

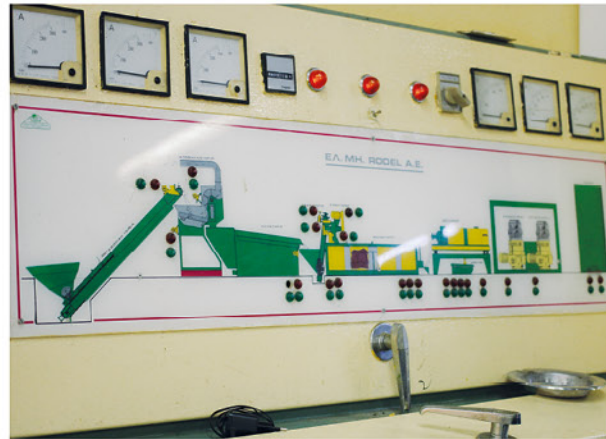


ARCHITECTURE OF
TERRITORY
European Countryside

Project by
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OLIVE VALLEY SLOW AGRICULTURE



ARCADIA
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Olive Valley Slow Agriculture

The semester started with the question: What is ‘countryside’?

We intuitively decided to define it as an environment with interwoven agriculture and production. We refused the idea of a bucolic idyll and started with understanding better the main characters which play a central role in its definition.

Our attention was focused on Alfeios Valley, a semi-mountainous area in western Peloponnese, between the Arcadian villages and Pyrgos’ seaside. The preconception that organized production could shape the identity of this countryside was constantly on our minds, but the fourteen-days-long field-trip showed a much more ambiguous reality, where informality and confusion characterised both the object and the method of study.

Alfeios Valley turned out to be exactly the opposite of a generic industrial agricultural landscape. As a matter of fact, our frame of study revealed a heterogeneous patchwork, in the words of Gilles Clement, a ‘third landscape’—the leftover space consisting of forests, bushes, abandoned paths and fields, mixed with the olive orchards.

Topography shapes the physical and the social elements of the territory. The physical elements such as the streets, the villages, the fields and the mills—in a word, the productive chain of agriculture—resist mechanization and stay slow. The social elements mainly refer to landowners—old, permanent population (agriculture workers, state employers and public facility workers) and seasonal ones (land owners and manual workers from the cities). Even if we say that a general decline in different production aspects took place from the 1960s onwards, this area still stays alive.

We learned that it is not possible to separate countryside from urbanity and vice versa.

We experienced the striking beauty of living in a “non-comfortable” environment.



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Slow Agriculture: Why so Slow?

Topography and household farming practices give rise to conditions far removed from the ones we are used to in the cities.

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The Street: Off-Road(s)

The street network acts as a slow buffer rather than a fast connection.

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The Village: A City Fallback

The villages appear virtually as islands in the landscape of the countryside. Villages are empty throughout the most of the year, except for summer and harvest months when people from cities come here for retreat.

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The Field: A Diverse Ground for Production

Once vineyards and nowadays olive groves, scattered fields of the Alfeios Valley appear as 'rooms' in the landscape.

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The Mill: A Public Facility

The mill exists independently from the village. During harvest months it becomes around-the-clock public space.

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Slow Agriculture: The Elements of the Territory

Slow streets and shrinking villages, disconnected one from the other, scattered fields and the olive mill, acting as a public place among them, form peculiar conditions in the Alfeios Valley.

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Eleopolis: Working & Living in the Olive Groves

In Eleopolis, we see slowness as a potential.

Slow Agriculture: Why so Slow?

Alfeios Valley is a physical entity, but it is also a social frame whose economic basis completely relies on the agricultural sector. Vineyard once used to be the predominant cultivation type here, nowadays it is the olive groves. This area has been largely resistant to any form of mechanisation due to its adverse topographical conditions and a general lack of entrepreneurship in agriculture. Internet connection was established in the area over ten years ago, but a majority of the local inhabitants from the area did not profit much from it. The labour is still mostly manual and the road infrastructure doesn't allow for fast and efficient movement. The result is a series of elements that shape the territory in a very unconventional way, far removed from what people are used to in urban settings. Streets adapt to the topography and quietly sit on the ground. These villages have a very peculiar dimension which is very close to the size of an average field (< 4 ha). The agriculture fields and the forests merge, producing a diverse landscape, unreadable at first glance and asking to be slowly discovered over time. The olive mill as a community infrastructure historically evolved through the system of barter. On the one hand, all these territorial elements have limited further economic development of the region, while on the other hand, they promoted an incredible potential for resistance. This opens up capacities for a whole new discussion on the future of the region.

