the support by the crowd is used to signal public approval of the cause (Martin 2012; Lehner and Nicholls 2014; Vasileiadou et al. 2016). In the academic literature, there are four different types of crowdfunding. Donation-based crowdfunding, backers receive no reward in return for their financial support. It is common to non-profit and non-governmental organizations that make use of this original form of crowdfunding (Hörisch 2015; Lehner 2013). Reward-based crowdfunding, backers receive material or immaterial returns on their investments, commonly in form of the product to be funded. As explained forward by Mollick (2014), reward-based crowdfunding is the most frequently used form of crowdfunding.

Furthermore, two investment-based types of crowdfunding exist, in which monetary returns are distributed among the investors. In equity-based crowdfunding (also referred crowd investing), investors receive financial returns on their investment in the case that the venture is profit-making (Mochkabadi and Volkmann 2018). Like investments in the stock market, this type of crowdfunding is associated with the highest risk for backers (Bapna 2019). Lastly, lending-based crowdfunding (also referred to as debt-based crowdfunding or crowdlending) is comparable to a bank loan, as backers act as lenders and receive a previously defined interest

rate within a certain period (Bruton et al. 2015). Lending-based crowdfunding holds the largest division of the global funding volume derived from crowdfunding (Massolution 2015).

Two different funding stages in the crowdfunding process can be differentiated, which are similar for each of the crowdfunding types. The scientific literature distinguishes between the pre-funding stage and the post-funding stage (e.g., see Jovanovic 2018; Hörisch 2019). The pre-funding phase describes the period lasting until the funding on the crowdfunding platform is concluded; it consists of the preparation of the campaign, communication and marketing among the target groups, and the actual funding period. In distinction, the post-funding phase begins after the crowdfunding campaign has finished. In this phase, the project initiators must communicate their successes or failures to supporters, distribute promised returns, and, in particular, realize the project by implementing the advertised measures.

The crowdfunding process involves various active players, which, from an academic perspective, also represent different potential research foci. Jovanovic (2018) and Messeni Petruzzelli et al. (2019) identified four important players: (1) the project creator, who launches the crowdfunding campaign and collects money for the purpose of realizing the specific cause or offering, (2) the campaign to be funded, representing its cause or offering, (3) the supporters (i.e., the crowd) backing the project with small sums of money, and (4) the crowdfunding platform, which acts as an internet-based intermediary between the project creator and its supporters. Past crowdfunding studies have mostly focused on factors influencing the success of crowdfunding campaigns in the pre-funding phase. Specifically, Mollick (2014) showed that the network of the project initiator is important, as is the signalled quality of the project to be funded. Furthermore, it was established that early financial contributions to crowdfunding campaigns can lead to a higher chance of success (Colombo et al. 2015).

Regarding the post-funding stage, fewer aspects have been evaluated. As an exception, Cumming et al. (2019) examined how ownership impacts post-offering outcomes, such as the long-run success of the crowdfunded ventures. Signori and Vismara (2018), on the long-run success of equity crowdfunding campaigns, was conducted. The degree of involvement of investors is found to have a strong impact on long-run success in the post-funding phase (Signori and Vismara 2018). According to Mollick (2014), crowdfunding is regarded as an opportunity for “entrepreneurial financing” and thus can itself be considered as an entrepreneurial act. Crowdfunding serves as a supplement to existing financing mechanisms, such as banks, credit institutes, and angel investors, and thus provides a novel way in which

entrepreneurs can access financial assets. Entrepreneurs, who often have challenges in receiving funds, are expected to benefit from this new phenomenon (Lehner 2013; Calic and Mosakowski 2016; Hörisch 2018).

Brown et al. (2016) state that the rewards of crowdfunding, with the exception of, raising capital, involves validation of product or business idea and creating a sales channel by distributing the products to backers. A crowdfunding campaign is less time consuming to launch, compare to turning to traditional sources of funding and is less restricted by legal aspects (Gerber & Hui, 2013). Crowdfunding allows creators, people who request resources to appeal for funds directly from backers and give funds through online platforms (Gerber et al., 2012). Crowdfunding makes it possible for those with limited access to traditional financial backing sources, such as banks or venture capitalists, to obtain the required financial resources to pursue their businesses (Gerber, & Hui, 2013). Crowdfunding also gives people with disposable income a new way to give to others and "invest" in a business that might not happen without their financial support (Gerber, & Hui, 2013).

One of the significant advantages of crowdfunding is similar to that of social media, enabling initiators to make personal contacts and communicate with a large number of visitors who are interested in the future of their business and are emotionally attached to them (Kuti, & Madarász, 2014). Crowdfunding can also be channel for promotion device to entails mass customisation or to understand better consumer preferences (Belleflamme & Lambert, 2014). Crowdfunding brings down intermediation costs due to more symmetric information and the fixed low rates associated with making transfers through its online platforms (Leon & Mora, 2017).

Crowdfunding is a new concept that offers an alternative funding method that enables entrepreneurs to realize their original ideas (Demiray, & Burnaz, 2019). As stated by, Jenik, Lyman, & Nava, 2017, the benefits of using crowdfunding by SMEs include: supplying of financial recourses, the investors do not need to have special knowledge about the industry, retention of management control over the company, removal of geographical barriers to investment, valuable signals about the market potential of the product, marketing and cost reduction of the products. The benefits of donation crowdfunding include community participation and feeling of glow, voting with money, and support formalization (Jenik et al., 2017). The popularity of crowdfunding presents one argument for its further consideration in academia.

3. METHODOLOGY

This study adopted a descriptive research design. This approach was chosen by the researcher because it ensures an accurate description of the study under investigation and reduces bias in collection of data. The aim of this study is to gauge the opinion of small-scale farmers on issues related to their attitudes and perceptions about the crowdfunding system in Estonia.

This chapter will explain in detail how the research was conducted. First, the choice of qualitative research will be discussed. Subsequently, it will be explained how the data was gathered and, lastly, how it was analysed. The target population are the small-scale farmers operating in the Estonia. Semi – structured questionnaire was designed, which comprises of open – ended and closed - ended questions in order to determine small-scale farmers attitudes and perceptions towards the crowdfunding system in Estonia. Seventy-three (73) small-scale farms were contacted and copy of questionnaire both in English and Estonian Language were sent to their respective emails, but none replied. Afterward, telephone interview was adopted and twenty-two (22) small-scale farmers gave audience, where the researcher was able to conduct the telephone interviews in English Language.

