

1 Agri-entrepreneurs and Their Characteristics

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1.1 Introduction

There are over three billion people working worldwide (World Bank, 2012). Of the three billion people with jobs, farming and household micro-businesses provide about 1.5 billion employment opportunities globally with 50% of employment in developing countries. Jobs are especially important for increasing numbers of underemployed youth in developing countries where there will not be enough jobs to employ the increasing number of unemployed. In these countries the largest group of those people is youth aged 15–24 (40%) (Kapsos, 2013). A disproportionate number of those people are young people, who will compete for ever fewer jobs in the future, as job creation lags population growth (Jones, 2015). Available jobs will require education and skills that poor people do not have. The few jobs accessible to people without an education or relevant skills do not provide livable wages. Entrepreneurship is a viable strategy for upward mobility, as a 1% increase in entrepreneurial activities decreases the poverty rate by 2% (Singh, 2014). Also, entrepreneurship is a means of identifying value-added activities that increase efficiency and employment opportunities. Entrepreneurs with successful businesses are self-employed.

Thus, entrepreneurship decreases unemployment (Gorgievski *et al.*, 2011). Entrepreneurship is particularly important to agriculture for several reasons (Milestad *et al.*, 2011). Some challenges to agri-entrepreneurial success in rural areas include weak education systems, limited access to mail, and competition from large farms with technology that increases their productivity.

Stenholm and Hytti (2014) differentiate the entrepreneur-farmer from the producer-farmer. They suggest the entrepreneur-farmers establish their identity by addressing challenges in institutional norms and acting as change agents. Producer-farmers concentrate on following customary behavior. Since there are so many definitions of agri-entrepreneurs, in this chapter the agri-entrepreneur will be treated as an innovative change agent who finds opportunities to use land and its resources for specialized, value-added food and agriculture-based businesses. The individual assumes all risks and benefits derived from the business. Agri-entrepreneurs own and manage their business with the intent to make profit. Agri-entrepreneurship, overall, is a combination of agriculture and business (Bairwa *et al.*, 2014). This combination of agriculture and business fosters agri-entrepreneurs who innovate, identify markets, and satisfy needs by developing different ways of doing things. Agri-entrepreneurs

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engage in a variety of activities in agriculture and related sectors.

This chapter discusses entrepreneurial activities related to agri-entrepreneurship since a majority of out-of-school youth (OSY) live in rural areas where agriculture, agricultural services, and farm-related product production are the primary source of jobs in developing countries. Most of the working-poor youth are employed in agriculture (Kapsos, 2013). Therefore, agri-entrepreneurship can increase employment opportunities, especially for out-of-work youth, and thus decrease poverty (Singh, 2014; Nagler and Naudé, 2015). The agricultural sector dominates economic activity in rural areas where a large number of OSY live and, as such, offers opportunities for entrepreneurship.

This chapter begins with an overview of the market conditions and challenges faced by agri-entrepreneurs (Sections 1.2 and 1.3). Sections 1.4 to 1.7 discuss generic entrepreneurship, entrepreneurial networks and innovation using Drucker's (1998) list of opportunities for entrepreneurs, supported by agriculture-related examples. Section 1.8 focuses on the differences between agri-entrepreneurship and new business creation in other industry sectors. Sections 1.9 to 1.11 discuss the challenges faced by agri-entrepreneurs, motivation for agribusiness start-ups and value-added agriculture, as well as characteristics of entrepreneurs engaged in situation-specific businesses (Miskin and Rose, 2015). Sections 1.12 and 1.13 provide examples of successful and unsuccessful agri-entrepreneurs, with a focus on their characteristics. Conclusions are discussed in Section 1.14.

1.2 Market Conditions and Challenges for Agri-entrepreneurs

Agribusiness is important to global food supplies and developing economies (Wilkinson, 2009). However, getting agricultural products from remote rural areas into larger markets has its challenges. These include a lack of intermediaries to develop relations between vendors, purchasers and contract systems (Parmigiani and Rivera-Santos, 2015). Other problems include inconsistent product quality and supply of

products because of poor infrastructure. There is also competition in domestic markets from transnationals that can sell their products for less than domestic producers can.

In the 1970s, transnational agribusinesses entered markets in developing countries. The first foray of transnationals in emerging markets was to sell corporately branded products. When market share and profitability for transnational agribusinesses increased, these companies became involved in developing countries' agricultural supply-chain systems, which eventually provided the transnationals with opportunities to control supply-chain operations. This led to specialized food product exports, such as exotic or off-season vegetables, for consumers in affluent countries. None the less, diversion of agricultural resources increases poverty, displaces farmers, and marginalizes agrarian society and culture in developing countries (McMichael, 2005).

Increasingly, transnational food conglomerates are the dominant players in food production systems in developing countries (Wilkinson, 2009). Contract farming is one method that transnational businesses use to vertically integrate supply-chain production and ensure product supplies for supermarkets (Bijman, 2008). Suggested benefits of contract farming include access to a global market, risk reduction, technical assistance, reduced transaction costs, and access to credit. On the other hand, opportunistic behavior is a negative consequence from the use of contract farming by transnational agribusinesses.

