IDENTIFICATION OF INTANGIBLE RESOURCES ESSENTIAL TO AGRI-TOURISM ENTERPRISES IN TAIWAN: A DELPHI STUDY

DISSERTATION

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ABSTRACT

The focus of traditional farm management was on operational effectiveness. However, the management of agri-tourism enterprises was more inclusive which required farm operators to further acknowledge the significance of intangible resources. The purpose of this study was to identify the roles of intangibility of resources associated with the management of agri-tourism enterprises in Taiwan. The theoretical base of this study was based upon Hall's framework (1992, 1993, 1994, 2000).

A three-round, modified Delphi technique was employed. Based on the review of literature, a self-administrated questionnaire was developed. A purposeful sample of academics, professionals in the public and private sectors, and operators of agri-tourism enterprises was identified and invited to participate in this study. Panelists responded via mailed questionnaires.

The findings revealed that, among competency-based intangible articulated, recognizing the needs of customers, providing quality service, innovating, setting future goals, and providing employee training related to customer services were considered to have top priorities for the sustainability of agri-tourism enterprises. Among asset-based intangibles articulated, establishing customer trust, establishing positive business

reputation, complying with sanitation regulations, complying with customer safety regulations, and securing proper operating licenses were considered to have top priorities for the sustainability of agri-tourism enterprises. The variety of intangible resources articulated indicated that panelists were well aware of the significance of intangibles concerning the management of agri-tourism enterprises. Strong consensus across the panel on both intangible sets indicated that agri-tourism enterprises would require vigorous planning and consideration for the sustainability of such business.

Dedicated to my mother, Hung-Ching Wang, my wife, Liping Yuan, and two special men

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Due to the prospect of being a member of the World Trade Organization (WTO), the government of the Republic of China (ROC) has faced various challenges. Since the agricultural industry is the first to bear the brunt of competition in both market and price, the government of the ROC has strived to promote agricultural diversification for the purpose of reducing the long-term negative impacts of newly concerned competition on the agricultural industry. The development of agri-tourism enterprises is one of the primary steps to pursue the goal of agricultural diversification (Chiou, 2000; Miller & Hsu, 2003).

In Taiwan, the idea of farm-based tourism was proposed by the Department of Agricultural Extension of the National Taiwan University and the Council of Agriculture in 1989 (Fang, 1997; Jenq, 1998). A short time later in 1993, the Council of Agriculture, the highest management authority in charge of making and enforcing agricultural policies in the ROC, advocated the "Leisure Farm Development and Management Program" for the purpose of assisting those farmers who were interested in diversifying their management strategies. In 1996, the "Leisure Farm Guiding Regulations" was formulated and adopted by the ROC government. The regulations not only implemented the objectives of the "Leisure Farm Development and Management Program" of 1993, but

also “encouraged farm owners to integrate local cultural activities into their management strategies for the purpose of being able to improve the local industry’s cultural uniqueness and to boost the local economy” (Hsu, 2002, p. 2).

After years of promotion, Taiwan has reached a certain level of success concerning the development of agri-tourism attributable to three factors. First, increased per capita income and improved standards of living enable Taiwanese people to pursue recreational needs by using their discretionary purchasing power (Hsu, 2002; Miller & Cheng, 2003; Chang, 2003). Second, the shortening of the workweek from six to five days provides more free time on weekends for Taiwanese people to seek recreational pursuits (Hsu, 2002; Miller & Cheng, 2003; Chang, 2003). Third, the support of government and academia has been the cornerstone of the development of agri-tourism. As stated above, the government of the Republic of China systematically formulated elaborate programs for the purpose of stimulating farm operators to diversify their management strategies (Zheng, 2004). With regard to the support of academics, Taiwanese scholars believe that leisure farms are suitable settings to disseminate the ideas of environmental soundness (Tang, 1998). Visitors of agri-tourism operations would have opportunities to experience hands-on activities and/or actual applications of farming practices and, thereby, would have the potential to improve the general level of agricultural literacy of the citizens and to make them aware of the importance of environmental stewardship.

Background and Setting

History of Agri-tourism Development in Taiwan: In Taiwan, the existence of agri-tourism could be dated back in the 1960s (Huang, 2001). Although the creation of

forest parks (e.g., Mt. Ali Forest Park) was a successful example of connecting natural resources and recreational activities in the 1960s (Huang, 2001), agricultural operations such as strawberry farms in Dahu, Miaoli County and flower nurseries in Tianwei, Changhua County in the 1970s were generally considered to be the starting point of agri-tourism in Taiwan (Cheng, 2005a). Such agricultural operations invited visitors to visit their premises and became popular since the 1970s.

In 1980, the Taipei City chapter of the Farmers' Association established a tourism tea plantation in Mucha, Taipei City, and positive feedbacks led to similar operations in the suburban areas of Taipei City. In the mid 1980s, government agencies recognized that such alternative tourism was able to create recreational opportunities for citizens and to increase farmers' incomes. Therefore, the "Agricultural Tourism Development and Demonstration Plan" was initiated by the Council of Agriculture for the purpose of promoting such agricultural operations (Cheng, 2005a). In the 1970s and 1980s, pick-your-own operations were prevalent in Taiwan. However, pick-your-own operations were limited by seasonal profiles related to crop harvests and gradually became less attractive to visitors because of increases in number of similar types of operations (Cheng, 2005a).

In 1989, the Department of Agricultural Extension of the National Taiwan University and the Council of Agriculture proposed the idea of farm-based tourism (Fang, 1997; Jenq, 1998). Farm-based tourism has continued to develop ever since. In 1993, the "Leisure Farm Development and Management Program" was advocated by the Council of Agriculture. The primary purpose of this program was to assist those people who were interested in diversifying their farm management. In 1996, the "Leisure Farm

Guiding Regulations" were formulated and adopted by the government. These regulations served as the cornerstone of defining leisure farms, addressing roles played by local and central governments, and specifying requirements for those farmers who intended to develop their farms as leisure-oriented ones (Chen, 2005).

Current Profile Related to Agri-tourism: "Taiwan is a subtropical island with an area of nearly 36,000 square kilometers (13,900 square miles), roughly two-thirds mountains, while only one-fourth is arable" (Council of Agriculture, 1997, p. 1). Currently, the population of Taiwan is approximately 22.75 million and the population density is close to 630 persons per square kilometer (Directorate General of Budget, Accounting, and Statistics, 2005), which ranks ninth in the world (Wikipedia, 2005).

Taiwan is highly urbanized. In 2002, with 9,827 persons per square kilometer, Kaohsiung City (154 square kilometers) was the most populous urban area in Taiwan, followed by Taipei City (272 square kilometers) with 9,720 persons per square kilometer, and Taichung City (163 square kilometers) with 6,099 persons per square kilometer (Government Information Office (GIO), 2005). "Heavily populated urban areas have grown outside the official limits of major cities, forming large metropolitan areas, which are now home to 68.93 percent of Taiwan's total population" (GIO, 2005, p. 1).

Because of urbanization and high population density, spaces reserved for parks and botanical gardens in urban communities have become limited (Chow, 2004; Guo, 2004). Correspondingly, urban residents would have fewer opportunities to appreciate natural resources. A study conducted by Hsu (2002) revealed that being close to nature, appreciating the scenery, and being at ease with oneself were the major reasons that motivated visitors to visit an agri-tourism enterprise and similar results were also

presented by other researchers (e.g. Wang & Lai, 1997). Therefore, the development of agri-tourism creates an increasing opportunity for urban residents to visit such enterprises for the purpose of relaxing and enjoying the beauty of nature.

Accordingly, as stated in the introduction section, the shortening of the workweek and increased per capita income are also pivotal to the development of agri-tourism in Taiwan. The shortening of workweek provides more leisure time for Taiwanese people to seek recreational pursuits and increased per capita income enables Taiwanese people to pursue leisure needs by using their discretionary purchasing power. Both attributes create a favorable condition for the agri-tourism industry. As a result, the rapid expansion in number of agri-tourism enterprises has taken place in recent years (Cheng, 2005b).

Agricultural and environmental educators indicate that leisure farms are ideal settings for learning. Visitors of such enterprises would have opportunities to experience hands-on activities, local agricultural customs, or real applications of farming practices (Hsu, 2002). The Council of Agriculture (2000) indicates that agri-tourism enterprises need "to insure sustainable use of agriculture resources, to harmonize agriculture and the environment, and to sustain and enrich the nation's green assets" (p. 1). Therefore, agri-tourism enterprises are necessary to be environmental friendly. Programs and activities provided by such enterprises, if properly designed, are capable of sensitizing visitors' concerns for environmental stewardship and improving citizens' capabilities related to agricultural literacy. Currently, many agri-tourism enterprises in Taiwan have practiced informal education to provide opportunities for visitors to learn the nature of food production, the uniqueness of rural customs, and the significance of environmental soundness.

Demographic Characteristics of Agri-tourism Enterprise Visitors: A better understanding of demographic characteristics concerning visitors of agri-tourism enterprises enables operators of such business to assess what preferences visitors are likely to have for their recreational and educational demands. As a result of such understanding, operators of agri-tourism enterprises are able to make appropriate decisions for the purpose of generating sustainable incomes. In Taiwan, the demographic profiles of visitors of agri-tourism enterprises were documented by many investigators. Table 1.1 summarizes selected demographic characteristics including gender, age distribution, educational level, marital status, monthly income, and occupations of agri-tourism enterprise visitors presented by Wang and Lai (1997), Hsu (2002), and Chang (2003).

In short, a typical visitor of agri-tourism enterprise in Wang and Lai's study was likely to be an unmarried, female, approximately 20 to 29 years of age, in a business occupation with monthly income between NT$ 20,001- $ 40,000, and had attended or finished junior college. A typical visitor of agri-tourism enterprise in Hsu's study was likely to be a married, female, approximately 26 to 35 years of age, in a business occupation with monthly income between NT$ 20,001- $ 40,000, and had attended or finished junior college. A typical visitor of agri-tourism enterprise in Chang's study was likely to be a married, female, approximately 20 to 34 years of age, in a business occupation with monthly income between NT$ 30,001- $ 50,000, and had attended or received her degree from a college or university.

	Wang & Lai (1997)	Hsu (2002)	Chang (2003)
Gender	57% (Female)	54% (Female)	55% (Female)
Age Group	50% (20-29 years old)	40% (26-35 years old)	42% (20-34 years old)
Education	40% (Junior College)	33% (Junior College)	34% (College/university)
Marital Status	45% (Married)	56% (Married)	51% (Married)
Monthly Income	42% (NT$ 20,001- 40,000)	40% (NT$ 20,001- 40,000)	37% (NT$ 30,001-50,000)
Occupation	25% (Business)	43% (Business)	29% (Business)

Table 1.1 Selected Demographic Characteristics of Agri-tourism Enterprise Visitors in Taiwan

Summary: The development of agri-tourism in the past decade has increasingly created recreational and educational alternatives for citizens to have fun, to improve their quality of life, and to satisfy the needs for social interactions (Hsu, 2002). According to Cheng (2005b), in 2004, approximately 8.2 million people visited leisure farms and the total revenue of such farms was estimated to exceed 4.5 billion New Taiwanese dollars (approximately 133,809,000 US dollars). Because of the potential of economic benefits, more and more farmers are willing to diversify their management directions in Taiwan. As a result, various operations with different emphases are presented. Cheng (2005a), based upon resources possessed and utilized by farm entrepreneurs, grouped agri-tourism enterprises into the following categories: leisure farms, forest parks, fish farms and hatcheries, ranches, orchards, tea plantations, nurseries, gardens, and educational farms.

Although the types of these operations are diverse, the common characteristics of these agricultural enterprises all involve interactions among agricultural producers, their products and services, and visitors.

It has become increasingly imperative to address the no longer emerging but currently well established agri-tourism phenomenon. In Taiwan, the rapid expansion in the number of agri-tourism enterprises and the current emphasis on the quality in products and services has reinforced the importance in focusing on intangible resources associated with the management of such businesses.

Management in Agri-tourism Enterprises

Sound management is the key to the success of businesses of any kind (Kay & Edwards, 1994; Kay, Edwards, & Duffy, 2004). Traditional farm enterprises and agri-tourism businesses are no exception. Traditional farm management or the management of production agriculture is generally centered on the details of all aspects of husbandry (Turner & Taylor, 1998). Steward, Jobes, Casey, and Purcell (2000) specifically indicate that effective utilizations of resources such as land, labor, and capital are the focal point of traditional farm management. Primarily serving as agricultural producers, traditional farm enterprises are less likely to specifically address the importance of intangible resources.

What constitutes the management of agri-tourism enterprises not merely includes all elements of traditional farm management, but also requires farm operators to specifically address the importance of intangible resources (Zheng, 2004). Because agri-tourism enterprises are characterized as being both agricultural producers and service providers, acknowledging, acquiring, utilizing, and accumulating intangible resources in

a sustainable manner for the purpose of being competitive and profitable in the industry is imperative (Zheng, 2004). For example, services are classified as intangible resources (Pine & Gilmore, 1999; Grosse, 2001; Zheng, 2004). This means, in the case of an operator of an agri-tourism enterprise, providing fuller and more complete service-related offerings to better satisfy the needs of customers becomes important to the management of the business. As Pine and Gilmore (1999) stated, "clients generally value the benefits of services more highly than the goods required to provide them. Services accomplish specific tasks they want done but don't want to do themselves; goods merely supply the means" (p. 8). Examples of intangible resources also include database and information management systems, communication networks, business reputation, intellectual property rights, marketing network, creativity, vision, leadership, organizational culture, innovative ability, employee know-how, and organizational learning (Hall, 1992; Hall, 1993; Olsen, West, & Tse, 1998; Hall, 2000; Zheng, 2004). At present, no literature concerning agri-tourism enterprises emphasizes the significance of intangible resources.

Hall's Framework

A conceptual framework, developed by Hall (1992, 1993, 1994, 2000), served as a basis from which this study was launched. The rationale of Hall's approach involves, according to Bounfour (2003), "…taking into account the fact that the differences of performance are more important within individual industries, than between industries, consider that such differences are to be attributed to the type of combination of resources, mainly intangibles, developed by firms, than to industry structures" (p. 22). The proposition concerning the development of agri-tourism enterprises matched Bounfour's statement.

Based upon Coyne's taxonomy (1986), Hall's framework (1992, 1993, 1994, 2000) linked intangible resources and differentiated capabilities. In this framework, four capabilities (cultural, functional, positional, and regulatory capabilities) were introduced. Considering the nature of these four capabilities, Hall further categorized them into competency-based and asset-based differentials. Figure 1.1 presented the scheme of this framework.

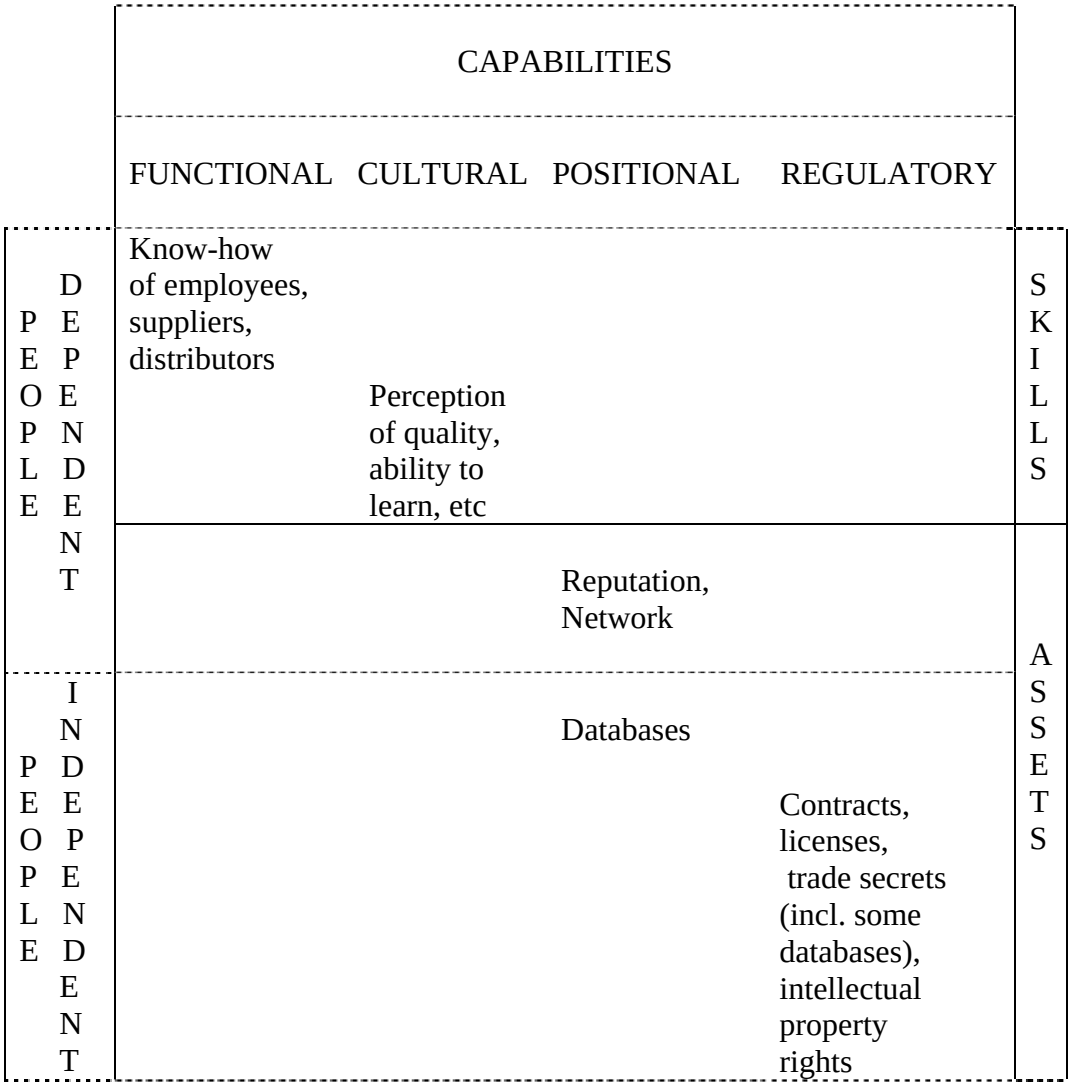

Figure 1.1 Conceptual Framework Linking Intangible Resources and Capabilities. Adopted from Hall (1994, p. 154).

Competency-based differentials: The competency-based differential was comprised of cultural and functional capabilities. Cultural capability, according to Hall (2000), was applied to the organization as a whole and was defined as the incorporation of individual and group habits, attitudes, beliefs, and values presented in an organization. If an organization's culture, for example, served as a driving force of providing quality products/services, meeting challenges, and/or encouraging learning, that culture could be a contributor to the success of the organization. Functional capability, according to Hall (2000), was the ability to complete specific jobs pertaining to an organization. Accordingly, the ability was derived from the knowledge, skills, and experiences of individuals in the organization and organization-related value chain such as employers, suppliers, distributors, and advertising agents.

Asset-based differentials: The asset-based differential consisted of positional and regulatory capabilities. Positional capability was a result of past decisions and actions that had established positive relationships with others. Business reputation was a salient example. Hall (1992) also indicated that past endeavors could, "contribute not only to competitive advantage, but also to defendable position, because of the long time it would usually take a competitor, starting from scratch, to match them" (p. 136). Regulatory capability was defined as the possession of legal entities in an organization (Hall, 2000). Examples of regulatory capability comprised of intellectual property rights, trade secrets, insurance, and contracts.

Educational Needs for Agri-tourism Development

In the process of agri-tourism development, roles played by government agencies (e.g., Extension) were diverse and changed over time. In Taiwan, the first role of government agencies was to serve as a change agent. As stated above, the major purpose of promoting agri-tourism in Taiwan was to diversify agricultural practices and thereby to avoid long-term negative impacts on agricultural industry because of the outlook of being a member of the WTO. Meanwhile, due to the relatively low income of farm families and low value of agricultural production, the development of agri-tourism became an alternative to improve farmers' well-being (Chang, 1998, 2003). However, the development of agri-tourism in Taiwan was rife with difficulties since its inception. For example, in 1989, the Council of Agriculture purposefully selected 31 farms as pioneer prospects to develop agri-tourism, but only eight of these farm businesses actually applied for operating licenses in 1993 (Chang, 2003). At that time, how to educate farmers to accept the idea of agri-tourism and thereby to help them transform their management directions was the primary concern.

More recently however, farmers' willingness to transform their management directions was no longer an issue because more and more farm entrepreneurs were inclined to diversify their management strategies. Due to increases in numbers of agri-tourism enterprises, however, lack of knowledge, experiences, and skills in management and marketing, as well as insufficient information in terms of customer profiles and demands, were identified as being barriers for the development of agri-tourism enterprises (Chang, 2003). Under such circumstances, providing learning opportunities and consulting channels for operators of agri-tourism enterprises became the key to

further development. In this case, Extension professionals could act as a facilitator for all agri-tourism operators to identify problems and possible solutions. Alternatively, offering educational programs related to the management of agri-tourism enterprises could be particularly beneficial to inexperienced farm entrepreneurs. In brief, the principle of educating agri-tourism entrepreneurs should follow Extension's focus, which centered on practical knowledge, a hands-on approach, and a non-formal learning environment (Seevers, Graham, Gamon, & Conklin, 1997).

Problem Statement

Although government agencies could temporarily offer financial support to facilitate farm operations, operators of agri-tourism enterprises still needed to incorporate diverse management knowledge, skills, and experiences for the purpose of ensuring the sustainability and prosperity of their farm enterprises. Interestingly, a study conducted by Mackey and Hsu (2003) revealed that operators of agri-tourism enterprises in the Hocking Valley Region, Ohio, were less likely to consider managerial skills and knowledge of the business to be major concerns in terms of the development of agri-tourism. From the standpoint of Extension professionals, two bold assumptions could be made. First, those operators might be well-equipped with diverse managerial skills and knowledge of the business and thereby training provided by Extension became unnecessary. Second, however, those operators surveyed might not be able to recognize the difference in the management of traditional farms and agri-tourism enterprises. Henry (1999) noted that, "the fatal assumption of all businesses is if you understand the technical work of a business, you understand a business that does the technical work" (p.

33). In this case, a misconception that the management of an agri-tourism enterprise was similar to traditional farm management could exist.