3.1. Choosing a research methodology

The choice of research methodology depends mainly on the nature of the research question. For rather explorative studies, like this thesis, qualitative methods seem a suitable choice (Strauss and Corbin 1990). Instead of measuring the phenomenon of integration by numbers, this thesis uses open questions to explore the expatriates' perspectives. Qualitative research can be defined as “any kind of research that produces findings not arrived by means of statistical procedures or other means of quantification” (Strauss and Corbin 1990). Thus, the focus lies on in-depth understanding of words, opinions, and experiences rather than on numbers. Moreover, qualitative methods are concentrating more on the individual than on the general (Mayring 2003). Qualitative research is mostly inductive. Although backed up with a theoretical framework, the data should be guiding the study, not a theory. (Taylor and Bogdan 1998).

The criticism towards qualitative methods is mostly based on the aspects of validity and reliability. Possible technical limitations of qualitative research derive mainly from the

influence of researcher's skills, personal bias, and eccentricities (Anderson, 2010). Qualitative research might be perceived as rather subjective, due to the personal involvement of the researcher in a rather open study. Moreover, the generalization of qualitative research might be limited as it is mostly looking at individual cases, and samples are rarely picked randomly. However, generalizing to a population is not the main goal of qualitative research; rather it aims at understanding and exploring a certain case and context. (Bryman 2008).

3.2. Characters of the interviewee

In the following, the characteristics of the interviewed small-scale farmers will be briefly described to understand the backgrounds of the interviewed persons. Most of this information has been collected through a survey questionnaire. However, some information was also collected through the interviews and will be briefly summarized at this point. Fourteen (14) of the interviewed farmers are male, eight (8) are female and they are between 40 and 70 years old. Half of them have well above ten (10) years farming experience, four (4) of them engage in two type of farming production either strawberry farm and or honey farm, crop growing farm and or animal rearing farm ie cattle breeding. Seven (7) of them started their farm as hobby before later in the years took it as occupation. There are two (2) farmers who are couple and both have separate farm operation. One (1) female farmer is a farm manager in a scotish farm and she also have her animal farm which has run for ten (10) years. Area of farm business ranges from cattle breeders and cheese farms, goat breeder and cheese farm, fish farms, strawberry and raspberry farms, honey farms, alpaca yarns farm.

3.3. Data

To gather data answering the research question, a suitable research method needed to be used. In the following, the choice for semi-structured interviews and how these have been conducted will be explained.

3.3.1. Data collection

In qualitative research, various methods can apply, such as interviews, ethnographic studies or focus groups. For this thesis, interviews seem to be a suitable method because they allow asking

open ended questions to a small sample and exploring individual experiences or opinions regarding the researched phenomenon. Interviews vary, amongst other things, in their degree of structure. In quantitative research they are often highly structured to reach a high validity and reliability (Bryman 2008). The interviews were carried out through phone i.e telephone interview, during the last week of March till mid April 2021 which lasted about three (3) to four (4) weeks. This interview method was adopted as a result, as it portray that none of the farmers were willing to answer the survey questionnaire sent to their email, even after several reminders. The telephone interview was suitable and appropriate because face-to-face interview would not have been possible considering the covid-19 pandemic restrictions and lockdown, during this period Estonia went on lockdown to curb the increased of virus second-wave pandemic. Furthermore, qualitative research is frequently used when a research is intended to deliver generalizable data (Pole and Lampard 2002). In qualitative research, interviews tend to be more flexible. Unstructured and semi-structured interviews mostly focus on the interviewee's focus, attitude, opinion and describing personal experience, aiming to get rich and in-depth data (Bryman 2008). Thus, they rather have the characteristics of conversations, trying to deal in-depth with the individual case (Pole and Lampard 2002).

For this thesis the semi-structured interview, as described by Pole and Lampard (2002) seemed to be a suitable method because its structuring through the survey questionnaire made it possible to keep orientation during the interview. Furthermore, the structuring made sure that important theoretical issues were covered in the conversation and it facilitated the analysis according to categories. On the other hand, the fact that the interview was not completely structured permitted to talk about the individual opinions and experiences of the expatriates in a non constraining way. Due to the explorative character of the research question, many upcoming topics that the farmers related to the funding, and other challenges could not be foreseen. Just as any other method, interviews have their limitations. According to Pole and Lampard (2002), interviews are socially constructed and therefore constrained by the interview situation. They are of an artificial character and can therefore not be expected to “uncover the truth or the essence of individual belief, experience or opinion” (Pole and Lampard 2002). The individual farmers interviewees were guaranteed anonymity.

Furthermore, as the primary purpose of this study was to explore their opinion, interpretation of the perceptions, experiences and knowledge of the interviewees on emerging phenomenon (DiCicco-Bloom and Crabtree, 2006) i.e crowdfunding system for their farming business, the names would have been irrelevant addition for the study. gave the permission to tape record

the interview. During the interviews, interviewees gave the permission for the audio to be recorded and notes were taken of key points to support the recordings (Kvale and Brinkmann, 2009); shortly after the meeting, written summaries of the interviews were composed, and the audio was transcribed. Each interview took between 30 and 45 minutes. It seems furthermore relevant to point out that the researcher conducted the interviews to get additional data regarding the challenges facing small-scale farmers in Estonia and how were they able to overcome or channels of escape of those challenges.

3.3.2. Data analysis

After conducting the interviews, they were transcribed to process them for the subsequent analysis. A suitable method for this analysis seems to be the qualitative content analysis by Mayring. Qualitative content analysis by Mayring is an approach aiming at analysing communication material in a systematic way (Mayring 2007). It seems to be a useful method because it tries to build on the strengths of the quantitative analysis such as its guidance by rules and following of the concepts of verification reliability and validity. To conduct qualitative content analysis, the source material needs to be defined as a first step. This includes declaring who was interviewed, how the sample was chosen, what the basic conditions of the interviews were and how the text to be analysed was generated (Mayring 2003). Moreover, the instruments and used techniques for qualitative content analysis can never be completely standardized; they always need to be connected to the individual material as well as the research question.

According to Mayring (2003) there exist three basic forms of interpretation in qualitative content analysis, namely 'summary', meaning the reduction of the data 'explication', by finding further material and 'structuring', meaning filtering important aspects from the data. For the present qualitative content analysis, 'structuring' and filtering the relevant content out of the material as a whole and analyse them regarding in advance specified categories (thematic blocs) seemed to be the most appropriate way. As a first step, tentative categories including variables were defined and explained in a coding agenda. To differentiate the categories, coding rules were developed. Coding was selected as an appropriate analysis strategy to concentrate on the meanings of interviews' contents (Kvale and Brinkmann, 2009), where "The goal (of coding) is to develop categories that capture the fullness of the experience and actions studied" (Kvale and Brinkmann, 2009). Subsequently, the researcher read the transcript and underlined

every statement that seemed relevant at a first glance. After reconsidering the defined categories, the content of the transcript was structured using a colour scheme. Statements, opinions, and quotes were taken out by order of their colour, summarizing them into the category system.