Resource-poor farmers have challenges getting their products to market. Although transnational corporations could facilitate distribution of the poorest farmers' products in the global supply chain, contract farming often is unavailable to these farmers (Fraser, 2012). Transnational corporations limit contract farming in extremely poor countries because of the companies' concerns about geographic isolation, high transportation costs, communication difficulties, and lack of available technology. Moreover, large transnationals may perceive poor contract farmers as a risk in meeting their obligations. Transnational corporations seek more affluent contract farmers who are able to pay commitment fees and bear some of the crop-related risk.

While farmers can contract crops out to transnational corporations, their ability to be entrepreneurial decreases because of a need to focus on contract crops. Control of the global food supply chain by transnational corporations yields asymmetrical power relationships with contract farmers (Minot, 2007; Bijman, 2008). Asymmetrical power relationships between transnational corporations and contract farmers enable transnationals to use coercive power in contract negotiations (Maloni and Benton, 2000). For example, a transnational corporation applies coercive power when it dictates price reductions for contract farmers, which in turn challenges the profitability of independent farming. Farmers may have to sell products at prices below production costs, thus decreasing their earnings and increasing the probability of failure to break even on production costs (McMichael, 2005).

All payments to contract farmers are contingent on satisfaction of corporate quality standards, regardless of environmental conditions. Sometimes, contract farmers are not paid because their products do not meet corporate quality standards; for example, a tomato is too small or underweight (Global Policy Forum, 2015). Lost income can result in displacement of small farmers as they seek opportunities elsewhere. Arguably loss of farmers' income violates one of the fundamental premises of sustainability: social equity, which affects the well-being of individuals and families (WCED, 1987).

1.3 Micro, Small and Medium-size Enterprises and Entrepreneurship

Entrepreneurship is one way in which small-size farmers can confront issues mentioned above, such as OSY under-employment and need for new jobs. Opportunities exist for farmers to create value-added agricultural products that are sold in local markets. For example, consumer desire for transparency in the food supply chain contributes to localization of agri-food systems (LAS) (Requier-Desjardins *et al.*, 2003). Rural entrepreneurs can compete against larger corporations through a business cluster that controls significant quantities of local farm products (Requier-Desjardins *et al.*, 2003) and agribusinesses

form Local Production Systems (LPS). Commercial relationships between LAS and LPS eventually create a supply chain, with added value at each level of activity. Clusters of micro-businesses making the same products establish a base of power in the marketplace through horizontal integration, if a strong vertical supply chain exists between its members wherein a manufacturer controls production, quality control, standardization, and packaging (Lamprinopoulou, *et al.*, 2006; Lamprinopoulou and Teagear, 2011).

Agribusiness clusters increase efficiencies in production activities in micro/small/medium-size enterprises (MSMEs) and decrease transaction costs. Micro-businesses are defined as employing one to nine people, small-size businesses have 10–49 employees and the workforces of medium-size businesses range from 50 to 250 people (Andersén, 2012).

In addition, MSMEs establish cooperative-competitive relationships in these clusters as a result of workforce sharing (Trienekens, 2011). Workforce sharing is a reciprocal subcontracting system that enables MSMEs to be agile and adjust products or services in response to market demands. As additional new businesses with related products open, there is geographic clustering of farm products and processing operations. Clusters of businesses facilitate knowledge sharing and diffusion and innovation among businesses and countervail large monopolistic intermediaries.

Increased involvement of local businesses in LAS and LPS includes purchases and sales of goods or services between members of the local supply chain and establishes input–output relationships (Requier-Desjardins *et al.*, 2003). The system works as follows. Inputs are costs associated with an MSME's purchases of raw materials and indirect costs from labor associated with product production as the business transforms raw materials into new or improved value-added products or services. An output is the value or sales revenue derived from the sum of goods produced by businesses in a cluster.

1.4 Generic Entrepreneurship

Entrepreneurship motivations are important in understanding how the entrepreneur operates their business or defines success. Traditionally,

the definition of an entrepreneur is an individual who starts a new business, cognizant of associated risks and ambiguities, for profit and growth (Scarborough, 2012). The entrepreneur takes advantage of opportunities and gathers resources, usually money, and other necessary non-monetary resources to turn their ideas into reality. Motivation for entrepreneurship, its meaning and measures of success differ among people, as well as countries, and by income level.

In addition, agri-entrepreneurship is tied to personal identity (Stenholm and Hytti, 2014). Each entrepreneur seeks to legitimize their identity through business activities and thus their goals reflect the environment and social norms. For example, an entrepreneur in a developing country may view success as the ability to support oneself and one's family (Gindling and Newhouse, 2013). In contrast, another agri-entrepreneur may be competitive, seeking to be the largest and best in order to reach their goal to be a profitable self-supporting business, independent of others (Stenholm and Hytti, 2014). In the latter case, the agri-entrepreneur assumes all risks and develops structures that enable growth and profitability. The latter type of entrepreneur becomes a visible change agent in the community when others adopt their practices.

