EXPERTS' VIEWS ON THE POTENTIAL OF LUXURY NICHE AGRICULTURAL PRODUCTS FOR RURAL ECONOMIC DEVELOPMENT IN MEXICO AND OTHER NATIONS WITH SIMILAR NEEDS: A DOUBLE-PANEL DELPHI STUDY

By

LUIS ANTONIO FLORES PORRAS

Bachelor of Science in Hotel and Restaurant Management
University of the Americas Puebla
Cholula, Puebla
2010

Master of Science in Business Administration
University of the Americas Puebla
Cholula, Puebla
2015

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
July, 2020

EXPERTS' VIEWS ON THE POTENTIAL OF LUXURY NICHE AGRICULTURAL PRODUCTS FOR RURAL ECONOMIC DEVELOPMENT IN MEXICO AND OTHER NATIONS WITH SIMILAR NEEDS: A DOUBLE-PANEL DELPHI STUDY

Dissertation Approved:

Dr. M. Craig Edwards

Dissertation Adviser

Dr. Shane Robinson

Dr. Jeff Sallee

Dr. Michael Schnelle

Dr. Craig Watters

ACKNOWLEDGEMENTS

I will always be thankful to GOD, who has always provided me with many blessings and has always show me the love He has for me and all human beings. I also want to extend my gratitude to my parents, brother, and all my family, who have always supported my crazy ideas. I will always appreciate everything they have done for me.

To my advisor and committee chair, Dr. Edwards, to my committee members, Dr. Craig Watters, Dr. Mike Schnelle, Dr. Shane Robinson, and Dr. Jeff Sallee, thanks for the time and effort each of you spent helping me design and improve this project. During my time here, I learned so much about research, agriculture, education, extension, and how they all tie together and apply to the world.

Name: LUIS ANTONIO FLORES PORRAS

Date of Degree: JULY, 2020

Title of Study: EXPERTS' VIEWS ON THE POTENTIAL OF LUXURY NICHE AGRICULTURAL PRODUCTS FOR RURAL ECONOMIC DEVELOPMENT IN MEXICO AND OTHER NATIONS WITH SIMILAR NEEDS: A DOUBLE-PANEL DELPHI STUDY

Major Field: AGRICULTURAL EDUCATION

Abstract: Economic development in both rural and urban settings is essential if a nation is to realize growth and prosperity. Producing for luxury niche markets, such as cut flowers or certain food crops, may offer smallholder farmers unique entrepreneurial opportunities. Nevertheless, threats also may exist that should be considered before starting such ventures. This study sought to identify the potential of smallholder farmers in rural areas of Mexico, and other nations with similar economic development needs, to successfully grow specialty crops for luxury niche markets. More than 100 experts from the specialty crops industry were asked to participate as panelists in a double-panel, Delphi study; 34 accepted for a response rate of 30.8%, including researchers, extension educators, and other professionals, as well as producers.

The study involved three rounds of data collection to address six objectives. The first round consisted of three questions regarding 1) plant products, 2) a SWOT analysis framework, and 3) what smallholder farmers needed to achieve competitive advantages. In rounds two and three, the initial responses were returned successively for the panelists to rate using a Likert-type, response scale: 1 = *Strongly disagree* to 6 = *Strongly agree*. Items receiving 75% or more responses of either *Agree* or *Strongly agree* were determined to have reached consensus of agreement among the panelists. Extensive qualitative data was also gathered from both panels.

The panels reached consensus of agreement for 192 items after three rounds of data collection, including eight categories of plants and 100 specific examples. For the SWOT analysis framework, the researchers, extension educators, or other professionals panel reached consensus of agreement for nine Strengths, 21 Weaknesses, 15 Opportunities, and 13 Threats; and the producers panel achieved agreement for 13 Strengths, 20 Weaknesses, 16 Opportunities, and 10 Threats. The other items failed to reach consensus. It was concluded that potential existed for smallholder farmers and agribusinesses to produce select specialty crops for luxury niche markets, but both internal and external factors should be considered before instigating such ventures. Recommendations for future research and practice are offered as well as the study's contributions to related literature, practice, and research.

TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

Table Page

LIST OF FIGURES

Figure Page

CHAPTER I

INTRODUCTION

Economic growth has been one of the world's major objectives, and is a part of the United Nations' Sustainable Development Goals (Le Blanc, 2015), such as no poverty, zero hunger, good health and well-being, and so forth. Every year, governments of different countries aim at improving their economies in an effort to diminish poverty (Hák, Janoušková, & Moldan, 2016). However, these goals are not always achieved; therefore, innovative and strategic solutions are needed to address these problems (Meza & Webb, 1990).

The objective of economic development does not guarantee people achieving happiness, but it may increase the possibilities of choice to satisfy their needs by raising per capita income (Hidayah, Abdul, & Hamdan 2012; Koven & Lyons, 2010; Leigh & Blakely, 2010). Development gives individuals greater control over the environment in which they live, and, therefore, it allows them to increase their freedom (Singer, 2006). As a result of economic development, people can choose between having more goods or more leisure, or opt for both (Meza & Webb, 1990).

Development may have a particular importance for societies in which political aspirations are generally greater than resources (Meza & Webb, 1990). Large-scale

growth can prevent some untenable social tensions that may arise between different social classes or groups due to conflicting political interests (Meza & Webb, 1990; Prada & Sánchez, 2017). At the same time, it must be admitted that economic development does not always diminish this struggle (Meza & Webb, 1990; Moll, Townsend, & Zhorin, 2017). On the contrary, it can break relatively stable social relations, foster jealousy and greed, and precipitate class conflict (De la Torre, 1981; Meza & Webb, 1990). Too much emphasis on individualism, such as lack of respect for customs or capacity for saving, may foment distrust to working in groups or associations and curb the possibility of large-scale economies that result in differential rewards for hard work, expertise, responsibility, and initiative (Kyriacou, 2016).

When it comes to introducing economic development in societies that have been stagnant, special problems may arise, including the transformation of beliefs, habits, and institutions (Acemoglu, Johnson, & Robinson, 2005). If the change is violent, the transition is painful because it frustrates existing hopes and rights of individuals (Meza & Webb, 1990).

Despite all of the above, the promotion of economic development is operating in most societies (Le Blanc, 2015). In many lesser-developed nations, aspirations exceed possibilities provided by production, and the differences between economic strata are widening (Costa & Bazzanella, 1958; Phillips, 2017). The masses are beginning to think that their poverty is unnecessary and it could end if they become an important part of the potential solution, and not seen as its cause (Chrisinger, Fowler, & Kleit, 2012). Some perceive that poverty can be changed through their own individual behaviors while others may blame their current rulers, powerful actors in society, and or even elected leaders (Herzer & Klump, 2010). According to Francois Perroux (1950), development is the combination of mental and social changes in

a population that enable it to grow cumulatively and durably; in other words, it is a whole society process and outcome.

Faced with this state of affairs, we must find solutions that include the total population as much as possible (Meza & Webb, 1990). The progress of humanity toward this integration arises in the concept of management, vision, policies, and above all leadership, that is, the art of directing the efforts of groups of people with a common purpose (Bass, 1990; Meza & Webb, 1990; Phillis, 2017).

Likewise, the study of a nation's agricultural sector's role regarding its economic development holds a fundamental place in development literature (Singh & Tabatabai, 1993). In the rise and development of most civilizations, a majority of economic activity was usually focused on agriculture (Singh & Tabatabai, 1993). Agriculture is a lasting discipline and economic pillar that will have significance for subsequent generations of citizens beyond our present understanding of history and time (Barker, 2009). Therefore, economists have recognized the importance of this sector, which intends to introduce and support economic growth (Johnston & Mellor, 1961; Singh & Tabatabai, 1993).

This study was designed to identify the potential of growing and marketing specialty agricultural products to achieve rural economic development in Mexico and other countries with similar needs as perceived by a select group of producers, researchers, extension educators, or related professionals who served as panelists for a three-round, Delphi study during late 2019 and early 2020. The Delphi method is a technique for reaching a *consensus of agreement* among *experts*, i.e., a study's panelists, about concerns, issues, and topics for which their opinions are valued (Thangaratinam & Redman, 2005).

Statement of the Problem

Insufficient per capita income and unemployment constitute two of the most severe problems for the economies of many developing nations (Fei & Ranis, 1967). Thereby, low income leads to a large part of the population living in poverty (Alkire & Santos, 2014). In turn, this creates significant obstacles for people to improve their economic livelihoods and related conditions, e.g., poor health and other measures of well-being (Mitra, Posarac, & Vick, 2013). Moreover, it is not unusual in developing regions to encounter disabilities often caused by malnutrition, which remains one of the most pernicious challenges to overcome in the rural areas of many nations (Maulik & Damstadt, 2007).

Other problems that plague these communities include diseases, which prevalence and incidence are associated strongly with poverty; environmental exposures with negative consequences; injuries without proper medical care; lack of adequate public health interventions; and other precarious living conditions (Mitra, Posarac, & Vick, 2013). Poverty is related to and often exacerbated by these and other deprivations. Thus, the reduction of poverty in developing nations is now recognized as a key element of social and business interests in these regions (Savadogo et al., 2015). Poverty no longer receives attention from only researchers but also from affluential business owners and leaders because, in some instances, natural or man-made disasters make it impossible to ignore (Shrivastava, Mitroff, Miller, & Miclani, 1988; Weick, 2010). Even members of the international business community and the people living in poverty in many developing nations are interacting more frequently and intensely, which heightens awareness of poverty and its many attendant issues (Blowfield & Dolan, 2010; Enderle, 2009; Hill, 2008; Singer, 2006).

Increasing economic competition is on the rise worldwide, and many of the proposed solutions for decreasing the existing gaps between nations rely on the *innovation capacity* of each (Todericiu & Şerban, 2016). According to Flynn, Dooley, O'Sullivan, and Cormican (2003), innovation is the process of making changes (incremental and radical, small and large) to products, processes, and services that result in the introduction of differentiators for a business that adds value to customers' desires and purchases while contributing to the organization's knowledge and capacity for growth.

Innovation is important not only at the micro level for firms as a key element in achieving sustainable competitive advantages, but also at the macro level by bringing great benefits for society, and is a key driver of economic growth and increased living standards (Kung & Schmid, 2015; Şener & Sarıdoğan, 2011). Nonetheless, for those seeking to introduce innovations in developing nations, poverty presents unique challenges for changes to prevail (Sağ, Sezen, & Güzel, 2016). Innovations should be designed with local customers, networks, and business ecosystems in mind; if not, providers may run the risk of introducing new ideas that repeatedly fail to be adopted and never cross the last-mile of the innovation journey (Karlan & Appel, 2011; Khavul & Bruton, 2013). Innovations designed with the right intentions but with the wrong people in mind, that ignore the strategic interdependence of customers within their local networks, and which likely lack business ecosystems to support innovation, may continue to disappoint the intended adopter populations (Khavul & Bruton, 2013).

Moreover, those living in poverty constitute a large potential market which makes poverty and its many challenges as well as opportunities visible to a much larger proportion of the business community (Khavul & Bruton, 2013). Hence, poverty and its effects are no

longer a corporate footnote or an international business curiosity, rather such are the realities and opportunities that businesses must confront (Khavul & Bruton, 2013).

Despite the frequency of weak, broken, or non-existent infrastructure, including legal and regulatory mechanisms and actors, developing nations have incalculable cases of innovative entrepreneurial performance and successes (Guest, 2004). Even rural regions are developing income-generating opportunities for young people, reducing their desires to relocate and supporting the improvement of local economic conditions (Escobal, Favareto, Aguirre, & Ponce, 2015). However, the sustainable entrepreneurship literature has yet to engage with settings of extreme poverty in many developing nations (Dean & McMullen, 2007; Hall, Daneke, & Lenox, 2010; Hockerts & Wüstenhagen, 2010; Shepherd & Patzelt, 2011; York & Venkataraman, 2010). Indeed, globalization has lowered the cost of doing business and opened the gates for even small- and medium-sized firms to produce and sell products in dozens of locations that were previously inaccessible (Khavul & Bruton, 2013). In this context, agricultural start-ups can contribute to feeding the world, and to reducing poverty overall by improving quality of life while supporting a sustainable environment (Rockström et al., 2017).

Nevertheless, sectors of significant agricultural growth coexist with endemic and, in some cases, expanding rural poverty, which contradicts and undercuts the economic development sought for those populations (de Grammont, 2010). Therefore, different approaches are needed to address these problems; such as the *long-tail approach* which is defined as an alternative business model, i.e., from selling a small number of well-positioned goods in large quantities to instead retailing a vast number of niche items in relatively small quantities (Anderson, 2006). Or, on the other hand, the *bait and hook model* that in principle

is to sell the essential item at a very low price, occasionally under cost of production, the *bait*; then, core profits are reaped by selling additional parts, consumables, or other related items, i.e., the services *hook* (Gorevaya & Khayrullina, 2015). The *niche market approach* is considered a superior tack for small and specialized firms (Toften & Hammervoll, 2009), which may include agricultural ventures.

Societies and their economic sectors are gradually increasing the requirements of human capital, and demanding that individuals be better-prepared and frequently more *specialized* regarding job tasks and related work performance competencies (Valenzuela et al., 2018). With the knowledge spillover effects this generates, entrepreneurship can have positive and significant impacts on economic development; however, this appears to be less so for necessity-based entrepreneurship, which generally does not lead to technological change or innovation (Acs & Varga, 2005). Nonetheless, the potential that luxury niche agricultural markets may hold for improving the economic livelihoods of the rural poor while also lifting their communities warrants additional study. For this dissertation research study, the mitigation of poverty was broadly defined as improved prosperity and impoverished people perceiving a better way of living (Diener, Ng, Harter, & Arora, 2010), especially those who populate rural areas with ties to the agricultural sector.

Purpose of the Study

The purpose of this study was to investigate the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers and specialty produce. The results

could assist in establishing current levels of demand for these products, as well as experts' views on the potential of smallholder farmers to meet such demand, with the intent of developing rural economies to diminish poverty and improve livelihoods. To achieve this purpose, the researcher examined the perceptions of experts regarding luxury niche products that may be appealing to micro and small agricultural producers in rural Mexico and nations with similar needs, and have long-term market viability. By analyzing the opinions of experts and identifying a *consensus of agreement* among them, an understanding may be achieved regarding the potential of producers to specialize in growing crops, e.g., cut tulips, orchids, ornamental flowers, saffron (*Crocus sativus*), and vanilla, among other high-value, specialty produce, with the aim of meeting the demands of luxury niche markets.

Objectives

To accomplish the purpose of this investigation, six objectives were addressed:

1. Describe selected personal and professional characteristics of participants who comprised the study's two panels of experts: producers panelists, and researchers, extension educators, or other professionals panelists.
2. Describe the perceptions of selected producers of luxury niche agricultural products regarding the potential of such to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.
3. Describe the perceptions of researchers, extension educators, or other professionals regarding the potential of luxury niche agricultural products to be grown and

marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.

4. Report consensus of agreement among the experts comprising each Delphi panel regarding the growing of luxury niche agricultural products by micro and small producers in rural Mexico and other nations with similar economic development needs.
5. Compare the perceptions of experts comprising the study's two Delphi panels regarding the potential of micro and small agricultural producers in rural Mexico and other nations with similar economic development needs to grow and market luxury niche agricultural products using SWOT analysis as a decision-making framework.
6. Propose recommendations for practice and future research based on the consensus of agreement reached by the study's Delphi panels regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.

Scope of the Study

This study included two panels of experts and was limited to their views on luxury niche agricultural products that could be grown and marketed by micro and small producers in rural areas of Mexico and in other nations with similar economic development needs. The study's participants were limited to producers, researchers, extension educators, or other professionals who comprised a list of more than 100 potential panelists. The examination of

production opportunities was not extended to other products or regions that did not correspond to the parameters of this study.

Assumptions

The following assumptions were made in conducting this study:

1. The panelists were familiar with the needs, challenges, and opportunities associated with luxury niche agricultural products and the potential for producers entrance into this sector. They either had worked or were working with these types of crops and/or the producers of such.
2. The panelists were knowledgeable of rural communities in Mexico where potential existed for improving the livelihoods of farmers by them growing and marketing specialty crops for luxury niche markets.
3. The panelists would provide their honest views for all the items, questions, statements, or other objects to which they were asked to respond.
4. The panelists had expert knowledge of the most relevant and current needs of micro and smallholder producers regarding them growing and marketing specialty crops for luxury niche markets.

Delimitations of the Study

This study was delimited to 107 producers, researchers, extension educators, or other professionals for the purpose of populating two distinct Delphi panels. In addition,

participants nominated to serve as panelists were required to confirm that they had reliable and consistent access to the Internet for the purpose of receiving and accessing the study's data collection instruments, completing said instruments, and replying to related correspondence from the researcher.

Limitations of the Study

The following were limitations of the study:

1. Significant variability between the panelists regarding their industry contexts may have existed.
2. Members of the panels selected for the study were nominated by knowledgeable peers through snowball sampling procedures.
3. The study was limited to industry experts as Delphi panelists who may not have been representative of the entire agricultural industry, especially regarding luxury niche products.
4. The opinions of the study's panelists represented a sample of Mexico's and the United States' agricultural industries as well as respective extension and academic experts. Therefore, the results should not be generalized to the world's population of similar experts.

Significance of the Study

Economic development involves (a) wealth creation measured in terms such as per capita income, tax base, and gross domestic product [GDP] (Koven & Lyons, 2010; Leigh &

Blakely, 2016); (b) entrepreneurship and job creation; and (c) change in the size of the economy, including qualitative improvement in societal conditions stemming from economic activity. Experts usually stress the importance of social, environmental, and economic dimensions when making investments intended for economic development, yet few programs do this (Hammer & Pivo, 2017).

This gap between *ought* and *is* regarding economic development may be explained by several factors. First, the understanding of economic development could be limited because it is situated in a broader context (Hammer & Pivo, 2017). Research in related areas of administration, planning, and sustainability suggests that community and organization characteristics obstruct the approval and implementation of effective economic development policies due to (a) a weak or incomplete understanding, (b) insufficient capacity of and support by key organizational and political leaders, and (c) low socioeconomic status of the intended beneficiaries (Conroy, 2006; Grodach, 2011; Hammer & Pivo, 2017; Saha, 2009; Saha & Paterson, 2008; Svara, Watt, & Jang, 2013; Wang, Hawkins, & Berman, 2014).

Second, economic development occurs in highly competitive settings in which the impact of important outcomes are beyond the administrative authority's control and success may be minimally defined if at all (Hammer & Pivo, 2017). Furthermore, economic development may be hindered by a lack of coordination and integration among various programs and policies, with current practices frequently at odds with the principles of economic development, and counter-productive social, environmental, and economic trade-offs are deemed mandatory (Hammer & Pivo, 2017). Nonetheless, entrepreneurship is extensively considered as beneficial for development and economic growth (Acs, 2006; Fatusin, 2015). During the past three decades, for instance, in nations that achieved

substantial poverty reduction, entrepreneurship rose remarkably, as in China. Therefore, donors and international development agencies have turned to entrepreneurship to improve the effectiveness and sustainability of aid (Gray, Duncan, Kirkwood, & Walton, 2014; Kury, 2012). Some researchers, however, have provided evidence of an incongruence as it relates to theory versus practice regarding entrepreneurship and the support for such, especially as a lifter of economic prosperity (Gibbs, 2009; Parkhurst, 2017; Zahra, Gedajlovic, Neubaum, & Shulman, 2009).

The results of this study may further our knowledge regarding the achievement of economic development, particularly regarding rural contexts on national, regional, and local scales in developing and developed economies (Hammer & Pivo, 2017). Hidayah, Abdul, and Hamdan (2012) stated: "Sustaining economic growth to provide employment opportunities and further improve the standard of living of the population principally in urban areas is a continued challenge in an increasingly competitive and open economic environment" (p. 813). Rural populations, however, also suffer from many of the same economic maladies as their urban counterparts.

The outcomes of this research study may be appropriate to share with the three actors suggested by Etzkowitz and Leydesdorff (1995), i.e., universities, industries, and governments. The relations between these actors are expected to be a significant component of any innovation strategy whether in local, regional, or global contexts. A nation's competitiveness depends on the capacity of its industry to innovate and upgrade (Porter, 1990), including in the agricultural sector, and, perhaps, with special relevance to and meaning for the rural poor. Therefore, the viability of micro and smallholder farmers producing specialty crops for luxury niche markets warranted investigation.

Operational Terms and Definitions

Agribusiness - constitutes any managerial and business activities executed by organizations that provide inputs for the agricultural sector, e.g., distribution, financial, handling, manufacturing, marketing, producing, processing, retailing, or transporting of farm products (Edwards & Shultz, 2005). In addition, it has an explicit interdependence with numerous sectors in the agri-food products and services value and/or supply chains (Ng & Siebert, 2009).

Agricultural industry - is not only the activity of processing agricultural products into higher value-added processed products, but also includes the changes in value systems and cultural economic development with a more comprehensive policy strategy (Srinita, 2017).

Barriers to entry - are advantages that incumbents have relative to new entrants regarding a particular market sphere. Seven major obstacles exist: supply-side economies of scale, demand-side benefits of scale, customer switching costs, capital requirements, incumbency advantages independent of size, unequal access to distribution channels, and restrictive government policy (Porter, 2008).

Competitive advantage - refers to a firm's capacity to achieve greater performance than its competitors (Porter, 1990).

Consensus of agreement - the trend to converge in compliance with a specific theme determined by statistical agreement among the members of a cluster or group (McKenna, 1994).

Delphi technique - is an accepted method for achieving convergence of opinion concerning real-world knowledge solicited from experts about certain topics or issues (Dalkey, 1969). The method was designed as a group communication process that aims at conducting detailed examinations and discussions of a specific issue for the purpose of goal setting, policy investigation, or predicting the occurrence of future events (Ludwig, 1997).

Economic development - is concerned with quality improvements, the introduction of new goods and services, risk mitigation and the dynamics of innovation and entrepreneurship. Economic development is about positioning the economy on a higher growth trajectory (Feldman, Hadjimichael, Lanahan, & Kemeny, 2016).

Efficiency - is the measure of how successful a firm is at producing as large as possible output from a given set of inputs (Farrell, 1957).

Entrepreneur - is an individual who possesses a collection of particular characteristics and a personality that prompts activities needed to create organizations (Gartner, 1988), including business ventures. In addition, McKenzie, Ugbah, & Smothers (2007) stated that the concept of entrepreneurship can be applied to disciplines different from business when studying diverse phenomena.

Expert - is an individual who has a wide understanding of a certain area based on their knowledge or skill as derived through related experience (Goodman, 1987). Therefore, experts must possess reliable knowledge on a professional level (Linstone & Turoff, 1975).

High-income countries - nations whose citizens earn annually incomes of $12,536 or more GNI per capita as measured in USD (World Bank, 2020).

High-value crops - are non-traditional produce, for example, condiments, flowers, foliage, fruits, houseplants, spices, and vegetables (Temu & Temu, 2005).

Human capital - refers to the investments made by individuals in education, health, and migration to gain experience, knowledge, skills, and to take advantage of better job opportunities, and such behaviors are usually intended to increase their economic value (Schultz, 1961).

Innovation - is a concept, idea, process, or product perceived as new by a person or another unit of adoption. Innovation presents new alternative(s) to an individual or a corporation, with novel strategies of problem-solving (Rogers, 2003). Innovation also may be the result of happenstance and serendipity (Macdonald, Assimakopoulos, & Anderson, 2007).

Low-income countries - nations whose citizens earn annually $1,035 or less GNI per capita as measured in USD (World Bank, 2020).

Lower middle-income countries - nations whose citizens earn annually from $1,036 to $4,045 GNI per capita as measured in USD (World Bank, 2020).

Luxury products - "have more than necessary and ordinary characteristics compared to other products of their category, which include their relatively high level of price, quality, aesthetics, rarity, extraordinarity, and symbolic meaning" (Heine & Phan, 2011, p. 112).

Mexico - an upper-middle-income nation in the North American continent (World Bank, 2020); the economic differences among its population are significant (Fuentes & Rojas, 2001). More than one-half of its inhabitants are affected by poverty (Fernández-Ramos, Garcia-Guerra, Garza-Rodriguez, & Morales-Ramirez, 2016; Gómez-Pompa & Kaus, 1999).

Micro and Small Enterprises (MSEs) - are businesses that have one to 10 employees and annual revenues up to 4,000,000.00 Mexican pesos (approximately $200,000.00 USD); and businesses are considered small if 11 to 30 employees are working in trade, or 11 to 50 if the employees are working in industry or in services (Official Journal of the Federation, 2002).

Niche market - regarding strategic planning, is a marketing space representing a specific need, or consumer desire for a particular product, and/or the purchasing preferences of delineated demographic groups or geographic segments (Teplensky, Kimberly, & Sandford, 1993).

Ornamental plants - are also referred to as garden plants, and typically grown for decorative purposes, for cut flowers, as house plants in gardens, landscape design projects, and specimen displays (Agyekum, 2010; Amingad & Lakshmipathy, 2014).

Quality of life - is a multidimensional concept that can be categorized within five dimensions: physical wellbeing, material wellbeing, social wellbeing, emotional wellbeing, and development and activity (Felce & Perry, 1995).

Smallholder farmer - smallholder farm sizes in many countries are significantly smaller than two hectares (approximately five acres); for Latin American countries, however, smallholder farms may be more than two hectares, but seldom are larger than five hectares (approximately 12 acres) [FAO, 2015]. (*Note*. For the purpose of this study, due to the variant usage found in much of the relevant literature, the terms "smallholder farmer [or producer]" and "micro and small enterprise [or entrepreneur]" were used interchangeably.)

Specialty produce - are "fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture" (USDA, 2019, p. 1). Horticultural crops such as fruits, vegetables, tree nuts, nursery crops and floricultural crops are also classified as specialty crops, according to the United States Department of Agriculture [USDA] (2019).

Standard of living - is the entirety of the concrete living situations of individuals, and the grade of happiness of their physical and social requirements based on imputable belongings and services (Wawrzyniak, 2016).

Strategic planning - is a series of actions a firm initiates to establish an alignment of approaches to achieve specific goals (May, 2010; Porter, 1996; Radnor, Kennerley, Tapinos, Dysin, & Meadows, 2005).

SWOT analysis - the strengths, weaknesses, opportunities, and threats (SWOT) approach has been used extensively as a tool for strategic analysis and planning (Helms & Nixon, 2010) by a wide variety of organizations and agencies and is associated frequently with the management sciences.

Upper middle-income countries - nations whose citizens earn annually from $4,046 to $12,535 GNI per capita as measured in USD (World Bank, 2020).

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter's purpose is to provide a review of the literature supporting the study. This review explores the linkages between relevant theories and concepts, and the background and critiques of such, especially regarding rural economic development to mitigate poverty. The chapter is divided into eight sections: (1) Conceptual Framework: Economic Development Theory; (2) Theoretical Framework: Human Capital Theory; (3) Poverty and Entrepreneurship; (4) Strategic Planning; (5) Niche Market Theory; (6) Luxury Markets and Specialty Crops; (7) The Delphi Method as a Research Tool; and (8) Summary.

Conceptual Framework: Economic Development Theory

Economic development occurs in urban and rural contexts, at national, regional, and local levels, for developing and developed economies (Hammer & Pivo, 2017). Hidayah, Abdul, and Hamdan (2012) stated: "Sustaining economic growth to provide employment opportunities and further improve the standard of living of the population especially in urban areas is a continued challenge in an increasingly competitive and open economic environment" (p. 813). Koven and Lyons (2010) and Leigh and Blakely (2016) asserted that economic development could be measured in terms of wealth creation, such as per capita income, jobs, GDP, and tax base. Forces exist that increase or stimulate economic development, such as improvement in production organization, capital accumulation, importation and assimilation of technology, and education (Fei & Ranis, 1967).

Economic development is perceived as the elementary funding of capital accumulation, growth, and liveliness of a region (Bekaert, Harvey, & Lundblad, 2001; Harvey, 1985; Molotch, 1976). Studies have aimed to comprehend irregular development, i.e., explicitly examining processes by which some regions achieve growth and wealth while others regions do not (Storper, 2011; Storper & Scott, 2009; Suire & Vicente, 2009). Arguments emphasize the proper role of the government, the need for lasting innovation, the role of human capital, agglomeration and clustering, and spatial analysis (Glaeser, Porta, Lopez, & Shleifer, 2004; Lucas, 1986; Marshall, 1890; Mathur, 1999; Porter, 2000; Rosenberg & Frischtak, 1983; Schumpeter, 1976; Tiebout, 1956).

Early human civilizations had a modest capital stock mostly entailing hand-crafted tools and clothing by fabricating a scarce residual (Bashota & Hasanaj, 2012).

Around 10,000 years ago agriculture was discovered, and, at that point, the progression of development became continuous (Bashota & Hasanaj, 2012). The main growth features remained and funded the establishment of an economic surplus, so more affluence was accumulated while global population was increasing (Bashota & Hasanaj, 2012). The process of gathering wealth sped up the Industrial Revolution which was created from the development and use of machinery and related technological advances (Bashota & Hasanaj, 2012; Zaman, 2013); however, this industrialization process occurred in disproportional ways among diverse world regions (Bashota & Hasanaj, 2012; De Nardi, 2004). A constant concern of some experts was the rise of overpopulation around the world sometimes called Malthusian's world (Ashraf & Galor, 2011). Studies suggest, however, that technology advanced in concert with population growth, permitting the production of higher amounts of food and other sustaining resources over time (Pingali, 2012).

Classical economics specifies that a nation's wealth can be measured by the quantity and quality of its productive resources, i.e., human resources, natural resources, and material resources, as developed by the labor of its citizens (Arrow, Dasgupta, Goulder, Mumford, & Oleson, 2012). In developing nations, unemployment is mainly due to scarcity of capital and not to deficiency in aggregate demand for goods, as might be assumed (Fei & Ranis, 1967). Innovation plays an important role regarding changes to labor productivity because it affects the relationship of such to economic growth (Zhai, Ding, & Wang, 2018).

Economic development is essentially a theoretical study with real effects (Currid-Halkett & Stolarick, 2011). It is assumed to be the result of wealth generation leading to

job creation (Green & Blakely, 2013; Leigh & Blakely, 2016). Despite the accepted research in the field, these schemes of economic development persist as vague or great indefinites that continue to stimulate scholarly debates (Currid-Halkett & Stolarick, 2011). A large part of development is a mixture of first-mover advantage, initial benefactions, unintended innovations, and path reliance (Allen, 2009; Goldstone, 1998; Krugman, 1991). The attainment of growth, jobs, labor pools, and outputs of effective development seem to vary and be driven by diverse industries and dissimilar locations depending on context and era (Kmec & Skaggs, 2014). Academic and practical considerations remain regarding the explicit mechanisms and constructs that may guide economic growth (Currid-Halkett & Stolarick, 2011).

The cross-national disparity in economic growth rates cannot be sufficiently explained by cultural factors alone (Dellink, Chateau, Lanzi, & Magné, 2017; Granato, Inglehart & Leblang, 1996). All economies are impacted by significant variations in growth rates, as a consequence of temporary aspects, e.g., unintended consequences or technological shocks that affect production (Dellink et al., 2017; Granato et al., 1996). Gradually changing cultural factors could not be attributed to variations in economic productivity between nations or regions, according to Dellink et al. (2017) and Granato et al. (1996). Culture includes shared values and norms that help in shaping behaviors of individuals populating a given society (Linnenluecke & Griffiths, 2010). In preindustrial civilizations, this value scheme can be seen as religion or other forms of spirituality and may change slowly; nevertheless, if industrialized civilizations are influenced by modernization, individuals' worldviews tend to transition into being more open to change, more secular, and more rational (Dellink et al., 2017; Granato et al., 1996).

The Role of Micro and Small Business Enterprises (MSEs) in Economic Development

Microbusinesses can affect economic development but some think they do not do enough to have significant economic impact. However, Muske, Woods, Swinney, and Ling (2007) opined that "[t]he lack of attention to microbusinesses often stem from a perception they generate little in terms of jobs and dollars for the community's economic engine" (para. 1). In this regard, Rodríguez, Braak, and Watson (2011) suggested the need exists for tools to determine how to account for such in the context of community economic development. Kirk, Allen, and Shideler (2014) stated that one useful tool is economic activity analysis. Kirk et al. (2014) asserted that using data from this method is one way a manager can make contrasts between public investments and supplementary extension enterprises, estimate the return-on-investment of enterprises, and eventually execute policy decisions. In a similar way, Hanagriff, Murphy, Roberts, and Lindner (2010) described the impact analysis for planning (IMPLAN) model as another method to measure economic impact and how this technique calculates approximations of extra financial profits from straight expenses in specific regions.

Micro and small enterprises (MSEs) are known as a critical source of employment and incomes in developing nations (Mead & Liedholm, 1998). If these types of enterprises grow and prosper, that can contribute in significant ways to economic growth and poverty mitigation (Mano, Iddrisu, & Yoshino, 2012). Nevertheless, the productivity of MSEs is generally low, and their sizes and reach often remain small (Mead & Liedholm, 1998; Tybout, 2000). For example, smallholder farm sizes in many countries are significantly smaller than two hectares; however, in Latin American countries,

smallholder farms may be more than two hectares but are seldom larger than five hectares (FAO, 2015).

The idea of starting a venture such as a smallholder farm should emanate from the expressed necessity of a particular product or service, either because companies are not meeting the demand or no such offering exists currently in the market (Fleitman, 2000; Swanson, 2006). As such, Soto and Dolan (2003) stated that succeeding in finding market segments or niche markets is the key to successfully creating new enterprises. However, in the case of agricultural start-ups, many decisions must be made, such as what to plant; what inputs to use and how to use them; when to plow, to plant, and to harvest; how much to keep for consumption if growing food crops or how much to sell to raise cash; and also how much to store (FAO, 2015).

The Case of Mexico

In Mexico, the Secretariat of Economy developed a classification in which microenterprises are businesses that have one to 10 employees and annual revenues up to 4,000,000.00 Mexican pesos (approximately $200,000.00 USD); businesses are considered small if 11 to 30 are working or engaging in trade, or 11 to 50, if the employees are working in industry or in services (Official Journal of the Federation, 2002). In several areas of Mexico, government programs have been established to offer and deliver economic resources for the creation or improvement of MSEs. These programs intend to stimulate agricultural enterprises to reduce the marginalization and poverty of rural Mexicans in particular (Espinoza, Figueroa, & Sánchez, 2014). The aims of such are to identify investment opportunities, to allocate public resources to promote

productive projects, as well as to provide technical assistance and training for legal support, project design, and advice for organizing the ventures (Espinoza et al., 2014).

Theoretical Framework: Human Capital Theory

Human capital, at its most essential level, measures an employee's quality based on the idea that human intellect and the skilling of labor are the drivers of economic growth (Krutova, 2015; Luckstead, Choi, Devadoss, & Mittelhammer, 2014). A phenomenon related to human capital theory, which has caused considerable awareness of the impact it can have in both the private and public sectors, is labor force training to improve workers' competitiveness, economic development, employment opportunities, job productivity, and social welfare (Fernández, Sanzo, & Trespalacios, 1999; Zvarych, 2018). The impact of having proper educational and professional training of a nation's workforce to compete in markets that are increasingly demanding, dynamic, global, segmented, and sophisticated seems undeniable (Fernández et al., 1999; Loubet & Morales, 2015; Sánches & Ríos, 2011). Companies need to adjust their flexibility and outputs to meet customers' shifting demands; this requires that workers upgrade their skillsets and acquire new knowledge to meet the emerging demands (Fernández et al., 1999; Loubet & Morales, 2015; Luţ, 2017). Moreover, the importance of training intensifies during periods of rapid technological change (Griliches, 1997).

Small businesses can play a crucial role in a nation's economic growth, including strategies to decrease unemployment by having strong local and regional relations and identification, as well as an innovative, job-creating, and flexible positions capable of satisfying constantly changing market demands (Koens & Thomas, 2015; Zvarych, 2018). Research on the needs of small enterprises stresses the importance of suitable

policies supporting improved training, management, and information for the development and competitiveness of such (Moreno & de Haro, 1995; Zvarych, 2018). Training is considered an investment in human capital (Loubet & Morales, 2015; Luţ, 2017). Human capital theory suggests that investments in training stimulate a rise in workers' productivity that leads to an increase in their respective incomes (Loubet & Morales, 2015; Varela & Retamoza, 2012).

Human capital development as an investment is any action focused on increasing workers' efficiency (Becker, 1993; Loubet & Morales, 2015). A significant element of human capital improvement involves the acquisition of training and knowledge by a person that raises his or her competence for executing activities with economic value (Milgrom & Roberts, 1993; Stiles & Kulvisaechana, 2003). Ehrenberg and Smith (2016) suggested that training investments occur in three phases: 1) early childhood; 2) youth and early adulthood; and 3) adulthood during which by being employed and working, people have opportunities to benefit from training programs.

In addition, human capital theory states that investing in people should provide economic benefits for both individuals and society (Sweetland, 1996). The principal benefits for people are higher lifetime earnings, improved health, increased occupational and social status, lesser likelihood of unemployment, and a rewarding work environment (Pandey & Kim, 2008; Perna, 2005). Likewise, some benefits to society are economic growth and an educated citizenry, among other prosocial factors (Pratt, Hillier, & Mace, 1999; Sweetland, 1996). A significant part of the study of human capital theory has been dedicated to the benefits derived from increased earnings; although several benefits are related to education, many studies have established that a positive relationship exists

between education and earnings (Becker, 1960; Card, 1999; Cohn & Addison, 1998; Krueger & Lindahl, 2001; Loubet & Morales, 2015; Mincer, 1958; Perna, 2005; Varela & Retamoza, 2012). A boosted efficiency provided by more education, especially related to literacy and analytic skills, is likely to enhance a person's income (Hong & Pandey, 2007). Individuals often consider that by achieving a level of post-secondary education, their chances of having successful careers will significantly expand (Hart & Livingstone, 2009). Even though underemployment remains a significant factor for the global economy, the individual workers, and the governmental agencies concerned with national economies, including the provision of additional education and training, still holds the potential of higher incomes (Knapp & Harms, 2002).

Human capital theory asserts that rational decisions are made by individuals about their needs to investment in themselves (Becker, 1975). The workforce members are expected to perform a cost-benefit analysis to forecast whether the anticipated incremental benefits arising from such investments counterbalance the related costs before deciding to devote their own resources to self-development (Becker, 1975). These costs may involve school attendance to achieve formal education, including fees, books, and tuition (Perna 2005). Other costs include the likelihood of diminished earnings and leisure time in the short-term (Becker 1993; Perna 2005). The two categories of training in human capital theory are *general training* ostensibly valuable to many firms and the acquisition of *specific training* of value to a particular firm (Becker 1975). In traditional human capital theory, employers are resistant to investing in general education, because if the worker elects to abandon the firm, enterprises will not be able to derive benefits from that form of investment (Becker 1975). Even so, studies have found value to the firm and

to the individual if investments are made in a worker's general education (Acemogul & Pischke, 1999; Kessler & Lulfesmann, 2006). As a consequence, individuals with additional general training are acknowledged as extra valuable assets for organizations (Kessler & Lulfesmann 2006).

As an overall postulation, the improvement of employees' human capital to perspective business owners increases the likelihood of their MSEs surviving and perhaps thriving (Brüderl, Preisendörfer, & Ziegler, 1992). Human capital factors, such as a person's education, experiences in an industry, or practice of the related decision-making processes, were frequently found to be significant in large-scale studies (Brüderl et al., 1992). Human capital theory also proposes that people and societies invest in education, job training, improved health, information, or even migration in anticipation of reaping an extensive range of benefits; moreover, studies have identified the economic reward of improved incomes for individuals and nations making such investments (Mincer, 1974). Therefore, the enhancement of a labor force's quality should result in higher productivity per employee for a given level of capital investment. Luckstead et al. (2014) posited that a nation's continual gross domestic product (GDP) growth can be attained through constant improvements in its human capital.

After investments in improving human performance are taken into account, it is easier to understand economic development (Schultz, 1961). Each society member is a microcosm of human potential or capital, i.e., a collection of capacities, energies, and aspirations. If these capacities and energies are organized and directed, a person is poised to translate his or her potential, i.e., human capital, into higher productivity (Slaus, Jacobs, & Giarini, 2012). Moreover, different dimensions of human capital exist. Level

of education is widely considered a reliable indicator of the quality of human capital in a society, even though people are restricted by their lifetimes regarding the expansion of their capabilities. This limitation, however, is extended by the exchange of intergenerational knowledge, especially if coupled with desires for continued learning by a society's members (Luckstead et al., 2014). Krutova (2015) stated that the central link of the economy is the person, as a consumer or as a producer; therefore, it is reasonable to assume that for the study of economics, human capital theory is a fundamental and pervasive concept. The often-repeated refrain that *people are the most important resource of a company* relates to the success of any organization, i.e., implying its effectiveness due to employees supporting the business by creating added value and optimizing processes leading to desirable outcomes (Canning & Hill, 2012; Ulrich & Brockbank, 2005).

In developing nations, an origin for economic problems is the insufficient production of human capital and knowledge, because potential gains associated with technological change can be diminished due to low levels of such forms of capital accumulation (Mitra, Abubakar, & Sagagi, 2011). The need for properly trained and highly skilled workers is essential today because developing nations meeting global technological demands can be the difference in achieving economic development (Usman & Tasmin, 2015). Therefore, when thinking about poverty reduction, the idea of entrepreneurial activities, such as competitiveness, high-growth firms, innovation, and new venture formation, should arise (Alvarez & Barney, 2014; Mitra et al., 2011). Education in and for entrepreneurship can promote creativity, innovative thinking, learning of new languages, poverty alleviation strategies, self-employment, social skills,

as well as training and technical skills acquisition that may diminish the negative effects of unemployment by providing job opportunities for many individuals (Usman & Tasmin, 2015). Tackling emergent and structural obstacles in the labor market, valuing skilled human capital for economic development and growth, and the creation of livelihood opportunities are key drivers of entrepreneurship (Mitra et al., 2011; Usman & Tasmin, 2015).

Poverty and Entrepreneurship

Entrepreneurship has been found to be a critical element for achieving economic growth and productivity (Baumol, 1993). A sustainable approach to mitigating rural poverty requires further research and curricula intended to promote economic development and growth (Ozgen & Minsky, 2007). Entrepreneurs, performing as market innovators, can play a critical role in economic development (Schumpeter, 1976). However, rural entrepreneurship often transpires in socially and economically marginalized areas with economic stagnation, inadequate infrastructure, as well as low levels of education, income, skilled workers, and sometimes lack a supportive culture for such to occur (Sharma, Chaudhary, Bala, & Chauhan, 2013).

Poverty is actually a broad problem with no easy solutions (Fisk et al., 2016). Each nation has citizens bound in poverty, which led the United Nations to announce that poverty mitigation is the most important Sustainable Development Goal (Lu, Nakicenovic, Visbeck, & Stevance, 2015; United Nations, n.d.). Mitigating poverty, however, is a difficult objective because human society schemes are complex and interrelated (Lavinas, 2015). In addition, individuals suffering poverty are usually also

victims of crime and corruption, which makes this topic more catastrophic and challenging to address (Gutterman, 2017).

The world's population is approaching 8 billion, and of that number about 1.5 billion people still live in extreme poverty earning less than $1.25 a day, and lacking access to basic needs such as energy, food, shelter, and water; about another 1 billion struggle to live in poverty earning less than $2.50 a day (Ravallion, 2013). Therefore, almost one-third of the world's population lives in economic impoverishment (Batana, Bussolo, & Cockburn, 2013). During the last three decades, a considerable number, particularly in China and India, have left poverty behind; however, other countries have not experienced these positive results (Deaton, 2005). In nations such as those of Sub-Saharan Africa, population growth is increasing, life expectancy is shorter, and poverty is more persistent than 35 years ago (Dasgupta, 2013).

Scholars argue about how poverty arises and perseveres in regions where change is difficult due to damaging and self-reinforcing economic, political, and social behaviors (Peterson, 2017). Threshold effects arise when earnings from a business or salaries from a job persist enduringly at subsistence levels and impede the buildup of savings (Dube, 2019). People experiencing poverty in developing countries find it problematic and often luxurious to save (Gindling & Terrell, 2010; Neumark & Wascher, 2007). An insufficient number of banks exist interested in their small savings, and many of the impoverished have more immediate and urgent needs that take priority over saving (Choudhury & Dusuki, 2008; Hiatt & Woodworth, 2006; Hinson, 2011). As a consequence, many living in poverty cannot accumulate enough to finance and expand their productivity (Vandenbroucke & Vleminckx, 2011). If deprived of investment capital, achieving scale

to diminish unit cost of a given enterprise is often an impossible endeavor (Hagenaars & de Vos, 1988). This effect halts the growth of most firms and obliges entrepreneurs in these settings to operate at subsistence levels (Viswanathan, Echambadi, Venugopal, & Sridharan, 2014). When no access to investment capital is the norm or if it is excessively expensive, even the most available entrepreneurial opportunities often go unexploited (Bruton, Filatotchev, Chahine, & Wright, 2010). Therefore, those experiencing poverty need access to capital, but efforts to provide such loans are frequently ineffective, or may push people even further into poverty by trapping them in cycles of debt (Ansari, Munir, & Gregg, 2012; Banerjee & Duflo, 2011; Bruton et al., 2010; Karlan & Zinman, 2011; Khavul & Bruton, 2013; Morduch, 2011).

Naudé (2013) asserted that two significant philosophies prevail in development economics: 1) development involves a structural change of how, what, and where supply and demand occur from low value addition, low productivity activities to extra productive, higher value addition activities and services; or 2) development is a multi-dimensional idea that entails more than mitigating income poverty. Many conceptual approaches have been proffered to understand the root causes of poverty. For instance, Rogers (2003) described the view of *individual-blame bias* which makes individuals solely responsible for their difficulties, instead of attributing their many problems or obstacles, at least, in part, to the system or society they populate. As is often the case, most people living in poverty do not have the income or other monetary assets necessary to access an improved quality of life (Wagler, 2008).

Given the divergent points of view by which poverty is understood, with those concentrating on the physical or material rationales, and others focusing on the results of

a way of life perspective, some scholars have observed that it is imperative to somehow conjoin the two positions (Nolan & Whelan, 1997). In that regard, Harris and Bentzen (1977) analyzed poverty as a *subculture*. They admitted that social learning theory would not sit well with everyone, despite this theory allowing for the manipulation of external variables present in the population studied. On the other hand, Harris and Bentzen (1977) focused on decision-making theory, which asserts that in a poverty context "behavior is rational if it is consistent, transitive and instrumental" (p. 210). This criterion is useful in assessing others' decisions and behaviors under varying circumstances. In the end, the researchers proposed the *poverty cycle*, i.e., the sanction of negative attitudes by the broader culture which creates a negative psycho-social climate for children of the poor (Harris & Bentzen, 1977).

Further, Banerjee and Duflo (2011) represented this cycle with an S-shaped curve in which future income tends to be lower than present income. Banerjee and Duflo (2011) called this the *poverty trap zone*; however, they asserted that a given theory by itself was not sufficient because it is necessary to know which postulation represents the real-world, and, moreover, that each poverty case should be assessed individually. Moreover, Stearns and Hills (1996) discussed the entrepreneurial models and debates between the elements that should be included when considering poverty and its possible solutions, such as the economic system; the entrepreneurial behaviors, opportunities, and innovations; and the social context. For Hayami and Godo (2002), the advancement of the social framework was viewed as a procedure of interactions between the monetary system and the social, institutional subsystem in which the former operates. The monetary system is comprised of actions managing financial assets, e.g., capital, natural resources, and workers'

potential, through innovations to support ventures and deliver products valuable for human living.

For agricultural contexts, more research is needed, but some researchers, such as Rembisz (2010), asserted that effects exist that have economic connotations in the agricultural sector. Some are the disparities of income between non-farm and on-farm labor, and also the intervention evolution for measuring the price supports and market share farmers receive in their daily transactions (Rembisz, 2010).

One tool to increase the prosperity of nations is entrepreneurship, which has produced some positive effects in regions throughout the world (Bruton, Ahlstrom, & Obloj, 2008). This approach, however, has not been sufficiently explored in the development literature because most studies of the phenomenon are done in developed nations (Castaño et al., 2015). Refining the quality of entrepreneurial capacity does not only imply improving the education and skills of entrepreneurs, i.e., their *human capital*, but also capitalizing on the innovative capabilities of entrepreneurs (Galindo & Méndez-Picazo, 2013; Priem, Li, & Carr, 2012). Innovative entrepreneurship is very desirable for development (Galindo & Méndez-Picazo, 2013; Priem et al., 2012). Therefore, economic innovation in developing nations should emphasize entrepreneurship promotion (Naudé, 2010). Entrepreneurs themselves have a greater propensity for innovation in developing contexts than usually documented in the related literature (Nabi, Liñán, Iakovleva, Kolvereid, & Stephan, 2011).

The promotion of innovative entrepreneurship in developing nations frequently encounters difficulties due to a broad lack of sufficient impact evaluations by which to judge what works and what does not (Vossenberg, 2013). Existing assessments do not

typically reflect biases due to unnoticed firm heterogeneity or self-selection of the firms studied (Lopez-Acevedo & Tinajero, 2013). In addition, impact research often does not characterize the effects or outcomes of the interventions, and the deficiency of reliable MSE information makes assessment and cross-country comparisons of programs difficult (Vrgovic, Vidicki, Glassman, & Walton, 2012).

Poverty in Developing Nations, the Case of Mexico

The Mexican economy has had several stages of growth and stability; however, the last period of constant growth stopped in 1982, when the annual rate of growth was 7.00% (Galindo & Bolivar, 2018). During the last 30 years, incomes have only improved for the richest households (Galindo & Bolivar, 2018; Moreno-Brid & Ros, 2009); despite the upsurge in spending to fight poverty, it increased from 44.50% to 46.20% of the Mexican population from 2008 to 2010 (Galindo & Bolivar, 2018). The Mexican states where poverty grew the most were Baja California Sur and Zacatecas by 9.50% and 9.80%, respectively, followed by Colima at 7.30%, and Veracruz's rate which rose 7.00% (Galindo & Bolivar, 2018).

During the 1980s, a rise in absolute poverty occurred in Mexico; this phenomenon was concentrated in rural areas (Mckinley & Alarcón, 1995; Rojas, 2008). Nonetheless, policymakers implemented structural adjustment and stabilization programs, which forced a disproportionately high cost on rural households, especially low-income households (Becerril & Abdulai, 2010). This also negatively impacted the agricultural sector in Mexico (Charlton & Taylor, 2016). As a result, Mexican peasants' and farmers' productive capacity eroded and most failed to match that of their international competitors (Valero-Gil & Valero, 2008). Poverty increased and was concentrated in

rural areas; this trend is consistent with indicators of Mexico's macroeconomic performance (Burstein, 2007; McKinley & Alarcón, 1995; Salcido, 2015).

Rural poverty affects millions of people around the world, and more than 70.00% are located in their nations' rural areas (Martínez, 2010). In Mexico, the most frequent reaction of rural families who face deteriorating living conditions has been to pursue income-earning opportunities outside of agriculture; such are important to the poorest rural families which, on average, earn only 18.00% of their income from farming and livestock production (Barrón & Rello, 2000; Piza, Palacios, Pulido, & Dallos, 2016). This condition is also common among agricultural field-workers in other nations (Barrón & Rello, 2000; Friedrich, 2017).

More than 4 million Mexican households did not have the necessary income to acquire a basic food basket to cover their needs in 2012; 62.00% of the families that experienced food insufficiency were located in rural areas (CONEVAL, 2013). This issue should be a top priority for policymakers focused on reducing extreme and moderate poverty in Mexico, including meeting the urgent economic development needs of the rural sector by adopting an inclusive development strategy (Iniguez-Montiel, 2014; Santiago, 2014). Such a strategy would focus on poverty mitigation as the core engine of Mexico's development while considering all segments of the population, and in particular the agricultural economy (Iniguez-Montiel, 2014).

Education, or human capital development in general, also should be considered a priority, because it is a major determining factor of poverty levels for any nation (Krueger & Malečková, 2003; Latapi & de la Rocha, 1995; Levy & Schady, 2013), including Mexico. A strong relationship has been found between poverty and educational

attainment level, usually accentuated in developing nations where the lower the education level, the higher the probability of a person living in poverty (Krueger & Malečková, 2003; Latapi & de la Rocha, 1995; Levy & Schady, 2013). Not only Mexico, but most Latin American nations are examples of this condition (Levy & Schady, 2013). If focusing on economic and social inequalities, studies on the impact of poverty reduction, pro-growth programs for the poor have shown the importance of policies calibrated to improve their incomes, such as flexible fiscal plans, land reforms, and subsidized human capital formation, among other approaches (Datt & Ravallion, 1992; Deininger & Squire, 1998; Murgai & Ravallion, 2005; Ravallion & Chen, 2003).

Cases exist that may be helpful for developing models appropriate for replication in rural areas, such as the Mexican state of Sinaloa's rise as a leading tomato producer on the international stage (Barrón & Rello, 2000; Flores & Edwards, 2019), and other examples involving training and the provision of production inputs to resource-constrained, smallholder farmers (Buadi, Anaman, & Kwarteng, 2013; Murshed-E-Jahan & Pemsl, 2011). Although commodity farming requires limited labor and is largely mechanized, the accelerated growth of market demand on flower, fruit, and horticultural exports has produced employment opportunities, especially for women in agri-processing plants, greenhouses, and other places along the supply chain, which often display a *feminization of agriculture* (Radel, Schmook, McEvoy, Mendez, & Petrzelka, 2012; Tamang, Paudel, & Shrestha, 2014). However, the required demand in production for these crops could derive from smallholder farmers of both sexes who comprise the core grower group in many developing nations (Anthony & Ferroni, 2012).

Moreover, linkages to markets is also a crucial factor to consider when examining why diverse rural regions in Latin America perform differently and should be acknowledged (Escobal, Favareto, Aguirre, & Ponce, 2015). Even though interdependence with markets alone is not sufficient for achieving sustained economic growth, a consensus suggests that access to markets plays a major role in boosting economic growth in the rural zones of developing nations (Escobal et al., 2015; Swanson, 2006).

Strategic Planning

Strategic planning is recognized by scholars and business leaders as a tool that can benefit any firm to expand and grow over time (Kongolo, 2010). Using a specified strategic planning agenda, micro and small businesses (MSBs) may not remain small, rather some will increase their employees and profits to become medium and, in some cases, large businesses (Skokan, Pawliczek, & Piszczur, 2013). Organizations around the globe progressively embrace strategic planning as a tool to improve their competitiveness (Phillips & Moutinho, 2014; Porter, 1996). Regardless of the promotion of strategic planning as beneficial for increased competitiveness and creating positive change, a scarcity of empirical research exists about strategic planning (Fletcher & Cooper, 1996; Getz, 1983). Although strategic planning was an innovative tool in the 1980s, it has become an orthodox practice (Poister, 2010) or routinized (Rogers, 2003) in many businesses. Strategic planning is an important management tool regarding both for-profit and non-profit organizations in competitive and evolving settings (Liu, Siguaw, & Enz, 2008).

As the world changes, the inconsistency between strategic planning popularity in theory versus in practice is wide (Dibrell, Craig, & Neubaum, 2014). Identifying the reality of this contrast is important for conducting strategic planning research in the future (Dibrell et al., 2014). Strategic planning is focused on determining, defining, and implementing strategic initiatives (Martin, 2014). Strategic planning is a calculated, methodical effort to produce vital conclusions and actions that outline and presage what an entity is, what it does, and why (Arasa & Obonyo, 2012). It can be useful to organizations, intra-organizational roles, inter-organizational networks, or partnerships intended to accomplish explicit functions, i.e., education, emergency services, health, transportation, and so forth, which may extend from local to international contexts (Albrechts, Balducci, & Hillier, 2017; Bryson, Edwards, & Van Slyke, 2018).

Strategic planning can be part of the wider exercise of strategic management that associates planning with implementation on a continuing basis (Ugboro, Obeng, & Spann, 2011). Hence, collaborative strategic planning models have been used for sustainable rural development purposes, and thereby allowing better allocation of natural resources, with a focus on the agricultural sector, which plays an essential role in the development of rural areas (Jurgens, 1993; Nchuchuwe & Adejuwon, 2012).

In for-profit studies, strategic planning is an accepted tool to maximize enterprise efficiency regarding revenue, market share, and other profit outcomes (Hsu, Trappey, Trappey, Hou, & Liu, 2006; Philip, 2007; Schoeffler, Buzzell, & Heany, 1974). Meanwhile, in the public sector, achieving goals alignment, sustainability of efforts, and performance effectiveness are significant motives for practicing strategic planning (Favoreu, Carassus, & Maurel, 2016; Poister, 2010).

A topic that has attracted more attention in strategic planning research is the relationship between strategic planning and organizational performance (Akinyele & Fasogbon, 2010; Jimenez, 2014). Scholars have tried to measure the relationship between performance and planning, which has driven discussions about strategic planning since the 1980s (Gibson & Cassar, 2005). These studies evaluated a traditional link between strategic planning and performance as surrounded by eventualities in the internal organizational setting and its external environment (Whittington & Cailluet, 2008). As such, strategic planning is taken as a progression, including a fixed system of steps starting with the formulation of a strategy, followed by an implementation of such strategy, and classically ending with monitoring and evaluation (Ramaseshan, Ishak, & Kingshott, 2013). Applying such a procedural model, studies have used survey-based metrics of strategic planning, including variables such as mission statements, types of work-environment examinations, formal short-, medium-, and long-term goals and action plans, and the use of planning documents (Andersen, 2004; Bazzaz & Grinyer, 1981; Boyd & Reuning-Elliott, 1998; Hopkins & Hopkins, 1997; Pearce, Freeman, & Robinson, 1987). Additional constructs studied were the integration, coordination, and communication practices as complementary planning results (Feng, Govindan, & Li, 2017; Reid, 2005; Ursulescu & Popa, 2013). If implementing it as an extensive participation scheme, contemporary studies emphasized strategic planning's role as a communicative, integrative tool and a main coordinating instrument for strategic decision-making (Andersen, 2004; Grant, 2003; Jarzabkowski & Balogun, 2009; Spee & Jarzabkowski, 2011).

Strategic planning studies have also focused on the political and societal variables influencing strategy creation (Jarzabkowski & Balogun, 2009). The purpose of this research was to operationalize strategy as a social achievement underpinned by actions made as related to such variables (Albrechts, 2015). By having an official strategic planning scheme, an organization is considered to have a higher probability of achieving efficiency and reaching its objectives (Klatt, Schlaefke, & Moeller, 2011).

Scholars have emphasized how an organization's associates endorse strategic planning, what individuals actually do through the planning stages, and how strategic planning helped to facilitate integrated strategic coordination and the strategy-making process (Arasa & Obonyo, 2012; Bryson, 2010; Spee & Jarzabkowski, 2011). The term *strategy practices* refers to the habits and standards, including material, social, and symbolic paraphernalia, with which strategic planning work is completed (Jarzabkowski & Spee, 2009). The root of such practices and standards have raised the interest of scholars who endorsed the application of a micro-institutional approach for the study of strategic planning as a tactical action (Johnson, Prashantham, Floyd, & Bourque, 2010; Whittington, 2014).

Theorizing the planning exercise as a set of structural practices reveals an improved understanding of such dynamics in planning contexts, how thoughtful actions can lead to modification of planning practices, and the planning process's adaptive potential (Johnson et al., 2010). After theoretical concepts have been established regarding such, large sampling designs can be used to examine the relationships between causes of inactivity following acts of strategic planning and what may be organizational reflexivity (Vrontis, Thrassou, Chebbi, & Yahiaoui, 2012). These associations can be

assessed using secondary data gathered by researching in libraries or employing online search engines, and with primary data gathered through questionnaires or participants' statements that describe constructs in depth and the frequency of variation in planning exercises (Lanza & Moser, 2012).

The relationship between strategic planning and performance, as it mainly pertains to agribusiness, has declined over time (Baker & Leidecker, 2001; Bannikova, Baydakov, & Vaytsekhovskaya, 2015; Ibrahim, 1992; Miles, White, & Munilla, 1997; Wright, 1991). In the view of Boyd and Reuning-Elliot (1998), this was due to the inadequate measurement of the planning variable and that has been a limitation to conducting empirical research. However, regarding findings describing the overall planning of MSEs, the most often reported strategic planning outcomes were annual goals followed closely by long-term goals (Boyd & Reuning-Elliot, 1998). Regarding a prescriptive research approach, Kennedy, Harrison, Kalaitzandonakes, Peterson, and Rindfuss (1997) concluded that firms seeking to improve competitiveness in areas other than raw commodities must develop strategies that communicate benefits to the consumer and uniqueness of the benefits bundle on offer.

