

RESEARCH ARTICLE

WILEY

Agritourism and local development: Evidence from two case studies in Greece

Sofia Karampela  | Thanasis Kizos 

Department of Geography, University of the Aegean, Mytilene, Greece

Correspondence

Sofia Karampela, Department of Geography, University of the Aegean, University Hill, Mytilene 81100, Greece.
Email: karampela@aegean.gr

Abstract

This paper attempts to fill a gap in the international literature by assessing the impacts of agritourism at local level combining different aspects. The primary data were obtained through personal in-depth interviews with the use of semi-structured questionnaires. Two destinations in Greece were selected due to their diverse characteristics: an island, Lesbos, and a continental locality, Plastiras Lake. Findings suggest that the differences can be summarized in structure: of agritourism supply; scale: by providing their owners with additional income in pluriactive farm households; and networks: affected by their different geographic characteristics, but are not reflected to the overall results of local development.

KEYWORDS

agritourism, Greece, impacts, local development, networks, scale

1 | INTRODUCTION: THEORETICAL APPROACH

Agritourism is a complex subject of study with differing definitions in the literature and tourism practice (Dubois & Schmitz, 2013; Potočník-Slavič & Schmitz, 2013) and is affected by the socio-economic characteristics of each destination (Broccardo, Culasso, & Truant, 2017). In this study, we attempt to answer two questions in relation to agritourism product: (a) How can we measure the impacts of agritourism on local development? (b) Do the destinations with different geographic characteristics have different impacts? The measurement and operationalization of the agritourism impacts at local level are assessed with the conceptual framework of Karampela, Kizos, and Spilanis (2016) by combining different aspects: the (five) different types of agritourism of Flanigan, Blackstock, and Hunter (2014, 2015) typology as described below, their scale of operation, and the networks with other (local) partners. The whole approach was guided by the effort to go beyond this descriptive typology and explore the impacts not only of the different types to the area but also of the activity as a whole. The primary data for the variables used were obtained through personal in-depth interviews and semi-structured questionnaires. The destinations with different geographic characteristics that were selected are two tourist destinations in Greece: an island, Lesbos, in north Aegean Sea and a continental

locality, Plastiras, Lake in Thessaly, central part of Greece (Figure 1). Furthermore, definitions of agritourism in an open-ended question are classified by us in the typology. The goal is to apply the theoretical framework at different spatial scales to gain insights on the suitability of the approach.

Phillip, Hunter, and Blackstock (2010) consider agritourism as a series of types of products rather than one homogenous entity. The typology (modified by Flanigan et al., 2014, 2015) they developed represents some of the most recent and comprehensive attempts for defining agritourism with the use of three criteria: (a) the nature of the contact between tourists and agricultural activity (the tangibility of agriculture in the context of visitor experiences of agritourism, Flanigan et al., 2014); (b) whether or not the product is based on a "working farm," the most frequently cited requirement for agritourism for both North American and European studies (e.g., Barbieri & Mshenga, 2008; Hegarty & Przeborska, 2005; Ollenburg & Buckley, 2007; Thomas-Francois & Francois, 2014), and (c) the degree of authenticity in the tourism experience. Gil Arroyo, Barbieri, and Rich (2013) suggest a fourth ontological issue, related to "travel," given the inclusion of the word "tourism" in the term agritourism. With the use of these criteria, five different types of agritourism emerge: (a) non-working farm indirect interaction agritourism (e.g., accommodation in ex-farming), (b) non-working farm direct interaction agritourism (e.g., farming museums), (c) working farm indirect interaction

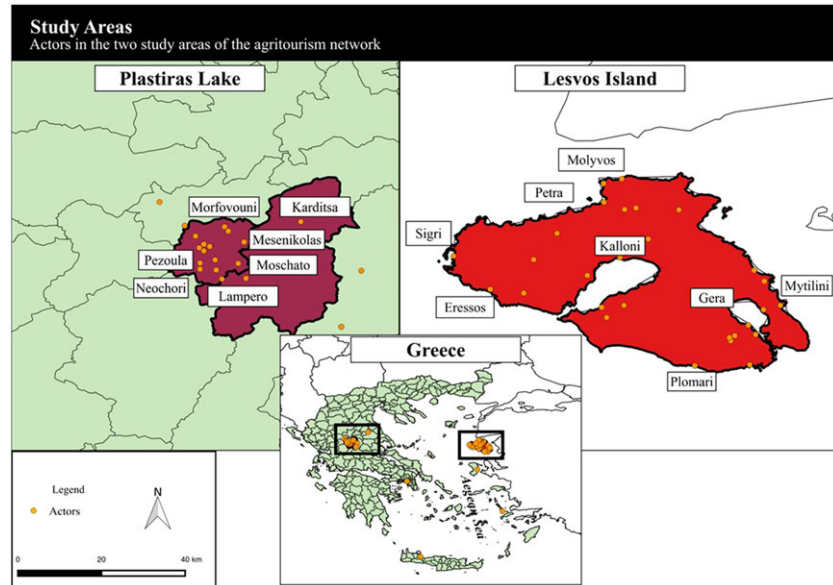


FIGURE 1 Location of the study area and the 160 respondents of the sample [Colour figure can be viewed at wileyonlinelibrary.com]

agritourism (e.g., farmhouse accommodation and outdoor activities), (d) working farm direct staged interaction agritourism (e.g., farm tours), and (e) working farm direct authentic interaction agritourism (e.g., participation in farm tasks). World Wide Opportunities on Organic Farms, a worldwide movement linking volunteers with organic farmers to promote cultural and educational experiences (<http://www.wwof.net/>), is excluded as volunteer work. The above kind of active participation where the owner does not generate income from the stay, although they indirectly benefit economically from this volunteer work (as recently cited by Streifeneder, 2016).

Literature is unanimous in considering agritourism as a key factor for local development (Mastronardi, Giaccio, Giannelli, & Scardera, 2015). For Organisation for Economic Co-operation and Development (OECD; 2001: 22),

“local development concept can be seen as a bottom-up attempt by local actors to improve incomes, employment opportunities and quality of life in their localities ... local development policies can also contribute towards the goal of strengthening local participation and democracy”.