Basically, the focus of farm management was on operational effectiveness (Henry, 1999). However, the management of agri-tourism enterprises was more inclusive which required farm operators to further acknowledge the significance of intangible resources because of direct interactions among operators of agri-tourism enterprises, their products, and customers. Therefore, a problem existed in ascertaining the intangibility of resources perceived to be requisite to the successful operation of such enterprises. If Extension was to maintain a balance between research knowledge and praxis for the purpose of better serving farm enterprise communities, recognition of intangible resources in terms of the management of farm enterprises needed to be identified and subsequently applied in concert with the farm operation and government agencies that supervised and/or administered the development of farm enterprises. At present, due to a paucity of research in agri-tourism enterprises, this study could provide a preliminary base of knowledge concerning the identification of intangible resources in the agri-tourism industry.

Purpose and Objectives

The purpose of the study was to identify the roles of intangibility of resources associated with the management of agri-tourism enterprises in Taiwan. The specific objectives of this study were:

1. To identify competency-based intangible resources regarding the management of agri-tourism enterprises as perceived by academics, professionals in the public and private sectors, and operators of agri-tourism enterprises

2. To identify asset-based intangible resources regarding the management of agri-tourism enterprises as perceived by academics, professionals in the public and private sectors, and operators of agri-tourism enterprises.

Definition of Terms

Competency-based intangible resources: Competency-based intangible resources were constitutively defined as collective attributes including knowledge, abilities, skills, and experiences that helped an agri-tourism enterprise gain sustainable competitive advantage. Because the Delphi technique was employed to establish an understanding of intangibility of resources concerning the management of an agri-tourism enterprise, the operational definition of competency-based intangible resources was defined as a consensus identified by a panel of experts through three iterations of the Delphi instrument.

Asset-based intangible resources: In the literature, asset-based intangible resources were generally defined as "long-lived assets without physical substances that are used in business" (Albrecht, Stice, Stice, & Skousen, 2002, p. 396). In this study, asset-based intangible resources were constitutively defined as long-lived assets that were a result of past endeavors and the possession of legal entities at an agri-tourism enterprise (Hall, 1993, 1994). Because the Delphi technique was employed to establish an understanding of intangibility of resources concerning the management of an agri-tourism enterprise, the operational definition of asset-based intangible resources was defined as a consensus identified by a panel of experts through three iterations of the Delphi instrument.

Agri-tourism enterprise: An agri-tourism enterprise was defined as a farm business managed by an individual operator for the purpose of providing enjoyment and education opportunities to the public, promoting products and services of the farm, and thereby generating additional income from tourist clientele (Hilchey, 1993; Fennell & Weaver, 1997).

Agri-tourism: Agri-tourism was defined as an activity that involved in having tourist clientele to visit any agricultural operation for the purpose of experiencing leisure enjoyments and educational opportunities (Lobo, 2003).

Management: Management was defined as "the process of planning, organizing, leading, and controlling an organization's human, financial, material, and other resources to increase its effectiveness" (George & Jones, 2002, p. 11).

Significance of the Study

Significance in research: Intangible resources were recognized by many as the requisite of an agri-tourism enterprise to gain competitive advantage (Zheng, 2004; Cheng, 2004). However, no research was found to specifically address intangible resources in the agri-tourism industry. Therefore, results of this study could establish a better understanding of the characteristics of intangible resources related to agri-tourism enterprises and could provide recommendations for further research in the management of agri-tourism enterprises. Because the Delphi technique was employed in this study, generalization of results was inappropriate. Therefore, the instrument of this study could be used to gather further empirical information.

Significance to Extension education: One of the program characteristics offered by Extension was based on the needs of clients and one of the fundamental doctrines in

Extension was to link research to practical applications (Seevers, Graham, Gamon, & Conklin, 1997). Therefore, the results of this study could not merely provide baseline data for Extension professionals to recognize the importance of intangible resources in the agri-tourism industry, but also to help identify the needs of transforming such research knowledge into practical applications for the purpose of educating current and potential operators of agri-tourism enterprises. "…Extension has been a catalyst for changes for individuals and groups" (Graham, 1994, p. 430). By serving as a catalyst who promoted lifelong learning and synergized research knowledge and praxis, it is believed that farm entrepreneurs' knowledge and skills could be improved and could further benefit the development of agri-tourism.

CHAPTER 2

REVIEW OF LITERATURE

In order to articulate the theoretical and practical premises of this study, this chapter was organized into three primary sections. These sections included: (1) agri-tourism, (2) the consideration of intangible resources, (3) the Delphi technique, and (4) summary.

Agri-tourism

Existing for more than 100 years (Glenn & Rounds, 1997), agri-tourism, also known as agricultural tourism, farm tourism, or farm-based tourism, has become a fast growing component of the tourism industry. Miller and Hsu (2002, 2003) noted that the practice of agri-tourism was an alternative use of farmland that permitted vacationers to stay on a farm and to experience farm life and various activities provided by the farm. The significance of agri-tourism was to provide additional income sources to the farm operators and relied upon the farm vacationers' abilities and willingness to stay on the premises during the vacation experience. Accordingly, such on-farm activity could offer opportunities not only for local farmers to diversify and increase their revenues, but also for the general public to increase the awareness and education about agriculture (Knight, 1999; Hsu, 2002). The Kentucky Agri-tourism Working Group (2003) specifically addressed the following benefits concerning the development of agri-tourism.

1. Agri-tourism can generate direct marketing opportunities for local farmers to increase revenues and enhance the viability of their farm operations.
2. It is an excellent tool to educate the public about the importance of agriculture and its contribution to a given county or locality's economy and quality of life.
3. It provides economic incentives and reduces friction in the agricultural-urban interface, thus helping to preserve agricultural land and green-space (p. 5).

Definitions of Agri-tourism

There are many available definitions of agri-tourism (McGehee & Kim, 2004). Busby and Rendle (2000) documented a chronology of 13 definitions pertaining to farm tourism/agri-tourism. In addition to the definitions provided by Busby and Rendle (2000), the Kentucky Agri-tourism Working Group (2003) defined agri-tourism as, "the economic activity that occurs when people link travel with agricultural products, services or experiences" (p.11). Lobo (2003) defined agri-tourism as, "the act of visiting a farm or any agricultural, horticultural, or agribusiness operation for the purpose of enjoyment, education, or active involvement in the activities of the farm or operation" (p. 1). Leones, Dunn, Worden, and Call (1994) defined agri-tourism as, "any agricultural activity that attracts people and encourages them to spend their leisure time and discretionary income on that activity" (p. 4).

Internationally, agri-tourism in Italy was specifically defined as, "a tourism activity where only farming people can be involved" (Ohe & Ciani, 1998, p. 2). In Taiwan, based upon the Leisure Farm Guiding Regulations, agri-tourism was defined as an economic activity that, "utilizes the bucolic view, natural ecology, and environmental resources, and that combines agriculture, forestry, fishery and ranching production, agricultural activities, farmland culture, plus farmland lifestyle" (Chang, 2003, p. 21). In Manitoba, Canada, agri-tourism was referred to an economic activity between tourists

and farm operators (Glenn & Rounds, 1997). In Ontario, Canada, agri-tourism was defined as, "the recreational and purposeful act of visiting a professional agricultural, horticultural or agri-business enterprise, and which might include active involvement, be educational in nature or be for the sole purpose of enjoyment" (Knight, 1999, p. 5). In Prince Edward Island, Canada, agri-tourism was defined as, "the economic activity that occurs when agricultural products or services are provided to the traveling public" (PEI Department of Agriculture and Forestry, 2000, p. 1).

In sum, agri-tourism is defined as an interactive activity that involves agricultural producers, tourists, and the products and facilities of agricultural producers. Mahoney (1987) particularly indicated that such activity was to use agriculturally-related facilities and activities to draw visitor's attention and attempted to sell agricultural products to tourists. As Knight (1999) stated:

> What is apparent is that agri-tourism is an all encompassing term which embraces a wide range of activities and operations, but essential to all of them is an interaction between the agricultural producer, his/her products, and the tourists. Agri-tourism applies to products and services which combine agriculture—its natural setting and products, with a tourism experience. It includes providing tourists with opportunities to experience a broad spectrum of products and services, including fruit stands, winery tours, farm-based bed and breakfast accommodation and farm tours. It implies economic activity between tourists and farm operators, an activity that links travel with agricultural products, services, and experience (p. 5).

Leeds and Barrett's Classification of Agri-tourism Enterprises

One of the most unsettling problems faced by agri-tourism researchers was what kinds of activities and services provided by a farm were considered to be eligible as an agri-tourism enterprise. For example, some might regard a farm with a roadside produce stand as a qualified agri-tourism enterprise. In contrast, many might argue that a roadside

produce stand was simply a form of trading. No service was provided by such trading or marketing. Therefore, a farm possessing a roadside produce stand should not be considered as an agri-tourism enterprise.

Based upon the complexity of activities and services provided by farm enterprises, Leeds and Barrett (2004) developed a classification to categorize agri-tourism enterprises for the purpose of resolving the above stated problem. According to Leeds and Barrett (2004), three levels of agri-tourism enterprises were categorized (Figure 2.1). The first level and the simplest form of agri-tourism enterprises were those farms that would have limited interactions with customers. Being a good grower was the primary role played by a farm entrepreneur of this type. Activities provided by Level I enterprises included roadside stands, limited small school tours, and/or other occasional events. The second level of agri-tourism enterprises contained those farms that provided various activities and services to meet customers' needs. Examples of activities provided by Level II enterprises consisted of wagon rides, corn mazes, petting zoos, snack bars, festivals, and/or pick-your-own. In Level II, farm entrepreneurs would have direct interactions with their customers. Compared to Level II, the third level of agri-tourism enterprises was more complex and sophisticated. Including all possible services and activities offered in the second level, Level III enterprises might comprise well-designed shopping grounds, full service restaurants, permanent restrooms, paved parking lots, guided tours, educational programs, and/or hotel-liked accommodations. In fact, based on Leeds and Barrett (2004), many agri-tourism enterprises would never reach this level.

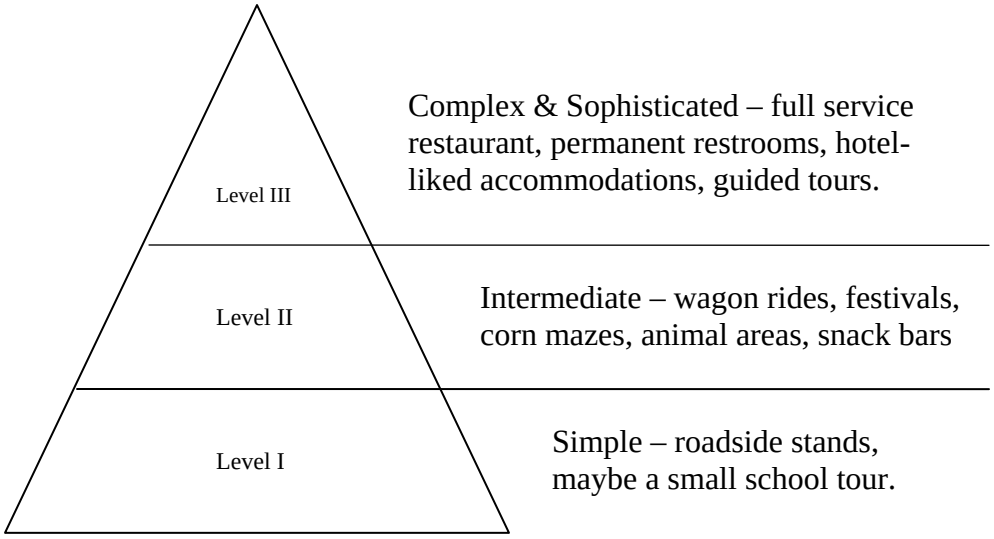

Figure 2.1 Leeds and Barrett's Classification of Agri-tourism Enterprises

Considerations of Activity and Service Creations/Adoptions in Agri-tourism Enterprises

The creation/adoption of activities and services of agri-tourism enterprises was basically dependent upon farm operators' recognition of the effectiveness and expediency of utilizing existing resources. Basically, the creation and adoption of activities and services were likely to rely on the localities of agri-tourism enterprises where farm entrepreneurs could effectively and expediently use the existing resources such as landscape, tradition, natural ecology, or local cultural uniqueness to attract customers, to promote their products, and to satisfy the needs of customers (Hsu, 2002). With respect to the effective use of existing resources, Ilbery (1991) illustrated that, if the location of an agri-tourism enterprise was close to a scenically attractive area, this farm enterprise

would likely develop activities and services to coincide with this popular destination for the purpose of effectively drawing tourists' attention. By considering the expediency of utilizing existing resources, activities and services provided by agri-tourism enterprises in Montana (often called dude ranches) were commonly livestock-oriented because the majority of farm operations in Montana (approximately 82%) were ranch-related (Black & Nickerson, 1997).

Activities Provided by Agri-tourism Enterprises

"Agri-tourism encompasses a wide range of things, from historical farm tours, to hunting, to road-side stands" (Holmes, 2003, p. 2). Indeed, activities provided by agri-tourism enterprises were diverse (Hsu, 2002; Schnuer, 2005). Typically, agri-tourism enterprises offered retail and service operations on their premises. These retail and service operations could consist of restaurants, lodging accommodations, craft/gift shops, pick-your-own, corn mazes, or other revenue-generating activities (Hilchey, 1993).

Many researchers attempted to group agri-tourism activities into specific categories. Pizam and Pokela (1980) categorized activities provided by agri-tourism enterprises into farming and non-farming activities. Based on Pizam and Pokela (1980), farming activities were those real jobs performed by farm laborers and visitors of such farm enterprises were welcomed to be helpers. Examples of farming activities included assistance of taking care of farm animals and milking cows. Non-farming activities consisted of various leisure exercises and play based recreation. Examples included hiking, swimming, fishing, and horseback riding.

From the standpoint of categorizing agri-tourism businesses on the basis of activities offered, Ilbery (1989) grouped farm-based recreational enterprises into two

general categories. These two categories were resource-based and day-visitor enterprises. According to Ilbery (1989), resource-based enterprises contained horse/pony-based activities (e.g., riding), water-based activities (e.g., fishing), and shooting (e.g., archery). Day-visitor enterprises included informal recreation (e.g., picnic sites), catering (e.g., kiosks), educational activities (e.g., school visits), sporting (e.g., jogging), dog-based activities (e.g., showing), farm produce sale (e.g., shop on farm), access to areas of interest (e.g., bird/wildlife watching), and public events (e.g., agricultural related—hedge laying; non-agricultural—pop concerts).

In fact, the number of agri-tourism activities available to farm entrepreneurs was vast (Ilbery, 1989). For example, Davis (1963) documented diverse activities provided by agri-tourism enterprises in east central Ohio and these activities consisted of fishing, boating, swimming, waterskiing, sailboating, golfing, hunting, bowling, horseback riding, go-cart riding, hiking, scenic driving, tennis, and folk dancing. In Canada, Fennell and Weaver (1997) identified a list of activities provided by agri-tourism which included wildlife viewing, hunting, casual photographing, touring, hiking, camping, professional photographing, horseback riding, petting zoo, cultural tourism, specialty meals, cross country skiing, conference retreats, study/research, cycling, fishing, snowmobiling, souvenir purchasing, assisting in farm work, canoeing, ice fishing, boating, and barn dancing.

The Consideration of Intangible Resources

> To make a painting, the artist has to be physically present in the room and has to have enough money to buy brushes, canvas, and paint. Human, physical, and monetary are needed to paint a picture, but not even these resources will make the painting a masterpiece (Itami & Roehl, 1987, p. 12).

Intangible resources were non-physical (Sanchez, Heene, & Thomas, 1996) and information-based (Furrer, Sudharshan, & Thomas, 2001). Intangible resources ranged from the people dependent or subjective resources such as organizational cultures, brand names, business reputations, networks, and know-how to people independent resources such as trade secrets, licenses, and public knowledge (e.g., scientific works), and the intellectual property rights of patents, trademarks, copyrights, and registered designs (Hall, 1992, 1993; Cheng & Chen, 1996).

Traditionally, intangibles were regarded as worthless and were deducted from the net worth of property because the value of intangibles was considered as being unquantifiable (Donaldson, 1992). Libby, Libby, and Short (2001) also stated that the value of intangibles were unable to be reflected on balance sheets because no identifiable transaction could be identified. As a result, the unquantifiable nature of intangibles was used as a justification to ignore the existence of intangibles even though individuals such as bankers might acknowledge the fact that certain particular intangibles had corresponding values.

Attitudes toward intangibles have changed (Donaldson, 1992). The importance of intangible resources and their contribution to the dynamics of competitiveness, in recent years, have been recognized by many at various institutions—small, large, public, and private (Bounfour, 2003). Based upon the resource-based view, which stressed that, "sustainable competitive advantage (or rent) based on a firm's competencies and capabilities can be achieved only when a firm's resources are rare, unique, and cannot be imitated" (Furrer, Sudharshan, and Thomas, 2001, p. 334), intangibles were the real source of competitive power and the pivotal component in an enterprise's capabilities.

Bounfour (2003) listed the following reasons to address the growing interest of practitioners and researchers concerning the issue of intangibles. First, the service sector of the economy was rapidly growing. In many advanced economies such as the United States, the service sector accounted for more than 75 percent of the total economy (Grosse, 2001). Second, rather than simply generating outputs, manufacturing firms currently tended to focus more on product development, efficient distribution, and effective marketing. Third, managers of firms needed to recognize the necessity of continuously creating value for their clients, products, and internal resources. Fourth, managers started to acknowledge that knowledge was the real source of competitive advantage. Accordingly, based on Bounfour (2003), the primary concern of managers in the case of recognizing knowledge was to maximize, "the knowledge's value within organizations, whether it is in 'individual heads', or stored somewhere while, at the same time, they look for making organizations less dependent upon individuals' knowledge" (p. 7). Fifth, for most firms, the discrepancy between market value and book value was recognized. That is, balance sheets of a firm were simply unable to provide a fair picture of a firm's value. Last, results from researches and evaluations indicated that intangibles played an important role in corporate competitiveness, especially in the area of research and development.

Sonnenberg (1994) addressed the importance of intangibles by comparing the differences in companies' thought processes between the Industrial Age and the Information Age (Table 2.1). Based upon Sonnenberg (1994), companies in the Industrial Age were characterized by their access to and exploitation of raw materials, standardization of services and outputs, and ability to maximize product volume.

Companies in the Information Age, other than merely generating commodities, were characterized by creating value-laden products and services for the purpose of being competitive and profitable in a sustainable manner. That is, companies needed to differentiate themselves from competitors because increased capabilities of competitors concerning new product imitation or innovation were dramatically accelerated. Therefore, Sonnenberg (1994) pointed out that intangibles were critical components for a company's success in the Information Age.

Industrial Age	Information Age
Capital intensive	Knowledge intensive
Capital expenditures	Education/training
Natural resources	Educated work force
Inventory	Data (information)
Production enhancements	Process enhancements
Hierarchical management	Empowerment
Tangible rewards	Psychic rewards
Issuing orders	Communicating
Top-down planning	Commitment (buy-in)
Inspection	Quality built in
Equipment failure	Employee turnover
Equipment uptime	Morale
Purchasing	Recruiting
Sales	Customer satisfaction
Laborer	Knowledge worker

Table 2.1 Companies' Thought Processes between the Industrial Age and the Information Age (Sonnenberg, 1994, p. 4).

Hall's Conceptual Framework

A conceptual framework, developed by Hall (1992, 1993, 1994, 2000), linked intangible resources and differentiated capabilities. Based upon Coyne's taxonomy (1986), Hall introduced four capabilities in his framework. They were cultural,

functional, positional, and regulatory capabilities. Considering the nature of these four capabilities, Hall further grouped them into competency-based and asset-based differentials (Figure 1.1).

The competency-based differential consisted of cultural and functional capabilities. Based on Hall (2000), cultural capability was applied to the organization as a whole and was defined as the incorporation of individual and group habits, attitudes, beliefs, and values presented in an organization. For example, if an enterprise's culture served as the cornerstone of providing quality products/services and/or encouraging learning, that culture could be one of contributors to the success of the enterprise. Functional capability, according to Hall (2000), was the ability to complete specific jobs in terms of an organization. Accordingly, the ability was stemmed from the knowledge, skills, and experiences of individuals in the organization and organization-related value chain such employers, suppliers, and distributors. For example, employee know-how could be considered as a competitive advantage since it enabled employees to efficiently perform their jobs and to reduce operational costs.

The asset-based differential was comprised of positional and regulatory capabilities. Positional capability was a consequence of past decisions and actions that had established positive relationships with others. Based on Hall (1992) past endeavors could "contribute not only to competitive advantage, but also to defendable position, because of the long time it would usually take a competitor, starting from scratch, to match them" (p. 136). For example, Bateman and Snell (2002) indicated that client expectations with regard to a product or service needed to be met and exceeded. If an enterprise could constantly meet and exceed the expectations of its customers, a positive

business reputation would be established and accumulated over time. Regulatory capability was defined as the possession of legal entities in an organization (Hall, 1992). Examples of regulatory capability included intellectual property rights, trade secrets, and contracts.

In sum, functional and cultural capabilities were grounded on competencies or skills. Positional and regulatory capabilities were correlated with assets owned by a company. More specifically, "the first two differentials are therefore concerned with 'doing', whilst the second two are concerned with 'having'" (Hall, 1992, p. 136).

Coyne's Taxonomy

Serving as the cornerstone of Hall's framework of intangible resources, Coyne (1986) stressed that companies needed to acknowledge the importance of differentiation in product/delivery attributes for the purpose of gaining sustainable competitive advantage (SCA). In the literature, Coyne (1986) indicated that, "customers rarely base their choice of a product or service on internal characteristics of the producer that are not reflected in a perceived product or delivery difference" (p. 55). Therefore, differences among competitors in various aspects such as raw material choice and factory location became factors only if those differences were transformed into product/delivery attributes that would have impacts on clients' choice of where to consume their money. According to Coyne (1986), product/delivery attributes contained not merely such common components as quality, price, and functionality, but also more extensive features like availability, visibility, consumer awareness, and after-sales service.