Other definitions consider entrepreneurs as active participants in their business, either as an employee or as a manager (Berglann *et al.*, 2011). One opinion is that entrepreneurs should control, either directly or indirectly, between 10% and 30% of their business. Access to wealth, albeit the individual's, spouse's, or parent's, influences the decision to become an entrepreneur. Individuals whose parents were entrepreneurs are likely to engage in entrepreneurship. An entrepreneur's experience in a particular industry is associated with new business start-ups. However, those who are unemployed are less likely to engage in entrepreneurship, while partially employed individuals are more apt to become an entrepreneur (Berglann *et al.*, 2011).

In some rural areas, for example in India, agri-entrepreneurship does not have enough available land to absorb the agricultural workforce, which contributes to unemployment and underemployment (Saxena, 2012). One solution to this problem is rural entrepreneurship

from agricultural-based business. These businesses process and add value to local agricultural production as they move through the supply chain. They also contribute to local jobs. However, rural entrepreneurs rely on middlemen and middlewomen to expand their market area and get their product to market. Rural entrepreneurs have no control over their products when they are turned over to an intermediary for distribution.

Gartner (1990) identified eight dimensions of an entrepreneur. The first dimension, "The Entrepreneur," suggests that entrepreneurship attracts people with unique personalities and abilities. The second dimension, "Innovation," describes entrepreneurs' penchant for newness, whether an idea, product or service. The third dimension, "Organization Creation," describes behavior necessary for business start-ups. The fourth dimension, "Creating Value," seeks to generate economic wealth. The fifth dimension, "Profit or Non-profit," discusses issues pertaining to whether or not the entrepreneur's priority is profit or a social agenda. "Growth" is the sixth dimension and characteristic of entrepreneurial success. The seventh dimension, "Uniqueness," concerns the entrepreneur's ability to offer something distinctive that distinguishes them from the competition and allows them to best satisfy consumers' novelty-seeking behavior. The "Owner-Manager" is the eighth dimension and addresses the entrepreneur's dual tasks of business owner and manager. Gartner's study found that 79% of respondents considered entrepreneurship to be related to the characteristics of innovation, growth, and uniqueness. Another 21% of respondents were interested in outcomes of entrepreneurship, such as value creation and income gains.

Another type of entrepreneurship is social entrepreneurship, which seeks to improve social capital (Mair and Marti, 2006). Social entrepreneurship is the innovative use and mix of resources to take advantage of opportunities leading to social change or the ability to meet social needs. Relationships are important in social entrepreneurship, as its primary objective is to help others; hence profit is not the bottom line. One example of a type of social entrepreneur is an experienced village leader with outside networks who donates their time and

expertise to help villagers set up new businesses and agribusiness cooperatives (Zhu *et al.*, 2015).

Berglann *et al.* (2011) suggested that education is not a good predictor of whether or not an individual will become an entrepreneur. Rather, the key determinant of entrepreneurship is the type of education that the individual receives. Entrepreneurship programs are increasing, with about one-third of them taught outside business schools (Katz, 2008). One reason for this increase may be that the entrepreneurship programs and agricultural colleges are linked to extension outreach initiatives. Extension work with farmers provides opportunities to conduct research and learn about best practice in business/farm management which supports profitable farming (Dethier and Effenberger, 2012). Also, extension services and agents offer help to agri-entrepreneurs with the goal of avoiding business failures.

Entrepreneurship in developing countries is different from more mature economies (Lingelbach *et al.*, 2005). Market inefficiencies in developing countries create more opportunities for entrepreneurial activities, when compared with developed economies. Situational influences, such as different degrees of market stability and consistency of products or services offered, provide additional prospects for entrepreneurship. Entrepreneurs in developing countries satisfy consumers' core needs better than in developed countries because of proximity to the market. Another difference between developing and more mature economies is that entrepreneurs in developing countries minimize risk by operating several different businesses, while those in mature economies tend to focus on one core business. Financial resources and access to loans are limited in developing countries, deterring new businesses. Entrepreneurial activities in developing countries are usually self-financed or funded by money from friends and family.

1.5 Entrepreneurship: Social Equity for Out-of-School Youth and Females

The proportions of unemployed young people in poorer countries are almost double those in affluent countries (GEM, 2015). Many youth

will drop out of school in poor countries. Drop-out reasons include poverty, parents wanting the youth to contribute to household income, and/or a lack of interest (Lalata *et al.*, 2010). Limited education causes inadequate reading, writing, and arithmetic skills (UNESCO, 2014). Hence, OSY's ability to engage in entrepreneurial activities or find and keep jobs is low.

One study (Ahaibwe and Mbowa, 2014) found that about 24% of OSY were employed in wage-earning jobs. These employed youth usually had secondary education and worked in urban areas. The study also revealed that 66% of all jobs were in the agricultural sector, which employed a majority of OSY. However, only 5% of OSY do not have a full-time wage-earning job, therefore most live in poverty. In addition, OSY unemployment due to the gap between the number of OSY and the jobs available in the formal or public sector decreases the likelihood of entering the job market (GEM, 2015).