Recently, many researchers suggest using networks and their characteristics (e.g., Dredge, 2006; Farsani, Coelho, & Costa, 2014; Hall, 2005; Marsat, Menegazzi, Monin, Bonniot, & Bouchaud, 2013; Proto, Tani, Bühnemann, Gaus, & Mathias Raith, 2012) for estimating local development impacts of tourism activities (e.g., Ammirato & Felicetti, 2013; Denicolai, Cioccarelli, & Zucchella, 2010; Gibson, Lynch, & Morrison, 2005; Polese, 2009; Quaranta, Citro, & Salvia, 2016). Some of these characteristics include quantitative and qualitative aspects of their operation such as locality, number of local partners; and their direction of cooperation, horizontal, vertical, and diagonal (Karampela, Kavroudakis, & Kizos, 2017); amongst which, diagonal is the one most applicable to tourism, where each additional partner adds value to the products and services produced by the existing enterprises. The scale of operation at agritourism units is very important as well in assessing impacts at local level and

Karampela et al. (2016) combine two aspects: (a) the economic success of the individual agritourism enterprises and (b) their scale of operation in terms of the number of visitors they receive, their size, and so forth.

Even though there is a growing interest in the economic and social impacts of agritourism, there is no consensus yet on different aspects that need to be included in assessing its impacts locally (Das & Rainey, 2010; Sznajder, Przezborska, & Scrimgeour, 2009; Tew & Barbieri, 2012). The different components of local development found in the literature can be summarized as employment (temporary and permanent; local and non-local), earnings from the activities, length of operation, and owner's locality as non-residents imply a leakage from the local economy (Koutsouris, Gidarakou, Grava, & Michailidis, 2014). Only some aspects of local development approaches have been measured including cooperatives, rural entrepreneurship, local employment, and so forth (Farsani, Coelho, & Costa, 2011; Iakovidou, Koutsou, & Partalidou, 2009; Iakovidou, Koutsou, Partalidou, & Emmanouilidou, 2012; Sergaki, Partalidou, & Iakovidou, 2015; Vakoufaris, Kizos, Spilanis, Koulouri, & Zacharaki, 2007; Yang, 2012; Zouros, 2004).

2 | RESEARCH METHODOLOGY AND CASE STUDY AREAS

2.1 | Research approach and analysis

The assumptions behind the whole rationale are that scale, networks, and local development are affected by the geographic and tourism supply characteristics of the case studies. The methodology includes: (a) quantitative aspects of scale, networks, and local development: the number of tourists, the number of links-partners and their location, the number of employees and permanent employees, months of units' operation, income, and (b) qualitative aspects: the types of agritourism units, the type of actor-partner, their type of relationship, and the permanent residence of the owner (Table 1).

TABLE 1 Variables used in our analysis

Aspects	Components	Variables	Values
Typology	Supply	Types of agritourism	1 = NWFII 2 = NWFDI 3 = WFII 4 = WFDSI 5 = WFDAI
Scale	Demand	Number of tourists	1 = 0–100 2 = 100–1,000 3 = > 1,000
Networks (N)	Partnership Partnership locality Direction of cooperation	Number of partners (P) Number of local partners (LP) Number of horizontal partners (HP) Number of vertical partners (VP) Number of diagonal partners (DP)	0–6 0–6 0–6 (0–6) * 1.5 (0–6) * 2
Local development (LD)	Employment (temporary and permanent; local and non-local)	Number of employees (E) Permanent employees (percentage of total; PE)	1 = 0–1 2 = 2–4 3 = 5–9 4 = 10–24 5 = 25–49 6 = 50–99 0 = none 1 = <25% 2 = 25–50% 3 = 50–75% 4 = > 75% 5 = all
	Earnings from the activities	Income (I)	1 = <1,000 2 = 1,000–5,000 3 = > 5,000
	Length of operation	Months of operation (M)	1 = < 3 2 = 3–6 3 = 6–9 4 = 9–12
	Locality of operation	Owner permanent residence in case study area (PR)	0 = No 1 = Yes

Note. Source: the authors. NWFII = non-working farm indirect interaction agritourism; NWFDI = non-working farm direct interaction agritourism; WFII = working farm indirect interaction agritourism; WFDSI = working farm direct staged interaction agritourism; WFDAI = working farm direct authentic interaction agritourism.

The research is structured in three stages

1. A preliminary survey of tourism actors and products in the areas in order to record their role in tourism, the number and type of relations with other actors, and the supply chains for inputs they use and outputs they produce. The result is a database including contact details.
2. Actors from the preliminary survey were selected for personal in-depth interviews with the use of semi-structured questionnaires to record quantitative and qualitative characteristics of links and supply chains. We used a snowball survey method with each of the original respondents providing further contact points who, from their perspective, are involved in agritourism. The process is repeated until the sample is saturated and no new contacts were mentioned. The questionnaire included the following sections: (a) type and characteristics of the respondents, unit/enterprise, for example, type of services offered and months of operation; (b) description of the most important actors' partners (up to six) and characteristics of their relations (locality and direction of cooperation); (3) details for the respondent as a person, for example, main occupation and location of permanent residence; (4) open-ended questions for agritourism; and (5) social and economic impacts: employment and income.

3. The above database is enriched with new information derived from the respondents and the snowball survey.

For the aspects of types of agritourism, scale of operation, networks and local development, a number of components, and variables are used (Table 1).

Two composite indexes were also calculated for networks (N) and local development (LD) with the following formulas:

$$1. N = P + LP + HP + 1.5 * VP + 2 * DP$$

where

- P Number of partners
LP Number of local partners
HP Number of horizontal partners
VP Number of vertical partners
DP Number of diagonal partners

Coefficients 1.5 and 2 denotes higher weights of the particular variables in the calculation of the index due to the higher importance attribute to it by our conceptual framework.

$$2. LD = E + PE + I + M + PR$$

where

E	Number of Employees
PE	Permanent Employees (percentage of total)
I	Income
M	Months of operation
PR	Owner Permanent Residence in case study area

The values for these indexes were categorized in three classes following the distribution of the values with each class representing 33.3% of the values: (a) networks classes: 1 = < 12, 2 = 12–18, 3 = > 18; (b) local development classes: 1 = < 9, 2 = 9–12, 3 = > 12.

These results were placed in the conceptual space of Figure 3 by counting the frequencies of the cases of the agritourism units of each type, their scale of operation, their respective networks features, and finally their local impacts.