Coyne (1986) further noted that establishing positive differentiations among competitors in key product/delivery attributes was requisite to competitive advantage. However, what conferred a meaningful advantage in terms of a differentiation needed to be specified. As stated by Coyne (1986),

> An advantage is durable only if competitors cannot readily imitate the producer's superior product/delivery attributes. In other words, a gap in the capability underlying the differentiation must separate the producer from his competitors; otherwise, no meaningful competitive advantage exists…A capability gap exists when the function responsible for the differentiated product/delivery attribute is one that only the producer in question can perform, or one that competitors (given their particular limitations) could do only with maximum effort (p. 57).

Based on the above propositions, Coyne (1986) identified four capability gaps as the sources of sustainable competitive advantage. They were business system gaps, position gaps, regulatory/legal gaps, and organization or managerial quality gaps.

Business system gaps were the differences in abilities between a particular company and its competitors. More specifically, if a company could outperform its competitors in individual functions and the competition was unable to easily catch up, it was reasonable to assume that this company would have gained a competitive advantage. For example, superior engineering skills possessed by employees of a company could create a capability gap because they were capable of generating greater precision and reliability in a finished product.

Position gaps, similar to Hall's positional capability, were a consequence of past endeavors. Business reputation and customer trust, for example, could represent significant capability gaps since the creation of such positive relationships with customers was frequently the legacy of prior management generations.

Regulatory/legal gaps stemmed from government efforts of limiting the competitors, "who can perform certain activities or the degree to which they can perform those activities" (Coyne, 1986, p. 57). Operating licenses, patents, and import quotas were all avenues to create this type of capability gap for competitors to gain competitive advantages. For example, Pfizer's patent on certain drugs was able to permit this company to be dominant in certain segments of the pharmacy industry for a period of time (Boone & Kurtz, 2002).

Organization or managerial quality gaps were the differences in adaptability and innovative capability between a particular company and its competitors. That is, if an organization was able to constantly out-innovate or to be more adaptive than its competitors, this type of gap would be created by such an organization.

In sum, Coyne (1986) specifically addressed the existence of capability gaps among organizations and such gaps were used as the basis on explaining why some organizations would be able to gain sustainable competitive advantage. Although Coyne (1986) had never mentioned the term "intangible resources" in the literature, his taxonomy indeed served as the foundations of identifying and categorizing intangible resources that later acted as the basis for the capability differentials in Hall's framework (Hall, 1992).

Sveiby's Perspective

Sveiby (1997) pointed out that intangibles were the most valuable assets for organizations, especially in the business services sector. Accordingly, Sveiby (1997)

classified intangibles into three categories: employee competence, internal structure, and external structure. Table 2.2 summarized Sveiby's perspective in terms of the classification of intangibles.

> By [employee] competence, [Sveiby] means the sum total of the individual capability of the employees of the company: their education, their years in the industry, the years with the company, and their esprit de corps. By internal structure he means the intellectual property, models, computer simulations, computer and administrative systems, corporate knowledge, and corporate culture. In external structure he includes relationships with the suppliers, brand equity, the number and quality of the clients, customer satisfaction, reputation, and image (Ruparel, 1998, p. 172).

Sveiby (1997) used well-known companies to illustrate his classification. For example, Coca-Cola's most valuable intangibles could be its brand name and, based upon Sveiby's classification, brand name was under the category of external structure. Another example, the intangibles of pharmaceutical companies such as Merck and Pfizer would be their R & D portfolios. According to Sveiby, R & D portfolios would be classified into the category of internal structure.

Intangibles		
External structure	*Internal structure*	*Individual competence*
Brand, customer and supplier relationships	The organization: legal structure, management, manual systems, R & D, Attitudes, software	Education, experience

Table 2.2 Sveiby's Classification of Intangibles (1997, p.12)

Fernandez, Montes, and Vazquez's Typology

"Intangible resources are those soft resources which basically consist of knowledge or information" (Fernandez, Montes, & Vazquez, 2000, p. 81). Centered on the above recognition concerning intangible resources, Fernandez, Montes, and Vazquez

(2000) developed a typology that was based upon Hall's (1992, 1993) framework of grouping intangibles into people dependent and people independent resources. This typology categorized intangible resources into human capital, organizational capital, technological capital, and relational capital. According to Fernandez et al. (2000), the intangible resource that belonged to the people dependent category was human capital. Intangible resources that belonged to the people independent category were organizational capital, technological capital, and relational capital.

With regard to human capital, Fernandez et al. (2000) basically referred to the knowledge acquired by individuals that would lead to increases in their productivity and the value of their contribution to the organization. Human capital also included personal relations and individual qualities such as experience, reputation, intelligence, or loyalty.

Organizational capital was considered as a cornerstone of contributing order, stability, and quality to an organization. This capital was also regarded as a context for employees to work in and communicate to one another. An organization's guidelines, norms, culture, databases, and strategic alliances were examples pertaining to organizational capital.

Technological capital referred to the knowledge pertaining to the access, use and innovation of production techniques and product technology. Examples of technological capital included patents, trade secrets, and copyrights. Based on Fernandez et al. (2000), the technological capital gap among competitors of an industry could be widened by the performance of the R & D department and the capability of adopting and assimilating

technologies developed by companies, "to which access is gained by industrial espionage, reverse engineering, head-hunting, licenses, and purchases of machinery and production equipment" (p. 84).

Relational capital was the potential stemmed from the intangibles pertaining to the market place. As Fernandez et al. (2000) stated,

> When the quality of the product is not easily established by inspection and immediate experience or when the cost of the search for and inspection of products is relatively high, the firm which can offer its clients, not only superior quality, but also the guarantee of this superior quality, can sell the product at a price exceeding the cost of providing and indicating this quality (p. 85).

Examples of this capital consisted of reputation, brands, customer loyalty, long-term customer relationships, commercial name, shop sign, and distribution channels.

The Delphi Technique

> Several heads are better than one in making subjective conjectures about the future…and that experts will make conjectures based upon rational judgment rather than merely guessing, and will separate hope from likelihood in the process (Weaver, 1971, p. 269).

Characteristics of Delphi

Based on the rationale that, "two heads are better than one, or…n heads are better than one" (Dalkey, 1972, p. 15), the Delphi technique, developed by Dalkey and Helmer at the Rand Corporation in the 1950s, was designed as a communication structure that aimed at constructing detailed examination and discussion of a particular issue for the purpose of goal setting, policy investigation, and prediction of future occurrence (Ulschak, 1983; Ludwig, 1994; Turoff & Hiltz, 1996). In the literature, the Delphi technique has been applied in various fields such as program planning, needs assessment,

curriculum development, policy determination, and resource utilization. Delbecq, Van de Ven, and Gustafson (1975) specifically indicated that the Delphi technique could be used for achieving the following objectives:

1. To determine or develop a range of possible program alternatives.
2. To explore or expose underlying assumptions or information leading to different judgments.
3. To seek out information which may generate a consensus on the part of the respondent group.
4. To correlate informed judgments on a topic spanning a wide range of disciplines.
5. To educate the respondent group as to the diverse and interrelated aspects of the topic (p. 11).

"Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem" (Linstone & Turoff, 1975, p. 3). Indeed, the Delphi technique was regarded as a means for consensus-building by utilizing a series of questionnaires to collect data from a panel of selected subjects (Dalkey & Helmer, 1963; Dalkey, 1969; Lindeman, 1981; Martino, 1983; Young & Jamieson, 2001). Delphi was also characterized by multiple iterations designed to achieve convergence of opinions. Based on Ludwig (1994),

> Iterations referred to the feedback process. The process was viewed as a series of rounds; in each round every participant worked through a questionnaire which was returned to the researcher who collected, edited, and returned to every participant a statement of the position of the whole group and the participant's own position. A summation of comments made each participant aware of the range of opinions and the reasons underlying those opinions (p. 55).

Furthermore, the attributes of the Delphi technique, according to Ludlow (1972), Dalkey (1972), and Douglas (1983), consisted of anonymity, controlled feedback, and statistical analysis. These attributes, in fact, were designed to offset the shortcomings of

conventional means of pooling individual opinions. Certain shortcomings concerning group processes such as face-to-face interactions have been identified by psychologists and the most serious shortcomings included influences of dominant individuals, noise, and group pressure for conformity (Dalkey, 1972).

Being viewed as one of the primary characteristics, anonymity of the respondents was considered as an alternative to reduce the effect of dominant individuals in the process of a Delphi study (Dalkey, 1972). In the premise of assuring the issue of confidentiality, subjects of a Delphi study might have a slight chance to know who else was invited to offer their opinions. Furthermore, subjects could be geographically dispersed and electronic devices such as e-mail could be used as a means to exchange information. Therefore, certain downsides of a group activity such as specious persuasions could be minimized (Helmer & Rescher, 1959; Oh, 1974; Adams, 2001).

Controlled feedback was designed to reduce the effect of noise. Based upon Dalkey (1972), noise meant that communication in a group process often distorted and dealt with group and/or individual interest rather than focusing on problem solving. As a result, this kind of communication would generally consist of bias. Basically, a well-described summary of prior iteration was intentionally distributed to respondents and the procedure of giving feedback to Delphi panelists provided additional opportunities for them to generate more salutary insights (Dalkey, 1972). Through the operation of multiple iterations, respondents were expected to become more problem-solving oriented, to offer their opinions more insightfully, and to minimize the effect of noise.

The use of statistical analysis was a practice to reduce group pressure for conformity (Dalkey, 1972). More specifically, statistical analysis was designed to assure

that opinions generated by each subject of a Delphi study were well represented in the final round because, “at the end of the exercise there may be still be a significant spread in individual opinions” (Dalkey, 1972, p. 21). That is, each Delphi panelist, in the premise of assuring the issue of confidentiality, would have no pressure to conform others’ responses that originated from social norms, customs, or organizational culture. Interestingly, Scheibe, Skutsch, and Schofer (1975) noted that subjects’ confidence played an important role in consensus generation. In brief, a highly confident panelist could be less impacted by group pressure and, therefore, could shift less toward consensus.

Delphi Process

Theoretically, the Delphi process could be continuously iterated until consensus was enhanced. However, the literature revealed that three iterations would be sufficient to gather information and to reach a consensus in most cases (Sweigert & Schabacker, 1974; McCampbell & Stewart, 1992; Watkins, 1993; Ludwig, 1994; Custer, Scarcella, & Stewart, 1999). Brooks (1979) specifically noted that consensus was reached after three iterations. Compared to the third round, the results showed little or no change in the fourth round. Furthermore, in their study, Cyphert and Gant (1971) noted that nearly all Delphi panelists developed their opinions after the third round was completed. As a result, they questioned the need for conducting the fourth round in a Delphi study.

Traditionally, in the first round, the Delphi technique began with an open-ended questionnaire and these open-ended statements served as the cornerstone to solicit specific information about a content area from the Delphi panelists (Custer, Scarcella, & Stewart, 1999). Content analysis was used to analyze collected information provided by

Delphi panelists. Investigators subsequently transformed these collected information into a structured instrument as the second round questionnaire. In addition, one common modification of Delphi format was the use of a designated questionnaire that was based upon an extensive review of literature. Kerlinger (1973) noted that the use of a modified Delphi was appropriate if basic information concerning the target issue was available. In sum, in opposition to the traditional Delphi that utilized open-ended questions to collect information in the initial round, a modified Delphi technique was utilized by administering a structured instrument to initiate the compilation and development for subsequent iterations. McCampbell and Stewart (1992) particularly addressed the advantages of using a pre-established set of statements in the first round:

1. It would save time that would otherwise be needed to collate and edit the usual first round responses and prepare the output that becomes the second round questionnaire.
2. It would have the effect of cutting down on the dropout rate of panelists completing the open-ended, needs-assessment type survey and not participating in the rest of the study.
3. It would assure that important statements were included by the researcher that otherwise might have been omitted.
4. Panel members genuinely would appreciate a completed instrument on which to respond (p. 58).

In the second round, each Delphi panelist would receive a second questionnaire and be asked to review the statements summarized by the investigators and identified by the panelist in the first round. Accordingly, Delphi panelists were required to rate each statement for the purpose of establishing preliminary priorities among statements. In some cases, subjects were asked to state the reason concerning rating priorities among statements (Jacobs, 1996). In this round, consensus began forming and the actual outcomes would be presented among the subjects' responses (Jacobs, 1996).

In the third round, each Delphi panelist would receive a questionnaire that included the list and ratings summarized by the investigators in the previous round, and thereby would be asked to revise his/her judgments or "to specify the reasons for remaining outside the consensus" (Pfeiffer, 1968, p. 152). This round gave subjects an opportunity to make further considerations for their judgments. However, compared to the previous round, only a slight increase in the degree of consensus could be expected (Weaver, 1971; Anglin, 1991; Jacobs, 1996).

In the fourth or final round, a list, ratings, minority opinions, and consensus would be distributed to each subject. This round provided an additional opportunity for panelists to revise their judgments. In fact, according to the degree of consensus sought by investigators, the number of iterations in a Delphi study could vary from three to five (Delbecq, Van de Ven, & Gustafson, 1975; Ludwig, 1994).

Panel Selection

Qualification of Delphi Subjects: In a Delphi study, choosing appropriate subjects was the most important step in the whole process because it directly related to the quality of results generated (Judd, 1972; Taylor & Judd, 1989; Jacobs, 1996). Since the Delphi technique focused on eliciting expert opinions over a short period of time, the selection of Delphi panelists was generally dependent upon the disciplinary areas of expertise required by the specific issue.

With regard to the standard of selecting Delphi panelists, in fact, no exact criterion was currently listed in the literature concerning the selection of Delphi subjects. That is, "throughout the Delphi literature, the definition of [Delphi subjects] has remained ambiguous" (Kaplan, 1971, p. 24). Researchers (Helmer & Rescher, 1959; Klee, 1972;

Oh, 1974) revealed that individuals who were simply knowledgeable concerning the target issue were not sufficient. Basically, in a loose sense in terms of the qualification of Delphi panelists, individuals were likely eligible to be invited in a Delphi study if they had somewhat related backgrounds and experiences concerning the target issue, were capable of contributing helpful inputs, and were willing to revise their initial or previous judgments for yielding consensus (Pill, 1971; Oh, 1974). Considering the necessity of selecting the most qualified individuals in a Delphi study, Delbecq, Van de Ven, and Gustafson (1975) specifically stated that three groups of people were qualified to be subjects of a Delphi study. These groups of people were "(1) the top management decision makers who will utilize the outcomes of the Delphi study; (2) the professional staff members together with their support team; and (3) the respondents to the Delphi questionnaire whose judgments are being sought" (p. 85).

Theoretically, Delphi subjects required to be highly trained and competent with specialized knowledge on the target issue. A general assumption regarding Delphi panelists was that they were commonly equivalent in knowledge and experiences. Altschuld and Thomas (1991) and Marchant (1988), however, noted that the expertise of Delphi panelists could be unevenly distributed, especially in the field of high technology. More specifically, "some panelists may have much more in-depth knowledge of certain topics, whereas other panelists are more knowledgeable about different topics" (Altschuld & Thomas, 1991, p. 187). Therefore, depending upon the field and topic of being studied, principal investigators needed to work diligently for the purpose of examining the qualification of Delphi panelists.

Procedure of Selecting Qualified Delphi Panelists: With regard to the proper procedure of selecting qualified Delphi panelists, Oh (1974) pointed out that choosing appropriate subjects was generally based on the judgment and discretion of the principal investigators. Later, Jones and Twiss (1978) indicated that the principal investigators of a Delphi study should identify and select the most appropriate individuals through a nomination process. Ludwig (1994) also stated that "solicitation of nominations of well-known and respected individuals from the members within the target groups of experts was recommended" (p. 52). Generally, the pool of selecting possible Delphi panelists was likely to use positional leaders (Kaplan, 1971; Ludwig, 1994), to follow a review of authors of publications in the literature (Meyer, 1992; Miller, 2001), and/or to make contacts with those who had firsthand relationships with a particular issue (Jones, 1975; Anderson & Schneider, 1993). The latter basically consisted of individuals who were primary stakeholders with various interests. After gathering a complete list regarding possible Delphi panelists, a nomination process could proceed in order to determine the final list of subjects in a Delphi study.

Number of Delphi Panelists: Delbecq, Van de Ven, and Gustafson (1975) recommended that researchers should use the minimally sufficient number of subjects and should seek to verify the results through follow-up explorations. Ludwig (1994) noted that the number of experts used in a Delphi study "was generally determined by the number required to constitute a representative pooling of judgments and the information processing capability of the research team" (p. 52). However, what constituted an optimal number of subjects in a Delphi study never reached a consensus. Delbecq, Van de Ven, and Gustafson (1975) suggested that ten to fifteen subjects could be sufficient if the

background of Delphi subjects was homogeneous. Conversely, if various reference groups were involved in a Delphi study, more subjects were anticipated. Ludwig (1994) documented that "the majority of Delphi studies have used between 15 and 20 respondents" (p. 63). In sum, the size of Delphi panelists was variable (Delbecq, Van de Ven, & Gustafson, 1975). If the sample size of a Delphi study was too small, these respondents might not be able to constitute a representative pooling of judgments. If the sample size was too large, the drawbacks of the Delphi technique such as the potential of low response rate, the consumption of large block of time, and the possibility of eliminating minority groups' opinions would take place. The drawbacks of the Delphi technique would be discussed later.

Summary: The knowledge, interest, and commitment of Delphi panelists would have great impact on the quality of responses. In addition, Delphi panelists needed to be highly motivated and should have no difficulty in reading and written communication (Delbecq, Van de Ven, & Gustafson, 1975; Ulschak, 1983; Johnson, Miller, Miller, & Summers, 1987; Altschuld, Thomas, McCloskey, Smith, Wiesmann, & Lower, 1992; Ludwig, 1994). For the purpose of enhancing the quality of responses, personal or telephone contacts were strongly encouraged because investigators would have opportunities to communicate with potential subjects, to describe the importance of their participation, to illustrate the objectives of the Delphi study, and to explain the procedure of the proposed study (Delbecq, Van de Ven, & Gustafson, 1975; Altschuld, Thomas, McCloskey, Smith, Wiesmann, & Lower, 1992; Ludwig, 1994).

Time Requirements

Conducting a Delphi study could be time-consuming. Specifically, when the instrument of a Delphi study consisted of large number of statements, the result was the fact that panelists needed to consume large blocks of time to complete the questionnaires. Delbecq, Van de Ven, and Gustafson (1975), Ulschak (1983), and Ludwig, (1994) recommended that a minimum 45 days for the administration of a Delphi study was required. With regard to the time management between iterations, Delbecq et al. (1975) also noted that giving two weeks for Delphi panelists to respond to each round was encouraged.

Ludwig (1994) indicated "a drawback to Delphi was that the questionnaire method may slow the process greatly as several days or weeks may pass between rounds (p. 54). More specifically, since the instrument development, data collection, and questionnaire administration were interconnected between rounds, ensuring Delphi panelists responded to the investigators on time, how investigators analyzed data, developed a new instrument based upon the prior responses, and distributed subsequent questionnaires in a timely fashion, were all a challenge.

Currently, the development of electronic technology (e.g., e-mail, telephone, teleconference) might facilitate those who were interested in using the Delphi technique. Witkin and Altschuld (1995) noted that electronic technology provided an opportunity for individuals more easily to execute the Delphi process by taking advantages of "(1) the storage, processing, and speed of transmission capabilities of computers; (2) the maintenance of respondent anonymity; and (3) the potential for rapid feedback" (p. 204).

Reliability in Delphi

"Reliability is the extent to which a measuring device is consistent in measuring whatever it measures" (Ary, Jacobs, & Razavieh, 1996, p. 262). However, conventional and more widely accepted means of establishing reliability were not appropriate for the Delphi technique (Hughes, 1993; Ludwig, 1994). The Delphi technique was principally used and intended to encourage subjects to modify the response set as the group moved towards consensus with the abstract ideas becoming a more unified construct. Dalkey (1972) noted:

> For the analyst using expert opinion within a study, reliability can be considered to play somewhat the same role as reproducibility in experimental investigations. It is desirable for a study that another analyst using the same approach (and different experts) arrives at similar results (p. 18).

Dalkey and Rourke (1972) also indicated that results generated by two groups of Delphi panelists should be similar if the same given value statements were distributed to them. Accordingly, investigators could run the correlation for the purpose of testing the similarity of results produced by the two groups and the value of the correlation coefficient should be high.

Scale

The rating scale of Delphi instrument needed to be equal interval because each subject was required to determine rank order or to rate relative importance of the target issue. Scheibe et al. (1975) indicated that an interval scale was a must for the Delphi instrument for the purpose of ensuring that priority or relative importance could be ascertained. In the literature, the use of the Likert-type scale was favored in most cases.

Statistics Used

The major statistics used in Delphi studies was central tendency. Generally, the uses of median and mode were favored, whereas, in some cases, as manifested by Murray and Jarman (1987), the mean was preferred. Witkin (1984) questioned the appropriateness of using the mean to measure the subjects' responses if scales used in Delphi studies were not equal intervals. In the literature, the use of median score, based on Likert-type scale, was strongly favored (Hill & Fowels, 1975; Eckman, 1983; Jacobs, 1996). As Jacobs (1996) stated, "considering the anticipated consensus of opinion and the skewed expectation of responses as they were compiled, the median would inherently appear best suited to reflect the resultant convergence of opinion" (p. 57). The use of mode was also suitable in Delphi. Ulschak (1983) indicated that the use of mode in the form of a histogram display could be appropriate. Ludwig (1994) specifically addressed that "the Delphi process has a tendency to create convergence, and though this was usually to a single point, there was the possibility of polarization or clustering of the results around two or more points. In these instances, the mean or median could be misleading" (p. 57).

Consensus Determination

"In most Delphis, consensus is assumed to have been achieved when a certain percentage of the votes fall within a prescribed range" (Scheibe, Skutsch, and Schofer, 1975, p. 277). In fact, what criterion was determined to use for the purpose of defining a consensus was subject to interpretation. The following were sample criteria recommended by different researchers.

1. "Consensus is reached when 80 percent of the votes fall within two categories on a seven-point scale" (Ulschak, 1983, p. 122).
2. At least 70 percent of Delphi panelists needed to rate three or higher on a four point Likert-type scale and the median had to be at 3.25 or higher (Green, 1982).
3. "Consensus on a statement was agreed upon when 80 percent of ratings…fell within two categories on a six-point Likert scale" (Kelbaugh, 2003, p. 83).
4. Consensus was achieved when the stability of distributions was less than or equal to 15 percent in two successive iterations and a mean score of 3.87 or higher on a five-point Likert scale (Chiou & Guo, 2005).