Consider the situation in Uganda, where young people represent 24% of those employed in the formal wage-paying job market (Ahaibwe and Mbowa, 2014). These young people are mostly urban workers with a secondary education. Rural OSY work in the agricultural sector. The agricultural sector provides 66% of all jobs, but only 5% of young workers earn wages. This indicates that farmer workers are not paid.

While entrepreneurship is a solution in poverty reduction and increasing income, teaching necessary skills to OSY is essential in preparing them for success (LaGraffe, 2012; Ahaibwe and Mbowa, 2014). Firstly, OSY should develop attitudes, knowledge, and awareness of available support services. Entrepreneurship training increases young people's prospects for employment, business start-ups, and maintaining successful businesses. Without this training, the probability of OSY finding wage-earning employment is low. OSY also need role models and access to capital in order to thrive as entrepreneurs (GEM, 2015). Unemployment and underemployment among OSY result in social problems, such as dependence on welfare, crime, and social unrest (LaGraffe, 2012; GEM, 2015).

For example, OSY aged 15–24 years in the Philippines account for 50.4% of all unemployment (Taborda, 2015). The overall employment rate for OSY is disproportionate

with the Philippines' overall unemployment rate of 6.4% in July 2015 (Philippines Institute for Development Studies, 2015). In addition, there is high underemployment for OSY, and many OSY work in the agricultural sector.

A second group of people in developing countries at risk for unemployment and poverty is females. Females in developing countries have higher unemployment rates (5.8%) than males (5.3%) (ILO, 2012). There is no expectation that the employment situation for females will improve in the near future. When compared with males, slightly more females are in vulnerable employment situations, such as jobs without employment benefits or employment in unpaid work at home, while earning income in the labor force. The difference between males and females in vulnerable work situations can be as high as 24% in North Africa.

Just like OSY, females have limited employment opportunities (Bonkat, 2014; GEM, 2015). In addition, females face discrimination in the workplace. Employment opportunities can be gender specific, such as the expectation that Mexican females work in the service and retail sectors (GEM, 2015). Another problem is that women's wages often are less than the minimum wage, or in some cases nonexistent for their work. Females earn less than males, regardless of development levels (Verick, 2014).

Female entrepreneurship varies by country. The number of female entrepreneurs compared with males differs by country and generally there are fewer female entrepreneurs (48%) than males (52%) (Vossenber, 2013). Female entrepreneurship participation rates around the world range from 1% in Pakistan to 40% in Zambia (GEM, 2015). Yet in Panama and Thailand, female entrepreneurs outnumber male entrepreneurs.

Most often the motivation for female entrepreneurship is survival, nonexistent job opportunities, or no other income source (Vossenber, 2013). Female entrepreneurship may be motivated by any combination of reasons; for example, a hobby develops into a business, participation in an entrepreneurship training program, or as a means to cope with an economic shock in conflict zone (Bushell, 2008; Bonkat, 2014).

Primarily, female entrepreneurial activities are in the consumer sector (GEM, 2015). This

includes food and related product services (Quinay, 2013). In rural conflict zones, female entrepreneurs sell vegetables and fruits to end-use consumers and engage in associated business activities (Bonkat, 2014).

Female entrepreneurs self-finance their businesses and are more risk averse than male entrepreneurs (Hampel-Milagrosa, 2014). Females face gender challenges in establishing business relationships (Bushell, 2008) and there are few successful role models for women. As is the case with OSY, women in developing countries have few opportunities for education or training related to entrepreneurship (GEM, 2015). Quinay (2013) suggested that empowering female entrepreneurs has three components: education, policy, and a social network. In order to succeed, female entrepreneurs need access to information communication technology (ITC) and assistance in identifying markets and finding distribution channels (Vossenber, 2013). In addition, females face challenges in obtaining credit or financing for their businesses (Stupnytska *et al.*, 2014). Approximately 70% of female entrepreneurs in developing countries receive inadequate funding for their businesses.

1.6 Entrepreneurial Networks

Businesses that network outside their own business and share knowledge, expertise, and ideas create symbiotic relationships conducive to collaborative innovation (Ketchen *et al.*, 2007). Participation in these collaborative relationships helps entrepreneurs remain innovative. These networks offer a variety of content. Some networks have communication content, wherein information is shared. Another network offers exchange content conducive to the give and take of goods and services. Networks with normative content provide people with knowledge and support that meet the expectations of others who share an interest in special attributes (Aldrich and Zimmer, 1986). Thus networks are a valuable source of new ideas and information for entrepreneurs. For example, networks mentoring female entrepreneurs in developing countries contribute to their success and ability to obtain credit (Stupnytska *et al.*, 2014).