Walsh and Lipinski (2009) indicated that in the strategic planning process of marketing, first, an analysis of the current situation of the company is done. This analysis includes internal and external elements. In step two, strategic goals are developed from the analysis of step one. Based on the goals, strategies on how to reach these goals are proposed. The strategies rely on marketing tools of the company used to equip such with actual measures or benchmarks aligned with attainment of the firm's stated goals. And

after all steps are implemented, a *success assessment* should be conducted regarding whether the strategy enabled achievement of the firm's objectives.

Strategic Planning and Luxury Goods

New luxury products diverge from traditional luxury items by being more accessible and affordable because the target customers are different. This phenomenon is referred to as the *democratization of luxury* (Truong, Simmons, McColl, & Kitchen, 2008). However, producers looking to enter luxury markets are required to consider a number of significant strategic implications because a single competitive advantage founded solely on revenue management is scarcely sustainable (Avlonitis & Indounas, 2005). Thus, to position themselves for lasting success, sellers should develop a systematic approach toward the proper integration of brand identity and image with targeted consumers (DelVecchio, 2000; Roy & Banerjee, 2007).

The possibility exists to discover the essential system of *collaborative management* by using a strategic plan, as intended to regulate a local prototype of sustainable competitiveness in economic, environmental, and social terms (Ioppolo, Cucurachi, Salomone, Saija, & Shi, 2016). The implementation of a strategic plan inspires a progression of joint knowledge, which can make it possible to create a new administration that truly reflects the local system and in the long-run may bring economic development (Ioppolo et al., 2016). Such could include MSEs, i.e., smallholder farmers and agribusinesses, producing in the agricultural and food sector.

Gürel and Tat (2017) illustrated the phases of the strategic planning process: 1) shaping a vision, which describes the desired future position of the organization; 2) framing the mission, a long-term purpose of organizational aspirations delimiting what to

avoid in the short-term; 3) defining objectives and concrete goals an organization seeks to achieve; and 4) an external and internal examination, i.e., a SWOT analysis. The external part of the analysis seeks to identify an organization's critical opportunities and threats in its competitive environment, and from the internal analysis an organization can illuminate strengths and weaknesses (Görener, Toker, & Ulucay, 2012). SWOT analysis is one of the simplest and most pragmatic methods widely used to analyze different types of risks, including forecasting fluctuations in markets, the development of firms, and economic outlooks for sectors and regions, among other uncertainties (Chernov, Dorokhov, & Dorokhova, 2016; Párraga, Cancelas, & Flores, 2014).

The SWOT analysis and Delphi method may be used as mutually beneficial tools in the strategic planning process, while SWOT analysis supports the decision-making process, the Delphi method weighs the importance of variables based on the views of experts. Therefore, if integrating such, the evaluation of alternative strategic decisions and the weighting of items can be unified, and may deliver more robust, reliable, and useful results (Hossain & Hossain, 2015; Rehmat, Najma, Mrak, Tika, & Mehtab, 2014; Schmelzenbart, Lettner, Hesser, & Schwarzbauer, 2018).

Niche Market Theory

Concentrated marketing, focused marketing, micro marketing and targeted marketing are used as synonyms for *niche marketing* (Dalgic, 2006). In previous decades, mass markets have fractured into reduced market niches or segments, in which businesses could compete in safer ways while also exploring new sales opportunities (Dalgic & Leeuw, 1994). Niche marketing may be used as a positioning strategy to create a deliberate sales campaign to create business opportunities (Dalgic & Leeuw, 2015). From

a marketing standpoint, the food industry may be an attractive niche for rural entrepreneurs wanting to create a close relationship with consumers (Edwards-Jones et al., 2008).

In the United States and around the world, niche marketing has been an approach applied successfully by several firms (Dalgic & Leeuw, 2015). Despite its rising awareness and growing acceptance, limited research studies have been reported on this topic (Dalgic & Leeuw, 2015). What is new, however, is the amplified variety of markets, technologies enabling new marketing approaches, and the decline of large companies' traditional marketing methods (Toften & Hammervoll, 2010). Niche marketing can be a suitable sales approach in intense and fluctuating settings (Toften & Hammervoll, 2010).

Due to a constant rise in competition, adjustments may occur in markets which can lead to only the strongest firms surviving (Toften & Hammervoll, 2013). In these instances, niche marketing may help companies to endure among the survivors (Toften & Hammervoll, 2013). Firms looking to be profitable and perhaps grow may be required to discover markets that hold some of these attributes:

- appropriate scope to be theoretically lucrative;
- non or minimal competitors, or markets that have been overlooked by other firms;
- growing potential;
- adequate purchasing capacity;
- special products or treatments;
- purchaser goodwill; and
- openings for a firm's entrance due to its superior competence (Kotler, 2003).

In addition, a characteristic of niche markets is that in the early stage such are relatively small but may grow and evolve into larger markets over time (Kotler, 2003; McKeena, 1988).

The awareness of adopting a niche marketing strategy to gain better profits has long been studied by marketing scholars (Claycamp & Massy, 1968; Kotler, 2003) and became recognized as a significant concept in the strategies of business. It was defined by Michael Porter (1986) as one of the basic business approaches. Another definition was provided by Keegan, Moriarty and Duncan (1992), i.e., as a minor market not aided by competing goods. A niche sales space can be a small market containing an individual customer or a limited group of customers with consistent needs or characteristics (Ebben & Johnson, 2005).

Two different approaches are distinguishable in a niche marketing context (Dalgic, 1998). The first is to perceive niche marketing as a phase of segmentation, which takes place in the sequential stages of segmentation, targeting, positioning, and niching (Dalgic, 1998; Keegan et al., 1992). And second is to understand niche marketing as a creative progression which Shani and Chalasani (1992) called nichemanship, meaning "a process of carving out a small part of the market whose needs are not fulfilled. By specialization along the market, customer, product or marketing mix lines, a company can match the unique needs [of such]" (p. 34). Stanton, Etzel, and Walker (2007) provided a broader definition: a process to meet client requests by tailoring products and services for minor markets. In addition, Kotler (2003) described the idea of niche marketing as a form of product specialization.

Another perspective is to define niche marketing as the positioning of a product or service into a profitable but small homogeneous market segment, which was ignored or overlooked by other actors of the same industry (Ojala, 2015). This positioning can be based on the unified concept of marketing that acknowledges the distinctive competencies a company may possess (Efrat & Shoham, 2011; Ojala, 2015). However, five essential elements need to be addressed if an enterprise is willing to venture into a niche market: adherence to the marketing concept, distinctive competencies, positioning, profitability, and small market segments (Efrat & Shoham, 2011).

Other important basics comprising niche markets are long-term relationships with customers and the companies' reputations (Abdullah, Putit, & Teo, 2014). This concept is often known as *relationship marketing* which by definition can be a strategy of marketing that strives to create ongoing connections with customers, whereby the services or products foment unique and ongoing relationships (Keegan et al., 1992). For long-term niche marketing, robust interactions with customers are crucial to success (Parrish, Cassill, & Oxenham, 2006). Therefore, *relationship marketing* is practiced to develop this kind of association (Williams & Chinn, 2010). The approach focuses on trying to shape a relationship founded on the shared benefit of the actors involved (Gummesson & Mele, 2010). The concept is known as a *win/win negotiation* in which the supplier can build an entrance barrier to sustain long-term profitability while deterring potential competitors; in addition, this strategy stimulates customer loyalty to the brand or business (Davis & Davidson 1991; Porter, 2008).

According to McKenna (1988), "niche marketing depends on word-of-mouth references and infrastructure development, a broadening of people in related industries

whose opinions are crucial to the product's success" (p. 91). The customer's awareness of a strong and enduring reputation is the core element of a successful niche marketing strategy (Toften & Hammervoll, 2011; Van Rooij & Lemp, 2010). Shifting customer incentives, new demands, and greater individualization have shaped a multitude of cracked and varied markets contrary to what simple mass marketing did traditionally (Dalgic & Leeuw, 1994; Fiore, Lee, & Kunz, 2004; Honneth, 2004). More differentiation and flexibility are needed to satisfy the demands of these emerging markets (Cannon & St John, 2004; Chang, Yang, Cheng, & Sheu, 2003; Parthasarthy & Sethi, 1992; Shy & Stenbacka, 2008). In today's unevenly market-tailored products, the marketing mix should be suited to the diverse tastes of various clientele (Campbell, 1999; Franke, Keinz, & Steger, 2009; Hobday, 1998).

As an alternative to chasing the whole market or having a large slice of a given market, these businesses target segments, inside segments, or niches (Caragher, 2008; Dalgic & Leeuw, 1994; Parrish et al., 2006). Smaller firms may not partake in monopolies regarding niches, but rather have improved focus and are better equipped to attend to these specific markets, in contrast to big competitors whose processes are more standardized, and because of their scales making little changes can incur high costs (Cooper & Kaplan, 1988; Umble, Haft, & Umble, 2003).

Teplensky, Kimberly, and Sandford (1993) defined a *niche market* in a strategic planning context as the emphasis on a particular need, product, demographic group, or geographic segment. Niche marketing is also considered a competitive strategy (Dalgic, 2006; Kotler, 2003; Parrish et al., 2006), and it may be proposed as a practical approach for small enterprises (Dimara, Petrou, & Skuras, 2003; Ilbery & Kneafsey, 1999; Maye &

Ilbery, 2006). “Niche markets are an attractive opportunity available to small businesses forced to compete against the scale economies that larger competitors can achieve” (Thilmany, 2008, p. 1-1).

Thilmany (2008) posited five stages to address opportunities in niche markets, especially regarding agricultural enterprises: 1) strategic planning, 2) defining the mission and objectives, 3) strategies and actions, 4) monitoring key projects and objectives, and 5) organizational realignment. These stages support the idea of how niche markets can create competitive advantages for producers, meaning that this strategy, if well-applied, may contribute to overcoming problems such as lower profit margins (Thilmany, 2008). However, Dalgic (2006) asserted that no constant or pervasive definition was to be found for niche markets. For example, some authors identified niche marketing mainly as a defensive approach, and it was effective only after a firm had decreased competition in a given market space (Dalgic, 2006; Hezar, Dalgic, Phelan, & Knight, 2006; Ries & Trout, 1986). Niche markets are also conceptualized as a strategy for businesses to achieve stable market positions through strong relationships with their customers, growth, and the maintenance of barriers to entry by competitors due to unique product types and innovations (Hezar et al., 2006).

Parrish et al. (2006) concluded that one advantage of niche marketing is the firm having a smaller client base, and, therefore, it can identify customers in superior ways. By doing this, the company is likely to be positioned better to satisfy customers’ needs, build brand loyalty, and potentially stimulate additional sales. In other words, “there are opportunities for producers to build relatively stable networks with [the] final consumers” (Ilbery & Kneafsey, 1999, p. 2213) in niche markets.

Likewise, the creation of networks with intermediaries and consumers would likely function as a barrier to the entry of transnational firms (Dimara, Petrou, & Skuras, 2003; IIbery & Kneafsey, 1999; Maye & Ilbery, 2006; Murdoch, 1995). This approach is theoretically superior if grounded in the principles of differentiation and customer service, i.e., the business must be different in ways deemed important by the customer; a successful approach is to concentrate on one or two parts of the market in which the firm can excel (Kotler, 2003). Hitt, Ireland, and Hoskisson (1999) explained that in the competitive space, firms must become experts in identifying differences among customers' needs and market choices, as profitable positions arise. A niche strategy is similarly useful when a venture can approach the opportunity in a different way than its competitors, and customer service is provided to create barriers to market entry by other firms (Dalgic, 2006). And another niche marketing recommendation is that firms choose strategies to improve their opportunities to enter market spaces while evading competition and searching for survival (Jain, 2005). Further, niche markets may be *attractive* depending on the segment's attributes and overall size or capacity.

However, Porter (1986) suggested *attractiveness* is determined by five forces of competition that account for all parts of the value chain: bargaining power of customers, bargaining power of suppliers, barriers to entry, intensity of rivalry among existing competitors, and the threat of substitutes (see Figure 1). Small businesses are frequently motivated to implement niche strategies to compete, and this approach may be the best fit for those enterprises (Dalgic & Leeuw, 1994; Oviatt & McDougal, 1994). Such businesses are observed to be elastic, adaptive, and receptive to the market (Lyles, Baird, Orris, & Kuratko, 1993; Rice & Hamilton, 1979; Sexton & Van Auken, 1982). However,

the need for strategic management still exists to take advantage of the elasticity, adaptability, and receptivity of a given niche market, including that which may demand specialty agricultural products.

Figure 1. Porter's five competitive forces model. Adapted from "The five competitive forces that shape strategy" (Porter, 2008, p. 27).

Luxury Markets and Specialty Crops

A constant progression has been taking place worldwide by which wealthy individuals are becoming wealthier; the refrain that *the rich get richer and the poor get poorer* appears to illustrate much of today's economy (Jiang & Probst, 2017). Nevertheless, luxury is no longer exclusively the realm of kings and queens, but rather an everyday marketing phenomenon (Yeoman & McMahon-Beattie, 2006). Over the centuries, luxurious tastes and the experiences of luxury were aligned with elitism, domination, and prosperity, and manifested by a few individuals embracing what were usually non-necessities (Brun et al., 2008). The very definition of luxury, beginning in

Roman times, was derived from a semantic mixture of the words *luxus*, meaning pomp, magnificence, and splendor, but also sensuality, and the cognate *luxuria*, implying riot, excess, and extravagance (Chandon, Laurent, & Valette-Florence, 2016; McNeil & Riello, 2016). Yeoman and McMahon-Beattie (2006) opined that a public display of luxury projected the esteem, status, and anxiety associated with materialism and was the purpose of acquiring such extravagance (Yeoman & McMahon-Beattie, 2006). Luxury products can range from long-term retained goods, e.g., jewelry, real estate, and watches, to more short-term products, including service and experience goods, such as alcohol, food, hotel stays, and travel, for which the use or display of particular brands may bring prestige to owners apart from any functional utility (Chandon et al., 2016; Vigneron & Johnson, 2004).

D'Arpizio and Levato (2018) asserted that a positive trend across all the world's regions was set to drive the luxury goods market higher by 6% to 8% at constant exchange rates in 2018 to reach 276 to 281 billion euros, or more than $300 billion USD. The traditional main markets for this category of products are consumers in the United States and Europe; in Asia, however, luxury providers focus more on the materialism and exclusivity associated with high-worth individuals (Gao, Norton, Zhang, & Kin-man, 2009; Yeoman, 2014).

Luxury goods are typically categorized as rare, unique, uncommon, or controlled by sumptuary laws (Hauck & Stanforth, 2007; Lynn, 1991). Luxury is intrinsically linked to products whose supply is small and have significant access limitations, which places such exclusively inside the realm of the privileged elite of a society (Nueno & Quelch,

1998). Traditional or old-fashioned luxury was synonymous with the practices and proclivities of the rich (Kovesi, 2015).

Luxury, however, as a concept, is very malleable and has undergone vast changes across cultures and over time (Hennigs, Wiedmann, Klarmann, & Behrens, 2015). At some point in history, it was associated with caviar, champagne, designer clothes, feasts, and sports cars. Nowadays, with economic prosperity having increased overall, luxury is less of a class-based distinction and no longer reserved solely for the elite (Plażyk, 2015). New generations enjoy material comfort in fuller ways than their ancestors as personal gratification and fulfillment through experience has become an emerging cultural trend (Yeoman & McMahon-Beattie, 2018). As a consequence, it may be that luxury, as previously defined by only monetary value or expensiveness, is progressively becoming more about authenticity and experiences (Yeoman, 2011). Consumers are more ambitious; they demand more of themselves and their living styles, mostly with respect to holidays and leisure times (Williams, Page, Petrosky, & Hernandez, 2010). However, this does not mean luxury is not about status, but rather that it goes beyond economic worth; the two conditions are undeniably intertwined (Han, Nunes, & Drèze, 2010).

The significance of this is that customers are looking to progress in their existence (Yeoman, 2011). An interesting phenomenon occurring in the last few decades is the *feminisation of luxury*, i.e., masculine status symbols and trophies have been replaced by experiences and indulgences (Stokburger-Sauer & Teichmann, 2013; Yeoman & McMahon-Beattie, 2014). Perhaps this can be attributed to the increasing buying power that women have in society, impacting luxury markets such as food, clothes, tourism, and actions to enhance their perceptions of well-being (Stokburger-Sauer & Teichmann,

2013). Such has exposed openings for the development of new products as improved access whets people's cravings for choice and diversity. As individuals experience new worlds, they try to recreate such in their own lives (Kapferer & Bastien, 2009). This trend is part of the increasingly multicultural variety of luxury products including food, because gastronomy has emerged as the new luxury industry (Lindgreen & Hingley, 2016; Winterhalter, 2011).

In accord, luxury has become much harder to describe because its language of expression is changing; today, luxury is neither a need nor inevitably expensive (Han, Nunes, & Drèze, 2010; Yeoman & McMahon-Beattie, 2006). Nevertheless, the ancient luxury world of elitism, extravagance, and expensiveness still prevails in many contexts (Yeoman & McMahon-Beattie, 2018). A supporting reason for luxury markets is the income-based approach. According to this theory, consumers ostentatiously display their wealth based on the prices paid for purchases (Durvasula & Lysonski, 2010; Sundie et al., 2011). Meanwhile, a major contributor to wealth is income, and price disparity has been used to classify and outline the foundations of some luxury products (O'Cass & McEwen, 2004). For these reasons, an interesting hypothesis may be that income plays a dominant role in this market segment (Hennigs et al., 2012). The higher an individual's income, the greater his or her tendency to acquire luxury goods (Wang & Tong, 2017).

A significant increase in demand for products with perceived hedonistic values such as food enjoyment has occurred, and customers' desires or preferences for sustainability, quality, and authenticity have also spiked (Hartmann, Nitzko, & Spiller, 2016). In conjunction, when many consumers are making these types of buying decisions, lower prices are becoming less relevant to some (Page, 2006). Based on the

rise of disposable income, consumers are starting to trade up, and *luxurification* has become commonplace for the middle class (Twitchell, 2003). Likewise, living standards have been growing at constant rates, and it is anticipated that will continue (Tran, 2015). This additional income has augmented consumers' expenditures on leisure (Dalgaard & Strulik, 2017).

Entrepreneurship has had a big impact on the supply-side of luxury; it shifts market dynamics by increasing access to flexible supply-chain networks, retailing, and global resources (Cao, Navare, & Jin, 2018). More consumers have ascended to appreciate and desire exotic holidays and better-quality products, especially for the gastronomic market (Chossat & Gergaud, 2003; Yeoman & McMahon-Beattie, 2006). These shifts in travel include an increase in vacations to agritourism locations with rich cultural heritages and beautiful landscapes, which may, thereby, aid local food producers in sales and future marketing opportunities (Kalenjuk, 2011; Pesonen & Komppula, 2010). In a similar way, consumers have *traded-up* for such goods as food, cosmetics, and pet supplies to name a few examples (Klompmaker, Hughes, & Haley, 1976).

This *trading-up* includes consumers aspiring for and seeking to gain admittance to the more elite classes of society (McNeil & Riello, 2016). Examples include products that offer an emotional engagement and constitute the inexpensive versions of goods traditionally bought by the only more affluent consumers (Silverstein & Fiske, 2003). Consumers are *trading-up* to new aspirational luxury products and *trading-down* to services and goods that are not as important in their daily lives (Silverstein & Fiske, 2003). The drivers that affect consumer demand for luxury are influenced by cultural and demographic shifts (Semaan, Lindsay, Williams, & Ashill, 2019).

A consumer's sophistication also influences his or her luxury expenditure profile (Godey et al., 2016). Another very important driver of consumers' desires for luxury is level of education; as they acquire more discerning decision-making tools and become increasingly liberal in lifestyle preferences, their tastes for luxury grows (Tran, 2015). Therefore, educational accomplishment and improved affluence can be indicators of a more experienced and *traveled* consumer compared with earlier generations; this expresses the increasing and associated importance of experiences and fulfillment (Willmott & Nelson, 2005). Consumers are taking more trips and spending more on cruises, and in galleries, libraries, and theatres (Trinh & Lam, 2016). During the last two decades, an extraordinary demand for luxury by an array of consumers worldwide has emerged (Kapferer, 2012). Additional key stimuli punctuate the convenience of luxury services and products in ways other than traditional retail settings, i.e., digital presentations and vicarious experiences via the Internet (Beuckels & Hudders, 2016).

Prior exclusive products and destinations, such as cruises, sophisticated or luxury gastronomy, and resorts, have become more accessible, and the virtual insignia of exclusiveness is increasingly mainstream (Kim, 2018). Gastronomy culture today is an amazingly rich concoction of food systems, incorporating ancient traditions of local people with those that have come from other nations and cultures (Jacoby & Murillo, 2012).

Due to the improved flows of consumption resulting from worldwide economic forces, many of these emergent niches exhibit significant cultural complexity, internal differentiation, and joint entanglement (Craig & Douglas, 2006). Therefore, a growing

need exists to understand the implications of luxury and how consumption behaviors are molded by and within multicultural environments (Shukla, 2011).

Moreover, a remarkable phenomenon has transpired because *sustainable luxury* was once considered antithetical to *sustainability,* as based on respect for the environment and needs of the greater society; whereas, luxurious consumption was seen as inconsiderate and contrary to achieving such aims (Hennigs, Wiedmann, Klarmann, & Behrens, 2013). The value recognition of established endemic and indigenous foods, and their preservation and security, indicates that family farmers may be recouping a lost prestige, that could result in the revival of some rural economies (Jacoby & Murillo, 2012). On the other hand, under the scheme and pressure of not-for-profit organizations and in response to reports giving low ratings to the sustainability of some luxury corporations, many luxury providers now assimilate into their missions, objectives, strategies, and concrete actions the constructs of Corporate Social Responsibility (CSR) and Corporate Environmental Responsibility (CER) [Bendell & Kleanthous 2007; Cervellon, 2013; Dekhili, Achabou, & Alharbi, 2019]. Luxury brands such as Cartier and Piaget, among others, are certified to promote the veneration of ethical, environmental, and social standards (Bendell & Kleanthous 2007; Cervellon, 2013).

As such, many consumers perceive sustainability as harmonized or in balance with luxury, and more so among the affluent (Cervellon, 2013). If the perception of a brand is *making luxury* due to its exquisite craftsmanship and rare materials and that anchors the brand's origin story, e.g., local manufacturing and protection of the environment, the sensation of luxury begins to correspond to sustainability through ethos, commitment in the supply chain, or by introducing eco-collections and eco-lines

(Balconi, Sebastiani, & Angioletti, 2019; Gibson & Seibold, 2014). Consumers may, therefore, assume that luxury brands use their marketing services for good causes and are likely to give back to society and to the environment (Balconi et al., 2019; Gibson & Seibold, 2014). The mottos *not doing harm and doing good*, *for the planet*, and *for the society and the people* exemplify what is meant by *sustainable luxury* (Cervellon & Shammas, 2013).

Luxury goods are more expensive. Moreover, the market may have identified these products as such even though simultaneously considered to be *trivial*, and without any practical benefit over their *non-luxury* counterparts (Sharma, 2015). As such, some producers of luxury goods tend to perceive that their sales come mainly from the upper classes (Han, Nunes, & Drèze, 2010). Companies selling these goods and services should have a simple marketing strategy by which to approach the various niches, and such should account for consumers' motives regarding the acquisition of luxury goods (Gao, Norton, Zhang, & Kin-man, 2009).

Regarding luxury products and services, it is imperative to examine the consumption standards in emerging markets due to the remarkable growth of luxury consumption among consumers (Shukla, 2012). Identifying these customers plays a significant role in niche markets, because satisfying their needs is determinative to participating successfully in such spaces (Garver, 2009; Murray & O'Neill, 2012). Therefore, it is important to be aware of what a product may represent to individuals to have a better understanding of consumers' behaviors toward the particular good or service (Sester, Dacremont, Deroy, & Valentin, 2013).

Agricultural Produce with Implications for Smallholder Farmers Seeking to Target Luxury Niche Markets

Agricultural commodities may be classified as *field crops* such as corn, cotton, rice, soybeans, and wheat, among others, or as *specialty crops*, including arboreal, fruits, nursery, ornamentals, and vegetables, among other examples (Zhang & Wilhelm, 2011). Specialty crops comprise a diverse and wide variety which differ significantly in composition, morphology, and physiology (Ruiz-Altisent et al., 2010; Zhang & Wilhelm, 2011). Hence, it is usual to classify such into different groups according to a specific criteria, e.g., temperate fruits: apple, citrus, grape, peach, and pear, harvested mechanically for processing, or manually for fresh consumption; or tropical fruits, including avocado, banana, mango, and papaya harvested by hand; and nuts or shell fruits which are often machine harvested (Ruiz-Altisent et al., 2010; Zhang & Wilhelm, 2011). In addition, several specialty crops have worldwide prestige, e.g., olives and grapes, which are mostly harvested with high-tech machines and sensors may be used for quality control purposes (Fuks, Weiss, Tepper, & Bar-Oz, 2016; Geman & Kanyinda, 2007).

Vegetables and fruits constitute a larger number of products, and are cultivated in a variety of environments, including greenhouses (Chang et al., 2011; Flores & Edwards, 2019; Gruda, Bisbis, & Tanny, 2019). This includes bell pepper, tomato, and zucchini; green vegetables, e.g., cabbage, lettuce, small greens, and spinach; and ornamentals, such as cut flowers, potted green plants, and potted flowers (Ruiz-Altisent et al., 2010; Zhang & Wilhelm, 2011). Some researchers have asserted that within horticulture, fruit production usually requires more capital, so having access to credit may be important if choosing to grow fruits rather than other specialty crops (Birthal, Joshi, Roy, & Thorat,

2013). Specialty crops comprise an important and expanding percentage of agribusinesses, and researchers have studied the phenomenon as a way to diversify crop portfolios as farmers explore supplementary crops that may help them mitigate risks and increase the likelihood of profitability (Popp & Rudstrom, 2000; Weisensel & Schoney, 1989).

After harvest, specialty crops undergo several phases before reaching the final consumer, i.e., cold-storage, controlled-storage, grading, packaging, pre-sorting, sorting, washing, and wrapping (De Beer & Petersen, 2017; Lurie, 1998). In addition, some specialty crops need different treatments such as applying ripening gases and temperature control, individual wrapping, chopping, and small-bag wrapping, or mashing, e.g., olive oil and wine (Basulto et al., 2009; Shiomi et al., 1996). Ornamental crops represent a large share of the entire output of the specialty crop industry; growing these products is considered an income-generating and lucrative venture (Sharma & Messar, 2017).

Markets demanding specialty crops require high-quality and safe conditions due to these products being edible and perishable (Plastina, Giannakas, & Pick, 2011). Freshness and quality are affected by environmental conditions, handling practices, processing, and time until consumption (De Beer & Petersen, 2017; Lurie, 1998). Therefore, it is crucial to control and monitor each step of the value-addition chain (Basulto et al., 2009; Plastina, Giannakas, & Pick, 2011; Shiomi et al., 1996). In a similar way, floriculture and nursery crops constitute one of the fastest growing specialty crop sectors (Sharma & Messar, 2017). However, producers face increasing competition from alternative markets and, therefore, require new managerial systems (Burks, Schmoldt, & Steiner, 2008; Schimmenti et al., 2013; Sharma, & Messar, 2017). In addition, the

process of nurturing plants to high-quality flowers entails an extremely specific growing environment for each production phase, and time cycles fluctuate significantly among plant conditions and varieties (Kleynhans & Spies, 2011). Furthermore, it is difficult to accurately forecast aesthetic trends and tastes to predict the popularity of varieties by the time plants mature (Schimmenti et al., 2013). These market conditions require growers to develop flexible production plans and increase their capacities to manage risk, which may be daunting challenges for many farmers and beyond their traditional planning processes and abilities (Zhang & Wilhelm, 2011).

On the other hand, food demand growth has been influenced by high-value produce (Hartmann et al., 2017); this trend may encourage farmers to diversify their production schemes (Popp & Rudstrom, 2000; Weisensel & Schoney, 1989). For instance, different cultures have *prestige foods*, which are mainly reserved for special events or illustrious affairs (Jelliffe, 1967). Feast foods are the scarcest, the hardest to acquire, and the most labor-intensive to produce; these include the richest, sweetest, and most succulent foods available (Van der Veen, 2003). Hence, marked differences exist among societies in the types of foods used for special occasions (Garine, 1979; Goody & Goody, 1982). These foods are often the harvest of specialty crops.

For producers to move toward high-value crops involves significant investments, including specific and often expensive inputs for which poor farmers usually do not have sufficient savings or the access to credit needed to exploit such opportunities (Birthal, Joshi, Roy, & Thorat, 2013). In addition, smallholder farmers' capacities for competitiveness may change over time due to varying physical or social capital (Berti & Mulligan, 2016). With the presence of favorable and unfavorable factors, whether

smallholders can diversify to produce high-value crops remains an open question for many (Joshi, Gulati, Birthal, & Tewary, 2004; Rao, Birthal, & Joshi, 2006; Vyas, 1996). It is necessary for potential growers to understand that diversification is fundamentally a dynamic process with land allocation and crop selections evolving over time (Joshi et al., 2004; Rao et al., 2006). The higher investment gestation lags and capital intensity needs for growing these crops seem to deter many smallholder farmers with low investment support and high risk-aversion tendencies from producing specialty crops (Bradshaw, Dolan, & Smit, 2004; Lin, 2011; Rahman, 2009).

Different schemes exist, such as *contract farming* which is defined as any verbal or printed arrangement between producers and agents, including manufacturer organizations, packers, processors, public-sector enterprises, retailers, and wholesalers, among other contracting entities, by which multiple facets of the agricultural production and marketing processes are facilitated (Echánove, 2006; FAO, 1972). Although these arrangements comprise a production process with direct or indirect control and differ from other types of contractual relationships, such as *purchase-sale* agreements and *sharecropping* (Key & Runsten, 1999; Little & Watts, 1994; Raynolds 2000). Other approaches include various types of cooperative groups. Cooperatives, as usually formed and operationalized in development contexts, may be a range of associations, including established farmers' groups, local governments, and entrepreneurs, among other entities (Ito, Bao, & Su, 2012; Mojo, Fischer, & Degefa, 2017). Some agricultural cooperatives are the result of shared actions by farmers and typically operate via a voluntary membership arrangement and an equity-based scheme (Ito, et al., 2012; Mojo et al., 2017). Agricultural cooperatives may help farmers to reduce some market constraints and

imperfections, and, in some cases, improve their productivity and access to new markets (Rao & Qaim, 2011; Verhofstadt & Maertens, 2014).

The Delphi Method as a Research Tool

Through the 1950s, the RAND Corporation directed a study titled *Project DELPHI*, the objective was to attain the most reliable consensus of agreement possible from a group of experts (Dalkey & Helmer, 1963). The study's results identified, from the viewpoint of a Soviet strategic planner, the range of optimal industrial targets in the United States, and estimated the number of atomic bombs needed to destroy such (Linstone & Turoff, 1975). The original study was completed by seven experts who answered five questionnaires delivered at weekly intervals (Dayé, 2018).

Delphi derives from Greek origins, i.e., from the word Delphus, and has connections to the Delphic oracle; therefore, the method is portrayed as a way to forecast future scenarios. Delphi studies have been used to develop and identify the consensus of experts regarding a given topic. As interest has grown in the analysis and usefulness of the data produced by this method, scholars have sought to clarify its conceptual basis and procedures for use (Holey, Feeley, Dixon, & Whittaker, 2007). After its public introduction in the 1960s, the Delphi method has been used in different domains, such as business, education, food, health care, management, and to produce various outcomes, including needs assessment, policy determination, program planning, and resource utilization (Fletcher & Marchildon, 2014; Nielsen & Thangadurai, 2007; Uhl, 1983). However, different views exist regarding methodological issues and approaches, e.g., how to recognize and choose experts, organization of data collection rounds, the opinion

exchange process, and the establishment of validity and reliability, among other concerns (Flanagan, Ashmore, Banks, & MacInnes, 2016; Hsu & Sandford, 2007).

In the beginning, the Delphi method or technique was employed mostly to make predictions or forecasts about a specific topic (Moutinho & Witt, 1995; Preble, 1983). However, its potential for cultivating communication and creating consensus regarding complex problems led to the method being viewed as a robust and reliable decision-making process (Hsu & Sandford, 2007; Loo, 2002; Mcilfatrick & Keeney, 2003; Uhl, 1983). Numerous educational institutions, governmental agencies, and private corporations, such as health care and nursing among other fields, have used the Delphi method to conduct research in which a consensus among experts was sought (Duffield, 1993; Green, 2014; Linstone & Turoff, 1975; Mullen, 2003; Nworie, 2011).

The Delphi technique is a favored approach of many researchers seeking consensus of agreement on a particular issue (Beretta, 1996; Green, Jones, Hughes, & Williams, 1999). Although the Delphi technique has been used in the fields of agriculture, business, defense, and education, studies using the technique in health research, and in particular nursing, are numerous (Addison, 2003; Alexander & Kroposki, 1999; Dailey & Holmberg, 1990; Ilbery, Maye, Kneafsey, Jenkins, & Walkley, 2004; Kaynak, Bloom, & Leibold, 1994; Lofmark & Thorell-Ekstrand, 2004; Mcilfatrick & Keeney, 2003; Volk, 1993). Applications of the Delphi method have occurred worldwide in various sectors and industries (see Appendix A).

The Delphi technique has been accorded a reasonable degree of acceptance by scholars. A review of literature that examined the use of the Delphi technique, as reported in peer-reviewed journals spanning a 33-year period, identified 29 studies that used the

Delphi technique as the main research methodology. These studies included a wide variety of topics, issues, and fields (see Appendix B). Therefore, the researcher, with the advice of his graduate committee, concluded that the Delphi method was an appropriate data collection approach for determining and reporting the consensus of agreement reached by the two groups of panelists who participated in the dissertation research study described here.

Summary

Industries have seen major upheavals in their economic foundations as markets changed drastically over time, including the agricultural and food sector. This review of literature examined issues related and applicable to the potential of growing luxury niche agricultural products for rural economic development in Mexico and in other nations with similar needs. The literature was placed into categories that when associated offer insight intended to address the problem of rural poverty, particularly in developing nations. The themes explored were Economic Development Theory, Human Capital Theory, Poverty and Entrepreneurship, Strategic Planning, Niche Market Theory, Luxury Markets and Specialty Crops, and the Delphi Method as a Research Tool.

The chapter started with the economic development theory, used as the study's conceptual framework, in which wealth creation, i.e., per capita income, GDP, job creation, and tax base expansion can be indicators of a developing economy (Koven & Lyons, 2010; Leigh & Blakely, 2016). Improvement in production organization, capital accumulation, and importation and assimilation of technology are forces that surge or arouse economic development, and are perceived as the basis for prosperity building,

wealth growth, and livelihood improvement of a region (Bekaert et al., 2001; Fei & Ranis, 1967; Harvey, 1985; Molotch, 1976).

Human capital theory proposes investments in workers' training, which may deliver and increase productivity that can lead to higher profits and incomes (Loubet & Morales, 2015; Varela & Retamoza, 2012). Therefore, such has been recognized because of the impact it can have related to labor force competitiveness, economic development, employment, job productivity, and social welfare (Fernández et al., 1999; Zvarych, 2018). Businesses need to have the flexibility to be suppliers for customers' shifting needs and demands; so, improving workers' skill sets and levels of education can assist firms – large and small – in meeting new and emerging market opportunities (Fernández et al., 1999; Loubet & Morales, 2015; Luţ, 2017). It is also key to acknowledge the crucial role that MSEs can play in economic growth and decreasing the unemployment of nations due to their strong and flexible nature to satisfy ever-changing market demands (Koens & Thomas, 2015; Zvarych, 2018). This may include agricultural enterprises (Inwood, 2017; Kuznetsova et al., 2018).

Strategic planning is an important management tool for organizations in highly competitive and dynamic settings (Liu et al., 2008). Strategic planning is a part of the process of strategic management, which connects planning with execution in an ongoing way; it is a recognized instrument for maximizing efficiency in terms of profits, market share, and incomes (Hsu et al., 2006; Philip, 2007; Schoeffler et al., 1974; Ugboro et al., 2011). The use of strategic planning as an instrument to increase competitiveness has been progressively adopted in a wide variety of businesses (Phillips & Moutinho, 2014; Porter, 1996).

The articulated requirements of a specific product or service, either because no such offering exists currently in the market or firms are not meeting the demand, should be the drivers of starting a venture, including smallholder farms and agribusinesses (Fleitman, 2000; Swanson, 2006). Thereby, a positioning strategy that can be used by these ventures is the niche marketing approach to generate a careful and focused promotion and sales rationale, as well as the process to pursue potential agribusiness opportunities (Dalgic & Leeuw, 2015). Niche marketing can be an appropriate scheme to apply in intensely shifting economic conditions (Toften & Hammervoll, 2010). Targeting business niches is an alternative to rushing toward the whole market, or trying to capture a large slice of it (Caragher, 2008; Dalgic & Leeuw, 1994; Parrish et al., 2006). According to D'Arpizio and Levato (2018), luxury markets should be considered as having a positive trend across all the world's regions and with increasing profit potential. Producers seeking access to luxury markets should consider several substantial strategic dictums because competitive advantage created exclusively on revenue management is unlikely to be achievable (Avlonitis & Indounas, 2005). It should be acknowledged that luxury products and services are classified as rare, exclusive, and unique (Hauck & Stanforth, 2007; Lynn, 1991). Also important is to recognize the role of entrepreneurship as having a significant effect on the supply-side of luxury; such may raise access to flexible supply-chain networks, retailing, and global resources due to changing market dynamics (Cao et al., 2018).

Education is a very significant driver of luxury because customers become more liberal and discerning in their tastes as level of education increases (Tran, 2015). An astonishing demand for luxury products has occurred worldwide during the last 20 years

(Kapferer, 2012), including food and aesthetic items derived from specialty crops (Lindgreen & Hingley, 2016; Winterhalter, 2011). Therefore, space may exist for smallholder producers in developing nations to target and grow for such markets (Swanson, 2006).

To conclude this summary, it is important to restate that poverty is actually a broad problem with no easy solutions (Fisk et al., 2016); all nations have citizens trapped in poverty. An instrument to boost economic development and prosperity may be entrepreneurship, which has demonstrated some positive effects in regions around the world (Banerjee & Duflo, 2011; Bruton et al., 2008), including the agricultural sector (Rembisz, 2010). Entrepreneurial capacity is reliant on the innovative competencies of entrepreneurs, which suggests that improving the education and skills of entrepreneurs, including aspirants, would create the requisite human capital (Galindo & Méndez-Picazo, 2013; Priem, Li, & Carr, 2012). Innovation requires a core emphasis on entrepreneurship promotion in developing nations (Naudé, 2010). The various entrepreneurial models should be considered when examining poverty and its potential solutions, such as the society's overall economic scheme, business opportunities, entrepreneurial enterprises, emerging technologies and other innovations, and innovativeness of the potential entrepreneurs (Stearns & Hills, 1996).

The Delphi method has been used in numerous studies (see Appendixes A & B) to obtain rich, original information based on a consensus of agreement as reached by panel members who have *expert knowledge* about a given phenomenon (Fletcher & Marchildon, 2014; Nielsen & Thangadurai, 2007; Uhl, 1983). After initial statements, i.e., views or opinions, are obtained from expert panelists in round one of a Delphi study,

such are returned to determine their collective levels of agreement, which may involve several additional rounds of data collection (Flanagan et al., 2016; Hsu & Sandford, 2007). The Delphi method, in conjunction with a SWOT analysis framework (Hossain & Hossain, 2015; López, 2004; Rehmat et al., 2014; Schmelzenbart et al., 2018), guided this study's data collection, analysis, and interpretation.

CHAPTER III

METHODOLOGY

Institutional Review Board

Federal regulations and Oklahoma State University policy require review and endorsement of all research studies involving human subjects before researchers can commence their investigations. The Office of University Research and the Institutional Review Board (IRB) at Oklahoma State University directed the above-mentioned review to protect the rights and welfare of human subjects involved in biomedical and behavioral research. This study received the proper scrutiny and was granted consent to be conducted. The IRB application number for this study was AG-19-49. A copy of the approval form is presented as Appendix C. The Office of University Research and the IRB at Oklahoma State University required the researcher to acquire informed consent of the study's participants (see Appendix D) prior to conducting the investigation; the study was accepted and processed as exempt (see Appendix C).

Purpose of the Study

The purpose of this study was to investigate the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers and specialty produce. The results could assist in establishing current levels of demand for these products, as well as experts' views on the potential of smallholder farmers to meet such demand, with the intent of developing rural economies to diminish poverty and improve livelihoods. To achieve this purpose, the researcher examined the perceptions of experts regarding luxury niche products that may be appealing to micro and small agricultural producers in rural Mexico and nations with similar needs, and have long-term market viability. By analyzing the opinions of experts and identifying a *consensus of agreement* among them, an understanding may be achieved regarding the potential of producers to specialize in growing crops, e.g., cut tulips, orchids, ornamental flowers, saffron (*Crocus sativus*), and vanilla, among other high-value, specialty produce, with the aim of meeting the demands of luxury niche markets.

Objectives

1. Describe selected personal and professional characteristics of participants who comprised the study's two panels of experts: producers panelists, and researchers, extension educators, or other professionals panelists.

2. Describe the perceptions of selected producers of luxury niche agricultural products regarding the potential of such to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.
3. Describe the perceptions of researchers, extension educators, or other professionals regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.
4. Report consensus of agreement among the experts comprising each Delphi panel regarding the growing of luxury niche agricultural products by micro and small producers in rural Mexico and other nations with similar economic development needs.
5. Compare the perceptions of experts comprising the study's two Delphi panels regarding the potential of micro and small agricultural producers in rural Mexico and other nations with similar economic development needs to grow and market luxury niche agricultural products using SWOT analysis as a decision-making framework.
6. Propose recommendations for practice and future research based on the consensus of agreement reached by the study's Delphi panels regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.

Researcher Reflexivity

I am a Mexican with a diverse background. Beginning at a young age, issues about the importance of food and its production arose because one of my family members is a food engineering researcher and has worked with rural communities in Mexico. This influence caused awareness of some challenges poor farmers face when trying to improve their livelihoods and played a role in instigating my research interest.

I earned a bachelor's degree in hotel and restaurant management and had managerial training in *luxury hotels* as Starwood's St. Regis, Park Hyatt, and Rosewood's Ventanas al Paraiso, and became more familiar with luxury services and culinary activities. I earned two M.B.A degrees, with specialties in International Business, and Luxury Brand Management & Marketing, respectively, which included defending a thesis based on a business plan for a high-tech greenhouse to grow luxury flowers.

These studies led me to develop a proposal for a Mexican government-sponsored grant to start a business, The Orchid House, in which I am growing orchids to market as cut flowers. When conducting this study, I was pursuing two Ph.D. degrees, one in Agricultural Education; and the other in Strategic Planning & Technology Management. The latter doctoral degree will be conferred by the Autonomous Popular University of the State of Puebla, in Mexico. My previous educational experiences took me to various countries with different cultures and further developed my interest in topics represented in this study.

My future plans or preferred future is to work as a professor/researcher and develop a model with robust external validity to use in impoverished communities to

improve the quality of their citizens' lives. I am also interested in teaching undergraduate and graduate courses related to my research focus.

Research Design

A wide collection of methodologies are available for researchers to employ. Researchers must select a research design appropriate for their investigations (Creswell, 2003). Some authors suggest using a blend of research methods to enhance a study's quality, and various research-oriented institutions have supported specific methodologies (Chen & Hirscheim, 2004; Galliers & Land, 1987).

The research design used for this study was essentially descriptive-exploratory; as such, a survey research design was applied by selecting the Delphi method in conjunction with SWOT analysis as data gathering, analysis, and interpretation tools (Hossain & Hossain, 2015; Rehmat et al., 2014; Schmelzenbart et al., 2018) via an inductive approach (Clarke & Jack, 1998; Sackman, 1975).

According to Creswell (2003), exploratory research is valuable when the investigator cannot categorize the significant variables to observe. Therefore, this methodology is frequently used when a theme is novel or has never been addressed for a particular group or sample of individuals, or when extant theories do not address the specific group under study (Johnson & Christensen, 2008). Exploratory research is regularly attempted if a limited understanding or lack of available information exists about the study subject (Neuman, 2006).

Qualitative techniques for gathering data are often used by exploratory researchers (Sarantakos, 1998). This kind of research is typically used in the theory-building stage of the research process (Wacker, 1998; Ziakas & Boukas, 2014). In exploratory studies, investigators attempt to comprehend the causes of a phenomenon in the absence of settled conclusions (David & Sutton, 2011). It is particularly advantageous if the researcher is hesitant or uncertain about the specific essence of the phenomenon (Saunders, Lewis, & Thornhill, 2012). Accepted paths for conducting exploratory research may involve consulting *experts* regarding an issue or topic, organizing focus group interviews, and examining literature, i.e., content analysis, among other approaches (Edmondson & McManus, 2007; Rao & Perry, 2003). Another benefit that exploratory research can offer is its adaptability and flexibility (Edmondson & McManus, 2007; Kimmelman, Mogil, & Dirnagl, 2014; Reiter, 2017). Furthermore, in this type of study, the investigator should be prepared to modify the path as new data and results appear, or novel observations arise (Edmondson & McManus, 2007; Kimmelman et al., 2014).

Moreover, the objective of descriptive studies is to define a precise profile of circumstances, individuals, phenomena, or procedures (Saunders et al., 2012). In addition, descriptive research attempts to examine and define the particularities of a phenomenon using arguments or statistics to declare a blueprint of stages, a distribution of categories, or a profile (Neuman, 2006; Sarantakos, 1998). As with the exploratory design, descriptive research methodology is also proper to apply in a theory-building stage; nevertheless, it also can be used when testing hypotheses and theories (Lambert & Lambert, 2012; Salaria, 2012). Data gathering methods when conducting descriptive studies typically include content analysis, field research, historical-comparative research,

and questionnaires (Neuman, 2006). Descriptive research can be used as a precursor to exploratory and explanatory research (Kimmelman et al, 2014; Stace, 1935). In such instances, it is necessary to have a clear description of the phenomena on which the researcher wishes to gather data before the collection of such (Kim, Sefcik, & Bradway, 2017; Stace, 1935).

The Delphi Method

Among survey-based studies, the Delphi method is an approach employed in numerous disciplines. It is a technique used for attaining a *consensus of agreement among experts*, i.e., panelists, about concerns, issues, and topics for which their opinions are appropriate and valuable (Stitt-Gohdes & Crews, 2004; Thangaratinam & Redman, 2005). It was used in this study to identify, analyze, and interpret the perceptions of selected panelists about the potential of luxury niche agricultural products that could be grown and marketed by micro and small agricultural producers in rural Mexico and nations with similar economic development needs to improve their livelihoods. Developed in 1950s by Olaf Helmer and Norman Dalkey, researchers at the RAND Corporation, this method was used initially to achieve the consensus of seven experts about political and military concerns (Fogo, 2014; Reguant & Torrado, 2016; Sackman, 1975). Dalkey (1969) defined the Delphi method as a systematic approach for a decision-making group to use to reach consensus by responding to specific questions over numerous rounds interposed with the group members' ongoing feedback.

In this way, the Delphi method aims to distill the benefits of the group members' knowledge and expertise without the possible disadvantages of group dynamics distorting the results, i.e., dominant personalities or individuals' desires to conform to majority

opinion (Kauko & Palmroos, 2014; Martin & Frick, 1998). Likewise, this research technique allows the researcher to develop and communicate needs, trends, or factors related to a specific area or topic (Stitt-Gohdes & Crews, 2004). “The rationale for the [Delphi method’s] procedures are primarily the age-old adage: two heads are better than one” (Dalkey, 1969, p. 408).

According to Akins, Tolson, and Cole (2005), the advantages of the Delphi method are numerous, and include:

- the ability to conduct a study in geographically dispersed locations without physically bringing the respondents together;
- time and cost-effectiveness;
- discussion of broad and complex problems;
- the ability for a group of experts with no prior history of communication with one another to effectively discuss a problem as a group;
- participants can have sufficient time to synthesize their ideas;
- participants can respond at their convenience;
- a record exists of the group activity that can be further reviewed; and
- the anonymity of participants provides them with the opportunity to freely express opinions and positions.

Therefore, the Delphi method in conjunction with SWOT analysis was used in this study. Ho, Lie, Leong, and Clear (2018) described the three main parts of a Delphi study: first, explaining the study, and developing the proper questionnaire; second, recognizing and choosing a panel of expert participants; and, third, arranging and administrating the survey, which usually involves at least two rounds and an agreement

scale (see Figure 2). Although no fixed number of panel participants exists for Delphi studies, 15 to 30 carefully selected subject-matter experts could be used to appropriately represent the views of a heterogeneous population (Martino, 1972). Whereas, five to 10 participants is considered a sufficient number for a relatively homogeneous population (Landeta, 2006; Loo, 2002; Robbins & Judge, 2008).

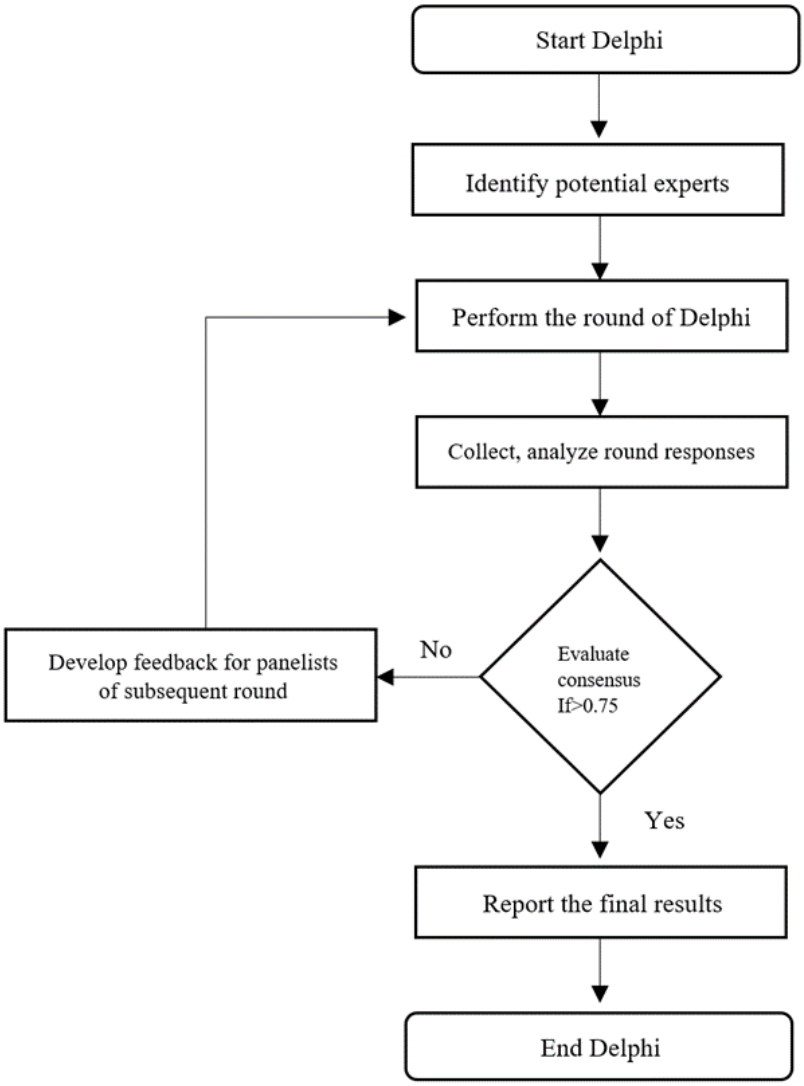

Figure 2. Delphi technique flow chart. Adapted from "Identification of Coordination Factors affecting Building Projects Performance" (Alaloul, Liew, & Zawawi, 2016, p. 2693).

"Evidence on the evaluation of Delphi consensus is limited; researchers have not yet described how to determine when an exact level of the consensus is reached in [a] Delphi [study]" (Holey, Feeley, Dixon, & Whittaker, 2007, p. 2). Although no concurrence regarding the best approach appears in the literature, levels of agreement are frequently used to indicate a consensus was reached (Giannarou & Zervas, 2014). A recognized *standard* for the target percentage of agreement often reported in the Delphi literature is 70%, i.e., a summative rating of at least 7 of 10 panelists indicating either *agree* or *strongly agree* for a given statement or response item (Giannarou & Zervas, 2014). The Delphi method can be an appropriate choice if the research question requires gathering subjective information from experts and those working in the field of interest (Stitt-Gohdes & Crews, 2004), either to set priorities or to reach consensus where none existed before (Keeney et al., 2011). Somewhat similar in purpose is *strategy development* which tends to be a complex and sometimes ambiguous procedure that recognizes and assesses alternatives for using a firm's resources to achieve its mission, vision, and objectives (Li, Davies, Edwards, Kinman, & Duan, 2002).

SWOT Analysis

Beginning in the early 1950s, SWOT analysis has been used with growing success as a strategic planning tool by both practitioners and researchers (Panagiotou, 2003). This technique parcels contextual factors comprising a phenomenon into inner strengths and weaknesses and extraneous opportunities and threats (Duarte, Ettkin, Helms, & Anderson, 2006; Valentin, 2001). The Delphi method is an appropriate procedure for conducting a SWOT analysis, as well as for studying quality and innovation (Campos-Climent, Apetrei, & Chaves-Ávila, 2012; López, 2004). SWOT

analysis is an approach that can lead to coherent recommendations regarding decision-making for the resolution of problems through the investigation of internal factors, i.e., motivations, skills, awareness, and resources, as well as external factors, such as economic and social environment, government policies, and market trends (Li et al., 2016). A SWOT analysis can assist in understanding if the perceived strengths of a product or practice help in responding to an opportunity or a threat in a given market, and which condition the market trends present (Bell & Rochford, 2016). For this study, the Delphi method was combined with a SWOT analysis framework to collect and interpret data and to report the investigation's findings.

Determining Consensus of Agreement

According to Hsu and Sandford (2007), "[t]he kind and type of criteria to use to both define and determine consensus in a Delphi study is subject to interpretation" (p. 4). However, "[e]stablishing the standard is crucial as the level chosen determines what items are discarded or retained as the rounds unfold. It is good practice for the research team to establish a definition of consensus" (Keeney, Hasson, & McKeena, 2006, p. 210).

It is frequent in observational studies to consider those items above 0.70 acceptable for retention in the consensus of agreement process (Bakeman & Gottman, 1989). Carnes, Mullinger, and Underwood (2010) confirmed that for their inquiry, after "all three rounds of this Delphi study, consensus was defined as >74.00% agreement" (p. 95). However, for Hepworth's and Rowe's (2017) study, "consensus was defined *a priori*. If ≥70.00% of participants scored the item as *critical* . . ." (p. 2). Verhagen et al. (1998) defined consensus as the overall agreement of a significant majority (>75.00%) of panelists (as cited in van der Linde, Hofstad, van Limbeek, Postema, & Geertzen, 2005).

Others have recommended a more rigorous standard to reach consensus, i.e., 80.00% of participants' votes either indicating a six or seven on a seven-point, Likert-type scale (Ulschak, 1983). Yet, Loughlin and Moore (1979) suggested that consensus could be associated with 51.00% or more agreement among participants. However, "[d]epending on the importance of the policy [in question], a 51.00% consensus cut-off point could lead to low morale or unrest among those who favored those views which only gained 50.00% agreement" (Keeney et al., 2006, p. 210). For Alaloul, Liew, and Zawawi (2016), "Kendall's Coefficient of Concordance (from 0.513 in the previous round -2nd round -, to 0.652 in this round-3rd round) indicate[d] that the agreement level amongst the panel experts had improved" (p. 2693).

Other authors considered the median as a point of consensus (Dalkey & Helmer, 1963). An acceptable level of agreement also can be achieved when the aggregate judgments of participants move to a central tendency subjective level (Dajani, Sincoff, & Talley, 1979; Delbecq, Van de Ven, & Gustafson, 1975), i.e., by settling stability, or "the consistency of answers between successive rounds of the study" (Dajani et al., 1979, p. 84). Furthermore, Landeta (1999) recommended the criterion of stability using the Relative Interquartile Range (RIR) by which consensus is reached if the RIR is less than a randomly predetermined value, RIR=(Q3-Q1)/Q2.

Verhagen et al. (1998) presented mean scores as derived from a five-point, Likert-type scale, strongly disagree (0), moderately disagree (1), neutral (2), moderately agree (3), and strongly agree (4), as a percentage of the highest reachable score, e.g., a mean score of 1.90 was 47.50% of the highest reachable score. In their study, the participants' reached *consensus of agreement* at a cut-off point of 70.00%. Diamond et al. (2014), who

examined 100 Delphi investigations, concluded that "[m]ost studies provided a priori definition; consensus was restricted to a limited portion of the range in half of the studies. Of those approaches based on a percentage or proportion, the median threshold, for determination of consensus was 75.00%" (p. 404). Even though "75.00% appear[ed] to be the minimal level . . . there is no obvious scientific rationale for this" (p. 210), according to Keeney et al. (2006) who outlined their 10 years of experience using the Delphi method.

An additional decision criterion can be whether the percentage of participants' responses is located in a range defined by the median ± 1 if greater than 80.00% (Reguant & Torrado, 2016). Green, Jones, Hughes, and Williams (1999) suggested applying similar criteria used by social scientists concerning response rates. Green et al. (1999) decided that consensus existed if at least 80.00% of respondents agreed with the statement in question. Reaching a *consensus of agreement* is the central rationale for using the Delphi technique, i.e., its main objective is to reveal a consensus among the opinions of the participants (Piñeiro, 2003). For this purpose, it is possible to use several different statistical tools:

- ranges based on quartiles (Kendall, 1977; Landeta, 1999; Long, 1991);
- the coefficient of variation (Green et al., 1990; Heiko, 2012; Kalaian & Kasim, 2012);
- average confidence interval (Akins et al., 2005; Graefe & Armstrong, 2011; Woolgrove, 2006);
- percentage in some of the response categories (Holey et al., 2007; Moss et al., 2013; Rayens, & Hahn, 2000);

- the ratio between standard deviation and uniform standard deviation (Ceric, 2014; Schmidt, 1997); and
- tests of goodness of fit (Mokkink et al., 2010; Piñero, 2003), among other methods.

This study's approach consisted of applying the Delphi method in conjunction with SWOT analysis. Data collection was facilitated by the electronic distribution of questionnaires sent to experts to attain their insights and opinions on the strategic potential of smallholder farmers in rural areas of Mexico or in similar contexts to produce specialty crops intended for luxury niche markets. The use of a SWOT analysis framework in rounds two and three of the study assisted in guiding the gathering of the experts' views. Data were collected by using the instruments during three rounds as sent to experts divided into two panels.

Based on the abovementioned literature, and after consulting with the researcher's graduate committee members, it was determined that the threshold or cutoff percentage for reaching *consensus of agreement* in this study would be 75.00% and above. If three-fourths (75.00%) or more of the panelists selected either *Agree* or *Strongly Agree* for an item in Round Two, or if three-fourths (75.00%) or more of the panelists selected *Agree* for an item returned in Round Three, that item had achieved consensus among the responding panelists.

Population and Sample

Because the Delphi technique emphasizes gathering and summarizing experts' opinions over time, selecting participants depends on the discipline and knowledge areas required by the topic of investigation (Hsu & Sandford, 2007). Although the literature is indefinite about specific criteria for choosing panelists, appropriate participants are selected if they have experience or backgrounds aligned with the topic at hand, are suited to provide helpful insights, and may be inclined to reconsider their judgments as members of a group seeking to reach a consensus (Pill, 1971). A sufficient number of subjects (panelists) should be sought to validate the results and have the potential for subsequent explorations through successive rounds (Cheung et al., 2017). The panel should be large enough to include a representative sample of expert opinions from across the field or relevant fields of interest (Hsu & Sandford, 2007; Ludwig, 1997). Another advantage of this research technique is to allow for the development of consensus in the absence of direct or face-to-face confrontation (Helmer, 1966). Moreover, a larger number of expert views for a given phenomenon can be collected anonymously from a heterogeneous group of panelists without the risk of confrontation or intimidation (Delbecq et al., 1975).

To determine the reliability and validity of a Delphi study's findings, the number of panelists is a significant consideration. Dalkey, Rourke, Lewis, and Snyder (1972) asserted that Delphi studies are reliable by having a panel with at least 13 members who are truly representative of the expert community. From the literature more broadly, the

Delphi method is considered reliable if 10 to 15 panelists are convened who represent a homogenous group (Dalkey et al., 1972; Dalkey & Helmber, 1963; Delbecq et al., 1975).