An alternative approach, proposed by Scheibe, Skutsch, and Schofer (1975), was to measure the stability of Delphi panelists' vote distribution curve rather than central tendency score. The rationale of this measurement was that responses from Delphi panelists would be inevitably different between two successive rounds and a certain amount of oscillatory movement would take place. By "calculating the proportion of respondents at each scale distance from the mode that moved toward the mode between rounds," investigators would acquire the percent change between rounds and use that number of percentage to identify the stability of subjects' responses (Scheibe, Skutsch, and Schofer, 1975, p. 278). Set by Scheibe, Skutsch, and Schofer (1975), a fifteen percent change was considered the state of equilibrium. More specifically, if a percentage change was less than 15 percent, it would say that the stability of that statement had been

reached. If a percentage change was higher than 15 percent, that particular statement needed to be included in the next iteration. More detailed information such as the method of calculation was specified in the Data Analysis section (Chapter Three).

Weaknesses of the Delphi Technique

Potential of Low Response Rate: Due to multiple feedback processes, keeping a high response rate could be a challenge. "In the Delphi technique, [poor response rate] is magnified fourfold because a maximum of four surveys may be sent to the same panelists" (Witkin & Altschuld, 1995, p. 196). If certain portion of subjects discontinued their responses during various stages of the Delphi process, the quality of information would be discounted. Therefore, Ludwig (1994) specifically addressed that subjects' motivation was the key to a successful Delphi study and investigators needed to play an active role to help ensure a high response rate.

Consumption of Large Block of Time: The Delphi technique could be time-consuming and laborious. Unlike other data collection techniques such as the telephone survey and the face-to-face administration, which could be simultaneously conducted by a group of people and could be completed in a short period of time if the sample size was small, the Delphi technique was iterative and sequential. As a result, the necessity of taking large block of time was inescapable. Ludwig (1994) indicated that "a drawback to Delphi was that the questionnaire method may slow the process greatly as several days or weeks may pass between rounds" (p. 54). Optimally speaking, the iteration characteristic of the Delphi process provided an opportunity for investigators and subjects to improve the accuracy of results. In contrast, the same characteristic also increased the workload of investigators (Cunliffe, 2002).

Possibility of Eliminating Minority Groups' Opinions: Individuals with various backgrounds would have different viewpoints. Researchers revealed that, in a Delphi study, the rating differences between two groups were found (Anderson & Schneider, 1993). In general, results generated by two groups of people with similar backgrounds should be more similar to each other than to the groups with different backgrounds. Based upon this proposition, if various reference groups were used in a Delphi study, the opinions provided by the minority group(s) could be potentially eliminated. For example, a study, conducted by Cyphert and Gant (1971), attempted to use the Delphi technique to assess the needs, desires, and opinions of various levels of stakeholders in a college. The sample of the study was categorized into six groups, but the sample sizes of these groups were very unevenly distributed. As a result, even though the member of the least populous subgroup jointly and consistently rated specific statements as the most important ones, their responses could be possibly eliminated because the member of the most populous subgroup might regard these important statements, selected by the member of the least populous subgroup, as trivial.

Therefore, when conducting a Delphi study, investigators needed to record opinions addressed by each subject for further references. Accordingly, if various reference groups were used in a Delphi study, investigators should attempt to make the size of each reference group evenly distributed for the purpose of offsetting the shortcoming stated above.

Potential of Molding Opinions: The iteration characteristic of the Delphi technique could potentially enable investigators to mold opinions (Altschuld, 2003). An experiment, conducted by Scheibe, Skutsch, and Schofer (1975), indicated that Delphi

panelists would rate their responses differently after they received a distorted feedback. Dalkey and Helmer (1963) also noted that "some 'leading' by the experimenters inevitably resulted from the selection of the information supplied" (p. 467). Moreover, Cyphert and Gant (1971) illustrated that a statement in their study was initially rated below average. However, Delphi panelists rated the statement above average after receiving a false feedback. Therefore, Cyphert and Gant (1971) concluded that the Delphi technique could "be used to mold opinion as well as to collect [data]" (p. 273). Indeed, "subtle pressure to conform with group ratings" was one of the major drawbacks in the Delphi technique (Witkin & Altschuld, 1995, p. 188). Delphi investigators needed to be careful in dealing with this issue.

Potential of Identifying the Less Important Statements: An assumption concerning Delphi panelists was that they were equivalent in knowledge and experience (Altschuld & Thomas, 1991). However, this assumption might not be justified. More specifically, the expertise of Delphi panelists could be unevenly distributed (Marchant, 1988; Altschuld & Thomas, 1991). "Some panelists may have much more in-depth knowledgeable of certain topics, whereas other panelists are more knowledgeable about different topics" (Altschuld & Thomas, 1991, p. 187). Therefore, panelists who had less in-depth knowledge of certain topics would be unable to specify the most important statements which were perceived by those panelists who possessed in-depth knowledge concerning the target issue. The outcomes of a Delphi study could be the results of identifying the *general* statements rather than in-depth familiarity (Altschuld & Thomas, 1991).

Summary

The review of literature primarily focused on agri-tourism and intangible resources. Because a paucity of studies has been conducted on both topics, the literature reviewed attempted to provide a background to the relevance and capability to collect the data for the purpose of fulfilling the objectives of this study. This research effort was intended to neither duplicate any previous studies nor collect data for the purpose of verifying the reviewed literature. Based on the reviewed literature, however, it was substantiated that the relevance, feasibility, and usefulness of the ends sought of collecting information would help describe the roles of intangible resources associated with the management of agri-tourism enterprises.

The literature regarding the Delphi technique served as the cornerstone of providing structure necessary to synergize the perceptions illustrated in the literature and the expertise of panelists. Furthermore, the reviewed literature enabled the investigators to understand strengths and weaknesses of the Delphi technique. As a result, the investigators were capable of determining appropriate criteria such as the definition of consensus, the qualification of Delphi panelists, and the number of Delphi panelists for the purpose of enhancing the quality of this study.

CHAPTER 3

METHODS

In opposition to the traditional Delphi that utilized open-ended questions to gather information in the first round, a modified Delphi technique was administered by using a structured instrument to initiate the compilation and development for subsequent iterations. Because of the availability of initial information, in this study, a modified Delphi technique was employed.

The reasons for using the Delphi technique to identify intangible resources concerning agri-tourism enterprises were twofold. First, the number of qualified subjects was limited. In Taiwan, only eight agri-tourism enterprises were ratified by the Council of Agriculture in 2001 (Hsu, 2002). Despite the expansion in the number of agri-tourism enterprises in recent years, only 20 percent of such businesses have acquired proper operating licenses (Cheng, 2005b). Second, according to Witkin and Altschuld (1995), the use of a Delphi technique would be appropriate if the purpose of this Delphi was to generate, prioritize, and obtain information regarding projected areas. In this case, because of a paucity of previous studies, this study attempted to generate information and set priorities for the purpose of providing a preliminary base of knowledge pertaining to intangible resources in the agri-tourism industry.

With regard to the number of iterations in a Delphi study, theoretically, the Delphi process could be continuously iterated until final consensus was determined. However, researchers (Cyphert & Gant, 1971; Brooks, 1979; Ludwig, 1994; Custer, Scarcella, & Stewart, 1999; Kelbaugh, 2003; Shah & Kalaian, 2005) have pointed out that three iterations would be sufficient to gain information and to reach a consensus in most cases. Based upon the above proposition, a three round Delphi survey was planned and conducted as a means of deriving a consensus concerning the intangibility of resources in the management of agri-tourism enterprises.

In order to articulate the procedures that were followed in this study, this chapter was organized into four sections. The sections included: (1) panel selection, (2) instrumentation, (3) data collection, and (4) data analysis.

Panel Selection

Qualification of subjects: In a Delphi study, choosing appropriate subjects was the most important step in the whole process because it directly related to the quality of results produced (Taylor & Judd, 1989). Because no exact criterion was currently listed in the literature concerning the selection of Delphi subjects, "the definition of [Delphi subjects] has remained ambiguous" (Kaplan, 1971, p. 24). Basically, individuals were likely eligible to be invited in a Delphi study if they had somewhat related backgrounds and experiences concerning the target issue, were capable of contributing helpful inputs, and were willing to revise their initial or previous judgments for yielding consensus (Pill, 1971; Oh, 1974). Delbecq, Van de Ven, and Gustafson (1975) specifically indicated that three groups of people were qualified to be subjects of a Delphi process. They were "(1)

the top management decision makers who will utilize the outcomes of the Delphi study; (2) the professional staff members together with their support team; and (3) the respondents to the Delphi questionnaire whose judgments are being sought" (p. 85).

To avoid using loose panel selection criteria and to match the qualification depicted by Delbecq Van de Ven and Gustafson (1975), an effort was made to identify experts who possessed knowledge and experience concerning the management and development of agri-tourism enterprises. Individuals identified as experts and invited to participate in this study were those who at least met one of the following criteria. First, individuals had firsthand relationships with the management and development of agri-tourism enterprises. In this case, operators of agri-tourism enterprises were considered to be qualified experts. Second, positional leaders who were in charge of the management and development of agri-tourism enterprises in the public and private institutions were considered to be qualified experts. In this case, directors of professional associations and government officers who were directly responsible for the agri-tourism development were included. Third, academics with expertise in the fields of agri-tourism, farm management, research knowledge, entrepreneurship, community development, and Extension were considered as qualified experts. In this case, only those who had scholarly work in the area of agri-tourism would be invited to participate in this study after a review of available publications and related literature.

Jones and Twiss (1978) indicated that the principal investigators of a Delphi study should identify and select useful individuals through a nomination process. Ludwig (1994) stated that "solicitation of nominations of well-known and respected individuals from the members within the target groups of experts was recommended" (p. 52).

Therefore, a review panel (Appendix A) comprising of two faculty members and one manager of agri-tourism enterprise with knowledge and experience in agri-tourism and research methodology was used for the purpose of helping make decisions in the process of subject selections. In this study, the Department of Leisure and Recreation Management of the Asia University and the Council of Agriculture (COA), the highest management authority responsible for making and enforcing agricultural policies in Taiwan, served as informational sources for providing an updated list that consisted of information of operators of agri-tourism enterprises and key officers in the public and private sectors. With regard to the selection of qualified academics, the selection of scholars in this study followed a procedure of a review of authors of publications in the literature conducted by the investigator. After gathering the complete list of contact information regarding operators of agri-tourism enterprises, key officers in the public and private sectors, and acknowledged scholars, a nomination process proceeded for the purpose of determining the final list of subjects in this study. See Appendix B for the complete list of the Delphi panel.

Number of subjects: Delbecq, Van de Ven, and Gustafson (1975) recommended that the principal investigators should use the minimally sufficient number of subjects and should seek to verify the results through follow-up research. Ludwig (1994) noted that the number of experts used in a Delphi study "was generally determined by the number required to constitute a representative pooling of judgments and the information processing capability of the research team" (p. 52). Due to a scarcity of literature

concerning the appropriate number of subjects to include in a Delphi study, determining the appropriate number of subjects to use in a Delphi study has never reached a consensus.

Witkin and Altschuld (1995) revealed that the approximate size of a Delphi panel was "generally under 50, but more have been used" (p. 187). Furthermore, Ludwig (1994) documented that "the majority of Delphi studies have used between 15 and 20 respondents" (p. 63). For the purpose of maximizing a representative pooling of information/judgments and maintaining a balance between Witkin and Altschuld (1995) and Ludwig's (1994) statements, a total of 40 experts were invited to participate in this study. The forty experts in this study included 13 operators of agri-tourism enterprises, 14 key officers in the public and private sectors, and 13 persons in academia.

Instrumentation

Because the modified Delphi technique was employed, a self-administrated questionnaire was developed to fulfill the objectives of the study in the first round (Appendix C & Appendix D). Accordingly, the contents of the instrument used in the first round were based on an extensive review of literature (Coyne, 1986; Par, 1991; Hall, 1992, 1993, 1994, 2000; Sonnenberg, 1994; Cheng & Chen, 1996; Sveiby, 1997; Fernandez, Montes, & Vazquez, 2000; Contractor, 2001; Inkpen & Madhok, 2001; Grosse, 2001; Sarathy, 2001; Furreer, Sudharshan, & Thomas, 2001; Bounfour, 2003; Esch, 2003; Villalinga, 2004; Zheng, 2004; Berry, 2005). As a result, a total of 44 statements were generated. Each subject was asked to rate each statement on a seven point Likert-type scale ranging from 1 (Not Important At All) to 7 (Critically Important). Instruments used in the second round (Appendix E & Appendix F) and third round

(Appendix G & Appendix H) were each developed and depended on responses provided by subjects to the preceding iteration. Any comments provided by panelists in each round were addressed and inputs were incorporated into the successive iteration(s).

Validity: In this study, face and content validity of the initial instrument was assessed by a panel of experts (n=9). The invitation of panel members (Appendix I) was based upon their knowledge and expertise in farm management, leisure and recreation management, small enterprise management, research methodology, and/or their prior experiences in conducting relevant research in the field of agri-tourism. Each panel member was asked to provide insights for the purpose of upgrading and critiquing the initial statements.

Because the setting of this study was in Taiwan, the instruments were required to be translated into Chinese (see Appendix D, F, & H for Chinese versions Round I, II and III). Procedures of back-translation and review (Brislin, 1970) were conducted because deeper meanings of certain statements in the Chinese version might not parallel the English version. Comments and inputs from panel members and the procedure of back-translation were addressed and suggestions incorporated into the final draft of the initial instrument.

Reliability: Hughes (1993) and Ludwig (1994) noted that traditional and more widely accepted means of building reliability were inappropriate for the Delphi technique because the use of the Delphi technique was to encourage experts to modify their responses as the group moved towards a consensus with possible incongruent ideas becoming a more unified construct. As Kelbaugh (2003) stated, “since reliability procedures look at the stability in measurement over time or across forms, it does not

apply to the Delphi technique where panel members are seeking consensus and the instrument is modified in each round based on panel member input" (p. 76). Dalkey (1972) also indicated that, "for the analyst using expert opinion within a study, reliability can be considered to play somewhat the same role as reproducibility in experimental investigation. It is clearly desirable for a study that another analyst using the same approach (and different experts) arrive at similar results" (p. 18). Because reliability was not applicable to the Delphi technique, no attempt was made to establish reliability in this study.

Data Collection

In this study, the mailed survey technique was employed on each round. After a thorough list of potential subjects was identified and a process of nomination was complete, the investigator contacted each expert (by phone and/or personal contact) for the purpose of requesting his/her participation, answering his/her questions, and ensuring his/her willingness to participate in this study. After the initial contact, a mail packet that included a cover letter, a questionnaire, and a self-addressed stamped envelope was mailed to the intended subjects. The cover letter contained a brief introduction of the study, the importance of subjects' participation, an assurance of confidentiality, and the deadline for returning the questionnaire.

With regard to the control of non-response error, the non-respondents were contacted over the telephone two days after the due date and were encouraged to complete and return the questionnaires. If the non-respondents were still unable to return their questionnaires, they would be dropped from this study. Ludwig (1994) noted that one of the shortcomings of the Delphi technique was that subjects would lose their

interest due to multiple iterations. Therefore, for the purpose of maintaining subjects' interests, letters of appreciation and small incentives were used following each round.

Missing data (no response, incomplete, or unintelligible) could also be a problem for the mail questionnaire (Dillman, 2000). In this study, subjects would be contacted over the telephone or e-mail if missing data severely restricted its application. More specifically, if subjects left at least four statements unanswered, incomplete, and/or unintelligible in each round, they would be contacted immediately after the investigator received their returned questionnaires. Simultaneously, these subjects would be asked to respond to those unanswered, incomplete, and/or unintelligible statements. If subjects only missed one or two statements, a courtesy note would be attached in the following round for the purpose of making them aware of those unanswered, incomplete, and/or unintelligible statements. If missing data took place in the final round, these subjects would be contacted and asked for their final responses concerning the missing statement(s).

In the Round I mailing, a cover letter, a copy of the questionnaire, and a self-addressed stamped envelope were included. The cover letter explained (1) the purpose of the study, (2) the research technique, and (3) the importance of their participations. Results generated from Round I were reviewed and further described in the Round II instrument using summary comments and summary tables.

In Round II, a packet that consisted of a cover letter, a copy of the Round II questionnaire, a self-addressed stamped envelope, a letter of appreciation, and a small incentive was mailed to each subject. In the Round II questionnaire, a summary of overall reactions in Round I and, by using summary tables, subjects' prior responses concerning

each statement was also attached. If statements did not reach projected consensus, all subjects were asked to re-assess their positions on each statement and were encouraged to change or retain their previous answers after considering the data provided by the investigator. Results from Round II were reviewed and further described in the Round III instrument by using summary comments and summary tables.

In Round III, similar to Round II, a packet containing a cover letter, a copy of Round III questionnaire, a self-addressed stamped envelope, a letter of appreciation, and a small incentive was mailed to each subject. In the Round III questionnaire, a summary of overall reactions in Round II and, by using summary tables, subjects' prior responses concerning each statement was also attached. Like Round II, if statements did not reach projected consensus, all subjects were asked to re-assess their positions on each statement and were encouraged to change or retain their previous answers after considering the data provided by the investigator.

Data Analysis

In this study, opinion stability and the mean score were used for the purpose of determining consensus. Accordingly, descriptive statistics were used and the Statistical Package for the Social Science (SPSS for Widows) was employed for data analysis. The measurement of opinion stability, proposed by Scheibe, Skutsch, and Schofer (1975), was to calculate the stability of subjects' vote distribution curve rather than central tendency scores. The rationale of this measurement was that responses from Delphi panelists would be inevitably different between two successive rounds and a certain amount of oscillatory movement would take place. By "calculating the proportion of respondents at each scale distance from the mode that moved toward the mode between rounds,"

investigators would gain the percent change between rounds and use that number of percentage to identify the stability of subjects' responses (Scheibe, Skutsch, and Schofer, 1975, p. 278). As stated by Scheibe, Skutsch, and Schofer (1975), a fifteen percent change level was an appropriate cut-off point. More specifically, if a percentage change was less than 15 percent, it could be determined that the stability of that statement had been reached. If a percentage change was higher than 15 percent, that particular statement needed to be included in the next round(s).

Consensus, in this study, was defined as the stability of distributions that presented marginal changes of less than or equal to 15 percent in two successive iterations and a mean score of 5.60 or higher. Statements not meeting the level of acceptance, as well as new statements provided by panelists in the previous iteration, were offered in the next round of the Delphi process. Furthermore, comments provided by the Delphi panel to individual statements, both agreements and disagreements, were included in the subsequent instrument in order to encourage a full range of responses.

According to Scheibe, Skutsch, and Schofer (1975), the process of calculation concerning the change level included the following:

> To compare the distributions of opinion between rounds, the histograms may be subtracted columnwise and the absolute value of the result taken…Columnwise subtraction between the first and second, and the second and third…The absolute values of the differences between histograms are aggregated to form total units of changes; but since any one participant's change of opinion is reflected in the histogram differences by two units of change, net person-changes must be computed by dividing total units of change by two. Finally, the percentage change is determined by dividing net changes by the number of participants (p. 277-278).

The reasons for using Scheibe, Skutsch, and Schofer's approach were assorted. First, this approach was capable of allowing more information to be contained. One of the

objectives of using the Delphi technique was to identify agreements and disagreements of a projected concern such as a policy issue (Turoff, 1975). However, a bimodal distribution could take place and such distribution would not be considered as a consensus. In fact, a bimodal distribution practically presented a substantial division of opinion. Second, the approach "is relatively simple to calculate, and has much greater power and validity than parametric tests of variance" (Scheibe, Skutsch, & Schofer, 1975, p. 280). Third, an inherent characteristic of the Delphi technique—to inform subjects during the process of requesting their judgments—could, more or less, inevitably drive subjects to conform their opinions to the majority. However, Linstone and Turoff (1975) and Ludlow (1975) noted that certain types of individuals such as decision makers were more likely to be interested in seeking consensus because they often needed to make decisions in a situation of lack of adequate information. In this study, two groups of subjects (operators of agri-tourism enterprises and key staff in the public and private sectors related to agri-tourism development) could be grouped into decision makers. For the purpose of offsetting the potential threat of a manipulated consensus, the measure of stability was more likely to preserve opinion distributions.

The other criterion of determining consensus was a mean score of 5.6 or higher. Although the score of 5.6 could be arbitrary, this criterion enabled investigators to determine consensus with higher end scores and, thereby, facilitated investigators to set priorities for the listed statements (Chiou & Guo, 2005).

CHAPTER 4

FINDINGS

The purpose of this study was to identify the roles of intangibility of resources associated with the management of agri-tourism enterprises as perceived by academics, professionals in the public and private sectors, and operators of agri-tourism enterprises in Taiwan. A three-round, modified Delphi technique was employed. The administration of data collection lasted 67 days from April 24, 2005, to June 29, 2005. Panelists responded via mailed questionnaires.

Following a nomination process, a panel of 40 experts, including 13 academics, 14 professionals in the public and private sectors, and 13 operators of agri-tourism enterprises, initially agreed on participating in this study. Accordingly, a total of 40 questionnaires were distributed to subjects in the first round. As a result of three successive iterations, data were collected from 37, 34, and 34 subjects during Round I, Round II, and Round III, respectively. The response rate of subjects was 93 percent, 85 percent, and 85 percent for Round I, Round II, and Round III, respectively.

This chapter presented the results of each round in chronological order. Descriptive statistics used in the analyses included frequencies, means, and standard deviations. In addition, opinion stability was used as one of the alternatives of measuring

consensus in this study. Statements of Round I and Round II were identical, but the layout and contents of the Round II questionnaire were different. The differences in Round I and Round II instruments were the presence of a summary table of each statement and written comments provided by subjects.

Results: Round I

The results reported were centered on responses of 37 subjects to the first round instrument. As stated above, 40 questionnaires were initially distributed to panel members. Three members of the panel were unable to return the first round questionnaires. The contents of the instrument used in the first round were based on an extensive review of literature (Coyne, 1986; Par, 1991; Hall, 1992, 1993, 1994, 2000; Sonnenberg, 1994; Cheng & Chen, 1996; Sveiby, 1997; Fernandez, Montes, & Vazquez, 2000; Contractor, 2001; Inkpen & Madhok, 2001; Grosse, 2001; Sarathy, 2001; Furreer, Sudharshan, & Thomas, 2001; Bounfour, 2003; Esch, 2003; Villalinga, 2004; Zheng, 2004; Berry, 2005). A total of 44 statements were included in the first round questionnaire. Among 44 statements, 25 items were related to competency-based intangible resources and 19 were pertaining to asset-based intangibles. Subjects were instructed to select the relative importance of each statement and were encouraged to provide their opinions. The relative importance of both competency-based and asset-based intangible resources was categorized using a seven point Likert-type scale, which ranged from 1 (Not Important At All) to 7 (Critically Important).