Topography as a Constraint for Agriculture...

Topography, together with soil quality and climate, is the major factor that influences the agricultural production. High altitude areas (above 600m) that are steep sloped (>16%) are usually considered less favourable for agriculture. These regions are highly resistant to mechanization and require tough and often complicated handwork. Because of this, EU provides additional subsidies to encourage farmers to keep working in these scarcely profitable, but still highly diverse and rich areas.

...in the Region of Peloponnese

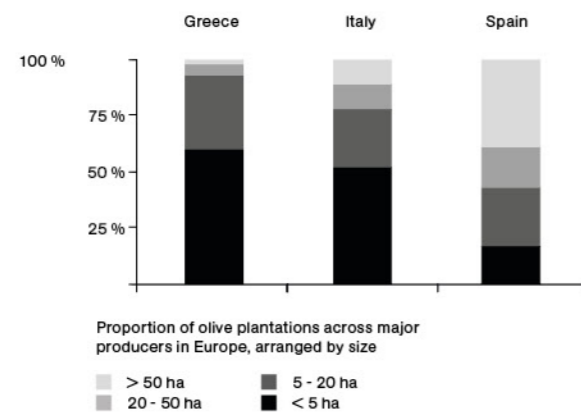
A major north-south spine acts as a barrier to the climatic agents from the west to the east. Therefore, the occidental part receives a high precipitation compared to the west. The area can be divided into three general zones based on the type of agriculture: the seaside zone with vegetables or fruit trees (ex. Argos); the semi-mountainous area (below 600m),

that is, due to its altitude and rocky soil, mostly optimal for olive groves (ex. Alfeios Valley); the higher plateaus, where mostly fruit trees like apple or chestnut are cultivated (ex. Tripoli).

...in Alfeios Valley

The Alfeios Valley consists of all of the aforementioned conditions in Peloponnese. In the areas close to the riverside, in addition to already existing corn plantations, a new trend of pomegranate cultivation has emerged. The river acts as an imprecise mirror between the north and south sides of the valley, that, although different in topographical and geological terms, each have olive

groves planted until about 600 meters of altitude. The former has stronger slopes parallel to the main valley and a better access to water, explaining the balance between olive cultivation and forest. The latter has less access to water and its delicate slopes are perpendicular to the river flow, offering better conditions for olive groves.



Small Scale, Household Based Agriculture Production

The agriculture sector, and in particular, the cultivation of olive groves, represents a major resource for the economy of Peloponnese. In spite of its major share in olive production (39% of the national production), Peloponnese doesn't benefit completely from this potential. The scattered nature and small size of the olive fields discourages any considerable investment in the development of infrastructure. Additionally, the idea of olive oil being a family business fails to inspire entrepreneurialism.

International Comparison

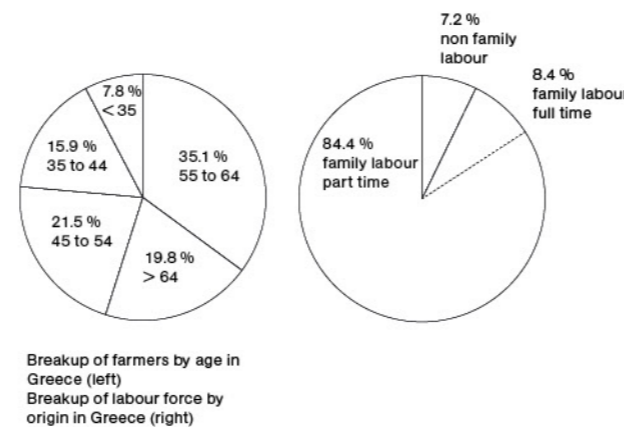
After Spain and Italy, Greece is the world's third largest olive oil producer. In contrast to these two countries, it is very hard for Greece to produce olive oil. The complexity of its topography doesn't allow for mechanization. The field sizes and patterns that one can find in Jaën or in Tuscany for industrial production could not be possible in Greece.

At present, 60% of the Greek and 40% of the Spanish olive export is supplied in bulk to big Italian companies, who are re-branding them for the international export as fine products.