Careful selection of the panel of experts is the keystone to a successful Delphi study (Stitt-Gohdes & Crews 2004). For the present study, the sample of Delphi panelists was composed of 1) producers of high-value crops who had experience with at least one specialty crop; and 2) researchers, extension educators, or other professionals who had investigated high-value crops and/or provided extension services to producers or potential producers of such, and had experience with at least one specialty crop.

Researchers conducting empirical investigations frequently rely on key informants (Kumar, Stern, & Anderson, 1993; Mitchell, 1994). "[A]dvantages of the key informant technique relate to the quality of data that can be obtained in a relatively short period of time" (Marshall, 1996, p. 93). In this study, key informants, i.e., directors of societies and foundations and other relevant professionals knowledgeable of the phenomenon, were used to develop preliminary respondent frames for both Delphi panels. These key informants were knowledgeable of possible participants willing to be contacted by the researcher and who may have been inclined to participate in the study. Therefore, this snowballing technique (Hartman & Baldwin, 1995; Mason, 1996; Sedgwick, 2013) was a form of purposeful or intentional sample selection regarding identification of the study's panelists. Purposeful sampling is a qualitative selection technique in which researchers deliberately select participants and locations to study or to better understand a phenomenon of interest (Creswell, 2003; Sedgwick, 2013).

This study sought to determine the potential of smallholder farmers for producing specialty crops for luxury niche markets to achieve rural economic development in

Mexico and other nations with similar needs. The panel representing producers in the agricultural industry in Mexico was comprised of experts drawn from a variety of agribusinesses. All agricultural production experts were familiar with the high-value crops market and they either had or were working with at least one specialty crop. This panel included experts representing some of the highly diverse agricultural industry in Mexico. The crops and value-added products represented by these panelists included agave, coffee, fruits, microgreens, ornamentals, vegetables, and wine, among others (see Table 1).

Table 1

Producers Panel: Products Grown and/or Processed for Sale, Gender, Education, Employees, and Years of Experience (n=16)

Products	Gender	Education/Highest Degree Earned	Employees	Years of Experience
Agave potatorum (mezcal)	Male	Bachelors	7	11
Amaranth	Male	Bachelors	20	4
Bamboo products	Male	Bachelors	10	8
Fruits, greens, and coffee	Male	Bachelors	11	20+
Grapes, nuts, dates	Male	Bachelors	150	7
In Vitro products, especially orchids	Male	Bachelors	16	15
Limes	Male	Bachelors	35	30
Organic vegetables (tomato, chile, cucumber, among others)	Male	Bachelors	30	19
Ornamentals	Male	Masters	*	4
Ornamentals	Male	Technical	4	5
Ornamentals	Male	Bachelors	16	35

Sprouts/microgreens	Female	Bachelors	120	15
Strawberry & cherry tomato	Female	Masters	13	14
Vegetables	Male	Technical	26	8
Wine (Merlot)	Female	Bachelors	35	10
*	Female	PhD	25	23

Note. *The participant did not provide that information.

The second panel consisted of researchers, extension educators, or other professionals who had investigated high-value crops and/or provided extension services to producers or potential producers of such, and had experience with at least one specialty crop. Table 2 provides a profile of these panelists.

Table 2

Researchers, Extension Educators, or Other Professionals Panel: Position, Gender, Education, and Years of Experience (n=18)

Position/Title	Gender	Education/Highest Degree Earned	Years of Experience
Consultant	Male	PhD	7
Director	Female	PhD	6
Director	Male	Masters	30
Extension agent	Female	PhD	25
Extension educator	Female	Masters	20
Manager	Male	Bachelors	26
Ornamental industry consultant	Female	Masters	8
Professor/Researcher	Female	PhD	10
Professor/Researcher	Male	PhD	49

Professor/Researcher	Female	PhD	20
Professor/Researcher	Male	Masters	28
Professor/Researcher	Other	PhD	20
Professor/Researcher	Male	PhD	15
Professor/Researcher	Female	PhD	25
Professor/Researcher	Female	PhD	5
Professor/Researcher	Female	PhD	28
Quality Coordinator/consultant	Female	PhD	19
Specialist on intellectual property, seed, and phytosanitary resources	Female	Masters	27

To determine the sample, a panel selection procedure was used because a Delphi study's success depends on the informed opinion of identified experts (Hasson, Keeney, & McKenna, 2000; Wicklein, 1993). Panelists must recognize the importance of the study's purpose and significance of their contributions so they perceive themselves as appropriate participants, and be motivated to remain active in the study throughout all rounds (Hsu & Sandford, 2007; Stitt-Gohdes & Crews, 2004). At the beginning of this study, the researcher described the investigation's purpose and invited the experts to participate via electronic mail messages and/or telephone calls. A script for the producers panel (see Appendix E) and a script for the researchers, extension educators, or other professionals panel (see Appendix F) was used to inform participants about the study in a consistent way.

Instrumentation

Experts were invited to participate in this study via electronic mail messages and telephone calls (see Appendixes E & F). After the experts agreed to participate, they received an electronic mail message containing a link to access each round's instrument (questionnaire). The first round instruments for both panels (see Appendixes G & H) were developed using Microsoft Office Word 2016® and then content was placed into the Qualtrics® format. All instruments were sent to the participants using the Qualtrics® format.

For the First or initial Round of the study, the researcher developed an open-ended instrument consisting of three questions. By using electronic questionnaires rather than paper forms, open-ended questions tend to obtain more comprehensive responses (Dillman & Smyth, 2007), and interactions are more convenient for all the actors involved in the study. The Delphi technique can be applied in a conference or *e-Delphi* way (Donohoe, Stellefson, & Tennant, 2012) by using computer software to collect the panelists' responses, which tends to shorten response time (Donohoe et al., 2012). With the availability and established popularity of Internet-based research tools, such have been identified as ways to mitigate the Delphi method's limitations, maximize its advantages, and expand the breadth of its application (Donohoe et al., 2012).

Validity is an essential aspect of any research instrument (Lincoln & Guba, 1985; Maxwell, 1996). Validity is the degree to which a test measures what it purports to measure, and, thereby, increase the likelihood of appropriately interpreting scores (Creswell & Miller, 2010; Gay, Mills, & Airasian, 2006). The investigator was

specifically interested in the face and content validity of the instruments used. Face validity refers to whether a test or instrument appears to measure what it claims to measure; content validity of an instrument can be determined by expert judgment (Drost, 2011; Hardesty & Bearden, 2004).

The study's questionnaires were reviewed by faculty members of the Department of Agricultural Education, Communications, and Leadership (AECL); the Department of Horticulture and Landscape Architecture; and the Department of Entrepreneurship at Oklahoma State University to ensure content validity. The committee members from AECL brought expertise in instrument design as well as education and training for human capital development in rural economies, including for agricultural producers. One of the committee members has significant expertise regarding horticultural crops, including specialty ornamental produce. The member holds a 100% extension appointment and works primarily with the Oklahoma greenhouse and nursery industry as well as the Oklahoma Nursery and Landscape Association. The committee member also works closely with extension educators in all 77 Oklahoma counties to assist them as they support producers. Another committee member's area of expertise is entrepreneurship and the training of entrepreneurs. He is an accomplished scholar, educator, entrepreneur, manager, and economic developer. The member has worked with students, faculty members, and the public on curriculum development and outreach programs related to creativity, innovation, and entrepreneurship – in the United States and other countries, – including in the context of agriculture and food.

The first round instrument and electronic mail messages (see Appendixes G & H) for the Spanish speaking panelists were translated by a formerly certified translator and

reviewed by a faculty member at Universidad de las Americas Puebla. The faculty member is a native speaker of Spanish. For the second and third rounds of the study, the Spanish documents were translated by the researcher, a native speaker of Spanish, to ensure accuracy of translation as well as the participants' anonymity.

The purpose of the initial instrument (see Appendixes G & H) was to elicit responses from panelists regarding the needs of as well as the knowledge and competencies required by smallholder agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers and specialty produce. The instrument included three questions. See Appendixes G and H for the entire instrument:

1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?

2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers, foliage, spices, and specialty produce?

Please include any strengths, weaknesses, opportunities, and threats to producing for luxury markets that should be considered by aspiring producers, especially smallholder farmers, such as resource input needs, technical needs including education and training, innovation concerns, and so forth.

3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages*, if producing luxury agricultural products for niche markets, as defined in this study?

The panelists' responses to these questions were used to develop the study's Round Two instruments (see Appendixes I & J). As indicated above, the participants were asked to answer the first question by listing as many luxury high-value plant products as they deemed appropriate in the context of the study. The researcher grouped the items into general categories, including arboreal, culinary herbs, edible fruits, endemic species, medicinal, nursery crops, nutraceutical foods, precious woods, vegetables, and others for the researchers, extension educators, or other professionals panel; and as condiments, flowers, vegetables, and others for the producers panel (see Appendixes I & J). The researcher's graduate committee member with expertise in horticulture assisted in the grouping or placement of specific plants or plant products by category before returning such to the panelists in Round Two.

The participants answered the second question using a SWOT analysis framework. In other words, they were asked to indicate their views on strengths, weaknesses, opportunities, and threats regarding the phenomenon under study. The data collected from Round Two were used to develop the study's Round Three instruments (see Appendixes K & L). Round Two consisted of the panelists rating the statements derived from Round One using a six-point, Likert-type scale: *1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, or 6 = Strongly Agree*. The statements for which 75.00% or more of the panelists indicated either *Agree* or *Strongly Agree* were determined to have reached *consensus of agreement*. In Round Three of the study, panelists were asked to rate the statements derived from Round Two using a dichotomous scale: *Disagree* or *Agree*. The statements for which 75.00% or more of the panelists indicated *Agree* were determined to have reached *consensus of agreement*

at the conclusion of Round Three. The panelists also could provide comments on an item-by-item basis if they chose to do that.

Three rounds are often sufficient to collect the necessary data, and, in most cases, to reach *consensus of agreement* in a Delphi study (Custer, Scarcella, & Stewart, 1999; Lamm, Lamm, Davis, Swaroop, & Edgar, 2020; Ludwig, 1997). By using two panels of experts instead of one, the researcher was able to compare the statements that reached *consensus of agreement* by both panels (Duffield, 1993; Förster & von der Gracht, 2014), as reported in Chapter 4.

The degree to which results are representative of the population from which a sample was selected and likely to be consistent over time is referred to as *reliability;* a study's instrument is understood to be reliable if its results can be replicated using a similar methodology with alike groups (Joppe, 2000). Reliability also can be assumed if the scores derived from an instrument are consistent and stable over time and by ensuring that the testing methods and conditions are similar (Creswell, 2003; Mohamad, Sulaiman, Sern, & Salleh, 2015). Dalkey (1969) asserted that when applying the Delphi technique, reliability of 0.70 or higher may be achieved if the panel contains 11 members or more. However, after further use of the technique Dalkey et al. (1972) indicated that a group of 13 participants was required for achieving reliability with a 0.90 correlation coefficient. Kastein, Jacobs, van der Hell, Luttik, and Touw-Otten (1993) also asserted that 13 participants was an appropriate number to achieve sufficient reliability in a Delphi Study. The participation of 15 researchers, extension educators, or other professionals, and 14 producers for each panel, respectively, throughout the study's three rounds of data collection, supported the reliability of its findings.

Data Collection

A significant strength of the Delphi method or technique is the guaranteed anonymity of participants answering a study's questions coupled with researcher-facilitated feedback and summarized information to achieve *consensus of agreement* among a group of experts on a specific topic or issue (Beech, 1999). Moreover, the use of SWOT analysis in tandem with the Delphi method is supported by relevant scholarly literature (Chermack & Kasshanna, 2007; Dyson, 2004; Helms & Nixon, 2010). For instance, research supports SWOT analysis as a tool for planning purposes; over the past two decades, SWOT research has focused on analyzing organizations for recommended strategic actions (Chermack & Kasshanna, 2007; Dyson, 2004; Helms & Nixon, 2010). As a methodology for strategic positioning, SWOT analysis has been extended beyond companies to entire countries and industries and related results are often published as business cases for teaching and training purposes (Chermack & Kasshanna, 2007; Dyson, 2004; Helms & Nixon, 2010).

This study sought to identify the potential of luxury agricultural products for achieving rural economic development in Mexico and other nations with similar needs, i.e., crops such as high-value, ornamental flowers and specialty produce. It used a SWOT analysis framework to gather experts' views on producing for luxury niche markets, especially smallholder farmers, such as their resource input needs, technical needs including education and training, innovation concerns, and so forth. The framework prompts were included in instruments for each round of the study (see Appendixes G, H, I, J, K, & L).

Round One

In Round One, professional and individual characteristics of each Delphi panelist were collected; these characteristics included age, gender, highest degree earned, and years of professional experience (see Tables 3 & 4). The initial electronic mail message for Round One was sent on October 16, 2019. The message included a cover letter to further explain the instructions for the study, as well as a link to the Qualtrics® instrument (see Appendixes G & H). One-hundred and thirteen potential panelists were initially contacted to participate in the study. The participants were asked to choose the panel that best fit their expertise, i.e., researchers, extension educators, or other professionals versus producers. A follow-up reminder electronic mail message (see Appendix N) was sent two weeks after the data collection process started, and again 10 days later (see Appendix P). When the data collection was closed, 18 participants had indicated that the researchers, extension educators, or other professionals panel was the best fit for their expertise, and 16 participants indicated they were producers and appropriate for that panel; the response by 34 participants was a response rate of 30.08% of the 113 initial contacts. Moreover, five electronic mail messages were marked as bounced, and one as duplicated; so, the effective number of initial contacts was 107 with an adjusted response rate of 31.78%

From Round One, 286 statements were provided by the researchers, extension educators, or other professionals panel (n = 18), and 179 statements by the producers panel (n = 16). The researcher analyzed each item, and similar or duplicate statements were either combined or eliminated, and compound statements were separated (Fereday & Muir-Cochrane, 2006; Shinn, Wingenbach, Briers, Lindner, & Baker, 2009). From the

286 original researchers, extension educators, or other professionals panel items, the researcher retained 188 for presentation in Round Two. Likewise, from 179 original producers panel items, the researcher retained 94 for presentation in Round Two. The Round Two instruments (see Appendixes I & J) were developed using Microsoft Office Word 2016® before placement into a Qualtrics® format.

Round Two

In Round Two, the panelists were asked to rate their levels of agreement for the items distilled from Round One. The researcher, extension educator, and other professional panelists were asked to rate their levels of agreement for 188 items. In addition, the producer panelists were asked to rate their levels of agreement for 94 items. Both panels were asked to use a six-point, Likert-type scale to rate their respective items: *1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, or 6 = Strongly Agree* (Choudhury & Bhattacharjee, 2014; Shinn et al., 2009). Items for which more than three-fourths (>75.00%) of the panelists selected either *Agree* (5) or *Strongly Agree* (6) were considered to have reached *consensus of agreement* (Carnes et al., 2010; Shinn et al., 2009). And items for which more than one-half (>50.00%) but less than three-fourths (<75.00%) of the respondents chose either *Agree* (5) or *Strongly Agree* (6) were used to develop the study's Round Three instrument (Carnes et al., 2010; Rodriguez-Mañas et al., 2013). In addition, items for which less than one-half (<50.00%) of the respondents chose either *Agree* (5) or *Strongly Agree* (6) were removed from further investigation (Rodriguez-Mañas et al., 2013) and not included in

Round Three. The opening electronic mail message (see Appendixes I & J) for Round Two was sent on December 24, 2019. The message included a cover letter explaining the instructions for the study's second round, as well as a link to the Qualtrics® instrument. The panelists were asked to respond by January 15, 2020. Electronic follow-up reminder messages (see Appendixes R & S) were sent to the panelists approximately one week before the assigned due date for the return of Round Two responses.

Qualitative Data Collection, Round Two

In Round Two, the panelists had an opportunity to offer additional comments if they perceived more information, detail, or clarification was needed regarding a particular item (Fletcher & Marchildon, 2014; Jacobs, 1996). The researcher, extension educator, or other professional panelists provided a total of 108 comments, and the producer panelists wrote 47 comments. Furthermore, the panelists were also asked to provide any additional information they thought to be of value to the study. Six researchers, extension educators, or other professionals panelists and three producer panelists did that.

Round Three

Round Three sought to achieve *consensus of agreement* for each panel on the remaining items. Therefore, the panelists were asked to indicate their agreement with or not for those items that at least one-half but less than three-fourths had selected either

Agree (5) or *Strongly Agree* (6) in Round Two. During this round, a dichotomous scale, i.e., *Disagree* or *Agree*, was used (see Appendixes K & L). Seventy-two items were returned to the researchers, extension educators, or other professionals panel, and 24 items to the producers panel. The introductory electronic mail message (see Appendixes K & L) for Round Three was sent on February 29, 2020. The message included a cover letter explaining the instructions for the study's third round, as well as a link to the Qualtrics® instrument. Follow-up electronic mail messages (Appendixes T & U) were sent to the participants of both panels approximately two weeks after the initial messages. Approximately 10 days after the reminder messages were sent, all participants from both panels had returned the Round Three instrument. Therefore, no additional follow-up reminder electronic mail messages were sent to the panelists, and the study's data collection period was closed. An additional 22 items for the researchers, extension educators, or other professionals panel and nine items for the producers panel reached *consensus of agreement* as the result of Round Three.

Qualitative Data Collection, Round Three

In Round Three, the panelists had an opportunity to offer additional comments if they perceived more information, detail, or clarification was needed regarding a particular item (Fletcher & Marchildon, 2014; Jacobs, 1996). The researcher, extension educator, or other professional panelists provided a total of 47 comments, and the producer panelists wrote 16 comments. Furthermore, the panelists were also asked to provide any additional information they thought to be of value to the study. Ten

researchers, extension educators, or other professionals panelists and eight producer panelists did that.

Data Analysis

Data were analyzed using Microsoft Office Excel® 2016. Nominal data, i.e., some of the panelists' personal characteristics, were analyzed using frequencies and percentages. However, for the panelists' ages and years of experience ranges and averages were also calculated. For each item in Rounds Two and Three, the frequency distribution validity percentage was used to determine if the item reached *consensus of agreement*, should be returned for additional feedback, or removed from further study (Buriak & Shinn, 1989; Jenkins III & Kitchel, 2009).

The Delphi technique is well-suited as a means and method to seek *consensus of agreement* among a panel of experts (Dalkey, 1969; Dalkey & Helmer, 1963; Linstone & Turoff, 1975). To that end, in Round Two, 91 researcher, extension educators, and other professionals panel items (n = 15; 83.33% response rate) and 70 producers panel items (n = 14; 87.50% response rate) for which more than three-fourths (>75.00%) of the participants selected either *Agree* or *Strongly Agree* were considered items for which *consensus of agreement* was reached (Buriak & Shinn, 1989; Farrell et al., 2015; Hsu & Sandford, 2007; Pietersma, de Vries, & Van den Akker-van, 2014). Moreover, 25 items of the researchers, extension educators, or other professionals panel for which less than one-half (50.00%) of the participants selected either *Agree* or *Strongly Agree* were removed from further investigation (Hsu & Sandford, 2007). Qualitative data, i.e.,

"comments" by item and overall, were collected from Round Two, and the researcher identified, coded, and described such in Chapter 4.

Round Three of the study included 72 researchers, extension educators, or other professionals panel items and 24 producers panel items for which more than one-half (>50.00%) but not more than three-fourths (<75.00%) of the participants had selected either *Agree* or *Strongly Agree* during Round Two. In Round Three, 22 items of the researchers, extension educators, or other professionals panel (n = 15; 100.00% response rate) and nine items from the producers panel (n = 14; 100.00% response rate) were marked *Agree* by three-fourths or more of the respondents and, therefore, considered to have reached *consensus of agreement*. The remaining 50 items from the researchers, extension educators, or other professionals panel and 15 items from the producers panel failed to reach the established level for *consensus of agreement*. The panelists also provided some additional qualitative data for selected items and a few concluding remarks they thought were of value to the study.

CHAPTER IV

FINDINGS

Purpose of the Study

The purpose of this study was to investigate the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers and specialty produce. The results could assist in establishing current levels of demand for these products, as well as experts' views on the potential of smallholder farmers to meet such demand, with the intent of developing rural economies to diminish poverty and improve livelihoods. To achieve this purpose, the researcher examined the perceptions of experts regarding luxury niche products that may be appealing to micro and small agricultural producers in rural Mexico and nations with similar needs, and have long-term market viability. By analyzing the opinions of experts and identifying a *consensus of agreement* among them, an understanding may be achieved regarding the potential of producers to specialize in growing crops, e.g., cut tulips, orchids, ornamental flowers, saffron (*Crocus sativus*), and vanilla, among other high-value, specialty produce, with the aim of meeting the demands of luxury niche markets.

Objectives

1. Describe selected personal and professional characteristics of participants who comprised the study's two panels of experts: producers panelists, and researchers, extension educators, or other professionals panelists.
2. Describe the perceptions of selected producers of luxury niche agricultural products regarding the potential of such to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.
3. Describe the perceptions of researchers, extension educators, or other professionals regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.
4. Report consensus of agreement among the experts comprising each Delphi panel regarding the growing of luxury niche agricultural products by micro and small producers in rural Mexico and other nations with similar economic development needs.
5. Compare the perceptions of experts comprising the study's two Delphi panels regarding the potential of micro and small agricultural producers in rural Mexico and other nations with similar economic development needs to grow and market luxury niche agricultural products using SWOT analysis as a decision-making framework.

6. Propose recommendations for practice and future research based on the consensus of agreement reached by the study's Delphi panels regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.

These objectives served as a guide for presenting the findings of the study. Findings regarding each objective are presented in separate sections of this chapter.

Sources of Data: Delphi Panelists

The two groups of panelists who participated in this study included a) researchers, extension educators, or other professionals who had investigated and/or provided extension services to producers or potential producers regarding high-value crops and had experience with at least one specialty crop, and b) producers of high-value crops who had experience producing at least one specialty crop.

Delphi Panelists' Selected Characteristics

Researchers, Extension Educators, or Other Professionals Panel

Researchers, extension educators, or other professionals were asked to answer questions that described their professional and personal characteristics (see Appendix M). This data was summarized and reported to provide a profile of the study's participants.

Of the 18 researchers, extension educators, or other professionals who completed the Round One instrument, 11 (61.11%) were female, six (33.33%) were male, and one (5.55%) responded *other* regarding their gender (see Table 3). Regarding the participants' ages, one panelist (5.55%) reported an age from 20 to 29 years; three panelists (16.66%) responded from 30 to 39 years; two panelists (11.11%) indicated having an age ranging from 40 to 49; six panelists (33.33%) ages were in the range of 50 to 59; and six panelists (33.33%) responded being 60 years or older (see Table 3). The panelists' ages ranged from 28 to 68. The panelists' mean age was 51.88 years. Regarding participants' ethnicity or race, 15 (83.33%) identified themselves as Latino; two (11.11%) Caucasian, and one (5.55%) preferred to not indicate their race or ethnicity.

Education and related work experience of the panelists were also of interest to the researcher. Accordingly, one (5.55%) participant reported a Bachelor's degree as the highest educational degree earned, five (27.77%) indicated a Master's degree, and 12 (66.66%) held a doctorate. Regarding their years of related work experience, eight (44.44%) of the panelists reported 21 or more years; four (22.22%) indicated 16 to 20 years; one panelist (5.55%) had 11 to 15 years, four (22.22%) specified six to 10 years, and one (5.55%) reported five or fewer years of related work experience (see Table 3). The panelists' years of related work experience ranged from five to 49 years. The panelists' related work experience averaged 20.44 years.

Table 3

Researchers, Extension Educators, or Other Professionals Panel: Participants' Personal Characteristics (n = 18)

Characteristics	*f*	%[a]
Gender		
Female	11	61.11
Male	6	33.33
Other	1	5.55
Age		
20 to 29	1	5.55
30 to 39	3	16.66
40 to 49	2	11.11
50 to 59	6	33.33
60 and older	6	33.33
Race/Ethnicity		
Latino	15	83.33
Caucasian	2	11.11
Prefer to not indicate	1	5.55
Highest Educational Degree Earned		
Doctorate	12	66.66
Master's	5	27.77
Bachelor's	1	5.55
Years of Work Experience		
5 or less	1	5.55
6 to 10	4	22.22
11 to 15	1	5.55
16 to 20	4	22.22
21 or more	8	44.44

Note. [a]In some cases, the sum of the percentages for a given characteristic may be less than 100.00% because of repeating decimals that were not rounded.

The panelists were also questioned about their job positions or titles (see Table 4). Nine participants (50.00%) indicated that they were full-time professors/researchers; four (22.22%) responded as holding positions of directors, managers, or specialists in enterprises or foundations; three (16.66%) were consultants, and two (11.11%) were full-time extension educators (see Table 4).

Table 4

Researchers, Extension Educators, or Other Professionals Panel: Job Positions or Titles (n = 18)

Position/Title	*f*	%[a]
Professor/Researcher	9	50.00
Director/Manager/Specialist	4	22.22
Consultant	3	16.66
Extension agent/educator	2	11.11

Note. [a]In some cases, the sum of the percentages for a given characteristic may be less than 100.00% because of repeating decimals that were not rounded.

Of the 18 researchers, extension educators, or other professionals who completed Round One of data collection, five (27.77%) reported to specialize in agronomy; two (11.11%) in agricultural education and communications; two (11.11%) in food sciences; two (11.11%) in horticulture; two (11.11%) in strategy and/or economic development; one (5.55%) in ecology; one (5.55%) in public administration; one (5.55%) in vegetable physiology; one (5.55%) in biology; and one (5.55%) did not respond to the question (see Table 5).

Table 5

Researchers, Extension Educators, or Other Professionals Panel: Areas of Specialization (n = 18)

Specializations	*f*	%[a]
Agronomy	5	27.77
Agricultural education and communications	2	11.11
Food sciences	2	11.11
Horticulture	2	11.11
Strategy and/or economic development	2	11.11
Ecology	1	5.55
Public administration	1	5.55

Vegetable physiology	1	5.55
Biology	1	5.55
No response	1	5.55

Note. [a]In some cases, the sum of the percentages for a given characteristic may be less than 100.00% because of repeating decimals that were not rounded.

Producers Panel

The producers panelists were also asked to respond to questions that described their professional and personal characteristics (see Table 6). This data was summarized and reported to provide a profile of the study's participants.

Of the 16 producers who completed the Round One instrument, 12 (75.00%) were male, and four (25.00%) were female (see Table 6). Regarding the participants' ages, four panelists (25.00%) reported an age from 20 to 29 years; five panelists (31.25%) responded from 30 to 39 years; four panelists (25.00%) indicated having an age ranging from 40 to 49 years; and three panelists (18.75%) responded being in the range of 50 to 59 years (see Table 6). The panelists' ages ranged from 22 to 58 years. The panelists' mean age was 39.31 years. Regarding participants' ethnicity or race, 13 (81.25%) identified themselves as Latino, and three (18.75%) preferred to not indicate their race or ethnicity (see Table 6).

Education and related work experience of the panelists were also of interest to the researcher. Accordingly, two (12.50%) of the producers reported a technical degree as their highest educational degree earned, 11 (68.75%) indicated a Bachelor's degree, two (12.50%) reported a Master's degree, and one (6.25%) held a doctorate. Regarding their years of related work experience, four (25.00%) of the panelists reported 21 or more years; one (6.25%) indicated 16 to 20 years; four (25.00%) specified 11 to 15 years; four

(25.00%) reported six to 10 years; and three (18.75%) responded having five or fewer years of related work experience (see Table 6). The panelists' years of work related experience ranged from four to 35 years. The panelists' averaged 13 years of related work experience.

Table 6

Producers Panel: Participants' Personal Characteristics (n = 16)

Characteristics	*f*	%
Gender		
Male	12	75.00
Female	4	25.00
Age		
20 to 29	4	25.00
30 to 39	5	31.25
40 to 49	4	25.00
50 to 59	3	18.75
Race/Ethnicity		
Latino	13	81.25
Prefer to not indicate	3	18.75
Highest Educational Degree Earned		
Doctorate	1	6.25
Master's	2	12.50
Bachelor's	11	68.75
Technical	2	12.50
Years of Work Experience		
5 or less	3	18.75
6 to10	4	25.00
11 to 15	4	25.00
16 to 20	1	6.25
21 or more	4	25.00

The panelists were also questioned about their job positions or titles (see Table 7). Twelve participants (75.00%) indicated that they were business owners; three (18.75%) responded holding positions as managers, and one (6.25%) did not respond to the question (see Table 7).

Table 7

Producers Panel: Job Positions or Titles (n = 16)

Position/Title	*f*	%
Owner	12	75.00
Manager	3	18.75
No response	1	6.25

Of the 16 producers who completed the Round One instrument, five (31.25%) indicated growing and marketing fruits and vegetables; three (18.75%) reported specializing in floriculture; two (12.50%) in wine production; one (6.25%) in bamboo products; one (6.25%) in grains, especially amaranth; one (6.25%) in agave for mezcal production; one (6.25%) in microgreens; one (6.25%) in in-vitro crops; and one panelist (6.25%) did not respond to the question (see Table 8).

Table 8

Producers Panel: Areas of Specialization (n = 16)

Specializations	*f*	%
Fruits and Vegetables	5	31.25
Floriculture	3	18.75
Wine	2	12.50
Bamboo	1	6.25
Grains (amaranth)	1	6.25
Agave (mezcal)	1	6.25
Microgreens	1	6.25
In vitro	1	6.25

No response	1	6.25

Researchers, Extension Educators, or Other Professionals Delphi Panel: Round One Findings

Round One of this Delphi study sought to identify the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers, and specialty produce. By presenting three open-ended questions and applying a SWOT analysis framework for the second question, the panelists were asked to consider the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, such as high-value crops, ornamental flowers, and specialty produce.

In Round One, the researchers, extension educators, or other professionals (*n* = 18) panelists provided 286 statements or items. Similar or duplicate statements were either combined or eliminated, and compound statements were separated. From the 286 original statements, the researcher retained 188 to present as items in Round Two (Fereday & Muir-Cochrane, 2006; Shinn et al., 2009) [see Table 9].

In responding to question one, the 10 categories of plant products offered by researchers, extension educators, or other professionals panelists included arboreal, culinary herbs, edible fruits, endemic species, medicinal, nursery crops, nutraceutical foods, precious woods, vegetables, and other. These categories were populated with 91 specific examples (see Table 9). The number of statements provided for question two applying a SWOT analysis framework were 28 Strengths, 37 Weaknesses, 30

Opportunities, and 28 Threats. These panelists indicated a total of 55 responses to question three (see Table 9).

Table 9

Statements/Items provided by the Researchers, Extension Educators, or Other Professionals Panel during Round One of the Study (N = 188)

Round One

Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?

Plant Products (*n* = 10 Categories, including 91 Examples)

Arboreal, including nuts and fruits (e.g., almond, buddleja cordata, cashew, English walnut, eucalyptus, lime, macadamia nut, pecan nut, pinyon nut, pistachio)

Culinary herbs (e.g., amaranth, *Dialium* [velvet tamarind], mint, oregano, sage, thyme)

Edible fruits (producers of such, e.g., avocado, blackberry, blueberry, cranberry, *Cucurbita ficifolia* [fig-leaf gourd], currant, kiwi, pepper, pitahaya, *Prunus salicifolia* [cherry], quince, raspberry, strawberry, wild grape)

Endemic species, including for local cuisine and popular culture (e.g., cinnamon, garlic, ginger, rosemary, saffron, tapirira, turmeric, vanilla)

Medicinal (e.g., arnica, boldo, calendula, echinacea, mallow, maritime cineraria, melissa, tarragon, valerian, witch hazel)

Nursery crops, including floral and foliage, tropical and other (e.g., anthurium, aspidistra, aster, bromeliad, *Byrsonima* [locust berry], chrysanthemum, *Eustoma* [lisianthus], fern, gardenia, holly, lavender, lemon croton plant, lily of the valley, liriope, maidenhair, myrtle, orchid, peony, perennial, philodendron, ruscus, tulip, *Zantedeschia aethiopica* [arum lily])

Nutraceutical foods (plants that produce such)

Precious woods (e.g., mahogany, teak)

Vegetables (e.g., artichoke, arugula, asparagus, bell pepper, celery, chile, endive, microgreens, onion, pickle, *Sechium edule* [chayote], specialty corn)

Other (e.g., centurion plant, dracaena, ear smut, *Linum usitatissimum* [flax], mushroom, truffle)

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Strengths (*n* = 28)

Good attitude toward entrepreneurial projects
Availability of materials and areas with natural resources other than land or water
Microclimates
Land
Workforce
General knowledge about the management of a specific resource
Adequate communication channels
Accessible locations
Notions of distribution and commercialization
Education and/or previous training
Planning
Existing community unity or willingness to achieve it
Labor that can achieve specialization
Water
Value-addition techniques for their products
Local knowledge
Agrobiological diversity of species in their areas
Availability of native plants
General agricultural knowledge
Soil management
Does not take much space to generate high profits
High levels of production in various exports
Experience of these producers
Lack of competition
Opportunities to develop a business
Potential exists for small producers to apply controlled and economically viable biotechnological processes for some high-value crops
Rural society eager for alternatives and proposals to improve their quality of life
People with value for the land

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 37)

No broad culture of consumption
Ignorance of the natural resources present and their potential
Shortage of economic and material support
Altered natural resources
Lack of advice and training
Poor communication channels
Distant location
Lack of unity and community disinterest
Loss of resources due to different causes
Legal status of many properties
Lack of organization to make cooperatives

Use and transformation of products is unknown
Lack of investment capital
They do not want to work
They leave the land to emigrate to the cities
They lose their traditions
Illiteracy
Poor social participation
Limited resources
Ignorance about products destined for luxury markets
Lack of training in reproduction of species with high sales potential
Not enough producers
Specialized labor is needed
Extended work for farmers
Specialized education in the agricultural products is needed
Lack of technology
Difficulty getting seeds or supplies
High agronomic knowledge to face production challenges due to pests, diseases, and/or other issues
Lack of research and development
Lack of assessment
Marketing can be difficult
Lack of transportation
Limited preharvest stability or resistance to decay
Reduced or limited postharvest shelf life
Abuse/misuse of chemical pesticides
Poor vision of sustainability
Lack of education

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 30)

Versatility for agro-industry transformation
Need to use or take advantage of one or more regional resources
If access exists to official regularization (rules & regulations)
If access exists to financing channels
Interest and openness of the community
Access to education and training
Communication channels
Producers' locations
Unsatisfied demand
Possibility of sales by cooperatives
Cheap labor
Some plants can grow in small areas and require minimal care
Potential for additional income

Train housewives and youth to integrate them into the workforce
Types of social organizations/support such as production cooperatives or family gardens
Types of social organization such as government-supported grants, programs, trusts, and credit
Ease of replication
Market for organic products is growing
Market for healthy products is growing
International markets
Less competition
High quality products
Specialized markets
Trade agreements
Grow plants for products that are well-priced
Need exists for foods with nutritional and functional properties that, in addition to being part of the ingredients of traditional cuisine, have properties that help prevent diseases such as diabetes, high cholesterol, and vascular diseases
Gourmet markets of international cuisine
Use the research of Mexican scientists
Very suitable climates
Enough water is available in certain areas

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 28)

Recurrent climatic effects in the region, including intermittent impact on communication
Community indifference/disinterest
Plagues and diseases of plants
Middlemen
Loss of resources due to natural causes
Loss of resources due to looting and other criminal acts
Companies already established with capital
Non-compliance with required quantities or volumes
Better paying jobs outside the agri-food sector
Highly bureaucratic processes for obtaining licenses
Market variability for the products
No nearby collection centers for the products
No organizations exists or locals do not know how to effectively organize themselves
Large-scale producers growing for export
Deforestation
Climate change
High dependence on government subsidies
Land use that endangers plant diversity

No clear export legislation exists for many products
Lack of economic incentives
Increasing price of raw material
Piracy and related acts of theft, e.g., intellectual property
Unforeseen culturally related problems
Phytosanitary restrictions
Tariff restrictions
Change in eating habits of younger generations
Drug trafficking
Abandonment of farming and producers migrating due to increasing crime, including acts of violence

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Responses (*n* = 55)

Necessary to organize small producers for the production and transformation of seed
Know and value their natural resources and how to use such properly
Internal organization and planning process that allows producers to visualize in tangible and economic ways what to produce at different times
Consider the inputs required and receive related technical advice and training
Know the full value chain of their product(s)
Receive financial advice to form agreements benefiting the community
Maintain an attitude of adaptation to changes and innovation
Receive technical and administrative training
Conduct good agricultural practices, preharvest, harvest, and postharvest
Adopt technology for the transformation of tinctures, extracts, essential oils, and capsules
Access to funds for the development of medium or high technology greenhouses
Receive training on new practices and crops, as well as trading, sales, and after sales activities
Participate in national and international fairs
Participate in conferences
Integrate the use of productive value chains with minimal reliance on middlemen
Receive access to credit to finance projects under fair lending conditions
Receive basic education
Receive training about luxury niche markets
Receive training about cooperatives and creation of value addition networks
Acquire knowledge of current regulations regarding the use of forest resources
Develop management plans
Flexible laws to take advantage of non-timber forest resources
Affiliate with programs that assure them a fair price for their products
Obtain suppliers that can be trusted to provide quality inputs
Acquire capital from NGOs

Plan production better to maintain a stable level of product supply
Benefit from research and development
Adequate infrastructure
Obtain certificates and keep related records
Receive environmental education
Conduct good practices
Maintain ownership of intellectual property
Recognition of and respect for cultural diversity, including producers' ancestral origins
Promotion of human values
Receive training on environmental, economic, social, and cultural sustainability
Benefit from collaboration among academic, governmental, and other societal actors
Promote the love of work
Not be subjected to governmental paternalism
Practice sustainable entrepreneurship
Develop communion between themselves and consumers
Conduct a community analysis regarding the viability of a production project
Prepare short-, medium-, and long-term production goals
Provide appropriate care for the environment
Assess regional environmental conditions
Gain access to international markets
Practice multidisciplinary integration
Acquire technical advice from extension agents to deal with pests and diseases
Be less fearful of change
Be willing to produce outside of their comfort zone
Use inputs that contribute to the reduction of greenhouse gases (GHG)
Apply technologies that restore natural resources such as soil, water, and local biodiversity
Practice green agriculture
Preserve traditional, ancestral knowledge for care of the land
Not illegally extract resources
Sustainable vision

Researchers, Extension Educators, or Other Professionals Delphi Panel: Round Two Findings

In Round Two, researchers, extension educators, or other professionals panel members were asked to rate their level of agreement for the 188 statements derived from Round One. The panelists were asked to use a six-point, Likert-type scale: *1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree,* or *6 =*

Strongly Agree. For 91 items, more than three-fourths (>75.00%) of the participants (*n* = 15) selected either *Agree* or *Strongly Agree*; therefore, the researcher determined that *consensus of agreement* had been reached for those items (Carnes et al., 2010; Shinn et al., 2009) [see Table 10]. The number of items reaching *consensus of agreement* regarding question one were four categories of plant products; items related to question two included six Strengths, 13 Weaknesses, 12 Opportunities, and seven Threats; and 49 items in the case of question three reached *consensus of agreement* as a result of Round Two (see Table 10).

Table 10

Researchers, Extension Educators, or Other Professionals Delphi Panel: Statements/Items that reached Consensus of Agreement after Round Two of the Study (N = 91)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 4 Categories, including 55 Examples)	
Edible fruits (producers of such, e.g., avocado, blackberry, blueberry, cranberry, *Cucurbita ficifolia* [fig-leaf gourd], currant, kiwi, pepper, pitahaya, *Prunus salicifolia* [cherry], quince, raspberry, strawberry, wild grape)	86.67
Endemic species, including for local cuisine and popular culture (e.g., cinnamon, garlic, ginger, rosemary, saffron, tapirira, turmeric, vanilla)	80.00
Medicinal (e.g., arnica, boldo, calendula, echinacea, mallow, maritime cineraria, melissa, tarragon, valerian, witch hazel)	80.00
Nursery crops, including floral and foliage, tropical and other (e.g., anthurium, aspidistra, aster, bromeliad, Byrsonima [locust berry], chrysanthemum, Eustoma [lisianthus], fern, gardenia, holly, lavender, lemon croton plant, lily of the valley, liriope,	80.00

maidenhair, myrtle, orchid, peony, perennial, philodendron, ruscus, tulip, Zantedeschia aethiopica [arum lily])

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Strengths (*n* = 6)

Local knowledge	100.00
General agricultural knowledge	86.67
People with value for the land	86.67
Microclimates	80.00
Land	80.00
Rural society eager for alternatives and proposals to improve their quality of life	80.00

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 13)

Poor communication channels	93.33
Loss of resources due to different causes	93.33
Ignorance about products destined for luxury markets	93.33
Lack of assessment	93.33
Lack of advice and training	86.67
Use and transformation of products is unknown	86.67
Lack of investment capital	86.67
Lack of technology	86.67
Abuse/misuse of chemical pesticides	86.67
Lack of organization to make cooperatives	80.00
They leave the land to emigrate to the cities	80.00
Lack of training in reproduction of species with high sales potential	80.00
Poor vision of sustainability	80.00

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 12)

Possibility of sales by cooperatives	86.67
Potential for additional income	86.67
Gourmet markets of international cuisine	86.67

Use the research of Mexican scientists	86.67
Need to use or take advantage of one or more regional resources	80.00
Some plants can grow in small areas and require minimal care	80.00
Train housewives and youth to integrate them into the workforce	80.00
Market for organic products is growing	80.00
Market for healthy products is growing	80.00
Specialized markets	80.00
Very suitable climates	80.00
Unsatisfied demand*	78.57

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 7)

Recurrent climatic effects in the region, including intermittent impact on communication	93.33
Climate change	93.33
Loss of resources due to natural causes	86.67
Deforestation	86.67
Middlemen	80.00
Highly bureaucratic processes for obtaining licenses	80.00
Increasing price of raw material	80.00

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Responses (*n* = 49)

Internal organization and planning process that allows producers to visualize in tangible and economic ways what to produce at different times	100.00
Consider the inputs required and receive related technical advice and training	100.00
Know the full value chain of their product(s)	100.00
Receive financial advice to form agreements benefiting the community	100.00
Receive training on new practices and crops, as well as trading, sales, and after sales activities	100.00
Receive training about cooperatives and creation of value addition networks	100.00
Develop management plans	100.00
Benefit from research and development	100.00
Conduct good practices	100.00

Receive training on environmental, economic, social, and cultural sustainability	100.00
Not be subjected to governmental paternalism	100.00
Practice sustainable entrepreneurship	100.00
Prepare short-, medium-, and long-term production goals	100.00
Maintain an attitude of adaptation to changes and innovation	93.33
Receive technical and administrative training	93.33
Conduct good agricultural practices, preharvest, harvest, and postharvest	93.33
Adopt technology for the transformation of tinctures, extracts, essential oils, and capsules	93.33
Integrate the use of productive value chains with minimal reliance on middlemen	93.33
Receive access to credit to finance projects under fair lending conditions	93.33
Receive training about luxury niche markets	93.33
Affiliate with programs that assure them a fair price for their products	93.33
Obtain suppliers that can be trusted to provide quality inputs	93.33
Plan production better to maintain a stable level of product supply	93.33
Adequate infrastructure	93.33
Obtain certificates and keep related records	93.33
Recognition of and respect for cultural diversity, including producers' ancestral origins	93.33
Promotion of human values	93.33
Benefit from collaboration among academic, governmental, and other societal actors	93.33
Develop communion between themselves and consumers	93.33
Conduct a community analysis regarding the viability of a production project	93.33
Provide appropriate care for the environment	93.33
Practice multidisciplinary integration	93.33
Acquire technical advice from extension agents to deal with pests and diseases	93.33
Use inputs that contribute to the reduction of greenhouse gases (GHG)	93.33
Apply technologies that restore natural resources such as soil, water, and local biodiversity	93.33
Preserve traditional, ancestral knowledge for care of the land	93.33
Not illegally extract resources	93.33
Sustainable vision	93.33
Necessary to organize small producers for the production and transformation of seed	86.67
Participate in national and international fairs	86.67
Receive environmental education	86.67
Assess regional environmental conditions	86.67

Be willing to produce outside of their comfort zone	86.67
Know and value their natural resources and how to use such properly	80.00
Access to funds for the development of medium or high technology greenhouses	80.00
Acquire knowledge of current regulations regarding the use of forest resources	80.00
Maintain ownership of intellectual property	80.00
Be less fearful of change	80.00
Practice green agriculture	80.00

Note. *Item rated by 14 of the 15 panelists.

In Round Two, at least one-half (50.00%) but less than three-fourths (<75.00%) of the researchers, extension educators, or other professionals panelists selected *Agree* or *Strongly Agree* for 72 of the 188 items they were asked to consider (see Table 11). In other words, these items did not reach *consensus of agreement* during Round Two, but were deemed suitable for return in Round Three. For question one regarding categories of plant products, this included five items; items for question two were 10 Strengths, 19 Weaknesses, 13 Opportunities, and 20 Threats; and regarding question three, five items populated this range of agreement among the panelists (see Table 11).

Table 11

Researchers, Extension Educators, or Other Professionals Delphi Panel: Statements/Items that did not reach Consensus of Agreement during Round Two of the Study and were returned for further Consideration by the Panelists during Round Three (N =72)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	

Plant Products (*n* = 5 Categories, including 24 Examples)

Culinary herbs (e.g., amaranth, *Dialium* [velvet tamarind], mint, oregano, sage, thyme)	73.33
Arboreal, including nuts and fruits (e.g., almond, buddleja cordata, cashew, English walnut, eucalyptus, lime, macadamia nut, pecan nut, pinyon nut, pistachio)	66.67
Nutraceutical foods (plants that produce such)	66.67
Precious woods (e.g., mahogany, teak)	60.00
Other (e.g., centurion plant, dracaena, ear smut, *Linum usitatissimum* [flax], mushroom, truffle)	60.00

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Strengths (*n* = 10)

Agrobiological diversity of species in their areas	73.33
Availability of native plants	73.33
Labor that can achieve specialization	66.67
Good attitude toward entrepreneurial projects	53.33
Workforce	53.33
Existing community unity or willingness to achieve it	53.33
Water	53.33
Experience of these producers	53.33
Lack of competition	53.33
Opportunities to develop a business	53.33

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 19)

Altered natural resources	73.33
Distant location	73.33
Lack of unity and community disinterest	73.33
Limited resources	73.33
Reduced or limited postharvest shelf life	73.33
Lack of education	73.33
No broad culture of consumption	66.67
Legal status of many properties	66.67
Lack of research and development	66.67
Marketing can be difficult	66.67

Lack of transportation	66.67
Shortage of economic and material support	60.00
They lose their traditions	60.00
Poor social participation	60.00
Specialized education in the agricultural products is needed	60.00
High agronomic knowledge to face production challenges due to pests, diseases, and/or other issues	60.00
Limited preharvest stability or resistance to decay	60.00
Illiteracy	53.33
Difficulty getting seeds or supplies	53.33

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 13)

Grow plants for products that are well-priced	73.33
Interest and openness of the community	66.67
Types of social organizations/support such as production cooperatives or family gardens	66.67
Ease of replication	66.67
High quality products	66.67
Trade agreements	66.67
Need exists for foods with nutritional and functional properties that, in addition to being part of the ingredients of traditional cuisine, have properties that help prevent diseases such as diabetes, high cholesterol, and vascular diseases	66.67
Enough water is available in certain areas	66.67
If access exists to financing channels	60.00
Access to education and training	60.00
Versatility for agro-industry transformation	53.33
Communication channels	53.33
Producers' locations	53.33

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 20)

Loss of resources due to looting and other criminal acts	73.33
No organizations exists or locals do not know how to effectively organize themselves	73.33
High dependence on government subsidies	73.33
Land use that endangers plant diversity	73.33

No clear export legislation exists for many products	73.33
Abandonment of farming and producers migrating due to increasing crime, including acts of violence	73.33
No nearby collection centers for the products	66.67
Unforeseen culturally related problems	66.67
Change in eating habits of younger generations	66.67
Community indifference/disinterest	60.00
Plagues and diseases of plants	60.00
Better paying jobs outside the agri-food sector	60.00
Market variability for the products	60.00
Piracy and related acts of theft, e.g., intellectual property	60.00
Phytosanitary restrictions	60.00
Tariff restrictions	60.00
Large-scale producers growing for export*	57.14
Companies already established with capital	53.33
Non-compliance with required quantities or volumes	53.33
Drug trafficking	53.33

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Responses (*n* = 5)

Receive basic education	73.33
Flexible laws to take advantage of non-timber forest resources	66.67
Promote the love of work	66.67
Participate in conferences	60.00
Gain access to international markets	60.00

Note. *Item rated by 14 of the 15 panelists.

The remaining 25 items for which less than one-half (50.00%) of the panelists indicated either *Agree* or *Strongly Agree* were not included in Round Three of the study; see Table 12 below for a listing of those items. This was one category of plant products from question one; the items related to question two included 12 Strengths, five Weaknesses, five Opportunities, and one Threat; and regarding question three, one item met this criterion.

Table 12

Researchers, Extension Educators, or Other Professionals Delphi Panel: Statements/Items discarded after Round Two of the Study (N = 25)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 1 Category, including 12 Examples)	
Vegetables (e.g., artichoke, arugula, asparagus, bell pepper, celery, chile, endive, microgreens, onion, pickle, Sechium edule [chayote], specialty corn)	46.67
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths (*n* = 12)	
Availability of materials and areas with natural resources other than land or water	46.67
Adequate communication channels	46.67
Soil management	46.67
Does not take much space to generate high profits	46.67
High levels of production in various exports	46.67
Potential exists for small producers to apply controlled and economically viable biotechnological processes for some high-value crops	46.67
General knowledge about the management of a specific resource	40.00
Notions of distribution and commercialization	40.00
Education and/or previous training	40.00
Value-addition techniques for their products	40.00
Accessible locations	33.33
Planning	33.33
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Weaknesses (*n* = 5)	
Ignorance of the natural resources present and their potential	46.67
Not enough producers	46.67
They do not want to work	33.33

Specialized labor is needed	33.33
Extended work for farmers*	28.57

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 5)

If access exists to official regularization (rules & regulations)	46.67
Cheap labor	46.67
Types of social organization such as government-supported grants, programs, trusts, and credit	40.00
International markets	40.00
Less competition	33.33

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 1)

Lack of economic incentives	46.67

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Response (*n* = 1)

Acquire capital from NGOs	40.00

Note. *Item rated by 14 of the 15 panelists.

Researchers, Extension Educators, or Other Professionals Delphi Panel: Qualitative Data

In Round Two, the panelists had an opportunity to offer additional comments if they perceived more information, detail, or clarification was needed regarding a particular item (Fletcher & Marchildon, 2014; Jacobs, 1996). Also, at the end of the instrument, space was provided for the panelists to share any additional ideas, thoughts, or general comments of value to the study. Six researchers, extension educators, or other professionals panelists provided a total of 108 comments to the items presented during

Round Two of the study (see Appendix V). Two comments related to categories of plant products, question one; 84 comments were distributed among the SWOT-related items associated with question two; 14 comments were related to responses answering question three; and eight were in the category of additional comments (see Appendix V).

Researchers, Extension Educators, or Other Professionals Delphi Panel: Round Three Findings

In Round Three, the researchers, extension educators, or other professionals panelists were asked to rate their levels of agreement for the 72 items that failed to reach *consensus of agreement* during Round Two but were not discarded after the round. During Round Three, the panelists were asked to use a dichotomous response scale: *Disagree* or *Agree.* More than three-fourths (>75.00%) of the panelists (n = 15) selected *Agree* for 22 of the returned items; therefore, the researcher determined that *consensus of agreement* was reached for those items (Jenkins III & Kitchel, 2009; Shinn et al., 2009) [see Table 13]. The additional items reaching *consensus of agreement*, included one category of plant product from question one; three Strengths, eight Weaknesses, three Opportunities, and six Threats as associated with question two; and one additional item from question three (see Table 13).

Table 13

Researchers, Extension Educators, or Other Professionals Delphi Panel: Additional Statements/Items that reached Consensus of Agreement in Round Three of the Study (N = 22)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 1 Category, including 6 Examples)	
Culinary herbs (e.g., amaranth, *Dialium* [velvet tamarind], mint, oregano, sage, thyme)	93.33
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths (*n* = 3)	
Agrobiological diversity of species in their areas	93.33
Availability of native plants	93.33
Labor that can achieve specialization	86.67
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Weaknesses (*n* = 8)	
Altered natural resources	100.00
Distant location	86.67
Lack of unity and community disinterest	86.67
Limited resources	86.67
Lack of research and development	86.67
Reduced or limited postharvest shelf life	86.67
Lack of education	86.67
Lack of transportation	80.00

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 3)

Grow plants for products that are well-priced	93.33
Interest and openness of the community	80.00
Need exists for foods with nutritional and functional properties that, in addition to being part of the ingredients of traditional cuisine, have properties that help prevent diseases such as diabetes, high cholesterol, and vascular diseases	80.00

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 6)

Abandonment of farming and producers migrating due to increasing crime, including acts of violence	100.00
Loss of resources due to looting and other criminal acts	93.33
No organizations exists or locals do not know how to effectively organize themselves	93.33
High dependence on government subsidies	93.33
Land use that endangers plant diversity	86.67
No clear export legislation exists for many products	86.67

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Response (*n* = 1)

Receive basic education	93.33

The remaining 50 items did not reach *consensus of agreement* in Round Three, which included four categories of plant products from question one; seven Strengths, 11 Weaknesses, 10 Opportunities, and 14 Threats associated with question two; and four response items related to question three (see Table 14).

Table 14

Researchers, Extension Educators, or Other Professionals Delphi Panel: Statements/Items that did not reach Consensus of Agreement in Round Three of the Study (N = 50)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 4 Categories, including 18 Examples)	
Arboreal, including nuts and fruits (e.g., almond, buddleja cordata, cashew, English walnut, eucalyptus, lime, macadamia nut, pecan nut, pinyon nut, pistachio)	60.00
Nutraceutical foods (plants that produce such)	60.00
Other (e.g., centurion plant, dracaena, ear smut, *Linum usitatissimum* [flax], mushroom, truffle)	60.00
Precious woods (e.g., mahogany, teak)	40.00
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths (*n* = 7)	
Good attitude toward entrepreneurial projects	73.33
Lack of competition	66.67
Opportunities to develop a business	66.67
Experience of these producers	60.00
Existing community unity or willingness to achieve it	53.33
Water	53.33
Workforce	46.67
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Weaknesses (*n* = 11)	
No broad culture of consumption	73.33

Illiteracy	66.67
Marketing can be difficult	66.67
Shortage of economic and material support	60.00
Legal status of many properties	60.00
Poor social participation	60.00
Specialized education in the agricultural products is needed	60.00
They lose their traditions	53.33
Difficulty getting seeds or supplies	53.33
High agronomic knowledge to face production challenges due to pests, diseases, and/or other issues	53.33
Limited preharvest stability or resistance to decay	46.67

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 10)

High quality products	73.33
If access exists to financing channels	60.00
Types of social organizations/support such as production cooperatives or family gardens	60.00
Enough water is available in certain areas	60.00
Versatility for agro-industry transformation	53.33
Ease of replication	53.33
Trade agreements	53.33
Access to education and training	46.67
Communication channels	46.67
Producers' locations	26.67

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 14)

Unforeseen culturally related problems	73.33
Community indifference/disinterest	66.67
Plagues and diseases of plants	60.00
Non-compliance with required quantities or volumes	60.00
No nearby collection centers for the products	60.00
Drug trafficking	60.00
Better paying jobs outside the agri-food sector	53.33
Phytosanitary restrictions	53.33
Change in eating habits of younger generations	53.33
Companies already established with capital	46.67

Market variability for the products	46.67
Tariff restrictions	46.67
Piracy and related acts of theft, e.g., intellectual property	40.00
Large-scale producers growing for export	33.33

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Responses (*n* = 4)

Promote the love of work	66.67
Gain access to international markets	66.67
Participate in conferences	60.00
Flexible laws to take advantage of non-timber forest resources	53.33

The total number of items that reached *consensus of agreement* for the researchers, extension educators, or other professionals panel was 113 after three rounds of data collection (see Table 15). The distribution of those items included five categories of plant products as derived from the panelists' responses to question one; nine Strengths, 21 Weaknesses, 15 Opportunities, and 13 Threats associated with question two; and 50 items emerged as consensual responses to question three (see Table 15).

Table 15

Researchers, Extension Educators, or Other Professionals Delphi Panel: Statements/Items that reached Consensus of Agreement after Three Rounds of the Study (N = 113)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 5 Categories, including 61 Examples)	

Culinary herbs (e.g., amaranth, *Dialium* [velvet tamarind], mint, oregano, sage, thyme)	93.33
Edible fruits (producers of such, e.g., avocado, blackberry, blueberry, cranberry, *Cucurbita ficifolia* [fig-leaf gourd], currant, kiwi, pepper, pitahaya, *Prunus salicifolia* [cherry], quince, raspberry, strawberry, wild grape)	86.67
Endemic species, including for local cuisine and popular culture (e.g., cinnamon, garlic, ginger, rosemary, saffron, tapirira, turmeric, vanilla)	80.00
Medicinal (e.g., arnica, boldo, calendula, echinacea, mallow, maritime cineraria, melissa, tarragon, valerian, witch hazel)	80.00
Nursery crops, including floral and foliage, tropical and other (e.g., anthurium, aspidistra, aster, bromeliad, Byrsonima [locust berry], chrysanthemum, Eustoma [lisianthus], fern, gardenia, holly, lavender, lemon croton plant, lily of the valley, liriope, maidenhair, myrtle, orchid, peony, perennial, philodendron, ruscus, tulip, Zantedeschia aethiopica [arum lily])	80.00

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Strengths (*n* = 9)

Local knowledge	100.00
Agrobiological diversity of species in their areas	93.33
Availability of native plants	93.33
General agricultural knowledge	86.67
People with value for the land	86.67
Labor that can achieve specialization	86.67
Microclimates	80.00
Land	80.00
Rural society eager for alternatives and proposals to improve their quality of life	80.00

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 21)

Altered natural resources	100.00
Poor communication channels	93.33
Loss of resources due to different causes	93.33
Ignorance about products destined for luxury markets	93.33
Lack of assessment	93.33

Distant location	86.67
Lack of unity and community disinterest	86.67
Limited resources	86.67
Lack of research and development	86.67
Reduced or limited postharvest shelf life	86.67
Lack of education	86.67
Lack of advice and training	86.67
Use and transformation of products is unknown	86.67
Lack of investment capital	86.67
Lack of technology	86.67
Abuse/misuse of chemical pesticides	86.67
Lack of organization to make cooperatives	80.00
They leave the land to emigrate to the cities	80.00
Lack of training in reproduction of species with high sales potential	80.00
Poor vision of sustainability	80.00
Lack of transportation	80.00

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 15)

Grow plants for products that are well-priced	93.33
Possibility of sales by cooperatives	86.67
Potential for additional income	86.67
Gourmet markets of international cuisine	86.67
Use the research of Mexican scientists	86.67
Interest and openness of the community	80.00
Need exists for foods with nutritional and functional properties that, in addition to being part of the ingredients of traditional cuisine, have properties that help prevent diseases such as diabetes, high cholesterol, and vascular diseases	80.00
Need to use or take advantage of one or more regional resources	80.00
Some plants can grow in small areas and require minimal care	80.00
Train housewives and youth to integrate them into the workforce	80.00
Market for organic products is growing	80.00
Market for healthy products is growing	80.00
Specialized markets	80.00
Very suitable climates	80.00
Unsatisfied demand*	78.57

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 13)

Abandonment of farming and producers migrating due to increasing crime, including acts of violence	100.00
Loss of resources due to looting and other criminal acts	93.33
No organizations exists or locals do not know how to effectively organize themselves	93.33
High dependence on government subsidies	93.33
Recurrent climatic effects in the region, including intermittent impact on communication	93.33
Climate change	93.33
Loss of resources due to natural causes	86.67
Deforestation	86.67
Land use that endangers plant diversity	86.67
No clear export legislation exists for many products	86.67
Middlemen	80.00
Highly bureaucratic processes for obtaining licenses	80.00
Increasing price of raw material	80.00

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Responses (*n* = 50)

Internal organization and planning process that allows producers to visualize in tangible and economic ways what to produce at different times	100.00
Consider the inputs required and receive related technical advice and training	100.00
Know the full value chain of their product(s)	100.00
Receive financial advice to form agreements benefiting the community	100.00
Receive training on new practices and crops, as well as trading, sales, and after sales activities	100.00
Receive training about cooperatives and creation of value addition networks	100.00
Develop management plans	100.00
Benefit from research and development	100.00
Conduct good practices	100.00
Receive training on environmental, economic, social, and cultural sustainability	100.00
Not be subjected to governmental paternalism	100.00
Practice sustainable entrepreneurship	100.00
Prepare short-, medium-, and long-term production goals	100.00
Receive basic education	93.33

Maintain an attitude of adaptation to changes and innovation	93.33
Receive technical and administrative training	93.33
Conduct good agricultural practices, preharvest, harvest, and postharvest	93.33
Adopt technology for the transformation of tinctures, extracts, essential oils, and capsules	93.33
Integrate the use of productive value chains with minimal reliance on middlemen	93.33
Receive access to credit to finance projects under fair lending conditions	93.33
Receive training about luxury niche markets	93.33
Affiliate with programs that assure them a fair price for their products	93.33
Obtain suppliers that can be trusted to provide quality inputs	93.33
Plan production better to maintain a stable level of product supply	93.33
Adequate infrastructure	93.33
Obtain certificates and keep related records	93.33
Recognition of and respect for cultural diversity, including producers' ancestral origins	93.33
Promotion of human values	93.33
Benefit from collaboration among academic, governmental, and other societal actors	93.33
Develop communion between themselves and consumers	93.33
Conduct a community analysis regarding the viability of a production project	93.33
Provide appropriate care for the environment	93.33
Practice multidisciplinary integration	93.33
Acquire technical advice from extension agents to deal with pests and diseases	93.33
Use inputs that contribute to the reduction of greenhouse gases (GHG)	93.33
Apply technologies that restore natural resources such as soil, water, and local biodiversity	93.33
Preserve traditional, ancestral knowledge for care of the land	93.33
Not illegally extract resources	93.33
Sustainable vision	93.33
Necessary to organize small producers for the production and transformation of seed	86.67
Participate in national and international fairs	86.67
Receive environmental education	86.67
Assess regional environmental conditions	86.67
Be willing to produce outside of their comfort zone	86.67
Know and value their natural resources and how to use such properly	80.00
Access to funds for the development of medium or high technology greenhouses	80.00

Acquire knowledge of current regulations regarding the use of forest resources	80.00
Maintain ownership of intellectual property	80.00
Be less fearful of change	80.00
Practice green agriculture	80.00

Note. *Item rated by 14 of the 15 panelists.