Entrepreneurs in developing countries also receive business information from personal and professional networks (Hampel-Milagrosa, 2014). Hampel-Milagrosa's study indicated about 59% of food-processing entrepreneurs who wanted to upgrade their business productivity, revenue, and size received market information from personal networks. Personal networks are an important contributor in the growth of food-processing businesses. For example, growth in food-processing businesses contributes to developing clusters of food-processing agri-entrepreneurs in Bukidnon on Mindanao Island in the Philippines (Philippines Institute for Development Studies, 2015). An entrepreneur who made linen and home-furnishings from natural fibers wanted to grow her business (Hampel-Milagrosa, 2014). She contacted a network of Mindanao tribes to help her design, source, and market her products. The tribal network's support influenced the entrepreneur's decision to partner with T'boli and Bagobo tribes in the creation of high-end personal handbags, as well as fashion and home-furnishing accessories with tribal designs. This collaboration was successful. The company began exporting their handcrafted products to Japan. Collaboration and mentoring of female entrepreneurs in developing countries helps improve their success rate and access to capital (Stupnytska *et al.*, 2014).

1.7 Entrepreneurship and Innovation

Schumpeter (1934) described entrepreneurs as innovative individuals who create new ideas or products, or a combination of both. These are introduced into the marketplace as innovations. Innovation disrupts market equilibrium, the status quo, but is essential as it moves the economy forward. Thus, entrepreneurship is the process through which innovation drives economic growth. Drucker (1998) argued that entrepreneurs systematically innovate or intentionally create focused activities that change the status quo. He cited opportunities for innovation as "unexpected occurrences, incongruities, process needs, industry and market changes, social and intellectual environment, demographic changes, changes in perception, and new knowledge" (Drucker, 1998).

Conflict negatively impacts the number of jobs and household income (World Bank, 2012). In areas where there are few jobs, entrepreneurship represents an alternative to poverty (Nagler and Naudé, 2015). Examples related to agriculture are provided for each innovation opportunity in [Table 1.1](#).

1.8 Agri-entrepreneurs

The idea at the center of agri-entrepreneurship is the right to use land and its resources for agriculture, forestry, and related activities that generate income (Suárez, 1972). Also, agri-entrepreneurs actively engage in agriculture, use current technology to increase agricultural productivity, and adopt new systems of operations (Singh, 2014).

Farm-related entrepreneurship provides the economic foundation for rural economies (Hossain and Jaim, 2011). Agriculture employs 75% of people living in rural areas (World Bank, 2008). This includes poor small-size farmers and landless workers who earn a livelihood through agriculture. Research indicates that the agricultural sector is twice as effective in reducing poverty as any other sector. Increasing crop productivity reduces food prices for poor people and has the largest effect on decreasing poverty rates. Small-size farmers increase their ability to compete in the market with the aid of producer organizations and technology innovation.

Changes in agricultural markets, such as ICT, reduced subsidies for agriculture, shifts in consumer demand, new food production standards, and an emphasis on sustainability, require farmers to adapt to new circumstances in order to survive (Lans *et al.*, 2013). Agri-entrepreneurs need to be innovative, take risks, and be proactive in identifying opportunities for success. Agri-entrepreneurship is different from traditional entrepreneurship in that modernization of agriculture is narrowly focused on highly specialized areas, efficiency, and productivity in farm management. Also, agri-entrepreneurs' start-up costs, ranging up to US\$600,000 for land and machinery, are significantly higher than non-farm businesses in developed countries (Richards and Bulkley, 2007). In contrast, start-up costs for street vendors in a conflict

Table 1.1. Innovation opportunities and examples.

Innovation opportunity	Example
Unexpected Occurrences	In 1873, a vineyard owner identified dried grapes that William Thompson marketed 2 years later as raisins (Kelly, 2013).
Incongruities	Innovations in agricultural biotechnology decrease crop variability for soybeans, cotton, corn and canola (Giddings and Chassy, 2009).
Process Needs	Robots will soon serve process needs by increasing efficiencies in fruit harvesting and livestock management (Harvey, 2014).
Industry and Market Changes	When blood cholesterol became associated with an increase in heart disease, consumers wanted beef with little fat and the beef industry raised cattle with less fat (Hoffman and Turnbull, 2007).
Social and Intellectual Environment	Farmers joined online communities to learn about market trends (Ganzell, 2009).
Demographic Changes	The Maryland Department of Agriculture began a programme that would identify local producers, sellers and buyers of specialty and ethnic food products. The most popular products sold were cilantro, specialty herbs, hot peppers and eggplants. The ethnicity of the specialty products and ethnic foods influenced the choice of products grown (Tubene <i>et al.</i> , 2015).
Changes in Perception	Most farmers in the Osun State of Nigeria perceive increased temperatures and decreased precipitation. The greatest number of farmers responded to climate change by planting crops earlier or later than previously done (Sofoluwe <i>et al.</i> , 2011).
New Knowledge	Alltech Crop Science developed mapping drone technology with real-time information transmission that identifies underperforming soil and crops. This technology enables the farmer to make an informed decision when employing management practices (Duboyne, 2015).

zone (Nepal) are about US\$15.00 (Bushell, 2008). In contrast, a cottage industry, such as basket weaving, that can be operated from home, can cost around US\$1100.