With regard to written comments in this round, one panelist suggested, “providing the definition of agri-tourism enterprises will be helpful for answering the questionnaire.” Another comment stated, “farm visitors in Taiwan are unlikely to acknowledge the fact

that securing proper operating licenses is important." Finally, one respondent indicated, "a specification regarding required contracts is desired." All written comments received in the first round were documented in Appendix J.

No statement would reach consensus in the first round because opinion stability was used as one of the alternatives of measuring consensus and stability computations required the comparison of modes between two successive rounds. In Round I, only descriptive statistics for each statement were presented. Table 4.1 and Appendix K contained the descriptive statistics for statements concerning competency-based intangible resources. Table 4.2 and Appendix L contained the descriptive statistics for statements pertaining to asset-based intangibles.

Table 4.1 provided data on panelists' perceptions of the relative importance pertaining to competency-based intangibles. Examining panelists' responses, the most important statements among competency-based intangibles were recognizing the needs of customers, providing quality services, innovating, and setting future growth. The means for these statements were 6.70, 6.62, 6.59, and 6.51, respectively, with standard deviations being .57, .68, .69, and .73, respectively.

Table 4.2 provided data on panelists' perceptions of the relative importance pertaining to asset-based intangibles. Examining panelists' responses, the most important statements among asset-based intangibles were establishing customer trust, establishing positive business reputation, complying with sanitation regulations, and complying with customer safety regulations. The means for these statements were 6.86, 6.81, 6.62, and 6.57, respectively, with standard deviations being .35, .40, .72, and .90, respectively.

In addition, stability computations required equal number of subjects in two successive rounds. Round I data provided by respondents who were unable to continuously participate in Round II and Round III were removed. Table 4.3 and Appendix M presented the descriptive statistics of 34 respondents in the first round related to competency-based intangible resources. Table 4.4 and Appendix N presented the descriptive statistics of 34 respondents in the first round pertaining to asset-based intangibles.

Table 4.3 provided data on panelists' perceptions of the relative importance pertaining to competency-based intangibles. Examining panelists' responses, the most important statements among competency-based intangibles were recognizing the needs of customers, providing quality services, innovating, and setting future growth. The means for these statements were 6.68, 6.59, 6.59, and 6.47, respectively, with standard deviations being .59, .70, .70, and .75, respectively. Compared Table 4.1 to Table 4.3, the means and standard deviations of Table 4.3 were slightly lower, though the rank order of the most important statements were identical.

Table 4.4 provided data on panelists' perceptions of the relative importance pertaining to asset-based intangibles. Examining panelists' responses, the most important statements among asset-based intangibles were establishing customer trust, establishing positive business reputation, complying with sanitation regulations, and complying with customer safety regulations. The means for these statements were 6.85, 6.79, 6.59, and 6.53, respectively, with standard deviations being .36, .41, .74, and .93, respectively. Compared Table 4.2 to Table 4.4, the means and standard deviations of Table 4.4 were slightly lower, though the rank order of the most important statements were identical.

Statement: Competency-based Intangible Resources	Mean	SD
1. Provide quality service.	6.62	.68
2. Provide quality products.	6.16	.99
3. Recognize the needs of customers.	6.70	.57
4. Set short-term objectives.	5.94	1.00
5. Set financial goals.	5.70	1.13
6. Set future growth.	6.51	.73
7. Motivate employees.	6.16	1.04
8. Give employees power to make decisions.	5.62	1.16
9. Reward employees appropriately.	6.16	.99
10. Encourage teamwork among employees.	6.27	.99
11. Innovate.	6.59	.69
12. Create ways for employees to provide feedback.	5.97	1.04
13. Provide opportunities for employee growth.	6.08	.92
14. Provide employee training related to technical skills.	6.14	.95
15. Provide employee training related to customer services.	6.46	.65
16. Recruit capable employees.	5.78	1.23
17. Develop effective marketing strategies.	6.14	1.00
18. Regularly evaluate customer satisfaction.	6.14	.86

Table 4.1: Means and Standard Deviations of Competency-based Intangible Resources on Round I (N=37) (Continued)

Table 4.1 Continued

Statement: Competency-based Intangible Resources	Mean	SD
19. Regularly evaluate employee job satisfaction.	5.92	1.16
20. Regularly evaluate financial performance.	6.03	1.01
21. Find other businesses to compare to.	5.92	1.12
22. Develop post-purchase services to customers.	5.78	1.20
23. Develop workable organizational structure.	5.59	1.30
24. Establish core values of the business.	6.32	.94
25. Develop a positive work environment within the organization.	6.14	1.06

Statement: Asset-based Intangible Resources	Mean	SD
1. Build positive relationships with government agencies.	5.62	1.26
2. Build positive relationships with regulators.	4.57	1.28
3. Build positive relationships with suppliers.	5.97	1.04
4. Build positive relationships with advertising agencies.	6.22	.98
5. Build alliance with other agri-tourism businesses.	6.05	1.03
6. Become involved in the community.	6.16	.83
7. Build customer databases to understand who my customers are.	6.41	.80
8. Build supplier databases to facilitate business operation.	6.16	1.01
9. Develop effective inventory system.	5.76	1.16
10. Establish positive business reputation.	6.81	.40
11. Establish customer trust.	6.86	.35
12. Secure proper operating licenses.	6.49	.73
13. Secure contracts required.	5.61	1.42
14. Comply with customer safety regulations.	6.57	.90
15. Be aware of legal liability concerns related to agri-tourism.	6.19	.91
16. Comply with sanitation regulations.	6.62	.72
17. Develop business trademark.	6.14	.95
18. Upgrade technologies as required (e.g., computer software).	5.83	1.14
19. Secure insurances required.	5.89	1.02

Table 4.2: Means and Standard Deviations of Asset-based Intangible Resources on Round I (N=37)

Statement: Competency-based Intangible Resources	Mean	SD
1. Provide quality service.	6.59	.70
2. Provide quality products.	6.09	1.00
3. Recognize the needs of customers.	6.68	.59
4. Set short-term objectives.	5.91	1.00
5. Set financial goals.	5.68	1.09
6. Set future growth.	6.47	.75
7. Motivate employees.	6.15	1.05
8. Give employees power to make decisions.	5.53	1.16
9. Reward employees appropriately.	6.12	1.01
10. Encourage teamwork among employees.	6.24	1.02
11. Innovate.	6.59	.70
12. Create ways for employees to provide feedback.	5.91	1.06
13. Provide opportunities for employee growth.	6.06	.92
14. Provide employee training related to technical skills.	6.15	.89
15. Provide employee training related to customer services.	6.41	.66
16. Recruit capable employees.	5.74	1.24
17. Develop effective marketing strategies.	6.06	1.01
18. Regularly evaluate customer satisfaction.	6.09	.87

Table 4.3: Means and Standard Deviations of Competency-based Intangible Resources on Round I (N=34) (Continued)

Table 4.3 Continued

Statement: Competency-based Intangible Resources	Mean	SD
19. Regularly evaluate employee job satisfaction.	5.85	1.18
20. Regularly evaluate financial performance.	5.97	1.03
21. Find other businesses to compare to.	5.85	1.13
22. Develop post-purchase services to customers.	5.74	1.21
23. Develop workable organizational structure.	5.50	1.31
24. Establish core values of the business.	6.32	.94
25. Develop a positive work environment within the organization.	6.09	1.08

Statement: Asset-based Intangible Resources	Mean	SD
1. Build positive relationships with government agencies.	5.59	1.23
2. Build positive relationships with regulators.	4.47	1.26
3. Build positive relationships with suppliers.	5.91	1.06
4. Build positive relationships with advertising agencies.	6.24	.92
5. Build alliance with other agri-tourism businesses.	6.00	1.04
6. Become involved in the community.	6.12	.84
7. Build customer databases to understand who my customers are.	6.38	.82
8. Build supplier databases to facilitate business operation.	6.12	1.04
9. Develop effective inventory system.	5.71	1.17
10. Establish positive business reputation.	6.79	.41
11. Establish customer trust.	6.85	.36
12. Secure proper operating licenses.	6.44	.75
13. Secure contracts required.	5.52	1.44
14. Comply with customer safety regulations.	6.53	.93
15. Be aware of legal liability concerns related to agri-tourism.	6.18	.93
16. Comply with sanitation regulations.	6.59	.74
17. Develop business trademark.	6.10	.96
18. Upgrade technologies as required (e.g., computer software).	5.75	1.15
19. Secure insurances required.	5.82	1.03

Table 4.4: Means and Standard Deviations of Asset-based Intangible Resources on Round I (N=34)

Results: Round II

In this round, 37 questionnaires were distributed to panel members. Three members of the panel were unable to return the second round questionnaires. Therefore, the results reported were centered on responses of 34 subjects to the second round instrument.

No written response resulted in the creation of new statement. The contents of the instrument used in the second round were based on an extensive review of literature (Coyne, 1986; Hall, 1992, 1993, 1994, 2000; Sonnenberg, 1994; Cheng & Chen, 1996; Sveiby, 1997; Fernandez, Montes, & Vazquez, 2000; Contractor, 2001; Inkpen & Madhok, 2001; Grosse, 2001; Sarathy, 2001; Furreer, Sudharshan, & Thomas, 2001; Bounfour, 2003; Esch, 2003; Villalinga, 2004; Zheng, 2004; Berry, 2005). Like Round I, a total of 44 statements were included in the second round questionnaire. Among 44 statements, 25 items were related to competency-based intangible resources and 19 were pertaining to asset-based intangibles. Subjects were instructed to select the relative importance of each statement and were encouraged to provide their opinions. The relative importance of both competency-based and asset-based intangible resources was categorized using a seven point Likert-type scale, which ranged from 1 (Not Important At All) to 7 (Critically Important).

Consensus, in this round, was reached on 33 of the 44 statements. These 33 statements were removed from future iterations. Consensus, in this study, was defined as the stability of distributions that presented marginal changes of less than or equal to 15 percent in two successive iterations and a mean score of 5.60 or higher (stability measurement computation can be found in Chapter 3). Table 4.5 and Appendix O

presented the results of stability analysis and the descriptive statistics for statements concerning competency-based intangible resources. Furthermore, Table 4.6 and Appendix P presented the results of stability analysis and the descriptive statistics for statements concerning asset-based intangible resources. With regard to written comments, one respondent suggested, “investigators should refer to the definition of the Leisure Farm Guiding Regulations for the purpose of maintaining a balance between research knowledge and practical applications.” Appendix J documented all written comments received in Round II.

A total of 11 bolded statements were presented in Table 4.5 and Table 4.6. These bolded items were statements that did not achieve consensus. Among competency-based intangibles articulated, statements that did not achieve consensus were giving employees power to make decisions, providing opportunities for employee growth, recruiting capable employees, regularly evaluating customer satisfaction, developing post-purchase services to customers, and developing workable organizational structure. Among asset-based intangibles articulated, statements that did not reach consensus were building positive relationships with government agencies, building positive relationships with regulators, building alliance with other agri-tourism businesses, securing contracts required, and developing business trademark.

Statement: Competency-based Intangible Resources	Stability Amount Change Round I-II (%)	Mean	SD
1. Provide quality service.	2.9	6.62	.70
2. Provide quality products.	5.9	6.18	.90
3. Recognize the needs of customers.	8.8	6.79	.48
4. Set short-term objectives.	11.8	5.88	.91
5. Set financial goals.	8.8	5.76	.99
6. Set future growth.	2.9	6.53	.61
7. Motivate employees.	11.8	6.26	.86
8. Give employees power to make decisions.	**11.8**	**5.59**	**1.05**
9. Reward employees appropriately.	11.8	6.09	.90
10. Encourage teamwork among employees.	8.8	6.45	.78
11. Innovate.	2.9	6.61	.65
12. Create ways for employees to provide feedback.	11.8	6.15	.82
13. Provide opportunities for employee growth.	**17.6**	**6.41**	**.56**
14. Provide employee training related to technical skills.	11.8	6.38	.74
15. Provide employee training related to customer services.	5.9	6.50	.62
16. Recruit capable employees.	**23.5**	**6.00**	**1.07**

Note: Bolded statements did not reach consensus.

Table 4.5: Results of Stability Analyses, Means, and Standard Deviations of Competency-based Intangible Resources on Round II (N=34) (Continued)

Table 4.5 Continued

Statement: Competency-based Intangible Resources	Stability Amount Change Round I-II (%)	Mean	SD
17. Develop effective marketing strategies.	11.8	6.33	.84
18. Regularly evaluate customer satisfaction.	**17.6**	**6.27**	**.57**
19. Regularly evaluate employee job satisfaction.	11.8	6.03	.94
20. Regularly evaluate financial performance.	11.8	6.21	.81
21. Find other businesses to compare to.	5.9	6.00	1.07
22. Develop post-purchase services to customers.	**17.6**	**6.15**	**.89**
23. Develop workable organizational structure.	**17.6**	**5.82**	**1.06**
24. Establish core values of the business.	11.8	6.32	.88
25. Develop a positive work environment within the organization.	8.8	6.29	.84

Note: Bolded statements did not reach consensus.

Statement: Asset-based Intangible Resources	Stability Amount Change Round I-II (%)	Mean	SD
1. Build positive relationships with government agencies.	**17.6**	**5.74**	**1.05**
2. Build positive relationships with regulators.	**14.7**	**4.47**	**1.13**
3. Build positive relationships with suppliers.	2.9	5.94	1.01
4. Build positive relationships with advertising agencies.	11.8	6.26	.75
5. Build alliance with other agri-tourism businesses.	**20.6**	**6.03**	**.90**
6. Become involved in the community.	5.9	6.03	.97
7. Build customer databases to understand who my customers are.	8.8	6.41	.86
8. Build supplier databases to facilitate business operation.	2.9	6.15	.99
9. Develop effective inventory system.	14.7	5.73	1.05
10. Establish positive business reputation.	5.9	6.85	.36
11. Establish customer trust.	8.8	6.94	.24
12. Secure proper operating licenses.	2.9	6.53	.61
13. Secure contracts required.	**5.9**	**5.55**	**1.35**
14. Comply with customer safety regulations.	14.7	6.62	.85

Note: Bolded statements did not reach consensus.

Table 4.6: Results of Stability Analyses, Means, and Standard Deviations of Asset-based Intangible Resources on Round II (N=34) (Continued)

Table 4.6 Continued

Statement: Asset-based Intangible Resources	Stability Amount Change Round I-II (%)	Mean	SD
15. Be aware of legal liability concerns related to agri-tourism.	2.9	6.21	.91
16. Comply with sanitation regulations.	11.8	6.71	.63
17. Develop business trademark.	**17.6**	**6.32**	**.81**
18. Upgrade technologies as required (e.g., computer software).	11.8	6.03	1.00
19. Secure insurances required.	8.8	6.00	.89

Note: Bolded statements did not reach consensus.

Results: Competency-based Intangible Resources

Statement 1: Provide quality services. The result of the stability analysis was 2.9 percent. The mean of this statement was 6.62 (SD= .70). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 2: Provide quality products. The result of the stability analysis was 5.9 percent. The mean of this statement was 6.18 (SD= .90). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 3: Recognize the needs of customers. The result of the stability analysis was 8.8 percent. The mean of this statement was 6.79 (SD= .48). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 4: Set short-term objectives. The result of the stability analysis was 11.8 percent. The mean of this statement was 5.88 (SD= .91). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 5: Set financial goals. The result of the stability analysis was 8.8 percent. The mean of this statement was 5.76 (SD= .99). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 6: Set future growth. The result of the stability analysis was 2.9 percent. The mean of this statement was 6.53 (SD= .61). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 7: Motivate employees. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.26 (SD= .86). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 8: Give employees power to make decisions. The result of the stability analysis was 11.8 percent. The mean of this statement was 5.59 (SD= 1.05). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 9: Reward employees appropriately. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.09 (SD= .90). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 10: Encourage teamwork among employees. The result of the stability analysis was 8.8 percent. The mean of this statement was 6.45 (SD= .78). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement. One respondent stated, “family members are the core of labor force regarding the management of agri-tourism enterprises. Therefore, encouraging teamwork among employees is not the focal point for the management of such businesses.”

Statement 11: Innovate. The result of the stability analysis was 2.9 percent. The mean of this statement was 6.61 (SD= .65). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 12: Create ways for employees to provide feedback. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.15 (SD= .82). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 13: Provide opportunities for employee growth. The result of the stability analysis was 17.6 percent. The mean of this statement was 6.41 (SD= .56). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 14: Provide employee training related to technical skills. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.38 (SD= .74). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 15: Provide employee training related to customer services. The result of the stability analysis was 5.9 percent. The mean of this statement was 6.50 (SD= .62).

The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 16: Recruit capable employees. The result of the stability analysis was 23.5 percent. The mean of this statement was 6.00 (SD= 1.07). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 17: Develop effective marketing strategies. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.33 (SD= .84). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 18: Regularly evaluate customer satisfaction. The result of the stability analysis was 17.6 percent. The mean of this statement was 6.27 (SD= .57). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 19: Regularly evaluate employee job satisfaction. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.03 (SD= .94). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 20: Regularly evaluate financial performance. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.21 (SD= .81). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 21: Find other businesses to compare to. The result of the stability analysis was 5.9 percent. The mean of this statement was 6.00 (SD= 1.07). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 22: Develop post-purchase services to customers. The result of the stability analysis was 17.6 percent. The mean of this statement was 6.15 (SD= .89). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 23: Develop workable organizational structure. The result of the stability analysis was 17.6 percent. The mean of this statement was 5.82 (SD= 1.06). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 24: Establish core values of the business. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.32 (SD= .88). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 25: Develop a positive work environment within the organization. The result of the stability analysis was 8.8 percent. The mean of this statement was 6.29 (SD= .84). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Results: Asset-based Intangible Resources

Statement 1: Build positive relationships with government agencies. The result of the stability analysis was 17.6 percent. The mean of this statement was 5.74 (SD= 1.05). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 2: Build positive relationships with regulators. The result of the stability analysis was 14.7 percent. The mean of this statement was 4.47 (SD= 1.13). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 3: Build positive relationships with supplier. The result of the stability analysis was 2.9 percent. The mean of this statement was 5.94 (SD= 1.01). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 4: Build positive relationships with advertising agencies. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.26 (SD= .75).

The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 5: Build alliance with other agri-tourism businesses. The result of the stability analysis was 20.6 percent. The mean of this statement was 6.03 (SD= .90). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 6: Become involved in the community. The result of the stability analysis was 5.9 percent. The mean of this statement was 6.03 (SD= .97). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 7: Build customer databases to understand who my customers are. The result of the stability analysis was 8.8 percent. The mean of this statement was 6.41 (SD= .86). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 8: Build supplier databases to facilitate business operation. The result of the stability analysis was 2.9 percent. The mean of this statement was 6.15 (SD= .99). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 9: Develop effective inventory system. The result of the stability analysis was 14.7 percent. The mean of this statement was 5.73 (SD= 1.05). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 10: Establish positive business reputation. The result of the stability analysis was 5.9 percent. The mean of this statement was 6.85 (SD= .36). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 11: Establish customer trust. The result of the stability analysis was 8.8 percent. The mean of this statement was 6.94 (SD= .24). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 12: Secure proper operating licenses. The result of the stability analysis was 2.9 percent. The mean of this statement was 6.53 (SD= .61). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement. In the first round, one respondent stated, “farm visitors in Taiwan are unlikely to acknowledge the fact that securing proper operating licenses is important.” An additional comment in this round (Round II) indicated, “the system of recognizing proper operating licenses is not well-established in Taiwan. Therefore, farm visitors are frequently unable to know whether operators of agri-tourism enterprises possess proper operating licenses.”

Statement 13: Secure contracts required. The result of the stability analysis was 5.9 percent. The mean of this statement was 5.55 (SD= 1.35). The criteria of achieving

consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement. One written comment stated, “each agri-tourism enterprise is different. Thus, contracts required for each business are different, too.”

Statement 14: Comply with customer safety regulations. The result of the stability analysis was 14.7 percent. The mean of this statement was 6.62 (SD= .85). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 15: Be aware of legal liability concerns related to agri-tourism. The result of the stability analysis was 2.9 percent. The mean of this statement was 6.21 (SD= .91). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 16: Comply with sanitation regulations. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.71 (SD= .63). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 17: Develop business trademark. The result of the stability analysis was 17.6 percent. The mean of this statement was 6.32 (SD= .81). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 18: Upgrade technologies as required (e.g., computer software). The result of the stability analysis was 11.8 percent. The mean of this statement was 6.03

(SD= 1.00). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 19: Secure insurances required. The result of the stability analysis was 8.8 percent. The mean of this statement was 6.00 (SD= .89). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Results: Round III

In the third round, 34 questionnaires were distributed to panel members. All questionnaires were returned. No written response was provided by panel members in this round.

A total of 11 statements were included in the third round questionnaire. Among 11 statements, 6 items were related to competency-based intangible resources and 5 were pertaining to asset-based intangibles. Subjects were instructed to select the relative importance of each statement and were encouraged to provide their opinions. The relative importance of both competency-based and asset-based intangible resources was categorized using a seven point Likert-type scale, which ranged from 1 (Not Important At All) to 7 (Critically Important).

Consensus, in this round, was reached on 9 of the 11 statements. Two statements that did not achieve consensus were “build positive relationships with regulators” and “build alliance with other agri-tourism businesses.” Both statements were categorized into asset-based intangible resources. Like prior iterations, consensus in this study was

defined as the stability of distributions that presented marginal changes of less than or equal to 15 percent in two successive iterations and a mean score of 5.60 or higher (stability measurement computation can be found in Chapter 3). Table 4.7 and Appendix Q presented the results of stability analysis and the descriptive statistics for statements concerning competency-based intangible resources. Table 4.8 and Appendix R presented the results of stability analysis and the descriptive statistics for statements concerning asset-based intangible resources.