Researchers, Extension Educators, or Other Professionals Delphi Panel: Qualitative Data

In Round Three, an additional opportunity was provided to the panelists to make further clarifications to the items and their relative importance. In addition, a final opportunity for panelists to share their thoughts, concerns, or recommendations was provided. Ten researchers, extension educators, or other professionals provided a total of 47 comments to the items presented during Round Three of the study (see Appendix W). Ten comments related to categories of plant products, question one; 21 comments were distributed among the SWOT-related items associated with question two; six comments were related to responses answering question three; and 10 were in the category of additional comments (see Appendix W).

Producers Delphi Panel: Round One Findings

As for the producers panel, Round One of the Delphi study also sought to identify the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value crops, ornamental flowers, and specialty produce. Similar to the other panel, this was achieved by presenting these panelists with three open-ended questions and applying a SWOT analysis framework for the second question.

In Round One, the producers panelists (n = 16) provided 179 statements or items. Similar or duplicate statements were either combined or eliminated, and compound statements were separated. From the 179 original statements, the researcher retained 94 to present as items in Round Two of the study (Fereday & Muir-Cochrane, 2006; Shinn et al., 2009) [see Table 16].

In responding to question one, the four categories of plant products offered by the producers panel were Condiments, Flowers, Vegetables and Other. These categories included 41 specific examples (see Table 16). The number of statements provided for question two applying a SWOT analysis framework were 20 Strengths, 22 Weaknesses, 16 Opportunities, and 14 Threats. These panelists indicated a total of 18 responses to question three (see Table 16).

Table 16

Statements/Items provided by the Producers Panel during Round One of the Study (N = 94)

Round One
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?
Plant Products (n = 4 Categories, including 41 Examples)
Condiments (culinary herbs and spices, e.g., mint, vanilla)
Flowers (e.g., *Araceae* [arum], bamboo, gladiolus, orchids, roses)
Vegetables (including fruits, e.g., asparagus, avocado, banana, black corn, blackberry, blue corn, chard, cherry tomato, chile, grape, kiwi, lettuce, mango, onion, orange, papaya, passion fruit, pumpkin, radish, raspberry, strawberry, tomato)
Other (including *Cactaceae*, *Fungi*, nuts, trees, e.g., agave, *Cedrela odorata* [cedar], coffee, ear smut, lime, macadamia nut, maguey, mahogany, moringa, opuntia, pinyon nut, sugar cane)

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Strengths (*n* = 20)

Available workforce
Closeness to the market
Sustainable
Directly linked to consumers
Local production
Available land
Hard workers
Fertile land
Available water
Access to organic fertilizers
Proximity to the countryside
Planting knowledge
Potential for protected designation of origin recognition
Optimal environment
National market stability
Positive environmental impact
Varieties of weather
Cheap labor
Cheap utility services where available
Producer experience

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 22)

Lack of organization to sell products
Lack of knowledge about business administration
Lack of education/training
Low technical capacity
High initial cost for these kinds of crops
Lack of articulation of the entire value chain
Weather extremes and inconsistencies
Lack of business communication skills
Limited resources
Young people leaving to look for better opportunities
Time required before harvesting
Lack of well-managed economic support
Limited markets
Technology shortages
Hard to get government support

Social culture
Lack of capital
Lack of fertilizers
Lack of technical knowledge
Lack of services
Some products are highly seasonal
Short shelf life of such products

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 16)

Unsatisfied demands (national)
Unsatisfied demands (international)
Sell to local markets and big companies
People are searching for organic products
NGOs and private institutions want to help rural areas
Government support
Large rural populations
New products for the community
Niches are being discovered
Growth of local consumption
Further development opportunities exists
Better quality of life for the producers
Higher incomes
Need for food with improved nutritional properties
Market for products offered in different presentations (e.g., value addition through packaging)
If training is provided about how to grow different luxury plants

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 14)

Lack of capital
Competition from large, foreign competitors with lower production costs
Low interest of the government to work with farmers
Plant diseases
Middlemen
Corporations/industrialized production
Climate change
Natural phenomena
Migration of young people
Lack of interest

Globalization
Organized crime
Lack of appropriate facilities
Lack of consumer awareness of products' origins

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Responses (*n* = 18)

Organization to sell through cooperatives
Technical training and support
Business/administrative training
Youth training
Awareness of the entire value chain and the role that each actor plays
Appropriate locations
Appropriate technologies
Support from authorities to reduce crop theft
Teamwork
Money management skills
Create seed banks/reserves
Maintain a high quality of products
Add value to raw products
Design a model to trigger or instigate development for potential producers
Infrastructure
Environmental education
Standards and certifications
Need to train and provide support, but the farmers should also invest, monetarily and otherwise, in the project to feel a part of it

---

Producers Delphi Panel: Round Two Findings

In Round Two, the producers panel members were asked to rate their levels of agreement for the 94 statements derived from Round One. The panelists were asked to use a six-point, Likert-type scale: *1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree,* or *6 = Strongly Agree.* For 70 items, more than three-fourths (>75.00%) of the panelists (*n* = 14) selected either *Agree* or *Strongly Agree*; therefore, the researcher determined that *consensus of agreement* had been reached for

those items (Carnes et al., 2010; Shinn et al., 2009) [see Table 17]. The number of items reaching *consensus of agreement* regarding question one were three categories of plant products; items from question two included 10 Strengths, 19 Weaknesses, 14 Opportunities, and seven Threats; and 17 items related to question three also reached *consensus of agreement* as a result of Round Two (see Table 17).

Table 17

Producers Delphi Panel: Statements/Items that reached Consensus of Agreement during Round Two of the Study (N = 70)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 3 Categories, including 39 Examples)	
Other (including Cactaceae, Fungi, nuts, trees, e.g., agave, Cedrela odorata [cedar], coffee, ear smut, lime, macadamia nut, maguey, mahogany, moringa, opuntia, pinyon nut, sugar cane)	92.86
Flowers (e.g., Araceae [arum], bamboo, gladiolus, orchids, roses)	85.71
Vegetables (including fruits, e.g., asparagus, avocado, banana, black corn, blackberry, blue corn, chard, cherry tomato, chile, grape, kiwi, lettuce, mango, onion, orange, papaya, passion fruit, pumpkin, radish, raspberry, strawberry, tomato)	78.57
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths (*n* = 10)	
Available workforce	92.86
Local production	92.86
Available land	92.86
Cheap labor	92.86
Hard workers	85.71
Fertile land	85.71

Proximity to the countryside	85.71
Positive environmental impact	85.71
Cheap utility services where available	85.71
Varieties of weather*	76.92

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 19)

Lack of organization to sell products	92.86
Lack of knowledge about business administration	92.86
High initial cost for these kinds of crops	92.86
Lack of articulation of the entire value chain	92.86
Lack of business communication skills	92.86
Young people leaving to look for better opportunities	92.86
Lack of capital	92.86
Short shelf life of such products	92.86
Lack of education/training	85.71
Weather extremes and inconsistencies	85.71
Limited markets	85.71
Technology shortages	85.71
Some products are highly seasonal	85.71
Limited resources	78.57
Time required before harvesting	78.57
Lack of well-managed economic support	78.57
Hard to get government support	78.57
Social culture	78.57
Lack of services	78.57

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 14)

People are searching for organic products	100.00
If training is provided about how to grow different luxury plants	100.00
NGOs and private institutions want to help rural areas	92.86
Better quality of life for the producers	92.86
Higher incomes	92.86
Market for products offered in different presentations (e.g., value addition through packaging)	92.86
Unsatisfied demands (international)	85.71
Sell to local markets and big companies	85.71

Further development opportunities exists	85.71
Need for food with improved nutritional properties	85.71
Unsatisfied demands (national)	78.57
Large rural populations	78.57
Niches are being discovered	78.57
Growth of local consumption	78.57

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 7)

Competition from large, foreign competitors with lower production costs	100.00
Lack of capital	85.71
Middlemen	85.71
Corporations/industrialized production	85.71
Climate change	85.71
Migration of young people	78.57
Organized crime	78.57

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Responses (*n* = 17)

Add value to raw products	100.00
Standards and certifications	100.00
Teamwork	92.86
Money management skills	92.86
Need to train and provide support, but the farmers should also invest, monetarily and otherwise, in the project to feel a part of it	92.86
Organization to sell through cooperatives	85.71
Awareness of the entire value chain and the role that each actor plays	85.71
Maintain a high quality of products	85.71
Design a model to trigger or instigate development for potential producers	85.71
Infrastructure	85.71
Appropriate technologies*	84.62
Business/administrative training	78.57
Youth training	78.57
Appropriate locations	78.57
Support from authorities to reduce crop theft	78.57

Create seed banks/reserves	78.57
Environmental education	78.57

Note. *Item rated by 13 of the 14 panelists.

In Round Two, at least one-half (50.00%) but less than three-fourths (<75.00%) of the producers panelists selected *Agree* or *Strongly Agree* for 24 of the 94 items they were asked to consider (see Table 18). In other words, these items did not reach *consensus of agreement* during Round Two but were deemed suitable for return in Round Three. For question one regarding categories of plant products, this meant one item; items from question two included 10 Strengths, three Weaknesses, two Opportunities, and seven Threats; and for question three one item populated this range of agreement among the panelists (see Table 18).

Table 18

Producers Delphi Panel: Statements/Items that did not reach Consensus of Agreement during Round Two of the Study and were returned for further consideration by the Panelists during Round Three (N = 24)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 1 Category, including 2 Examples)	
Condiments (culinary herbs and spices, e.g., mint, vanilla)	71.43
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths (*n* = 10)	

Closeness to the market	71.43
Sustainable	71.43
Directly linked to consumers	71.43
Potential for protected designation of origin recognition	71.43
Optimal environment*	69.23
Available water	64.29
Access to organic fertilizers	64.29
Planting knowledge	64.29
National market stability	64.29
Producer experience	64.29

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 3)

Low technical capacity	71.43
Lack of technical knowledge	71.43
Lack of fertilizers	64.29

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 2)

Government support	71.43
New products for the community	71.43

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 7)

Plant diseases	71.43
Natural phenomena	71.43
Lack of interest	71.43
Lack of appropriate facilities	71.43
Low interest of the government to work with farmers	64.29
Lack of consumer awareness of products' origins	64.29
Globalization	57.14

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

	Response (*n* = 1)
Technical training and support	64.29

Note. *Item rated by 13 of the 14 panelists.

In Round Two of the study, no items for which less than one-half (<50.00%) of the panelists indicated either *Agree* or *Strongly Agree* were found.

Producers Delphi Panel: Qualitative Data

In Round Two, the panelists had an opportunity to offer additional comments if they perceived more information, detail, or clarification was needed regarding a particular item (Fletcher & Marchildon, 2014; Jacobs, 1996). Also, at the end of the instrument, space was provided for the panelists to share any additional ideas, thoughts, or general comments of value to the study. Three producers panelists provided a total of 47 comments to the items presented during Round Two of the study (see Appendix X). Five comments related to categories of plant products, question one; 35 comments were distributed among the SWOT-related items associated with question two; four comments were related to responses answering question three; and three were in the category of additional comments.

Producers Delphi Panel: Round Three Findings

In Round Three, the producers panelists were asked to rate their levels of agreement for the 24 items that did not reach *consensus of agreement* during Round Two

but were not discarded after the round. During Round Three, the panelists were asked to use a dichotomous response scale: *Disagree* or *Agree*. More than three-fourths (>75.00%) of the panelists (n = 14) selected *Agree* for nine of the returned items; therefore, the researcher determined that *consensus of agreement* was reached for those items (Jenkins III & Kitchel, 2009; Shinn et al., 2009) [see Table 19].

The additional items reaching *consensus of agreement* did not include any categories of plant products from question one. However, three Strengths, one Weakness, two Opportunities, and three Threats as associated with question two did reach *consensus of agreement* but no additional items from question three (see Table 19).

Table 19

Producers Delphi Panel: Statements/Items that reached Consensus of Agreement in Round Three of the Study (N = 9)

Items	% Agreement
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths (n = 3)	
Sustainable	92.86
Directly linked to consumers	85.71
Potential for protected designation of origin recognition	78.57
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Weaknesses (n = 1)	
Low technical capacity	78.57

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Opportunities (*n* = 2)	
Government support	78.57
New products for the community	78.57
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Threats (*n* = 3)	
Lack of appropriate facilities	92.86
Natural phenomena	85.71
Plant diseases	78.57

The remaining 15 items did not reach *consensus of agreement* in Round Three, which included one category of plant products from question one; seven Strengths, two Weaknesses, and four Threats associated with question two; and one response item related to question three (see Table 20).

Table 20

Producers Delphi Panel: Statements/Items that did not reach Consensus of Agreement in Round Three of the Study (N = 15)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 1 Category, including 2 Examples)	
Condiments (culinary herbs and spices, e.g., mint, vanilla)	71.43

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Strengths (*n* = 7)

Producer experience	57.14
Closeness to the market	42.86
Access to organic fertilizers	42.86
Planting knowledge	42.86
Optimal environment	42.86
Available water	35.71
National market stability	35.71

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 2)

Lack of technical knowledge	35.71
Lack of fertilizers	21.43

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 4)

Low interest of the government to work with farmers	42.86
Lack of interest	42.86
Globalization	35.71
Lack of consumer awareness of products' origins	35.71

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Response (*n* = 1)

Technical training and support	42.86

The total number of items that reached *consensus of agreement* for the producers panel was 79 after three rounds of data collection (see Table 21). The distribution of those items, included three categories of plant products as derived from panelists' responses to question one; 13 Strengths, 20 Weaknesses, 16 Opportunities, and 10 Threats associated with question two; and 17 items emerged as consensual responses to question three (see Table 21).

Table 21

Producers Delphi Panel: Statements/Items that reached Consensus of Agreement after Three Rounds of the Study (N = 79)

Items	% Agreement
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (*n* = 3 Categories, including 39 Examples)	
Other (including Cactaceae, Fungi, nuts, trees, e.g., agave, Cedrela odorata [cedar], coffee, ear smut, lime, macadamia nut, maguey, mahogany, moringa, opuntia, pinyon nut, sugar cane)	92.86
Flowers (e.g., Araceae [arum], bamboo, gladiolus, orchids, roses)	85.71
Vegetables (including fruits, e.g., asparagus, avocado, banana, black corn, blackberry, blue corn, chard, cherry tomato, chile, grape, kiwi, lettuce, mango, onion, orange, papaya, passion fruit, pumpkin, radish, raspberry, strawberry, tomato)	78.57
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths (*n* = 13)	
Available workforce	92.86
Local production	92.86
Available land	92.86
Cheap labor	92.86

Sustainable	92.86
Directly linked to consumers	85.71
Hard workers	85.71
Fertile land	85.71
Proximity to the countryside	85.71
Positive environmental impact	85.71
Cheap utility services where available	85.71
Potential for protected designation of origin recognition	78.57
Varieties of weather*	76.92

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses (*n* = 20)

Lack of organization to sell products	92.86
Lack of knowledge about business administration	92.86
High initial cost for these kinds of crops	92.86
Lack of articulation of the entire value chain	92.86
Lack of business communication skills	92.86
Young people leaving to look for better opportunities	92.86
Lack of capital	92.86
Short shelf life of such products	92.86
Lack of education/training	85.71
Weather extremes and inconsistencies	85.71
Limited markets	85.71
Technology shortages	85.71
Some products are highly seasonal	85.71
Low technical capacity	78.57
Limited resources	78.57
Time required before harvesting	78.57
Lack of well-managed economic support	78.57
Hard to get government support	78.57
Social culture	78.57
Lack of services	78.57

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities (*n* = 16)

People are searching for organic products	100.00
If training is provided about how to grow different luxury plants	100.00

NGOs and private institutions want to help rural areas	92.86
Better quality of life for the producers	92.86
Higher incomes	92.86
Market for products offered in different presentations (e.g., value addition through packaging)	92.86
Unsatisfied demands (international)	85.71
Sell to local markets and big companies	85.71
Further development opportunities exists	85.71
Need for food with improved nutritional properties	85.71
Government support	78.57
New products for the community	78.57
Unsatisfied demands (national)	78.57
Large rural populations	78.57
Niches are being discovered	78.57
Growth of local consumption	78.57

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats (*n* = 10)

Competition from large, foreign competitors with lower production costs	100.00
Lack of appropriate facilities	92.86
Natural phenomena	85.71
Lack of capital	85.71
Middlemen	85.71
Corporations/industrialized production	85.71
Climate change	85.71
Plant diseases	78.57
Migration of young people	78.57
Organized crime	78.57

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Responses (*n* = 17)

Add value to raw products	100.00
Standards and certifications	100.00
Teamwork	92.86
Money management skills	92.86

Need to train and provide support, but the farmers should also invest, monetarily and otherwise, in the project to feel a part of it	92.86
Organization to sell through cooperatives	85.71
Awareness of the entire value chain and the role that each actor plays	85.71
Maintain a high quality of products	85.71
Design a model to trigger or instigate development for potential producers	85.71
Infrastructure	85.71
Appropriate technologies*	84.62
Business/administrative training	78.57
Youth training	78.57
Appropriate locations	78.57
Support from authorities to reduce crop theft	78.57
Create seed banks/reserves	78.57
Environmental education	78.57

Note. *Item rated by 13 of the 14 panelists.

Producers Delphi Panel: Qualitative Data

In Round Three, the panelists were provided another opportunity to make further clarifications to the items. In addition, a final opportunity for panelists to share their thoughts, concerns, or recommendations was provided. Eight producers indicated a total of 16 comments to the items presented during Round Three of the study (see Appendix Y). Four comments related to plant products, question one; seven comments were distributed among the SWOT-related items associated with question two; no comments were offered regarding responses answering question three; and five were in the category of additional comments.

Summary

Most of the 18 researchers, extension educators, or other professionals panelists who completed Round One of the study were female and Latino. Twelve of the 18 participants reported being 50 years or older. Regarding education and related work

experience, two-thirds of the panelists reported holding a doctorate as their highest educational degree; about one-fourth indicated having a master's degree. In addition, a majority of the participants had 16 or more years of related work experience (see Table 3).

Most of the 16 producers panelists who completed Round One of data collection were male and Latino. Nine of these panelists reported an age from 20 to 39 years; the remaining seven panelists were 40 years of age or older.

Regarding education and related work experience, 13 of these panelists indicated having a bachelor's or technical degree as their highest educational degree; three reported earning a master's or doctoral degree. Regarding their years of related work experience, slightly less than one-half of the panelists reported 10 years or fewer, and slightly more than one-half indicated 11 or more years of related work experience (see Table 6).

Regarding the panelists' specializations, about one-fourth or five of the researchers, extension educators, or other professionals identified agronomy as their specialization, followed by two each who specialized in agricultural education and communications, food sciences, horticulture, and strategy and/or economic development; the remaining panelists specialized in other areas (see Table 5). The panelists were also questioned about their job positions or titles. One-half indicated that they were full-time professors/researchers; slightly less than one-fourth or four reported holding positions of directors, managers, or specialists in enterprises or foundations; three were consultants, and two were full-time extension educators (see Table 4).

About one-third of the producers identified fruits and vegetables as their product specialization; three indicated specializing in floriculture, two in wine production, and the

remainder of these panelists produced a variety of other specialty crops. When questioned about their job positions or titles, three-fourths of the panelists reported to be owners, three indicated holding a managerial position, and one panelist did not respond to the question (see Table 7).

As a result of Round One of the study, the researchers, extension educators, or other professionals panelists provided 286 items, and the producers panelists returned 179 items. From the 286 original researchers, extension educators, or other professionals panel items, the researcher retained 188 to present to these panelists in Round Two (see Table 9). From the 179 original producers panel items, the researcher retained 94 statements to present to these panelists in Round Two (see Table 16). The researcher removed duplicated items and, in some cases, combined items as deemed appropriate.

In responding to question one, 10 categories of plant products were offered by researchers, extension educators, or other professionals, and four categories by the producers. These categories contained 91 and 41 specific examples of plant products, respectively (see Tables 9 & 16). The number of statements provided by the researchers, extension educators, or other professionals panel for question two using a SWOT analysis framework were 28 Strengths, 37 Weaknesses, 30 Opportunities, and 28 Threats. The statements provided by the producers panel applying the SWOT analysis framework were 20 Strengths, 22 Weaknesses, 16 Opportunities, and 14 Threats. The researchers, extension educators, or other professionals and producers panels provided a total of 55 and 18 responses, respectively, to question three (see Figure 3).

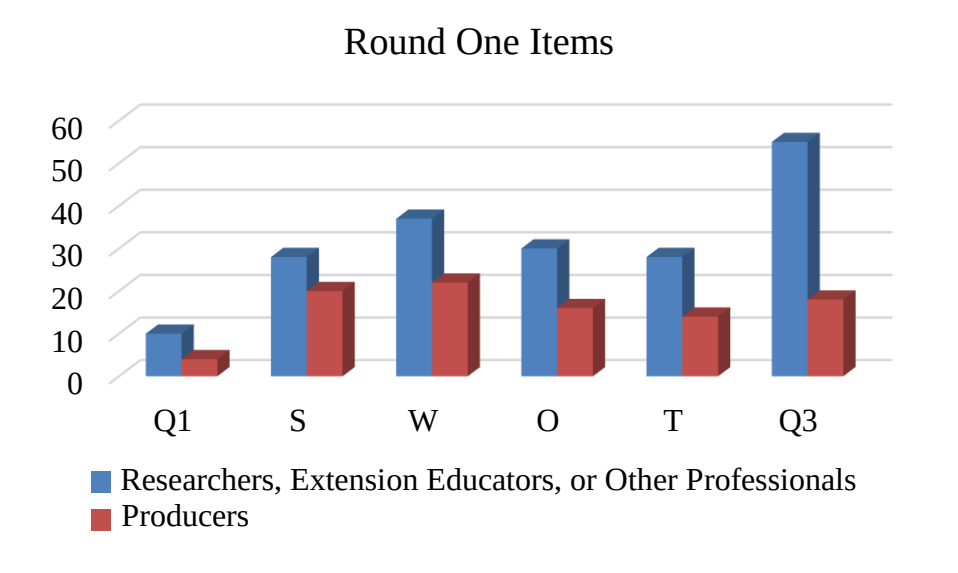

Figure 3. Comparison of the number of statements/items provided by both panels during round one of the study.

In Round Two, each group of panelists was asked to rate their levels of agreement for the items they identified in Round One of the data collection exercise. The researchers, extension educators, or other professionals panel achieved *consensus of agreement* for 91 items, i.e., more than three-fourths (>75.00%) of the panelists selected either *Agree* or *Strongly Agree* (see Table 10), and the producers panel reached *consensus of agreement* for 70 items (see Table 17). The distribution of those items included four and three categories of plant products, respectively, as derived from panelists' responses to question one; six and 10 Strengths, 13 and 19 Weaknesses, 12 and 14 Opportunities, and seven and seven Threats, respectively, as associated with question two. Forty-nine and 17 items, respectively, emerged as consensual responses to question three as a result of Round Two (see Figure 4).

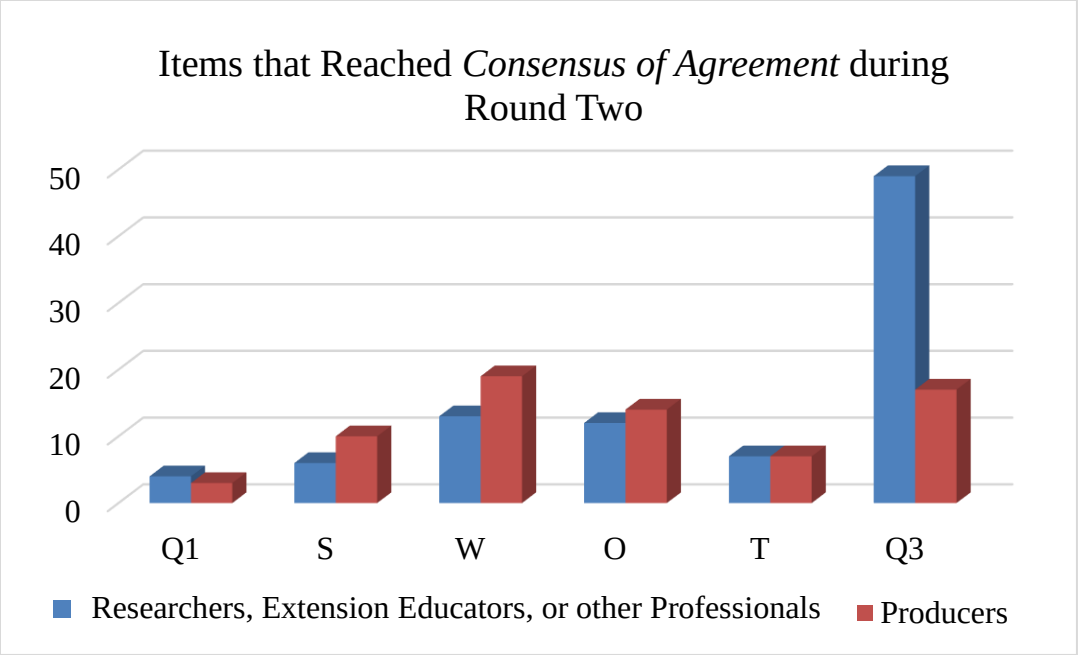

Figure 4. Comparison of the number of statements/items that reached *consensus of agreement* in round two of the study, both Delphi panels.

Items that did not reach *consensus of agreement* in Round Two but were deemed suitable for rating during Round Three of the study were returned to the two groups of panelists. Seventy-two items for the researchers, extension educators, or other professionals and 24 items for the producers were included in their respective Round Three instruments. The remaining 25 items from the researchers, extension educators, or other professionals panel were discarded from any additional investigation. In the case of the producers panel, no items were excluded from further investigation as a result of Round Two. Round Two also resulted in 108 comments from six researchers, extension educators, or other professionals and 47 comments from three producers regarding selected items (see Appendixes V & X).

As a result of Round Three, the researchers, extension educators, or other professionals panel reached *consensus of agreement* for 22 additional items, and the

producers panel reached *consensus of agreement* regarding nine more items (see Tables 13 & 19). The additional items reaching *consensus of agreement* included one category of plant products from question one for the researchers, extension educators, or other professionals panel. Three Strengths, eight Weaknesses, three Opportunities, and six Threats, as associated with question two, also reached *consensus of agreement* for the researchers, extension educators, or other professionals panel. Likewise, three Strengths, one Weakness, two Opportunities, and three Threats also reached *consensus of agreement* for the producers panel. And one additional item regarding question three from the researchers, extension educators, or other professionals panel reached *consensus of agreement* as a result of Round Three (see Figure 5).

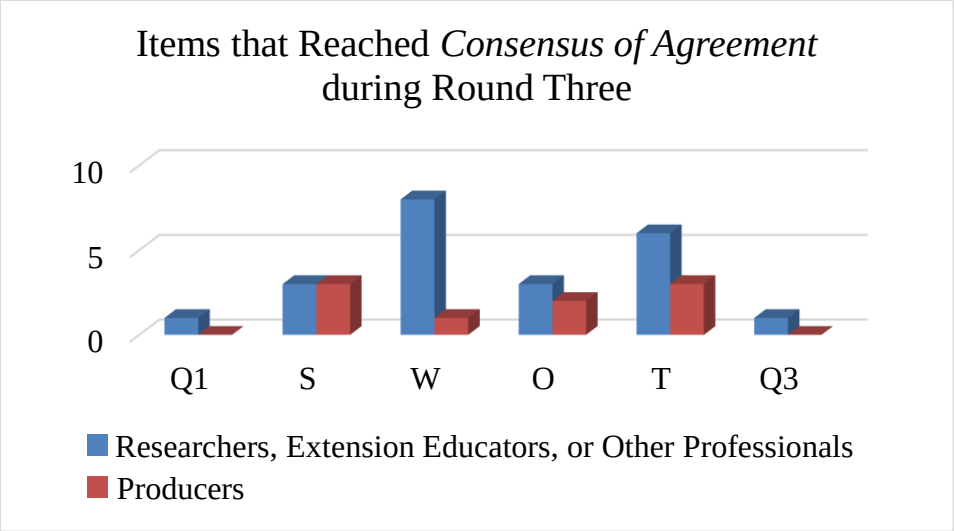

Figure 5. Comparison of the number of statements/items that reached *Consensus of Agreement* in round three of the study, both Delphi panels.

The remaining items did not reach *consensus of agreement* in Round Three, i.e., 50 items from the researchers, extension educators, or other professionals panel and 15

items from the producers panel, respectively, and were deemed to require no further investigation.

After three rounds of data collection, the researchers, extension educators, or other professionals panel reached *consensus of agreement* for 113 items; and the producers panel reached *consensus of agreement* regarding 79 items (see Tables 15 & 21). The distribution of those items, included five and three categories of plant products, respectively, as derived from the panelists' responses to question one; nine and 13 Strengths, 21 and 20 Weaknesses, 15 and 16 Opportunities, and 13 and 10 Threats, respectively, as associated with question two; and 50 and 17 items, respectively, emerged as consensual responses to question three (see Figure 6).

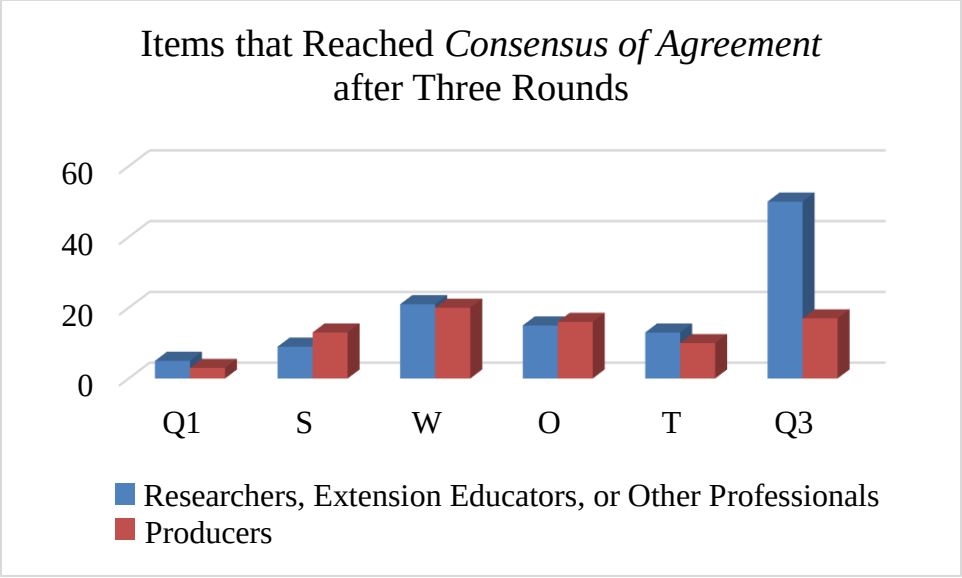

Figure 6. Comparison of the number of statements/items that reached *consensus of agreement* after three rounds of the study, both Delphi panels.

In Round Three, another opportunity was offered for the panelists to make additional comments regarding the returned items. A final opportunity for the panelists to

share their thoughts, concerns, or other recommendations as appropriate to the study was also provided. Ten researchers, extension educators, or other professionals panelists and eight producers panelists provided 47 and 16 comments, respectively, in Round Three (see Appendixes W & Y).

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, IMPLICATIONS AND DISCUSSION, AND CONTRIBUTIONS

Purpose of the Study

The purpose of this study was to investigate the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers and specialty produce. The results could assist in establishing current levels of demand for these products, as well as experts' views on the potential of smallholder farmers to meet such demand, with the intent of developing rural economies to diminish poverty and improve livelihoods. To achieve this purpose, the researcher examined the perceptions of experts regarding luxury niche products that may be appealing to micro and small agricultural producers in rural Mexico and nations with similar needs, and have long-term market viability. By analyzing the opinions of experts and identifying a *consensus of agreement* among them, an understanding may be achieved regarding the potential of producers to specialize in growing crops, e.g., cut tulips, orchids, ornamental flowers, saffron (*Crocus sativus*), and

vanilla, among other high-value, specialty produce, with the aim of meeting the demands of luxury niche markets.

Objectives

To accomplish the purpose of this investigation, six objectives were addressed:

1. Describe selected personal and professional characteristics of participants who comprised the study's two panels of experts: producers panelists, and researchers, extension educators, or other professionals panelists.
2. Describe the perceptions of selected producers of luxury niche agricultural products regarding the potential of such to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.
3. Describe the perceptions of researchers, extension educators, or other professionals regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.
4. Report consensus of agreement among the experts comprising each Delphi panel regarding the growing of luxury niche agricultural products by micro and small producers in rural Mexico and other nations with similar economic development needs.
5. Compare the perceptions of experts comprising the study's two Delphi panels regarding the potential of micro and small agricultural producers in rural Mexico and other nations with similar economic development needs to grow and market

luxury niche agricultural products using SWOT analysis as a decision-making framework.

6. Propose recommendations for practice and future research based on the consensus of agreement reached by the study's Delphi panels regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.

Significance of the Study

Economic development involves (a) wealth creation measured in terms such as per capita income, tax base, and gross domestic product [GDP] (Blakely & Bradshaw, 2002; Koven & Lyons, 2010), (b) entrepreneurship and job creation, and (c) change in the size of the economy, as well as qualitative improvement in societal conditions stemming from economic activity. Economic development experts usually stress the importance of social, environmental, and economic dimensions when making investments intended for economic development, yet few economic programs address all three dimensions in concert (Hammer & Pivo, 2017).

This gap between *ought* and *is* regarding economic development may be explained by several factors. First, the understanding of economic development may be limited because it is situated in a broader context (Hammer & Pivo, 2017). Research in the related areas of administration, planning, and sustainability suggests that community and organizational characteristics obstruct the approval and implementation of effective economic development policies due to (a) a weak or incomplete understanding of key

principles, (b) insufficient capacity of and support by key organizational and political leaders, and (c) low socioeconomic status of the intended beneficiaries (Conroy, 2006; Grodach, 2011; Hammer, 2010; Hammer, Allen, & Meier, 2010; Johnson & White, 2010; Saha, 2009; Saha & Paterson, 2008; Svara, Watt, & Jang, 2013; Wang, Hawkins, Lebredo, & Berman, 2012).

Second, economic development occurs in highly competitive settings in which the ultimate impact of important outcomes are beyond the administrative authority's control and success may be minimally defined, if at all (Bradbury, Kodrzycki, & Tannenwald, 1997; Hammer & Pivo, 2017). Furthermore, economic development may be hindered by a lack of coordination and integration among various programs and policies, with current practices frequently at odds with the principles of economic development, and counter-productive social, environmental, and economic trade-offs are considered mandatory (Dernbach, 1998; Hammer & Pivo, 2017). Nonetheless, it is widely considered that entrepreneurship is beneficial for development and economic growth (Acs, 2006; Esiebugie, Loveday, & Hembadoon, 2016). During the past three decades, for instance, in nations that achieved substantial poverty reduction, entrepreneurship has risen remarkably, such as in China. Therefore, donors and international development agencies have turned to entrepreneurship to improve the effectiveness and sustainability of aid (Naudé, 2013). Some researchers, however, have provided evidence of inconsistencies as related to theory versus practice regarding entrepreneurship and the support for such efforts, especially whether it brings economic prosperity in meaningful and sustainable ways (Gibbs, 2009; Parkhurst, 2017; Zahra et al., 2009).

The results of this study may further our knowledge regarding the achievement of economic development, particularly regarding rural contexts on national, regional, and local scales in developing economies (Hammer & Pivo, 2017). Hidayah, Abdul, and Hamdan (2012) stated: "Sustaining economic growth to provide employment opportunities and further improve the standard of living of the population principally in urban areas is a continued challenge in an increasingly competitive and open economic environment" (p. 813). Rural populations, however, also suffer from many of the same economic maladies as their urban counterparts, and, in many instances, experience such even more acutely.

The outcomes of this research study may be appropriate to share with the three actors suggested by Etzkowitz and Leydesdorff (1995), i.e., universities, industries, and government. The relations between these actors are expected to be a significant component of any innovation strategy whether in local, regional, or global contexts. A nation's competitiveness depends on the capacity of its industry to innovate and upgrade (Porter, 1990), including in the agricultural sector, and, perhaps, with special relevance to and meaning for the rural poor. Therefore, the viability of micro and smallholder farmers producing crops for luxury niche markets warranted investigation.

Population and Sample

For this investigation, the Delphi panelists, i.e., the study's respondents, were a purposive sample: 1) producers of high-value crops who had experience with at least one specialty crop (n = 16); and 2) researchers, extension educators, or other professionals who investigated and/or provided extension services to communities regarding high-

value crops, and had experience with at least one specialty crop (n = 18). To select the two panels' of experts, key informants (Rogers, 2003) were used to develop preliminary respondent frames. Such informants were knowledgeable of possible participants willing to be contacted by the researcher and who may have been inclined to participate in the study. Therefore, this snowballing technique (Hartman & Baldwin, 1995; Mason, 1996; Sedgwick, 2013) was a form of purposive or intentional sample selection regarding identification of the study's potential panelists.

This study sought to determine the potential of luxury agricultural products for achieving rural economic development in Mexico and other nations with similar economic needs. The panel of producers was comprised of experts representing agribusiness entities or agricultural cooperatives in Mexico. All agricultural production experts were familiar with the high-value crops market and they either had been or were responsible for working with at least one specialty crop. The second panel consisted of researchers, extension educators, or other professionals who had investigated and/or provided extension services to producers or potential producers regarding the growing of high-value crops, and had experience with at least one specialty crop.

The Study's Conceptual and Theoretical Frames

For this study, economic development theory was used as a conceptual framework, i.e., a way of understanding the elemental funding support and promulgation of capital accumulation, growth, and prosperity of a region (Bekaert et al., 2001; Harvey, 1985; Molotch, 1976). This theory was used to organize the vast literature addressing the

numerous constructs inclusive to and implied by economic development (Arrow et al., 2012; Bashota & Hasanaj, 2012; Currid-Halkett & Stolarick, 2011; Dellink et al., 2017; De Nardi, 2004; Glaeser et al., 2004; Green & Blakely, 2013; Lucas, 1986; Marshall, 1890; Mathur, 1999; Porter, 2000; Rosenberg & Frischtak, 1983; Schumpeter, 1976; Tiebout, 1956) and in particular the rural economies of developing nations. Based on the conceptual framework, propositions regarding the notion of rural economic development emerged, with possible management connotations to gain competitive advantage, especially when smallholder farmers may be willing to grow plant products intended for luxury niche markets.

Human capital theory was used as the study's theoretical frame because it emphasizes education as a crucial factor when increasing productivity and efficiency of any nation's workforce by increasing their intellectual stock of economically productive human capacity. In the main, human capital measures an employee's quality based on the idea that human intellect and the skilling of labor are the drivers of economic growth (Becker, 1993; Krutova, 2015; Loubet & Morales, 2015; Luckstead et al., 2014; Milgrom & Roberts, 1993; Stiles & Kulvisaechana, 2003). Moreover, some researchers have asserted that human resources are a nation's primary determinant of the type and pace of its economic and social development (Fernándezet al., 1999; Loubet & Morales, 2015; Sánches & Ríos, 2011; Zvarych, 2018). In other words, education is an engine of growth. Such growth depends on the quality and quantity of any nation's – whether developed or developing – education system (Gylfason, 2001; Olaniyan & Okemakinde, 2008) and the accessibility of such by its citizens.

SWOT Analysis as a Strategic Planning Tool

Strategic planning represents a crucial and large part of any firm's success and longevity (Kongolo, 2010; Phillips & Moutinho, 2014; Porter, 1996). Strategic management tools are the means, methods, resources, and techniques through which firms can plan and execute their actions, and regulate their capabilities and forecasts for organizing work in optimal ways to achieve objectives and desired results (Poister, 2010). Businesses of any kind can use SWOT analysis as a strategic planning tool, and some business leaders and management scholars consider it an appropriate tool for strategic planning (Hossain & Hossain, 2015; Kolbina, 2015; Rehmat et al., 2014; Schmelzenbart et al., 2018). SWOT analysis has been applied broadly in many different business contexts (Chernov et al., 2016; Párraga et al., 2014). The success and effectiveness of the planning, projects, and programs that implemented a SWOT analysis, including the adjustments, changes, and course corrections from the emergent external or internal factors, hold a significant place in the strategic management literature (Ghazinoory, Esmail & Memariani, 2007; Gürel & Tat, 2017; Kolbina, 2015; Lu, 2010; Terrados, Almonacid, & Hontoria, 2007). Therefore, a SWOT analysis framework, as delivered through a Delphi method data collection approach, was chosen for this study.

Research Design

This study was descriptive-exploratory (Creswell, 2003; Johnson & Christensen, 2008; Kimmelman et al, 2014; Sarantakos, 1998). As such, a survey research design was applied by using the Delphi method in conjunction with SWOT analysis as data

gathering, analysis, and interpretation tools (Hossain & Hossain, 2015; Rehmat et al., 2014; Schmelzenbart et al., 2018) via an inductive approach (Clarke & Barbara, 1998; Sackman, 1975). The Delphi method in conjunction with a SWOT analysis framework were the study's main methodological procedures, as applied to two panels of purposively selected experts. Delphi studies seek to develop a *consensus of agreement* among experts through a procedure by which the participants are not in contact with one another, thus avoiding the possibility of direct confrontation or intimidation occurring (Akers, 2000; Hsu & Sandford, 2007; Linstone & Turoff, 1975).

In Delphi studies, the number of rounds can either continue until consensus is reached or can be established a priori by the researcher. The number of rounds usually range from two to five; in this study, after conferring with the researcher's graduate committee members, a three-round design was employed to achieve *consensus of agreement* based on the panelists' successive responses. Using three rounds for a Delphi study can be effective, and results derived from four or more rounds may not show significant change from a third round outcome (Pollard & Pollard, 2004; Rowe, & Wright, 1999). Moreover, participants may lose their focus on and commitment to a study after a third round because of question and answer repetition (Linstone & Turoff, 1975). In addition, panelists are more likely to participate if the instruments are tailored to their experience and training, and when conducting a Delphi study the respondents' comments should be noted and considered by researchers to guide the development of successive instruments (Stern, Bilgen, & Dillman, 2014). Both procedures were followed in this study.

Data Collection

This study's data collection began in the fall of 2019. The researcher initially explained the study and invited both groups of panelists to participate via electronic mail messages as well as telephone calls, and used scripts for both panels (see Appendixes E & F) to assure a consistent description of the study. On October 16, 2019, members of both panels received an electronic mail message containing the link to access the instrument for Round One of the study (see Appendixes G & H). The initial instruments for both panels were developed using Microsoft Office Word 2016® before placement into a Qualtrics® format. Follow-up reminder electronic mail messages were sent two weeks after the initial contact, and again 10 days later (see Appendixes N & O).

As a result of Round One, the researcher reviewed 286 researchers, extension educators, or other professionals panelists' statements and 179 producers panelists' statements. Similar or duplicate statements were combined or eliminated and compound statements were separated (Fereday & Muir-Cochrane, 2006; Shinn et al., 2009). From the 286 original researchers, extension educators, or other professionals panelists' statements, 188 were retained for presentation in Round Two. From the 179 producers panelists' statements, 94 were retained for presentation in Round Two. Participants were also asked to provide personal and professional characteristics information in Round One of the study (see Appendix M).

Round Two of the study was initiated on December 24, 2019; participants were asked to rate their levels of agreement for the statements derived from Round One. The participants were asked to use a six-point, Likert-type scale to rate the items: *1 = Strongly*

Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, or *6 = Strongly Agree.* One week before the assigned due date for the return of Round Two responses, electronic follow-up reminder messages were sent to the participating panelists (see Appendixes R & S). Round Two's data collection was completed on January 15, 2020. Items for which more than three-fourths (>75.00%) of the participants selected *Agree* or *Strongly Agree* were considered items for which *consensus of agreement* was reached. Items for which less one-half (50.00%) of the participants selected either *Agree* or *Strongly Agree* were removed from further investigation. Based on the analysis of data from Round Two, a *consensus of agreement* was forming in both panels. In this round, the panelists also provided comments for selected items.

Round Three of the study was sent to the participants on February 29, 2020. The goal of this round was to establish *consensus of agreement* for those items that failed to achieve such during Round Two, i.e., more than one-half (>50.00%) but less than three-fourths (<75.00%) of the panelists had selected either *Agree* or *Strongly Agree*. The Round Three instruments (see Appendixes K & L) included the percentages (*Agree* and *Strongly Agree* combined) for the items that did not reach *consensus of agreement* during Round Two. Follow-up electronic mail messages (see Appendixes T & U) that encouraged the panelists to respond were sent to them approximately two weeks after the initial contact for Round Three. Data collection for Round Three concluded on March 21, 2020 with a 100.00% response rate for both panels.

The Delphi method's purpose is to aggregate responses from a *panel of experts* to represent their levels of agreement regarding what is under study or in question (Okoli & Pawlowski, 2004; Stitt-Gohdes & Crews, 2004; Worrell, Di Gangi, & Bush, 2013). In

this investigation, from Round One, the researchers, extension educators, or other professionals panelists (*n* = 18) and the producers panelists (*n* = 16) provided 188 and 94 unduplicated statements, respectively (see Tables 9 & 16). In Round Two of the study, 91 researchers, extension educators, or other professionals panelists' items (*n* = 15; 83.33% response rate) and 70 producers panelists' items (*n* = 14; 87.50% response rate) [see Tables 10 & 17] were rated either *Agree* or *Strongly Agree* by more than three-fourths (>75.00%) of the participants, and therefore considered items for which *consensus of agreement* had been reached (Buriak & Shinn, 1989; Farrell et al., 2015; Hsu & Sandford, 2007; Jenkins, 2009; Pietersma, de Vries, & Van den Akker-van, 2014).

The Round Three instruments included 72 researchers, extension educators, or other professionals panelists' items and 24 producers panelists' items, respectively, for which more than one-half (>50.00%) but less than three-fourths (<75.00%) of panelists had selected either *Agree* or *Strongly Agree* in Round Two. In this final round, the panelists were asked to indicate either *Agree* or *Disagree* for each item (see Appendixes K & L). As a result of Round Three, 22 additional researchers, extension educators, or other professionals panelists' items (*n* = 15; 100.00% response rate) and nine more producers panelists' items (*n* = 14; 100.00% response rate) received *Agree* by more than three-fourths (>75.00) of the participants and were considered items for which *consensus of agreement* was reached (see Tables 13 & 19).

Data Analysis

Personal and professional characteristics of the participants were analyzed using frequencies and percentages and, if appropriate, ranges and means were calculated. For

each item presented to panelists in Rounds Two and Three of the study, the frequency distribution valid percentage was used to determine if the item 1) reached *consensus of agreement*, 2) should be returned to panelists for additional rating in Round Three, or 3) should be excluded from further study. Data were analyzed using Microsoft Office Excel 2016®.

Results

Analysis of participants' selected personal and professional characteristics revealed that a majority (61.11%) of panelists who completed the researchers, extension educators, or other professionals instrument were female, and a majority (75.00%) of the respondents for the producers panel were male; and most members of both panels were Latino. A majority (66.66%) of researchers, extension educators, or other professionals panelists indicated their age to be 50 years or older; and a majority (56.25%) of producers identified their age to be between 20 and 39 years old. Regarding education and related work experience, a majority (66.66%) of the researchers, extension educators, or other professionals panelists reported holding a doctorate; and a majority (68.75%) of the producers panelists reported a bachelor's degree as their highest level of educational attainment (see Tables 3 & 6).

The Delphi panelists were also asked to report their backgrounds regarding specialty crops. About one-fourth (27.77%) of the researchers, extension educators, or other professionals identified their specialization as agronomy, and one-half responded that they were professors/researchers (see Table 4). Slightly less than one-third (31.25%)

of the producers panelists identified their specialization as fruits and vegetables, and a majority (75.00%) of the panel reported to be business owners. Regarding years of work experience, two-thirds (66.66%) of the researchers, extension educators, or other professionals responded as having 16 or more years of related work experience; and more than one-half (56.25%) of the producers reported more than 10 years of work experience regarding specialty crops (see Tables 5 & 8).

From Round One, the researcher retained 188 items from the researchers, extension educators, or other professionals panel, and 94 items from the producers panel for presentation in Round Two of the study. In responding to question one, 10 and four categories of plant products were offered by the researchers, extension educators, or other professionals, and producers panelists, respectively. These categories included 91 examples provided by the researchers, extension educators, or other professionals panelists, and 41 examples offered by the producers panelists (see Tables 9 & 16). The number of statements provided for question two by the researchers, extension educators, or other professionals and by the producers panelists, using a SWOT analysis framework, were 28 and 20 Strengths, 37 and 22 Weaknesses, 30 and 16 Opportunities, and 28 and 14 Threats, respectively. The researchers, extension educators, or other professionals and producers panelists indicated a total of 55 and 18 responses, respectively, to question three (see Tables 9 & 16; see Figure 3). These items were presented to their respective panels during Round Two of the study.

As a result of Round Two, the researchers, extension educators, or other professionals panel reached *consensus of agreement* for 91 items, i.e., more than three-fourths (>75.00%) of the participants selected either *Agree* or *Strongly Agree*; and the

producers' panel reached *consensus of agreement* for 70 items (see Tables 10 & 17). Those items' distributions included four and three categories of plant products, respectively, as derived from panelists' responses to question one; six and 10 Strengths, 13 and 19 Weaknesses, 12 and 14 Opportunities, and seven and seven Threats, respectively, as associated with question two; and 49 and 17 items, respectively, emerged as consensual responses to question three (see Tables 10 & 17; see Figure 4).

Round Three of the study included 72 researchers, extension educators, or other professionals panel items and 24 producers panel items for which more than one-half (>50.00%) but less than three-fourths (<75.00%) of the panelists had indicated either *Agree* or *Strongly Agree* for the items in Round Two. As a result of Round Three, the researchers, extension educators, or other professionals panelists reached *consensus of agreement* for an additional 22 items (see Table 13), and the producers' panel reached *consensus of agreement* for nine more items (see Table 19). The additional items reaching *consensus of agreement* included one category of plant products from question one, in the case of the researchers, extension educators, or other professionals panel; three and three Strengths, eight and one Weaknesses, three and two Opportunities, and six and three Threats, respectively, as associated with question two; and one additional item from question three for the researchers, extension educators, or other professionals panel (see Tables 13 & 19; see Figure 5).

The total number of items that reached *consensus of agreement* for the researchers, extension educators, or other professionals panel was 113, and the total was 79 for the producers panel (see Tables 15 & 21). The distribution of those items included five and three categories of plant products, respectively, as derived from panelists'

responses to question one; nine and 13 Strengths, 21 and 20 Weaknesses, 15 and 16 Opportunities, and 13 and 10 Threats, respectively, as associated with question two; and 50 and 17 items, respectively, emerged as consensual responses to question three (see Tables 15 & 21; see Figure 6).

Qualitative analysis of Round Two responses revealed that participants from both panels provided additional comments. Six researchers, extension educators, or other professionals panelists provided a total of 108 comments, and three producers panelists offered a total of 47 comments to the items presented during Round Two of the study (see Appendixes V & X). In addition, comments were also provided by both panels in Round Three. Ten researchers, extension educators, or other professionals offered 47 comments, and eight producers provided 16 comments to the items presented during Round Three of the study (see Appendixes W & Y).

Conclusions

An analysis of the study's findings formed the basis for its conclusions. Such are presented by objective.

Objective #1

Describe selected personal and professional characteristics of participants who comprised the study's two panels of experts: producers panelists, and researchers, extension educators, or other professionals panelists.

Concerning objective one, it was found that within this particular sample, a majority of researchers, extension educators, or other professionals who served as

panelists were Latino females older than 50 years of age, had earned a doctorate, and worked as professors/researchers. A majority of the producers panelists were Latino males whose ages were in the range of 20 to 39 years, had earned a bachelor's degree, and were owners of businesses (see Tables 3 & 6).

Regarding the panelists' related work experience, almost three-fourths of the researchers, extension educators, or other professionals panelists had more than 10 years of such experience, and more than one-half of the producers panelists indicated similar work longevity. The most frequent specialization identified by the researchers, extension educators or other professionals panelists was agronomy, followed by agricultural education and communications, food sciences, horticulture, and strategy and/or economic development. About one-third of the producers identified fruits and vegetables as their product specialization, followed by one-fourth who indicated floriculture, and the remaining panelists reported either wine production or various specialty crops as a focus.

Objective #2

Describe the perceptions of selected producers of luxury niche agricultural products regarding the potential of such to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.

Concerning objective two, the producers panelists achieved *consensus of agreement* for 70 items related to the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers and specialty produce. It was concluded, therefore, that these categories of plant products, various Strengths, Weaknesses, Opportunities, and

Threats, as well as needs related to smallholder farmers achieving competitive advantage were essential to consider if producing for such markets. The three categories of plant products for which *consensus of agreement* was reached included flowers, vegetables, and other (see Table 21). The producers panel also reached *consensus of agreement* for 13 Strengths, 20 Weaknesses, 16 Opportunities, and 10 Threats (see Table 21). Therefore, it was concluded that based on the producers panelists' perceptions, the potential existed for smallholder farmers to grow crops intended for luxury niche markets, i.e., strengths and opportunities, but some critical weaknesses and threats should be addressed before encouraging them to pursue such production. In addition, this panel reached *consensus of agreement* for 17 items related to the needs of smallholder farmers if they are to achieve competitive advantage producing selected luxury niche agricultural products (see Table 21). The producers panelists provided comments for specific items in Rounds Two and Three of the study (see Appendixes X & Y). These panelists' comments generally reflected their perceptions regarding which items would be critical to consider and, in some cases, why, if smallholder farmers were to produce specialty crops for luxury niche markets.

Objective #3

Describe the perceptions of researchers, extension educators, or other professionals regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.

Regarding objective three, the researchers, extension educators, or other professionals panelists reached *consensus of agreement* for 113 items related to the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers and specialty produce. It was concluded, therefore, that these categories of plant products, various Strengths, Weaknesses, Opportunities, and Threats, as well as needs related to smallholder farmers achieving competitive advantage were essential to consider if producing for such markets. The five categories of plant products for which consensus of agreement was reached included culinary herbs, edible fruits, endemic species, medicinal, and nursery crops (see Table 15). The researchers, extension educators, or other professionals panel reached *consensus of agreement* for nine Strengths, 21 Weaknesses, 15 Opportunities, and 13 Threats (see Table 15). It was concluded that based on the researchers, extension educators, or other professionals panelists' perceptions, the potential existed for smallholder farmers to grow crops intended for luxury niche markets, i.e., strengths and opportunities, but, similar to the producers panel, some critical weaknesses should be addressed before encouraging them to pursue such production. In addition, this panel reached *consensus of agreement* for 50 items related to the needs of smallholder farmers if they are to achieve competitive advantage producing selected luxury niche agricultural products (see Table 15). The panelists also provided comments for specific items during Rounds Two and Three of the study (see Appendixes V & W). These panelists' comments generally reflected their perceptions regarding which items would be critical to consider and, in some cases, why, if smallholder farmers were to produce specialty crops for luxury niche markets.

Objective #4

Report consensus of agreement among the experts comprising each Delphi panel regarding the growing of luxury niche agricultural products by micro and small producers in rural Mexico and other nations with similar economic development needs.

Regarding objective four, after completion of three rounds of data collection, the researchers, extension educators, or other professionals panelists reached *consensus of agreement* for 113 items (see Table 15). The distribution of those items included five categories of plant products; nine Strengths, 21 Weaknesses, 15 Opportunities, and 13 Threats; and 50 items related to smallholder farmers achieving competitive advantage in an appropriate niche market space (see Table 15). Seventy-five other items did not reach *consensus of agreement* after three rounds of the study (see Tables 12 & 14). These panelists also provided a total of 155 comments related to a variety of items (see Appendixes V & W). Likewise, the producers panelists achieved *consensus of agreement* for 79 items after three rounds of data collection (see Table 21). The items included three categories of plant products; 13 Strengths, 20 Weaknesses, 16 Opportunities, and 10 Threats; and 17 items related to smallholder farmers achieving competitive advantage in an appropriate niche market space (see Table 21). The remaining 15 items did not reach *consensus of agreement* after three rounds of the study (see Table 20).

Objective #5

Compare the perceptions of experts comprising the study's two Delphi panels regarding the potential of micro and small agricultural producers in rural Mexico and

other nations with similar economic development needs to grow and market luxury niche agricultural products using SWOT analysis as a decision-making framework.

Concerning objective five, the researchers, extension educators, or other professionals panelists reached *consensus of agreement* for nine Strengths, 21 Weaknesses, 15 Opportunities, and 13 Threats (see Table 15). However, 65 items from the SWOT analysis categories did not reach *consensus of agreement* after three rounds of data collection (see Tables 12 & 14). Likewise, the producers panelists reached *consensus of agreement* for 13 Strengths, 20 Weaknesses, 16 Opportunities, and 10 Threats (see Table 21). However, 13 items from the SWOT analysis categories did not reach *consensus of agreement* after three rounds of data collection (see Table 20).

The panels were most similar regarding weaknesses for the highest number of SWOT items reaching *consensus of agreement,* i.e., 21 Weaknesses emerged from the researchers, extension educators, or other professionals panel and 20 for the producers panel (see Figure 6). Whereas, the SWOT category of Strengths yielded the smallest number of items reaching *consensus of agreement*, i.e., nine, for the researchers, extension educators, or other professionals panel. Likewise, for the producers panel, the category of Threats produced the lowest number of items reaching *consensus of agreement*, i.e., 10 (see Tables 15 & 21; see Figure 6). Therefore, it was concluded that if comparing and considering the opinions of both panels, the SWOT category of Weaknesses should be closely examined regarding any future strategic planning (Chernov et al., 2016; Párraga et al., 2014) for the purpose of preparing smallholder farmers in rural areas of Mexico or in other nations with similar economic development needs to produce plant products for luxury niche markets.