The statistical analysis is performed with the use of SPSS 23.0 software. Analysis of variance was used to identify statistically significant differences ($p < .05$) between the average values of the variables used for the types of agritourism units in the two case study areas and in total (Table 6). Also, Pearson correlations ($p < .01$) for the values of the variables and indexes of our analysis were calculated (Table S7).

2.2 | Case study areas

Two destinations in Greece with different geographic characteristics are selected: an island and a continental locality, differing also in terms of tourism supply, recognition, and accessibility: (a) the island (Lesvos) is a modestly popular international tourism destination for Aegean Islands standards, with daily sea and air connections to the Greek mainland and (b) the lake area (Plastiras) is a domestic tourism destination located at a continental mountainous area at the central part of Greece.

Lesvos Island is part of the North Aegean Region. It is the third largest island in Greece (1,630 km²), with a population that has dropped significantly as a result of economic decline from 1951 to

1991 (–30%, from 126,928 to 88,206), people stabilizing in the next decades (86,436 in 2011). The local economy is based on agriculture with an emphasis on olive oil production, sheep husbandry (for cheese production), and the agri-food industry also includes *ouzo*, a local alcoholic drink. Many of the island's inhabitants are also engaged in tourism.

The second research was carried out over the 314 km² Lake Plastiras area, in the Agra Mountains (*“the name of what is still the most inaccessible and least developed part of the country”*- Salmon, 1995) of the Pindos Mountain Range in Karditsa Prefecture, composed of 14 settlements. The Plastiras Lake is an artificial one, constructed in 1958–1962, to supply drinking and irrigation water for the nearby Karditsa plain and produce electricity (Kokkali, Koutsouris, & Chrysochou, 2009). Administratively, some of the 14 settlements are part of Lake Plastiras Municipality and others belong to Karditsa Municipality. The area's population has declined mostly during the period around the lake construction (1961–1971: –32%, see Koutsouris, 2008), whereas in 1991–2011, there has been an increase (13.9%). Agriculture is the prime livelihood for residents, with some small-scale family manufacture activities, such as alcohol distillation (for wine and *tsipouro*, a local alcoholic drink) and weaving. Tourism developed after the 1980s, when local development projects supported rural tourism enterprises (Kokkali et al., 2009). According to a recent research (Koutsouris, 2009), those involved in tourism can be categorized as “newcomers” with experience from working outside the area in the past and educational/training assets, the rest being locals who “rode the tide” of the tourism development of the area.

Regarding tourism, the differences in magnitude are significant, with average duration of stays in Lesvos more than double than those in Plastiras Lake (Table 2, 4.4 to 2). In both cases, arrivals and nights spent in hotels increase during 2005–2015 (25.6% and 5.2% in Lesvos, and 65.2% and 83.4%, respectively, in Plastiras Lake), but the average duration of stay decreases in Lesvos (–16.3%) and the occupancy rate in both areas (–24.3% in Lesvos and –46.3% in Plastiras). Tourism statistics also demonstrate the importance of foreign tourists for Lesvos (they cover 80% of total nights spent in hotels) and domestic

TABLE 2 Characteristics of case study areas

	Lesvos Island	Plastiras Lake
Area (km ²)	1,630	314
Population (2011)	86,436	4,929
Beds in hotels (2016)	7,718	686
Beds in secondary houses (2016)	6,294	573
Beds/population (2016)	0.16	0.26
Arrivals in hotels (2015)	131,633	24,055
Change (%) of arrivals in hotels (2015–2005)	25.6%	65.2%
Nights spent in hotels (2015)	584,023	48,548
Change (%) of nights spent in hotels (2015–2005)	5.2%	83.4%
Average duration of stay (2015)	4.4	2.0
Change (%) of average duration of stay (2015–2005)	–16.3%	11.1%
Occupancy rate (2015)	39.8	23.4
Change (%) of occupancy rate (2015–2005)	–24.3%	–46.3%
Percentage of total available beds where data referred (2015)	96.2	79.2

Note. Source: Hellenic Statistical Authority and Greek Ministry of Tourism, processed by the authors.

tourists for Plastiras Lake (covering 97% of total nights spent in hotels in 2015). Recent research underlines Plastiras Lake domestic tourism mainly during the weekends (which is also highlighted in the average duration of stay, 2 days) and major religious festivities–vacations (Easter, Christmas, Ash Monday, etc.); on the contrary, summertime vacations in Greece are mostly related to seaside tourism (Koutsouris, Gidarakou, Kokkali, & Dimopoulou, 2013). What is more important is that a significant number of tourists visit this case study area during summer period especially for daily tours, for accommodation in rooms to let and also tourists with country houses and/or origin from the area who are not recorded in the official statistical data.

2.3 | Sample

Research was conducted during the high season to ensure maximum cooperation and participation in Lesvos Island in the period July 2015–November 2015, and in Plastiras Lake in the period June 2016–September 2016. In the final sample, enterprises, associations, and stakeholders were included that were (a) related to agritourism and/or played an important role in terms of agritourism development, (b) operating during the research period, and (c) willing to participate (although in the end very few denials to participate were recorded). Some of them were outside the “core” case study area, but they were considered as important in agritourism and thus included in the sample. Interviews were also conducted with representatives of key tourism organizations and associations in the destinations, for example, the Greek National Tourism Organization, Hellenic Agrotourism Federation, and local tourist associations. Some of the suggestions of the respondents in the snowball process were not interviewed in the end, either because they were not operating at that time or it became clear after an initial contact that they were not relevant to the purposes of the research. The final sample per category of respondents is presented in Table 3 and their location in Figure 1.

3 | RESULTS

The results of the variables and indexes that were used for the measurement of agritourism on local development are presented

below according to the conceptual framework: (a) types of agritourism units, (b) scale, (c) networks, and finally, (d) local development by comparing the two destinations with different geographic characteristics that were selected. Also, the main findings, the differences and similarities between the two cases, and the main discussion of the research are displayed in Table 4.

3.1 | Types of agritourism units

Although most of the interviewees from this research were familiar with the concept of agritourism, they tended to use it in rather different ways. A wide range of answers emerged when they were asked to define agritourism in an open-ended question that were later classified by us according to agritourism typology. In Figure 2, each case classified by us (X axis) and each answer in this open-ended question of agritourism definition (Y axis) is categorized in Flanigan et al.'s (2014, 2015) typology of five different types of agritourism. We have also added a new category: (six) stakeholders in the X axis of our “real” typology. The most important result is that approximately 40% of the sample believe that agritourism takes place in a working farm where visitors have an authentic working involvement in the farm (Type 5), and 26% consider that their real type coincides with their opinion about agritourism definition type. For example, 12% of the respondents who belong to Type 3 believe that agritourism are units who belong to this type, specifically many of them refer, “we are a typical example of an agritourism unit.” The absolute numbers per type in the two case study areas reveal the following differences: Types 1 and 2 aggregate to the percentage of 47% in Lesvos Island and 27% in Plastiras Lake whereas Types 4 and 5, the percentage of 9% and 23%, respectively.