However, in case the contents did not fit in existing categories, new ones were developed. Defining the categories serves to filter the interviews for statements fitting into the categories. The categories were developed in an inductive way, guided through the conducted data. Silverman (2000) adds that when coding data, one must be aware of the risk to miss out data that does not fit into the categories. Hence, it is crucial to define the categories very carefully and to watch out for potentially important data outside the categories. Each category was differentiated into several subcategories and for each subcategory variables were developed.

Table 1: Coding table

Data Source	Stakeholder type	Qualitative data	Code	Question
Pop – up	Resident 1	I want to see more bins...	Waste	4
Pop – up	Resident 1	I aslo want to see more lighting in the street...	Safety	4
Submission	Worker 2	I really do not like the new parking laws because...	Parking	6
Pop - up	Worker 2	I really do not like the new parking laws because...	Parking	6

Adapted from: bangthetable.com

To ensure a consistent and reasonable analysis, the categories were, following Mayring (2003), explained, supported by examples. Furthermore, coding rules were defined to differentiate the categories from each other wherever necessary. After developing the categories and coding agenda, the text was coded. Contents belonging to the variables were collected in a category system and structured according to it. Table 1 above shows the example of coding table used for qualitative analysis.

4. RESULTS AND DISCUSSION

In this section the results and findings from the conducted interviews will be presented. After each section of findings, these findings will be analyzed and discussed in relation to the academic literature.

4.1. Attitude towards crowdfunding system

The rationale for this study is to gauge the opinion of small-scale farmers on issues related to their attitudes and perceptions about the crowdfunding system in Estonia agriculture as an alternative source of finance. Crowdfunding has to do with enterprenuer soliciting for financial help from the public, and the people making individual contributions in small amount of money for a specified business purpose, respondents were asked of having any knowledge of an individual or group of people making such campaign on Radio, Television, Newspapers or social media platforms in Estonia. Respondents were asked several questions during the telephone interview and to further evaluate their level of awareness regarding crowdfunding with the following statements:

- a. If they have a fair understanding about crowdfunding as a funding mechanism as an alternative source of finance.
- b. If they have heard or read about the concept, but they do not know how it functions practically as an efficient financing approach for businesses.
- c. If they know nothing regarding crowdfunding as a financing mechanism.

The result shows in Figure 2 below, that only 22% of respondents attest having awareness about crowdfunding. 7% of the respondents attest having read or heard about crowdfunding, but are not familiar with its workings and how it functions efficiently as an alternative financing mechanism and, 71% of the respondents affirm that they know nothing about crowdfunding. The result of awareness towards crowdfunding at 22% as revealed in this study is significantly low and small-scale farmers have low knowledge of the concept compared to a similar study in the Philipines with 42%, (Vergara, 2015) However, given the fact that, a significant number of the respondents are yet heard or read and know nothing about the concept, will requires much more awareness campaigns, and put the right measures into motion, crowdfunding has a lot of potentials to substitute as a funding approach in Estonia agriculture.

Hence, respondents were asked about how their agricultural business firms and operations have being financed before and present funding, likewise combinations of source of funds they are using or intending to use if needs arise.

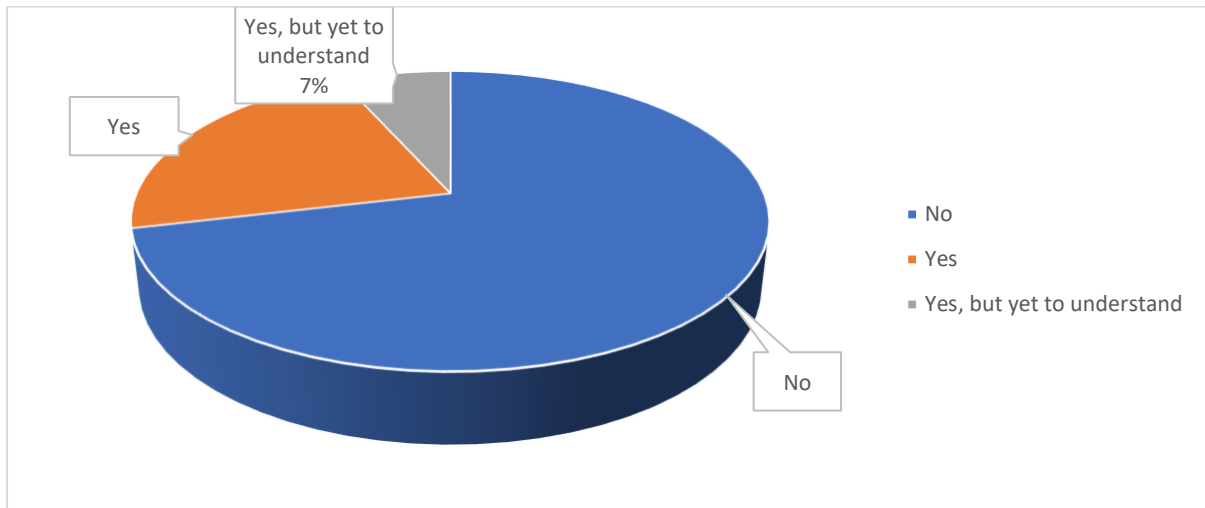


Figure 2: Crowdfunding awareness among respondents.