Labour Portrait

As in the rest of Europe, Greece and Peloponnese have registered a significant reduction in the number of people working in the fields. While countries like Spain, Italy and France have registered a strong switch to mechanisation, Peloponnese still remains highly dependent on manual labour. This sector lacked a generational change. A vast majority of farmers are older than 45

and work in the fields by themselves or with their families. Since the financial crisis, there has been a trend of younger people moving here from the cities in order to earn extra money working in the agriculture sector. A major proportion of the labour force is comprised of immigrants from Albania that are usually hired illegally.



Alfeios Valley, Greece
Olive groves



Jaën, Spain
Olive groves

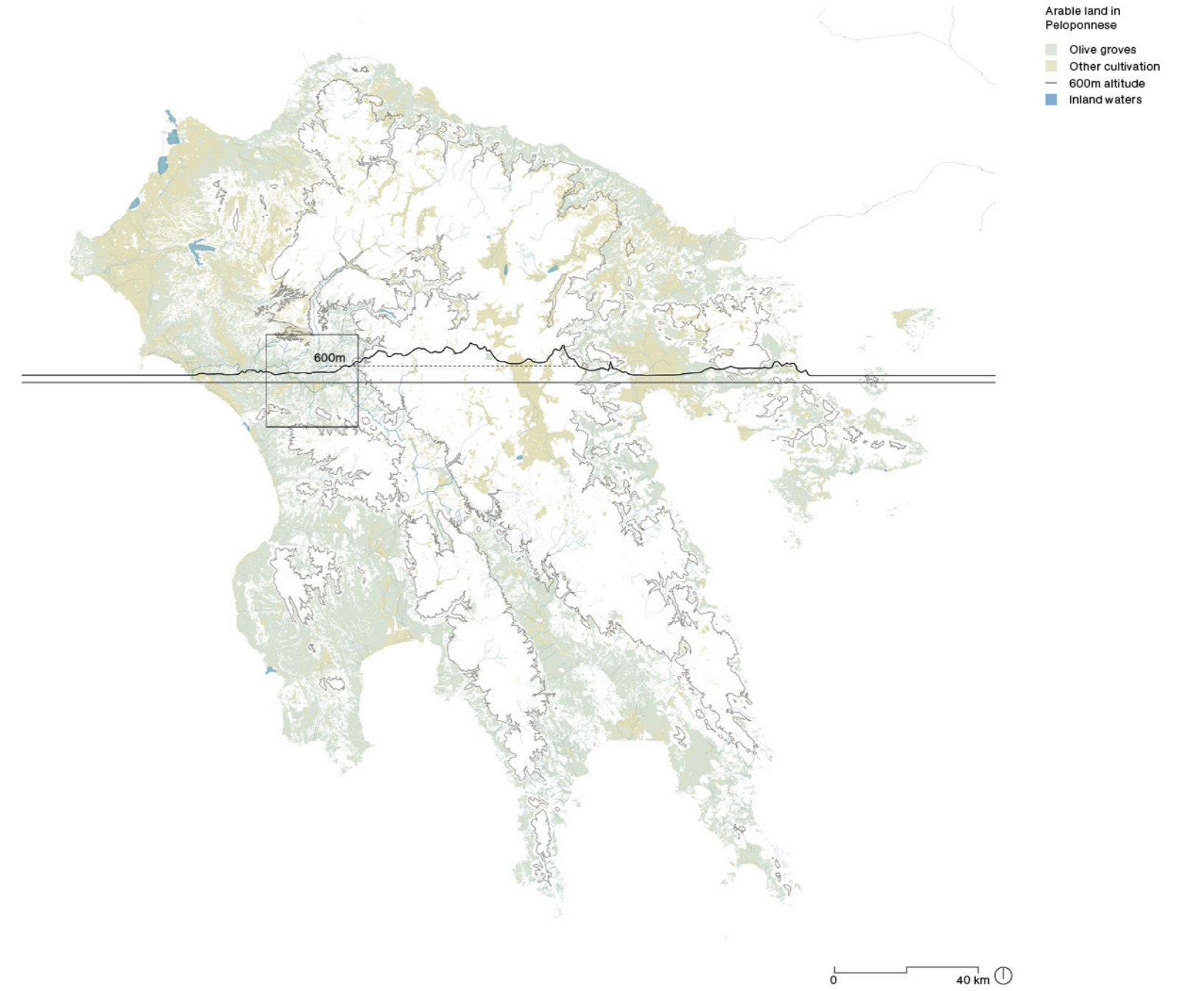


Profiles of Alfeios Valley inhabitants

Topography as a
Constraint for
Agriculture
...in Peloponnese



Seaside agriculture (top)
Semi-mountainous area (middle)
Tripoli mountainous plateau (bottom)