3.2 | Scale

The combination of tourists and income classes yield a number of different cases (Table 5) with a range of scales of operation and relative successes taking into account the particularities of the sector or the area as large scale for one area may be small for another. The success of the enterprises that provide the product vary from the unsuccessful (enterprises that barely survive or will have to close) to successful and

TABLE 3 Categories and frequencies of respondents in the sample

Categories/frequencies	Lesvos Island	Plastiras Lake	Total
1. Farm house accommodation units/enterprises	17	16	33
2. Tourism activities units (e.g., guides for trails, bird watching, horses, donkeys, yoga, and meditation)	16	10	25
3. Visited processing facilities (e.g., ouzo factories, wineries, oil mills, beekeeping workshops, and women's cooperatives)	26	14	40
4. Secondary tourism enterprises (e.g., rent a car, travel agency, tour operator, retailers of regional products, and artisans producing tourism relevant regional handicraft)	23	8	32
5. Museums related to the countryside (e.g., museum of olive oil production, Petrified Forest, and botanical garden)	3	2	5
6. Chambers and tourism associations	8	7	15
7. Stakeholders (regions—tourism department, municipalities—Vice Mayor responsible for tourism, Greek National Tourism Organization, and local/regional development agencies).	4	6	10
Total	97	63	160

Note. Source: the authors.

TABLE 4 Main findings and discussion of the research

Main findings		Differences			Main discussion	
		Components/variables	Lesvos Island	Plastiras Lake	Statements	Bibliography
Aspects	Typology	Types 1 and 2	47%	27%	Is characterized as more "tourism" than "agri" or "agro" in Greek because they operate in the margin of mass tourism with the same customers and product	By Gousiou, Spiliatis, and Kizos, (2001) and confirmed by others, for example, Kizos and Iosifides, (2007) and Koutsouris et al. (2014)
		Types 4 and 5	9%	23%	Open-ended question for agritourism definition: "Agritourism is a muddled concept and/or image between realities and stakeholder expectations" Agritourism can take multiple forms without suggesting any type is superior to the others	Dubois, Cawley, and Schmitz (2017)
		Different structure of this kind of product			Some farmers hide, separate, and even abandon economic agricultural activity to correspond with the tourist imagery	Flanigan et al. (2014)
Scale	Absolute numbers of agritourists	143,719		92,290	On average does not differ notably Demand or scale is in accordance with supply	As cited by Kizos (2010)
Networks	Locality of the partners				Small for stakeholders	Nogueira and Pinho (2015: 325)
Local development	Income				Number of employees Permanent employees Earn less than 10,000€ per year—50% More than one occupation—50%	In agreement with other findings of Koutsouris et al. (2013) As argued by Tew and Barbieri (2012) Rogerson and Rogerson (2014) Kizos (2010) and Koutsouris et al. (2013)
					Implying that these households are at risk of poverty Even if the economic benefits of small agritourism enterprises are not universal and often modest, they may make a difference Farmers turning to agritourism as a means for income diversification do not always possess the essential enterprise competencies required for success Agritourism has resulted in the development of pluri-activity on the part of some of the household's members, in this	

(Continues)

TABLE 4 (Continued)

Main findings		Main discussion	
Aspects	Differences		Bibliography
	Components/variables	Plastiras Lake	
Permanent residence of the owners	87%	27%	Das and Rainey (2010) In line with previous research in rural Greece from Koutsouris et al. (2014)
			<p>Statements</p> <p>sense supported the differentiation of the local economy Increases in income but not any significant increases in jobs mainly due to the family nature of the enterprises Leakages from the local economy</p>
			<p>Similarities</p> <p>The other job as main occupation—50% Months of operation</p>

Source: the authors

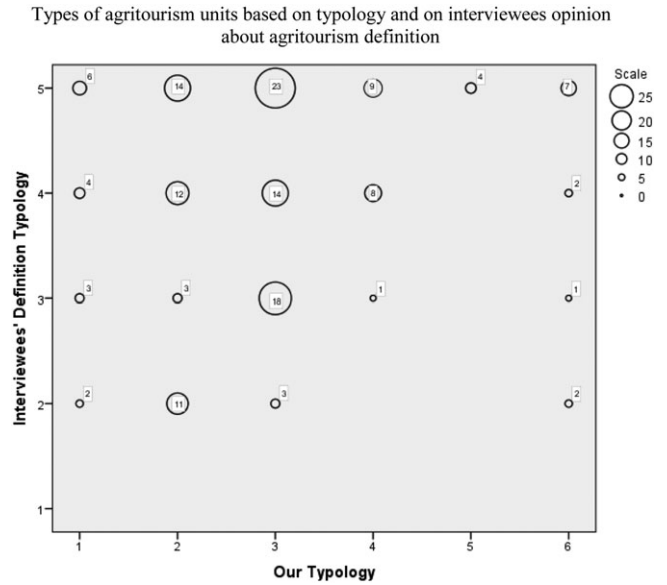


FIGURE 2 Types of agritourism units based on typology and on interviewee's opinion about agritourism definition. Source: the authors

similarly from the very small to large. Only a small percentage refers to large scale and successful enterprises whereas the biggest percentage refers to small scale and less successful enterprises. It is important that scale diversified into very different numbers on average in the types of agritourism units both within each case study area and between the case study areas (see Table 6), but the average value between the two case studies does not differ notably. This range of enterprises near the margin of survival is related to the fact that a significant number of enterprises are not viable as separate enterprises but provide their owners with additional income in pluriactive farm households, as many of the interviewees have more than one occupation (47.4% in Lesvos and 58.7% in Plastiras) and the other job as their main occupation (49% of total). Another notable result is the absolute numbers of agritourists in our sample, 143,719 in Lesvos Island compared with 92,290 in Plastiras Lake.