Two statements were unable to reach consensus in this round. These two statements were building positive relationships with regulators and building alliance with other agri-tourism businesses. Both statements were in the category of asset-based intangible resources.

Statement: Competency-based Intangible Resources	Stability Amount Change Round I-II (%)	Mean	SD
1. Give employees power to make decisions.	2.9	5.62	1.04
2. Provide opportunities for employee growth.	11.8	6.44	.70
3. Recruit capable employees.	14.7	6.21	1.01
4. Regularly evaluate customer satisfaction.	5.9	6.32	.59
5. Develop post-purchase services to customers.	8.8	6.32	.84
6. Develop workable organizational structure.	5.9	5.91	.90

Note: Bolded statements did not reach consensus.

Table 4.7: Results of Stability Analyses, Means, and Standard Deviations of Competency-based Intangible Resources on Round III (N=34)

Statement: Asset-based Intangible Resources	Stability Amount Change Round I-II (%)	Mean	SD
1. Build positive relationships with government agencies.	8.8	5.74	.96
2. Build positive relationships with regulators.	**8.8**	**4.41**	**.99**
3. Build alliance with other agri-tourism businesses.	**23.5**	**6.09**	**.75**
4. Secure contracts required.	8.8	5.70	1.06
5. Develop business trademark.	8.8	6.41	.82

Note: Bolded statements did not reach consensus.

Table 4.8: Results of Stability Analyses, Means, and Standard Deviations of Asset-based Intangible Resources on Round III (N=34)

Results: Competency-based Intangible Resources

Statement 1: Give employee power to make decisions. The result of the stability analysis was 2.9 percent. The mean of this statement was 5.62 (SD= 1.04). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 2: Provide opportunities for employee growth. The result of the stability analysis was 11.8 percent. The mean of this statement was 6.44 (SD= .70). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 3: Recruit capable employees. The result of the stability analysis was 14.7 percent. The mean of this statement was 6.21 (SD= 1.01). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 4: Regularly evaluate customer satisfaction. The result of the stability analysis was 5.9 percent. The mean of this statement was 6.32 (SD= .59). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 5: Develop post-purchase services to customers. The result of the stability analysis was 8.8 percent. The mean of this statement was 6.32 (SD= .84). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 6: Develop workable organizational structure. The result of the stability analysis was 5.9 percent. The mean of this statement was 5.91 (SD= .90). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Results: Asset-based Intangible Resources

Statement 1: Build positive relationships with government agencies. The result of the stability analysis was 8.8 percent. The mean of this statement was 5.74 (SD= .96). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 2: Build positive relationships with regulators. The result of the stability analysis was 8.8 percent. The mean of this statement was 4.41 (SD= .99). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 3: Build alliance with other agri-tourism businesses. The result of the stability analysis was 23.5 percent. The mean of this statement was 6.09 (SD= .75). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was **not** achieved on this statement.

Statement 4: Secure contracts required. The result of the stability analysis was 8.8 percent. The mean of this statement was 5.70 (SD= 1.06). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

Statement 5: Develop business trademark. The result of the stability analysis was 8.8 percent. The mean of this statement was 6.41 (SD= .82). The criteria of achieving consensus required stability changes of less than or equal to 15 percent and a mean score of 5.60 or higher. Therefore, consensus was achieved on this statement.

CHAPTER 5

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

In order to articulate the areas of focus for this study, this chapter was organized into four primary sections. These sections included: (1) summary, (2) conclusions, (3) implications, and (4) recommendations.

Summary

Subtly different from traditional farm management that primarily focused on operational effectiveness, the management of agri-tourism required farm entrepreneurs to acknowledge the significance of intangible resources. Based on Hall's framework (1994, 2000), this study was initiated with the intent to develop a better understanding of intangible resources concerning the management of agri-tourism enterprises. At present, due to a paucity of research in agri-tourism enterprises, this study could provide a preliminary base of knowledge pertaining to the identification of intangible resources in the agri-tourism industry.

Purpose and Objectives

The purpose of this study was to identify the roles of intangibility of resources associated with the management of agri-tourism enterprises in Taiwan. The specific objectives of this study were:

1. To identify competency-based intangible resources regarding the management of agri-tourism enterprises as perceived by academics, professionals in the public and private sectors, and operators of agri-tourism enterprises.
2. To identify asset-based intangible resources regarding the management of agri-tourism enterprises as perceived by academics, professionals in the public and private sectors, and operators of agri-tourism enterprises.

Methods

A three-round, modified Delphi technique was employed in this study. With regard to panel selection, to avoid using loose panel selection criteria and to match the qualification criteria depicted by Delbecq, Van de Ven, and Gustafson (1975), an effort was made to identify experts who possessed knowledge and experience concerning the management and development of agri-tourism enterprises. A total of 40 experts were identified and were invited to participate in this study. As a result of three successive iterations, data were collected from 37, 34, and 34 subjects during Round I, Round II, and Round III, respectively.

A self-administrated questionnaire was initially developed for the purpose of fulfilling the objectives of this study. Panelists responded via mailed questionnaires. The contents of the instrument used in the first round were based upon an extensive review of literature. A total of 44 statements were generated. Among 44 statements, 25 items were related to competency-based intangible resources and 19 were pertaining to asset-based intangibles. Each subject was asked to rate each statement on a seven point Likert-type scale ranging from 1 (Not Important At All) to 7 (Critically Important). Consensus, in this study, was defined as the stability of distributions that presented

marginal changes of less than or equal to 15 percent in two successive iterations and a mean score of 5.60 or higher. No written response resulted in the creation of new statements in the second and third rounds. Identical to Round I, a total of 44 statements were included in the second round questionnaire. In Round III, a total of 11 statements were included in the questionnaire. Among 11 statements, 6 items were related to competency-based intangible resources and 5 were pertaining to asset-based intangibles. All comments provided by subjects in the first, second, and third rounds were anonymously reported.

In this study, face and content validity of the initial instrument was assessed by a panel of experts (n=9). In addition, because this study was conducted in Taiwan, the instrument was required to be translated into Chinese. Therefore, procedures of back-translation and review (Brislin, 1970) were conducted because deeper meanings of certain statements in the Chinese version might not parallel the English version. Comments and inputs from panel members and the procedure of back-translation were addressed and suggestions incorporated into the final draft of the initial instrument.

No attempt was made to establish reliability in this study because reliability was not applicable to the Delphi technique. As Kelbaugh (2003) indicated, “since reliability procedures look at the stability in measurement over time or across forms, it does not apply to the Delphi technique where panel members are seeking consensus and the instrument is modified in each round based on panel member input” (p.76).

The SPSS computer program was employed for data analysis. Descriptive statistics were used and the analyses included frequencies, means, and standard deviations. In addition, opinion stability was used as one of the alternatives of measuring consensus in this study. Stability measurement computation was stated in Chapter 3.

Summary of Findings

The findings of this study were the collective perceptions of the respondents. Therefore, generalization of these findings to other population was inappropriate. Consensus, in this study, was defined as the stability of distributions that presented marginal changes of less than or equal to 15 percent in two successive iterations and a mean score of 5.60 or higher.

A total of 44 statements were examined by panelists. Consensus was reached on 42 statements. Among 42 consensus-reached statements, 25 were competency-based intangible resources and 17 were asset-based intangible resources. Statements on the following list were identified as important intangible resources associated with the management of agri-tourism enterprises.

Competency-based Intangible Resources

- Provide quality services (stability= 2.9; mean= 6.62).
- Provide quality products (stability= 5.9; mean= 6.18).
- Recognize the needs of customers (stability= 8.8; mean= 6.79).
- Set short-term objectives (stability= 11.8; mean= 5.88).
- Set financial goals (stability= 8.8; mean= 5.76).
- Set future growth (stability= 2.9; mean= 6.53).
- Motivate employees (stability= 11.8; mean= 6.26).

- Give employees power to make decisions (stability= 2.9; mean= 5.62).
- Reward employees appropriately (stability= 11.8; mean= 6.09).
- Encourage teamwork among employees (stability= 8.8; mean= 6.45).
- Innovate (stability= 2.9; mean= 6.61).
- Create ways for employees to provide feedback (stability= 11.8; mean= 6.15).
- Provide opportunities for employee growth (stability= 2.9; mean= 6.44).
- Provide employee training related to technical skills (stability= 11.8; mean= 6.38).
- Provide employee training related to customer services (stability= 5.9; mean= 6.50).
- Recruit capable employees (stability= 14.7; mean= 6.21).
- Develop effective marketing strategies (stability= 11.8; mean= 6.33).
- Regularly evaluate customer satisfaction (stability= 5.9; mean= 6.32).
- Regularly evaluate employee job satisfaction (stability= 11.8; mean= 6.03).
- Regularly evaluate financial performance (stability= 11.8; mean= 6.21).
- Find other businesses to compare to (stability= 5.9; mean= 6.00).
- Develop post-purchase services to customers (stability= 8.8; mean= 6.32).
- Develop workable organizational structure (stability= 5.9; mean= 5.91).
- Establish core values of the business (stability= 11.8; mean= 6.32).
- Develop a positive work environment within the organization (stability= 8.8; mean= 6.29).

Asset-based Intangible Resources

- Build positive relationships with government agencies (stability= 8.8; mean= 5.74).
- Build positive relationships with suppliers (stability= 2.9; mean= 5.94).
- Build positive relationships with advertising agencies (stability= 11.8; mean= 6.26).
- Become involved in the community (stability= 5.9; mean= 6.03).
- Build customers databases to understand who my customers are (stability= 8.8; mean= 6.41).
- Build supplier databases to facilitate business operation (stability= 2.9; mean= 6.15).
- Develop effective inventory system (stability= 14.7; mean= 5.73).
- Establish positive business reputation (stability= 5.9; mean= 6.85).
- Establish customer trust (stability= 8.8; mean= 6.94).
- Secure proper operating licenses (stability= 2.9; mean= 6.53).
- Secure contracts required (stability= 8.8; mean= 5.70).
- Comply with customer safety regulations (stability= 14.7; mean= 6.62).
- Be aware legal liability concerns related to agri-tourism (stability= 2.9; mean= 6.21).
- Comply with sanitation regulations (stability= 11.8; mean= 6.71).
- Develop business trademark (stability= 8.8; mean= 6.41).

- Upgrade technologies as required --e.g., computer software (stability= 11.8; mean= 6.03).
- Secure insurances required (stability= 8.8; mean= 6.00).

Two statements were unable to reach consensus. These two statements were "build positive relationships with regulators" and "build alliance with other agri-tourism businesses." With respect to the former statement, the change in stability was 8.8 percent with a mean score of 4.41. Regarding the latter statement, the change in stability was 23.5 percent with a mean score of 6.09.

Conclusions

Identifying important intangible resources regarding agri-tourism enterprises was crucial for the understanding and betterment of such businesses. Conducting this Delphi study allowed investigators to elicit respondents' opinions and, thereby, the results of this study could serve as a planning tool for Extension professionals, especially community development agents, to develop programs for the purpose of assisting individuals who were interested in the development of agri-tourism enterprises.

Because prior study had not been conducted in the field of intangible resources associated with the management of agri-tourism enterprises, no valid basis was attainable for establishing a *priori* criteria and formulating conclusion statements that were relevant to the relative importance of intangible resources. For interpretation and reporting, although it could be arbitrary, those statements receiving a mean score of 6.50 or higher were considered to have priorities for the sustainable management of agri-tourism enterprises. Based on findings of this study and the reporting criterion stated above, the following conclusions were drawn.

1. Intangible resources, as revealed by responses to statements given in this modified Delphi study, were considered important to the management of agri-tourism enterprises. The variety of intangible resources articulated indicated that subjects of this study, including academics, professionals in the public and private sectors, and operators of agri-tourism enterprises, were well aware of the significance of intangibles concerning the management of agri-tourism enterprises.

2. By the end of Round III, 100 percent of the competency-based intangible resource set and 89.5 percent of the asset-based intangible resource set had reached consensus. Strong consensus across the panel on both intangible sets indicated that agri-tourism enterprises would require vigorous planning and consideration for the sustainability of such businesses. As noted by Wolfe and Holland (2002), "build it and they will come" successes were rarely practical in the agri-tourism industry.

3. Among competency-based intangibles articulated, recognizing the needs of customers, providing quality services, innovating, setting future growth, and providing employee training related to customer services were considered to have top priorities for the sustainability of agri-tourism enterprises.

4. Among asset-based intangibles articulated, establishing customer trust, establishing positive business reputation, complying with sanitation regulations, complying with customer safety regulations, and securing proper operating licenses were considered to have top priorities for the sustainability of agri-tourism enterprises.

Implications

"The identification of the intangible resources which are the most important for business success has certain implications for management practice" (Hall, 1994, p. 162).

Furthermore, the identification of intangible resources would also have implications not only for knowledge, but also for program developments in Extension. The followings were implications offered.

Implications for agri-tourism management: Intangible resources are valuable, but they are not observable (Godfrey & Gregersen, 1999; Won, 2004). Accordingly, a considerable time frame would be required for building and accumulating intangible resources (Won, 2004). Therefore, operators of agri-tourism enterprises would need to recognize the importance of intangibles, to make sound plans for building and accumulating such resources, and to persistently implement those plans for the sustainability of their management practices. The results of this study could enable operators of agri-tourism enterprises to ascertain the core of intangibles and subsequently to set priorities for building such resources.

Being aware that customer satisfaction would be a key to the sustainability of agri-tourism enterprises, for example, operators of such business would need to initiate a series of evaluations for the purpose of determining the worth or merit of activities and services provided by their enterprises. If an operator of agri-tourism enterprise is able to successfully establish internal and external evaluation processes within his/her enterprises and to recognize that conducting evaluations is an ongoing process and requires continuous enterprise commitments, an accumulation of enterprise competency pertaining to evaluations and a better understanding of services/activities of his/her enterprise can be expected. As a result, the operator is able to improve the deficiencies of his/her enterprise, to manage the enterprise more efficiently, and to prioritize both tangible and intangible resources that need to be built by the operator.

Implications for knowledge: Literature regarding intangible resources were prolific (Itami & Roehl, 1987; Parr, 1991; Donaldson, 1992; Hall, 1992, 1993, 1994, 2000; Sonnenberg, 1994; Sveiby, 1997; Ruparel, 1998; Fernandez, Montes, & Vazquez, 2000; Contractor, 2001; Bounfour, 2003; Esch, 2003; Villalinga, 2004; Berry, 2005), but few were able to specifically itemize intangibles. More precisely, intangibles presented by many were more likely to be generic (e.g., organizational culture, employee know-how). This study brought greater clarity to the enumeration of intangible resources, especially in the area of agri-tourism development. Accordingly, the results of this study could provide a preliminary base of knowledge for a better understanding of intangible resources with regard to the management of agri-tourism enterprises.

Implications for Extension: "Extension professionals need to learn if there are changes in knowledge, attitudes, skills, and aspirations of program participants" (Kelbaugh, 2003, p. 170). By the same token, being proactive to assess the educational needs of the public is imperative for Extension (Buford, Bedeian, & Lindner, 1995). Therefore, the results of this study could serve as a reference for Extension professionals to acknowledge the relative importance of assorted intangibles regarding the management of agri-tourism enterprises and enable them to assess the educational needs and to organize effective programs for those who would be interested in the development and management of agri-tourism enterprises.

The Farmers' Association plays a pivotal role in Taiwan's Extension. Liu (1995) documented that, in Taiwan, providing assistance concerning the improvement of farm management is one of the primary foci on the agricultural Extension of the Farmers' Association. Therefore, the results of this study could enable the Farmer' Association to

develop effective educational programs in recognizing the importance of intangible resources related to the management of agri-tourism enterprises. Additionally, the results of this study also can help government agencies with the implementation of these programs and promotions of agri-tourism as a whole.

Recommendations

This section was organized into two categories. These two categories were recommendations for further research and recommendations for practice. Based on the findings and conclusions of this study, the following recommendations were offered.

Recommendations for Further Research

1. Additional information regarding competency-based and asset-based intangibles would be helpful in understanding and addressing the dynamics of such resources in the agri-tourism industry. Replication of this study would be appropriate by employing a different panel of experts to ascertain the reliability of the results.

2. The instrument developed for this study could be used to collect the needed data from different countries. The differences in culture, social custom, demographic distribution, economic development, government regulations, and/or agricultural development could lead to different results and enable researchers to make valuable comparisons.

3. The questionnaire developed for this study could be used as a survey instrument to verify and substantiate the findings of this study. Further survey attempts should be made if a list of qualified subjects could be obtained and if the sample size would be large enough to enable investigators to generalize the results.

If the minimum guidelines regarding sample size could be met, factor analysis could be employed for the purpose of explaining these variables with respect to their common underlying dimensions. As stated by Sandford (2002), "providing for a shorter and more parsimonious survey instrument may increase response rates, decrease measurement error, and provide greater opportunity and flexibility for the instrument's use" (p. 165).

4. Although this study concluded with two statements in which consensus was not achieved by the subjects, a further examination of these two statements would be appropriate. That is, as stated above, the differences in culture, social custom, demographic distribution, economic development, government regulations, and/or agricultural development could lead to different results. Accordingly, special attention should be given to those new statements generated by different subjects.

5. This study has identified useful intangible resources related to the management of agri-tourism enterprises. Some of these intangible resources (e.g., operating licenses, business trademark) can also be considered as indicators of barriers to competition. Therefore, a further study specifically addressing barriers to competition in the agri-tourism industry is recommended.

6. In a wider context, with changes in regulations related to the development of agri-tourism, an increasing need for researchers to examine the impact of regulations upon the agri-tourism industry, agri-tourism enterprises, and local communities should be anticipated. Policy analyses or evaluations concerning changes in regulations should be conducted in a continuous manner.

Recommendations for Practice

1. A long-term commitment of time, money, and personnel improvement would be essential to the development of intangible resources for agri-tourism enterprises. Therefore, how to effectively develop intangibles for the betterment of agri-tourism enterprises is an issue that must be taken seriously by government agencies, professionals in the private sector, academics, and operators of such business.

2. “Farming turning into a service industry and agricultural workers turning into business entrepreneurs may be difficult for traditional farmers” (Council of Agriculture, Tourism Bureau, & Taiwan Leisure Farming Development Association, 2003, p. 187). Therefore, the roles played by government agencies should focus on not merely supervising the agri-tourism industry and establishing regulations related to agri-tourism, but also providing services for business entrepreneurs to learn and to better manage their enterprises.

APPENDIX A

Panel Selection Committee

Panel Selection Committee:

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APPENDIX B

Delphi Panel

Academics:

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Director
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Chiou-Hu Tsay
Director
Bureau of Agriculture
Nantou County Government

Wen-Horng Yu
Chief Operating Officer
Taiwan Leisure Farming Development Association

Operators of Agri-tourism Enterprises:

Ching-Lay Chang
Shangri-la Leisure Farm

Kuoh-Cheng Chang
Taiyi Farm

Ya-Yuan Deng
Long-Yun Farm

Dian Lin
Miracle Mount Leisure Farm

Li-Chu Wu
Nursery Stories Wonderful Farm

Ming-Jer Wu
Flying Cow Ranch

Shih-Sian Ye
Shi-Bey Garden

Shang-Yi Yu
Tiao-Tiao Leisure Farm

Ru-Ming Zeng
Goang Shing Farm

APPENDIX C

Round I Questionnaire (English Version)

Identification of Intangible Resources Essential to Agri-tourism Enterprises in Taiwan: A Delphi Study

Round I

April 24, 2005

Dear Mr./Miss/Ms. Recipient:

First of all, thank you very much for agreeing to participate in this study. I am very happy that I will be capable of having advantage of your perspective, knowledge, and experience to develop empirical information concerning the roles of intangible resources associated with agri-tourism enterprises.

The objective of this study is to identify competency-based and asset-based intangibles in terms of the management of agri-tourism enterprises. As we discussed during our previous contact, a total of three questionnaires will be mailed to you. The second and third rounds will be built from the panel's responses to the instrument of previous round.

This questionnaire will take about thirty minutes of your time. Your responses to this questionnaire are absolutely confidential. After the completion of a series of questionnaires, the identifier will be removed and your responses will be released only as summaries in which no personal responses can possibly identified. Accordingly, you can choose not to participate without penalty to you. If you agree to participate, you can withdraw from the study at any time, and there will be no penalty. In the first round, your task is twofold:

1. Rate each statement on a seven point Likert-type scale ranging from 1 (Not Important At All) to 7 (Critically Important).

2. Review each statement on the questionnaire. You are very welcomed to comment on any statements. Please feel free to make clarifications, ask questions, and provide your opinions that are in favor or against statements.

Please complete the enclosed questionnaire and return it no later than May 3. If you have any questions or comments concerning the study, please feel free to contact me. You can call me at 0930-380-689 or e-mail me at hsu.127@osu.edu. I will respond to you as soon as possible.