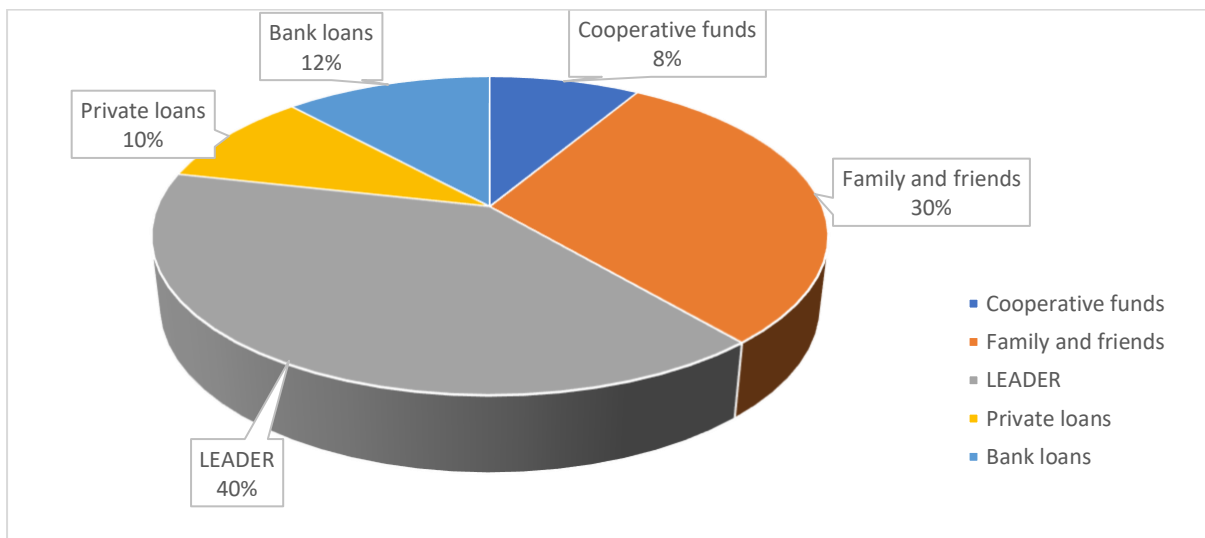


Figure 3: Utilization of alternative source of finance.

The study result Figure 3 above reveals that all (100%) respondents subscribe to use of personal savings; Out of the mentioned sources of funds available to existing SMEs and potential business operators, 8% of respondents have obtained cooperative funds; 30% of the

respondents have seek help from family and friends; 10% of the respondents are utilising or ready to utilise private loans; 12% of the respondents are using or ready to utilise bank loans; 40% of the respondents have utilise LEADER for their agricultural business while 32% are ready to utilise crowdfunding. This is a significant revelation and a pointer to the future of crowdfunding. The result further reveals that small-scale farmers are looking into alternative sources of funds for agricultural operations.

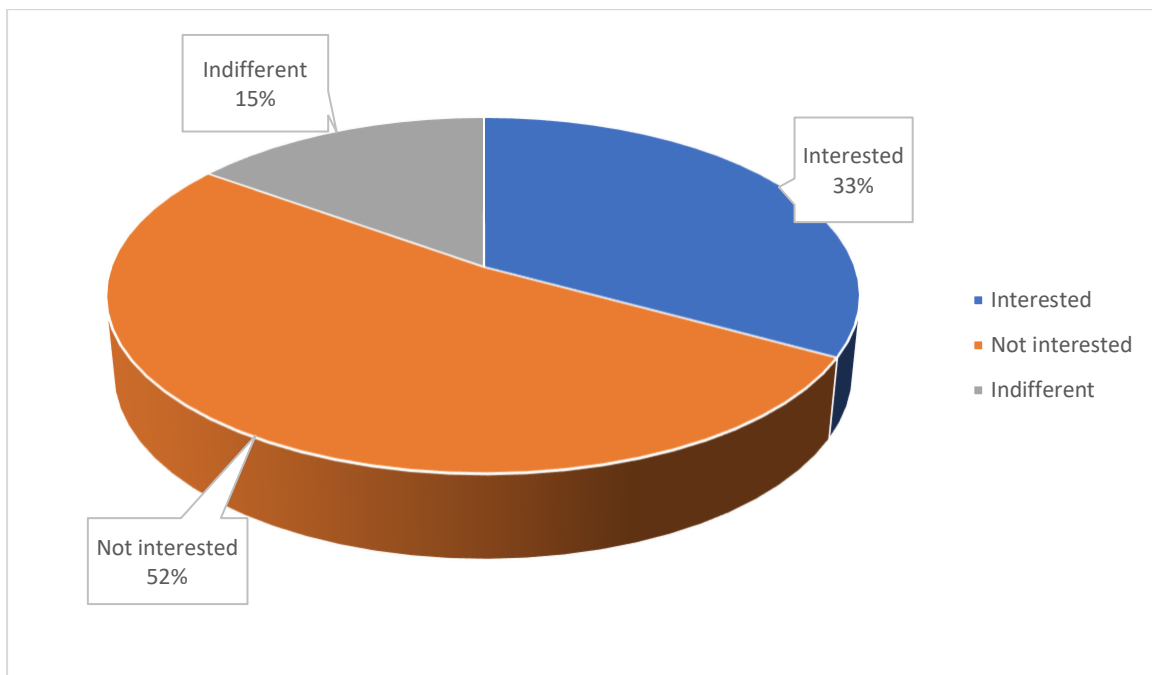


Figure 4: Crowdfunding campaign participation.

To further evaluate the willingness of small-scale farmers to participate in crowdfunding campaigns, respondents were asked about their desire to participate in future crowdfunding campaigns. Figure 4 above shows that 33% of the respondents affirm they are ready to participate in future crowdfunding campaigns, 15% of the respondents said they are not certain as at the time the question was asked if they would participate or not i.e they are indifferent while 52% of the respondents that see nothing good out of crowdfunding. Given the significant rate of those desiring to participate in crowdfunding campaigns, there is an opportunity for crowdfunding to release its potentials should awareness and attitude continues to increase and have positive change.

4.2. Related issues about funding

The availability of and accessibility to funds is crucial to the effectiveness of agricultural activities. For small-scale farmers to generate income from productive activities requires credit, especially to stimulate traditional heavily under-capitalized local farm operation. Availability of credit, more than any other service, awakens the aspirations of farmers generally. Respondents were asked to relate their experiences over the periods of farming operation in regards of issues faced or facing with financial institutions in seeking for agricultural loans. They mentioned that financial institutions often have a weak institutional capacity to provide financial services in rural areas, and operators within the financial sector often display limited understanding of the agricultural sector and the nature of debt financing required. For instance, one of the respondents expressed that they often lack understanding of the specificity of farm operations based on time and climatic factors, the gestation period of agricultural production, and the need for weather-related insurance services. This limited knowledge often contaminates and prolong chance of getting funds to financing the agricultural firms.