3.3 | Networks

The total number of links recorded for the 97 respondents from Lesvos were 488 (5.03 of reported links on average) and 244 for the 63 respondents in Plastiras Lake (3.87 on average). The characteristics of these links (Table 6) underline the most remarkable difference between the two networks that refers to the locality of the partners. On Lesvos, local networks (within the case study area) are much more important, 3.56 on average, than they are in Plastiras Lake, 1.84 on average. The different geographic characteristics of our case studies seem to affect the networks that have been established, given that Lesvos is an island and therefore its accessibility and travel costs are higher than those of the continental area. A more detailed view of the average values for the different types of agritourism units in the case study areas shows that even if the sample of stakeholders interviewed is small (5% of total for Lesvos Island and 11% for Plastiras Lake), the number of all kind of partners (local, horizontal, vertical, and diagonal) is very small, especially for Plastiras Lake that consequently means small composite indexes for networks.

TABLE 5 Economic success and scale of operation in case study areas

		Economic success: Income classes (%)			
		<1,000€ (N = 74)	1,000–5,000€ (N = 49)	5,000–10,000€ (N = 7)	Total
Scale: Tourists' classes (%)	0–100 (N = 45)	66.7	33.3	0.0	100.0
	100–1,000 (N = 53)	56.6	35.8	7.5	100.0
	>1,000 (N = 32)	43.8	46.9	9.4	100.0
	Total	56.9	37.7	5.4	100.0

Note. Source: adapted from Karampela et al., 2016, processed by the authors.

Specifically, one of them comments “Our legislation is specific and leaves little room for creative cooperation. The networks that you mentioned may be meaningful for enterprises and not for stakeholders.”

3.4 | Local development

From the results of local development variables, the most important difference in our case study areas seems to be the permanent residence of the owners, 87% of total respondents in Lesvos Island compare with 27% in Plastiras Lake. It is also the most referred problem from our respondents especially in Plastiras Lake where they used to say “The owner stays in his/her enterprise less than tourists do.”

This does not seem to affect average months of operation enterprises in two cases (9.8 and 10.7, respectively). The rest of the variables: number of employees and permanent employees (% of total) are also similar in two cases, 5.2 employees on average in Lesvos where 63% are permanent whereas 5.6 employees on average in Plastiras where 62% are permanent.

Many different trajectories are possible and can lead to different outcomes, as the results in Figure 3 show. For example, even enterprises that are indirectly related to agriculture in the area and operate as non-working farms (Type 1 in the agritourism typology) can be large and operate throughout the year with many local and diagonal networks with other actors of the area (e.g., farms, processing enterprises, and other tourism activities), resulting in a higher impact on the local economy than on enterprises that operate on working farms and have direct interaction with agriculture (a more “pure” form of agritourism) that are smaller in scale of operation and weaker in networks.

4 | DISCUSSION

In this paper, two case study areas with different geographic and tourism supply characteristics are examined: an island (Lesvos) and a lake (Plastiras). The typology-based agritourism approach in this study allows different agritourism types to be explored separately, comparatively, or as one overarching phenomenon; recognizing the multiple forms that agritourism can take without suggesting any type is superior to the others (Flanigan et al., 2014). In fact, our whole approach was guided by the effort to go beyond this descriptive typology and explore the impacts not only of the different types to the area but also of the activity as a whole. The differences in absolute numbers per type of agritourism units in the two case study areas reveal the different structure in this kind of tourism product. On Lesvos Island, we find agritourism units that are not physically based

on working farms properties but on making a connection to agriculture or agricultural heritage in terms of imagery or location rather than having a direct connection to farm animals, crops, or processes (non-working farm units: Types 1 and 2); characterized as more tourism than “agri” or “agro” in Greek (by Gousiou et al., 2001 and confirmed by others e.g. Kizos & Iosifides, 2007; Koutsouris et al., 2014) because they operate in the margin of mass tourism with the same customers and product. On the other hand, on Plastiras Lake, we meet the range of products that allow visitors to interact with aspects of farming in a working farm environment. For the interviewees' opinion about agritourism definition in the open-ended question, the results are in line with Dubois et al.'s (2017) recent study underline that “agritourism is a muddled concept and/or image between realities and stakeholder expectations.”

It is important to mention that the agricultural sector benefits from a romantic and an imaginary image that differs from the reality of agriculture. The human presence of the farmer at the center of his profession and his farm, the warm welcome, the presence of animals, rural life, villages, neighbors, and large open spaces, together create a positive attraction. The farmer sometimes tries to combine the aspects of agricultural activity with what the tourist imagines or expects. It is not easy to sensitize tourists to the true farming way of life. Observational study during the research revealed that some farmers hide, separate, and even abandon economic agricultural activity to correspond with the tourist imagery. As a result, the agricultural activity is increasingly distinct from the tourist activity.

Variables and indexes used in this analysis serve as a guideline for planning (Park & Yoon, 2011). First, taking into account economic success and scale of operation in our cases, the international research suggests that entrepreneurs and especially farmers turning to agritourism as a means for income diversification do not always possess the essential enterprise competencies required for success (Rogerson & Rogerson, 2014). Almost half of our units earn less than 10,000€ per year, implying that these households are at risk of poverty, which is in agreement with other findings of Koutsouris et al. (2013). On the other hand, agritourism has resulted in the development of pluri-activity on the part of some of the household's members, in this sense supported the differentiation of the local economy (Kizos, 2010; Koutsouris et al., 2013) and also as argued by Tew and Barbieri (2012), even if the economic benefits of small agritourism enterprises are not universal and often modest, they may make a difference.