1.9 Challenges to Agri-entrepreneurship

Globally, agri-entrepreneurs need to respond to changes in consumption, products sought, distribution systems, new technologies, and industry structure (Boehlje *et al.*, 2011). In addition, there is a disconnect between the locations where agricultural products are produced, processed, and consumed. Going forward, agribusinesses face three significant issues: (i) increased risk and uncertainty in decision making; (ii) innovation, development, and adoption of new technologies that enable increased production efficiency and overall profitability; and (iii) agility in responding to change, competition, and evolving industry structures. Global climate change is another concern. Further challenges

are the geographic location of the agribusiness, farm size, and land topography (McElwee and Smith, 2012). All three can have a negative effect on business success. Additional impediments to agri-entrepreneurship are volatile prices and product supplies, low and unpredictable earnings, and intensive farming with environmental costs (Pettinger, 2014). Although these issues are of universal concern, they disproportionately affect agri-entrepreneurs in developing countries.

Agri-entrepreneurs in developing countries face some challenges that are similar to those in more mature economies and other challenges that differ from more mature economies. The similarities include poverty, insecure livelihoods, lack of access to technology, socio-political instability, natural disasters, degradation of the environment, and gender discrimination (Faisal, 2010). Often it is hard for the agri-entrepreneur to meet with the experts or extension services that can provide guidance in developing their businesses. These agribusinesses have high start-up costs when

compared with non-farm businesses (Richards and Bulkley, 2007). Rural agri-entrepreneurs have challenges obtaining credit for their start-up experiences and they are reticent in seeking help from others. Farmers who are not innovative use conventional farming methods that make them susceptible to price competition (Marsden and Smith, 2005).

A serious concern for agri-entrepreneurs in developing countries is transnationals seeking to purchase property in their country. Transnationals look for countries with weak governments and little regulation of direct foreign investment, because it makes it easier for them to enter a market and gain control of marketplace activities (Land Matrix, 2015). Property-seeking transnationals with deep pockets diminish opportunities for local agri-entrepreneurs who lack access to social media and money for traditional advertising. There are fewer female entrepreneurs in developing countries than developed countries (Stupnytska *et al.*, 2014).

Another issue affecting agri-entrepreneurs in transitional economies with vast numbers of rural communities, as well as poor countries, is undifferentiated agricultural products that account for 50% of total exports (UNIDO, 2015). In transitional economies, the export of undifferentiated agricultural products increases poverty, displaces farmers, and marginalizes agrarian society and culture in developing countries (McMichael, 2005). While transitional economies mostly export agricultural products, they also divert food products from their domestic markets (UNIDO, 2015). The result is a limited supply of food available to people living in these countries, especially those in rural communities. This affects local consumers' ability to buy food and feed their families.

1.10 Motivations for Agribusiness Start-ups

Given the challenges agri-entrepreneurship faces, what motivates aspiring agri-entrepreneurs to start their own business? Those considering a new agribusiness venture evaluate other job opportunities in order to determine which opportunity is in their best interest (Land Matrix, 2015). Potential agri-entrepreneurs also look at the business's impact on their family.

Agri-entrepreneurs can take advantage of opportunities to engage in new activities and increase household income, or expand farm operations so that additional family members can be employed (Agnete *et al.*, 2003). In this scenario, agri-entrepreneurship may be perceived as a means of providing a good living. This agri-entrepreneur perceives continuity of the farm and related businesses as an obligation or tradition. In some cases, the individual lacks other career options. A second reason to start an agribusiness is to take advantage of unique resources and use them for competitive advantage in business operations. In general, these businesses expand upon the entrepreneur's primarily agriculture-related business. Thirdly, the agri-entrepreneur may want to try out new business ideas.

Small farmers can remain economically viable when they diversify their activities and sell value-added products that best meet consumers' needs (Lowson, 2003; Haugen and Vik, 2008). Agri-entrepreneurs need to establish a competitive advantage by selling novel products not sold by agribusinesses. Product novelty will increase the likelihood that consumers will purchase their products at prices that exceed production costs, cover the cost of doing business, and provide sufficient profit.

1.11 Value-added Agribusiness

Consumer preferences for value-added and locally grown agricultural products create new opportunities for agri-entrepreneurs (DeLind, 2002). Agri-entrepreneurs can sell value-added products that exploit consumer demand for organic and local foods. Examples of value-added products include organic vegetables, BST-free cheese, unbleached flour, gluten-free food, and heritage apples. Value-added products are important because they generally have a high return on investment. Sales of these products generate additional income for agri-entrepreneurs and for the local and regional economy (Vogel, 2012). The different types of value-added agri-entrepreneurs include technical services and farm equipment rentals, agrotourism, forest products, direct-to-consumer sales, and distribution through community-supported

agriculture. Farms with agribusinesses usually earn more income than those without these enterprises. For example, agri-entrepreneurs can earn up to 72% of their income selling products through community-supported agriculture, 50.7% from value-added farm produce products, and almost 25% from direct-to-consumer sales. Consumer demand for locally grown and organic agricultural products has increased over the past decade (Ikerd, 2011). Agribusinesses producing sustainable products need to label their products appropriately so that consumers will pay a premium price for the product. In addition, consumer relationships and ethical practices add value to sustainable agribusinesses.