If considering the main internal factors (Görener et al., 2012; Li et al., 2016; Walsh & Lipinski, 2009; Whittington & Cailluet, 2008) exposed by the producers panelists for smallholder farmers who may want to produce plant products for luxury niche markets, the *Strengths* included an available workforce, local production, available land, and cheap labor. On the other hand, the main *Weaknesses* were the lack of organization to sell products, lack of knowledge about business administration, high initial cost for these kinds of crops, lack of articulation of the entire value chain, and lack of business communication skills. The primary external factors (Görener et al., 2012; Li et al., 2016; Walsh & Lipinski, 2009; Whittington & Cailluet, 2008) were *Opportunities*, such as consumers are searching for organic products, if training is provided about how to grow different luxury plants, NGOs and private institutions want to help rural areas, better quality of life for the producers, market for products offered in different presentations (e.g., value addition through packaging); and *Threats* including competition from larger companies, lack of appropriate facilities, natural phenomena, lack of capital, and middlemen.

In a similar way, the internal factors (Görener et al., 2012; Li et al., 2016; Walsh & Lipinski, 2009; Whittington & Cailluet, 2008) exposed by the researchers, extension educators, or other professionals panelists were *Strengths*, including local knowledge, agrobiological diversity of species in their areas, availability of native plants, general agricultural knowledge, and people with value for the land. *Weaknesses* were altered natural resources, poor communication channels, loss of resources due to different causes, ignorance about products destined for luxury markets, and lack of assessment. External factors (Görener et al., 2012; Li et al., 2016; Walsh & Lipinski, 2009;

Whittington & Cailluet, 2008) were *Opportunities* to grow plants for products that are well-priced, possibility of sales by cooperatives, potential for additional income, gourmet markets of international cuisine, and use the research of Mexican scientists. And *Threats* emerged, such as abandonment of farming and producers migrating due to increasing crime, including acts of violence; loss of resources due to looting and other criminal acts; lack of existing organizations, or locals do not know how to effectively organize themselves; high dependence on government subsidies; and recurrent climatic effects in the region, including intermittent impacts on communication.

Objective #6

Propose recommendations for practice and future research based on the consensus of agreement reached by the study's Delphi panels regarding the potential of luxury niche agricultural products to be grown and marketed by micro and small producers in rural Mexico and other nations with similar economic development needs.

Recommendations for Future Research

A priority for additional research in this area should be the improvement of data collection to support future strategic planning and decision-making. Sourcing reliable data from existing academic and producer specialty crop communities to document production budgets, sales and related forecasts, and measurements of purchases, among other metrics are needed. Original studies also may be necessary. The need for a more sophisticated conceptualization of related growers and agribusinesses is acknowledged,

which may allow researchers to study more complex interpretations of their needs and related effects. An additional compelling future research suggestion is to examine the panelists' comments during Rounds Two and Three of this study from a qualitative or interpretive perspective. By analyzing the content and meaning of the panelists' narrative comments (see Appendixes V, W, X, & Y) and developing the emergent themes, an even more comprehensive, nuanced, and contextualized understanding and interpretation of the phenomenon would be illuminated (Vaismoradi, Jones, Turunen, & Snelgrove, 2016).

Another future research recommendation is the need for exploration on larger geographic scales and contexts. Important considerations may arise when generating a unique economic impact on specific regions by acknowledging the variables that produce these particular effects and comparing such in different regional contexts (Storper, 2011; Storper & Scott, 2009; Suire & Vicente, 2009). Although each region may have an interest to promote local specialty crop production intended to reach luxury niche markets, larger-scale studies might enrich our understanding of how local production is associated with marketing opportunities in broader contexts. Emerging evidence suggests that local production can promote greater consumption of specific products, including goods that are traditionally under-consumed in a given locality (Evans, McMeekin, & Southerton, 2012; Freedman, Choi, Hurley, Anadu, & Hébert, 2013). Therefore, the economic impacts of local agribusinesses, such as input suppliers, could be assessed using a variety of attributes or metrics in addition to the number of jobs created. For instance, this may involve researching the spillover effects of implementing these enterprises, such as fostering entrepreneurship, incremental increases in property values, or promoting social capital among other related outcomes (Feenstra, Lewis, Hinrichs,

Gillespie Jr., & Hilchey, 2003) with importance for producers of luxury niche agricultural products as well as their local, regional, and national economies.

In addition, existing learning groups or communities of actors, including smallholder farmers, who contribute to local community economic development should be studied to critique their designs, methods, practices, and outcomes, especially regarding economic, environmental, and social impacts. The conduct of such research should be determined through interactions between researchers and potential producers to recognize and establish mutual concerns for responding to the perceived needs, interests, and capacities of rural communities. Such a collaborative or participatory approach may lead to adapting research agendas and developing plans that include training programs and management frameworks more likely to help such communities capitalize on their competitive advantages (Swanson, 2006).

Finally, investigations relying on a conflation of the Delphi method with a SWOT analysis framework for decision-making to support strategic planning have demonstrated usefulness for such a purpose (Hossain & Hossain, 2015; Rehmat et al., 2014; Schmelzenbart et al., 2018). Therefore, if conducting these types of studies, the use of this methodological combination could lead to additional and more granular findings with practical applications. Other researchers are encouraged to consider employing the approach.

Recommendations for Future Practice

Future actions associated with implementing the findings of this study should seek to exploit the *Strengths* and diminish or even eradicate the *Weaknesses* on which the panelists reached *consensus of agreement*. Both groups of panelists acknowledged the need to increase business knowledge and skills among smallholder farmers, e.g., through collaborations and the formation of cooperatives (see Tables 15 & 21), because the achievement of economies of scale is nearly impossible in their context if working individually (Altman, 2015). Therefore, it is recommended that the creation of agricultural cooperatives be supported to contribute to the achievement of such economies of scale, which may enable diversification of production to arise and improve the position of rural producers and agribusinesses seeking to meet the demands of luxury niche markets (Rao & Qaim, 2011; Verhofstadt & Maertens, 2014). Local cooperatives may contribute to developing and improving methods of administration, quality management systems, and proper training processes, among addressing other needs (Ito et al., 2012; Mojo et al., 2017). However, potential *Threats* also likely exist (Lang, Calantone, & Gudmundson, 1997) that may decrease the possibility of these entrepreneurs achieving success. These may include competition from large, foreign competitors with lower production costs; natural phenomena; abandonment of farming and producers migrating due to increasing crime, including acts of violence; loss of resources due to looting and other criminal acts; or no organizations exist or locals do not know how to effectively organize themselves (see Tables 15 & 21). An acknowledgment of the abovementioned could be the first step toward capitalizing on strengths and

opportunities and minimizing or even alleviating weaknesses and threats, as were found by this and other studies (Bell & Rochford, 2016; Görener et al., 2012; Hax & Majluf, 1983).

Results of the current Delphi study indicated the potential for smallholder farmers to grow crops intended for luxury niche markets, as opined by two groups of experts. Leaders and members of smallholder farmer groups and unions, leaders of rural cooperatives, opinion leaders, policy and decision-makers, researchers, rural economists, staff of NGOs, among others concerned with this study's phenomena may be informed by its findings. The authoritative feedback from two diverse groups of experts facilitated the identification of specific items that could be used to design and execute future strategic planning scenarios (Gürel & Tat, 2017; Vecchiato, 2015) targeting the improvement of the livelihoods of smallholder farmers. The explicit emphasis on a range of plant products and the needs of smallholder farmers to successfully grow for luxury markets may draw the support of leaders, including policy makers and allocators of resources, needed for these producers to achieve sustainable performance and long-term competitiveness.

It is also recommended to use the study's findings as a guide to examine the situation in specific regions and communities to determine purposeful initiatives for leveraging the strengths and opportunities inherent to those locales. Stakeholders would develop a plan to present the range of strategic possibilities that a specific region may consider relevant to developing its economy. The plan could be used to identify the most suitable opportunities for a given location, and also aim to mitigate or overcome crucial potential weaknesses and threats likely to jeopardize the competitiveness of agribusinesses producing for luxury niche markets. The study's findings may also help

leaders to develop and deploy strategic plans guided by a SWOT-based framework (Chermack & Kasshanna, 2007; Dyson, 2004; Gürel & Tat, 2017; Helms & Nixon, 2010; Hossain & Hossain, 2015; Kolbina, 2015; Panagiotou, 2003; Phillips & Moutinho, 2014; Porter, 1996) for the purpose of framing smallholder farmers' production schemes, marketing targets, and long-range objectives.

It is uncommon to find communities that share matching characteristics and needs, therefore, tailored strategic plans are needed. In many cases, a lack of recognition about the importance of agriculture to rural economies and its impact on the global economy often hinders the vision of policy makers and the leaders of rural communities in effectively planning for future opportunities (Singh & Tabatabai, 1993; Swanson, 2006). It is conceivable, therefore, that rural communities will continue to be challenged and transformed, especially by the changes likely to occur in agriculture and in the economy more broadly, including their farmers choosing to produce for luxury niche agricultural markets. When social institutions and businesses combine training and innovative approaches with cutting-edge technologies, rural communities may become more autonomous and competitive actors in the global economy (Etzkowitz & Leydesdorff, 1995; Kung & Schmid, 2015; Porter, 1990; Şener & Sarıdoğan, 2011; Todericiu & Şerban, 2016). Rural economic development can be more effective when the starting point seeks to understand the current context and needs of communities, including investments in human capital (Krutova, 2015; Luckstead et al., 2014; Luţ, 2017). Therefore, practitioners of rural economic development (Jurgens, 1993; Nchuchuwe & Adejuwon, 2012) should consider forming and organizing local groups to

decide on strategies and guidelines consistent with objectives that can be adopted, implemented, and monitored over time.

Another recommendation for future practice emphasizes the importance of Extension services, public and private, and the vital position such serves in the diffusion of innovations (Rogers, 2003), including the transfer of new knowledge and practices proposed for smallholder farmers to adopt (Rivera & Sulaiman, 2009; Rogers, 2003). Hellin (2012) and Sæther (2010) reinforced the essential role played by the agricultural extension services for promoting the implementation of innovative processes and products by farmers within the agroindustry. However, before these practices and innovations may be diffused, change agents, including advisory service and extension professionals, must be convinced of the importance and necessity of such (Tiraieyari, Hamzah, Samah, & Uli, 2013). Practicing open communication with opinion leaders about this study's findings could provide guidance to producers of specialty crops for luxury markets by recognizing and expanding competitive advantages, which may lead to improving their livelihoods and lifting the farmers' communities (Swanson, 2006). By organizing smallholder farmers groups, working with such to grow selected specialty crops, and linking them to luxury niche markets, these producers may also learn new business, leadership, and management skills supporting their success. Getting smallholder farmers organized is an important initial step in attaining long-term economic development in rural contexts (Swanson, 2006) and should involve Extension and advisory services personnel. It is recommended that the findings of this study be applied to achieve this aim.

Implications and Discussion

Several economic development constructs were considered in this study. The Delphi method accompanied with the SWOT framework analysis was valuable because it revealed some significant issues encountered by rural communities and their smallholder farmers, especially in Mexico and perhaps in other nations with similar needs, if trying to produce specialty agricultural products for luxury niche markets. The objectives of the study were focused on understanding the realities of rural communities and smallholder farmers from the views of experts, and trying to find solutions to some of the barriers and capacity gaps preventing economic development. The study's focus was to distill the opinions of experts on the benefits (strengths and opportunities) and barriers (weaknesses and threats) that smallholder farmers were likely to encounter if looking to diversify their production and try to reach different markets by implementing related planning strategies.

Although postulates and theories are often used to illustrate economic development (Bashota & Hasanaj, 2012; Fei & Ranis, 1967; Hammer & Pivo, 2017; Hidayah et al., 2012; Ioppolo et al., 2016; Koven & Lyons, 2010; Leigh & Blakely, 2016; Storper, 2011; Storper & Scott, 2009; Suire & Vicente, 2009), this work may contribute to the practice of economic development and its literature, especially in the rural contexts of developing nations. It is necessary, however, that more in-depth exploration occur to describe the learning and training needs of smallholder farmers, especially regarding the funding, design, and delivery of projects intended to implement rural economic development policies. Findings of this study, as a whole, were mostly focused on the

acknowledgment of factors that should be considered if smallholder farmers are to achieve competitiveness in luxury niche markets for selected agricultural products.

Another area for future work may be to link responses from the SWOT framework analysis to actual project outcomes. Such work could be critical for effectively demonstrating the long-term impact that these projects may have after reaching maturity, e.g., operating more efficiently, promoting scalable economic development, and meeting the demand needs of growing and changing populations. Related areas of study may be stimulated by this research effort. For instance, researchers could create business-oriented case studies for rural economic development that demonstrate the benefits and challenges of each component. Building such cases could empower leaders to communicate the need for change, including information about the kind of crops that have been grown and marketed successfully by smallholder farmers, especially in developing nations, and increase the likelihood of their producers making a successful shift to luxury niche agricultural markets. However, this might not always be easy to do, and may result in conflicting results because payoffs tend to be a longer-term outcome, while costs are incurred in the short-term (Bradshaw et al., 2004; Lin, 2011; Rahman, 2009).

The concept of a SWOT matrix may help in the outline of scenarios to recognize the most promising conditions for executing and managing projects, including agricultural start-ups in rural areas poised to grow agricultural products for luxury niche markets. This approach should be considered an important option for framing and guiding such projects.

Rural economic deterioration has been a long-standing concern worldwide (Ozgen & Minsky, 2007). The quest for strategies that may overturn this trend has led to recognizing associated opportunities regarding micro and small entrepreneurial ventures in many regions and nations (Cooper & Kaplan, 1988; Skokan et al., 2013; Umble et al., 2003). For example, smallholder farmers managing diversified businesses, including production and value-addition, could make a positive contribution to rural economic development. The empirical evidence gathered and analyzed in this study pointed to a possible link between luxury niche markets for agricultural products and sustainable rural development, as evidenced by the strengths and opportunities identified by both groups of Delphi panelists (see Tables 15 & 21; see Figure 6). The lack of commercial businesses and large firms in rural areas of Mexico with economic development needs increases the possibility of livelihood benefits for smallholder farmers in such contexts. The potential viability of MSEs as a component of development strategies is one of the most proposed tools for increasing the livelihoods of impoverished individuals living in rural contexts (Banerjee & Duflo, 2011; Mead & Liedholm, 1998; Zvarych, 2017). Therefore, if employment opportunities can be created by smallholder farmers growing for luxury niche markets, such should reduce unemployment, improve financial stability, and diminish poverty in rural communities (Espinosa et al., 2013; Mead & Liedholm, 1998). As a consequence, these ventures, if successful, may also help address some of the indirect, negative effects of longstanding rural poverty (Alvarez & Barney, 2014; Mano et al., 2012; Mitra et al., 2011; Rockström et al., 2017; Savadogo et al., 2015), e.g., minimize the rate of rural migration to cities (see Tables 15 & 21) and the related pressures placed on urban infrastructure and services.

The versatility of MSEs is one of the most important strengths of the strategies for stimulating economic development in rural communities (Mead & Liedholm, 1998; Zvarych, 2017). The results of this study indicated that luxury niche markets may include the demand for a wide range of plant products and related business ventures. This suggests that the potential opportunities for diversification of rural economies may reduce some of the negative consequences associated with growing traditional crops (i.e., monocultures), such as soil degradation and low biological diversity, and, thereby, help to bolster the long-term sustainability of local communities (Joshi et al., 2004; Popp & Rudstrom, 2000; Rao et al., 2006; Tonts & Selwood, 2003; Vyas, 1996; Weisensel & Schoney, 1989).

Moreover, small firms are more able to quickly and efficiently respond to changes in business and community environments than larger companies and traditional enterprises (Lyles et al., 1993; Rice, 1979; Sexton & Van Auken, 1982). Their nimbleness could enable them to more rapidly change crops grown in response to shifting consumer tastes (Miller et al., 2003). It follows that smallholder farmers aiming to produce for luxury niche markets might be better positioned to capitalize on such shifts, i.e., from being highly dependent on the principles of mass production to an economy that has the potential to offer greater diversity and flexibility. This would be part of a broader transition from the mass production of standardized commodities toward a diversified, flexible, and profitable production system targeting niche markets to meet consumers' specialized needs and preferences (Diochon, 2003; Tonts & Selwood, 2003). Such an approach, however, may involve significant variations in the means used to stimulate growth, including the promotion of small business endeavors to produce

employment opportunities, wealth generation, and economic security in rural communities (Diochon, 2003), which likely implies policies, resources, and other forms of government-provided support (Bird et al., 2001).

The findings of this study indicated that smallholder farmers' agribusinesses may be able to provide significant socio-economic benefits for individuals, households, and communities. These MSEs could fill a significant gap in economic sectors by creating more employment. However, if small businesses are to do so, local communities and national governments must encourage environments that endorse and support a variety of business interests and entrepreneurial opportunities aligned with the comparative and competitive advantages inherent to their unique contexts, including workforces, climates and growing conditions, and access to markets among other significant factors (Bird et al., 2001).

Human capital (Krutova, 2015; Luckstead et al., 2014; Luţ, 2017) accumulation has been considered a significant factor in economic development and affects growth through the production rate of local technological innovation and the adoption speed of introduced technologies (Benhabib & Spiegel, 1994). Economic growth has benefited regions rather unequally (Fleisher, Li, & Zhao, 2010), and a high rate of economic growth in a particular region is sometimes related to inequalities in other parts of the world. The determinants of such regional differences in rates of economic growth can be understood as a function of several interrelated factors, including investments in human, infrastructural, and physical capital; the immersion of new technology and its regional spread; and reforms in markets (Fleisher et al., 2010).

The results of this study suggest that education and training are critical determinants for rural economic development (see Tables 15 & 21), including the preparation of smallholder farmers to grow crops for luxury markets. For such development to occur, these potential entrepreneurs must receive education and training commensurate with their needs, i.e., the farmers' human capital must be developed if the economies of their communities, regions, and nations are to advance (Gennaioli, La Porta, Lopez-de-Silanes, & Shleifer, 2013).

Major Contributions of this Study

Contribution to Theory

Economic development occurs in urban and rural contexts, at national, regional, and local levels, for developing and developed economies (Hammer & Pivo, 2017). Nevertheless, attaining sustainable economic growth to improve the living standards of individuals and provide employment opportunities in an increasingly competitive global environment is a continuous challenge (Hidayah et al., 2012). Despite the recognized research in this field, schemes of economic development continue to be vague or great uncertainties exist that foment ongoing scholarly debates (Currid & Stolarick, 2011). This study supports the idea of achieving economic development by targeting opportunities in the agricultural sector, in particular for smallholder farmers willing to produce for luxury niche markets. Further exploration and expansion of such should not be neglected or ignored. If a novel paradigm of rural economic development can emerge, it may be one in

which the potential that agriculture holds takes an important place alongside other enterprises significant to creating viable rural livelihoods as a way to reduce poverty and improve economic prosperity (Flores & Edwards, 2019).

Contribution to Literature

The importance of economic development has been widely reported (Currid & Stolarick, 2011; Hammer & Pivo, 2017; Harvey, 1985; Molotch, 1976; Smith & Harvey, 2008). However, little research has been done regarding the potential of luxury niche markets as a source of demand for specialty agricultural products. This study sought to contribute to the literature regarding potential specialty crops to be grown by smallholder farmers for such markets to improve their livelihoods, especially those producers in developing nations. Scant research is available regarding the potential that luxury markets may hold for triggering economic development. Findings from this study can begin to fill that gap in the literature.

Contribution to Practice

This study relied on human capital theory (Becker, 1993; Fernández et al., 1999; Krutova, 2015; Loubet & Morales, 2015; Luckstead et al., 2014; Varela & Retamoza, 2012; Zvarych, 2018) as its conceptual framework. The study's findings could serve as a point of reference for use by the three actors suggested in Etzkowitz's and Leydesdorff's (1995) triple helix model, i.e., industry, universities, and government, when planning,

facilitating, and evaluating projects intended to help rural populations in developing nations. Furthermore, this study makes a case for the value of luxury niche agricultural crops. Researchers, extension educators, or other professionals identified 113 items, and producers indicated 79 items that could be useful when planning the start-up of an agricultural venture intended to produce for a luxury niche market. The findings of this study also hold the potential for informing individuals who are willing to begin an incursion into such markets.

This study reflects key factors to consider when launching agricultural MSEs in rural areas; such may provide an advantage toward increasing the competitiveness and profitability of these ventures. New and renewed efforts should arise to use the findings, conclusions, implications, and recommendations of this study to support rural economic development to help individuals who need such assistance.

REFERENCES

Abdullah, M. F., Putit, L., & Teo, C. B. C. (2014). Impact of relationship marketing tactics (RMT's) & relationship quality on customer loyalty: A study within the Malaysian mobile telecommunication industry. *Procedia-Social and Behavioral Sciences, 130*, 371-378. doi:10.1016/j.sbspro.2014.04.044

Acemoglu, D., & Pischke, J. S. (1999). The structure of wages and investment in general training. *Journal of Political Economy, 107*(3), 539-572. doi:10.1086/250071

Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth. *Handbook of Economic Growth, 1*(A), 385-472. doi:10.1016/S1574-0684(05)01006-3

Acs, Z. J., & Varga, A. (2005). Entrepreneurship, agglomeration and technological change. *Small Business Economics, 24*(3), 323-334. doi:10.1007/s11187-005-1998-4

Acs, Z. J. (2006). How is entrepreneurship good for economic growth? *Innovations: Technology, Governance, Globalization, 1*(1), 97-107. doi:10.1162/itgg.2006.1.1.97

Addison, T. (2003). E-commerce project development risks: Evidence from a Delphi survey. *International Journal of Information Management, 23*(1), 25-40. doi:10.1016/S0268-4012(02)00066-X

Agyekum, N. (2010). Plant article ornamental plants. *Plant Science, 211*. North Dakota State University. Retrieved from https://www.ndsu.edu/pubweb/chiwonlee/plsc211/student%20papers/article10/Agyekum,%20Nana%20Akua/index.html

Akins, R. B., Tolson, H., & Cole, B. R. (2005). Stability of response characteristics of a Delphi panel: Application of bootstrap data expansion. *BMC Medical Research Methodology, 5*(1), 37-49. doi:10.1186/1471-2288-5-37

Akinyele, S. T., & Fasogbon, O. I. (2010). Impact of strategic planning on organizational performance and survival. *Research Journal of Business Management, 4*(1), 73-82. Retrieved from http://eprints.covenantuniversity.edu.ng/id/eprint/1741

Alaloul, W. S., Liew, M. S., & Zawawi, N. A. W. A. (2016). Identification of coordination factors affecting building projects performance. *Alexandria Engineering Journal, 55*(3), 2689-2698. doi:10.1016/j.aej.2016.06.010

Albrechts, L. (2015). Ingredients for a more radical strategic spatial planning. *Environment and Planning B: Planning and Design, 42*(3), 510-525. doi:10.1068/b130104p

Albrechts, L., Balducci, A., & Hillier, J. (2017). *Situated practices of strategic planning: An international perspective*. New York, NY: Routledge.

Alexander, J., & Kroposki, M. (1999). Outcomes for community health nursing practice. *JONA: The Journal of Nursing Administration, 29*(5), 49-56. Retrieved from

https://journals.lww.com/jonajournal/Abstract/1999/05000/Outcomes_for_Community_Health_Nursing_Practice.7.aspx

Alkire, S., & Santos, M. E. (2014). Measuring acute poverty in the developing world: Robustness and scope of the multidimensional poverty index. *World Development, 59*, 251-274. doi:10.1016/j.worlddev.2014.01.026

Allen, D. (2009). From boundary concept to boundary object: The practice and politics of care pathway development. *Social Science & Medicine, 69*(3), 354-361. doi:10.1016/j.socscimed.2009.05.002

Altman, M. (2015). Cooperative organizations as an engine of equitable rural economic development. *Journal of Co-operative Organization and Management, 3*(1), 14-23. doi:10.1016/j.jcom.2015.02.001

Alvarez, S. A., & Barney, J. B. (2014). Entrepreneurial opportunities and poverty alleviation. *Entrepreneurship Theory and Practice, 38*(1), 159-184. doi:10.1111/etap.12078

Amingad, V., & Lakshmipathy, M. (2014). Agricultural & horticultural sciences. *Agrotechnology*, *2*(4), 23-41. doi:10.4172/2168-9881.S1.007

Andersen, T. J. (2004). Integrating decentralized strategy making and strategic planning processes in dynamic environments. *Journal of Management Studies, 41*(8), 1271-1299. doi:10.1111/j.1467-6486.2004.00475.x

Anderson, C. (2006). *The long tail: Why the future of business is selling less of more*. New York, NY: Hyperion.

Ansari, S., Munir, K., & Gregg, T. (2012). Impact at the 'bottom of the pyramid': The role of social capital in capability development and community empowerment.

Journal of Management Studies, 49(4), 813-842. doi:10.1111/j.1467-6486.2012.01042.x

Anthony, V. M., & Ferroni, M. (2012). Agricultural biotechnology and smallholder farmers in developing countries. *Current Opinion in Biotechnology, 23*(2), 278-285. doi:10.1016/j.copbio.2011.11.020

Arasa, R., & Obonyo, P. K. (2012). The relationship between strategic planning and firm performance. *International Journal of Humanities and Social Science, 2*(22), 201-213. Retrieved from http://197.136.134.32/handle/123456780/4326

Arrow, K. J., Dasgupta, P., Goulder, L. H., Mumford, K. J., & Oleson, K. (2012). Sustainability and the measurement of wealth. *Environment and Development Economics, 17*(3), 317-353. doi:10.1017/S1355770X12000137

Ashraf, Q., & Galor, O. (2011). Dynamics and stagnation in the Malthusian epoch. *American Economic Review, 101*(5), 2003-2041. doi:10.1257/aer.101.5.2003

Avlontis, G. J., & Indounas, K. A. (2005). Pricing objectives and pricing methods in the services sector. *Journal of Services Marketing, 19*(1), 47-57. doi:10.1108/08876040510579398

Bakeman, R., & Gottman, J. M. (1989). *Interaction observation: Introduction to sequential analysis*. Madrid, Spain: Morata.

Baker, G. A., & Leidecker, J. K. (2001). Does it pay to plan?: Strategic planning and financial performance. *Agribusiness: An International Journal, 17*(3), 355-364. doi:10.1002/agr.1021

Balconi, M., Sebastiani, R., & Angioletti, L. (2019). A neuroscientific approach to explore consumers' intentions towards sustainability within the luxury fashion industry. *Sustainability, 11*(18), 1-14. doi:10.3390/su11185105

Banerjee, A., & Duflo, E. (2011). More than 1 billion people are hungry in the world. *Foreign Policy, 186*, 66-72. Retrieved from https://www.jstor.org/stable/41233425

Bannikova, N. V., Baydakov, A. N., & Vaytsekhovskaya, S. S. (2015). Identification of strategic alternatives in agribusiness. *Modern Applied Science, 9*(4), 344-353. doi:10.5539/mas.v9n4p344

Barker, G. (2009). *The agricultural revolution in prehistory: Why did foragers become farmers?* New York, NY: Oxford University Press.

Barrón, M. A., & Rello, F. (2000). The impact of the tomato agroindustry on the rural poor in Mexico. *Agricultural Economics, 23*(3), 289-297. doi:10.1111/j.1574-0862.2000.tb00280.x

Bashota, B., & Hasanaj, P. (2012). Theories of international economic development (Case study: Economic development in Kosovo). *ILIRIA International Review, 2*(1), 67-90. doi:10.21113/iir.v2i1.163

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics, 18*(3), 19-31. doi:10.1016/0090-2616(90)90061-S

Basulto, F. S., Duch, E. S., Espadas, F., Plaza, R. D., Saavedra, A. L., & Santamaría, J. M. (2009). Postharvest ripening and maturity indices for maradol papaya.

Interciencia, 34(8), 583-588. Retrieved from https://www.redalyc.org/pdf/339/33913144010.pdf

Batana, Y., Bussolo, M., & Cockburn, J. (2013). Global extreme poverty rates for children, adults and the elderly. *Economics Letters, 120*(3), 405-407. doi:10.1016/j.econlet.2013.05.006

Baumol, W. (1993). *Entrepreneurship, management, and the structure of payoffs*. Cambridge, MA: The MIT Press.

Bazzaz, S. J., & Grinyer, P. H. (1981). Corporate planning in the UK: The state of the art in the 70s. *Strategic Management Journal, 2*(2), 155-168. doi:10.1002/smj.4250020205

Becerril, J., & Abdulai, A. (2010). The impact of improved maize varieties on poverty in Mexico: A propensity score-matching approach. *World Development, 38*(7), 1024-1035. doi:10.1016/j.worlddev.2009.11.017

Becker, G. S. (1960). Underinvestment in college education? *The American Economic Review, 50*(2), 346-354. Retrieved from https://www.jstor.org/stable/1815038?seq=1

Becker, G. S. (1975). *Human capital: A theoretical and empirical analysis with special reference to education* (2nd ed.). New York, NY: National Bureau of Economic Research, Columbia University Press

Becker, G. S. (1993). Nobel lecture: The economic way of looking at behavior. *Journal of Political Economy, 101*(3), 385-409. doi:10.1086/261880

Beech, B. (1999). Go the extra mile--Use the Delphi technique. *Journal of Nursing Management, 7*(5), 281-288. doi:10.1046/j.1365-2834.1999.00125.x

Bekaert, G., Harvey, C. R., & Lundblad, C. (2001). Emerging equity markets and economic development. *Journal of Development Economics, 66*(2), 465-504. doi:10.1016/S0304-3878(01)00171-7

Bell, G. G., & Rochford, L. (2016). Rediscovering SWOT's integrative nature: A new understanding of an old framework. *The International Journal of Management Education*, *14*(3), 310-326. doi:10.1016/j.ijme.2016.06.003

Bendell, J., & Kleanthous, A. (2007). *Deeper luxury*. Madrid, Spain: WWF, Godalming.

Beretta, R. (1996). A critical review of the Delphi technique. *Nurse Researcher, 3*(4), 79-89. doi:10.7748/nr.3.4.79.s8

Berti, G., & Mulligan, C. (2016). Competitiveness of small farms and innovative food supply chains: The role of food hubs in creating sustainable regional and local food systems. *Sustainability, 8*(7), 616-647. doi:10.3390/su8070616

Beuckels, E., & Hudders, L. (2016). An experimental study to investigate the impact of image interactivity on the perception of luxury in an online shopping context. *Journal of Retailing and Consumer Services, 33*, 135-142. doi:10.1016/j.jretconser.2016.08.014

Bird, S. R., Sapp, S. G., & Lee, M. Y. (2001). Small business success in rural communities: Explaining the sex gap. *Rural Sociology, 66*(4), 507-531. doi:10.1111/j.1549-0831.2001.tb00082.x

Birthal, P. S., Joshi, P. K., Roy, D., & Thorat, A. (2013). Diversification in Indian agriculture toward high-value crops: The role of small farmers. *Canadian Journal of Agricultural Economics/Revue Canadienne d'Agroeconomie, 61*(1), 61-91. doi:10.1111/j.1744-7976.2012.01258.x

Blowfield, M. E., & Dolan, C. (2010). Fairtrade facts and fancies: What Kenyan fairtrade tea tells us about business' role as development agent. *Journal of Business Ethics, 93*(2), 143-162. doi:10.1007/s10551-010-0558-2

Boyd, B. K., & Reuning-Elliott, E. (1998). A measurement model of strategic planning. *Strategic Management Journal, 19*(2), 181-192. doi:10.1002/(SICI)1097-0266(199802)19:2<181::AID-SMJ945>3.0.CO;2-Z

Bradbury, K. L., Kodrzycki, Y. K., & Tannenwald, R. (1997, March/April). The effects of state and local public policies on economic development: An overview. *New England Economic Review*, 1-12. Retrieved from https://www.bostonfed.org/publications/new-england-economic-review/1997-issues/issue-march-april-1997/the-effects-of-state-and-local-public-policies-on-economic-development-an-overview.aspx

Bradshaw, B., Dolan, H., & Smit, B. (2004). Farm-level adaptation to climatic variability and change: Crop diversification in the Canadian prairies. *Climatic Change, 67*(1), 119-141. doi:10.1007/s10584-004-0710-z

Bradshaw, T. K. (2002). The contribution of small business loan guarantees to economic development. *Economic Development Quarterly, 16*(4), 360-369. doi:10.1177/089124202237199

Brüderl, J., Preisendörfer, P., & Ziegler, R. (1992). Survival chances of newly founded business organizations. *American Sociological Review, 57*(2), 227-242. doi:10.2307/2096207

Brun, A., Caniato, F., Caridi, M., Castelli, C., Miragliotta, G., Ronchi, S., Sianesi, A., & Spina, G. (2008). Logistics and supply chain management in luxury fashion retail:

Empirical investigation of Italian firms. *International Journal of Production Economics, 114*(2), 554-570. doi:10.1016/j.ijpe.2008.02.003

Bruton, G. D., Ahlstrom, D., & Obloj, K. (2008). Entrepreneurship in emerging economies: Where are we today and where should the research go in the future. *Entrepreneurship Theory and Practice, 32*(1), 1-14. doi:10.1111/j.1540-6520.2007.00213.x

Bruton, G. D., Filatotchev, I., Chahine, S., & Wright, M. (2010). Governance, ownership structure, and performance of IPO firms: The impact of different types of private equity investors and institutional environments. *Strategic Management Journal, 31*(5), 491-509. doi:10.1002/smj.822

Bryson, J. M. (2010). The future of public and nonprofit strategic planning in the United States. *Public Administration Review, 70*(s1), s255-s267. doi:10.1111/j.1540-6210.2010.02285.x

Bryson, J. M., Edwards, L. H., & Van Slyke, D. M. (2018). Getting strategic about strategic planning research. *Public Management Review, 20*(3), 317-339. doi:10.1080/14719037.2017.1285111

Buadi, D. K., Anaman, K. A., & Kwarteng, J. A. (2013). Farmers' perceptions of the quality of extension services provided by non-governmental organizations in two municipalities in the Central Region of Ghana. *Agricultural Systems, 120*, 20-26. doi:10.1016/j.agsy.2013.05.002

Buriak, P., & Shinn, G. C. (1989). Mission, initiatives, and obstacles to research in agricultural education: A national Delphi using external decision-makers. *Journal of Agricultural Education, 30*(4), 14-23. Retrieved from

https://www.researchgate.net/profile/Glen_Shinn/publication/237334391_Mission_Initiatives_And_Obstacles_To_Research_In_Agricultural_Education_A_National_Delphi_Using_External_Decision_Makers/links/00b7d529f2030d5d7a000000/Mission-Initiatives-And-Obstacles-To-Research-In-Agricultural-Education-A-National-Delphi-Using-External-Decision-Makers.pdf

Burstein, J. (2007, April). *US-Mexico agricultural trade and rural poverty in Mexico*. Washington, DC: Woodrow Wilson Center. Retrieved from https://www.wilsoncenter.org/sites/default/files/media/documents/publication/Mexico_Agriculture_rpt_English1.pdf

Campbell, A. (1999). Tailored, not benchmarked. *Harvard Business Review, 77*(2), 41-42. Retrieved from https://go.gale.com/ps/anonymous?id=GALE%7CA54077788&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00178012&p=AONE&sw=w

Campos-Climent, V., Apetrei, A., & Chaves-Ávila, R. (2012). Delphi method applied to horticultural cooperatives. *Management Decision, 50*(7), 1266-1284. doi:10.1108/00251741211247003

Cannings, A., & Hills, T. (2012). A framework for auditing HR: Strengthening the role of HR in the organization. *Industrial and Commercial Training*, *44*(3), 139-149. doi: 10.1108/00197851211216745

Cannon, A. R., & St John, C. H. (2004). Competitive strategy and plant-level flexibility. *International Journal of Production Research, 42*(10), 1987-2007. doi:10.1080/00207540310001657603

Cao, L., Navare, J., & Jin, Z. (2018). Business model innovation: How the international retailers rebuild their core business logic in a new host country. *International Business Review, 27*(3), 543-562. doi:10.1016/j.ibusrev.2017.10.005

Caragher, J. M. (2008). Expand your horizons: Niche marketing success stories. *Journal of Accountancy, 205*(4), 56-59. Retrieved from https://search.proquest.com/docview/206796610/fulltextPDF/962A52186EAF45C0PQ/1?accountid=4117

Card, D. (1999). The causal effect of education on earnings. *Handbook of Labor Economics, 3*(A), 1801-1863. doi:10.1016/S1573-4463(99)03011-4

Carnes, D., Mullinger, B., & Underwood, M. (2010). Defining adverse events in manual therapies: A modified Delphi consensus study. *Manual Therapy, 15*(1), 2-6. doi:10.1016/j.math.2009.02.003

Castaño, N., de Luque, M. F. S., Wernsing, T., Ogliastri, E., Shemueli, R. G., Fuchs, R. M., & Robles-Flores, J. A. (2015). *El jefe*: Differences in expected leadership behaviors across Latin American countries. *Journal of World Business, 50*(3), 584-597. doi:10.1016/j.jwb.2014.12.002

Ceric, A. (2014). Minimizing communication risk in construction: A Delphi study of the key role of project managers. *Journal of Civil Engineering and Management, 20*(6), 829-838. doi:10.3846/13923730.2013.802739

Cervellon, M. C. (2013). Conspicuous conservation: Using semiotics to understand sustainable luxury. *International Journal of Market Research, 55*(5), 695-717. doi:10.2501/IJMR-2013-030

Cervellon, M. C., & Shammas, L. (2013). The value of sustainable luxury in mature markets: A customer-based approach. *Journal of Corporate Citizenship, 52,* 90-101. Retrieved from https://www.jstor.org/stable/jcorpciti.52.90?seq=1

Chandon, J. L., Laurent, G., & Valette-Florence, P. (2016). Pursuing the concept of luxury: Introduction to the JBR special issue on "luxury marketing from tradition to innovation." *Journal of Business Research, 69*(1), 299-303. doi:10.1016/j.jbusres.2015.08.001

Chang, J., Wu, X., Wang, Y., Meyerson, L. A., Gu, B., Min, Y., . . . & Ge, Y. (2013). Does growing vegetables in plastic greenhouses enhance regional ecosystem services beyond the food supply? *Frontiers in Ecology and the Environment, 11*(1), 43-49. doi:10.1890/100223

Chang, S. C., Yang, C. L., Cheng, H. C., & Sheu, C. (2003). Manufacturing flexibility and business strategy: An empirical study of small and medium sized firms. *International Journal of Production Economics, 83*(1), 13-26. doi:10.1016/S0925-5273(02)00263-3

Charlton, D., & Taylor, J. E. (2016). A declining farm workforce: Analysis of panel data from rural Mexico. *American Journal of Agricultural Economics, 98*(4), 1158-1180. doi:10.1093/ajae/aaw018

Chen, W., & Hirschheim, R. (2004). A paradigmatic and methodological examination of information systems research from 1991 to 2001. *Information Systems Journal, 14*(3), 197-235. doi:10.1111/j.1365-2575.2004.00173.x

Chermack, T. J., & Kasshanna, B. K. (2007). The use and misuse of SWOT analysis and implications for HRD professionals. *Human Resource Development International, 10*(4), 383-399. doi:10.1080/13678860701718760

Chernov, V., Dorokhov, O., & Dorokhova, L. (2016). Fuzzy logic approach to SWOT analysis for economics tasks and example of its computer realization. *Bulletin of the Transilvania University of Braşov-Series V, 9*(58), 317-326. Retrieved from https://search-proquest-com.argo.library.okstate.edu/docview/1833105804/fulltextPDF/5D8AD535D9424F6APQ/1?accountid=4117

Cheung, K. L., de Ruijter, D., Hiligsmann, M., Elfeddali, I., Hoving, C., Evers, S. M., & de Vries, H. (2017). Exploring consensus on how to measure smoking cessation. A Delphi study. *BMC Public Health, 17*(1), 1-10. doi:10.1186/s12889-017-4902-7

Chossat, V., & Gergaud, O. (2003). Expert opinion and gastronomy: The recipe for success. *Journal of Cultural Economics, 27*(2), 127-141. doi:10.1023/A:1023432502059

Choudhury, M. A., & Dusuki, A. W. (2008). Banking for the poor: The role of Islamic banking in microfinance initiatives. *Humanomics, 24*(1), 49-66. doi:10.1108/08288660810851469

Choudhury, S., & Bhattacharjee, D. (2014). Optimal number of scale points in Likert-type scales for quantifying compulsive buying behavior. *Asian Journal of Management Research, 4*(3), 432-440. Retrieved from

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.431.5244&rep=rep1&type=pdf

Chrisinger, C. K., Fowler, C. S., & Kleit, R. G. (2012). Shared skills: Occupation clusters for poverty alleviation and economic development in the US. *Urban Studies, 49*(15), 3403-3425. doi:10.1177/0042098011433489

Clarke, A., & Jack, B. (1998). The benefits of using qualitative research. *Professional Nurse, 13*(12), 845-847. Retrieved from https://europepmc.org/article/med/10095679

Claycamp, H. J., & Massy, W. F. (1968). A theory of market segmentation. *Journal of Marketing Research, 5*(4), 388-394. doi:10.1177/002224376800500405

Cohn, E., & Addison, J. T. (1998). The economic returns to lifelong learning in OECD countries. *Education Economics, 6*(3), 253-307. doi:10.1080/09645299800000021

Conroy, M. M. (2006). Moving the middle ahead: Challenges and opportunities of sustainability in Indiana, Kentucky, and Ohio. *Journal of Planning Education and Research, 26*(1), 18-27. doi:10.1177/0739456X06289664

Cooper, R., & Kaplan, R. S. (1988). Measure costs right: Make the right decisions. *Harvard Business Review, 66*(5), 96-103. Retrieved from http://host.uniroma3.it/facolta/economia/db/materiali/insegnamenti/588_3930.pdf

Costa Pinto, L. A., & Bazzanella, W. (1958). Economic development, social change and population problems in Brazil. *The ANNALS of the American Academy of Political and Social Science, 316*(1), 121-126. doi:10.1177/000271625831600114

Craig, C., & Douglas, S. P. (2006). Beyond national culture: Implications of cultural dynamics for consumer research. *International Marketing Review*, *23*(3), 322-342. doi:10.1108/02651330610670479

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Creswell, J. W., & Miller, D. L. (2010). Determining validity in qualitative inquiry, theory into practice. *Theory into Practice, 39*(3), 124-130. doi:10.1207/s15430421tip3903_2

Currid-Halkett, E., & Stolarick, K. (2011). The great divide: Economic development theory versus practice–A survey of the current landscape. *Economic Development Quarterly, 25*(2), 143-157. doi:10.1177/0891242410394358

Custer, R. L., Scarcella, J. A., & Stewart, B. R. (1999). The modified Delphi technique-A rotational modification. *Journal of Career and Technical Education, 15*(2), 1-6. Retrieved from https://ejournals.lib.vt.edu/JCTE/article/view/702/1013

D'Arpizio, C., & Levato, F. (June 7, 2018). *Global personal luxury goods market expected to grow by 6-8 percent to €276-281b in 2018, driven by strong rebound in China*. Media Center. Bain & Co. Retrieved from https://www.bain.com/about/media-center/press-releases/2018/bain-spring-luxury-report-2018/

Dailey, A. L., & Holmberg, J. C. (1990). Delphi–A catalytic strategy for motivating curriculum revision by faculty. *Community/Junior College Quarterly of Research and Practice, 14*(2), 129-136. doi:10.1080/0361697900140207

Dajani, J. S., Sincoff, M. Z., & Talley, W. K. (1979). Stability and agreement criteria for the termination of Delphi studies. *Technological Forecasting and Social Change, 13*(1), 83-90. doi:10.1016/0040-1625(79)90007-6

Dalgaard, C. J., & Strulik, H. (2017). The genesis of the golden age: Accounting for the rise in health and leisure. *Review of Economic Dynamics, 24*, 132-151. doi:10.1016/j.red.2017.01.005

Dalgic, T. (1998). Niche marketing principles: Guerrillas versus gorillas. *Journal of Segmentation in Marketing, 2*(1), 5-18. doi:10.1300/J142v02n01_02

Dalgic, T. (Ed.). (2006). *Handbook of niche marketing, principles and practices*. New York, NY: The Haworth Press Inc.

Dalgic, T., & Leeuw, M. (1994). Niche marketing revisited: Concept, applications and some European cases. *European Journal of Marketing, 28*(4), 39-55. doi:10.1108/03090569410061178

Dalkey, N. C. (1969). *The Delphi method: An experimental study of group opinion.* Santa Monica, CA: The Rand Corporation.

Dalkey, N. C., & Helmer, O. (1963). An experimental application of the Delphi method to the use of experts. *Management Science, 9*(3), 458-467. doi:10.1287/mnsc.9.3.458

Dalkey, N. C., Rourke, D. L., Lewis, R., & Snyder, D. (1972). S*tudies in the quality of life; Delphi and decision-making.* Lanham, MD: Lexington Books.

Dasgupta, P. (2013). The nature of economic development and the economic development of nature. *Economic and Political Weekly, 48*(51), 38-51. Retrieved from https://www.jstor.org/stable/24478403?seq=1

Datt, G., & Ravallion, M. (1992). Growth and redistribution components of changes in poverty measures: A decomposition with applications to Brazil and India in the 1980s. *Journal of Development Economics, 38*(2), 275-295. doi:10.1016/0304-3878(92)90001-P

David, M., & Sutton, C. D. (2011). *Social research: An introduction* (3rd ed.). Los Angeles, CA: Sage Publications, Inc.

Davis, S., & Davidson, B. (1991). *2020 Vision*. New York, NY: FIRESIDE.

Dayé, C. (2018). How to train your oracle: The Delphi method and its turbulent youth in operations research and the policy sciences. *Social Studies of Science, 48*(6), 846-868. doi:10.1177/0306312718798497

Dean, T. J., & McMullen, J. S. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing, 22*(1), 50-76. doi:10.1016/j.jbusvent.2005.09.003

Deaton, A. (2005). Measuring poverty in a growing world (or measuring growth in a poor world). *The Review of Economics and Statistics, 87*(1), 1-19. doi:10.1162/0034653053327612

De Beer, J., & Petersen, N. (2017). Post-harvest physiology of cut flowers: A problem-based, cooperative learning activity for the biology classroom. *The American Biology Teacher, 79*(7), 578-583. doi:10.1525/abt.2017.79.7.578

de Grammont, H. C. (2010). The evolution of agricultural production in the Mexican countryside: Productive concentration, poverty, and pluriactivity. *Andamios, 7*(13), 85-117. Retrieved from

http://www.scielo.org.mx/scielo.php?pid=S1870
00632010000200005&script=sci_arttext&tlng=pt

Deininger, K., & Squire, L. (1998). New ways of looking at old issues: Inequality and growth. *Journal of Development Economics, 57*(2), 259-287. doi:10.1016/S0304-3878(98)00099-6

Dekhili, S., Achabou, M. A., & Alharbi, F. (2019). Could sustainability improve the promotion of luxury products? *European Business Review, 31*(4), 488-511. doi:10.1108/EBR-04-2018-0083

De la Torre, J. (1981). Foreign investment and economic development: Conflict and negotiation. *Journal of International Business Studies, 12*(2), 9-32. doi:10.1057/palgrave.jibs.8490576

Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). *Group techniques for program planning: A guide to nominal group and Delphi processes*. Glenview, IL: Scott, Foresman.

Dellink, R., Chateau, J., Lanzi, E., & Magné, B. (2017). Long-term economic growth projections in the shared socioeconomic pathways. *Global Environmental Change, 42*, 200-214. doi:10.1016/j.gloenvcha.2015.06.004

DelVecchio, D. (2000). Moving beyond fit: The role of brand portfolio characteristics in consumer evaluations of brand reliability. *Journal of Product & Brand Management, 9*(7), 457-471. doi:10.1108/10610420010351411

De Nardi, M. (2004). Wealth inequality and intergenerational links. *The Review of Economic Studies, 71*(3), 743-768. doi:10.1111/j.1467-937X.2004.00302.x

Dernbach, J. C. (1998). Reflections on comparative law, environmental law, and sustainability. *In Widener L. Symp. J. 3*, 279. Retrieved from https://heinonline.org/HOL/LandingPage?handle=hein.journals/wlsj3&div=13&id=&page=

Diamond, I. R., Grant, R. C., Feldman, B. M., Pencharz, P. B., Ling, S. C., Moore, A. M., & Wales, P. W. (2014). Defining consensus: A systematic review recommends methodologic criteria for reporting of Delphi studies. *Journal of Clinical Epidemiology, 67*(4), 401-409. doi:10.1016/j.jclinepi.2013.12.002

Dibrell, C., Craig, J. B., & Neubaum, D. O. (2014). Linking the formal strategic planning process, planning flexibility, and innovativeness to firm performance. *Journal of Business Research, 67*(9), 2000-2007. doi:10.1016/j.jbusres.2013.10.011

Diener, E., Ng, W., Harter, J., & Arora, R. (2010). Wealth and happiness across the world: Material prosperity predicts life evaluation, whereas psycho-social prosperity predicts positive feeling. *Journal of Personality and Social Psychology*, *99*(1), 52-61. doi: 10.1037/a0018066

Dillman, D. A., & Smyth, J. D. (2007). Design effects in the transition to web-based surveys. *American Journal of Preventive Medicine, 32*(5), S90-S96. doi:10.1016/j.amepre.2007.03.008

Dimara, E., Petrou, A., & Skuras, D. (2003). The socio-economics of niche market creation. *International Journal of Social Economics*, *30*(3) 219-235. doi:10.1108/03068290310460134

Diochon, M. C. (2003). *Entrepreneurship and community economic development*. Quebec, Canada: McGill-Queen's Press-MQUP.

Donohoe, H., Stellefson, M., & Tennant, B. (2012). Advantages and limitations of the e-Delphi technique: Implications for health education researchers. *American Journal of Health Education, 43*(1), 38-46. doi:10.1080/19325037.2012.10599216

Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives, 38*(1), 105-123. Retrieved from https://search.informit.com.au/documentSummary;dn=491551710186460;res=IELHSS

Duarte, C., Ettkin, L. P., Helms, M. M., & Anderson, M. S. (2006). The challenge of Venezuela: A SWOT analysis. *Competitiveness Review: An International Business Journal, 16*(3/4), 233-247. doi:10.1108/cr.2006.16.3_4.233

Dube, A. (2019). Minimum wages and the distribution of family incomes. *American Economic Journal: Applied Economics, 11*(4), 268-304. doi:10.1257/app.20170085

Duffield, C. (1993). The Delphi technique: A comparison of results obtained using two expert panels. *International Journal of Nursing Studies, 30*(3), 227-237. doi:10.1016/0020-7489(93)90033-Q

Durvasula, S., & Lysonski, S. (2010). Money, money, money–How do attitudes toward money impact vanity and materialism?–The case of young Chinese consumers. *Journal of Consumer Marketing, 27*(2), 169-179. doi:10.1108/07363761011027268

Dyson, R. G. (2004). Strategic development and SWOT analysis at the University of Warwick. *European Journal of Operational Research, 152*(3), 631-640. doi:10.1016/S0377-2217(03)00062-6

Ebben, J. J., & Johnson, A. C. (2005). Efficiency, flexibility, or both? Evidence linking strategy to performance in small firms. *Strategic Management Journal, 26*(13), 1249-1259. doi:10.1002/smj.503

Echanove-Huacuja, F. (2006). Contract farming and small-scale producers. *Iberoamericana, 36*(1), 83-102. doi:10.16993/ibero.184

Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review, 32*(4), 1246-1264. doi:10.5465/amr.2007.26586086

Edwards-Jones, G., i Canals, L. M., Hounsome, N., Truninger, M., Koerber, G., Hounsome, B., . . . & Harris, I. M. (2008). Testing the assertion that 'local food is best': The challenges of an evidence-based approach. *Trends in Food Science & Technology, 19*(5), 265-274. doi:10.1016/j.tifs.2008.01.008

Edwards, M. R., & Shultz, C. J. (2005). Reframing agribusiness: Moving from farm to market centric. *Journal of Agribusiness, 23*(1), 57-73. doi:10.22004/ag.econ.59611

Efrat, K., & Shoham, A. (2011). Environmental characteristics and technological capabilities' interaction in high-technology born global firms. *European Journal of International Management, 5*(3), 271-284. doi:10.1504/EJIM.2011.039942

Ehrenberg, R. G., & Smith, R. S. (2016). *Modern labor economics: Theory and public policy* (12th ed.). London, England: Routledge.

Enderle, G. (2009). A rich concept of wealth creation beyond profit maximization and adding value. *Journal of Business Ethics, 84*(3), 281-295. doi:10.1007/s10551-009-0205-y

Escobal, J., Favareto, A., Aguirre, F., & Ponce, C. (2015). Linkage to dynamic markets and rural territorial development in Latin America. *World Development, 73*, 44-55. doi:10.1016/j.worlddev.2014.09.017

Esiebugie, U. M., Hembadoon, D., & Ekeh, L. (2016). Small scale industries and poverty reduction in Benue State, Nigeria. *Imperial Journal of Interdisciplinary Research, 2*(8), 1347-1355. Retrieved from http://www.onlinejournal.in/IJIRV2I8/224.pdf

Espinosa Méndez, E., García Cué, J. L., Jiménez Velázquez, M. A., Martínez Saldaña, T., Equíhua, P., Luis, J., & Sánchez Escudero, J. (2013). Characterization of micro and small agricultural enterprises of the Altos from Chiapas region. *Revista Mexicana de Ciencias Agrícolas, 4*(6), 955-962. Retrieved from http://www.scielo.org.mx/scielo.php?pid=S2007-09342013000600011&script=sci_arttext

Espinoza, J. F., Figueroa Rodríguez, O. L., & Jiménez Sánchez, L. (2014). Elements to analyze social networks for rural development in Mexico: The RENDRUS case. *Agricultura, Sociedad y Desarrollo, 11*(1), 1-24. Retrieved from http://www.scielo.org.mx/scielo.php?pid=S1870-54722014000100001&script=sci_arttext

Etzkowitz, H., & Leydesdorff, L. (1995). The triple helix--University-industry-government relations: A laboratory for knowledge based economic development. *EASST Review, 14*(1), 14-19. Retrieved from https://ssrn.com/abstract=2480085

Evans, D., McMeekin, A., & Southerton, D. (2012). Sustainable consumption, behavior change policies and theories of practice. *Studies Across Disciplines in the Humanities and Social Sciences 12*, 113-129. Retrieved from https://helda.helsinki.fi/bitstream/handle/10138/34226/12_07_evans-southerton-mcmeekin.pdf?sequence=1

Farrell, B., Tsang, C., Raman-Wilms, L., Irving, H., Conklin, J., & Pottie, K. (2015). What are priorities for deprescribing for elderly patients? Capturing the voice of practitioners: A modified Delphi process. *PloS one, 10*(4), 1-16. doi:10.1371/journal.pone.0122246

Farrell, M. J. (1957). The measurement of productive efficiency. *Journal of the Royal Statistical Society: Series A (General), 120*(3), 253-290. doi:10.2307/2343100

Fatusin, A. F. (2015). Small scale industries and poverty reduction in Ondo State, Nigeria. *Journal of Economics and Business Research, 21*(1), 57-68. Retrieved from https://www.ceeol.com/search/article-detail?id=564795

Favoreu, C., Carassus, D., & Maurel, C. (2016). Strategic management in the public sector: A rational, political or collaborative approach? *International Review of Administrative Sciences, 82*(3), 435-453. doi:10.1177/0020852315578410

Feenstra, G. W., Lewis, C. C., Hinrichs, C. C., Gillespie, G. W., & Hilchey, D. (2003). Entrepreneurial outcomes and enterprise size in US retail farmers' markets. *American Journal of Alternative Agriculture, 18*(1), 46-55. doi:10.1079/AJAA200233

Fei, J., & Ranis, G. (1967). Economic development (theory). *Econometrica (pre-1986), 35*(5), 132. Retrieved from https://search-proquest-

com.argo.library.okstate.edu/docview/214662159/9002026D75BC4EB9PQ/44?accountid=4117

Felce, D., & Perry, J. (1995). Quality of life: Its definition and measurement. *Research in Developmental Disabilities, 16*(1), 51-74. doi:10.1016/0891-4222(94)00028-8

Feldman, M., Hadjimichael, T., Lanahan, L., & Kemeny, T. (2016). The logic of economic development: A definition and model for investment. *Environment and Planning C: Government and Policy, 34*(1), 5-21. doi:10.1177/0263774X15614653

Feng, L., Govindan, K., & Li, C. (2017). Strategic planning: Design and coordination for dual-recycling channel reverse supply chain considering consumer behavior. *European Journal of Operational Research, 260*(2), 601-612. doi:10.1016/j.ejor.2016.12.050

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods, 5*(1), 80-92. doi:10.1177/160940690600500107

Fernández, B. M., Sanzo, P. M., & Trespalacios, G. J. (1999). Training in small business retailing: Testing human capital theory. *Journal of European Industrial Training, 23*(7), 335-352. doi:10.1108/03090599910287350

Fernández-Ramos, J., Garcia-Guerra, A. K., Garza-Rodriguez, J., & Morales-Ramirez, G. (2016). The dynamics of poverty transitions in Mexico. *International Journal of Social Economics, 43*(11), 1082-1095. doi:10.1108/IJSE-04-2015-0084

Fiore, A. M., Lee, S. E., & Kunz, G. (2004). Individual differences, motivations, and willingness to use a mass customization option for fashion products. *European Journal of Marketing, 38*(7), 835-849. doi:10.1108/03090560410539276

Fisk, R. P. P., Anderson, L., Bowen, D. E., Gruber, T., Ostrom, A., Patrício, L., & Sebastiani, R. (2016). Billions of impoverished people deserve to be better served. *Journal of Service Management, 27*(1), 43-55. doi:10.1108/JOSM-04-2015-0125

Flanagan, T., Ashmore, R., Banks, D., & MacInnes, D. (2016). The Delphi method: Methodological issues arising from a study examining factors influencing the publication or non-publication of mental health nursing research. *Mental Health Review Journal, 21*(2), 85-94. doi:10.1108/MHRJ-07-2015-0020

Fleitman, J. (2000). *Successful businesses: How to start managing and operating a business efficiently*. Mexico City, Mexico: McGraw-Hill.

Fletcher, A. J., & Marchildon, G. P. (2014). Using the Delphi method for qualitative, participatory action research in health leadership. *International Journal of Qualitative Methods, 13*(1), 1-18. doi:10.1177/160940691401300101

Fletcher, J., & Cooper, C. (1996). Tourism strategy planning: Szolnok County, Hungary. *Annals of Tourism Research, 23*(1), 181-200. doi:10.1016/0160-7383(95)00057-7

Flores, L. A., & Edwards, M. C. (2019). A historical overview of protected agriculture in the state of Sinaloa, Mexico: Implications for improving rural prosperity. *Journal of International Agricultural and Extension Education, 26*(3), 7-26. doi:10.5191/jiaee.2019.26301

Flynn, M., Dooley, L., O'Sullivan, D., & Cormican, K. (2003). Idea management for organizational innovation. *International Journal of Innovation Management, 7*(4), 417-442. doi:10.1142/S1363919603000878

Fogo, B. (2014). Core practices for teaching history: The results of a Delphi panel survey. *Theory & Research in Social Education, 42*(2), 151-196. doi:10.1080/00933104.2014.902781

Food and Agriculture Organization (FAO). (1972). *Contract farming and economic integration*. Author. Retrieved from https://agris.fao.org/agris-search/search.do?recordID=US201300480053

Food and Agriculture Organization (FAO). (2015). *The economic lives of smallholder farmers an analysis based on household data from nine countries*. Author. Retrieved from http://www.fao.org/3/a-i5251e.pdf

Förster, B., & von der Gracht, H. (2014). Assessing Delphi panel composition for strategic foresight–A comparison of panels based on company-internal and external participants. *Technological Forecasting and Social Change, 84*, 215-229. doi:10.1016/j.techfore.2013.07.012

Franke, N., Keinz, P., & Steger, C. J. (2009). Testing the value of customization: When do customers really prefer products tailored to their preferences? *Journal of Marketing, 73*(5), 103-121. doi:10.1509/jmkg.73.5.103

Freedman, D. A., Choi, S. K., Hurley, T., Anadu, E., & Hébert, J. R. (2013). A farmers' market at a federally qualified health center improves fruit and vegetable intake among low-income diabetics. *Preventive Medicine, 56*(5), 288-292. doi:10.1016/j.ypmed.2013.01.018

Friedrich, T. (2017). Sustainable soil management with conservation agriculture. Meaning for rice cultivation. *Revista Ingeniería Agrícola, 7*(1), 3-7. Retrieved form https://www.rcta.unah.edu.cu/index.php/IAgric/article/view/506

Fuentes, N., & Rojas, M. (2001). Economic theory and subjective well-being: Mexico. *Social Indicators Research, 53*(3), 289-314. doi:10.1023/A:1007189429153

Fuks, D., Weiss, E., Tepper, Y., & Bar-Oz, G. (2016). Seeds of collapse? Reconstructing the ancient agricultural economy at Shivta in the Negev. *Antiquity, 90*(353), 1-5. doi:10.15184/aqy.2016.167

Galindo, J. O., & Bolívar, H. R. (2018). Poverty in Mexico, an analysis with a multidimensional approach. *Revista Análisis Económico, 28*(69), 189-218. Retrieved from http://www.analisiseconomico.azc.uam.mx/index.php/rae/article/view/150/0

Galindo, M. Á., & Méndez-Picazo, M. T. (2013). Innovation, entrepreneurship, and economic growth. *Management Decision, 51*(3), 501-514. doi:10.1108/00251741311309625

Galliers, R. D., & Land, F. F. (1987). Choosing appropriate information systems research methodologies. *Communications of the ACM, 30*(11), 900-902. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/similar?doi=10.1.1.471.143&type=sc

Gao, L., Norton, M. J., Zhang, Z. M., & Kin-man To, C. (2009). Potential niche markets for luxury fashion goods in China. *Journal of Fashion Marketing and Management: An International Journal*, *13*(4), 514-526. doi:10.1108/13612020910991376

Garine, I. D. (1979). Culture et nutrition. *Communications, 31*(1), 70-92. Retrieved from https://www.persee.fr/doc/comm_0588-8018_1979_num_31_1_1470

Gartner, W. B. (1988). "Who is an entrepreneur?" is the wrong question. *American Journal of Small Business, 12*(4), 11-32. doi:10.1177/104225878801200401

Garver, M. S. (2009). A maximum difference scaling application for customer satisfaction researchers. *International Journal of Market Research, 51*(4), 481-500. doi:10.2501/S1470785309200694

Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational research: Competencies for analysis and application*. New York, NY: Prentice Hall.