Sincerely,

Larry E. Miller
Professor and Principal Investigator
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The Ohio State University

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Competency-based Intangible Resources

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
1. Provide quality services.	1	2	3	4	5	6	7

	Not Important At all			Moderately Important			Critically Important
2. Provide quality products.	1	2	3	4	5	6	7

	Not Important At all			Moderately Important			Critically Important
3. Recognize the needs of customers.	1	2	3	4	5	6	7

	Not Important At all			Moderately Important			Critically Important
4. Set short-term objectives.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
5. Set financial goals.	1	2	3	4	5	6	7

	Not Important At all			Moderately Important			Critically Important
6. Set future growth.	1	2	3	4	5	6	7

	Not Important At all			Moderately Important			Critically Important
7. Motivate employees.	1	2	3	4	5	6	7

	Not Important At all			Moderately Important			Critically Important
8. Give employees power to make decisions.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
9. Reward employees appropriately.	1	2	3	4	5	6	7
10. Encourage teamwork among employees.	1	2	3	4	5	6	7
11. Innovate.	1	2	3	4	5	6	7
12. Create ways for employees to provide feedback.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
13. Provide opportunities for employee growth.	1	2	3	4	5	6	7
14. Provide employee training related to technical skills.	1	2	3	4	5	6	7
15. Provide employee training related to customer services.	1	2	3	4	5	6	7
16. Recruit capable employees.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
17. Develop effective marketing strategies.	1	2	3	4	5	6	7
18. Regularly evaluate customer satisfaction.	1	2	3	4	5	6	7
19. Regularly evaluate employee job satisfaction.	1	2	3	4	5	6	7
20. Regularly evaluate financial performance.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
21. Find other businesses to compare to.	1	2	3	4	5	6	7
22. Develop post-purchase services to customers.	1	2	3	4	5	6	7
23. Develop workable organizational structure.	1	2	3	4	5	6	7
24. Establish core values of the business.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
25. Develop a positive work environment within the organization.	1	2	3	4	5	6	7

Asset-based Intangible Resources

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
1. Build positive relationships with government agencies.	1	2	3	4	5	6	7
2. Build positive relationships with regulators.	1	2	3	4	5	6	7
3. Build positive relationships with suppliers.	1	2	3	4	5	6	7
4. Build positive relationships with advertising agencies.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
5. Build alliances with other agri-tourism businesses.	1	2	3	4	5	6	7
6. Become involved in the community.	1	2	3	4	5	6	7
7. Build customer databases to understand who my customers are.	1	2	3	4	5	6	7
8. Build supplier databases to facilitate business operation.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
9. Develop effective inventory system.	1	2	3	4	5	6	7
10. Establish positive business reputation.	1	2	3	4	5	6	7
11. Establish customer trust.	1	2	3	4	5	6	7
12. Secure proper operating licenses.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
13. Secure contracts required.	1	2	3	4	5	6	7
14. Comply with customer safety regulations.	1	2	3	4	5	6	7
15. Be aware of legal liability concerns related to agri-tourism.	1	2	3	4	5	6	7
16. Comply with sanitation regulations.	1	2	3	4	5	6	7

A successful agri-tourism enterprise needs to:

	Not Important At all			Moderately Important			Critically Important
17. Develop business trademark.	1	2	3	4	5	6	7

	Not Important At all			Moderately Important			Critically Important
18. Upgrade technologies as required (e.g., computer software).	1	2	3	4	5	6	7

	Not Important At all			Moderately Important			Critically Important
19. Secure insurances required.	1	2	3	4	5	6	7

APPENDIX D

Round I Questionnaire (Chinese Version)

台灣休閒農場無形資源之探求—德爾菲法

第一回合

民國94年4月24日

親愛的參與者:

首先,非常感謝您的參與.同時,亦非常高興能借重您的專業知識,智慧與經驗來共同完成這份調查.

這份調查的目的是探求經營休閒農場所需的無形資源.無形資源則又分為能力和資產面向. 由於德爾菲法 (Delphi Technique) 的使用, 總共三份問卷將會陸續地寄給您. 第二, 第三回合的問卷將會根據您與其他參與者的回應而稍有變更.

完成這份問卷將會佔用您三十分鐘的時間.您的回應將會保持極度機密.當第三回合的問卷完成後,用來表明您參與這份調查的記號將會被去除.所有的數據是根據全體受訪者的回應,因此,您的個人回應是無法被得知的.同時,您可自由地選擇參不參與這份調查. 如您選擇參與, 您可以隨時退出而不會有任何責任.

在此第一回合, 請注意下列兩點:

1. **請圈選每一題的相對重要性 (1 代表 "極不重要", 7代表 "極為重要").**
2. **請仔細思考每一題,自由地表達您的想法(同意或反對皆可).如您有任何寶貴意見關於經營休閒農場所需的無形資源,或對於題目有任何修正,請於問卷空白處提供您的看法.**

請於5月3日前完成並寄回問卷.如有任何問題,請與我們聯絡,我們會非常樂意為您解答. 我們的電話號碼是 0930-380-689 或是使用電子郵件 hsu.127@osu.edu.
非常感謝您的合作!

Larry E. Miller
教授
人力與社區資源發展學系
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E-mail: hsu.127@osu.edu

無形資源的能力面向

成功的休閒農場經營需要:

1. 提供高品質的服務

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

2. 提供高品質的產品

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

3. 體認顧客的需求

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

4. 設定近期發展目標

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

5. 設定財務目標

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

6. 設定未來發展方向

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

7. 激勵員工

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

8. 授權給員工做決策

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

9. 適切地獎勵員工

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

10. 鼓勵團隊合作

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

11. 創新

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

12. 為員工提供良好的溝通管道

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

13. 提供員工成長的機會

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

14. 提供員工專業技術的訓練

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

15. 提供員工顧客服務的訓練

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

16. 招收有能力的員工

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

17. 開發有效率的市場策略

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

18. 定期評估顧客的滿意度

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

19. 定期評估員工的工作滿意度

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

20. 定期評估財務狀況

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

21. 分析比較同業的運作

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

22. 發展顧客售後服務網路

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

23. 建立務實的行政組織架構

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

24. 建立經營上的核心價值

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

	極不重要			普通重要			極為重要
25. 建立良好的工作環境	1	2	3	4	5	6	7

無形資源的資產面向

成功的休閒農場經營需要:

1. 與政府人員保持良好關係

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

2. 與立法人員保持良好關係

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

3. 與供應業者保持良好關係

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

4. 與媒體保持良好關係

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

5. 與其他同業業者建立合作關係

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

6. 參與地方活動

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

7. 建立顧客資料檔案

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

8. 建立供應業者資料檔案以利經營

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

9. 建立有效的存貨系統

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

10. 建立良好的商譽

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

11. 取得顧客的信賴

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

12. 取得適當的營業執照

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

13. 獲得所需的契約

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

14. 遵守顧客安全法規

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

15. 注意政府修訂休閒農業法規

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

16. 遵守衛生法規

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

成功的休閒農場經營需要:

17. 創立公司的商標

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

18. 改良所需的技術軟體

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

19. 獲得所需的保險

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

APPENDIX E

Round II Questionnaire (English Version)

Identification of Intangible Resources Essential to Agri-tourism Enterprises in Taiwan: A Delphi Study

Round II

In this study, an agri-tourism enterprise is defined as a farm business managed by an individual operator for the purpose of providing enjoyment and education opportunities to the public, promoting products and services of the farm, and thereby generating additional income from tourist clientele.

May 21, 2005

Dear Mr./Miss/Ms. Recipient:

Thank you very much for your continuing participation in this study. In this package, a summary concerning all ratings and comments of the first round is included.

This second questionnaire will take about thirty minutes of your time. Like the previous round, your responses to this questionnaire are absolutely confidential. After the completion of a series of questionnaires, the identifier will be removed and your responses will be released only as summaries in which no personal responses can possibly identified. Accordingly, you can choose not to participate without penalty to you. If you agree to participate, you can withdraw from the study at any time, and there will be no penalty.

Recommendations provided by each panelist were divided into groups of similar statements. If you feel your suggestions have not been given full weight, please let me know by noting this in the space provided. In this round, your task is threefold:

1. **Consider other panelists' comments and reconsider your previous ratings on all statements. Your previous rating on all statements is highlighted in green.**
2. **Rate each statement on a seven point Likert-type scale ranging from 1 (Not Important At All) to 7 (Critically Important).**
3. **Review each statement on the questionnaire. You are very welcomed to comment on any statements. Please feel free to make clarifications, ask questions, and provide your opinions that are in favor or against statements.**

Please complete the enclosed questionnaire and return it no later than May 29. If you have any questions or comments concerning the study, please feel free to contact me. You can call me at 0930-380-689 or e-mail me at hsu.127@osu.edu. I will respond to you as soon as possible.

Sincerely,

Larry E. Miller
Professor and Principal Investigator
Human and Community Resource Development
The Ohio State University

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Competency-based Intangible Resources

A successful agri-tourism enterprise needs to:

1. Provide quality services.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

2. Provide quality products.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

3. Recognize the needs of customers.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

4. Set short-term objectives.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

5. Set financial goals.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

6. Set future growth.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

7. Motivate employees.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

8. Give employees power to make decisions.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

9. Reward employees appropriately.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

10. Encourage teamwork among employees.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

11. Innovate.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

12. Create ways for employees to provide feedback.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

13. Provide opportunities for employee growth.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

14. Provide employee training related to technical skills.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

15. Provide employee training related to customer services.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

16. Recruit capable employees.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

17. Develop effective marketing strategies.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

18. Regularly evaluate customer satisfaction.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

19. Regularly evaluate employee job satisfaction.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

20. Regularly evaluate financial performance.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

21. Find other businesses to compare to.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

22. Develop post-purchase services to customers.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

23. Develop workable organizational structure.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

24. Establish core values of the business.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

25. Develop a positive work environment within the organization.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

Asset-based Intangible Resources

A successful agri-tourism enterprise needs to:

1. Build positive relationships with government agencies.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

2. Build positive relationships with regulators.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

3. Build positive relationships with suppliers.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

4. Build positive relationships with advertising agencies.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

5. Build alliances with other agri-tourism businesses.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

6. Become involved in the community.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

7. Build customer databases to understand who my customers are.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

8. Build supplier databases to facilitate business operation.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

9. Develop effective inventory system.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

10. Establish positive business reputation.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

11. Establish customer trust.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

12. Secure proper operating licenses.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

Comment: Farm visitors in Taiwan are less likely to pay attention to farm operators' licenses.

A successful agri-tourism enterprise needs to:

13. Secure contracts required.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

Comment: There are possibly many contracts required. The relative importance of each contract can be different.

14. Comply with customer safety regulations.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

15. Be aware of legal liability concerns related to agri-tourism.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

16. Comply with sanitation regulations.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

17. Develop business trademark.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

18. Upgrade technologies as required (e.g., computer software).

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Your Round I Selection:

A successful agri-tourism enterprise needs to:

19. Secure insurances required.

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round I Summary

Not Important At all — Moderately Important — Critically Important

1 2 3 4 5 6 7

Your Round I Selection:

APPENDIX F

Round II Questionnaire (Chinese Version)

台灣休閒農場無形資源之探求—德爾菲法

第二回合

在這份研究,休閒農場的定義為：

私人經營之農企業,其目的在於提供民眾休憩的場所與教育的機會,推廣農場的產品與服務,進而增加農場的收入.

民國94年5月21日

親愛的參與者:

非常感謝您的繼續參與.此次,除了第二回合的問卷,於每題之空白部分亦包含了關於第一回合的數據摘要與其他參與者的意見.

就像第一回合,完成這份問卷將會佔用您三十分鐘的時間.您的回應將會保持極度機密.當第三回合的問卷完成後,用來表明您參與這份調查的記號將會被去除.所有的數據是根據全體受訪者的回應,因此,您的個人回應是無法被得知的.同時,您可自由地選擇參不參與這份調查.如您選擇參與,您可以隨時退出而不會有任何責任.

每位參與者的意見, 已被歸類表達. 如您認爲您的意見沒被完全表達, 請寫在空白處, 我們會於下一回合表達您的意見.

在第二回合, 請注意下列三點:

1. **請仔細考慮其他參與者的意見, 同時, 重新考量您之前每一題的選擇. 您之前每一題的選擇是以綠色的數字表達.**

2. **請圈選每一題的相對重要性 (1 代表 "極不重要", 7代表 "極為重要").**

3. **請仔細思考每一題, 自由地表達您的想法 (同意或反對皆可). 如您有任何寶貴意見關於經營休閒農場所需的無形資源, 或對於題目有任何修正, 請於問卷空白處提供您的看法.**

請於5月29日前完成並寄回問卷.如有任何問題,請與我們聯絡,我們會非常樂意為您解答. 我們的電話號碼是 0930-380-689 或是使用電子郵件 hsu.127@osu.edu.
非常感謝您的合作!

Larry E. Miller
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無形資源的能力面向

成功的休閒農場經營需要:

1. 提供高品質的服務

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

2. 提供高品質的產品

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

3. 體認顧客的需求

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

4. 設定近期發展目標

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

5. 設定財務目標

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

6. 設定未來發展方向

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

7. 激勵員工

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

8. 授權給員工做決策

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

9. 適切地獎勵員工

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

10. 鼓勵團隊合作

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

11. 創新

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

12. 為員工提供良好的溝通管道

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

13. 提供員工成長的機會

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

14. 提供員工專業技術的訓練

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

15. 提供員工顧客服務的訓練

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

16. 招收有能力的員工

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

17. 開發有效率的市場策略

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

18. 定期評估顧客的滿意度

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

19. 定期評估員工的工作滿意度

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

20. 定期評估財務狀況

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

21. 分析比較同業的運作

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

22. 發展顧客售後服務網路

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

23. 建立務實的行政組織架構

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

24. 建立經營上的核心價值

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

25. 建立良好的工作環境

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

無形資源的資產面向

成功的休閒農場經營需要:

1. 與政府人員保持良好關係

極不重要 普通重要 極為重要

1 2 3 4 5 6 7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

2. 與立法人員保持良好關係

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

3. 與供應業者保持良好關係

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

4. 與媒體保持良好關係

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

5. 與其他同業業者建立合作關係

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

6. 參與地方活動

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

7. 建立顧客資料檔案

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

8. 建立供應業者資料檔案以利經營

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

9. 建立有效的存貨系統

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

10. 建立良好的商譽

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

11. 取得顧客的信賴

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

12. 取得適當的營業執照

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

參與者意見: 台灣的遊客似乎不是很在乎此項.

13. 獲得所需的契約

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

參與者意見: 此問題所謂的契約指的什麼?

不同契約之重要度會有所不同.

成功的休閒農場經營需要:

14. 遵守顧客安全法規

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

15. 注意政府修訂休閒農業法規

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

16. 遵守衛生法規

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

17. 創立公司的商標

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

18. 改良所需的技術軟體

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

19. 獲得所需的保險

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第一回合的摘要,
您上一回合的選項為:

APPENDIX G

Round III Questionnaire (English Version)

Identification of Intangible Resources Essential to Agri-tourism Enterprises in Taiwan: A Delphi Study

Round III

In this study, an agri-tourism enterprise is defined as a farm business managed by an individual operator for the purpose of providing enjoyment and education opportunities to the public, promoting products and services of the farm, and thereby generating additional income from tourist clientele.

June 11, 2005

Dear Mr./Miss/Ms. Recipient:

Again, thank you very much for your continuing participation in this study. In this package, a summary concerning all ratings and comments of the second round is included.

This final questionnaire will take about thirty minutes of your time. Like the previous round, your responses to this questionnaire are absolutely confidential. After the completion of a series of questionnaires, the identifier will be removed and your responses will be released only as summaries in which no personal responses can possibly identified. Accordingly, you can choose not to participate without penalty to you. If you agree to participate, you can withdraw from the study at any time, and there will be no penalty.

Recommendations provided by each panelist were divided into groups of similar statements. If you feel your suggestions have not been given full weight, please let me know by noting this in the space provided. In this final round, your task is threefold:

1. Consider other panelists' comments and reconsider your previous ratings on all statements. Your previous rating on all statements is highlighted in green.
2. Rate each statement on a seven point Likert-type scale ranging from 1 (Not Important At All) to 7 (Critically Important).
3. Review each statement on the questionnaire. You are very welcomed to comment on any statements. Please feel free to make clarifications, ask questions, and provide your opinions that are in favor or against statements.

Please complete the enclosed questionnaire and return it no later than June 19. If you have any questions or comments concerning the study, please feel free to contact me. You can call me at 0930-380-689 or e-mail me at hsu.127@osu.edu. I will respond to you as soon as possible.

Thank you very much for your efforts to make this study possible. I will let you know the results of the study when it becomes available. If you do not want your name listed in the Delphi panel, please let me know.

Sincerely,

Larry E. Miller
Professor and Principal Investigator
Human and Community Resource Development
The Ohio State University
Office Phone: 0021-614-292-9134
Office Fax: 0021-614-292-7007
E-mail: miller.103@osu.edu

Chia-Chien Hsu
Doctoral Candidate
Human and Community Resource Development
The Ohio State University
Cell Phone: 0930-380-689
Fax: 2914-2030
E-mail: hsu.127@osu.edu

Competency-based Intangible Resources

A successful agri-tourism enterprise needs to:

1. Give employees power to make decisions.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

2. Provide opportunities for employee growth.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

3. Recruit capable employees.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

A successful agri-tourism enterprise needs to:

4. Regularly evaluate customer satisfaction.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

5. Develop post-purchase services to customers.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

6. Develop workable organizational structure.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

Asset-based Intangible Resources

A successful agri-tourism enterprise needs to:

1. Build positive relationships with government agencies.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

2. Build positive relationships with regulators.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

3. Build alliances with other agri-tourism businesses.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

A successful agri-tourism enterprise needs to:

4. Secure contracts required.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

Comment: Each farm is different. Therefore, contracts required by farm operators are likely to be different.

5. Develop business trademark.

Not Important At all			Moderately Important			Critically Important
1	2	3	4	5	6	7

# of People Select 1	# of People Select 2	# of People Select 3	# of People Select 4	# of People Select 5	# of People Select 6	# of People Select 7

Round II Summary

Your Round II Selection:

APPENDIX H

Round III Questionnaire (Chinese Version)

台灣休閒農場無形資源之探求—德爾菲法

第三回合

在這份研究, 休閒農場的定義為：

私人經營之農企業, 其目的在於提供民眾休憩的場所與教育的機會, 推廣農場的產品與服務, 進而增加農場的收入.

民國94年6月11日

親愛的參與者:

再次感謝您的合作參與.此次,除了第三回合的問卷,亦包含了一份關於第二回合的摘要與其他參與者的意見.

就像第二回合,完成這份問卷將會佔用您三十分鐘的時間.您的回應將會保持極度機密.當第三回合的問卷完成後,用來表明您參與這份調查的記號將會被去除.所有的數據是根據全體受訪者的回應,因此,您的個人回應是無法被得知的.同時,您可自由地選擇參不參與這份調查. 如您選擇參與, 您可以隨時退出而不會有任何責任.

每位參與者的意見, 已被歸類. 如您認爲您的意見沒被完全表達, 請寫在空白處, 我們會將您的意見表達.

在第三回合, 請注意下列三點:

1. 請仔細考慮其他參與者的意見, 同時, 重新考量您之前每一題的選擇. 您之前每一題的選擇是以綠色的數字表達.

2. 請圈選每一題的相對重要性 (1 代表 “極不重要”, 7代表 “極為重要”).

3. 請仔細思考每一題,自由地表達您的想法(同意或反對皆可).如您有任何寶貴意見關於經營休閒農場所需的無形資源,或對於題目有任何修正,請於問卷空白處提供您的看法.

請於6月19日前完成並寄回問卷.如有任何問題,請與我們聯絡,我們會非常樂意為您解答. 我們的電話號碼是 0930-380-689 或是使用電子郵件 hsu.127@osu.edu.

再次感謝您的合作參與. 當調查結果揭曉, 屆時, 我們會向您報告結果.
如您不想列名參與者的名單, 請告知, 我們一定按照您的吩咐. 非常感謝您的合作!

Larry E. Miller
教授
人力與社區資源發展學系
美國俄亥俄州立大學

電話: 0021-614-292-9134
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許家謙
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無形資源的能力面向

成功的休閒農場經營需要:

1. 授權給員工做決策

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

2. 提供員工成長的機會

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

3. 招收有能力的員工

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

4. 定期評估顧客的滿意度

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

5. 發展顧客售後服務網路

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

6. 建立務實的行政組織架構

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

無形資源的資產面向

成功的休閒農場經營需要:

1. 與政府人員保持良好關係

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

2. 與立法人員保持良好關係

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

3. 與其他同業業者建立合作關係

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

成功的休閒農場經營需要:

4. 獲得所需的契約

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

參與者意見: 因每一個農場的情形不同, 所需要的契約亦大不相同.

5. 創立公司的商標

極不重要　　普通重要　　極為重要

1　2　3　4　5　6　7

選1的人數	選2的人數	選3的人數	選4的人數	選5的人數	選6的人數	選7的人數

左邊表格是第二回合的摘要,
您上一回合的選項為:

APPENDIX I

Face and Content Validity Panel

Face and Content Validity Panel

Dr. Sharon A. Alvarez, Assistant Professor and Academic Director, Department of Management and Human Resources and Center of Entrepreneurship, The Ohio State University.

Dr. Robert J. Birkenholz, Professor and Chair, Department of Human and Community Resource Development, The Ohio State University.

Mr. Rob Leeds, Extension Agent, Delaware County, The Ohio State University Extension.

Dr. Barbara G. Ludwig, Department Chair, The Ohio State University Extension Administration.

Dr. Larry E. Miller, Professor, Department of Human and Community Resource Development, The Ohio State University.

Dr. H. G. Parsa, Associate Professor, Hospitality Management, The Ohio State University.

Dr. Brian A. Sandford, Assistant Professor, Occupational Education Program, Oklahoma State University.

Dr. Scott D. Scheer, Associate Professor, Department of Human and Community Resource Development, The Ohio State University.

Mrs. Sharon Strouse, Extension Agent, Holmes County, The Ohio State University Extension.

APPENDIX J

Written Comments

Round I:

- Providing the definition of agri-tourism enterprises will be helpful for answering the questionnaire.
- Farm visitors in Taiwan are unlikely to acknowledge the fact that securing proper operating licenses is important.
- A specification regarding required contracts is desired.

Round II:

- Investigators should refer to the definition of the Leisure Farm Guiding Regulations for the purpose of maintaining a balance between research knowledge and practical applications.
- Family members are the core of labor force regarding the management of agri-tourism enterprises. Therefore, encouraging teamwork among employees is not the focal point for the management of such businesses.
- The system of recognizing proper operating licenses is not well-established in Taiwan. Therefore, farm visitors are frequently unable to know whether operators of agri-tourism enterprises possess proper operating licenses.
- Each agri-tourism enterprise is different. Thus, contracts required for each business are different, too.