Sustainable agricultural practices should meet needs for ecological integrity and economic gain (Ikerd, 2008). For example, agribusinesses using sustainable agricultural practices in Nicaragua, Guatemala and Honduras have better topsoil and moisture retention, with less erosion and economic loss, when compared with farmers not practicing sustainable agriculture (Altieri *et al.*, 2012). Small-farm operations in Chiapas growing coffee using sustainable agricultural practices find that their products have improved resilience to hurricanes as a result of the soil they are planted in and growing conditions. Agri-entrepreneurs in developing countries have an opportunity to benefit from consumers in developed countries who connect status with green/sustainable products and are willing to pay more for these products (Elliott, 2013).

Value-chain analysis is important to agri-entrepreneurs in emerging economies and developed countries (Trienekens, 2011). Agri-entrepreneurs need to identify constraints in developing value-added products. These constraints include access to market information and resources, in addition to infrastructure and institutional barriers. The next level of value-chain analysis requires the agri-entrepreneur to analyse how they can add value to a product and how to finance related costs. There are few loans available to agri-entrepreneurs in developing countries (Lingelbach *et al.*, 2005). Also, existing networks exist to ensure product distribution. In addition, the impact of governance on their business must be considered. In the last stage of the chain analysis, agri-entrepreneurs look

for ways to upgrade their value-added activities. New products or services could be offered to consumers, the distribution network position could be improved, or partnerships can be established in order to grow their businesses.

Value-added products also establish a direct connection between the consumer, farmer, farm, and bioregion. This contributes to a sense of place and links consumer, producer, and place, which is important to one's social self (Feagan, 2007). An example of this would be childhood memories of pancakes with Canadian maple syrup. Place provides an additional way to differentiate products (Armington, 1969). This strategy is effective at the local level, as well as at the national level. A study of domestic computers of inferior quality versus imports of superior quality indicated that Australian consumers, who were not computer experts, preferred the low-quality computers made in Australia (Pecotich and Ward, 2007). This finding suggests that consumers pay more for products congruent with their perception of the product and how it supports the consumer's self-image. Country-of-origin branding has a different influence on product selection by computer novices and by experts. There is a dearth of available research about place and perceptions of product quality in developing countries, which suggests a need for marketing intelligence.

1.12 Characteristics of Successful Agri-entrepreneurs

Agri-entrepreneurs have personal characteristics that set them apart from others and influence the way they operate businesses. Bairwa *et al.* (2014) described agri-entrepreneurs as visionary, curious, proactive, determined, persistent, honest, hardworking individuals with integrity, as well as management and organization skills. They pointed out that agri-entrepreneurs often engage in a variety of activities, which suggests that they multi-task well. They recognized entrepreneurs as single-minded, driven, ambitious, creative problem solvers, yet practical and goal-oriented. In addition, they suggested that agri-entrepreneurs are able to recognize needs as opportunities. Lastly, agri-entrepreneurs willingly accept risks necessary to turn ideas into real and marketable products.

Sancho (2010) provided a comprehensive list of agri-entrepreneurial characteristics. These include initiative, sense of opportunity or intuitiveness, and independence. Agri-entrepreneurs are also viewed as dynamic, exhibiting leadership skills, a strong character, and goal driven. Other agri-entrepreneurial characteristics are responsibility, honesty, committed, energetic, hard work, and experience. Sancho (2010) also believed that agri-entrepreneurs are creative and imaginative problem solvers who can turn innovative ideas into reality and expect to succeed in their efforts. In addition, those involved in agri-entrepreneurship are knowledgeable and involved, and systematically evaluate their position. Moreover, agri-entrepreneurs value partnerships and teamwork. They readily take on tasks, but remain flexible and adaptable as they act as change agents.

Similarly Hossain and Jaim (2011) argued that, as owners of an organization, agri-entrepreneurs should take a personal stake in the enterprise, including all risks and uncertainties involved in running it. They contended that agri-entrepreneurial success results from firm performance. Anderson *et al.* (2006) suggested that entrepreneurial skills related to agribusiness are optimism, innovation, initiative, and risk-taking. They believed that agri-entrepreneurs willingly accept challenges, take responsibility and deal with the unknown and that they should be able to communicate effectively, have positive interpersonal skills, negotiate successfully, and lead their business operation. Anderson *et al.* (2006) shared the view of Hossain and Jaim (2011) that agri-entrepreneurs are opportunity seekers and change agents who can analyze, synthesize, evaluate, plan and execute ideas. These qualities ensure that the individual/actor/agent is relevant in their entrepreneurial role under any circumstance. For example, entrepreneurial soldiers traded cigarettes for products not easily obtained during World War II when consumer goods were rationed (albeit these entrepreneurial activities were short-term solutions to product shortages and ended with the end of the war).