Geman, H., & Kanyinda, A. (2007). Water as the next commodity. *The Journal of Alternative Investments, 10*(2), 23-30. doi:10.3905/jai.2007.695264

Getz, D. (1983). Capacity to absorb tourism: Concepts and implications for strategic planning. *Annals of Tourism Research, 10*(2), 239-263. doi:10.1016/0160-7383(83)90028-2

Ghazinoory, S., Esmail Zadeh, A., & Memariani, A. (2007). Fuzzy SWOT analysis. *Journal of Intelligent & Fuzzy Systems, 18*(1), 99-108. Retrieved from https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs00334

Giannarou, L., & Zervas, E. (2014). Using Delphi technique to build consensus in practice. *International Journal of Business Science & Applied Management, 9*(2), 65-82. Retrieved from https://www.econstor.eu/handle/10419/190657

Gibbs, D. (2009). Sustainability entrepreneurs, ecopreneurs and the development of a sustainable economy. *Greener Management International, 55*, 63-78. Retrieved

from https://www.jstor.org/stable/pdf/greemanainte.55.63.pdf?seq=1#page_scan_tab_contents

Gibson, B., & Cassar, G. (2005). Longitudinal analysis of relationships between planning and performance in small firms. *Small Business Economics, 25*(3), 207-222. doi:10.1007/s11187-003-6458-4

Gibson, P., & Seibold, S. (2014). Understanding and influencing eco-luxury consumers. *International Journal of Social Economics, 41*(9), 780-800. doi:10.1108/IJSE-02-2013-0042

Gindling, T. H., & Terrell, K. (2010). Minimum wages, globalization, and poverty in Honduras. *World Development, 38*(6), 908-918. doi:10.1016/j.worlddev.2010.02.013

Glaeser, E. L., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2004). Do institutions cause growth? *Journal of Economic Growth, 9*(3), 271-303. doi:10.1023/B:JOEG.0000038933.16398.ed

Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., & Singh, R. (2016). Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior. *Journal of Business Research, 69*(12), 5833-5841. doi:10.1016/j.jbusres.2016.04.181

Goldstone, R. L. (1998). Perceptual learning. *Annual Review of Psychology, 49*(1), 585-612. doi:10.1146/annurev.psych.49.1.585

Gómez-Pompa, A., & Kaus, A. (1999). From pre-Hispanic to future conservation alternatives: Lessons from Mexico. *Proceedings of the National Academy of Sciences, 96*(11), 5982-5986. doi:10.1073/pnas.96.11.5982

Goodman, C. M. (1987). The Delphi technique: A critique. *Journal of Advanced Nursing, 12*(6), 729-734. doi:10.1111/j.1365-2648.1987.tb01376.x

Goody, J., & Goody, J. R. (1982). *Cooking, cuisine and class: a study in comparative sociology*. New York, NY: Cambridge University Press.

Görener, A., Toker, K., & Ulucay, K. (2012). Application of combined SWOT and AHP: A case study for a manufacturing firm. *Procedia-Social and Behavioral Sciences, 58*, 1525-1534. doi:10.1016/j.sbspro.2012.09.1139

Gorevaya, E., & Khayrullina, M. (2015). Evolution of business models: Past and present trends. *Procedia Economics and Finance*, *27*, 344-350. doi:10.1016/S2212-5671(15)01005-9

Graefe, A., & Armstrong, J. S. (2011). Comparing face-to-face meetings, nominal groups, Delphi and prediction markets on an estimation task. *International Journal of Forecasting, 27*(1), 183-195. doi:10.1016/j.ijforecast.2010.05.004

Granato, J., Inglehart, R., & Leblang, D. (1996). The effect of cultural values on economic development: Theory, hypotheses, and some empirical tests. *American Journal of Political Science, 40*(3), 607-631. doi:10.2307/2111786

Grant, R. M. (2003). Strategic planning in a turbulent environment: Evidence from the oil majors. *Strategic Management Journal, 24*(6), 491-517. doi:10.1002/smj.314

Gray, B. J., Duncan, S., Kirkwood, J., & Walton, S. (2014). Encouraging sustainable entrepreneurship in climate-threatened communities: A Samoan case study.

Entrepreneurship & Regional Development, 26(5-6), 401-430. doi:10.1080/08985626.2014.922622

Green, B., Jones, M., Hughes, D., & Williams, A. (1999). Applying the Delphi technique in a study of GPs' information requirements. *Health & Social Care in the Community, 7*(3), 198-205. doi:10.1046/j.1365-2524.1999.00176.x

Green, L. N., & Blakely, E. J. (2013). *Planning local economic development: Theory and practice* (5th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Green, R. A. (2014). The Delphi technique in educational research. *Sage Open, 4*(2), 1-8. doi:10.1177/2158244014529773

Griliches, Z. (1997). Education, human capital, and growth: A personal perspective. *Journal of Labor Economics, 15*(1), S330-S344. doi:10.1086/209865

Grodach, C. (2011). Barriers to sustainable economic development: The Dallas–Fort Worth experience. *Cities, 28*(4), 300-309. doi:10.1016/j.cities.2011.02.006

Guest, R. (2004). *The shackled continent: Power, corruption, and African lives*. Washington, DC: Smithsonian Books.

Gummesson, E., & Mele, C. (2010). Marketing as value co-creation through network interaction and resource integration. *Journal of Business Market Management, 4*(4), 181-198. doi:10.1007/s12087-010-0044-2

Gürel, E., & Tat, M. (2017). SWOT analysis: A theoretical review. *Journal of International Social Research, 10*(51), 994-1006. doi:10.17719/jisr.2017.1832

Gutterman, E. (2017). Poverty, corruption, trade, or terrorism? Strategic framing in the politics of UK anti-bribery compliance. *The British Journal of Politics and International Relations, 19*(1), 152-171. doi:10.1177/1369148116681731

Gylfason, T. (2001). Natural resources, education, and economic development. *European Economic Review, 45*(4-6), 847-859. doi:10.1016/S0014-2921(01)00127-1

Hagenaars, A., & De Vos, K. (1988). The definition and measurement of poverty. *Journal of Human Resources, 23*(2), 211-221. doi:10.2307/145776

Hák, T., Janoušková, S., & Moldan, B. (2016). Sustainable development goals: A need for relevant indicators. *Ecological Indicators, 60*, 565-573. doi:10.1016/j.ecolind.2015.08.003

Hall, J. K., Daneke, G. A., & Lenox, M. J. (2010). Sustainable development and entrepreneurship: Past contributions and future directions. *Journal of Business Venturing, 25*(5), 439-448. doi:10.1016/j.jbusvent.2010.01.002

Hammer, J., & Pivo, G. (2017). The triple bottom line and sustainable economic development theory and practice. *Economic Development Quarterly*, *31*(1), 25-36. doi: 10.1177/0891242416674808

Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing, 74*(4), 15-30. doi:10.1509/jmkg.74.4.015

Hanagriff, R., Murphy, T., Roberts, G., & Lindner, J. (2010). Economic impact of supervised agricultural experiences: Returns from SAE investment costs in Texas, 2007-2008. *Journal of Agricultural Education, 51*(4), 71-81. doi:10.5032/jae.2010.04071

Hardesty, D. M., & Bearden, W. O. (2004). The use of expert judges in scale development: Implications for improving face validity of measures of

unobservable constructs. *Journal of Business Research, 57*(2), 98-107. doi:10.1016/S0148-2963(01)00295-8

Harris, J., & Bentzen, W. (1977). Theoretical framework for analyzing poverty as a subculture. *The Clearing House, 50*(5), 209-211. doi:10.1080/00098655.1977.9956955

Hart, D., & Livingstone, D. W. (2009). Rising educational expectations: Trends and limits in times of economic downturn. *Education Canada, 49*(3), 4-7. Retrieved from https://www.edcan.ca/wp-content/uploads/EdCan-2009-v49-n3-Hart.pdf

Hartman, F., & Baldwin, A. (1995). Using technology to improve the Delphi method. *Journal of Computing in Civil Engineering, 9*(4), 244-249. doi:10.1061/(ASCE)0887-3801(1995)9:4(244)

Hartmann, L. H., Nitzko, S., & Spiller, A. (2016). The significance of definitional dimensions of luxury food. *British Food Journal, 118*(8), 1976-1998. doi:10.1108/BFJ-09-2015-0337

Harvey, A. C. (1985). Trends and cycles in macroeconomic time series. *Journal of Business & Economic Statistics, 3*(3), 216-227. doi:10.2307/1391592

Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing, 32*(4), 1008-1015. doi:10.1046/j.1365-2648.2000.t01-1-01567.x

Hauck, W. E., & Stanforth, N. (2007). Cohort perception of luxury goods and services. *Journal of Fashion Marketing and Management: An International Journal, 11*(2), 175-188. doi:10.1108/13612020710751365

Hax, A. C., & Majluf, N. S. (1983). The use of the industry attractiveness-business strength matrix in strategic planning. *Interfaces, 13*(2), 54-71. doi:10.1287/inte.13.2.54

Hayami, Y., & Godo, Y. (2002). *Nogyo keizairon. Agricultural economics.* Tokyo, Japan: Iwanami Shoten.

Heiko, A. (2012). Consensus measurement in Delphi studies: Review and implications for future quality assurance. *Technological Forecasting and Social Change, 79*(8), 1525-1536. doi:10.1016/j.techfore.2012.04.013

Heine, K., & Phan, M. (2011). Trading-up mass-market goods to luxury products. *Australasian Marketing Journal (AMJ), 19*(2), 108-114. doi:10.1016/j.ausmj.2011.03.001

Hellin, J. (2012). Agricultural extension, collective action and innovation systems: Lessons on network brokering from Peru and Mexico. *The Journal of Agricultural Education and Extension, 18*(2), 141-159. doi:10.1080/1389224X.2012.655967

Helmer, O. (1966, December). *The use of the Delphi technique in problems of educational innovations*. Santa Monica, CA: RAND Corporation. Retrieved from https://www.rand.org/content/dam/rand/pubs/papers/2006/P3499.pdf

Helms, M. M., & Nixon, J. (2010). Exploring SWOT analysis–Where are we now? *Journal of Strategy and Management, 3*(3), 215-251. doi:10.1108/17554251011064837

Hennigs, N., Wiedmann, K. P., Klarmann, C., & Behrens, S. (2013). Sustainability as part of the luxury essence: Delivering value through social and environmental

excellence. *Journal of Corporate Citizenship, 52*, 25-35. Retrieved from https://www.jstor.org/stable/jcorpciti.52.25?seq=1

Hennigs, N., Wiedmann, K. P., Klarmann, C., & Behrens, S. (2015). The complexity of value in the luxury industry: From consumers' individual value perception to luxury consumption. *International Journal of Retail & Distribution Management, 43*(10/11), 922-939. doi:10.1108/IJRDM-07-2014-0087

Hennigs, N., Wiedmann, K. P., Klarmann, C., Strehlau, S., Godey, B., Pederzoli, D., . . . & Taro, K. (2012). What is the value of luxury? A cross-cultural consumer perspective. *Psychology & Marketing, 29*(12), 1018-1034. doi:10.1002/mar.20583

Hepworth, L. R., & Rowe, F. J. (2018). Using Delphi methodology in the development of a new patient-reported outcome measure for stroke survivors with visual impairment. *Brain and Behavior, 8*(2), 1-9. doi:10.1002/brb3.898

Herzer, D., & Klump, R. (2010). Poverty and government transfers in the United States. *Applied Economics Letters, 17*(16), 1565-1569. doi:10.1080/13504850903051516

Hezar, I., Dalgic, T., Phelan, S., & Knight, G. (2006). *Handbook of niche marketing, principles and practices*. Binghamton, NY: The Haworth Press, Inc.

Hiatt, S. R., & Woodworth, W. P. (2006). Alleviating poverty through microfinance: Village banking outcomes in Central America. *The Social Science Journal, 43*(3), 471-477. doi:10.1016/j.soscij.2006.04.017

Hidayah, N., Abdul, H., & Hamdan, H. (2012). Conceptual framework of urban poverty reduction: A review of literature. *Procedia Social and Behavioral Sciences, 68,* 804-814. doi:10.1016/j.sbspro.2012.12.268

Hill, C. (2008). International business: Competing in the global market place. *Strategic Direction, 24*(9), 342-348. doi:10.1108/sd.2008.05624iae.001

Hiller, S., & Self, J. (2004). From measurement to management: Using data wisely for planning and decision-making. *Library Trends, 52*(1), 129-155. Retrieved form http://hdl.handle.net/2142/1720

Hinson, R. E. (2011). Banking the poor: The role of mobiles. *Journal of Financial Services Marketing, 15*(4), 320-333. doi:10.1057/fsm.2010.29

Hitt, M. A., Ireland, R. D., & Hoskisson, R. (1999). *Strategic management: Competitiveness and globalization* (3rd ed.). Cincinnati, OH: South-Western College Publishing.

Ho, L. W., Lie, T. T., Leong, P. T., & Clear, T. (2018). Developing offshore wind farm siting criteria by using an international Delphi method. *Energy Policy*, *113*, 53-67. doi:10.1016/j.enpol.2017.10.049

Hobday, M. (1998). Product complexity, innovation and industrial organization. *Research Policy, 26*(6), 689-710. doi:10.1016/S0048-7333(97)00044-9

Hockerts, K., & Wüstenhagen, R. (2010). Greening Goliaths versus emerging Davids–Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. *Journal of Business Venturing, 25*(5), 481-492. doi:10.1016/j.jbusvent.2009.07.005

Holey, E. A., Feeley, J. L., Dixon, J., & Whittaker, V. J. (2007). An exploration of the use of simple statistics to measure consensus and stability in Delphi studies. *BMC Medical Research Methodology, 7*(52), 1-10. doi:10.1186/1471-2288-7-52

Hong, P., & Pandey, S. (2007). Human capital as structural vulnerability of US poverty. *Equal Opportunities International, 26*(1), 18-43. doi:10.1108/02610150710726516

Honneth, A. (2004). Organized self-realization: Some paradoxes of individualization. *European Journal of Social Theory*, *7*(4), 463-478. doi:10.1177/1368431004046703

Hopkins, W. E., & Hopkins, S. A. (1997). Strategic planning–financial performance relationships in banks: A causal examination. *Strategic Management Journal, 18*(8), 635-652. doi:10.1002/(SICI)1097-0266(199709)18:8<635::AID-SMJ904>3.0.CO;2-%23

Hossain, M. M., & Hossain, M. K. (2015). Use of SWOT and Delphi method as a strategy making tool of food industry management. *International Journal of Technology Enhancements and Emerging Engineering Research, 3*(11), 91-98. Retrieved from https://www.researchgate.net/profile/Md_Hossain263/publication/300327833_Use_Of_SWOT_And_Delphi_Method_As_A_Strategy_Making_Tool_Of_Food_Industry_Management/links/570a1e0208ae8883a1fb99da/Use-Of-SWOT-And-Delphi-Method-As-A-Strategy-Making-Tool-Of-Food-Industry-Management.pdf

Hsu, C. C., & Sandford, B. A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research, and Evaluation, 12*(10), 1-8. doi:10.7275/pdz9-th90

Hsu, F. C., Trappey, A. J., Trappey, C. V., Hou, J. L., & Liu, S. J. (2006). Technology and knowledge document cluster analysis for enterprise R&D strategic planning.

International Journal of Technology Management, 36(4), 336-353. Retrieved from http://ebc.ie.nthu.edu.tw/km/ipr/ppt/Handout19.pdf

Ibrahim, A. B. (1992). Strategy formulation in small business: A conceptual framework. *Journal of Small Business & Entrepreneurship, 9*(4), 71-76. doi:10.1080/08276331.1992.10600415

Ilbery, B., & Kneafsey, M. (1999). Niche markets and regional specialty food products in Europe: Toward a research agenda. *Environment and Planning A, 31*(12), 2207-2222. doi:10.1068/a312207

Ilbery, B., Maye, D., Kneafsey, M., Jenkins, T., & Walkley, C. (2004). Forecasting food supply chain developments in lagging rural regions: Evidence from the UK. *Journal of Rural Studies, 20*(3), 331-344. doi:10.1016/j.jrurstud.2003.09.001

Iniguez-Montiel, A. J. (2014). Growth with equity for the development of Mexico: Poverty, inequality, and economic growth (1992–2008). *World Development, 59*, 313-326. doi:10.1016/j.worlddev.2014.01.011

Ioppolo, G., Cucurachi, S., Salomone, R., Saija, G., & Shi, L. (2016). Sustainable local development and environmental governance: A strategic planning experience. *Sustainability, 8*(2), 180-196. doi:10.3390/su8020180

Ito, J., Bao, Z., & Su, Q. (2012). Distributional effects of agricultural cooperatives in China: Exclusion of smallholders and potential gains on participation. *Food Policy, 37*(6), 700-709. doi:10.1016/j.foodpol.2012.07.009

Jacobs, N. A. (1996). Students' perceptions of the library service at the university of Sussex: Practical quantitative and qualitative research in an academic library. *Journal of Documentation, 52*(2), 139-162. doi:10.1108/eb026964

Jacoby, E., & Murillo, P. (2012). The best food on earth. Peru. The union of agriculture, gastronomy, nutrition. *World Nutrition, 3*(8), 358-372. Retrieved form https://www.worldnutritionjournal.org/index.php/wn/article/view/392

Jain, S. C. (2005). *Marketing Planning and Strategy* (7th ed.). Cincinnati, OH: South-Western College Publishing.

Jarzabkowski, P., & Balogun, J. (2009). The practice and process of delivering integration through strategic planning. *Journal of Management Studies, 46*(8), 1255-1288. doi:10.1111/j.1467-6486.2009.00853.x

Jarzabkowski, P., & Paul Spee, A. (2009). Strategy-as-practice: A review and future directions for the field. *International Journal of Management Reviews, 11*(1), 69-95. doi:10.1111/j.1468-2370.2008.00250.x

Jelliffe, D. B. (1967). Parallel food classifications in developing and industrialized countries. *The American Journal of Clinical Nutrition, 20*(3), 279-281. doi:10.1093/ajcn/20.3.279

Jenkins III, C. C., & Kitchel, T. (2009). Identifying quality indicators of SAE and FFA: A Delphi approach. *Journal of Agricultural Education, 50*(3), 33-42. Retrieved from https://eric.ed.gov/?id=EJ871213

Jiang, L., & Probst, T. M. (2017). The rich get richer and the poor get poorer: Country- and state-level income inequality moderates the job insecurity-burnout relationship. *Journal of Applied Psychology, 102*(4), 672-681. doi:10.1037/apl0000179

Jimenez, B. S. (2014). Smart cuts?: Strategic planning, performance management and budget cutting in US cities during the great recession. *Journal of Public*

Budgeting, Accounting & Financial Management, 26(3), 494-515. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2244658

Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative, and mixed approaches* (3rd ed.). Los Angeles, CA: Sage Publications, Inc.

Johnson, G., Prashantham, S., Floyd, S. W., & Bourque, N. (2010). The ritualization of strategy workshops. *Organization Studies, 31*(12), 1589-1618. doi:10.1177/0170840610376146

Johnston, B. F., & Mellor, J. W. (1961). The role of agriculture in economic development. *The American Economic Review, 51*(4), 566-593. Retrieved from https://www.jstor.org/stable/1812786?seq=1#page_scan_tab_contents

Joppe, G. (2000). Testing reliability and validity of research instruments. *Journal of American Academy of Business Cambridge, 4*(1/2), 49-54. Retrieved from http://www.ryerson.ca/~mjoppe/rp.htm

Joshi, P. K., Gulati, A., Birthal, P. S., & Tewari, L. 2004. Agricultural diversification in South Asia: Patterns, determinants and policy implications. *Economic and Political Weekly, 39*(24), 2457-2467. Retrieved from https://www.jstor.org/stable/4415148?seq=1

Jurgens, C. R. (1993). Strategic planning for sustainable rural development. *Landscape and Urban Planning, 27*(2-4), 253-258. doi:10.1016/0169-2046(93)90058-L

Kalaian, S., & Kasim, R. M. (2012). Terminating sequential Delphi survey data collection. *Practical Assessment, Research, and Evaluation, 17*(1), 1-11. Retrieved from https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1253&context=pare

Kalenjuk, B. (2011). Food, agriculture and tourism linking local gastronomy and rural tourism: Interdisciplinary perspectives. *Turizam, 15*(4), 169-173. Retrieved from http://scindeks-clanci.ceon.rs/data/pdf/1450-6661/2011/1450-66611104169K.pdf

Kapferer, J. N. (2012). Abundant rarity: The key to luxury growth. *Business Horizons, 55*(5), 453-462. doi:10.1016/j.bushor.2012.04.002

Kapferer, J. N., & Bastien, V. (2009). The specificity of luxury management: Turning marketing upside down. *Journal of Brand Management, 16*(5-6), 311-322. doi:10.1057/bm.2008.51

Karlan, D., & Appel, J. (2011). *More than good intentions: How a new economics is helping to solve global poverty.* London, England: Penguin Books.

Karlan, D., & Zinman, J. (2011). Microcredit in theory and practice: Using randomized credit scoring for impact evaluation. *Science, 332*(6035), 1278-1284. doi:10.1126/science.1200138

Kastein, M. R., Jacobs, M., van der Hell, R. H., Luttik, K., & Touw-Otten, F. W. (1993). Delphi, the issue of reliability: A qualitative Delphi study in primary health care in the Netherlands. *Technological Forecasting and Social Change, 44*(3), 315-323. doi:10.1016/0040-1625(93)90075-I

Kauko, K., & Palmroos, P. (2014). The Delphi method in forecasting financial markets–An experimental study. *International Journal of Forecasting, 30*(2), 313-327. doi:10.1016/j.ijforecast.2013.09.007

Kaynak, E., Bloom, J., & Leibold, M. (1994). Using the Delphi technique to predict future tourism potential. *Marketing Intelligence & Planning, 12*(7), 18-29. doi:10.1108/02634509410065537

Keegan, W., Moriarty, S., & Duncan, T. (1992). *Marketing*. Englewood Cliffs, NJ: Prentice Hall.

Keeney, S., Hasson, F., & McKenna, H. (2006). Consulting the Oracle: Ten lessons from using the Delphi technique in nursing research. *Journal of Advanced Nursing, 53*(2), 205-212. doi:10.1111/j.1365-2648.2006.03716.x

Keeney, S., McKenna, H., & Hasson, F. (2011). *The Delphi technique in nursing and health research*. England, UK: John Wiley & Sons.

Kendall, J. W. (1977). Variations of Delphi. *Technological Forecasting and Social Change, 11*(1), 75-85. doi:10.1016/0040-1625(77)90017-8

Kennedy, P. L., Harrison, R. W., Kalaitzandonakes, N. G., Peterson, H. C., & Rindfuss, R. P. (1997). Perspectives on evaluating competitiveness in agribusiness industries. *Agribusiness: An International Journal, 13*(4), 385-392. doi:10.1002/(SICI)1520-6297(199707/08)13:4<385::AID-AGR4>3.0.CO;2-V

Kessler, A. S., & Lülfesmann, C. (2006). The theory of human capital revisited: On the interaction of general and specific investments. *The Economic Journal, 116*(514), 903-923. doi:10.1111/j.1468-0297.2006.01116.x

Key, N., & Runsten, D. (1999). Contract farming, smallholders, and rural development in Latin America: The organization of agroprocessing firms and the scale of out grower production. *World Development, 27*(2), 381-401.

Khavul, S., & Bruton, G. D. (2013). Harnessing innovation for change: Sustainability and poverty in developing countries. *Journal of Management Studies, 50*(2), 285-306. doi:10.1111/j.1467-6486.2012.01067.x

Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of qualitative descriptive studies: A systematic review. *Research in Nursing & Health, 40*(1), 23-42. doi:10.1002/nur.21768

Kim, Y. (2018). Power moderates the impact of desire for exclusivity on luxury experiential consumption. *Psychology & Marketing, 35*(4), 283-293. doi:10.1002/mar.21086

Kimmelman, J., Mogil, J. S., & Dirnagl, U. (2014). Distinguishing between exploratory and confirmatory preclinical research will improve translation. *PLoS Biology, 12*(5), 1-4. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4028181/

Kirk, D., Allen, K., & Shideler, D. (2014). Economic activity analysis: The need for consensus. *Journal of Extension*, *52*(3). Retrieved from https://www.joe.org/joe/2014june/comm2.php

Klatt, T., Schlaefke, M., & Moeller, K. (2011). Integrating business analytics into strategic planning for better performance. *Journal of Business Strategy, 32*(6), 30-39. doi:10.1108/02756661111180113

Kleynhans, R., & Spies, J. J. (2011). Requirements for the development and breeding of new flower bulb crops. *Philosophical Transitions in Genetics, 1*, 81-101. Retrieved from https://www.researchgate.net/profile/Johan_Spies/publication/257266745_Requirements_for_the_development_and_breeding_of_new_flower_bulb_crops/links/00b7d524bf95a543fc000000/Requirements-for-the-development-and-breeding-of-new-flower-bulb-crops.pdf

Klompmaker, J. E., Hughes, G. D., & Haley, R. I. (1976). Test marketing in new product development. *Harvard Business Review, 54*(3), 128-138. Retrieved from https://hbr.org/1976/05/test-marketing-in-new-product-development

Kmec, J. A., & Skaggs, S. L. (2014). The "state" of equal employment opportunity law and managerial gender diversity. *Social Problems, 61*(4), 530-558. doi:10.1525/sp.2014.12319

Knapp, T., & Harms, J. (2002). When the screen goes blank: A television plant closing and its impacts on workers. *The Sociological Quarterly, 43*(4), 607-626. doi:10.1111/j.1533-8525.2002.tb00068.x

Koens, K., & Thomas, R. (2015). Is small beautiful? Understanding the contribution of small businesses in township tourism to economic development. *Development Southern Africa, 32*(3), 320-332. doi:10.1080/0376835X.2015.1010715

Kolbina, O. (2015). SWOT analysis as a strategic planning tool for companies in the food industry. *Problems of Economic Transition, 57*(9), 74-83. doi:10.1080/10611991.2014.1088367

Kongolo, M. (2010). Job creation versus job shedding and the role of SMEs in economic development. *African Journal of Business Management, 4*(11), 2288-2295.

Kotler, P. (2003). *Marketing Management* (11th ed.). Toronto, Canada: Prentice Hall.

Koven, S. G., & Lyons, T. S. (2010). *Economic development: Strategies for state and local practice*. Washington, DC: ICMA Press.

Kovesi, C. (2015). What is luxury?: The rebirth of a concept in the early modern world. *Luxury, 2*(1), 25-40. doi:10.1080/20511817.2015.11428563

Krueger, A. B., & Lindahl, M. (2001). Education for growth: Why and for whom? *Journal of Economic Literature, 39*(4), 1101-1136. doi:10.1257/jel.39.4.1101

Krueger, A. B., & Malečková, J. (2003). Education, poverty and terrorism: Is there a causal connection? *Journal of Economic Perspectives, 17*(4), 119-144. doi:10.1257/089533003772034925

Krugman, P. (1991). Increasing returns and economic geography. *Journal of Political Economy, 99*(3), 483-499. doi:10.1086/261763

Krutova, I. N. (2015). The human capital theory through the prism of financial security of Finland's education. *Asian Social Science, 11*(7), 48-58. doi:10.5539/ass.v11n7p48

Kumar, N., Stern, L. W., & Anderson, J. C. (1993). Conducting interorganizational research using key informants. *Academy of Management Journal, 36*(6), 1633-1651. doi:10.5465/256824

Kung, H., & Schmid, L. (2015). Innovation, growth, and asset prices. *The Journal of Finance, 70*(3), 1001-1037. doi:10.1111/jofi.12241

Kury, K. W. (2012). Sustainability meets social entrepreneurship: A path to social change through institutional entrepreneurship. *International Journal of Business Insights & Transformation, 4*(3), 64-71. Retrieved from https://web.a.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=09745874&asa=Y&AN=73307613&h=DZQTRfK%2bDUbiWDaMnvHaOSkMD6eVVgPIh5ubqlVPCdkfCyfAN9RRwbFCjVWhsW7VR668jzkXGD9XXBGy1jUQ1A%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehos

t%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d09745874%26asa%3dY%26AN%3d73307613

Kuznetsova, I. G., Voronkova, O. Y., Bakhvalov, S. Y., Ruiga, I. R., Zhuruli, G. N., & Levichev, V. E. (2018). Formation of human capital as a key factor in ensuring the national security of agriculture in the digital economy. *European Research Studies, 21*(3), 73-83. Retrieved from https://search.proquest.com/docview/2188845291?pq-origsite=gscholar

Kyriacou, A. P. (2016). Individualism–Collectivism, governance and economic development. *European Journal of Political Economy, 42,* 91-104. doi:10.1016/j.ejpoleco.2015.11.005

Lambert, V. A., & Lambert, C. E. (2012). Qualitative descriptive research: An acceptable design. *Pacific Rim International Journal of Nursing Research, 16*(4), 255-256. Retrieved from https://www.tci-thaijo.org/index.php/PRIJNR/article/download/5805/5064

Lamm, K. W., Lamm. A. J., Davis, K., Swaroop, B. J., & Edgar, L. D. (2020). Identifying capacities an extension network may need to effectively support the professionalization of extension providers. *Journal of International Agricultural and Extension Education, 27*(2), 91-107. doi:10.5191/jiaee.2020.27291

Landeta, J. (1999). *El método Delphi*. Medellín, Colombia: Editorial Universidad Pontificia Bolivariana. Retrieved from http://www.salamicenas.es/45991-BXHURHRAQ.html

Landeta, J. (2006). Current validity of the Delphi method in social sciences. *Technological Forecasting and Social Change, 73*(5), 467-482. doi:10.1016/j.techfore.2005.09.002

Lang, J. R., Calantone, R. J., & Gudmundson, D. (1997). Small firm information seeking as a response to environmental threats and opportunities. *Journal of Small Business Management, 35*(1), 11-23. Retrieved from https://search.proquest.com/docview/220993875?pq-origsite=gscholar

Lanza, G., & Moser, R. (2012). Strategic planning of global changeable production networks. *Procedia CIRP, 3,* 257-262. doi:10.1016/j.procir.2012.07.045

Latapi, A. E., & de la Rocha, M. G. (1995). Crisis, restructuring and urban poverty in Mexico. *Environment and Urbanization, 7*(1), 57-76. doi:10.1177/095624789500700112

Lavinas, L. (2015). Latin America: Anti-poverty schemes instead of social protection. *Contemporary Readings in Law and Social Justice, 7*(1), 112-171. Retrieved from https://www.ceeol.com/search/article-detail?id=286159

Le Blanc, D. (2015). Towards integration at last? The sustainable development goals as a network of targets. *Sustainable Development, 23*(3), 176-187. doi:10.1002/sd.1582

Leigh, N. G., & Blakely, E. J. (2016). *Planning local economic development: Theory and practice*. Newbury, CA: Sage Publications, Inc.

Levy, S., & Schady, N. (2013). Latin America's social policy challenge: Education, social insurance, redistribution. *Journal of Economic Perspectives, 27*(2), 193-218. doi:10.1257/jep.27.2.193

Li, C. Z., Hong, J., Xue, F., Shen, G. Q., Xu, X., & Luo, L. (2016). SWOT analysis and Internet of Things-enabled platform for prefabrication housing production in Hong Kong. *Habitat International, 57,* 74-87. doi:10.1016/j.habitatint.2016.07.002

Li, S., Davies, B., Edwards, J., Kinman, R., & Duan, Y. (2002). Integrating group Delphi, fuzzy logic and expert systems for marketing strategy development: The hybridization and its effectiveness. *Marketing Intelligence & Planning, 20*(5), 273-284. doi:10.1108/02634500210441521

Lin, B. B. (2011). Resilience in agriculture through crop diversification: Adaptive management for environmental change. *BioScience, 61*(3), 183-193. doi:10.1525/bio.2011.61.3.4

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications, Inc.

Lindgreen, A., & Hingley, M. K. (Eds.). (2016). *The new cultures of food: Marketing opportunities from ethnic, religious and cultural diversity*. New York, NY: Routledge.

Linnenluecke, M. K., & Griffiths, A. (2010). Corporate sustainability and organizational culture. *Journal of World Business, 45*(4), 357-366. doi:10.1016/j.jwb.2009.08.006

Linstone, H. A., & Turoff, M. (1975). *The Delphi method*. Reading, MA: Addison-Wesley.

Little, P. D., & Watts, M. (Eds.). (1994). *Living under contract: Contract farming and agrarian transformation in sub-Saharan Africa*. Madison, WI: Univ of Wisconsin Press.

Liu, Z., Siguaw, J. A., & Enz, C. A. (2008). Using tourist travel habits and preferences to assess strategic destination positioning: The case of Costa Rica. *Cornell Hospitality Quarterly, 49*(3), 258-281. doi:10.1177/1938965508322007

Löfmark, A., & Thorell-Ekstrand, I. (2004). An assessment form for clinical nursing education: A Delphi study. *Journal of Advanced Nursing, 48*(3), 291-298. doi:10.1111/j.1365-2648.2004.03198.x

Long, H. B. (1991). Continuing higher education research futures: A Delphi study of professors of adult education. *The Journal of Continuing Higher Education, 39*(2), 29-35. doi:10.1080/07377366.1991.10400813

Loo, R. (2002). The Delphi method: A powerful tool for strategic management. *Policing: An International Journal of Police Strategies & Management, 25*(4), 762-769. doi: 10.1108/13639510210450677

López, M. D. M. M. (2004). A SWOT analysis by applying the Delphi prospective technique to a traditional sector. *Alta Dirección, 39*(234), 77-84. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=936079

López-Acevedo, G., & Tinajero-Bravo, M. (2013). Evaluating different types of enterprise support programs using panel firm data: Evidence from the Mexican manufacturing sector. *Economía, 14*(1), 1-26. Retrieved from https://www.jstor.org/stable/23608171?seq=1

Loubet. O. R., & Morales, P. A. (2015). Formation of human capital for economic growth in Sinaloa. *Ra Ximhai, 11*(3), 41-55. Retrieved from https://www.redalyc.org/pdf/461/46135409004.pdf

Loughlin, K. G., & Moore, L. F. (1979). Using Delphi to achieve congruent objectives and activities in a pediatrics department. *Journal of Medical Education, 54*(2), 101-106. doi:10.1097/00001888-197902000-00006

Lu, W. (2010). Improved SWOT approach for conducting strategic planning in the construction industry. *Journal of Construction Engineering and Management, 136*(12), 1317-1328. doi:10.1061/(ASCE)CO.1943-7862.0000240

Lu, Y., Nakicenovic, N., Visbeck, M., & Stevance, A. S. (2015). Policy: Five priorities for the UN sustainable development goals. *Nature, 520*, 432-433. Retrieved from https://www.nature.com/news/polopoly_fs/1.17352!/menu/main/topColumns/topLeftColumn/pdf/520432a.pdf

Lucas, R. E. (1986). Principles of fiscal and monetary policy. *Journal of Monetary Economics, 17*(1), 117-134. doi:10.1016/0304-3932(86)90008-5

Luckstead, J., Choi, S. M., Devadoss, S., & Mittelhammer, R. C. (2014). China's catch-up to the US economy: Decomposing TFP through investment-specific technology and human capital. *Applied Economics*, *46*(32), 3995-4007. doi:10.1080/00036846.2014.948677

Ludwig, B. (1997). Predicting the future: Have you considered using the Delphi methodology? *Journal of Extension, 35*(5), 1-4. Retrieved form https://joe.org/joe/1997october/tt2.php

Lurie, S. (1998). Postharvest heat treatments. *Postharvest Biology and Technology, 14*(3), 257-269. doi:10.1016/S0925-5214(98)00045-3

Luţ, D. M. (2017). The role of lifelong education and training in human capital development. *Quaestus, 11*, 9-18. Retrieved from https://search.proquest.com/docview/1950620993?pq-origsite=gscholar

Lyles, M. A., Baird, I. S., Orris, J. B., & Kuratko, D. F. (1993). Formalized planning in small business: Increasing strategic choices. *Business Management, 31*(2), 38-51. Retrieved from https://pdfs.semanticscholar.org/ea7c/1b90c9f20acbd23ad03dfec01c6f1127189c.pdf

Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing, 8*(1), 43-57. doi:10.1002/mar.4220080105

Macdonald, S., Assimakopoulos, D., & Anderson, P. (2007). Education and training for innovation in SMEs: A tale of exploitation. *International Small Business Journal, 25*(1), 77-95. doi:10.1177/0266242607071782

Mano, Y., Iddrisu, A., Yoshino, Y., & Sonobe, T. (2012). How can micro and small enterprises in sub-Saharan Africa become more productive? The impacts of experimental basic managerial training. *World Development, 40*(3), 458-468. doi: 10.1016/j.worlddev.2011.09.013

Marshall, A. (1890). *Principles of economics*. London, England: McMillan.

Marshall, M. N. (1996). The key informant technique. *Family Practice, 13*(1), 92-97. Retrieved from

https://pdfs.semanticscholar.org/df18/f52ec42d1fef4a149f474aeaad3cc51a4244.pdf

Martin, A. G., & Frick, M. J. (1998). The Delphi technique: An informal history of its use in agricultural education research since 1984. *Journal of Agricultural Education*, *39*(1), 73-79. Retrieved from https://eric.ed.gov/?id=EJ563589

Martin, R. L. (2014). The big lie of strategic planning. *Harvard Business Review, 92*(1/2), 78-84. Retrieved from http://sfgl.co.nz/uploads/1/2/5/9/125950534/big_lie_about_strategic_planning.pdf

Martínez, S. B. (2010). Development challenge: Organic agriculture as part of a rural poverty alleviation strategy in Mexico. *Nóesis: Revista de Ciencias Sociales y Humanidades, 19*(37), 92-111. Retrieved from https://doaj.org/article/edc6db24d50e4bb7b147eef5e2705832

Martino, J. P. (1993). *Technological forecasting for decision making* (3rd ed.). Dayton, OH: McGraw-Hill, Inc.

Mason, J. (1996). *Qualitative researching.* Thousand Oaks, CA: Sage Publications, Inc.

Mathur, V. K. (1999). Human capital-based strategy for regional economic development. *Economic Development Quarterly*, *13*(3), 203-216. doi:10.1177/089124249901300301

Maulik, P. K., & Darmstadt, G. L. (2007). Childhood disability in low-and middle-income countries: Overview of screening, prevention, services, legislation, and epidemiology. *Pediatrics*, *120*(1), S1-S55. doi:10.1542/peds.2007-0043B

Maxwell, J. A. (1996). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage Publications, Inc.

May G., (2010). *Strategic planning: Fundamentals for small business.* New York, NY: Business Expert Press.

Maye, D., & Ilbery, B. (2006). Regional economies of local food production: Tracing food chain links between 'specialist' producers and intermediaries in the Scottish–English borders. *European Urban and Regional Studies, 13*(4), 337-354. doi:10.1177/0969776406068588

Mcilfatrick, S. J., & Keeney, S. (2003). Identifying cancer nursing research priorities using the Delphi technique. *Journal of Advanced Nursing, 42*(6), 629-636. doi:10.1046/j.1365-2648.2003.02666.x

McKeena, R. (1988). Marketing in the age of diversity. *Harvard Business Review, 66*(5), 88-95. Retrieved from https://web-a-ebscohost-com.argo.library.okstate.edu/ehost/detail/detail?vid=2&sid=eae201df-4da6-4750-9adb-93a352888189%40sdc-v-sessmgr02&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#AN=8800019100&db=buh

McKenna, H. P. (1994). The Delphi technique: A worthwhile research approach for nursing? *Journal of Advanced Nursing, 19*(6), 1221-1225. doi:10.1111/j.1365-2648.1994.tb01207.x

McKenzie, B., Ugbah, S. D., & Smothers, N. (2007). "Who is an entrepreneur?" Is it still the wrong question? *Academy of Entrepreneurship Journal, 13*(1), 23-44. Retrieved from https://www.researchgate.net/profile/Munish_Thakur/publication/299562692_Ku

mar_Munish_Explaining_entrepreneurial_success_A_conceptual_model_Academy_of_Entrepreneurship_Journal_131_2007_57/links/56ff6d4308aea6b77468d9be.pdf#page=33

McKinley, T., & Alarcón, D. (1995). The prevalence of rural poverty in Mexico. *World Development, 23*(9), 1575-1585. doi:10.1016/0305-750X(95)00066-L

McNeil, P., & Riello, G. (2016). *Luxury: A rich history*. New York, NY: Oxford University Press, Inc.

Mead, D. C., & Liedholm, C. (1998). The dynamics of micro and small enterprises in developing countries. *World Development, 26*(1), 61-74. doi:10.1016/S0305-750X(97)10010-9

Meza, D., & Webb, D. (1990). Risk, adverse selection and capital market failure. *The Economic Journal, 100*(399), 206-214. doi:10.2307/2233604

Miles, M. P., White, J. B., & Munilla, L. S. (1997). Strategic planning and agribusiness: An exploratory study of the adoption of strategic planning techniques by cooperatives. *British Food Journal, 99*(11), 401-408. doi:10.1108/00070709710196481

Milgrom, P. R., & Roberts, J. (1993). Economy, organization, and management of the company. *Revista de Economía Aplicada. 3*(1), 203-207. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=176679

Miller, N. J., Besser, T. L., Gaskill, L. R., & Sapp, S. G. (2003). Community and managerial predictors of performance in small rural US retail and service firms. *Journal of Retailing and Consumer Services, 10*(4), 215-230. doi:10.1016/S0969-6989(02)00012-7

Mincer, J. (1974). *Progress in human capital analysis of the distribution of earnings*. Cambridge, MA: National Bureau of Economic Research. Retrieved from https://www.nber.org/papers/w53

Mitchell, V. W. (1994). Using industrial key informants: Some guidelines. *Market Research Society Journal, 36*(2), 1-5. doi:10.1177/147078539403600206

Mitra, J., Abubakar, Y., & Sagagi, M. (2011). Knowledge creation and human capital for development: The role of graduate entrepreneurship. *Education + Training, 53*(5), 462-479. doi:10.1108/00400911111147758

Mitra, S., Posarac, A., & Vick, B. (2013). Disability and poverty in developing countries: A multidimensional study. *World Development, 41*, 1-18. doi:10.1016/j.worlddev.2012.05.024

Mohamad, M. M., Sulaiman, N. L., Sern, L. C., & Salleh, K. M. (2015). Measuring the validity and reliability of research instruments. *Procedia-Social and Behavioral Sciences, 204*, 164-171. doi:10.1016/j.sbspro.2015.08.129

Mojo, D., Fischer, C., & Degefa, T. (2017). The determinants and economic impacts of membership in coffee farmer cooperatives: Recent evidence from rural Ethiopia. *Journal of Rural Studies, 50,* 84-94. doi:10.1016/j.jrurstud.2016.12.010

Mokkink, L. B., Terwee, C. B., Patrick, D. L., Alonso, J., Stratford, P. W., Knol, D. L., . . . & De Vet, H. C. (2010). The COSMIN checklist for assessing the methodological quality of studies on measurement properties of health status measurement instruments: An international Delphi study. *Quality of Life Research, 19*(4), 539-549. doi:10.1007/s11136-010-9606-8

Moll, B., Townsend, R. M., & Zhorin, V. (2017). Economic development, flow of funds, and the equilibrium interaction of financial frictions. *Proceedings of the National Academy of Sciences, 114*(24), 6176-6184. doi:10.1073/pnas.1707055114

Molotch, H. (1976). The city as a growth machine: Toward a political economy of place. *American Journal of Sociology, 82*(2), 309-332. doi:10.1086/226311

Morduch, J. (2011). Why finance matters. *Science, 332*(6035), 1271-1272. doi:10.1126/science.1208113

Moreno, A. T., & de Haro Giménez, T. (1995). The productivity of the Spanish food industries as an indicator of their competitiveness. *Revista Española de Economía Agraria, 174*, 83-108. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=2153931

Moreno-Brid, J. C., & Ros, J. (2009). *Development and growth in the Mexican economy: A historical perspective*. New York, NY: Oxford University Press, Inc.

Moss, E. L., Arbyn, M., Dollery, E., Leeson, S., Petry, K. U., Nieminen, P., & Redman, C. W. (2013). European federation of colposcopy quality standards Delphi consultation. *European Journal of Obstetrics & Gynecology and Reproductive Biology, 170*(1), 255-258. doi:10.1016/j.ejogrb.2013.06.032

Moutinho, L., & Witt, S. F. (1995). Forecasting the tourism environment using a consensus approach. *Journal of Travel Research, 33*(4), 46-50. doi:10.1177/004728759503300407

Mullen, P. M. (2003). Delphi: Myths and reality. *Journal of Health Organization and Management, 17*(1), 37-52. doi:10.1108/14777260310469319

Murdoch, J. (1995). Actor-networks and the evolution of economic forms: Combining description and explanation in theories of regulation, flexible specialization, and networks. *Environment and Planning A, 27*(5), 731-757. doi:10.1068/a270731

Murgai, R., & Ravallion, M. (2005). Employment guarantee in rural India: What would it cost and how much would it reduce poverty? *Economic and Political Weekly, 40*(31), 3450-3455. Retrieved from https://www.jstor.org/stable/4416967?seq=1

Murray, D. W., & O'Neill, M. A. (2012). Craft beer: Penetrating a niche market. *British Food Journal, 114*(7), 899-909. doi:10.1108/00070701211241518

Murshed-E-Jahan, K., & Pemsl, D. E. (2011). The impact of integrated aquaculture–agriculture on small-scale farm sustainability and farmers' livelihoods: Experience from Bangladesh. *Agricultural Systems, 104*(5), 392-402. doi:10.1016/j.agsy.2011.01.003

Muske, G., Woods, M., Swinney, J., & Ling, K. C.-L. (2007). Small businesses and the community: Their role and importance within a state's economy. *Journal of Extension, 45*(1). Retrieved from https://www.joe.org/joe/2007february/rb4.php

Nabi, G., Liñán, F., Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education + Training, 53*(5), 353-370. doi:10.1108/00400911111147686

National Council for the Evaluation of Social Development Policy (CONEVAL). (2013). Medición de la pobreza en México y en las entidades federativas 2012 [Measuring poverty in Mexico and in the federal entities 2012]. Mexico City, Mexico: Author. Retrieved from

http://www.coneval.gob.mx/Informes/Coordinacion/Pobreza_2012/RESUMEN_EJECUTIVO_MEDICION_POBREZA_2012.pdf

Naudé, W. (2010). Entrepreneurship, developing countries, and development economics: New approaches and insights. *Small Business Economics, 34*(1), 1-12. doi:10.1007/s11187-009-9198-2

Naudé, W. (2013). Entrepreneurship and economic development: Theory, evidence and policy. *IZA Discussion Paper, 7507*, 1-20. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2314802

Nchuchuwe, F. F., & Adejuwon, K. D. (2012). The challenges of agriculture and rural development in Africa: The case of Nigeria. *International Journal of Academic Research in Progressive Education and Development, 1*(3), 45-61. Retrieved from https://www.researchgate.net/publication/325909370_The_Challenges_of_Agriculture_and_Rural_Development_in_Africa_The_Case_of_Nigeria

Neuman, W. L. (2006). *Social research methods: Qualitative and quantitative approaches* (6th ed.). New York, NY: Pearson Education

Neumark, D., & Wascher, W. (2007). Minimum wages and low-wage workers: How well does reality match the rhetoric. *Minnesota Law Review, 92*, 1296. Retrieved from https://heinonline.org/HOL/LandingPage?handle=hein.journals/mnlr92&div=39&id=&page=

Ng, D. W., & Siebert, J. W. (2009). Toward better defining the field of agribusiness management. *International Food and Agribusiness Management Review, 12*(4) 123-142. Retrieved from

https://oaktrust.library.tamu.edu/bitstream/handle/1969.1/182321/document-1.pdf?sequence=1

Nielsen, C., & Thangadurai, M. (2007). Janus and the Delphi oracle: Entering the new world of international business research. *Journal of International Management, 13*(2), 147-163. doi:10.1016/j.intman.2006.07.003

Nolan, B., & Whelan, C. (1997). Resources, deprivation, and poverty. *Journal of Social Policy, 26*(2), 267-299. doi:10.1017/S0047279497265001

Nueno, J. L., & Quelch, J. A. (1998). The mass marketing of luxury. *Business Horizons, 41*(6), 61-68. doi:10.1016/S0007-6813(98)90023-4

Nworie, J. (2011). Using the Delphi technique in educational technology research. *TechTrends, 55*(5), 24-30. doi:10.1007/s11528-011-0524-6

O'Cass, A., & McEwen, H. (2004). Exploring consumer status and conspicuous consumption. *Journal of Consumer Behavior: An International Research Review, 4*(1), 25-39. doi:10.1002/cb.155

Official Journal of the Federation (*DOF).* (2002). *Law for the development of competitiveness of micro, small and medium enterprises.* Mexico City, Mexico: Author. Retrieved from http://www.diputados.gob.mx/LeyesBiblio/pdf/247_190517.pdf

Ojala, A. (2015). Geographic, cultural, and psychic distance to foreign markets in the context of small and new ventures. *International Business Review, 24*(5), 825-835. doi:10.1016/j.ibusrev.2015.02.007

Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: An example, design considerations and applications. *Information & Management, 42*(1), 15-29. doi:10.1016/j.im.2003.11.002

Olaniyan, D. A., & Okemakinde, T. (2008). Human capital theory: Implications for educational development. *Pakistan Journal of Social Sciences, 5*(5), 479-483. Retrieved from http://docsdrive.com/pdfs/medwelljournals/pjssci/2008/479-483.pdf

Oviatt, B. M., & McDougal, P. P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies, 25*(1), 45-64. doi:10.1057/palgrave.jibs.8490193

Ozgen, E., & Minsky, B. D. (2007). Opportunity recognition in rural entrepreneurship in developing countries. *International Journal of Entrepreneurship, 11*, 49-73. Retrieved from https://www.abacademies.org/articles/ijevol11no12007.pdf#page=57

Page, C. (2006). *Innovation in gourmet and specialty food and drinks: Market evolution and NPD in super-premium and healthy products*. Warwickshire, England: Business Insights Limited. Retrieved from https://books.google.com/books/about/Innovation_in_Gourmet_and_Specialty_Food.html?id=iQ_zmgEACAAJ

Panagiotou, G. (2003). Bringing SWOT into focus. *Business Strategy Review, 14*(2), 8-10. doi:10.1111/1467-8616.00253

Pandey, S., & Kim, J. H. (2008). Path to poverty alleviation: Marriage or postsecondary education? *Journal of Family and Economic Issues, 29*(1), 166-184. doi:10.1007/s10834-007-9088-1

Parkhurst, J. (2017). *The politics of evidence: From evidence-based policy to the good governance of evidence*. London, England: Routledge.

Párraga, M. M., Cancelas, N. G., & Flores, F. S. (2014). Delphi-SWOT tools used in strategic planning of the Port of Manta. *Procedia-Social and Behavioral Sciences, 162*, 129-138. doi:10.1016/j.sbspro.2014.12.193

Parrish, E. D., Cassill, N. L., & Oxenham, W. (2006). Niche market strategy for a mature marketplace. *Marketing Intelligence & Planning, 24*(7), 694-707. doi:10.1108/02634500610711860

Parthasarthy, R., & Sethi, S. P. (1992). The impact of flexible automation on business strategy and organizational structure. *Academy of Management Review, 17*(1), 86-111. doi:10.5465/amr.1992.4279572

Pearce, J. A., Freeman, E. B., & Robinson Jr., R. B. (1987). The tenuous link between formal strategic planning and financial performance. *Academy of Management Review, 12*(4), 658-675. doi:10.5465/amr.1987.4306718

Perna, L. W. (2005). The benefits of higher education: Sex, racial/ethnic, and socioeconomic group differences. *The Review of Higher Education, 29*(1), 23-52. doi:10.1353/rhe.2005.0073

Perroux, F. (1950). Economic space: Theory and applications. *The Quarterly Journal of Economics, 64*(1), 89-104. doi:10.2307/1881960

Pesonen, J., & Komppula, R. (2010). Rural wellbeing tourism: Motivations and expectations. *Journal of Hospitality and Tourism Management, 17*(1), 150-157. doi:10.1375/jhtm.17.1.150

Peterson, E. W. (2017). Is economic inequality really a problem? A review of the arguments. *Social Sciences, 6*(4), 147-171. doi:10.3390/socsci6040147

Philip, G. (2007). IS strategic planning for operational efficiency. *Information Systems Management, 24*(3), 247-264. doi:10.1080/10580530701404504

Phillips, N. (2017). Power and inequality in the global political economy. *International Affairs, 93*(2), 429-444. doi:10.1093/ia/iix019

Phillips, P., & Moutinho, L. (2014). Critical review of strategic planning research in hospitality and tourism. *Annals of Tourism Research, 48*, 96-120. doi:10.1016/j.annals.2014.05.013

Pietersma, S., de Vries, M., & van den Akker-van, M. E. (2014). Domains of quality of life: Results of a three-stage Delphi consensus procedure among patients, family of patients, clinicians, scientists and the general public. *Quality of Life Research, 23*(5), 1543-1556. doi:10.1007/s11136-013-0578-3

Pill, J. (1971). The Delphi method: Substance, context, a critique and an annotated bibliography. *Socio-Economic Planning Sciences, 5*(1), 57-71. doi:10.1016/0038-0121(71)90041-3

Piñeiro, E. M. (2003). The Delphi technique as a strategy for consulting those involved in program evaluation. *Revista de Investigación Educativa, 21*(2), 449-463. Retrieved from https://revistas.um.es/rie/article/view/99311

Pingali, P. L. (2012). Green revolution: Impacts, limits, and the path ahead. *Proceedings of the National Academy of Sciences, 109*(31), 12302-12308. doi:10.1073/pnas.0912953109

Piza, C., Palacios, L., Pulido, N., & Dallos, R. J. (2016). Family farming: An alternative for food security. *Conexión Agropecuaria JDC, 6*(1), 13-25. Retrieved from https://jdc.edu.co/revistas/index.php/conexagro/article/view/52

Plastina, A., Giannakas, K., & Pick, D. (2011). Market and welfare effects of mandatory country-of-origin labeling in the US specialty crops sector: An application to fresh market apples. *Southern Economic Journal, 77*(4), 1044-1069. doi:10.4284/0038-4038-77.4.1044

Plażyk, K. (2015). The democratization of luxury–A new form of luxury. *Studia University of Economics in Katowice,* 158-165. Retrieved from https://www.academia.edu/9557814/The_democratization_of_luxury_a_new_form_of_luxury

Poister, T. H. (2010). The future of strategic planning in the public sector: Linking strategic management and performance. *Public Administration Review, 70*(s1), s246-s254. doi:10.1111/j.1540-6210.2010.02284.x

Pollard, C., & Pollard, R. (2004). Research priorities in educational technology: A Delphi study. *Journal of Research on Technology in Education, 37*(2), 145-160. doi:10.1080/15391523.2004.10782430

Popp, M., & Rudstrom, M. (2000). Crop enterprise diversification and specialty crops. *Agricultural Finance Review, 60*(1), 85-98. doi:10.1108/00214710080001112

Porter, M. E. (1986). Changing patterns of international competition. *California Management Review, 28*(2), 9-40. doi:10.2307/41165182

Porter, M. E. (1990). The competitive advantage of nations. *Harvard Business Review, 68*(2), 73-93. Retrieved from https://web-a-ebscohost-com.argo.library.okstate.edu/ehost/detail/detail?vid=5&sid=ff124f15-761d-4372-9115-a0fc20c59653%40sessionmgr4006&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#AN=9005210820&db=buh

Porter, M. E. (1996). What is strategy? *Harvard Business Review, 74*(6), 61-78. Retrieved from https://web-a-ebscohost-com.argo.library.okstate.edu/ehost/detail/detail?vid=2&sid=c7597bd1-ea8d-4ff1-bcc2-1d1ff3cd728a%40sessionmgr4007&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#AN=9611187954&db=buh

Porter, M. E. (1998). Clusters and the new economics of competition. *Harvard Business Review, 76*(6), 77-90. Retrieved from http://marasbiber.com/wp-content/uploads/2018/05/Michael-E.-Porter-Cluster-Reading.pdf

Porter, M. E. (2000). Location, competition, and economic development: Local clusters in a global economy. *Economic Development Quarterly, 14*(1), 15-34. doi:10.1177/089124240001400105

Porter, M. E. (2008). *On competition - Updated and expanded edition.* Boston, MA: Harvard Business Review Press.