Another important finding is that even if scale on average between the two case studies does not differ notably, the total numbers in our sample units differ significantly: Lesvos Island has approximately 56% more tourists than Plastiras Lake. Furthermore, it seems that the demand or scale is in accordance with supply (no

TABLE 6 Descriptive statistics and average values per types of agritourism units in case study areas*

Case study area	Types of agritourism	N total	%	Scale: Number of tourists (N)			Number of local partners	Number of horizontal partners	Number of vertical partners	Number of diagonal partners	Networks	Number of employees (N (1) = 91; (2) = 54, (3) = 145)	Permanent employees % of total (N (1) = 91; (2) = 54, (3) = 145)	Income classes (N (1) = 90; (2) = 53, (3) = 143)	Months of operation	Permanent residence in case study area (% of total) (N (1) = 91; (2) = 54, (3) = 145)	Local development (N (1) = 89; (2) = 52, (3) = 141)
				(1) = 83;	(2) = 52;	(3) = 135)											
(1) Island (N = 97)	1	10	10	1,232.78	5.50	3.50	1.00	4.40	0.10	16.80	3.5	73	1.6	9.5	90	11.40	
	2	36	37	3,141.94	4.75	3.42	0.56	3.75	0.44	15.24	7.2	63	1.6	10.8	94	12.11	
	3	37	38	517.23	5.27	4.03	0.62	3.05	1.59	17.69	2.2	66	1.4	8.6	84	9.90	
	4	6	6	595.00	5.67	2.83	0.67	3.50	1.50	17.42	15.0	55	1.6	11.0	50	11.20	
	5	3	3	366.67	5.00	4.00	0.00	2.00	3.00	18.00	3.0	58	2.5	8.3	67	13.00	
	6	5	5		3.60	1.80	2.40	1.20	0.00	9.60	4.8	36	2.0	12.0	100	10.60	
Total	97	100	1,731.55	5.03	3.56	0.71	3.35	0.97	16.26	5.2	63	1.6	9.8	87	11.12		
(2) Lake (N = 63)	1	6	10	1,288.00	3.00	2.17	1.33	1.67	0.00	9.00	4.3	54	1.5	12.0	33	10.83	
	2	11	17	766.67	4.27	1.09	1.09	2.36	0.82	11.64	2.6	67	1.4	11.1	18	10.10	
	3	25	40	1,841.67	4.56	2.40	0.28	3.60	0.68	14.00	6.1	55	1.3	9.7	28	9.80	
	4	13	21	2,673.08	3.46	1.46	0.46	2.38	0.62	10.19	5.2	64	1.5	11.7	39	11.08	
	5	1	2		6.00	3.00	0.00	6.00	0.00	18.00	12.0	50	2.0	12.0	100	13.00	
	6	7	11	500.00	2.00	1.29	1.00	0.86	0.14	5.86	14.0	84	2.0	10.3	00	14.00	
Total	63	100	1,784.42	3.87	1.84	0.63	2.68	0.56	11.48	5.6	61	1.4	10.7	27	10.52		
(3) Total	1	16	10	1,252.50	4.56	3.00	1.13	3.38	0.06	13.88	3.8	66	1.6	10.4	69	11.19	
	2	47	29	2,666.89	4.64	2.87	0.68	3.43	0.53	14.39	6.2	64	1.5	10.9	77	11.67	
	3	62	38	1,095.16	4.98	3.37	0.48	3.27	1.23	16.20	3.7	62	1.4	9.1	61	9.87	
	4	19	11	2,184.12	4.16	1.89	0.53	2.74	0.89	12.47	7.9	62	1.6	11.5	42	11.11	
	5	4	2	366.67	5.25	3.75	0.00	3.00	2.25	18.00	5.3	56	2.3	9.3	75	13.00	
	6	12	7	500.00	2.67	1.50	1.58	1.00	0.08	7.42	8.3	54	2.0	11.0	42	11.57	
Total	160	100	1,751.92	4.58	2.88	0.68	3.09	0.81	14.38	5.3	62	1.5	10.2	63	10.90		

Note. Source: the authors.

*(with gray color): Statistically significant differences (analysis of variance $p < .05$) between types of agritourism.

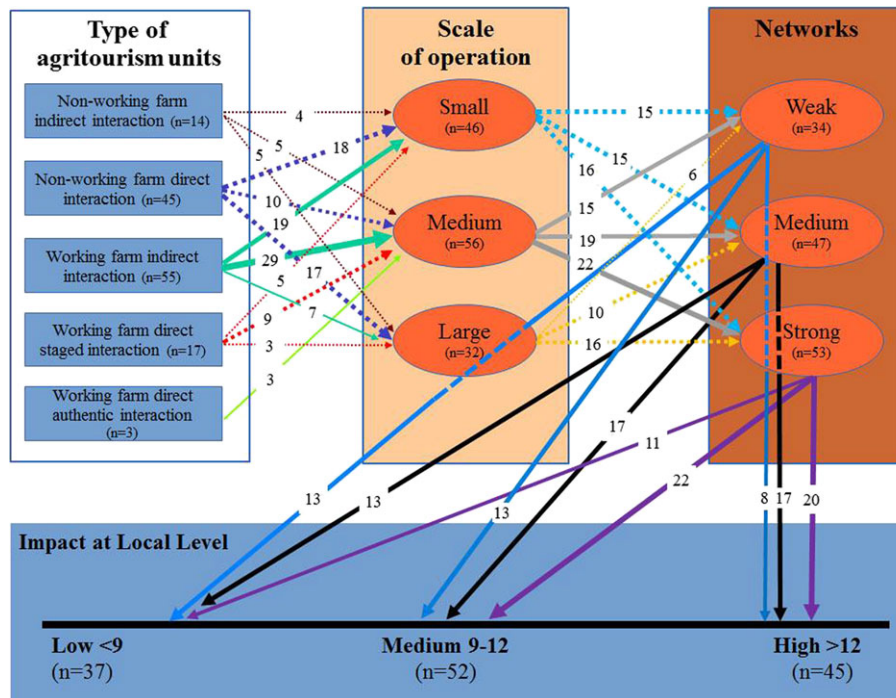


FIGURE 3 Impact at local level of agritourism units according to type, scale of operation, and network quantities and qualities of case study areas. Source: adapted from Karampela et al. (2016), processed by the authors [Colour figure can be viewed at wileyonlinelibrary.com]

statistically significant correlation is observed, Table S7) in Lesvos Island, 86% of tourists is concentrated in Types 1 and 2 of agritourism units (47%) and only 3% to the Types 4 and 5 (9%), whereas in Plastiras Lake, Types 1 and 2 (27%) attract 15% of tourists and Types 4 and 5 (23%), the percentage of 38% of tourists. This, apart from local planning implications, also calls for better and far-reaching statistical data for new types of indicators and approaches for identifying and collecting this data as cited by Kizos' work (2010) on multifunctionality of farm households in Greece.

Another study in agritourism points out for employees that farmers will benefit from increases in income but do not see any significant increase in jobs mainly due to the family nature of the enterprises (Das & Rainey, 2010).