A drive to succeed, a high degree of competitiveness, a high energy level, receptivity to change, and an appreciation of support networks are attributes of successful female entrepreneurs (Quinay, 2013). Other attributes are

positive thinking, self-esteem, ability to see opportunities, willingness to work long hours, and recognition of the need for continuous entrepreneurship education. Flexibility is important to female entrepreneurs in conflict zones, as they need to be resourceful in developing their skills and business models so that they can earn an income if they are displaced.

Characteristics of successful entrepreneurship include a business that survives 3 years (Makhbul and Hasun, 2010), communicates with stakeholders (Islam *et al.*, 2011), establishes social networks, gains personal satisfaction (Gorgievski *et al.*, 2011), and balances work with life. An entrepreneur's success is judged by their ability to generate profit related to the business's break-even point (Gorgievski *et al.*, 2011; Miskin and Rose, 2015). Also, successful female entrepreneurs view business failures as a learning opportunity.

Agri-entrepreneurship education increases behavioral intentions towards opening a business (Mohamed *et al.*, 2012). Morgan *et al.* (2010) suggested that agri-entrepreneurial skill sets are situation specific. For example, conflict-zone entrepreneurs should sell products that are easily transported in order to earn income. Previous discussion (Section 1.6) of the partnership between an entrepreneur and T'boli and Bagobo tribes to create distinctive motifs for fashion handbags speaks to situation-specific skills (Hampel-Milagrosa, 2014). Agri-entrepreneurs need to feel confident in their abilities to develop a successful business (McElwee and Smith, 2012). They are internally driven to succeed. Characteristics most associated with agri-entrepreneurs (Fig. 1.1) include many of the terms associated with generic entrepreneurship.



Fig. 1.1. Word cloud of most common descriptors of agri-entrepreneurs.

1.13 Obstacles to Positive Agri-entrepreneurship Characteristics

While an entrepreneur's personal characteristics and experience contribute to agribusiness success, they also influence failed agribusiness. For example, risk aversion can contribute to unprofitable agribusinesses (Pannell *et al.*, 2000). Other characteristics of unsuccessful agri-entrepreneurs include poor financial management, inadequate cost analysis, and lack of attention to the product lifecycle, sales of unprofitable products, unprofitable unfavorable consumer perceptions, and inattentive customer service (Duft, 2015). Additionally, communities, organizations, infrastructure, and social capital that support entrepreneurship and job creation are damaged (Alexander, 2012). Ordinary crime, corruption, political and policy insecurity also hinder entrepreneurial success. Additionally, conflict disrupts markets and displaces people.

The failure of a Somalian slaughterhouse (Massimo *et al.*, 2013) shows that even when an opportunity is actualized as a business it can fail because of unanticipated threats. The slaughterhouse was needed to satisfy health standards for harvested animals and process local meat that could be used as a substitute for imported products or exported. It operated for a less than a year before closing. Access to a distribution system was a problem in terms of on-time meat delivery. The business did not have a contingency plan for increased competition in export markets. Moreover, there was a weather problem: an unanticipated drought was beyond the control of the business and negatively impacted harvest operations, as well as income.

1.14 Conclusion

Agriculture and household micro-businesses provide about 50% of employment in half of all jobs in developing countries (World Bank, 2012). However, most of these jobs do not generate enough income to lift people out of poverty. Entrepreneurial activities related to agriculture produce a solution for increasing household incomes and

decreasing vulnerability in transitional economies and conflict zones (Singh, 2014). There is a problem, because poverty is inversely related to education, which limits opportunities for unemployed and underemployed individuals to succeed in entrepreneurship or finding a job (UNESCO, 2014). The type of entrepreneurship training received by interested entrepreneurs influences business success (Berglann *et al.*, 2011).

Aspiring entrepreneurs need skills to decrease risk and uncertainty in decision making and become agile in responding to change, competition, and evolving industry structures (Boehlje *et al.*, 2011). Agility and flexibility are important to conflict-zone entrepreneurs, in particular the most vulnerable—OSY and females—who may have to move business operations if they are displaced by violence (Quinay, 2013).

Successful entrepreneurs take advantage of shifts in consumer demand and satisfy consumers' needs with value-added products, such as organically grown coffee. Value-added products provide entrepreneurs with greater return-on-investment and profit margins. Entrepreneurs who succeed in business understand the importance of continuous education about markets, consumers, current practices, and the business environment. They also obtain information from personal and professional networks.

Key characteristics differentiate agri-entrepreneurs with a successful business from those who are unsuccessful. These characteristics include vision, curiosity, proactive behavior, determination, persistence in working towards goals, and management skills (Bairwa *et al.*, 2014). Successful entrepreneurs have integrity, are honest and persistent, and work towards their goals. Sometimes business failures are beyond an entrepreneur's control (Massimo *et al.*, 2013), but often business failures occur because entrepreneurs do not have a contingency plan. Other barriers to entrepreneurial success include an inability to manage money or company operations (Pannell, 2000). Lastly, the willingness and ability of an entrepreneur to learn from business failures explains why some entrepreneurs fail and others succeed.

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