Majority of respondent interviewed suggested that credit market serving agriculture is hamper by the operational and administrative inadequacies and exploitative tendencies of financial institutions. These include (1) the demanding loan terms and conditions set by financial institutions, (2) heavy interest rate (3) the negative attitude of financial institutions, (4) inadequate capacity to offer services, and (5) inappropriate financial products and services. Other constraints of a general nature include a poor agricultural statistics and information system and an underdeveloped property rights regime, especially as regards the difficulty in using land as collateral for loans. As part of formentioned, evidence of market failure in the financial sector includes banks failure to provide appropriate credit and financial services to small-scale and family farms. The agricultural credit market is plague by many imperfections, including market segmentation, scarcity of collateral, information deficiencies, and mass illiteracy of loans applicants. The asymmetry information often leads to difficulty of adverse selection and moral hazard, which stimulate the reluctance of commercial banks to lend to small-scale farmers (Olomola 1996). From respondents responses, it indicated that this adverse selection would arises when the lenders do not know the particular characteristics of borrowers, especially in terms of their preferences for undertaking such projects, while for moral hazard, the main problem is that borrowers' actions are not ascertain by lenders, which leads to risk of default in the sense that farmer may be slack in working to make the project successful, or they may change the type of project that they wish to undertake.

A respondent, who also double as a manager in a scottish farm claimed that despite the various attempts being made to capitalize the agricultural sector, it has proved hard to bridge the gap between formal lenders and small-scale farmers. She mentioned that there are arguments on both sides of the divide. Lenders often argue that farmers do not repay loans on time, the administrative cost of loan processing is prohibitive, and loan supervision is cumbersome. However, the farmers are of the opinion that it takes too long for formal lenders to process a loan, disbursement is often late to obtain (about three months delay), and information about loan conditions is released intermittent. Many small-scale farmers often do not apply for credit any longer because they assume, they will be denied it on account of the strict terms and conditions that are often required, and there are situations in which all these conditions are met and yet farmers are denied loans. Respondents are also of the opinion that the loan processing is not transparent and full of bureaucracy. For instance, a farmer narrated his experience with Põllumajanduse Registrate ja Informatsiooni Amet (PRIA) investment application in the previous year. He mentioned that the process was hectic and time consuming, couple with bureaucracy, for investment support to build factory building on his farmland which cost €150,000, and he will contribute €75,000 as part, but he missed out because it took several months for Tartu county to issue building project approval until the expiration of Põllumajanduse Registrate ja Informatsiooni Amet (PRIA) investment support. Most investment support require serious dedication and and which may asked to extend to some agencies before finally obtained.

However, to deepen explanation of senerios faced by small-scale farmers, identification of the farmers' credit-rationing status is employed. Credit-rationing is the situation when banks limit the supply of loans or credits to bowrrowers who demand funds at a set quoted rate by the financial institution. During interview questions were asked that made it possible to infer respondents' credit rationing status, following the procedure applied by Khantachavana, Turvey, and Kong (2011) in defining categories of rationed farmers. Price-rationed farmers are farmers who borrowed and were satisfied with the amount they received. Quantity-rationed are farmers who was denied a loan and non-borrowers been the last in the category. Further questions been asked for not borrowing reveals three reasons: some respondent did not apply due to the possibility and knowledge that their applications will not be granted (quantity rationed); some respondent did not apply due to the fear of losing collateral (risk rationed); and some respondent had enough money and no need to borrow (price rationed). According to these definitions, the farmers are grouped into three credit-rationed categories, risk rationed,

quantity rationed, and price rationed; for the purpose of analyzing the determinants of credit rationing in small-scale agricultural financing in Estonia. Of the farmers contacted in this research study, 68% are quantity rationed, 22% are price rationed, and 10% are risk rationed. The significant rate of small-scale farmers that does not want to patronise financial institution is greater and it shows a good prospect that those small-scale farmers would join in crowdfunding campaigns.

4.3. Challenges face in farming

Besides finance which have already been identified, there are several other challenges confronting the small-scale farmers which hamper agricultural activities. Respondents were asked to state how these challenges have affected their agricultural operations and how to mitigate for better agricultural performance in terms of quality and quantity produce in various agricultural activities.

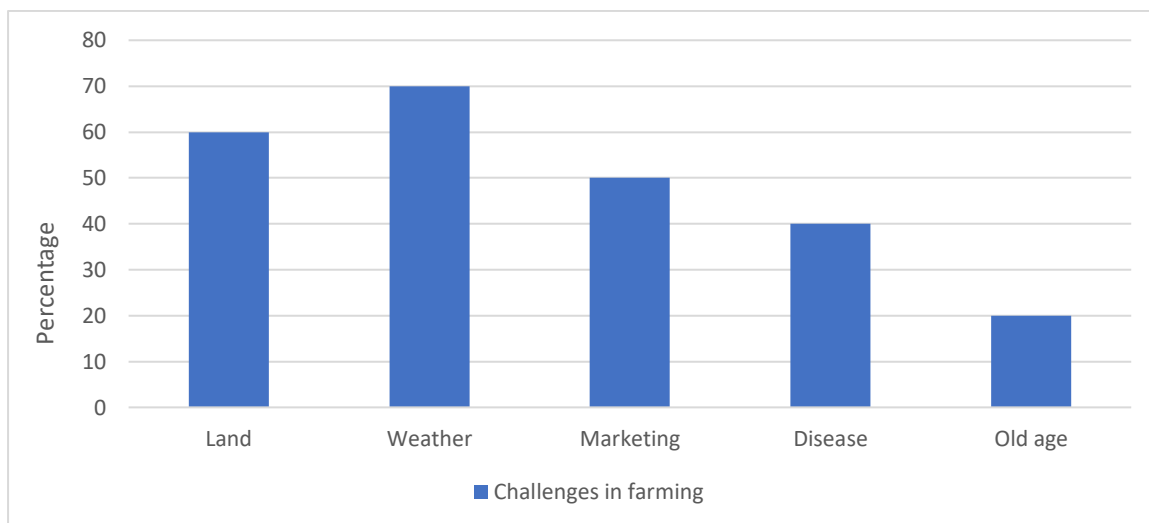


Figure 5: Challenges face in farming.

The Figure 5 above indicate that 60% of respondents stated they have challenges related to agricultural land. When further asked to give details on the claim, some mentioned that they are being shock in terms of space for operations, some farmers recalled that landowners are not willing to release their land for agricultural purposes either for lease or outright purchase,

resulting from lack of trust and confidence the landowners have towards farmers, in regards to landgrabbers.

A respondent who produce alpaca yarns expressed that in starting up the farm and the factory, they had and currently have challenge of land for expansion because the present acquired land cannot accommodate the production giving it in the next 2 years time, but no suitable land area have being secured due to landowners not ready to give out their lands for agriculture. Weather is one of the factor of concern in agriculture both for crop and animal farms. Crop growers especially small-scale farmers battling with bad weather, it has gone so worse that all farm crops got destroyed in the avert of bad weather in a certain period. 70% of the respondents stated that they face with the weather challenge, which most of the cases result to reduce of profits, labour and time loss or total loss of produce. One of the honeybee farmers recounted how weather devastated the farm, which cause the farm business to ran into repaying of debts. Unstable and unpredicted weather has usually one of the concerns of financial institutions in regards to agricultural loans request from small-scale farmers.