Porter, M. E. (2008). The five competitive forces that shape strategy. *Harvard Business Review, 86*(1), 25-40. Retrieved from http://www.business.uwm.edu/gdrive/Goranova_M/Readings_712/Porter%205%20forces.pdf

Prada-Blanco, A., & Sanchez-Fernandez, P. (2017). Empirical analysis of the transformation of economic growth into social development at an international level. *Social Indicators Research, 130*(3), 983-1003. doi:10.1007/s11205-015-1206-0

Pratt, J., Hillier, Y., & Mace, J. (1999). Markets and motivation in part-time postgraduate education. *Studies in Higher Education, 24*(1), 95-107. doi:10.1080/03075079912331380168

Preble, J. F. (1983). Public sector use of the Delphi technique. *Technological Forecasting and Social Change, 23*(1), 75-88. doi:10.1016/0040-1625(83)90072-0

Priem, R. L., Li, S., & Carr, J. C. (2012). Insights and new directions from demand-side approaches to technology innovation, entrepreneurship, and strategic management research. *Journal of Management, 38*(1), 346-374. doi:10.1177/0149206311429614

Radel, C., Schmook, B., McEvoy, J., Mendez, C., & Petrzelka, P. (2012). Labor migration and gendered agricultural relations: The feminization of agriculture in the *ejidal* sector of Calakmul, Mexico. *Journal of Agrarian Change, 12*(1), 98-119. doi:10.1111/j.1471-0366.2011.00336.x

Radnor, Z., Kennerley, M., Tapinos, E., Dyson, R. G., & Meadows, M. (2005). The impact of performance measurement in strategic planning. *International Journal*

of Productivity and Performance Management, 54(5/6), 370-384. doi:10.1108/17410400510604539

Rahman, S. (2009). Whether crop diversification is a desired strategy for agricultural growth in Bangladesh? *Food Policy, 34*(4), 340-349. doi:10.1016/j.foodpol.2009.02.004

Ramaseshan, B., Ishak, A., & Kingshott, R. P. (2013). Interactive effects of marketing strategy formulation and implementation upon firm performance. *Journal of Marketing Management, 29*(11-12), 1224-1250. doi:10.1080/0267257X.2013.796319

Rangarajan, K., Long, S., Ziemer, N., & Lewis, N. (2012). An evaluative economic development typology for sustainable rural economic development. *Community Development, 43*(3), 320-332. doi:10.1080/15575330.2011.651728

Rao, E. J., & Qaim, M. (2011). Supermarkets, farm household income, and poverty: Insights from Kenya. *World Development, 39*(5), 784-796. doi:10.1016/j.worlddev.2010.09.005

Rao, P. P., Birthal, P. S., & Joshi, P. K. (2006). Diversification towards high value agriculture: Role of urbanization and infrastructure. *Economic and Political Weekly, 41*(26), 2747-2753. Retrieved from https://www.jstor.org/stable/4418403?seq=1

Rao, S., & Perry, C. (2003). Convergent interviewing to build a theory in under-researched areas: Principles and an example investigation of Internet usage in inter-firm relationships. *Qualitative Market Research, 6*(4), 236-247. doi:10.1108/13522750310495328

Ravallion, M. (2013). How long will it take to lift one billion people out of poverty? *The World Bank Research Observer, 28*(2), 139-158. doi:10.1093/wbro/lkt003

Ravallion, M., & Chen, S. (2003). Measuring pro-poor growth. *Economics Letters, 78*(1), 93-99. doi:10.1016/S0165-1765(02)00205-7

Rayens, M. K., & Hahn, E. J. (2000). Building consensus using the policy Delphi method. *Policy, Politics, & Nursing Practice, 1*(4), 308-315. doi:10.1177/152715440000100409

Raynolds, L. T. (2000). Re-embedding global agriculture: The international organic and fair trade movements. *Agriculture and Human Values, 17*(3), 297-309. doi:10.1023/A:1007608805843

Reed, B. J., & Blair, R. (1993). Economic development in rural communities: Can strategic planning make a difference? *Public Administration Review, 53*(1), 88-92. doi:10.2307/977285

Reguant, M., & Torrado, M. (2016). The Delphi method. *Revista d'Innovació i Recerca en Educació, 9*(2), 87-102. doi:10.1344/reire2016.9.1916

Rehmat, K., Najma, N., Mrak, I., Tika, K., & Mehtab, A. (2014). Assessment of tourism potentials and future prospects in the Karakoram range of Pakistan using Delphi panel SWOT analysis. *Journal of Biodiversity and Environmental Sciences, 5*(3), 133-143. Retrieved from https://www.cabdirect.org/cabdirect/abstract/20153110142

Reid, M. (2005). Performance auditing of integrated marketing communication (IMC) actions and outcomes. *Journal of Advertising, 34*(4), 41-54. doi:10.1080/00913367.2005.10639208

Reiter, B. (2017). Theory and methodology of exploratory social science research. *International Journal of Science and Research Methodology, 5*(4), 129-150. Retrieved from https://scholarcommons.usf.edu/gia_facpub/132/

Rembisz, W. (2010). The critical analysis of the intervention basis and evolution in agriculture. *Contemporary Economics, 4*(4), 7-24. Retrieved from https://search.proquest.com/docview/1115295408?pq-origsite=gscholar

Rice, G. H., & Hamilton, R. (1979). Decision theory and the small business. *American Journal of Small Business*, *4*(1), 1-9. doi:10.1177/104225877900400101

Ries, A., & Trout, J. (1981). *Positioning: The battle for your mind*. New York, NY: Warner Books.

Rivera, W. M., & Sulaiman, V. R. (2009). Extension: Object of reform, engine for innovation. *Outlook on Agriculture, 38*(3), 267-273. doi:10.5367/000000009789396810

Robbins, S. P., & Judge, T. A. (2008). *Organizational behavior*. Upper Saddle River, NJ: Prentice Hall.

Rockström, J., Williams, J., Daily, G., Noble, A., Matthews, N., Gordon, L., . . . & de Fraiture, C. (2017). Sustainable intensification of agriculture for human prosperity and global sustainability. *Ambio*, *46*(1), 4-17. doi:10.1007/s13280-016-0793-6

Rodríguez, A., Watson, P., & Braak, W. (2011). Getting to know the economy in your community: Automated social accounting. *Journal of Extension*, *49*(4), 1-9. Retrieved from https://www.joe.org/joe/2011august/pdf/JOE_v49_4iw3.pdf

Rodríguez-Mañas, L., Féart, C., Mann, G., Viña, J., Chatterji, S., Chodzko-Zajko, W., . . . & Scuteri, A. (2013). Searching for an operational definition of frailty: A Delphi

method-based consensus statement. The frailty operative definition-consensus conference project. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences, 68*(1), 62-67. doi:10.1093/gerona/gls119

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press, a Division of Simon & Schuster, Inc.

Rojas, M. (2008). Experienced poverty and income poverty in Mexico: A subjective well-being approach. *World Development, 36*(6), 1078-1093. doi:10.1016/j.worlddev.2007.10.005

Rosenberg, N., & Frischtak, C. R. (1983). Long waves and economic growth: A critical appraisal. *The American Economic Review, 73*(2), 146-151. Retrieved from https://www.jstor.org/stable/1816830?seq=1

Rowe, G., & Wright, G. (1999). The Delphi technique as a forecasting tool: Issues and analysis. *International Journal of Forecasting, 15*(4), 353-375. doi:10.1016/S0169-2070(99)00018-7

Roy, D., & Banerjee, S. (2007). CARE-ing strategy for integration of brand identity with brand image. *International Journal of Commerce and Management, 17*(1/2), 140-148. doi: 10.1108/10569210710776512

Ruiz-Altisent, M., Ruiz-Garcia, L., Moreda, G. P., Lu, R., Hernandez-Sanchez, N., Correa, E. C., . . . & García-Ramos, J. (2010). Sensors for product characterization and quality of specialty crops–A review. *Computers and Electronics in Agriculture, 74*(2), 176-194. doi:10.1016/j.compag.2010.07.002

Sackman, H. (1975). *Delphi critique.* Lexington, MA: The Rand Corporation.

Sæther, B. (2010). Agricultural extension services and rural innovation in inner Scandinavia. *Norsk Geografisk Tidsskrift–Norwegian Journal of Geography, 64*(1), 1-8. doi:10.1080/00291950903557647

Sağ, S., Sezen, B., & Güzel, M. (2016). Factors that motivate or prevent adoption of open innovation by SMEs in developing countries and policy suggestions. *Procedia-Social and Behavioral Sciences, 235*, 756-763. doi:10.1016/j.sbspro.2016.11.077

Saha, D. (2009). Factors influencing local government sustainability efforts. *State and Local Government Review, 41*(1), 39-48. doi:10.1177/0160323X0904100105

Saha, D., & Paterson, R. G. (2008). Local government efforts to promote the "three Es" of sustainable development: Survey in medium to large cities in the United States. *Journal of Planning Education and Research, 28*(1), 21-37. doi:10.1177/0739456X08321803

Salaria, N. (2012). Meaning of the term descriptive survey research method. *International Journal of Transformations in Business Management, 1*(6), 1-7. Retrieved from https://pdfs.semanticscholar.org/b5da/a392a693f64d7b9df01b9d429bd839d95059.pdf

Salcido, G. T. (2015). Rural poverty: Exclusion and improvement and policies and social actors. *Sociológica México, 29*(10), 139-155. Retrieved from http://www.sociologicamexico.azc.uam.mx/index.php/Sociologica/article/view/662

Sánchez, C., & Ríos, H. (2011). The knowledge economy as the basis for economic growth in Mexico. *Enl@ce: Revista Venezolana de Información, Tecnología y*

Conocimiento, 8(2), 43-60. Retrieved from https://www.redalyc.org/pdf/823/82319126004.pdf

Santiago, F. (2014). Innovation for inclusive development. *Innovation and Development, 4*(1), 1-4. doi:10.1080/2157930X.2014.890353

Sarantakos, S. (1998). *Social research* (3rd ed.). South Melbourne, Australia: Macmillan Education.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.). England, United Kingdom: Pearson Education Limited.

Savadogo, G., Souarès, A., Sié, A., Parmar, D., Bibeau, G., & Sauerborn, R. (2015). Using a community-based definition of poverty for targeting poor households for premium subsidies in the context of a community health insurance in Burkina Faso. *BMC Public Health, 15*(84), 1-12. doi:10.1186/s12889-014-1335-4

Schimmenti, E., Galati, A., Borsellino, V., Ievoli, C., Lupi, C., & Tinervia, S. (2013). Behavior of consumers of conventional and organic flowers and ornamental plants in Italy. *Horticultural Science, 40*(4), 162-171. doi:10.17221/115/2013-HORTSCI

Schmelzenbart, A. C., Lettner, M., Hesser, F., & Schwarzbauer, P. (2018). Barriers and incentives on the market diffusion of lignin composites-A Delphi-SWOT analysis. *Pro Ligno, 14*(4), 73-81. Retrieved from http://www.proligno.ro/en/articles/2018/4/SCHMELZENBART.pdf

Schmidt, R. C. (1997). Managing Delphi surveys using nonparametric statistical techniques. *Decision Sciences, 28*(3), 763-774. doi:10.1111/j.1540-5915.1997.tb01330.x

Schoeffler, S., Buzzell, R. D., & Heany, D. F. (1974). Impact of strategic planning on profit performance. *Harvard Business Review, 52*(2), 137-145. Retrieved from https://web-a-ebscohost-com.argo.library.okstate.edu/ehost/detail/detail?vid=2&sid=2bb1f3de-60ce-4d44-a397-42a30f4cdc90%40sessionmgr4006&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#AN=3867154&db=buh

Schultz, T. W. (1961). Investment in human capital. *The American Economic Review, 51*(1), 1-17. Retrieved from https://www.jstor.org/stable/1818907?seq=1

Sedgwick, P. (2013). Snowball sampling. *BMJ, 347*, 1-2. doi:10.1136/bmj.f7511

Semaan, R. W., Lindsay, V., Williams, P., & Ashill, N. (2019). The influence of gender roles in the drivers of luxury consumption for women: Insights from the Gulf Region. *Journal of Retailing and Consumer Services, 51*, 165-175. doi:10.1016/j.jretconser.2019.06.006

Şener, S., & Sarıdoğan, E. (2011). The effects of science-technology-innovation on competitiveness and economic growth. *Procedia-Social and Behavioral Sciences, 24*, 815-828. doi:10.1016/j.sbspro.2011.09.127

Sester, C., Dacremont, C., Deroy, O., & Valentin, D. (2013). Investigating consumers' representations of beers through a free association task: A comparison between packaging and blind conditions. *Food Quality and Preference, 28*(2), 475-483. doi:10.1016/j.foodqual.2012.11.005

Sexton D. L., & Van Auken, P. (1982). Prevalence of strategic planning in small business. *Journal of Small Business Management, 20*(3), 20-26. Retrieved from https://search.proquest.com/docview/210776182?pq-origsite=gscholar

Shani, D., & Chalasani, S. (1992), Exploiting niches using relationship marketing. *Journal of Consumer Marketing, 9*(3), 33-42. doi:10.1108/07363769210035215

Sharma, H. (2015). A study of demographic characteristics influencing consumer behavior regarding premium car brands. *Pacific Business Review International, 8*(4), 17-30. Retrieved from http://www.pbr.co.in/2015/2015_month/Oct/3.pdf

Sharma, M., Chaudhary, V., Bala, R., & Chauhan, R. (2013). Rural entrepreneurship in developing countries: Challenges, problems and performance appraisal. *Global Journal of Management and Business Studies, 3*(9), 1035-1040. Retrieved from https://www.ripublication.com/gjmbs_spl/gjmbsv3n9_16.pdf

Sharma, R., & Messar, Y. (2017). Transgenics in ornamental crops: Creating novelties in economically important cut flowers. *Current Science, 113*(1), 43-52. Retrieved from https://www.currentscience.ac.in/cs/Volumes/113/01/0043.pdf

Shepherd, D. A., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking "what is to be sustained" with "what is to be developed." *Entrepreneurship Theory and Practice, 35*(1), 137-163. doi:10.1111/j.1540-6520.2010.00426.x

Shinn, G. C., Wingenbach, G. J., Briers, G. E., Lindner, J. R., & Baker, M. (2009). Forecasting doctoral–level content in international agricultural and extension education–2010: Viewpoint of fifteen engaged scholars. *Journal of International*

Agricultural and Extension Education, 16(1), 57-71. doi:10.5191/jiaee.2009.16105

Shiomi, S., Kubo, Y., Wamocho, L. S., Koaze, H., Nakamura, R., & Inaba, A. (1996). Postharvest ripening and ethylene biosynthesis in purple passion fruit. *Postharvest Biology and Technology*, *8*(3), 199-207. doi:10.1016/0925-5214(95)00073-9

Shrivastava, P., Mitroff, I. I., Miller, D., & Miclani, A. (1988). Understanding industrial crises. *Journal of Management Studies, 25*(4), 285-303. doi:10.1111/j.1467-6486.1988.tb00038.x

Shukla, P. (2011). Impact of interpersonal influences, brand origin and brand image on luxury purchase intentions: Measuring interfunctional interactions and a cross-national comparison. *Journal of World Business, 46*(2), 242-252. doi:10.1016/j.jwb.2010.11.002

Shukla, P. (2012). The influence of value perceptions on luxury purchase intentions in developed and emerging markets. *International Marketing Review*, *29*(6), 574-596. doi:10.1108/02651331211277955

Shumpeter, J. (1976). *Capitalism, socialism and democracy* (5th ed.). London, England: Routledge.

Shy, O., & Stenbacka, R. (2008). Price competition, business hours and shopping time flexibility. *The Economic Journal, 118*(531), 1171-1195. doi:10.1111/j.1468-0297.2008.02165.x

Silverstein, M. J., & Fiske, N. (2003). Luxury for the masses. *Harvard Business Review, 81*(4), 48-59. Retrieved form https://hbr.org/2003/04/luxury-for-the-masses

Singer, A. E. (2006). Business strategy and poverty alleviation. *Journal of Business Ethics, 66*(2-3), 225-231. doi:10.1007/s10551-005-5587-x

Singh, A., & Tabatabai, H. (1993). *Economic crisis and third world agriculture.* Cambridge, England: Cambridge University Press.

Skokan, K., Pawliczek, A., & Piszczur, R. (2013). Strategic planning and business performance of micro, small and medium-sized enterprises. *Journal of Competitiveness, 5*(4), 57-72. doi:10.7441/joc.2013.04.04

Slaus, I., Jacobs, G., & Giarini, O. (2012). Human capital. *Cadmus, 1*(4), 4-7. Retrieved from https://search.proquest.com/docview/1082359813/fulltext/577D4CD6DEA6417DPQ/1?accountid=4117

Smith, T. C., & Nemetz, P. L. (2009). Social entrepreneurship compared to government foreign aid. *Journal of Research in Marketing and Entrepreneurship, 11*(1), 49-65. doi:10.1108/14715200911014149

Soto, E., & Dolan, S. L. (2003). *SMEs facing the challenge of the 21st century: The new global markets.* Mexico City, Mexico: Thomson.

Spee, A. P., & Jarzabkowski, P. (2011). Strategic planning as communicative process. *Organization Studies, 32*(9), 1217-1245. doi:10.1177/0170840611411387

Srinita, S. E. (2017). Economic and consumption distribution and business strategy toward improvement of agricultural industry. *European Research Studies, 20*(4A), 175-193. Retrieved from https://search.proquest.com/docview/1968019515/fulltextPDF/139083A0AB9C425BPQ/1?accountid=4117

Stace, W. T. (1935). Science and the explanation of phenomena. *Philosophy, 10*(40), 409-427. doi:10.1017/S003181910001809X

Stanton, W., Etzel, M. J., & Walker, B. J. (2007). *Marketing basics* (14th ed.). Mexico City, Mexico: McGraw Hill.

Stearns, T. M., & Hills, G. E. (1996). Entrepreneurship and new firm development: A definitional introduction. *Journal of Business Research, 36*(1), 1-4. doi:10.1016/0148-2963(95)00157-3

Stern, M. J., Bilgen, I., & Dillman, D. A. (2014). The state of survey methodology: Challenges, dilemmas, and new frontiers in the era of the tailored design. *Field Methods, 26*(3), 284-301. doi:10.1177/1525822X13519561

Stiles, P., & Kulvisaechana, S. (2003). *Human capital and performance: A literature review*. University of Cambridge, Cambridge, England.

Stitt-Gohdes, W. L., & Crews, T. B. (2004). The Delphi technique: A research strategy for career and technical education. *Journal of Career and Technical Education, 20*(2), 55-67. Retrieved from https://eric.ed.gov/?id=EJ1069510

Stokburger-Sauer, N. E., & Teichmann, K. (2013). Is luxury just a female thing? The role of gender in luxury brand consumption. *Journal of Business Research, 66*(7), 889-896. doi:10.1016/j.jbusres.2011.12.007

Storper, M. (2011). Why do regions develop and change? The challenge for geography and economics. *Journal of Economic Geography, 11*(2), 333-346. Retrieved from https://www.jstor.org/stable/26162224?seq=1

Storper, M., & Scott, A. J. (2009). Rethinking human capital, creativity and urban growth. *Journal of Economic Geography, 9*(2), 147-167. doi:10.1093/jeg/lbn052

Suire, R., & Vicente, J. (2009). Why do some places succeed when others decline? A social interaction model of cluster viability. *Journal of Economic Geography, 9*(3), 381-404. doi:10.1093/jeg/lbn053

Sundie, J. M., Kenrick, D. T., Griskevicius, V., Tybur, J. M., Vohs, K. D., & Beal, D. J. (2011). Peacocks, porsches, and Thorstein Veblen: Conspicuous consumption as a sexual signaling system. *Journal of Personality and Social Psychology, 100*(4), 664-680. doi:10.1037/a0021669

Svara, J. H., Watt, T. C., & Jang, H. S. (2013). How are US cities doing sustainability? Who is getting on the sustainability train, and why? *Cityscape, 15*(1), 9-44. Retrieved from https://www.jstor.org/stable/41958955

Swanson, B. E. (2006). The changing role of agricultural extension in a global economy. *Journal of International Agricultural and Extension Education, 13*(3), 5-17. Retrieved from https://www.aiaee.org/attachments/article/160/Swanson%2013.3-1.pdf

Sweetland, S. R. (1996). Human capital theory: Foundations of a field of inquiry. *Review of Educational Research, 66*(3), 341-359. doi:10.3102/00346543066003341

Tamang, S., Paudel, K. P., & Shrestha, K. K. (2014). Feminization of agriculture and its implications for food security in rural Nepal. *Journal of Forest and Livelihood, 12*(1), 20-32. Retrieved from https://www.forestaction.org/app/webroot/vendor/tinymce/editor/plugins/filemanager/files/JFL%20VOl%2012%20%281%29/tamang%20et%20al.pdf

Temu, A. E., & Temu, A. A. (2005, October). High value agricultural products for smallholder markets in Sub-Saharan Africa: Trends, opportunities and research

priorities. *How can the poor benefit from the growing markets for high value agricultural products?* International Center for Tropical Agriculture, Cali, Combodia. Retrieved from http://www.fao.org/docs/eims/upload/210989/regional_ssa.pdf

Teplensky, J. D., Kimberley, J. R., & Sanford Schwartz, J. (1993). Scope, timing and strategic adjustment in emerging markets: Manufacturing strategies and the case for MRI. *Strategic Management Journal*, *14*(7), 505-527. doi:10.1002/smj.4250140703

Terrados, J., Almonacid, G., & Hontoria, L. (2007). Regional energy planning through SWOT analysis and strategic planning tools: Impact on renewables development. *Renewable and Sustainable Energy Reviews*, *11*(6), 1275-1287. doi:10.1016/j.rser.2005.08.003

Thangaratinam, S., & Redman, C. W. (2005). The Delphi technique. *The Obstetrician & Gynaecologist*, *7*(2), 120-125. doi:10.1576/toag.7.2.120.27071

Thilmany, D. (2008). What are niche markets? What advantages do they offer? *Assessment and Strategy Development for Agriculture*. Retrieved from http://www.valueaddedag.org/nichemarkets/NicheMarketscompletebook6-17-08.pdf#page=4

Tiebout, C. M. (1956). Exports and regional economic growth. *Journal of Political Economy*, *64*(2), 160-164. doi:10.1086/257771

Tiraieyari, N., Hamzah, A., Samah, B. A., & Uli, J. (2013). The importance of the philosophy, attitude, perception, and knowledge of extension workers in

transferring sustainable agricultural practices to Malaysian farmers. *Asian Social Science, 9*(15), 289-294. doi:10.5539/ass.v9n15p289

Todericiu, R., & Şerban, A. (2016). Education, innovation and economic development. *Studies in Business and Economics, 11*(2), 158-164. doi:10.1515/sbe-2016-0029

Toften, K., & Hammervoll, T. (2009). Niche firms and marketing strategy: An exploratory study of internationally oriented niche firms. *European Journal of Marketing, 43*(11/12), 1378-1391. doi:10.1108/03090560910989948

Toften, K., & Hammervoll, T. (2010). Niche marketing and strategic capabilities: An exploratory study of specialised firms. *Marketing Intelligence & Planning, 28*(6), 736-753. doi: 10.1108/02634501011078138

Toften, K., & Hammervoll, T. (2011). International market selection and growth strategies for niche firms. *International Journal of Entrepreneurship and Innovation Management, 13*(3-4), 282-295. doi:10.1504/IJEIM.2011.039823

Toften, K., & Hammervoll, T. (2013). Niche marketing research: Status and challenges. *Marketing Intelligence & Planning, 31*(3), 272-285. doi:10.1108/02634501311324618

Tonts, M., & Selwood, J. (2003). Niche markets, regional diversification and the reinvention of Western Australia's sandalwood industry. *Tijdschrift Voor Economische en Sociale Geografie, 94*(5), 564-575. doi:10.1046/j.1467-9663.2003.00283.x

Tran, X. V. (2015). Effects of economic factors on demand for luxury hotels rooms in the US. *Advances in Hospitality and Tourism Research (AHTR), 3*(1), 1-17. Retrieved from http://www.ahtrjournal.org/admin/dosyalar/9/1-manuscript.pdf

Trinh, G., & Lam, D. (2016). Understanding the attendance at cultural venues and events with stochastic preference models. *Journal of Business Research, 69*(9), 3538-3544. doi:10.1016/j.jbusres.2016.01.033

Truong, Y., Simmons, G., McColl, R., & Kitchen, P. J. (2008). Status and conspicuousness–Are they related? Strategic marketing implications for luxury brands. *Journal of Strategic Marketing*, *16*(3), 189-203. doi:10.1080/09652540802117124

Twitchell, J. B. (2003). *Living it up: America's love affair with luxury*. New York, NY: Simon and Schuster.

Tybout, J. R. (2000). Manufacturing firms in developing countries: How well do they do, and why? *Journal of Economic Literature*, *38*(1), 11-44. doi:10.1257/jel.38.1.11

Ugboro, I. O., Obeng, K., & Spann, O. (2011). Strategic planning as an effective tool of strategic management in public sector organizations: Evidence from public transit organizations. *Administration & Society*, *43*(1), 87-123. doi:10.1177/0095399710386315

Uhl, N. P. (1983). Using the Delphi technique in institutional planning. *New Directions for Institutional Research, 1983*(37), 81-94. doi:10.1002/ir.37019833709

Ulrich, D., & Brockbank, W. (2005). *The HR value proposition*. Boston, MA: Harvard Business School Publishing.

Ulschak, F. L. (1983). *Human resource development: The theory and practice of need assessment*. Reston, VA: Reston Publishing Company, Inc.

Umble, E. J., Haft, R. R., & Umble, M. M. (2003). Enterprise resource planning: Implementation procedures and critical success factors. *European Journal of Operational Research, 146*(2), 241-257. doi:10.1016/S0377-2217(02)00547-7

United Nations. (n.d.). *Envision 2030: 17 goals to transform the world for persons with disabilities*. New York, NY: Author. Retrieved from https://www.un.org/development/desa/disabilities/envision2030.html

United States Department of Agriculture (USDA). (2019). *What is a specialty crop?* Washington, DC: Agricultural Marketing Service, Author. Retrieved from https://www.ams.usda.gov/services/grants/scbgp/specialty-crop

Ursulescu, C., & Popa, V. (2013). Supply chains integration for corporative strategic planning. using portfolio, programs and project management. *Valahian Journal of Economic Studies, 4*(3), 7-14. Retrieved from https://web.b.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=20679440&AN=113853068&h=6bkwZJAh3KkITiXt4FMMFJ2U9t%2fD5F8TTnKo0eQbHBDDBHDYH4uxUwahkUTzgzXuL3XryqjHrfzoZy%2bKYOPBJw%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d20679440%26AN%3d113853068

Usman, A. S., & Tasmin, R. (2015). Entrepreneurial skills development strategies through the mandatory students' industrial work experience scheme in Nigeria. *Procedia-Social and Behavioral Sciences, 204*(1), 254-258. doi:10.1016/j.sbspro.2015.08.148

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice, 6*(5), 100-110. doi:10.5430/jnep.v6n5p100

Valentin, E. K. (2001). SWOT analysis from a resource-based view. *Journal of Marketing Theory and Practice, 9*(2), 54-69. doi:10.1080/10696679.2001.11501891

Valenzuela, L., Jerez, O. M., Hasbún, B. A., Pizarro, V., Valenzuela, G., & Orsini, C. A. (2018). Closing the gap between business undergraduate education and the organizational environment: A Chilean case study applying experiential learning theory. *Innovations in Education and Teaching International, 55*(5), 575-584. doi:10.1080/14703297.2017.1295877

Valero-Gil, J. N., & Valero, M. (2008). The effects of rising food prices on poverty in Mexico. *Agricultural Economics, 39*(s1), 485-496. doi:10.1111/j.1574-0862.2008.00354.x

van der Linde, H., Hofstad, C. J., van Limbeek, J., Postema, K., & Geertzen, J. H. (2005). Use of the Delphi technique for developing national clinical guidelines for prescription of lower-limb prostheses. *Journal of Rehabilitation Research & Development, 42*(5), 693-704. doi:10.1682/JRRD.2003.11.0172

Van der Veen, M. (2003). When is food a luxury? *World Archaeology, 34*(3), 405-427. doi:10.1080/0043824021000026422

Vandenbroucke, F., & Vleminckx, K. (2011). Disappointing poverty trends: Is the social investment state to blame? *Journal of European Social Policy, 21*(5), 450-471. doi:10.1177/0958928711418857

Van Rooij, S. W., & Lemp, L. K. (2010). Positioning e-learning graduate certificate programs: Niche marketing in higher education. *Services Marketing Quarterly, 31*(3), 296-319. doi:10.1080/15332969.2010.486691

Varela, L. R., & Retamoza, L. A. (2012). Human capital and salary differences in Mexico, 2000-2009. *Estudios Fronterizos, 13*(26), 175-200. Retrieved from http://www.scielo.org.mx/scielo.php?pid=S0187-69612012000200007&script=sci_arttext&tlng=en

Vecchiato, R. (2015). Strategic planning and organizational flexibility in turbulent environments. Foresight, 17(3), 257-273. doi:10.1108/FS-05-2014-0032

Verhagen, A. P., de Vet, H. C., de Bie, R. A., Kessels, A. G., Boers, M., Bouter, L. M., & Knipschild, P. G. (1998). The Delphi list: A criteria list for quality assessment of randomized clinical trials for conducting systematic reviews developed by Delphi consensus. *Journal of Clinical Epidemiology, 51*(12), 1235-1241. doi:10.1016/S0895-4356(98)00131-0

Verhofstadt, E., & Maertens, M. (2014). Smallholder cooperatives and agricultural performance in Rwanda: Do organizational differences matter? *Agricultural Economics, 45*(S1), 39-52. doi:10.1111/agec.12128

Vigneron, F., & Johnson, L. W. (2004). Measuring perceptions of brand luxury. *Journal of Brand Management, 11*(6), 484-506. doi:10.1057/palgrave.bm.2540194

Viswanathan, M., Echambadi, R., Venugopal, S., & Sridharan, S. (2014). Subsistence entrepreneurship, value creation, and community exchange systems: A social capital explanation. *Journal of Macromarketing, 34*(2), 213-226. doi:10.1177/0276146714521635

Volk, K. (1993). Curriculum development using the Delphi technique. *Technology Teacher, 52*(4), 35-36. Retrieved from https://eric.ed.gov/?id=EJ455333

Vossenberg, S. (2013). Women entrepreneurship promotion in developing countries: What explains the gender gap in entrepreneurship and how to close it. *Maastricht School of Management Working Paper Series, 8*(1), 1-27. Retrieved from https://www.semanticscholar.org/paper/Women-Entrepreneurship-Promotion-in-Developing-What-Vossenberg/1da1ac54febcbb80d65943cc22d20c22f62c8f54

Vrgovic, P., Vidicki, P., Glassman, B., & Walton, A. (2012). Open innovation for SMEs in developing countries–An intermediated communication network model for collaboration beyond obstacles. *Innovation, 14*(3), 290-302. doi:10.5172/impp.2012.14.3.290

Vrontis, D., Thrassou, A., Chebbi, H., & Yahiaoui, D. (2012). Transcending innovativeness towards strategic reflexivity. *Qualitative Market Research: An International Journal, 15*(4), 420-437. doi:10.1108/13522751211257097

Vyas, V. S. (1996). Diversification in agriculture: Concept, rationale and approaches. *Indian Journal of Agricultural Economics, 51*(4), 636. Retrieved from https://search.proquest.com/openview/a49cb890152a36c9b839791672639258/1?pq-origsite=gscholar&cbl=1818936

Wacker, J. G. (1998). A definition of theory: Research guidelines for different theory-building research methods in operations management. *Journal of Operations Management, 16*(4), 361-385. doi:10.1016/S0272-6963(98)00019-9

Wagler, U. (2008). *Multidimensional poverty measurement.* New York, NY: Springer.

Walsh, M. F., & Lipinski, J. (2009). The role of the marketing function in small and medium-sized enterprises. *Journal of Small Business and Enterprise Development, 16*(4), 569-585. doi:10.1108/14626000911000929

Wang, X., Hawkins, C. V., & Berman, E. M. (2014). Financing sustainability and stakeholder engagement: Evidence from US cities. *Urban Affairs Review, 50*(6), 806-834. doi:10.1177/1078087414522388

Wang, X., Hawkins, C. V., Lebredo, N., & Berman, E. M. (2012). Capacity to sustain sustainability: A study of US cities. *Public Administration Review, 72*(6), 841-853. doi:10.1111/j.1540-6210.2012.02566.x

Wang, X., & Tong, L. (2017). The factors affecting the affluent consumers luxury purchasing behavior in China. *International Journal of Business and Management, 12*(10), 194-202. doi:10.5539/ijbm.v12n10p194

Wawrzyniak, D. (2016). Standard of living in the European Union. *Comparative Economic Research, 19*(1), 141-155. doi:10.1515/cer-2016-0008

Weaver, W. T. (1971). The Delphi forecasting method. *The Phi Delta Kappan, 52*(5), 267-271. Retrieved from https://www.jstor.org/stable/20372868?seq=1

Weick, K. E. (2010). Reflections on enacted sensemaking in the Bhopal disaster. *Journal of Management Studies, 47*(3), 537-550. doi:10.1111/j.1467-6486.2010.00900.x

Weisensel, W. P., & Schoney, R. A. (1989). An analysis of the yield-price risk associated with specialty crops. *Western Journal of Agricultural Economics, 14*(2), 293-299. Retrieved from https://www.jstor.org/stable/40988108?seq=1

Whittington, R. (2014). Information systems strategy and strategy-as-practice: A joint agenda. *The Journal of Strategic Information Systems, 23*(1), 87-91. doi:10.1016/j.jsis.2014.01.003

Whittington, R., & Cailluet, L. (2008). The crafts of strategy. *Long Range Planning, 41*(3), 241-247. doi:10.1016/j.lrp.2008.03.003

Wicklein, R. C. (1993). Identifying critical issues and problems in technology education using a modified-Delphi technique. *Journal of Technology Education, 5*(1), 54-71. Retrieved from https://vtechworks.lib.vt.edu/bitstream/handle/10919/8552/wicklein.pdf?sequence=1

Williams, J., & Chinn, S. J. (2010). Meeting relationship-marketing goals through social media: A conceptual model for sport marketers. *International Journal of Sport Communication, 3*(4), 422-437. doi:10.1123/ijsc.3.4.422

Williams, K. C., Page, R. A., Petrosky, A. R., & Hernandez, E. H. (2010). Multi-generational marketing: Descriptions, characteristics, lifestyles, and attitudes. *The Journal of Applied Business and Economics, 11*(2), 21-36. Retrieved from https://www.researchgate.net/profile/Robert_Page3/publication/264877591_Multi-Generational_Marketing_Descriptions_Characteristics_Lifestyles_and_Attitudes/links/540f129d0cf2d8daaad095dc.pdf

Wilmott, M., & Nelson, W. (2005). *Complicated lives: Sophisticated consumers, intricate lifestyles and simple solutions*. London, England: The Future Foundation and Wiley.

Winterhalter, C. (2011). Gastronomic fashions, luxury concepts, consumption practices and the construction of identity. *Fashion Forward,* 287-296. Retrieved from https://www.researchgate.net/publication/237757959_Gastronomic_fashions_luxury_concepts_consumption_practices_and_the_construction_of_identity

Woolgrove, J. (2006). Delphi definitions. *British Dental Journal, 201*(4), 186-187. doi:10.1038/sj.bdj.4813903

World Bank. (2020). *World Bank country and lending groups*. Washington, DC: Author. Retrieved from https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

Worrell, J. L., Di Gangi, P. M., & Bush, A. A. (2013). Exploring the use of the Delphi method in accounting information systems research. *International Journal of Accounting Information Systems, 14*(3), 193-208. doi:10.1016/j.accinf.2012.03.003

Wright, P. C. (1991). An investigation of qualitative planning techniques acceptable to owner/managers of small businesses. *Journal of Small Business & Entrepreneurship*, *8*(4), 41-50. doi:10.1080/08276331.1991.10600383

Yeoman, I. (2011). The changing behaviors of luxury consumption. *Journal of Revenue and Pricing Management, 10*(1), 47-50. doi:10.1057/rpm.2010.43

Yeoman, I. (2014). Luxury. *Journal of Revenue and Pricing Management, 13*(1), 1. doi:10.1057/rpm.2013.45

Yeoman, I., & McMahon-Beattie, U. (2006). Luxury markets and premium pricing. *Journal of Revenue and Pricing Management, 4*(4), 319-328. doi:10.1057/palgrave.rpm.5170155

Yeoman, I., & McMahon-Beattie, U. (2018). The future of luxury: Mega drivers, new faces and scenarios. *Journal of Revenue and Pricing Management, 17*(4), 204-217. doi:10.1057/s41272-018-0140-6

York, J. G., & Venkataraman, S. (2010). The entrepreneur–environment nexus: Uncertainty, innovation, and allocation. *Journal of Business Venturing, 25*(5), 449-463. doi:10.1016/j.jbusvent.2009.07.007

Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing, 24*(5), 519-532. doi:10.1016/j.jbusvent.2008.04.007

Zaman, A. (2013). Is development accumulation of wealth? Islamic views. *Afro Eurasian Studies, 2*(1-2), 144-203. Retrieved from https://dergipark.org.tr/en/pub/afes/issue/44783/557032

Zhai, Y., Ding, Y., & Wang, F. (2018). Measuring the diffusion of an innovation: A citation analysis. *Journal of the Association for Information Science and Technology, 69*(3), 368-379. doi:10.1002/asi.23898

Zhang, W., & Wilhelm, W. E. (2011). OR/MS decision support models for the specialty crops industry: A literature review. *Annals of Operations Research, 190*(1), 131-148. doi:10.1007/s10479-009-0626-0

Ziakas, V., & Boukas, N. (2014). Contextualizing phenomenology in event management research. *International Journal of Event and Festival Management, 5*(1), 56-73. doi: 10.1108/IJEFM-08-2012-0023

Zvarych, R. (2018). Determinants of economic growth in developing countries. *Journal of European Economy, 17*(1), 19-33. Retrieved from http://jeej.tneu.edu.ua/index.php/enjee/article/view/1319/1306

APPENDIXES

APPENDIX A

DELPHI METHOD STUDIES IN VARIOUS SECTORS AND INDUSTRIES WORLDWIDE

No.	Author(s)	Country or Organization	Study's Purpose/Description	Number of Experts (Panelists)
1	Cabero (2014)	Spain	Used to form content blocks for a future training action of university teaching staff in ICT	First round with 68; and second round included 65
2	Cancelo, Neyro, & Baquero (2014)	Spain	Study to determine the degree of agreement/disagreement between a group of Spanish gynecologists about the role of probiotics as adjuvant treatment in vaginitis	123
3	Coduras & Señarís (2009)	Foundation Astrazéneca	Study to anticipate the future of pharmaceutical provision in Spain	First round with 67; and second round included 65
4	Créange & Careyron (2013)	France	Study showed that a group of diagnostic criteria and strategies were not enough to reach a consensus for the diagnosis of typical Chronic inflammatory demyelinating polyneuropathy (CIDP) in clinical practice	32
5	Debin et al. (2013).	France	Objective of this study was to establish an expert-based determination from the beginning and to the end of influenza epidemics in France	57 responded in all three rounds
6	Fletcher & Marchildon (2014)	Canada	A modified Delphi method was used in a research project Action involving health leadership in Canada	First round with 39
7	Gordon & Pease (2006)	United States	Study described the Delphi process in real time, and illustrated its use in decision-making conducted for the Millennium Project of the	10 to 15

			American Council of the University of the United Nations	
8	Graham, Regehr, & Wright (2003)	Canada	Study sought to reach consensus to establish the best clinical criteria for the diagnosis of carpal tunnel syndrome	First round with 14; and second round included 12
9	Kauko & Palmroos (2014)	Bank of Finland	Study described how panelists were invited to provide forecasts on variables of the financial market in a controlled experiment. No evidence found that increasing the sample size beyond 7 to 10 participants improved accuracy	13
10	Landeta (2006)	Spain	Study evaluated the method and checked its validity, especially in an area of the social sciences	14
11	Liimatainen et al. (2014)	Finland	Study was about CO_2 emissions from road freight transport	First round with 24; and second round included 20
12	Moore (2001)	United States	Study described leadership profiles of the new product development stages in business regarding consumed packaged goods	37 panelists in total in groups of 5 to 6
13	Okoli & Pawlowski (2004)	United States & Canada	A guide for the process of selection of experts suitable for a Delphi study, which detailed principles for decision-making during the process to ensure validity	10 to 18 for each of 4 panels

14	Wakefield & Watson (2014)	Brigham Young University (United States); Bournemouth University (United Kingdom)	Used in research on public relations and communications in the era of web 2.0. Study's purpose was to introduce, analyze, and explain the method and its evolution as a research tool in public relationships	10 to 15
15	Zeedick (2010)	United States	Studied instructional design theory and its application in programs of online education	9

Note. Summary of 15 scientific publications by author(s), country or organizations, purpose of the studies, and number of participants. Adapted from *Delphi Method - Proposal to calculate the number of experts in a Delphi study on biodegradable packaging to 2032* (Zartha, Montes, Toro, & Villada, 2014).

APPENDIX B

DELPHI METHOD STUDIES INCLUDING A VARIETY OF TOPICS, ISSUES, AND FIELDS

No.	Author(s)	Year	Research Topic/Purpose/Context
1	Dalkey & Helmer	1963	Technique development; defense industry
2	Dalkey	1969	Technique development; defense industry
3	Dowell	1975	Forecasting; higher education
4	Driskill	1975	Educational priorities; secondary school physics
5	Strauss & Zeigler	1975	Technique refinement; social sciences
6	Goodman	1987	Technique critique; nursing
7	Reid	1988	Application; competencies for health care fields
8	Buriak & Shinn	1989	Research priorities; agricultural education
9	Hoover	1989	Modal development; health care food service operations
10	Azani & Khorramshahgol	1990	Technique refinement; location planning
11	Kors, Sittig, & vanBemmel	1990	Application; diagnostic knowledge for cardiology
12	Miles-Tapping, Dyck, Brunham, Simpson, & Barber	1990	Research priorities; physical therapy
13	Whitman	1990	Technique refinement; nursing
14	Bartu, McGowan, Nelson, Ng, & Robertson	1993	Research priorities; nursing
15	Ferretti	1993	Research priorities; interactive multimedia technology
16	Green, Khan, & Badinelli	1993	Testing a decision model; food service systems
17	Texas Department of Human Services	1993	Validate goals and goal indicators; nutrition education
18	de Loe	1994	Technique refinement; climate change and water management
19	Jenkins & Smith	1994	Technique refinement; nursing
20	Misener, Watkins, & Ossege	1994	Research priorities; public health nursing

21	Raskin	1994	Research priorities; social work
22	Salmond	1994	Research priorities; orthopedic nursing
23	Walker	1994	Research priorities; clinical physiotherapy
24	Hartman & Baldwin	1995	Technique refinement; use of computer technology and the Delphi method
25	Forrest et al.,	1995	Research agenda; dental hygiene
26	Hollis, Davis, & Reeb	1995	Research priorities; clinical nursing
27	Murry & Hammons	1995	Application; higher education
28	Broome, Woodring, & O'Conner-Von	1996	Research priorities; nursing of children and families
29	Demi, Meredith, & Gray	1996	Research priorities; urologic nursing

Note. Examination of 29 scientific publications by author(s) and years, 1963 to 1996, Adapted from *Achieving consensus to deal with methodological issues in the Delphi technique* (Goodarzi, Abbasi, & Farhadian, 2018).

APPENDIX C

INSTITUTIONAL REVIEW BOARD APPROVAL FORM

Oklahoma State University Institutional Review Board

Date:	10/04/2019
Application Number:	AG-19-49
Proposal Title:	Experts' Views on the Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico: A Double-Panel Delphi Study
Principal Investigator:	Luis Flores Porras
Co-Investigator(s):	
Faculty Adviser:	CRAIG EDWARDS
Project Coordinator:	
Research Assistant(s):	
Processed as:	Exempt
Exempt Category:	

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or irb@okstate.edu.

Sincerely,

Oklahoma State University IRB

APPENDIX D

INFORMED CONSENT

Oklahoma State University

Agricultural Hall

Stillwater, OK 74078

(830) 320-6808

luisflo@okstate.edu

Experts' Views on the Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico: A Double-Panel Delphi Study

Directions: Please read this completely. This document is intended to provide you with an overview of the research study, your rights as a participant, and what is expected of you. You may agree or disagree to participate in this research after reading this document. If you have any questions regarding this study, please submit your questions via e-mail to luisflo@okstate.edu or contact me by telephone at 830-320-6808. Thank you!

You are being asked to participate in a Double-Panel Delphi Study which is a systematic approach to a decision-making group, using specific questions in numerous rounds interposed with the respondents' feedback to reach group consensus on a specific theme or themes (Dalkey, 1969). The goal of this study is to build knowledge about the potential of luxury agricultural products for achieving rural economic development in Mexico and in other countries with similar needs.

You were nominated as a possible participant in this study because you are identified as an experienced professional interested in Luxury Agricultural Markets who fit one (or more) of the following criteria: 1) A producer of high-value crops, who has experience with at least one specialty crop; 2) A researcher, extension educator, or other professional who has been investigating and/or providing extension services to communities regarding high-value crops, and has experience with at least one specialty crop.

PURPOSE:

This study of the potential of luxury niche agricultural products for rural economic development is being conducted through Oklahoma State University.

The purposes of this study are 1) to describe the perceptions of a select group of agricultural producers, researchers, extension educators, or other professionals regarding the potential of smallholder agricultural producers to successfully grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers and specialty produce; and 2) to describe similarities and differences that may exist between

the perceptions of the participating panelists. Data collection from both panels will be gathered using the Delphi technique.

PROCEDURES:

What your voluntary involvement requires:

This study will be completed through three online questionnaires. Your participation will take no more than three hours total over a period of about six weeks. You will receive three study links via email, as well as a final summary of the results of the study for your information at conclusion of the study.

How will the study proceed?
The study's starting date is _____. On this day, you will receive an introductory email containing two links, from which you will choose the panel that fits you best based on your experience (producer, researcher, extension educator, and so forth). After choosing your most suitable panel you will be ready to begin Round One. **We recognize you may have experience suitable for both panels, but ask you to choose the panel most appropriate regarding your past interests and work.**

Round One will include:

1. Terms of participation
2. A summary of topic information
3. Questions about you
4. Four open-ended questions

Round One should take you no more than one hour to complete. The online questionnaire will allow you to save your answers and complete your response later, enabling you to respond without having to address all questions at once. This design will also give you time to think about your answers. The first questionnaire will ask for information such as your sex, age, ethnicity, formal education, current occupation and position, area(s) of specialization within the related industries, and experience in producing, researching, or providing extension services, as appropriate for you.

You will have 10 days to complete Round One. Approximately one week after all Round One answers are analyzed, you will receive a link for Round Two.

Round Two will include:

1. Panelists' responses from Round One
2. This summary of the responses from panelists will be presented in a manner that does not identify or link any answers to individual participants.
3. A set of questions derived from the responses of all panelists for which you will be asked to rate your *level of agreement* using a 6-point Likert type scale: Strongly disagree, Disagree, Slightly disagree, Slightly agree, Agree, and Strongly agree.

You will be asked to return your comments and ratings within 10 days. The estimated completion time for this round is also about one hour.

Approximately one week after the Round Two responses are analyzed, you will be emailed the link for Round Three, as that may be needed.

Round Three will include:

Round Three will emphasize on achieving *consensus of agreement* among the respondents for each panel by requesting you to rate your level of agreement using a 6-point Likert type scale for those items that did not reach consensus of agreement in Round Two.

The estimated completion time for this round is also one hour. There also will be an opportunity to provide any additional comments you may have during this final round of the study.

The entire study period for collection of panelists' responses is likely to last about 45 days.

RISKS OF PARTICIPATION:

This study represents no risk for the participants i.e., psychological, social, legal, or stress risks, greater than what one encounters in everyday life. If at any time you do not wish to continue with the study, you may end your participation without explanation.

BENEFITS OF PARTICIPATION:

Personal benefits are not expected based on your participation in this research study. However, your disposition toward and commitment to offering your expertise for achieving the study's objectives are significant. Your thoughts and comments will provide an important foundation for further education, training, and research concerning the production of high-value, ornamental, or specialty crops, and the potential of such to develop rural economies by improving the livelihoods of smallholder producers.

CONFIDENTIALITY:

Your responses and comments for this research study will not include any recognizable information and will be analyzed and summarized as the panels' responses. This confidential design is meant to assure the participants' anonymity and encourage their sharing of perspectives and opinions.

Participants' information will not be released and will be kept private. As long as the information gathered in this study is useful in a scientific context it will be saved on a password-protected computer kept under lock and key in the researcher's office. The

study data will be kept for five years and thereafter destroyed. **This study's results may** be presented in peer-refereed publications and/or at professional meetings. You will not be **individually identified under any circumstances.**

COMPENSATION:

There is no monetary compensation for participating in this research study.

CONTACTS:

If you want to contact any of the researchers, or if you desire to request information about the results of the study and/or discuss your participation, please contact Mr. Luis Flores, Ph.D. Candidate, (830) 320-6808, luisflo@okstate.edu; or contact Dr. M. Craig Edwards, 448 Agricultural Hall, Department of Agricultural Education, Communications, and Leadership, Oklahoma State University, Stillwater, OK 74078, (405) 744-8141, craig.edwards@okstate.edu

If you have questions about your rights as a research volunteer, you may contact OSU IRB 223 Scott Hall; 74078; 405-744-3377; irb@okstate.edu

PARTICIPANTS' RIGHTS:

Your contribution in this research is **voluntary**. There is no consequence for denial to contribute, and you are free to withdraw your participation in the study at any time, without penalty.

If you are willing to participate, the next step is to signify your voluntary agreement by providing the information requested below and providing your responses via the Round One online questionnaire. **Thank you again for participating**. If you have questions, please email me at luisflo@okstate.edu.

Thank you very much!

Sincerely
Luis A. Flores
Doctoral Candidate
Oklahoma State University

Reference

Dalkey, N.C. (1969). *The Delphi method: An experimental study of group opinion.* Santa Monica, CA: The Rand Corporation.

APPENDIX E

PRODUCERS ELECTRONIC MAIL MESSAGE/TELEPHONE SCRIPT

Electronic mail message/Telephone Script: Producers Panelists

Greetings, my name is Luis A. Flores; I am a Ph.D. candidate in the Department of Agricultural Education, Communications and Leadership at Oklahoma State University. I am conducting a study to identify the potential of luxury agricultural products for achieving rural economic development in Mexico and other countries with similar needs. Your expertise as a specialty crops producer and/or the recommendations from knowledgeable sources identified you as a potential panelist for this study.

Your participation in this study will require you to complete three questionnaires over the next 45 days. Your responses will be used to understand the opportunities and needs that smallholder farmers in rural areas have in regard to producing high-value crops, to improve their livelihoods and lift the economies of their communities. Therefore, you will be asked to identify strengths, weaknesses, opportunities, and threats smallholder farmers may face when planning to produce high-value crops.

Your participation in this study will better inform the three actors for economic development, as suggested by Etzkowitz and Leydesdorff (1995): universities, producers, and governments. The relations among these actors are considered a significant component of any innovation strategy in regional and global contexts. A nation's competitiveness depends on the capacity of its industry to innovate and upgrade (Porter, 1990).

Thank you for considering this invitation. Will you agree to serve as panelist for this study? If you are willing to participate, you will receive an email message from me with instructions regarding the study's Round One questionnaire.

Even if you choose to not participate in the study, I thank you sincerely for taking my call and/or reading my email message and for your support of rural economic development.

Thank you for your time!

Luis A. Flores

Doctoral candidate

Oklahoma State University

APPENDIX F

RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS ELECTRONIC MAIL MESSAGE/TELEPHONE SCRIPT

Electronic Mail Message/Telephone Script: Researchers, Extension Educators, or Other Professionals Panelists

Greetings, my name is Luis A. Flores; I am a Ph.D. candidate in the Department of Agricultural Education, Communications and Leadership at Oklahoma State University. I am conducting a study to identify the potential of luxury agricultural products for achieving rural economic development in Mexico and other countries with similar needs. Your expertise as a specialty crops researcher, extension educator, or related professional, and/or the recommendations from knowledgeable sources identified you as a potential panelist for this study.

Your participation in this study will require you to complete three questionnaires over the next 45 days. Your responses will be used to understand the opportunities and needs that smallholder farmers in rural areas have in regard to producing high-value crops, to improve their livelihoods and lift the economies of their communities. Therefore, you will be asked to identify strengths, weaknesses, opportunities, and threats smallholder farmers may face when planning to produce high-value crops.

Your participation in this study will better inform the three actors for economic development, as suggested by Etzkowitz and Leydesdorff (1995): universities, producers, and governments. The relations among these actors are considered a significant component of any innovation strategy in regional and global contexts. A nation's competitiveness depends on the capacity of its industry to innovate and upgrade (Porter, 1990).

Thank you for considering this invitation. Will you agree to serve as panelist for this study? If you are willing to participate, you will receive an email message from me with instructions regarding the study's Round One questionnaire.

Even if you choose to not participate in the study, I thank you sincerely for taking my call and/or reading my email message and for your support of rural economic development.

Thank you for your time!

Luis A. Flores

Doctoral candidate

Oklahoma State University

APPENDIX G

RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS PANEL ROUND ONE INSTRUMENT

Background/Context

Sectors of significant agricultural growth coexist with endemic and, in some cases, expanding rural poverty, which contradicts and undercuts the economic development sought for such populations (de Grammont, 2010). Therefore, different approaches are needed to address these problems; such as the *long-tail approach* which is defined as an alternative business model, i.e., from selling a small number of well-positioned goods in large quantities to retailing a vast number of niche items in reasonably small quantities (Anderson, 2006). Moreover, the niche market approach is considered a superior strategy for small and specialized firms (Toften & Hammervoll, 2009), which could include agricultural ventures as "there are opportunities for producers to build relatively stable networks with final consumers" in niche markets (Ilbery & Kneafsey, 1999, p. 2213). One way to increase livelihood security and reduce poverty may be to enhance the participation of farmers in high-value agriculture (Reardon, 2005).

A positive trend exists across all the world's regions and was set to drive the luxury goods market higher by 6% to 8% at constant exchange rates in 2018 to reach 276 to 281 billion euros or more than $300 billion USD (D'Arpizio & Levato, 2018). Such goods include select food and floral products that could be produced by smallholder farmers in resource-constrained regions, including parts of Mexico.

Operational Terms and Definitions

High-value crops- are non-traditional produce, for example, condiments, flowers, foliage, fruits, houseplants, spices, and vegetables (Temu & Temu, 2005). Most of these products are recognized for having a higher market value than traditional cereal grains and export crops (Temu & Temu, 2005).

Luxury products- "have more than necessary and ordinary characteristics compared to other products of their category, which include their relatively high level of price, quality, aesthetics, rarity, extraordinarity, and symbolic meaning" (Heine & Phan, 2011, p. 112).

Niche market- in a strategic planning context is the emphasis on a particular need, or a product, demographic group, or geographic segment (Teplensky, Kimberly, & Sandford, 1993).

Ornamental plants- also referred to as garden plants, and typically grown for decorative purposes, for cut flowers, as house plants in gardens, landscape design projects, and specimen displays (Agyekum, 2010; Amingad & Lakshmipathy, 2014).

Smallholder farmer- smallholder farm sizes in many countries are significantly smaller than two hectares; for Latin American countries, however, smallholder farms may be more than two hectares, but seldom are larger than five hectares (Rapsomanikis, 2015).

Specialty crops- "fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture" (USDA, 2019). *Horticultural crops* such as fruits, vegetables, tree nuts, nursery crops and floricultural crops are also classified as *specialty crops* (see Table 1), according to the USDA (2019).

USDA Specialty Crops

Culinary Herbs and Spices

Chamomile	Ginger	Paprika
Cardamom	Lavender	Saffron
Cinnamon	Mint	Vanilla
Curry	Oregano	Wasabi

Floriculture and Nursery Crops

African Violet	Holly	Philodendron
Anthurium	Ivy	Poinsettia
Carnation	Juniper	Rose
Gladiolus	Orchid	Snap Dragon

Fruits and Tree Nuts

Avocado	Kiwi	Pomegranate
Blackberry	Mango	Quince
Currant	Pear	Raspberry
Grape	Pistachio	Walnut

Medicinal Herbs

Artemissia	Ginko Biloba	St. John's Wort
Astragalus	Ginseng	Sonchus
Boldo	Mullein	Urtica
Foxglove	Patchouli	Witch Hazel

Vegetables

Artichoke	Edamame	Onion
Asparagus	Endive	Parsnip
Brussel sprouts	Garlic	Pumpkin
Celery	Okra	Tomato

Table 1. Specialty Crops examples list. Adapted from "USDA Definition of Specialty Crop" (USDA, n.d., pp. 4-8). *Note.* NOT an exhaustive list of specialty crops in regard to this study or otherwise.

Round One Open-ended Questions

Please provide your response to the following questions.

1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries? Some examples of specialty produce include but are not limited to ornamental flowers, foliage, and spices.

Please include all the plant products you consider appropriate.

2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers, foliage, spices, and specialty produce?

Please include any strengths, weaknesses, opportunities, and threats to producing for luxury markets that should be considered by aspiring producers, especially smallholder farmers, such as resource input needs, technical needs including education and training, innovation concerns, and so forth.

SWOT

Strengths

Weaknesses

Opportunities

Threats

3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages,* if producing luxury agricultural products for niche markets, as defined in this study?

Please include as many ideas you may have on farmers' needs.

Please list any other thoughts, ideas, and/or concerns you may have in regard to orienting smallholder farmers toward and preparing them to produce for niche markets.

References

Agyekum, N. (2010). Plant article ornamental plants. *Plant Science, 211*, 1. Retrieved from https://www.ndsu.edu/pubweb/chiwonlee/plsc211/student%20papers/article10/Agyekum,%20Nana%20Akua/

Amingad, V., & Lakshmipathy, M. (2014). Ornamental plants and their role in human psychology. *Agrotechnol, 2*(4), 144. Abstract retrieved from https://www.longdom.org/conference-abstracts-files/2168-9881-S1.0007-095.pdf

Anderson, C. (2006). *The long tail: Why the future of business is selling less of more*. New York, NY: Hachette Books.

D'Arpizio, C., & Levato, F. (June 7, 2018). *Global personal luxury goods market expected to grow by 6-8 percent to €276-281b in 2018, driven by strong rebound in China*. Media Center. Bain & Co. Retrieved from https://www.bain.com/about/media-center/press-releases/2018/bain-spring-luxury-report-2018/

de Grammont, H. C. (2010). The evolution of agricultural production in the Mexican countryside: Productive concentration, poverty, and pluriactivity. *Andamios, 7*(13), 85-117. Retrieved from http://www.scielo.org.mx/scielo.php?pid=S1870 00632010000200005&script=sci_arttext&tlng=pt

Heine, K., & Phan, M. (2011). Trading-up mass-market goods to luxury products. *Australasian Marketing Journal, 19*(2), 108-114. doi:10.1016/j.ausmj.2011.03.001

Ilbery, B., & Kneafsey, M. (1999). Niche markets and regional specialty food products in Europe: Toward a research agenda. *Environment and Planning A, 31*(12), 2207-2222. doi:10.1068/a312207

Rapsomanikis, G. (2015). *The economic lives of smallholder farmers: An analysis based on household data from nine countries*. Food and Agriculture Organization of the United Nations (FAO). Retrieved from http://www.fao.org/3/a-i5251e.pdf

Reardon, T. (2005). *Retail companies as integrators of value chains in developing countries:*

Diffusion, procurement system change, and trade and development effects. Eschborn,

Germany: GTZ.

Teplensky, J. D., Kimberley, J. R., & Sanford Schwartz, J. (1993). Scope, timing and strategic adjustment in emerging markets: Manufacturing strategies and the case for MRI. *Strategic Management Journal*, *14*, 505-527. doi:10.1002/smj.4250140703

Temu, A. E., & Temu, A. A. (2005). High value agricultural products for smallholder markets in Sub-Saharan Africa: Trends, opportunities and research priorities. Paper presented at the *High Value Agricultural Products* Workshop, Cali, Colombia. Retrieved from http://www.fao.org/docs/eims/upload/210989/regional_ssa.pdf

Toften, K., & Hammervoll, T. (2009). Niche firms and marketing strategy: An exploratory study of internationally oriented niche firms. *European Journal of Marketing*, *43*(11/12), 1378-1391. doi:10.1108/03090560910989948

United States Department of Agriculture (USDA). (2019). *Specialty crops.* Author. Retrieved from https://www.ams.usda.gov/market-news/fruits-vegetables

United States Department of Agriculture (USDA). (n.d.). *USDA Definition of Specialty Crop.* Author. Retrieved from https://www.ams.usda.gov/sites/default/files/media/USDASpecialtyCropDefinition.pdf

APPENDIX H

PRODUCERS PANEL ROUND ONE INSTRUMENT

Background/Context

Sectors of significant agricultural growth coexist with endemic and, in some cases, expanding rural poverty, which contradicts and undercuts the economic development sought for such populations (de Grammont, 2010). Therefore, different approaches are needed to address these problems; such as the *long-tail approach* which is defined as an alternative business model, i.e., from selling a small number of well-positioned goods in large quantities to retailing a vast number of niche items in reasonably small quantities (Anderson, 2006). Moreover, the niche market approach is considered a superior strategy for small and specialized firms (Toften & Hammervoll, 2009), which could include agricultural ventures as "there are opportunities for producers to build relatively stable networks with final consumers" in niche markets (Ilbery & Kneafsey, 1999, p. 2213). One way to increase livelihood security and reduce poverty may be to enhance the participation of farmers in high-value agriculture (Reardon, 2005).

A positive trend exists across all the world's regions and was set to drive the luxury goods market higher by 6% to 8% at constant exchange rates in 2018 to reach 276 to 281 billion euros or more than $300 billion USD (D'Arpizio & Levato, 2018). Such goods include select food and floral products that could be produced by smallholder farmers in resource-constrained regions, including parts of Mexico.

Operational Terms and Definitions

High-value crops- are non-traditional produce, for example, condiments, flowers, foliage, fruits, houseplants, spices, and vegetables (Temu & Temu, 2005). Most of these products are recognized for having a higher market value than traditional cereal grains and export crops (Temu & Temu, 2005).

Luxury products- "have more than necessary and ordinary characteristics compared to other products of their category, which include their relatively high level of price, quality, aesthetics, rarity, extraordinarity, and symbolic meaning" (Heine & Phan, 2011, p. 112).

Niche market- in a strategic planning context is the emphasis on a particular need, or a product, demographic group, or geographic segment (Teplensky, Kimberly, & Sandford, 1993).

Ornamental plants- also referred to as garden plants, and typically grown for decorative purposes, for cut flowers, as house plants in gardens, landscape design projects, and specimen displays (Agyekum, 2010; Amingad & Lakshmipathy, 2014).

Smallholder farmer- smallholder farm sizes in many countries are significantly smaller than two hectares; for Latin American countries, however, smallholder farms may be more than two hectares, but seldom are larger than five hectares (Rapsomanikis, 2015).