APPENDIX K

Distribution of Ratings of Importance by Delphi Panel for Each Statement on Round I

Competency-based Intangible Resources (N=37)

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Provide quality services.	0 (0)	0 (0)	0 (0)	1 (2.7)	1 (2.7)	9 (24.3)	26 (70.3)
2. Provide quality products.	0 (0)	0 (0)	0 (0)	3 (8.1)	6 (16.2)	10 (27.0)	18 (48.6)
3. Recognize the needs of customers.	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.4)	7 (18.9)	28 (75.7)
4. Set short-term objectives.	0 (0)	0 (0)	0 (0)	4 (10.8)	7 (18.9)	13 (35.1)	13 (35.1)
5. Set financial goals.	0 (0)	0 (0)	0 (0)	8 (21.6)	6 (16.2)	12 (32.4)	11 (29.7)
6. Set future growth.	0 (0)	0 (0)	0 (0)	1 (2.7)	2 (5.4)	11 (29.7)	23 (62.2)
7. Motivate employees.	0 (0)	0 (0)	0 (0)	4 (10.8)	5 (13.5)	9 (24.3)	19 (51.4)
8. Give employees power to make decisions.	0 (0)	0 (0)	0 (0)	9 (24.3)	7 (18.9)	10 (27.0)	11 (29.7)
9. Reward employees appropriately.	0 (0)	0 (0)	1 (2.7)	2 (5.4)	3 (8.1)	15 (40.5)	16 (43.2)
10. Encourage teamwork among employees.	0 (0)	0 (0)	1 (2.7)	1 (2.7)	5 (13.5)	10 (27.0)	20 (54.1)
11. Innovate.	0 (0)	0 (0)	0 (0)	1 (2.7)	1 (2.7)	10 (27.0)	25 (67.6)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 37.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
12. Create ways for employees to provide feedback.	0 (0)	0 (0)	1 (2.7)	2 (5.4)	8 (21.6)	12 (32.4)	14 (37.8)
13. Provide opportunities for employee growth.	0 (0)	0 (0)	0 (0)	3 (8.1)	5 (13.5)	15 (40.5)	14 (37.8)
14. Provide employee training related to technical skills.	0 (0)	0 (0)	0 (0)	3 (8.1)	5 (13.5)	13 (35.1)	16 (43.2)
15. Provide employee training related to customer services.	0 (0)	0 (0)	0 (0)	0 (0)	3 (8.1)	14 (37.8)	20 (54.1)
16. Recruit capable employees.	0 (0)	0 (0)	2 (5.4)	4 (10.8)	8 (21.6)	9 (24.3)	14 (37.8)
17. Develop effective marketing strategies.	0 (0)	0 (0)	0 (0)	3 (8.1)	7 (18.9)	9 (24.3)	18 (48.6)
18. Regularly evaluate customer satisfaction.	0 (0)	0 (0)	0 (0)	2 (5.4)	5 (13.5)	16 (43.2)	14 (37.8)
19. Regularly evaluate employee job satisfaction.	0 (0)	0 (0)	2 (5.4)	3 (8.1)	5 (13.5)	13 (35.1)	14 (37.8)
20. Regularly evaluate financial performance.	0 (0)	0 (0)	0 (0)	4 (10.8)	6 (16.2)	12 (32.4)	15 (40.5)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 37.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
21. Find other businesses to compare to.	0 (0)	0 (0)	1 (2.7)	4 (10.8)	6 (16.2)	12 (32.4)	14 (37.8)
22. Develop post-purchase services to customers.	0 (0)	0 (0)	1 (2.7)	6 (16.2)	7 (18.9)	9 (24.3)	14 (37.8)
23. Develop workable organizational structure.	0 (0)	1 (2.7)	1 (2.7)	6 (16.2)	7 (18.9)	11 (29.7)	11 (29.7)
24. Establish core values of the business.	0 (0)	0 (0)	0 (0)	2 (5.4)	6 (16.2)	7 (18.9)	22 (59.5)
25. Develop a positive work environment within the organization.	0 (0)	0 (0)	1 (2.7)	2 (5.4)	6 (16.2)	10 (27.0)	18 (48.6)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 37.

APPENDIX L

Distribution of Ratings of Importance by Delphi Panel for Each Statement on Round I

Asset-based Intangible Resources (N=37)

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Asset-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Build positive relationships with government agencies.	0 (0)	1 (2.7)	1 (2.7)	5 (13.5)	7 (18.9)	13 (35.1)	10 (27.0)
2. Build positive relationships with regulators.	0 (0)	3 (8.1)	2 (5.4)	14 (37.8)	10 (27.0)	5 (13.5)	3 (8.1)
3. Build positive relationships with suppliers.	0 (0)	0 (0)	0 (0)	5 (13.5)	5 (13.5)	13 (35.1)	14 (37.8)
4. Build positive relationships with advertising agencies.	0 (0)	0 (0)	0 (0)	4 (10.8)	2 (5.4)	13 (35.1)	18 (48.6)
5. Build alliance with other agri-tourism businesses.	0 (0)	0 (0)	0 (0)	4 (10.8)	6 (16.2)	11 (29.7)	16 (43.2)
6. Become involved in the community.	0 (0)	0 (0)	0 (0)	2 (5.4)	4 (10.8)	17 (45.9)	14 (37.8)
7. Build customer databases to understand who my customers are.	0 (0)	0 (0)	0 (0)	2 (5.4)	1 (2.7)	14 (37.8)	20 (54.1)
8. Build supplier databases to facilitate business operation.	0 (0)	0 (0)	0 (0)	4 (10.8)	4 (10.8)	11 (29.7)	18 (48.6)
9. Develop effective inventory system.	0 (0)	0 (0)	2 (5.4)	3 (8.1)	9 (24.3)	11 (29.7)	12 (32.4)
10. Establish positive business reputation.	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (18.9)	30 (81.1)
11. Establish customer trust.	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (13.5)	32 (86.5)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI); 7= Critically Important (CI); N= 37.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Asset-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
12. Secure proper operating licenses.	0 (0)	0 (0)	0 (0)	1 (2.7)	2 (5.4)	12 (32.4)	22 (59.5)
13. Secure contracts required.	1 (2.7)	0 (0)	2 (5.4)	4 (10.8)	7 (18.9)	11 (29.7)	12 (32.4)
14. Comply with customer safety regulations.	0 (0)	0 (0)	1 (2.7)	1 (2.7)	1 (2.7)	7 (18.9)	27 (73.0)
15. Be aware of legal liability concerns related to agri-tourism.	0 (0)	0 (0)	0 (0)	2 (5.4)	6 (16.2)	12 (32.4)	17 (45.9)
16. Comply with sanitation regulations.	0 (0)	0 (0)	0 (0)	1 (2.7)	2 (5.4)	7 (18.9)	27 (73.0)
17. Develop business trademark.	0 (0)	0 (0)	0 (0)	3 (8.1)	5 (13.5)	13 (35.1)	16 (43.2)
18. Upgrade technologies as required (e.g., computer software).	0 (0)	0 (0)	1 (2.7)	5 (13.5)	6 (16.2)	12 (32.4)	13 (35.1)
19. Secure insurances required.	0 (0)	0 (0)	0 (0)	5 (13.5)	6 (16.2)	14 (37.8)	12 (32.4)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 37.

APPENDIX M

Distribution of Ratings of Importance by Delphi Panel for Each Statement on Round I

Competency-based Intangible Resources (N=34)

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Provide quality services.	0 (0)	0 (0)	0 (0)	1 (2.9)	1 (2.9)	9 (26.5)	23 (67.6)
2. Provide quality products.	0 (0)	0 (0)	0 (0)	3 (8.8)	6 (17.6)	10 (29.4)	15 (44.1)
3. Recognize the needs of customers.	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.9)	7 (20.6)	25 (73.5)
4. Set short-term objectives.	0 (0)	0 (0)	0 (0)	4 (11.8)	6 (17.6)	13 (38.2)	11 (32.4)
5. Set financial goals.	0 (0)	0 (0)	0 (0)	7 (20.6)	6 (17.6)	12 (35.3)	9 (26.5)
6. Set future growth.	0 (0)	0 (0)	0 (0)	1 (2.9)	2 (5.9)	11 (32.4)	20 (58.8)
7. Motivate employees.	0 (0)	0 (0)	0 (0)	4 (11.8)	4 (11.8)	9 (26.5)	17 (50.0)
8. Give employees power to make decisions.	0 (0)	0 (0)	0 (0)	9 (26.5)	7 (20.6)	9 (26.5)	9 (26.5)
9. Reward employees appropriately.	0 (0)	0 (0)	1 (2.9)	2 (5.9)	3 (8.8)	14 (41.2)	14 (41.2)
10. Encourage teamwork among employees.	0 (0)	0 (0)	1 (2.9)	1 (2.9)	5 (14.7)	9 (26.5)	18 (52.9)
11. Innovate.	0 (0)	0 (0)	0 (0)	1 (2.9)	1 (2.9)	9 (26.5)	23 (67.6)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 34.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
12. Create ways for employees to provide feedback.	0 (0)	0 (0)	1 (2.9)	2 (5.9)	8 (23.5)	11 (32.4)	12 (35.3)
13. Provide opportunities for employee growth.	0 (0)	0 (0)	0 (0)	3 (8.8)	4 (11.8)	15 (44.1)	12 (35.3)
14. Provide employee training related to technical skills.	0 (0)	0 (0)	0 (0)	2 (5.9)	5 (14.7)	13 (38.2)	14 (41.2)
15. Provide employee training related to customer services.	0 (0)	0 (0)	0 (0)	0 (0)	3 (8.8)	14 (41.2)	17 (50.0)
16. Recruit capable employees.	0 (0)	0 (0)	2 (5.9)	4 (11.8)	7 (20.6)	9 (26.5)	12 (35.3)
17. Develop effective marketing strategies.	0 (0)	0 (0)	0 (0)	3 (8.8)	7 (20.6)	9 (26.5)	15 (44.1)
18. Regularly evaluate customer satisfaction.	0 (0)	0 (0)	0 (0)	2 (5.9)	5 (14.7)	15 (44.1)	12 (35.3)
19. Regularly evaluate employee job satisfaction.	0 (0)	0 (0)	2 (5.9)	3 (8.8)	5 (14.7)	12 (35.3)	12 (35.3)
20. Regularly evaluate financial performance.	0 (0)	0 (0)	0 (0)	4 (11.8)	6 (17.6)	11 (32.4)	13 (38.2)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 34.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
21. Find other businesses to compare to.	0 (0)	0 (0)	1 (2.9)	4 (11.8)	6 (17.6)	11 (32.4)	12 (35.3)
22. Develop post-purchase services to customers.	0 (0)	0 (0)	1 (2.9)	6 (17.6)	6 (17.6)	9 (26.5)	12 (35.3)
23. Develop workable organizational structure.	0 (0)	1 (2.9)	1 (2.9)	6 (17.6)	7 (20.6)	10 (29.4)	9 (26.5)
24. Establish core values of the business.	0 (0)	0 (0)	0 (0)	2 (5.9)	5 (14.7)	7 (20.6)	20 (58.8)
25. Develop a positive work environment within the organization.	0 (0)	0 (0)	1 (2.9)	2 (5.9)	6 (17.6)	9 (26.5)	16 (47.1)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 34.

APPENDIX N

Distribution of Ratings of Importance by Delphi Panel for Each Statement on Round I

Asset-based Intangible Resources (N=34)

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Asset-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Build positive relationships with government agencies.	0 (0)	1 (2.9)	1 (2.9)	4 (11.8)	7 (20.6)	13 (38.2)	8 (23.5)
2. Build positive relationships with regulators.	0 (0)	3 (8.8)	2 (5.9)	14 (41.2)	8 (23.5)	5 (14.7)	2 (5.9)
3. Build positive relationships with suppliers.	0 (0)	0 (0)	0 (0)	5 (14.7)	5 (14.7)	12 (35.3)	12 (35.3)
4. Build positive relationships with advertising agencies.	0 (0)	0 (0)	0 (0)	3 (8.8)	2 (5.9)	13 (38.2)	16 (47.1)
5. Build alliance with other agri-tourism businesses.	0 (0)	0 (0)	0 (0)	4 (11.8)	6 (17.6)	10 (29.4)	14 (41.2)
6. Become involved in the community.	0 (0)	0 (0)	0 (0)	2 (5.9)	4 (11.8)	16 (47.1)	12 (35.3)
7. Build customer databases to understand who my customers are.	0 (0)	0 (0)	0 (0)	2 (5.9)	1 (2.9)	13 (38.2)	18 (52.9)
8. Build supplier databases to facilitate business operation.	0 (0)	0 (0)	0 (0)	4 (11.8)	4 (11.8)	10 (29.4)	16 (47.1)
9. Develop effective inventory system.	0 (0)	0 (0)	2 (5.9)	3 (8.8)	8 (23.5)	11 (32.4)	10 (29.4)
10. Establish positive business reputation.	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (20.6)	27 (79.4)
11. Establish customer trust.	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (14.7)	29 (85.3)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI); 7= Critically Important (CI); N= 34.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Asset-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
12. Secure proper operating licenses.	0 (0)	0 (0)	0 (0)	1 (2.9)	2 (5.9)	12 (35.3)	19 (55.9)
13. Secure contracts required.	1 (2.9)	0 (0)	2 (5.9)	4 (11.8)	7 (20.6)	10 (29.4)	10 (29.4)
14. Comply with customer safety regulations.	0 (0)	0 (0)	1 (2.9)	1 (2.9)	1 (2.9)	7 (20.6)	24 (70.6)
15. Be aware of legal liability concerns related to agri-tourism.	0 (0)	0 (0)	0 (0)	2 (5.9)	5 (14.7)	12 (35.3)	15 (44.1)
16. Comply with sanitation regulations.	0 (0)	0 (0)	0 (0)	1 (2.9)	2 (5.9)	7 (20.6)	24 (70.6)
17. Develop business trademark.	0 (0)	0 (0)	0 (0)	3 (8.8)	5 (14.7)	12 (35.3)	14 (41.2)
18. Upgrade technologies as required (e.g., computer software).	0 (0)	0 (0)	1 (2.9)	5 (14.7)	6 (17.6)	11 (32.4)	11 (32.4)
19. Secure insurances required.	0 (0)	0 (0)	0 (0)	5 (14.7)	6 (17.6)	13 (38.2)	10 (29.4)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 34.

APPENDIX O

Distribution of Ratings of Importance by Delphi Panel for Each Statement on Round II

Competency-based Intangible Resources

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Provide quality services.	0 (0)	0 (0)	0 (0)	1 (2.9)	1 (2.9)	8 (23.5)	24 (70.6)
2. Provide quality products.	0 (0)	0 (0)	0 (0)	2 (5.9)	5 (14.7)	12 (35.3)	15 (44.1)
3. Recognize the needs of customers.	0 (0)	0 (0)	0 (0)	0 (0)	1 (2.9)	5 (14.7)	28 (82.4)
4. Set short-term objectives.	0 (0)	0 (0)	0 (0)	2 (5.9)	10 (29.4)	12 (35.3)	10 (29.4)
5. Set financial goals.	0 (0)	0 (0)	0 (0)	5 (14.7)	6 (17.6)	15 (44.1)	8 (23.5)
6. Set future growth.	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.9)	12 (35.3)	20 (58.8)
7. Motivate employees.	0 (0)	0 (0)	0 (0)	2 (5.9)	3 (8.8)	13 (38.2)	16 (47.1)
8. Give employees power to make decisions.	0 (0)	0 (0)	0 (0)	7 (20.6)	7 (20.6)	13 (38.2)	7 (20.6)
9. Reward employees appropriately.	0 (0)	0 (0)	1 (2.9)	1 (2.9)	3 (8.8)	18 (52.9)	11 (32.4)
10. Encourage teamwork among employees.	0 (0)	0 (0)	0 (0)	1 (2.9)	3 (8.8)	10 (29.4)	20 (58.8)
11. Innovate.	0 (0)	0 (0)	0 (0)	1 (2.9)	0 (0)	10 (29.4)	23 (67.6)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 34.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
12. Create ways for employees to provide feedback.	0 (0)	0 (0)	0 (0)	1 (2.9)	6 (17.6)	14 (41.2)	13 (38.2)
13. Provide opportunities for employee growth.	0 (0)	0 (0)	0 (0)	0 (0)	1 (2.9)	18 (52.9)	15 (44.1)
14. Provide employee training related to technical skills.	0 (0)	0 (0)	0 (0)	1 (2.9)	2 (5.9)	14 (41.2)	17 (50.0)
15. Provide employee training related to customer services.	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.9)	13 (38.2)	19 (55.9)
16. Recruit capable employees.	0 (0)	0 (0)	0 (0)	6 (17.6)	1 (2.9)	14 (41.2)	13 (38.2)
17. Develop effective marketing strategies.	0 (0)	0 (0)	0 (0)	1 (2.9)	5 (14.7)	10 (29.4)	18 (52.9)
18. Regularly evaluate customer satisfaction.	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.9)	21 (61.7)	11 (32.4)
19. Regularly evaluate employee job satisfaction.	0 (0)	0 (0)	1 (2.9)	1 (2.9)	5 (14.7)	16 (47.1)	11 (32.4)
20. Regularly evaluate financial performance.	0 (0)	0 (0)	0 (0)	1 (2.9)	5 (14.7)	14 (41.2)	14 (41.2)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 34.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
21. Find other businesses to compare to.	0 (0)	0 (0)	0 (0)	3 (8.8)	7 (20.6)	11 (32.4)	13 (38.2)
22. Develop post-purchase services to customers.	0 (0)	0 (0)	0 (0)	2 (5.9)	5 (14.7)	13 (38.2)	14 (41.2)
23. Develop workable organizational structure.	0 (0)	0 (0)	1 (2.9)	4 (11.8)	4 (11.8)	16 (47.1)	9 (26.5)
24. Establish core values of the business.	0 (0)	0 (0)	0 (0)	2 (5.9)	3 (8.8)	11 (32.4)	18 (52.9)
25. Develop a positive work environment within the organization.	0 (0)	0 (0)	0 (0)	1 (2.9)	5 (14.7)	11 (32.4)	17 (50.0)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 34.

APPENDIX P

Distribution of Ratings of Importance by Delphi Panel for Each Statement on Round II

Asset-based Intangible Resources

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Asset-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Build positive relationships with government agencies.	0 (0)	1 (2.9)	0 (0)	3 (8.8)	5 (14.7)	19 (55.9)	6 (17.6)
2. Build positive relationships with regulators.	0 (0)	1 (2.9)	3 (8.8)	18 (52.9)	5 (14.7)	5 (14.7)	2 (5.9)
3. Build positive relationships with suppliers.	0 (0)	0 (0)	0 (0)	4 (11.8)	6 (17.6)	12 (35.3)	12 (35.3)
4. Build positive relationships with advertising agencies.	0 (0)	0 (0)	0 (0)	1 (2.9)	3 (8.8)	16 (47.1)	14 (41.2)
5. Build alliance with other agri-tourism businesses.	0 (0)	0 (0)	1 (2.9)	0 (0)	7 (20.6)	15 (44.1)	11 (32.4)
6. Become involved in the community.	0 (0)	0 (0)	1 (2.9)	2 (5.9)	3 (8.8)	17 (50.0)	11 (32.4)
7. Build customer databases to understand who my customers are.	0 (0)	0 (0)	1 (2.9)	0 (0)	2 (5.9)	12 (35.3)	19 (55.9)
8. Build supplier databases to facilitate business operation.	0 (0)	0 (0)	0 (0)	3 (8.8)	5 (14.7)	10 (29.4)	16 (47.1)
9. Develop effective inventory system.	0 (0)	0 (0)	1 (2.9)	4 (11.8)	6 (17.6)	15 (44.1)	8 (23.5)
10. Establish positive business reputation.	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (14.7)	29 (85.3)
11. Establish customer trust.	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.9)	32 (94.1)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI); 7= Critically Important (CI); N= 34.

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Asset-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
12. Secure proper operating licenses.	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.9)	12 (35.3)	20 (58.8)
13. Secure contracts required.	1 (2.9)	0 (0)	1 (2.9)	4 (11.8)	8 (23.5)	11 (32.4)	9 (26.5)
14. Comply with customer safety regulations.	0 (0)	0 (0)	0 (0)	2 (5.9)	2 (5.9)	3 (8.8)	27 (79.4)
15. Be aware of legal liability concerns related to agri-tourism.	0 (0)	0 (0)	0 (0)	2 (5.9)	5 (14.7)	11 (32.4)	16 (47.1)
16. Comply with sanitation regulations.	0 (0)	0 (0)	0 (0)	0 (0)	3 (8.8)	4 (11.8)	27 (79.4)
17. Develop business trademark.	0 (0)	0 (0)	0 (0)	0 (0)	7 (20.6)	9 (26.5)	18 (52.9)
18. Upgrade technologies as required (e.g., computer software).	0 (0)	0 (0)	0 (0	3 (8.8)	7 (20.6)	10 (29.4)	14 (41.2)
19. Secure insurances required.	0 (0)	0 (0)	0 (0)	2 (5.9)	7 (20.6)	14 (41.2)	11 (32.4)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 34.

APPENDIX Q

Distribution of Ratings of Importance by Delphi Panel for Each Statement on Round III

Competency-based Intangible Resources

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Competency-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Give employees power to make decisions.	0 (0)	0 (0)	0 (0)	7 (20.6)	6 (17.6)	14 (41.2)	7 (20.6)
2. Provide opportunities for employee growth.	0 (0)	0 (0)	0 (0)	1 (2.9)	1 (2.9)	14 (41.2)	18 (52.9)
3. Recruit capable employees.	0 (0)	0 (0)	0 (0)	4 (11.8)	2 (5.9)	11 (32.4)	17 (50.0)
4. Regularly evaluate customer satisfaction.	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.9)	19 (55.9)	13 (38.2)
5. Develop post-purchase services to customers.	0 (0)	0 (0)	0 (0)	2 (5.9)	2 (5.9)	13 (38.2)	17 (50.0)
6. Develop workable organizational structure.	0 (0)	0 (0)	0 (0)	3 (8.8)	6 (17.6)	16 (47.1)	9 (26.5)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 6.

APPENDIX R

Distribution of Ratings of Importance by Delphi Panel for Each Statement on Round III

Asset-based Intangible Resources

	1 (NIAA)	2	3	4 (MI)	5	6	7 (CI)
Statement: Asset-Based Intangible Resources	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Build positive relationships with government agencies.	0 (0)	1 (2.9)	0 (0)	2 (5.9)	5 (14.7)	22 (64.7)	4 (11.8)
2. Build positive relationships with regulators.	0 (0)	1 (2.9)	2 (5.9)	19 (55.9)	7 (20.6)	4 (11.8)	1 (2.9)
3. Build alliance with other agri-tourism businesses.	0 (0)	0 (0)	0 (0)	2 (5.9)	2 (5.9)	21 (61.8)	9 (26.5)
4. Secure contracts required.	0 (0)	0 (0)	1 (2.9)	4 (11.8)	7 (20.6)	14 (41.2)	8 (23.5)
5. Develop business trademark.	0 (0)	0 (0)	0 (0)	0 (0)	7 (20.6)	6 (17.6)	21 (61.8)

Note: 1= Not Important At All (NIAA); 4= Moderately Important (MI);
7= Critically Important (CI); N= 5.

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