Many of the respondents claim that government subsidies were uncertained to pad their losses when such adverse incidence occurs at such agricultural years. However, marketing was mentioned has part of the challenges face by the respondents. 50% of respondents indicated that there is not enough market sales for their products. Some mentioned that they have to remain on a small scale of production, in other word, if production is increased, the extra-quantity produced have to be thrown to trash, because there is low demand. Many respondents are of the opinion that their produce gets to market place, alongside a rivary products from other European countries who have better EU agricultural subsidy supports, in essense making such produce less cheaper than theirs in the market-place, and reduce customers patronage; honeybee farmer lamented.

There is a concern from the part of the farmer to customers to really get to know what they are buying and consume, in the case of honey for example, the market is flooded with chinese honey, which are not genuine honey, but colouration mixtures and which are lesser in price and because of the price, many consumers drift to these chinese honeybee than the original honey produce in Estonia. Farmers and plant or animal diseases have been enemies since time in memorial. Disease in this context are on gradual occurence reduction i.e usually rear or uncommon as of decades ago said by respondents. From the figure 4, 40% attested to the fact that diseases are strong challenge when attack a farm especially animal farm, it cause avoke

because many of such diseases are contagious and spread rapidly. And crop growers are advised to be mindful of the pesticides applied on their crops because of chemical residues in the produce.

Furthermore, many respondents have kept to daily routine checks and measures to keep their farms off disease track. A respondent said to have recorded a huge loss sometimes ago when disease invaded the animals farm, which ruined the business capital. Among the challenges stated included old age. Farming activities are task demanding, considering that strength is inversely proportional to age, i.e. the older the age, the lower the strength. Respondents who stated old age as a challenge are of 20%. The age range of respondents is between 40 – 70 years old. The effect of old age has limited their productivities. The young generation is not enticed to venture into farming, it has always persisted as an old age occupation, which hampers old age farmers to make use or understand the relevant technology for farm operation.

4.4. Farmers unity

Some respondents indicated that they belong to one or two associations or cooperatives in their line of agricultural business while some respondents do not join any of the existing associations or cooperatives.

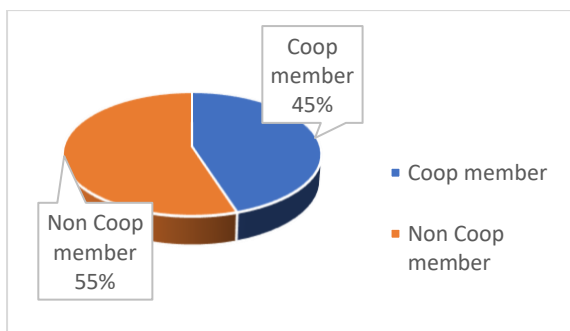


Figure 6: Membership association.

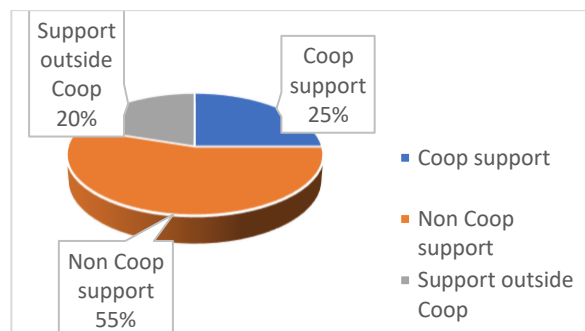


Figure 7: Association financial support.

The Figure 6 shows that 45% of the respondents have membership affiliations with associations or cooperative societies. This proportion happens to be lower than expected, as one would believe small scale farmers have a lot to gain when they associate with themselves.

There are always records of advantages in terms of marketing of their products, higher purchasing power for the members, loans and financial supports rendering to its members. One of the major reasons stated by respondents why in the recent times, farmers do not tend to have enthusiasm in getting involved with association or cooperative society is the connection between trust and organizational commitment towards members' participation in the governance of their cooperative. In accordance to previous studies, agricultural cooperatives have shown the significance of members' trust in the managers of their cooperatives, and the involvement of members in the life of the cooperative (Fulton and Giannakas 2001; James and Sykuta 2005; Gall and Schroeder 2006). From Figure 6 above it shows that 55% of respondents do not belong to association or agricultural cooperation which attests to previous research studies. Some farmers mentioned that it has been a concurrent issue in the agricultural sector that farmers do not want to unite, even when it matters most to relate to other farmers, they tend to act non-challant to the cause.

However, further questions were asked in details about their various involvement with association or cooperatives in relation to funding. The above Figure 7 shows association financial supports. 25% of respondents have gotten financial supports from their respective association and cooperatives while 20% of respondents are yet to receive such financial assistance for their agricultural business despite their membership due to bureaucracy, asymmetric information among many reasons respondents pointed out, but instead they seek and gotten alternative source of financial supports outside their association and cooperative. 55% of the respondents do not receive financial supports as well. They rather receive funding from other alternative source of finance. These groups of small-scale farmers that have reached out to alternative source of finance shows basically interest towards to join the crowdfunding campaign.

4.5. Uncertain future plans

It is a continuous effort to ascertain and achieve goal for one's farm business. Goals drive the vision of the farmer for short and long term plans. Some respondents stated they do not seem to have any plans for the farm. They were asked further reason they do not have plans ahead, the farmers replied that they have been lower demand on their produce or the market is saturated therefore they do not see need to expand in the near future rather they will maintain the production scale. Other small-scale farmers claimed that they want to remain at the present

scale of farming, because it easier to manage and control, while some farmers mentioned that because of old age there is actually little activities they can operate, however some farmers are into farming for hobby or some activities the enjoy engaged, so farming is a side-job because they have main job which take their time. Most respondents commented that due to stated reasons they would rather not involve in crowdfunding system which will lead them to access more funds to expand their agricultural business. Meanwhile, those small-scale farmers that are much interest in the crowdfunding campaign are farmers who are optimistic and futuristic about their farms, having plans to expand, such as acquiring farm machineries, building farm structures, acquiring farmland and so on.