As for the networks, Karampela et al. (2017) point out that

... in the case of Lesvos, one of the possible explanations for the denser network observed is related to the less seasonal tourism activities on the island and the higher number of "conventional" tourists that visit Lesvos. This appears to create more opportunities even for the so-called "alternative" and/or agritourism enterprises that are in our sample. On the contrary, the domestic tourists who stay only for a few days in the Plastiras Lake area provide a more "dedicated" market, but also a more limited one.

The study of Nogueira & Pinho (2015: 325) suggests that "...to promote rural tourism and local development efficiently, the coordination of the tourism network needs to involve close working interactions with diverse local stakeholders" but it seems from our research that stakeholders, for whom the average number of all kind of partners is small, do not recognize this.

The majority of the units' owners (65%) stated that their enterprises are open throughout the year, but they are non-residents, especially in Plastiras Lake (73%) whose majority still lives outside the area to which they commute when their enterprise operates, a fact that further implies leakages from the local economy in line with previous research in rural Greece from Koutsouris et al. (2014).

It seems that the differences in the results per type of agritourism unit of our two case study areas can be summarized in the structure of agritourism supply, in scale, and in networks, affected by their different geographic characteristics, but these differences are not reflected to the overall results of local development. It might be a case that local development concept is more complex and the composite index measured in this study is influenced by more components, for example, other economic activities and taxation rates.

5 | CONCLUSION

Our study presents an effort to operationalize agritourism impacts at local level with the use of variables and composite indexes and contributes to the efforts to fill an important gap in the international literature. The methodological framework that is adopted contributes to the wider understanding of agritourism and local development, can be applied to different spatial scales, and allows comparisons over time and space. A number of possibilities exist for further research to broaden or deepen the understanding of different types of agritourism and local development, including for example, a Delphi method for determining the components of assessing local development. Even though the uncertainties and the measure issues, it is comprehensible that simple descriptive typology is not enough. Issues of networks and scale might be important both not only for comparing the different

types of agritourism units but also for the overall activity and the area. The economic benefits of agritourism enterprises are not significant, but they may make a difference. Agritourism enterprises might not be viable as separate enterprises but they provide their owners with additional income in pluriactive farm households.

ACKNOWLEDGEMENTS

This research is the result of the first author's PhD thesis. The first author gives special and sincere thanks to people of Lesvos Island and Plastiras Lake: (a) who helped in conducting interviews in rural areas and (b) interviewees who graciously volunteered their time for the research presented in this article. We also extend our gratitude to Assistant Professor Dimitris Kavroudakis for the map design in Figure 1.

ORCID

Sofia Karamela  <http://orcid.org/0000-0002-4016-3424>

Thanasis Kizos  <http://orcid.org/0000-0002-1526-0919>

REFERENCES

- Ammirato, S., & Felicetti, A. M. (2013). The potential of agritourism in revitalizing rural communities: Some empirical results. In L. M. Camarinha-Matos, & R. J. Scherer (Eds.), *Collaborative systems for reindustrialization (JIFIP Advances in Information and Communication Technology, vol. 408)* (pp. 489–497). Berlin, PRO-VE: Springer.
- Barbieri, C., & Mshenga, P. M. (2008). The role of the firm and owner characteristics on the performance of agritourism farms. *Sociologia Ruralis*, 48(2), 166–183.
- Broccardo, L., Culasso, F., & Truant, E. (2017). Unlocking value creation using an agritourism business model. *Sustainability (Switzerland)*, 9(9).
- Das, B. R., & Rainey, D. V. (2010). Agritourism in the Arkansas delta byways: Assessing the economic impacts. *International Journal of Tourism Research*, 12(3), 265–280.
- Denicolai, S., Cioccarelli, G., & Zucchella, A. (2010). Resource-based local development and networked core-competencies for tourism excellence. *Tourism Management*, 31(2), 260–266.
- Dredge, D. (2006). Policy networks and the local organisation of tourism. *Tourism Management*, 27(2), 269–280.
- Dubois, C., Cawley, M., & Schmitz, S. (2017). The tourist on the farm: A 'muddled' image. *Tourism Management*, 59, 298–311. <https://doi.org/10.1016/j.tourman.2016.08.016>
- Dubois, C., & Schmitz, S. (2013). What is the position of agritourism on the Walloon tourist market? *European Countryside*, 5(4), 295–307.
- Farsani, N. T., Coelho, C., & Costa, C. (2011). Geotourism and geoparks as novel strategies for socio-economic development in rural areas. *International Journal of Tourism Research*, 13(1), 68–81.
- Farsani, N. T., Coelho, C. O. A., & Costa, C. M. M. (2014). Analysis of network activities in geoparks as geotourism destinations. *International Journal of Tourism Research*, 16(1), 1–10.
- Flanigan, S., Blackstock, K., & Hunter, C. (2014). Agritourism from the perspective of providers and visitors: A typology-based study. *Tourism Management*, 40, 394–405.
- Flanigan, S., Blackstock, K., & Hunter, C. (2015). Generating public and private benefits through understanding what drives different types of agritourism. *Journal of Rural Studies*, 41, 129–141.
- Gibson, L., Lynch, P. A., & Morrison, A. (2005). The local destination tourism network: Development issues. *Tourism and Hospitality, Planning and Development*, 2(2), 87–99.
- Gil Arroyo, C., Barbieri, C., & Rich, S. R. (2013). Defining agritourism: A comparative study of stakeholders' perceptions in Missouri and North Carolina. *Tourism Management*, 37(1), 39–47.
- Gousiou, K., Spilanis, I., & Kizos, T. (2001). Is agrotourism 'agro' or 'tourism'? Evidence from agrotourist holdings in Lesvos, Greece. *Anatolia*, 12(1), 6–22.
- Hall, M. (2005). Rural wine and food tourism cluster and network development. In D. Hall, I. Kirkpatrick, & M. Mitchell (Eds.), *Rural tourism and sustainable business* (pp. 149–164). UK: British Library Cataloguing.
- Hegarty, C., & Przezborska, L. (2005). Rural and agri-tourism as a tool for reorganising rural areas in old and new member states—A comparison study of Ireland and Poland. *International Journal of Tourism Research*, 7(2), 63–77.
- Iakovidou, O., Koutsou, S., & Partalidou, M. (2009). Women entrepreneurs in the Greek countryside: A typology according to movies and business characteristics. *Journal of Developmental Entrepreneurship*, 14(2), 165–179.
- Iakovidou, O., Koutsou, S., Partalidou, M., & Emmanouilidou, M. (2012). Women entrepreneurs in rural Greece: Do they come from the same "neck of the woods"? Locals, daughters-in-law and urban-newcomers. *New Medit*, 11(2), 58–64.
- Karamela, S., Kavroudakis, D., & Kizos, T. (2017). Agritourism networks: Empirical evidence from two case studies in Greece. *Current Issues in Tourism*, 1–20. <https://doi.org/10.1080/13683500.2017.1379475>
- Karamela, S., Kizos, T., & Spilanis, I. (2016). Evaluating the impact of agritourism on local development in small islands. *Island Studies Journal*, 11(1), 161–176.
- Kizos, T. (2010). Multifunctionality of farm households in Greece. *Norsk Geografisk Tidsskrift-Norwegian Journal of Geography*, 64(2), 105–116.
- Kizos, T., & Iosifides, T. (2007). The contradictions of agrotourism development in Greece: Evidence from three case studies. *South European Society and Politics*, 12(1), 59–77.
- Kokkali, P., Koutsouris, A., & Chrysochou, P. (2009). Cognitive components of rural tourism destination images: The case of Lake Plastiras, Greece. *Tourismos*, 4(4), 273–291.
- Koutsouris, A. (2008). The battlefield for (sustainable) rural development: The case of Lake Plastiras, Central Greece. *Sociologia Ruralis*, 48(3), 240–256.
- Koutsouris, A. (2009). Social learning and sustainable tourism development; local quality conventions in tourism: A Greek case study. *Journal of Sustainable Tourism*, 17(5), 567–581.
- Koutsouris, A., Gidarakou, I., Grava, F., & Michailidis, A. (2014). The phantom of (agri)tourism and agriculture symbiosis? A Greek case study. *Tourism Management Perspectives*, 12(1), 94–103.
- Koutsouris, A., Gidarakou, I., Kokkali, M., & Dimopoulou, M. (2013). Agritourism in opposition to agriculture? Two Greek case studies. In E. Figueiredo, & A. Raschi (Eds.), *Fertile links? Connections between tourism activities, socioeconomic contexts and local development in European rural areas* (pp. 145–169). Florence: Firenze University Press.
- Marsat, J.-B., Menegazzi, P., Monin, C., Bonniot, A., & Bouchaud, M. (2013). Designing a regional policy of agrotourism—The case of Auvergne region (France). *European Countryside*, 5(4), 308–321.
- Mastronardi, L., Giaccio, V., Giannelli, A., & Scardera, A. (2015). Is agritourism eco-friendly? A comparison between agritourisms and other farms in Italy using farm accountancy data network dataset. *SpringerPlus*, 4(1), 590.
- Nogueira, S., & Pinho, J. C. (2015). Stakeholder network integrated analysis: The specific case of rural tourism in the Portuguese Peneda-Gerês National Park. *International Journal of Tourism Research*, 17(4), 325–336.
- OECD (2001). *Best Practices in Local Development*. Paris: OECD Publishing.
- Ollenburg, C., & Buckley, R. (2007). Stated economic and social motivations of farm tourism operators. *Journal of Travel Research*, 45(4), 444–452.