Specialty crops- "fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture" (USDA, 2019). *Horticultural crops* such as fruits, vegetables, tree nuts, nursery crops and floricultural crops are also classified as *specialty crops* (see Table 1), according to the USDA (2019).

USDA Specialty Crops

Culinary Herbs and Spices

Chamomile	Ginger	Paprika
Cardamom	Lavender	Saffron
Cinnamon	Mint	Vanilla
Curry	Oregano	Wasabi

Floriculture and Nursery Crops

African Violet	Holly	Philodendron
Anthurium	Ivy	Poinsettia
Carnation	Juniper	Rose
Gladiolus	Orchid	Snap Dragon

Fruits and Tree Nuts

Avocado	Kiwi	Pomegranate
Blackberry	Mango	Quince
Currant	Pear	Raspberry
Grape	Pistachio	Walnut

Medicinal Herbs

Artemissia	Ginko Biloba	St. John's Wort
Astragalus	Ginseng	Sonchus
Boldo	Mullein	Urtica
Foxglove	Patchouli	Witch Hazel

Vegetables

Artichoke	Edamame	Onion
Asparagus	Endive	Parsnip
Brussel sprouts	Garlic	Pumpkin
Celery	Okra	Tomato

Table 1. Specialty Crops examples list. Adapted from "USDA Definition of Specialty Crop" (USDA, n.d., pp. 4-8). *Note.* NOT an exhaustive list of specialty crops in regard to this study or otherwise.

Round One Open-ended Questions

Please provide your response to the following questions.

1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries? Some examples of specialty produce include but are not limited to ornamental flowers, foliage, and spices.

Please include all the plant products you consider appropriate.

2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets, including crops such as high-value, ornamental flowers, foliage, spices, and specialty produce?

Please include any strengths, weaknesses, opportunities, and threats to producing for luxury markets that should be considered by aspiring producers, especially smallholder farmers, such as resource input needs, technical needs including education and training, innovation concerns, and so forth.

SWOT

Strengths

Weaknesses

Opportunities

Threats

3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages*, if producing luxury agricultural products for niche markets, as defined in this study?

Please include as many ideas you may have on farmers' needs.

Please list any other thoughts, ideas, and/or concerns you may have in regard to orienting smallholder farmers toward and preparing them to produce for niche markets.

References

Agyekum, N. (2010). Plant article ornamental plants. *Plant Science, 211*, 1. Retrieved from https://www.ndsu.edu/pubweb/chiwonlee/plsc211/student%20papers/article10/Agyekum,%20Nana%20Akua/

Amingad, V., & Lakshmipathy, M. (2014). Ornamental plants and their role in human psychology. *Agrotechnol, 2*(4), 144. Abstract retrieved from https://www.longdom.org/conference-abstracts-files/2168-9881-S1.0007-095.pdf

Anderson, C. (2006). *The long tail: Why the future of business is selling less of more*. New York, NY: Hachette Books.

D'Arpizio, C., & Levato, F. (June 7, 2018). *Global personal luxury goods market expected to grow by 6-8 percent to €276-281b in 2018, driven by strong rebound in China*. Media Center. Bain & Co. Retrieved from https://www.bain.com/about/media-center/press-releases/2018/bain-spring-luxury-report-2018/

de Grammont, H. C. (2010). The evolution of agricultural production in the Mexican countryside: Productive concentration, poverty, and pluriactivity. *Andamios, 7*(13), 85-117. Retrieved from http://www.scielo.org.mx/scielo.php?pid=S1870 00632010000200005&script=sci_arttext&tlng=pt

Heine, K., & Phan, M. (2011). Trading-up mass-market goods to luxury products. *Australasian Marketing Journal, 19*(2), 108-114. doi:10.1016/j.ausmj.2011.03.001

Ilbery, B., & Kneafsey, M. (1999). Niche markets and regional specialty food products in Europe: Toward a research agenda. *Environment and Planning A, 31*(12), 2207-2222. doi:10.1068/a312207

Rapsomanikis, G. (2015). *The economic lives of smallholder farmers: An analysis based on household data from nine countries*. Food and Agriculture Organization of the United Nations (FAO). Retrieved from http://www.fao.org/3/a-i5251e.pdf

Reardon, T. (2005). *Retail companies as integrators of value chains in developing countries:*

Diffusion, procurement system change, and trade and development effects. Eschborn,

Germany: GTZ.

Teplensky, J. D., Kimberley, J. R., & Sanford Schwartz, J. (1993). Scope, timing and strategic adjustment in emerging markets: Manufacturing strategies and the case for MRI. *Strategic Management Journal*, *14*, 505-527. doi:10.1002/smj.4250140703

Temu, A. E., & Temu, A. A. (2005). High value agricultural products for smallholder markets in Sub-Saharan Africa: Trends, opportunities and research priorities. Paper presented at the *High Value Agricultural Products* Workshop, Cali, Colombia. Retrieved from http://www.fao.org/docs/eims/upload/210989/regional_ssa.pdf

Toften, K., & Hammervoll, T. (2009). Niche firms and marketing strategy: An exploratory study of internationally oriented niche firms. *European Journal of Marketing*, *43*(11/12), 1378-1391. doi:10.1108/03090560910989948

United States Department of Agriculture (USDA). (2019). *Specialty crops.* Author. Retrieved from https://www.ams.usda.gov/market-news/fruits-vegetables

United States Department of Agriculture (USDA). (n.d.). *USDA Definition of Specialty Crop.* Author. Retrieved from https://www.ams.usda.gov/sites/default/files/media/USDASpecialtyCropDefinition.pdf

APPENDIX I

RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS ROUND TWO INSTRUMENT

Researchers, Extension Educators, and Other Professionals
Round Two Instrument

Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico and Other Countries with Similar Needs

Directions: In Round One, you were asked to 1) identify the luxury high-value agricultural plant products that may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries; 2) identify the strengths, weaknesses, opportunities, and threats (SWOT) for *smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets; and 3) identify the *needs for smallholder farmers in rural areas to achieve competitive advantages in luxury markets*.

Below is a list of 188 items (statements) representing your views and that of other experts regarding smallholder farmers in Mexico and other countries to produce for luxury niche agricultural markets. Please read the statements and indicate your **level of agreement for each. *Note*. The statements are in no particular order.**

A 6-point, Likert-type scale is provided for you to indicate your level of agreement with each statement: **1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree 5 = Agree, 6 = Strongly Agree.** Please use the far right hand column to offer any additional thoughts or comments you may have about a particular item or statement. Space is also provided at the end of the instrument for you to share any additional thoughts, ideas, and/or concerns that may have been overlooked in Round One.

After you have responded to all the statements, please **click the submit button** located at the end of the questionnaire. If you have any questions regarding this study, please e-mail me at luisflo@okstate.edu

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Round One Statements	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
	Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?							
	Examples of Plant Products							
1	Arboreal, including nuts and fruits (e.g., almond, buddleja cordata, cashew, English walnut, eucalyptus, lime, macadamia nut, pecan nut, pinyon nut, pistachio)							
2	Culinary herbs (e.g., amaranth, *Dialium* [velvet tamarind], mint, oregano, sage, thyme)							
3	Edible fruits (producers of such, e.g., avocado, blackberry, blueberry, cranberry, *Cucurbita ficifolia* [fig-leaf gourd], currant, kiwi, pepper, pitahaya, *Prunus salicifolia* [cherry], quince, raspberry, strawberry, wild grape)							
4	Endemic species, including for local cuisine and popular culture (e.g., cinnamon, garlic, ginger, rosemary, saffron, tapirira, turmeric, vanilla)							
5	Medicinal (e.g., arnica, boldo, calendula, echinacea, mallow, maritime cineraria, melissa, tarragon, valerian, witch hazel)							
6	Nursery crops, including floral and foliage, tropical and other (e.g., anthurium, aspidistra, aster, bromeliad, *Byrsonima* [locust berry], chrysanthemum, *Eustoma* [lisianthus], fern, gardenia, holly, lavender, lemon croton plant, lily of the valley, liriope, maidenhair, myrtle, orchid, peony, perennial, philodendron, ruscus, tulip, *Zantedeschia aethiopica* [arum lily])							
7	Nutraceutical foods (plants that produce such)							
8	Precious woods (e.g., mahogany, teak)							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Round One Statements (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
9	Vegetables (e.g., artichoke, arugula, asparagus, bell pepper, celery, chile, endive, microgreens, onion, pickle, *Sechium edule* [chayote], specialty corn)							
10	Other (e.g., centurion plant, dracaena, ear smut, *Linum usitatissimum* [flax], mushroom, truffle)							
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?							
	Strengths							
11	Good attitude toward entrepreneurial projects							
12	Availability of materials and areas with natural resources other than land or water							
13	Microclimates							
14	Land							
15	Workforce							
16	General knowledge about the management of a specific resource							
17	Adequate communication channels							
18	Accessible locations							
19	Notions of distribution and commercialization							
20	Education and/or previous training							
21	Planning							
22	Existing community unity or willingness to achieve it							
23	Labor that can achieve specialization							
24	Water							
25	Value-addition techniques for their products							
26	Local knowledge							
27	Agrobiological diversity of species in their areas							
28	Availability of native plants							
29	General agricultural knowledge							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Strengths (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
30	Soil management							
31	Does not take much space to generate high profits							
32	High levels of production in various exports							
33	Experience of these producers							
34	Lack of competition							
35	Opportunities to develop a business							
36	Potential exists for small producers to apply controlled and economically viable biotechnological processes for some high-value crops							
37	Rural society eager for alternatives and proposals to improve their quality of life							
38	People with value for the land							
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?							
	Weaknesses							
39	No broad culture of consumption							
40	Ignorance of the natural resources present and their potential							
41	Shortage of economic and material support							
42	Altered natural resources							
43	Lack of advice and training							
44	Poor communication channels							
45	Distant location							
46	Lack of unity and community disinterest							
47	Loss of resources due to different causes							
48	Legal status of many properties							
49	Lack of organization to make cooperatives							
50	Use and transformation of products is unknown							
51	Lack of investment capital							
52	They do not want to work							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Weaknesses (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
53	They leave the land to emigrate to the cities							
54	They lose their traditions							
55	Illiteracy							
56	Poor social participation							
57	Limited resources							
58	Ignorance about products destined for luxury markets							
59	Lack of training in reproduction of species with high sales potential							
60	Not enough producers							
61	Specialized labor is needed							
62	Extended work for farmers							
63	Specialized education in the agricultural products is needed							
64	Lack of technology							
65	Difficulty getting seeds or supplies							
66	High agronomic knowledge to face production challenges due to pests, diseases, and/or other issues							
67	Lack of research and development							
68	Lack of assessment							
69	Marketing can be difficult							
70	Lack of transportation							
71	Limited preharvest stability or resistance to decay							
72	Reduced or limited postharvest shelf life							
73	Abuse/misuse chemical pesticides							
74	Poor vision of sustainability							
75	Lack of education							
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?							
	Opportunities							
76	Versatility for agro-industry transformation							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Opportunities (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
77	Need to use or take advantage of one or more regional resources							
78	If access exists to official regularization (rules & regulations)							
79	If access exists to financing channels							
80	Interest and openness of the community							
81	Access to education and training							
82	Communication channels							
83	Producers' locations							
84	Unsatisfied demand							
85	Possibility of sales by cooperatives							
86	Cheap labor							
87	Some plants can grow in small areas and require minimal care							
88	Potential for additional income							
89	Train housewives and youth to integrate them into the workforce							
90	Types of social organizations/support such as production cooperatives or family gardens							
91	Types of social organization such as government-supported grants, programs, trusts, and credit							
92	Ease of replication							
93	Market for organic products is growing							
94	Market for healthy products is growing							
95	International markets							
96	Less competition							
97	High quality products							
98	Specialized markets							
99	Trade agreements							
100	Grow plants for products that are well-priced							
101	Need exist for foods with nutritional and functional properties that, in addition to being part of the ingredients of traditional cuisine, have properties that help prevent diseases such as diabetes, high cholesterol, and vascular diseases							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Opportunities (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
102	Gourmet markets of international cuisine							
103	Use the research of Mexican scientists							
104	Very suitable climates							
105	Enough water is available in certain areas							
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?							
	Threats							
106	Recurrent climatic effects in the region, including intermittent impact on communication							
107	Community indifference/disinterest							
108	Plagues and diseases of plants							
109	Middlemen							
110	Loss of resources due to natural causes							
111	Loss of resources due to looting and other criminal acts							
112	Companies already established with capital							
113	Non-compliance with required quantities or volumes							
114	Better paying jobs outside the agri-food sector							
115	Highly bureaucratic processes for obtaining licenses							
116	Market variability for the products							
117	No nearby collection centers for the products							
118	No organizations exists or locals do not know how to effectively organize themselves							
119	Large-scale producers growing for export							
120	Deforestation							
121	Climate change							
122	High dependence on government subsidies							
123	Land use that endangers plant diversity							
124	No clear export legislation exists for many products							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Threats (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
125	Lack of economic incentives							
126	Increasing price of raw material							
127	Piracy and related acts of theft, e.g., intellectual property							
128	Unforeseen culturally related problems							
129	Phytosanitary restrictions							
130	Tariff restrictions							
131	Change in eating habits of younger generations							
132	Drug trafficking							
133	Abandonment of farming and producers migrating due to increasing crime, including acts of violence							
	Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?							
134	Necessary to organize small producers for the production and transformation of seed							
135	Know and value their natural resources and how to use such properly							
136	Internal organization and planning process that allows producers to visualize in tangible and economic ways what to produce at different times							
137	Consider the inputs required and receive related technical advice and training							
138	Know the full value chain of their product(s)							
139	Receive financial advice to form agreements benefiting the community							
140	Maintain an attitude of adaptation to changes and innovation							
141	Receive technical and administrative training							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Question 3 (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
142	Conduct good agricultural practices, preharvest, harvest, and postharvest							
143	Adopt technology for the transformation of tinctures, extracts, essential oils, and capsules							
144	Access to funds for the development of medium or high technology greenhouses							
145	Receive training on new practices and crops, as well as trading, sales, and after sales activities							
146	Participate in national and international fairs							
147	Participate in conferences							
148	Integrate the use of productive value chains with minimal reliance on middlemen							
149	Receive access to credit to finance projects under fair lending conditions							
150	Receive basic education							
151	Receive training about luxury niche markets							
152	Receive training about cooperatives and creation of value addition networks							
153	Acquire knowledge of current regulations regarding the use of forest resources							
154	Develop management plans							
155	Flexible laws to take advantage of non-timber forest resources							
156	Affiliate with programs that assure them a fair price for their products							
157	Obtain suppliers that can be trusted to provide quality inputs							
158	Acquire capital from NGOs							
159	Plan production better to maintain a stable level of product supply							
160	Benefit from research and development							
161	Adequate infrastructure							
162	Obtain certificates and keep related records							
163	Receive environmental education							
164	Conduct good practices							
165	Maintain ownership of intellectual property							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Question 3 (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
166	Recognition of and respect for cultural diversity, including producers' ancestral origins							
167	Promotion of human values							
168	Receive training on environmental, economic, social, and cultural sustainability							
169	Benefit from collaboration among academic, governmental, and other societal actors							
170	Promote the love of work							
171	Not be subjected to governmental paternalism							
172	Practice sustainable entrepreneurship							
173	Develop communion between themselves and consumers							
174	Conduct a community analysis regarding the viability of a production project							
175	Prepare short-, medium-, and long-term production goals							
176	Provide appropriate care for the environment							
177	Assess regional environmental conditions							
178	Gain access to international markets							
179	Practice multidisciplinary integration							
180	Acquire technical advice from extension agents to deal with pests and diseases							
181	Be less fearful of change							
182	Be willing to produce outside of their comfort zone							
183	Use inputs that contribute to the reduction of greenhouse gases (GHG)							
184	Apply technologies that restore natural resources such as soil, water, and local biodiversity							
185	Practice green agriculture							
186	Preserve traditional, ancestral knowledge for care of the land							
187	Not illegally extract resources							
188	Sustainable vision							

Please provide any additional comments that may be of value to this study.

APPENDIX J

PRODUCERS ROUND TWO INSTRUMENT

Producers
Round Two Instrument

Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico and Other Countries with Similar Needs

Directions: In Round One, you were asked to 1) identify the luxury high-value agricultural plant products that may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries; 2) identify the strengths, weaknesses, opportunities, and threats (SWOT) for *smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets; and 3) identify the *needs for smallholder farmers in rural areas to achieve competitive advantages in luxury markets*.

Below is a list of 94 items (statements) representing your views and that of other experts regarding smallholder farmers in Mexico and other countries to produce for luxury niche agricultural markets. Please read the statements and indicate your **level of agreement for each. *Note*. The statements are in no particular order.**

A 6-point, Likert-type scale is provided for you to indicate your level of agreement with each statement: **1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, 6 = Strongly Agree.** Please use the far right hand column to offer any additional thoughts or comments you may have about a particular item or statement. Space is also provided at the end of the instrument for you to share any additional thoughts, ideas, and/or concerns that may have been overlooked in Round One.

After you have responded to all the statements, please **click the submit button** located at the end of the questionnaire. If you have any questions regarding this study, please e-mail me at luisflo@okstate.edu

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Round One Statements	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
	Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?							
	Examples of Plant Products							
1	Condiments (culinary herbs and spices, e.g., mint, vanilla)							
2	Flowers (e.g., *Araceae* [arum], bamboo, gladiolus, orchids, roses)							
3	Vegetables (including fruits, e.g., asparagus, avocado, banana, black corn, blackberry, blue corn, chard, cherry tomato, chile, grape, kiwi, lettuce, mango, onion, orange, papaya, passion fruit, pumpkin, radish, raspberry, strawberry, tomato)							
4	Other (including *Cactaceae*, *Fungi*, nuts, trees, e.g., agave, *Cedrela odorata* [cedar], coffee, ear smut, lime, macadamia nut, maguey, mahogany, moringa, opuntia, pinyon nut, sugar cane)							
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?							
	Strengths							
5	Available workforce							
6	Closeness to the market							
7	Sustainable							
8	Directly linked to consumers							
9	Local production							
10	Available land							
11	Hard workers							
12	Fertile land							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Strengths (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
13	Available water							
14	Access to organic fertilizers							
15	Proximity to the countryside							
16	Planting knowledge							
17	Potential for protected designation of origin recognition							
18	Optimal environment							
19	National market stability							
20	Positive environmental impact							
21	Varieties of weather							
22	Cheap labor							
23	Cheap utility services where available							
24	Producer experience							
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?							
	Weaknesses							
25	Lack of organization to sell products							
26	Lack of knowledge about business administration							
27	Lack of education/training							
28	Low technical capacity							
29	High initial cost for these kinds of crops							
30	Lack of articulation of the entire value chain							
31	Weather extremes and inconsistencies							
32	Lack of business communication skills							
33	Limited resources							
34	Young people leaving to look for better opportunities							
35	Time required before harvesting							
36	Lack of well-managed economic support							
37	Limited markets							
38	Technology shortages							
39	Hard to get government support							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Weaknesses (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
40	Social culture							
41	Lack of capital							
42	Lack of fertilizers							
43	Lack of technical knowledge							
44	Lack of services							
45	Some products are highly seasonal							
46	Short shelf life of such products							
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?							
	Opportunities							
47	Unsatisfied demands (national)							
48	Unsatisfied demands (international)							
49	Sell to local markets and big companies							
50	People are searching for organic products							
51	NGOs and private institutions want to help rural areas							
52	Government support							
53	Large rural populations							
54	New products for the community							
55	Niches are being discovered							
56	Growth of local consumption							
57	Further development opportunities exist							
58	Better quality of life for the producers							
59	Higher incomes							
60	Need for food with improved nutritional properties							
61	Market for products offered in different presentations (e.g., value addition through packaging)							
62	If training is provided about how to grow different luxury plants							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
		1	**2**	**3**	**4**	**5**	**6**	**Comments**
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?							
	Threats							
63	Lack of capital							
64	Competition from large, foreign competitors with lower production costs							
65	Low interest of the government to work with farmers							
66	Plant diseases							
67	Middlemen							
68	Corporations/industrialized production							
69	Climate change							
70	Natural phenomena							
71	Migration of young people							
72	Lack of interest							
73	Globalization							
74	Organized crime							
75	Lack of appropriate facilities							
76	Lack of consumer awareness of products' origins							
	Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?							
77	Organization to sell through cooperatives							
78	Technical training and support							
79	Business/administrative training							
80	Youth training							
81	Awareness of the entire value chain and the role that each actor plays							

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree	
	Question 3 (cont'd)	**1**	**2**	**3**	**4**	**5**	**6**	**Comments**
82	Appropriate locations							
83	Appropriate technologies							
84	Support from authorities to reduce crop theft							
85	Teamwork							
86	Money management skills							
87	Create seed banks/reserves							
88	Maintain a high quality of products							
89	Add value to raw products							
90	Design a model to trigger or instigate development for potential producers							
91	Infrastructure							
92	Environmental education							
93	Standards and certifications							
94	Need to train and provide support, but the farmers should also invest, monetarily and otherwise, in the project to feel a part of it							

Please provide any additional comments that may be of value to this study.

APPENDIX K

RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS ROUND THREE INSTRUMENT

Round Three

Again, thank you very much for your continued involvement in our study!

The study's purpose is to investigate the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, such as high-value crops, ornamental flowers, and specialty produce. The results will assist in establishing current levels of demand for these products as well as experts' views on the potential of smallholder farmers to meet such demand, with the intent of developing rural economies to diminish poverty and improve livelihoods in Mexico and elsewhere. **Your views on this topic are critical to the quality of our results**!

Directions

In Round Two, your level of agreement was indicated for **188 items** related to smallholder farmers in Mexico and other countries producing for luxury niche agricultural markets. Based on your feedback, 91 items reached *consensus of agreement*: More than three-fourths of the panel chose *Agree* (5) or *Strongly Agree* (6) for these items.

In Round Three, we are asking you to indicate your level of agreement for the 72 items that at least one-half but less than three-fourths of the panel selected *Agree* (5) or *Strongly Agree* (6) during Round Two. The percentages of panelists who indicated *Agree* (5) or *Strongly Agree* (6) for the 72 items are provided for your consideration.

In this third round, please indicate either *Agree* or *Disagree* regarding whether the item should be added to the list of those reaching consensus of agreement in round two. The opportunity to offer comments explaining your view is available for each item in the

far righthand column, and space for additional comments overall is provided at the end of the questionnaire.

After you have responded to all items, please click the submit button located at the bottom of your screen. If you have any questions regarding this study, please e-mail me at luisflo@okstate.edu

Thank you for your time and participation!

Sincerely,

Luis A. Flores Porras

Round Three Questionnaire: Researchers Panel
N=72

	Remaining items from Round Two that you are asked to reconsider during this Round.	**% agreement reached in Round Two**	**Disagree**	**Agree**	**Comments explaining your view**
	Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?				
	Examples of Plant Products				
1	Arboreal, including nuts and fruits (e.g., almond, buddleja cordata, cashew, *Dialium* [velvet tamarind], English walnut, eucalyptus, lime, macadamia nut, pecan nut, pinyon nut, pistachio)	66.67			
2	Culinary herbs (e.g., amaranth, mint, oregano, sage, thyme)	73.33			
3	Nutraceutical foods (plants that produce such)	66.67			
4	Precious woods (e.g., mahogany, teak)	60.00			
5	Other (e.g., centurion plant, dracaena, ear smut, *Linum usitatissimum* [flax], mushroom, truffle)	60.00			
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?				
	Strengths				
6	Good attitude toward entrepreneurial projects	53.33			
7	Workforce	53.33			
8	Existing community unity or willingness to achieve it	53.33			
9	Labor that can achieve specialization	66.67			
10	Water	53.33			
11	Agrobiological diversity of species in their areas	73.33			
12	Availability of native plants	73.33			
13	Experience of these producers	53.33			
14	Lack of competition	53.33			
15	Opportunities to develop a business	53.33			

	Remaining items from Round Two that you are asked to reconsider during this Round.	% agreement reached in Round Two	Disagr	Agree	Comments explaining your view
	Weaknesses				
16	No broad culture of consumption	66.67			
17	Shortage of economic and material support	60.00			
18	Altered natural resources	73.33			
19	Distant location	73.33			
20	Lack of unity and community disinterest	73.33			
21	Legal status of many properties	66.67			
22	They lose their traditions	60.00			
23	Illiteracy	53.33			
24	Poor social participation	60.00			
25	Limited resources	73.33			
26	Specialized education in the agricultural products is needed	60.00			
27	Difficulty getting seeds or supplies	53.33			
28	High agronomic knowledge to face production challenges due to pests, diseases, and/or other issues	60.00			
29	Lack of research and development	66.67			
30	Marketing can be difficult	66.67			
31	Lack of transportation	66.67			
32	Limited preharvest stability or resistance to decay	60.00			
33	Reduced or limited postharvest shelf life	73.33			
34	Lack of education	73.33			
	Opportunities				
35	Versatility for agro-industry transformation	53.33			
36	If access exists to financing channels	60.00			
37	Interest and openness of the community	66.67			
38	Access to education and training	60.00			
39	Communication channels	53.33			
40	Producers' locations	53.33			
41	Types of social organizations/support such as production cooperatives or family gardens	66.67			
42	Ease of replication	66.67			
43	High quality products	66.67			
44	Trade agreements	66.67			
45	Grow plants for products that are well-priced	73.33			

	Remaining items from Round Two that you are asked to reconsider during this Round.	% agreement reached in Round Two	Disagree	Agree	Comments explaining your view
	Opportunities (cont'd)				
46	Need exist for foods with nutritional and functional properties that, in addition to being part of the ingredients of traditional cuisine, have properties that help prevent diseases such as diabetes, high cholesterol, and vascular diseases	66.67			
47	Enough water is available in certain areas	66.67			
	Threats				
48	Community indifference/disinterest	60.00			
49	Plagues and diseases of plants	60.00			
50	Loss of resources due to looting and other criminal acts	73.33			
51	Companies already established with capital	53.33			
52	Non-compliance with required quantities or volumes	53.33			
53	Better paying jobs outside the agri-food sector	60.00			
54	Market variability for the products	60.00			
55	No nearby collection centers for the products	66.67			
56	No organizations exist or locals do not know how to effectively organize themselves	73.33			
57	Large-scale producers growing for export	57.14			
58	High dependence on government subsidies	73.33			
59	Land use that endangers plant diversity	73.33			
60	No clear export legislation exists for many products	73.33			
61	Piracy and related acts of theft, e.g., intellectual property	60.00			
62	Unforeseen culturally related problems	66.67			
63	Phytosanitary restrictions	60.00			
64	Tariff restrictions	60.00			
65	Change in eating habits of younger generations	66.67			
66	Drug trafficking	53.33			
67	Abandonment of farming and producers migrating due to increasing crime, including acts of violence	73.33			

	Remaining items from Round Two that you are asked to reconsider during this Round.	**% agreement reached in Round Two**	**Disagree**	**Agree**	**Comments explaining your view**
	Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?				
68	Participate in conferences	60.00			
69	Receive basic education	73.33			
70	Flexible laws to take advantage of non-timber forest resources	66.67			
71	Promote the love of work	66.67			
72	Gain access to international markets	60.00			

APPENDIX L

PRODUCERS ROUND THREE INSTRUMENT

Round Three

Again, thank you very much for your continued involvement in our study!

The study's purpose is to investigate the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, such as high-value crops, ornamental flowers, and specialty produce. The results will assist in establishing current levels of demand for these products as well as experts' views on the potential of smallholder farmers to meet such demand, with the intent of developing rural economies to diminish poverty and improve livelihoods in Mexico and elsewhere. **Your views on this topic are critical to the quality of our results**!

Directions

In Round Two, your level of agreement was indicated for **94 items** related to smallholder farmers in Mexico and other countries producing for luxury niche agricultural markets. Based on your feedback, 70 items reached *consensus of agreement*: More than three-fourths of the panel chose *Agree* (5) or *Strongly Agree* (6) for these items.

In Round Three, we are asking you to indicate your level of agreement for the 24 items that at least one-half but less than three-fourths of the panel selected *Agree* (5) or *Strongly Agree* (6) during Round Two. The percentages of panelists who indicated *Agree* (5) or *Strongly Agree* (6) for the 24 items are provided for your consideration.

In this third round, please indicate either *Agree* or *Disagree* regarding whether the item should be added to the list of those reaching consensus of agreement in round two. The opportunity to offer comments explaining your view is available for each item in the

far righthand column, and space for additional comments overall is provided at the end of the questionnaire.

After you have responded to all items, please click the submit button located at the bottom of your screen. If you have any questions regarding this study, please e-mail me at luisflo@okstate.edu

Thank you for your time and participation!

Sincerely,

Luis A. Flores Porras

Round Three Questionnaire: Producers Panel
N=24

	Remaining items from Round Two that you are asked to reconsider during this Round.	**% agreement reached in Round Two**	**Disagree**	**Agree**	**Comments explaining your view**
	Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?				
	Examples of Plant Products				
1	Condiments (culinary herbs and spices, e.g., mint, vanilla)	71.43			
	Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?				
	Strengths				
2	Closeness to the market	71.43			
3	Sustainable	71.43			
4	Directly linked to consumers	71.43			
5	Available water	64.29			
6	Access to organic fertilizers	64.29			
7	Planting knowledge	64.29			
8	Potential for protected designation of origin recognition	71.43			
9	Optimal environment	69.23			
10	National market stability	64.29			
11	Producer experience	64.29			
	Weaknesses				
12	Low technical capacity	71.43			
13	Lack of fertilizers	64.29			
14	Lack of technical knowledge	71.43			
	Opportunities				
15	Government support	71.43			
16	New products for the community	71.43			

	Remaining items from Round Two that you are asked to reconsider during this Round.	% agreement reached in Round Two	Disagree	Agree	Comments explaining your view
	Threats				
17	Low interest of the government to work with farmers	64.29			
18	Plant diseases	71.43			
19	Natural phenomena	71.43			
20	Lack of interest	71.43			
21	Globalization	57.14			
22	Lack of appropriate facilities	71.43			
23	Lack of consumer awareness of products' origins	64.29			
	Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?				
24	Technical training and support	64.29			

APPENDIX M

PERSONAL AND PROFESSIONAL CHARACTERISTICS INSTRUMENT

Panelist's Information Both Panels

The following questions will help us describe the panelists who participated in the study.

a. Name_____.

b. Age _____.

c. Sex: Male Female Other Prefer not to indicate

d. Race/Ethnicity:

African-American Alaska American Indian Asian Caucasian Hispanic/Latino Native/Pacific Islander Other Prefer not to indicate

e. Position/title:

f. Number of years worked as:
Producer: _____.
Researcher: _____.
Extension educator: _____.
Other (please describe):
_____.

g. Education/Highest degree earned to date:

Associate's degree(s) & area(s) of study:
_____
_____.

Bachelor's degree(s) & area(s) of study:
_____
_____.

Master's degree(s) & area(s) of study:
_____
_____.

Doctoral degree(s) & area(s) of study:
_____
_____.

Other significant professional development or training experiences related to this study (please describe):

h. Preferred email address for this study:

i. Preferred telephone number(s) if willing to be contacted by the researcher for follow up:

j. Nationality/Country(ies) of Citizenship:

k. Place of Employment:

Self Employed: Yes/No
Semi-retired or Retired: Yes/No

l. If you have a business enterprise related to this study, please name and describe it: _____ _____ _____ _____ _____.

m. What do you produce for sale? _____ _____.

n. Other than yourself, how many workers do you employ?

Full-time: _____.
Part-time: _____.
Casual (i.e., irregular or seasonal): _____.

APPENDIX N

FOLLOW-UP REMINDER, ROUND ONE RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS

Dear participant:

Thank you for agreeing to participate in the study, “Experts’ Views on the Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico and Other Nations with Similar Needs: A Double-Panel Delphi Study.” If you have not finished the questionnaire, please take a few minutes to complete it.

If you have any questions about this study, please email me at Luisflo@okstate.edu.

Again, thank you!

Luis A. Flores
Ph.D. Candidate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
Agriculture Hall
830-320-6808

APPENDIX O

FOLLOW-UP REMINDER, ROUND ONE PRODUCERS

Dear participant:

Thank you for agreeing to participate in the study, “Experts’ Views on the Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico and Other Nations with Similar Needs: A Double-Panel Delphi Study.” If you have not finished the questionnaire, please take a few minutes to complete it.

If you have any questions about this study, please email me at Luisflo@okstate.edu.

Again, thank you!

Luis A. Flores
Ph.D. Candidate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
Agriculture Hall
830-320-6808

APPENDIX P

SECOND FOLLOW-UP REMINDER, ROUND ONE RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS

Dear participant:

Thank you for agreeing to participate in the study, “Experts’ Views on the Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico and Other Nations with Similar Needs: A Double-Panel Delphi Study.” This is just a reminder regarding the survey you received. It is extremely important to the success of this study that you complete the questionnaire.

If you have any questions about this study, please email me at Luisflo@okstate.edu.

Again, thank you!

Luis A. Flores
Ph.D. Candidate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
Agriculture Hall
830-320-6808

APPENDIX Q

SECOND FOLLOW-UP REMINDER, ROUND ONE PRODUCERS

Dear participant:

Thank you for agreeing to participate in the study, “Experts’ Views on the Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico and Other Nations with Similar Needs: A Double-Panel Delphi Study.” This is just a reminder regarding the survey you received. It is extremely important to the success of this study that you complete the questionnaire.

If you have any questions about this study, please email me at Luisflo@okstate.edu.

Again, thank you!

Luis A. Flores
Ph.D. Candidate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
Agriculture Hall
830-320-6808

APPENDIX R

FOLLOW-UP REMINDER, ROUND TWO RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS

Dear participant:

Thank you for your participation in the study, "**Experts' Views on the Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico and Other Nations with Similar Needs: A Double-Panel Delphi Study."** In this email, you will find the link to the survey instrument for the Second Round, please take a few minutes to complete the survey.

In the First Round, 188 articles (statements) were identified that represent their views and those of other experts regarding the potential that exists for small farmers in Mexico and other countries with similar needs to grow agricultural products destined for luxury markets.

In this Round, rate your level according to each statement.

Follow the link https://okstatecasnr.az1.qualtrics.com/jfe/form/SV_ezddJJT1EukzKWV to access the second-round survey instrument.

If you have any questions about this study, please email me at Luisflo@okstate.edu.

Please complete the second-round survey instrument before January 20, 2020.

Thank you very much for your participation and congratulations!

Sincerely,

Luis A. Flores
Ph.D. Candidate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
Agriculture Hall
830-320-6808
Luisflo@okstate.edu

APPENDIX S

FOLLOW-UP REMINDER, ROUND TWO PRODUCERS

Dear participant:

Thank you for your participation in the study, "**Experts' Views on the Potential of Luxury Niche Agricultural Products for Rural Economic Development in Mexico and Other Nations with Similar Needs: A Double-Panel Delphi Study."** In this email, you will find the link to the survey instrument for the Second Round, please take a few minutes to complete the survey.

In the First Round, 94 articles (statements) were identified that represent their views and those of other experts regarding the potential that exists for small farmers in Mexico and other countries with similar needs to grow agricultural products destined for luxury markets.

In this Round, rate your level according to each statement.

Follow the link https://okstatecasnr.az1.qualtrics.com/jfe/form/S_5lJ7YKwatBk7lz to access the second-round survey instrument.

If you have any questions about this study, please email me at Luisflo@okstate.edu.

Please complete the second-round survey instrument before January 20, 2020.

Thank you very much for your participation and congratulations!

Sincerely,

Luis A. Flores
Ph.D. Candidate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
Agriculture Hall
830-320-6808
Luisflo@okstate.edu

APPENDIX T

FOLLOW-UP REMINDER, ROUND THREE RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS

Thank you very much for your continued involvement in our study to investigate the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, such as high-value crops, ornamental flowers, and specialty produce. The results will assist in establishing current levels of demand for these products as well as experts' views on the potential of smallholder farmers to meet such demand, with the intent of developing rural economies to diminish poverty and improve livelihoods in Mexico and elsewhere. **Your views on this topic are critical to the quality of our results**!

In this email, you will find the link to the Third Round instrument, please take a few minutes to complete it.

Follow the link: https://okstatecasnr.az1.qualtrics.com/jfe/form/S_2lBxPZUGRBtoF

If you have any questions about this study, please email me at Luisflo@okstate.edu.

Again, thank you very much for your constant participation!

Sincerely,

Luis A. Flores
Ph.D. Candidate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
Agriculture Hall
830-320-6808

APPENDIX U

FOLLOW-UP REMINDER, ROUND THREE PRODUCERS

Thank you very much for your continued involvement in our study to investigate the potential of micro and small agricultural producers to successfully grow products intended for luxury niche markets, such as high-value crops, ornamental flowers, and specialty produce. The results will assist in establishing current levels of demand for these products as well as experts' views on the potential of smallholder farmers to meet such demand, with the intent of developing rural economies to diminish poverty and improve livelihoods in Mexico and elsewhere. **Your views on this topic are critical to the quality of our results**!

In this email, you will find the link to the Third Round instrument, please take a few minutes to complete it.

Follow the link: https://okstatecasnr.az1.qualtrics.com/jfe/form/S_24B6ZgRxe0B4ah

If you have any questions about this study, please email me at Luisflo@okstate.edu.

Again, thank you very much for your constant participation!

Sincerely,

Luis A. Flores
Ph.D. Candidate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
Agriculture Hall
830-320-6808

APPENDIX V

RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS

DELPHI PANEL: QUALITATIVE DATA

ROUND TWO

Researchers, Extension Educators, or Other Professionals Panel: Panelists' Comments as provided during Round Two of the Study (N =108)

Items	Comments
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (2 Categories & 2 Examples)	
Nutraceutical foods (plants that produce such)	1) This is an unstable group of agricultural products in terms of their effectiveness. The physiological and/or nutritional benefits of them and therefore their potential to generate continuous and lasting gains are not proven
Precious woods (e.g., mahogany, teak)	2) However, these products require permits, studies and monitoring of a management plan according to the conditions of the environment in which they are located
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths	
Good attitude toward entrepreneurial projects	3)From the outset it will not always be that way and much will depend on convincing them. They must be explained a project, advantages, disadvantages, goals and benefits; 4) many producers want to receive support to start if they don't have an attitude
Availability of materials and areas with natural resources other than land or water	5) That availability would be complementary to those cases with land and water; 6) Many times, they do not have the materials to start or maintain the crops

Microclimates	7) They offer advantages for some crops that require special conditions; 8) giving them clear training that they can achieve it
Land	9) Having some land(s) offers advantages to achieve goals
Workforce	10) It is convenient, it can be a small or variable number of people; 11) many producers emigrate to big cities or other countries to look for better opportunities
General knowledge about the management of a specific resource	12) It is desirable, but not indispensable. Advice can be used; 13) not everyone knows the procedures
Adequate communication channels	14) There are currently many changes in management
Accessible locations	15) It would be convenient, but this can be relative and sometimes the access may not be so direct
Notions of distribution and commercialization	16) Desirable but advice can be sought; 17) they don't know and the coyotes are on the prowl, to pay little and resell
Education and/or previous training	18) It is very poor for these areas
Planning	19) There is no planning
Existing community unity or willingness to achieve it	20) In some communities
Does not take much space to generate high profits	21) It is a notion dependent on the type of product that is handled
High levels of production in various exports	22) It is a moot concept. High production does not guarantee successful export. The export is not synonymous of profit greater than that obtained from the domestic market with wide coverage; 23) With training
Experience of these producers	24) The experience in production represents a solid base for economic growth
Lack of competition	25) Lack of competition is a relative and temporary condition that appears to be an advantage. What can favor and strengthen a company is just competition
Opportunities to develop a business	26) They are important if they occur, but you should also seek to create them
Potential exists for small producers to apply controlled and economically viable biotechnological processes for some high-value crops	27) It may occur but it is a somewhat infrequent possibility in the reality of small producers

Rural society eager for alternatives and proposals to improve their quality of life	28) Desirable
People with value for the land	29) Very desirable and important

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses

No broad culture of consumption	30) It is necessary to expand education and disseminate more knowledge of national products and their uses
Ignorance of the natural resources present and their potential	31) This still exists, but is modified to the extent that studies on resources and their importance are expanded and disseminated
Shortage of economic and material support	32) These are important aspects but it has already been discussed that strategies for reversing these conditions can be sought
Distant location	33) In some cases, it is inconvenient; 34) in others, it can be resolved
Lack of unity and community disinterest	35) It occurs
Legal status of many properties	36) Property regularization should continue and be promoted permanently
Lack of organization to make cooperatives	37) Cooperatives can be useful but not indispensable in all cases
They do not want to work	38) It cannot be generalized in all cases.
They leave the land to emigrate to the cities	39) Yes, in a few cases
Illiteracy	40) It is possible to correct it
Limited resources	41) It is possible to introduce some with high value
Ignorance about products destined for luxury markets	42) It can reverse and become an opportunity
Lack of training in reproduction of species with high sales potential	43) Training is possible and should be extended
Not enough producers	44) Potentially there may be them through training programs
Specialized labor is needed	45) Training can reverse this situation
Extended work for farmers	46) Not in general for Mexicans
Specialized education in the agricultural products is needed	47) To some degree and again, training can be offered to those who wish to obtain it
Difficulty getting seeds or supplies	48) It is usually not so

High agronomic knowledge to face production challenges due to pests, diseases, and/or other issues	49) Knowledge is necessary to address these problems, it can be basic or very specialized, it depends on the seriousness of the problem
Lack of research and development	50) In countries like ours, research and development require more attention
Lack of transportation	51) It depends on the absolute lack of transport or the lack of own transport. On the other hand, public transport can be helpful

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities

Versatility for agro-industry transformation	52) Important for cases in which it may occur.
If access exists to official regularization (rules & regulations)	53) Technicians are needed that in this sense support
If access exists to financing channels	54) However, although it is a desirable opportunity for many, the reality is different and strategies to initiate and reinforce gradual growth must be sought; 55) I'm not sure about government changes now
Access to education and training	56) Very low
Communication channels	57) There are only a few
Cheap labor	58) While it is attractive to producers and investors, it is not the best in terms of personnel that can be integrated into the company's mission and make it more efficient
Types of social organizations/support such as production cooperatives or family gardens	59) There are government changes
Types of social organization such as government-supported grants, programs, trusts, and credit	60) Acceptable, but must be observed by the interested parties as temporary supports, subject to recovery by organizations or agencies; 61) there are changes at least in Mexico
International markets	62) Access to these markets involves products with quality control, promotion, processing and transportation facilities.

	The country must facilitate them and not hinder them
Less competition	63) It can work as an opportunity temporarily speaking. The point in strengths has already been discussed
Specialized markets	64) Not for any case. It implies experience in handling quality products
Trade agreements	65) Whenever weaknesses and strengths of participants are analyzed with the intention of correcting the former and maintaining the latter
Need exist for foods with nutritional and functional properties that, in addition to being part of the ingredients of traditional cuisine, have properties that help prevent diseases such as diabetes, high cholesterol, and vascular diseases	66) Provided that these properties can be guaranteed and do not fall into promotions and advertising without sustainable bases; 67) meet the requirements of the food safety modernization act
Gourmet markets of international cuisine	68) Very convenient for both national and international level
Use the research of Mexican scientists	69) Highly desirable among other investigations
Enough water is available in certain areas	70) Despite this, it requires supervision and monitoring of water quality

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Threats

Recurrent climatic effects in the region, including intermittent impact on communication	71) The frequency of these events can increase with climate change
Community indifference/disinterest	72) It may not be widespread
Plagues and diseases of plants	73) There are possible solutions
Middlemen	74) It can be a threat if they are allowed to intervene freely, if the community is organized, they can be removed
Loss of resources due to natural causes	75) Linked in some way to the recurrence of climatic events
Loss of resources due to looting and other criminal acts	76) Possible in the field and insecurity in our country
Companies already established with capital	77) It is not a condition that prevents developing products not considered by these companies.

Non-compliance with required quantities or volumes	78) It is a risk
Better paying jobs outside the agri-food sector	79) Especially in the rural region of the South of the country, it is difficult to find well-paid salaries; 80) It can happen
Highly bureaucratic processes for obtaining licenses	81) It is based on the ignorance and education of the producers; 82) Those are factors to overcome
Market variability for the products	83) It happens
No nearby collection centers for the products	84) Those are real factors
No organizations exists or locals do not know how to effectively organize themselves	85) It can be resolved with advice
Large-scale producers growing for export	86) If you are a small but efficient producer, you can seek to grow or ally temporarily with the largest or others

Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?

Necessary to organize small producers for the production and transformation of seed	87) For the production itself, not necessarily for the transformation for which they may not agree
Know and value their natural resources and how to use such properly	88) That is already a big step
Internal organization and planning process that allows producers to visualize in tangible and economic ways what to produce at different times	89) Highly desirable
Maintain an attitude of adaptation to changes and innovation	90) In general, yes, but there will be more traditional sectors of the population in the management of their resources that need to be taken into account
Access to funds for the development of medium or high technology greenhouses	91) The availability of funds, is not consistent at present, the development of strategies that allow the installation by phases of greenhouses of these types is required
Participate in conferences	92) Forming a group of attendees to forums and conferences between members of the community and in which

	interested students, technicians or other people capable of transmitting new ideas and advances to be tested, is recommended
Receive access to credit to finance projects under fair lending conditions	93) Desirable, is not something that is readily available
Receive training about cooperatives and creation of value addition networks	94) It would be interesting to detect successful cooperatives and organizations to share their experiences with new producers
Flexible laws to take advantage of non-timber forest resources	95) However, this flexibility is not yet in our country and must be sought
Benefit from collaboration among academic, governmental, and other societal actors	96) Attending forums and having contact with these people will be useful to benefit the productive activities of the communities
Prepare short-, medium-, and long-term production goals	97) They are very important, as are the tasks to achieve them
Gain access to international markets	98) However, it is important to influence the national market first, then the international one
Acquire technical advice from extension agents to deal with pests and diseases	99) Counseling is decisive, especially if it seeks to combat pests and diseases by using environmentally friendly products
Be less fearful of change	100) It would be necessary to make previous diagnoses on resistance to change
Additional comments	101) The Mexican regulations for the management of non-timber forest resources are obsolete and require an update; 102) the realization of the use within sustainability criteria is essential for small producers in rural areas of Mexico to achieve benefits in their community and forests based on the management of their resources; 103) I believe that small groups of producers should be supported with the necessary tools to obtain optimal and tangible results that are seedbeds to encourage other groups 104) To get fair prices for the community products; 105) Although it is perhaps the most complex, balances should be sought: between competitiveness and the use of natural

	resources; 106) the use of technology and the conservation of traditional practices; 107) financing and non-dependence on government support. In many of these species regulation is needed, or the existing one is excessive for the type of crops that are intended to be harvested. Even in species listed at risk, it is very difficult for communities to obtain the necessary permits for propagation and sustainable exploitation. Not only technical and financial support are required, but also in the management of permits, registrations, certificates and other legal and regulatory issues; 108) The statements expressed and analyzed in this survey will be able to integrate those that could be proposed to be followed for the incorporation, of agricultural products that could be generated in rural communities - both for their characteristics and quality, - to niches of luxury markets. However, the relativity of these proposals or actions recommended in the face of the social, cultural, environmental and wealth of resources of the communities makes them conform to a set of application lines that require selection and combination to solve aspects of production of the chosen vegetables, according to the community(s) to develop them as needed

APPENDIX W

RESEARCHERS, EXTENSION EDUCATORS, OR OTHER PROFESSIONALS

DELPHI PANEL: QUALITATIVE DATA

ROUND THREE

Researchers, Extension Educators, or Other Professionals Panel: Panelists' Comments as provided during Round Three of the Study (N = 47)

Items	Comments
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (5 Categories & 23 Examples)	
Arboreal, including nuts and fruits (e.g., almond, buddleja cordata, cashew, Dialium [velvet tamarind], English walnut, eucalyptus, lime, macadamia nut, pecan nut, pinyon nut, pistachio)	1) They can also occur in areas with problems of lack of water
Culinary herbs (e.g., amaranth, mint, oregano, sage, thyme)	2) It has a good market, especially in certain specialized niches; 3) It would be necessary to previously carry out a market study for the consumption of these species, their niche being surely very limited to new trends in consumers of healthy products or ways of life totally different from the bulk of the population; 4) Not all
Nutraceutical foods (plants that produce such)	5) This market is growing exponentially; 6) It is necessary to stop the manifestation of diseases; 7) There is an interest in health care for a high purchasing power
Precious woods (e.g., mahogany, teak)	8) There is an unmet demand, but it requires compliance with sustainability certificates; 9) It's a good idea, but it takes many years
Other (e.g., centurion plant, dracaena, ear smut, Linum usitatissimum [flax], mushroom, truffle)	In general, more promotion is required to improve the demand for these products; 10) Mushrooms are an excellent food
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	

Strengths	
Good attitude toward entrepreneurial projects	11) Although it is not widespread; 12) The good attitude towards entrepreneurial projects will depend, in turn, on a good relationship between members of a community, the respect of the project for its conditions and resources, as well as the feasibility and benefits that it can offer them
Workforce	13) Specialized technicians and personnel and training of local capacities are required
Existing community unity or willingness to achieve it	14) Unfortunately, in rural areas and due to the effect of government assistance, the existing paradigms of working in cooperatives and common projects must first be broken
Water	15) Depending on the region, but in general hydraulic infrastructure is required; 16) Although there is a large amount of natural resources in rural areas, access to water is generally not guaranteed for the entire population
Agrobiological diversity of species in their areas	17) It is of the greatest strengths; 18) Only in areas under humid and sub-humid climates
Availability of native plants	19) The use of native plants can favor their conservation
Experience of these producers	20) There are isolated cases of small rural producers that have developed marketing strategies for their products
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Weaknesses	
No broad culture of consumption	21) In general, consumption is local
High agronomic knowledge to face production challenges due to pests, diseases, and/or other issues	22) The lack of sufficient agronomic knowledge constitutes a weakness, but it is not, a high knowledge of the subject. There is cultural knowledge in the

	communities that can help to overcome production challenges or, in need, they can access agronomic advisory services of an adequate level to solve problems that arise
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Opportunities	
Versatility for agro-industry transformation	23) In some cases, but in many of these crops, further study is required; 24) Generally, resistance to change makes small producers reject new ideas
If access exists to financing channels	25) This is one of the main challenges
Interest and openness of the community	26) It is in these communities where these types of projects should be applied
Access to education and training	27) The educational level in these communities is generally limited
Communication channels	28) In many communities there is no access to telecommunications
Producers' locations	29) Some communities are difficult to access
Ease of replication	30) There is not enough experience in the transfer of utility models or technological packages in the agricultural environment
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Threats	
Market variability for the products	31) Many of these products are highly valued, but in small niches
Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?	

Participate in conferences	32) The creation of local capacities is required, through courses and workshops
Receive basic education	33) It is certainly a challenge; 34) The education of many of these communities is limited
Promote the love of work	35) The communities have this dedication, that is why the crops have been preserved. But awareness of society is needed.
Gain access to international markets	36) Not necessarily, first manage fair prices, then supply the national market and finally seek international alternatives; 37) Although the national market may also be of interest, especially for the start of projects.
Other comments	38) Very interesting work, since it gives a tangible idea of the needs of the agricultural market for products considered luxury, and that if they can be improved, it is an important benefit for its economy; 39) I believe that there should be joint actions, advisory, training, financing, technical assistance, market research, agro-industrial processes for the transformation of products, and with close participation by the community; 40) In my opinion, if there is no local involvement, there will be no long-term success; 41) I think it is a great study and that it can have a great impact. Congratulations!; 42) There is a lack of interest in promoting national agricultural production in the country with an emphasis on satisfying the domestic market, and therefore, they allow small producers to do whatever they can according to their personal resources and interests. If it is possible to awaken interest in forming groups of producers with common interests, this type of luxury product market may be an alternative for them to improve their standard of living; 43) I find the items that have come out of the previous rounds very interesting. I consider it fundamental to consider that education should be at the center of this initiative; 44) Interesting, to support small

	producers; 45) In my opinion, the establishment of collaborative relationships between producers and the academic sector will be a factor that contributes to the success of production programs such as those considered here; 46) This, on the other hand, would reflect the social impact of the research work; 47) The study addresses important aspects in the proposal of productive projects aimed at small agricultural producers with crops for niches in luxury markets. The analysis that is made of strengths, opportunities, weaknesses, threats and competitive advantages, gathers necessary elements to consider for the sustainability and permanence of a project. In any proposal, respect for the community, its knowledge and resources, rather than the imposition of current scientific and technological procedures that can be gradually shown, tested and assimilated, are decisive factors in the acceptance and development of the project. In all of this, the participation of multidisciplinary work teams plays a decisive role and makes it possible to assess the role of universities as facilitating organizations for the development of rural communities.

APPENDIX X

PRODUCERS DELPHI PANEL: QUALITATIVE DATA

ROUND TWO

Producers Panel: Panelists' Comments as provided during Round Two of the Study (N = 47)

Item	Comments
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (4 Categories & 5 Examples)	
Condiments (culinary herbs and spices, e.g., mint, vanilla)	1) Totally
Flowers (e.g., *Araceae* [arum], bamboo, gladiolus, orchids, roses)	2) Of course; 3) It is too expensive to grow flowers
Vegetables (including fruits, e.g., asparagus, avocado, banana, black corn, blackberry, blue corn, chard, cherry tomato, chile, grape, kiwi, lettuce, mango, onion, orange, papaya, passion fruit, pumpkin, radish, raspberry, strawberry, tomato)	4) Those are not luxury items but there is demand for them
Other (including Cactaceae, Fungi, nuts, trees, e.g., agave, Cedrela odorata [cedar], coffee, ear smut, lime, macadamia nut, maguey, mahogany, moringa, opuntia, pinyon nut, sugar cane)	5) They need some more marketing and added value, but there is market and potential
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths	
Closeness to the market	6) With appropriate transportation to markets, refrigeration, cold chain, etc.
Sustainable	7) Local market, local production
Directly linked to consumers	8) Totally
Hard workers	9) Training and strengthening of human resources are required

Fertile land	10) Sometimes the best soil is not necessary (hydrological, nurseries, etc.)
Available water	11) Depending on the region, it can be difficult to get water, for example in Sonora the water is harder to reach than in Puebla
Planting knowledge	12) Strengthening knowledge, technical capacity is required
Potential for protected designation of origin recognition	13) It is important to create a designation of origin and value it, not only as a marketing tool but also as a general empowerment and valorization of the region, psychologically; 14) I believe that when it comes to foods such as fruits and vegetables, it is not so easy to get designations of origin
National market stability	15) In recent years in the national market it has not been the one that gives the most profits due to such high costs, in addition the national market can saturate very easily
Varieties of weather	16) In recent years the climate has made the seasons of production change, and can affect from the quantities produced to the value that production has in the market due to more dates

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Weaknesses

Lack of organization to sell products	17) Sectoral articulation, organization and leadership is required
Lack of knowledge about business administration	18) Shoemaker to your shoes. Producers need support in other areas such as marketing, administration, safety, but all earning fairly. Not at the expense of poor producers as it is almost always the case
High initial cost for these kinds of crops	19) Nor is it insurmountable, often it is a small investment to start
Lack of articulation of the entire value chain	20) Totally agree; 21) Team thinking for the benefit of all

Lack of business communication skills	22) Communication and business mentality
Limited resources	23) They can be obtained, when you want you can
Young people leaving to look for better opportunities	24) Many young people leave because these kinds of opportunities are not generated in their communities
Technology shortages	25) It is important to provide new generations with technology so that they can act without impediment in the modern world
Social culture	26) Business mentality, positive attitude that seeks to overcome problems or make problems a new business opportunity
Lack of services	27) Supporting service
Some products are highly seasonal	28) But you can plan to take this into account and plan accordingly
Short shelf life of such products	29) Transportation, logistics chain is important and part of the success of this type of projects

Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?

Opportunities

Unsatisfied demands (national)	30) Many of these products are imported; In recent years, local consumption has grown, to support pollution reduction and support local producers
Unsatisfied demands (international)	31) First local demand, neighboring countries, then global market. For a small producer, it is very difficult to stay on the international market, since the quantities produced as the price of the product affect, and if they cannot produce enough this affects them
New products for the community	32) By knowing new products that are consumed by customers with purchasing power, these products become interesting and desired for the producers and communities where they are produced
Further development opportunities exist	33) The growth of new sectors and new production lines generates new needs,

	new markets, new spaces for employment in specialty and innovative areas
Market for products offered in different presentations (e.g., value addition through packaging)	34) It is important to chain retail with production so that the entire chain is successful and capitalizes
If training is provided about how to grow different luxury plants	35) Training without financial support will not help producers in rural areas who have low incomes and no capital
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Threats	
Corporations/industrialized production	36) Although competing in a slightly different sector, the consumer has the final option where he decides what he values and to what extent he is willing to pay for it
Globalization	37) Opening local markets to trade when local producers do not have the conditions to compete is not fair or true commercial openness
Organized crime	38) Extortion is a SERIOUS problem! Many do not start or close their family businesses for fear of extortion
Lack of appropriate facilities	39) They are created and the problem is over
Lack of consumer awareness of products' origins	40) Communication work is important, good marketing, professional, highlighting values, quality
Question 3. What is *needed for smallholder farmers in rural areas to achieve competitive advantages* if producing luxury agricultural products for niche markets, as defined in this study?	
Organization to sell through cooperatives	41) Excellent
Maintain a high quality of products	42) Quality control and consistency is a serious problem for small producers
Add value to raw products	43) Needed

Environmental education	44) To work with what is there, and strictly invest in what is necessary to move forward.
Additional comments	45) The gift has no value, it is important effort and own financial participation; 46) Avoid products from other sources; 47) Farmers in rural areas are very interested in growing these crops mainly because they are in need of money. Therefore, with proper support especially training and seed capital then they will be able to do very well in this kind of farming as it is their source of livelihood

APPENDIX Y

PRODUCERS DELPHI PANEL: QUALITATIVE DATA

ROUND THREE

Producers Panel: Round Three comments on smallholder farmers in Mexico and other nations with similar needs to produce for luxury niche agricultural markets (N = 16)

Item	Comments
Question 1. Which luxury high-value agricultural plant products may reflect an *unsatisfied consumer demand* and have the potential for delivering profits to smallholder farmers in low- and middle-income countries?	
Plant Products (1 Category & 2 Examples)	
Condiments (culinary herbs and spices, e.g., mint, vanilla)	1) Some are very difficult to grow, like vanilla; 2) Not all; 3) I think that in some situations yes; 4) Some are not viable
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Strengths	
Available water	5) Not at all
Access to organic fertilizers	6) Organic fertilizer can be produced
Potential for protected designation of origin recognition	7) In very specific products
Optimal environment	8) Due to climate change
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Weaknesses	
Low technical capacity	9) FERTILIZER can be produced
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	

Opportunities	
Government support	10) Financial or in kind support is unclear
Question 2. What is the *potential for smallholder agricultural producers in rural areas* to grow products intended for luxury niche markets?	
Threats	
Natural phenomena	11) Droughts
Additional comments	12) It can grow with the participation of all the entities involved in the subject; 13) I hope to know the results, the topic is interesting; 14) I personally believe that the luxury market has a great future, but unfortunately the market is full of very large producers that produce a lot and of good quality, which allows them to lower their prices and this affects small producers, something that is commonly said. is that the profits are in the quantity of production and not in the sales, which speaks about the importance of having large productions instead of good prices; 15) Government support is needed in terms of training in the production, transformation, and marketing of their products, as well as providing small technologies to farmers to carry out work efficiently; 16) In terms of cultivation and due to changes in cultivation there is no longer a standardization to have an optimal environment

VITA

Luis Antonio Flores Porras

Candidate for the Degree of

Doctor of Philosophy

Dissertation: EXPERTS' VIEWS ON THE POTENTIAL OF LUXURY NICHE AGRICULTURAL PRODUCTS FOR RURAL ECONOMIC DEVELOPMENT IN MEXICO AND OTHER NATIONS WITH SIMILAR NEEDS: A DOUBLE-PANEL DELPHI STUDY

Major Field: Agricultural Education

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Agricultural Education at Oklahoma State University, Stillwater, Oklahoma in July, 2020.

Completed the requirements for the Master of Science in Business Administration at University of the Americas Puebla, Cholula, Puebla/Mexico in 2015.

Completed the requirements for the Master of Science in Business Administration at INSEEC, Paris, France in 2013.

Completed the requirements for the Bachelor of Science in Hotels and Restaurants Management at University of the Americas Puebla, Cholula, Puebla/Mexico in 2010.

Experience: Undergraduate Professor ANÁHUAC University Puebla.

Professional Memberships: Association for International Agricultural and Extension Education; Mexican Association of Orchideology.