5. CONCLUSION

The prevalence of low accessibility to funds battling with small scale farmers in the developed countries including Estonia is the fundamental regressing factor affecting the sustainability of their productivity and their business growth, and this invariably increase chance of poverty among the rural farmers. If an effective alternative source of finance such as crowdfunding is introduced and implemented, and supported by relevant stakeholders to cushion the effect of financial challenges that these small scale farmers are vulnerable to, such as: rigorous bureaucracy, asymmetric information, frequent change of terms and conditions, collateral risk, high interest rates etc in sourcing funds from financial institutions, there will be increased productivity, and economy growth and development will be encouraged among the small scale farmers and in the country.

Therefore, in this study, it drawn to conclusion based on aim and reference to results analysed to derive the following among small scale farmers in Estonia

- The small-scale farmers have low knowledge about crowdfunding, and this indicate that there is an opportunity for crowdfunding to release its potentials should awareness and attitude is motivated to increase and have positive change among small scale farmers.
- The marketing challenge can be mitigate as result of crowdfunding campaign cutting across large potential consumers who could not have access to the particular farm produce, serve as boost and direct sale link to customers on a larger scale than regular scope of marketing.
- All related funds challenges such as rigorous bureaucracy, extortion, high interest rates, bureaucracy, asymmetry information encounter from financial institutions when sourcing for funds can be resolve through tapping into crowdfunding as alternative source of finance.
- Access to funds derive from crowdfunding platform would bring about efficient productivity for small scale farmers which would eventually transmit to food sustainability.

Conclusively, this study recommends massive crowdfunding campaign in agricultural sector, especially among small scale farmers in Estonia to unleash its potential in cushion the effects of low accessibility of credits, coupled with challenges that comes with sourcing of finance from financial institutions.

REFERENCES

- Abele, S., & Frohberg, K. (2004). Subsistence agriculture in Central and Eastern Europe: how to break the vicious circle? (No. 920-2016-72836, pp. 1-216).
- Aladejebi, O. (2020). Crowdfunding: An Emerging Source of Raising Funds In Nigeria. *Archives of Business Review*–Vol, 8(7).
- Arabatzis, G. A. R. Y. F. A. L. L. O. S. (2005). European Union, Common Agricultural Policy (CAP) and the afforestation of agricultural land in Greece. *New Medit*, 4(4), 48.
- Augustine, S. Y., & Adesunkanmi, O. S. (2017). *Saudi Journal of Economics and Finance (SJEF)*.
- Aunapuu-Lents, V. (2013). Rural Policy in Estonia: The Leader Approach and the Concentration of Power. *Administrative Culture*, 14(1), 125-144.
- Ayerdi, K. M., Fernandez, S. P., & Rivero, D. 7. Effectiveness of Crowdsourcing for the Appearance of a New Public Sphere. *Mobile and Digital Communication*.
- Beattie, V., Goodacre, A., & Thomson, S. (2000). Operating leases and the assessment of lease–debt substitutability. *Journal of Banking & Finance*, 24(3), 427-470.
- Beaufoy, G., Jones, G., De Rijck, K., & Kazakova, Y. (2008). High nature value farmlands: recognising the importance of South East European landscapes. Final summary report (Bulgaria & Romania). WWF Danube-Carpathian Programme and European Forum on Nature Conservation and Pastoralism (EFNCP). WWF Danube-Carpathian Programme and EFNCP.
- BELUHOVA-UZUNOVA, R., HRISTOV, K., & SHISHKOVA, M. (2020). THE COMMON AGRICULTURAL POLICY POST 2020-FARMERSPERCEPTION AND POLICY IMPLICATION. *Scientific Papers Series-Management, Economic Engineering in Agriculture and Rural Development*, 20(2), 61-68.
- Bernstein, S., Lerner, J., Sorensen, M., & Strömberg, P. (2017). Private equity and industry performance. *Management Science*, 63(4), 1198-1213.
- Birol, E., Smale, M., & Gyovai, Á. (2006). Using a choice experiment to estimate farmers' valuation of agrobiodiversity on Hungarian small farms. *Environmental and Resource Economics*, 34(4), 439-469.
- Böckel, A., Hörisch, J., & Tenner, I. (2020). A systematic literature review of crowdfunding and sustainability: highlighting what really matters. *Management Review Quarterly*, 1-21.

- Bosilca, R., Caradaica, M., Dodi, I., Popescu, M., Badiu, A., & Horga, I. (2013). *Europolity. Continuity and Change in European Governance* (Vol. 7, No. 1).
- Compass, E. (2019). Survey on financial needs and access to finance of EU agricultural enterprises.
- Diamond, D. W., & Rajan, R. G. (2001, June). Banks, short-term debt and financial crises: theory, policy implications and applications. In *Carnegie-Rochester conference series on public policy* (Vol. 54, No. 1, pp. 37-71). North-Holland.
- Filimonova, N. G., Ozerova, M. G., Ermakova, I. N., & Miheeva, N. B. (2019, August). Crowdfunding as the way of projects financing in agribusiness. In *IOP Conference Series: Earth and Environmental Science* (Vol. 315, No. 2, p. 022098). IOP Publishing.
- Gasson, R., Crow, G., Errington, A., Hutson, J., Marsden, T., & Winter, D. M. (1988). The farm as a family business: a review. *Journal of agricultural economics*, 39(1), 1-41.
- Grubbström, A., & Sooväli-Sepping, H. (2012). Estonian family farms in transition: a study of intangible assets and gender issues in generational succession. *Journal of Historical Geography*, 38(3), 329-339.
- Guiomar, N., Godinho, S., Pinto-Correia, T., Almeida, M., Bartolini, F., Bezak, P., ... & Wästfelt, A. (2018). Typology and distribution of small farms in Europe: Towards a better picture. *Land use policy*, 75, 784-798.
- Hossain, M., & Oparaocha, G. O. (2017). Crowdfunding: Motives, definitions, typology and ethical challenges. *Entrepreneurship Research Journal*, 7(2).
- Hubbard, C. (2009). Small farms in the EU: How small is small? (No. 696-2016-47663).
- Huvio, T., Kola, J., & Lundström, T. (2005). Small-scale farmers in liberalised trade environment. *Helsingin yliopisto, taloustieteen laitos*.
- Jordan, A. (2001). The European Union: an evolving system of multi-level governance... or government?. *Policy & Politics*, 29(2), 193-208.
- Kim, J. S. A grounded theory approach: Introduction and application.
- Klerx, S. (2015). Alternative sources of finance in the agricultural sector. Business Economic Group, Wageningen University.
- Kloss, A. (2010). The integration of expatriates: How expatriates living in Denmark define integration. *Integration The Vlsi Journal*.
- Kull, M. (2009). Local and Regional Governance in Finland A Study on Institutionalisation, Transformation and Europeanization. *Administrative Culture*, 10(1), 22-39.