- Park, D. B., & Yoon, Y. S. (2011). Developing sustainable rural tourism evaluation indicators. *International Journal of Tourism Research*, 13(5), 401–415.
- Phillip, S., Hunter, C., & Blackstock, K. (2010). A typology for defining agritourism. *Tourism Management*, 31(6), 754–758.
- Polese, F. (2009). Local government and networking trends supporting sustainable tourism: Some empirical evidence. In L. F. Girard, & P. Nijkamp (Eds.), *Cultural Tourism and Sustainable Local Development* (pp. 131–148). London: Ashgate.
- Potočnik-Slavič, I., & Schmitz, S. (2013). Farm tourism across Europe. *European Countryside*, 5(4), 265–274.
- Proto, A., Tani, S., Bühnemann, J., Gaus, O., & Mathias Raith, M. (2012). *Knowledge networks and their impact on new and small firms in local economies: The case studies of the Autonomous Province of Trento and Magdeburg, OECD Local Economic and Employment Development (LEED) working papers, 2012/02*. Paris: OECD Publishing. <https://doi.org/10.1787/5k9gs1cr080x-en>
- Quaranta, G., Citro, E., & Salvia, R. (2016). Economic and social sustainable synergies to promote innovations in rural tourism and local development. *Sustainability (Switzerland)*, 8(7).
- Rogerson, C. M., & Rogerson, J. M. (2014). Agritourism and local economic development in South Africa. *Bulletin of Geography*, 26(26), 93–106.
- Salmon, T. (1995). *The unwritten places*. Greece: Lycabettus Press.
- Sergaki, P., Partalidou, M., & Iakovidou, O. (2015). Women's agricultural cooperatives in Greece: A comprehensive review and swot analysis. *Journal of Developmental Entrepreneurship*, 20(1), 1550002.
- Streifeneder, T. (2016). Agriculture first: Assessing European policies and scientific typologies to define authentic agritourism and differentiate it from countryside tourism. *Tourism Management Perspectives*, 20, 251–264.
- Sznajder, M., Przeborska, L., & Scrimgeour, F. (Eds.) (2009). *Agritourism*. Wallingford: CABI International.
- Tew, C., & Barbieri, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism Management*, 33(1), 215–224.
- Thomas-Francois, K., & Francois, A. (2014). Spices and agro tourism on Grenada, the island of spice. In L. Jolliffe (Ed.), *Spices and tourism: Destinations, attractions and cuisines* (pp. 17–32). Bristol: Channel View.
- Vakoufaris, H., Kizos, T., Spilanis, J., Koulouri, M., & Zacharaki, A. (2007). Women's cooperatives and their contribution to the local development of the North Aegean region, Greece. *Journal of Rural Cooperation*, 35(1), 19–41.
- Yang, L. (2012). Impacts and challenges in agritourism development in Yunnan, China. *Tourism Planning and Development*, 9(4), 369–381.
- Zouros, N. (2004). The European Geoparks Network—Geological heritage protection and local development. *Episodes*, 27(3), 165–171.

SUPPORTING INFORMATION

Additional Supporting Information may be found online in the supporting information tab for this article.

How to cite this article: Karampela S, Kizos T. Agritourism and local development: Evidence from two case studies in Greece. *Int J Tourism Res*. 2018;20:566–577. <https://doi.org/10.1002/jtr.2206>