- Kull, M. (2008). EU multi-level governance in the making: the community initiative LEADER+ in Finland and Germany. Department of Political Science.
- Lagerspetz, M., Rikmann, E., & Ruutsoo, R. (2002). The structure and resources of NGOs in Estonia. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 13(1), 73-87.
- Leonard, M. (2005). Why Europe will run the 21st century (pp. 49-56). London: Fourth estate.
- Lipton, M. (2006). Can small farmers survive, prosper, or be the key channel to cut mass poverty?. *eJADE: electronic Journal of Agricultural and Development Economics*, 3(853-2016-56133), 58-85.
- McKillop, D., & Wilson, J. O. (2011). Credit unions: A theoretical and empirical overview. *Financial Markets, Institutions & Instruments*, 20(3), 79-123.
- Mkrtchyan, T. (2009). Armenia's European future. *Europe in Dialogue*, (01), 14-49.
- Muscio, A., & Sisto, R. (2020). Are agri-food systems really switching to a circular economy model? Implications for European research and innovation policy. *Sustainability*, 12(14), 5554.
- Nuriyev, E. (2007). EU Policy in the South Caucasus: A view from Azerbaijan. *CEPS Working Documents*, (272).
- OECD, F. UNCDF, 2016. Adopting a territorial approach to Food Security and Nutrition Policy.
- Olomola, A. S., & Gyimah-Brempong, K. (2014). Loan demand and rationing among small-scale farmers in Nigeria.
- Ranaweera, K. K. D. S. (2017). Proceedings of the International Conference on Food Quality, Safety and Security, Colombo, Sri Lanka, 24-25 October 2017. In Proceedings of the International Conference on Food Quality, Safety and Security, Colombo, Sri Lanka, 24-25 October 2017.. The International Institute of Knowledge Management (TIKM).
- Rasva, M., & Jürgenson, E. (2020). Changes of agricultural producers in Estonia according to the size of land use.
- Rollo, J. (2004). Agriculture, the structural funds and the budget after enlargement. *Romanian J. Eur. Aff.*, 4, 18.
- Shucksmith, M., & Rønningen, K. (2011). The Uplands after neoliberalism?—The role of the small farm in rural sustainability. *Journal of Rural Studies*, 27(3), 275-287.
- Silverman, D. (2015). *Interpreting qualitative data*. Sage.

- Silverman, D. (2013). *Doing qualitative research: A practical handbook*. Sage.
- Soreh, W. C. (2017). Awareness and attitude towards Crowdfunding in Nigeria. *International Journal of African and Asian Studies*, 36, 1-8.
- Szumelda, A. (2013). Is small beautiful? The debate on the future of small individual farms in Poland. *Eastern European Countryside*, 19, 219-250.
- Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.
- Tomczak, A., & Brem, A. (2013). A conceptualized investment model of crowdfunding. *Venture Capital*, 15(4), 335-359.
- Van der Ploeg, J. D. (2013). Peasants and the art of farming: A Chayanovian manifesto (No. 2). Fernwood.
- van Vliet, J. A., Schut, A. G., Reidsma, P., Descheemaeker, K., Slingerland, M., van de Ven, G. W., & Giller, K. E. (2015). De-mystifying family farming: Features, diversity and trends across the globe. *Global food security*, 5, 11-18.
- Villani, E. (2013). Crowdfunding. The new buzzword in capital formation. Kevin M. McGovern Family Center for Venture Development in the Life Sciences.
- Wright Robbie, M. K. (1998). Venture capital and private equity: A review and synthesis. *Journal of Business Finance & Accounting*, 25(5-6), 521-570.
- Zhengfei, G., & Oude Lansink, A. (2006). The source of productivity growth in Dutch agriculture: A perspective from finance. *American journal of agricultural economics*, 88(3), 644-656.

APPENDIXES

APPENDIX 1

Questionnaire for the small-scale farmers:

Name of the interviewee:

Farm location (County) of the interviewee:

Area of farm business:

Date of interview (dd/mm/yyyy):

Time of starting the interview:

Name of the interviewer: Olasupo Ojo

INTERVIEWER'S INTRODUCTION AND STATEMENT OF INFORMED CONSENT

My name is Olasupo Ojo, and I have come from the Estonian University Of Life Sciences (Institute of Economics and Social Sciences). We are conducting a farmer survey to gauge the opinion of Estonia farmers on issues related to their attitudes and perceptions about the Social crowdfunding system. For this exercise, I will be interviewing tenths of farmers across the country. The findings of this survey will be used for writing Master thesis.

This survey is an independent study and is not linked to any political party or government agency. Whatever information you provide will be kept strictly confidential. Participation in this survey is voluntary and it is entirely up to you to answer or not answer any question that I ask. I hope that you will take part in this survey since your participation is important. It usually takes 15 to 20 minutes to complete this interview. Please spare some time for the interview and help me in successfully completing the survey.

1. How long have you been into farming (years)?
2. Please describe your farm activities
3. What are your major challenges in farming? And how you overcome the challenges
4. How have you been able to overcome the challenges mentioned above?
5. What is your average farm production capacity (tonnes)?

6. What is your revenue annually (euro)?
7. Do you belong to any cooperative society? Yes No Please explain?
8. Have you taken a loan from the cooperative society before? Yes No Please explain?
9. Have you applied for funding for your farm business before? Yes No Please explain?
10. If yes, from which source(s) did you obtain the fund(s)?
11. Has funding been a challenge in your business? Yes No Please explain?
12. If yes, how have you overcome the funding issue in the past?
13. Have you heard of Crowdfunding? Yes No Please explain?
14. If yes, what do you like about crowdfunding?
15. If no, would you like to be involved in crowdfunding? Yes No Please explain?

(Interviewer explanations below)

- **Peer-to-peer lending:** The crowd lends money to a company with the understanding that the money will be repaid-with interest.
- **Equity crowdfunding:** Sale of a stake in a business to a number of investors in return for investment. The idea is similar to how common stock is bought or sold on a stock exchange, or to a venture capital.
- **Rewards-based crowdfunding:** Individuals donate to a project or business with expectations of receiving in return a non-financial reward, such as goods or services, at a later stage in exchange of their contribution
- **Profit-sharing / revenue-sharing:** Businesses can share future profits or revenues with the crowd in return for funding now
- **Hybrid models:** Offer businesses the opportunity to combine elements of more than one crowdfunding type.

16. What is your future plan(s) for your business? Expansion Diversification Winding up Please explain?
17. How would you want to use the fund from crowdfunding in your business?
18. What is your preferred maximum tenure for crowdfunding funds?