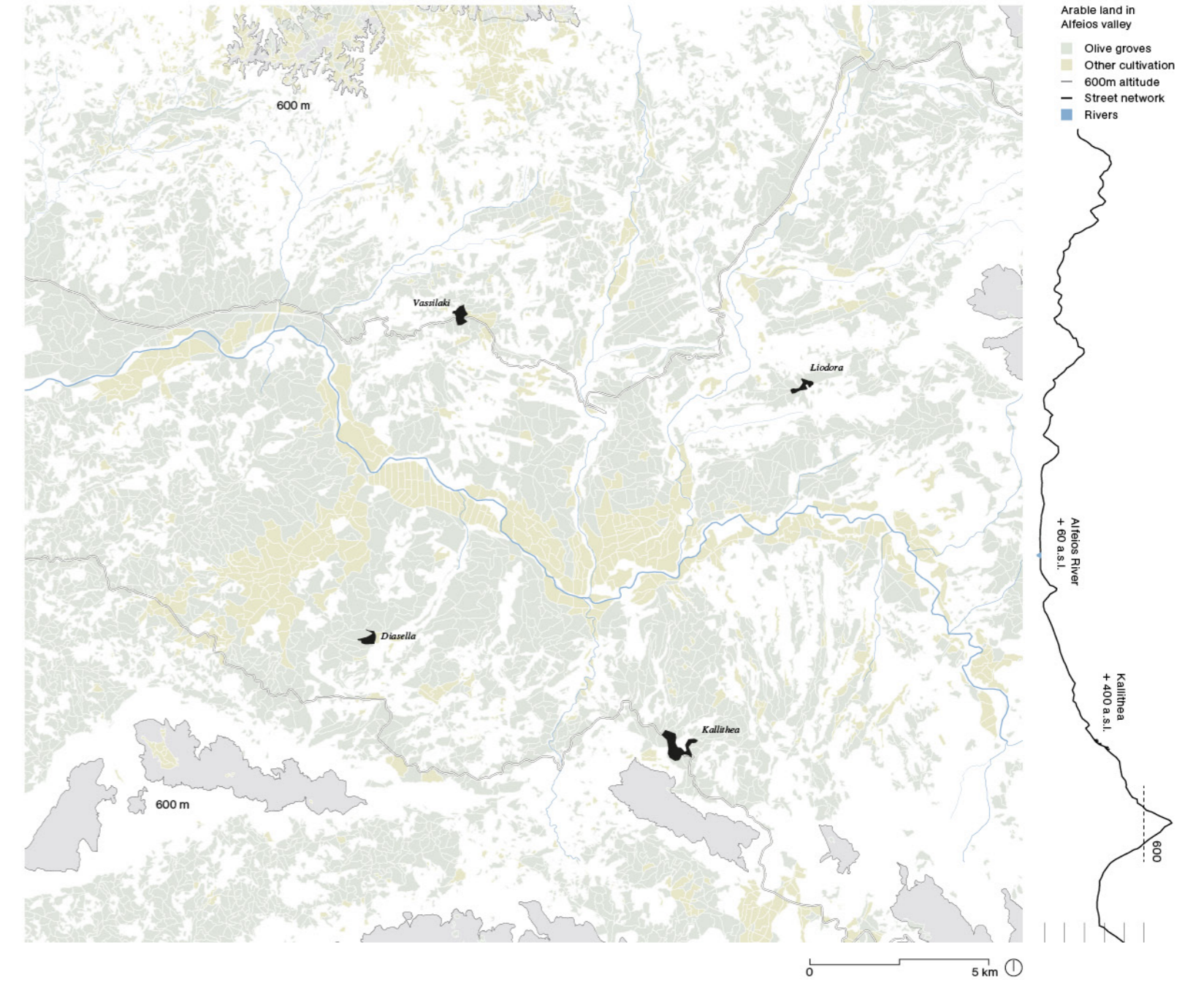


The Peloponnesian topography can be classified into three different categories, with dominant cultivation systems: fruit trees in the higher plateaus- like apple

and walnut; olive groves in the semi-mountainous areas; and berry trees, orange trees and vegetables in the plains where most of the inland water is present.



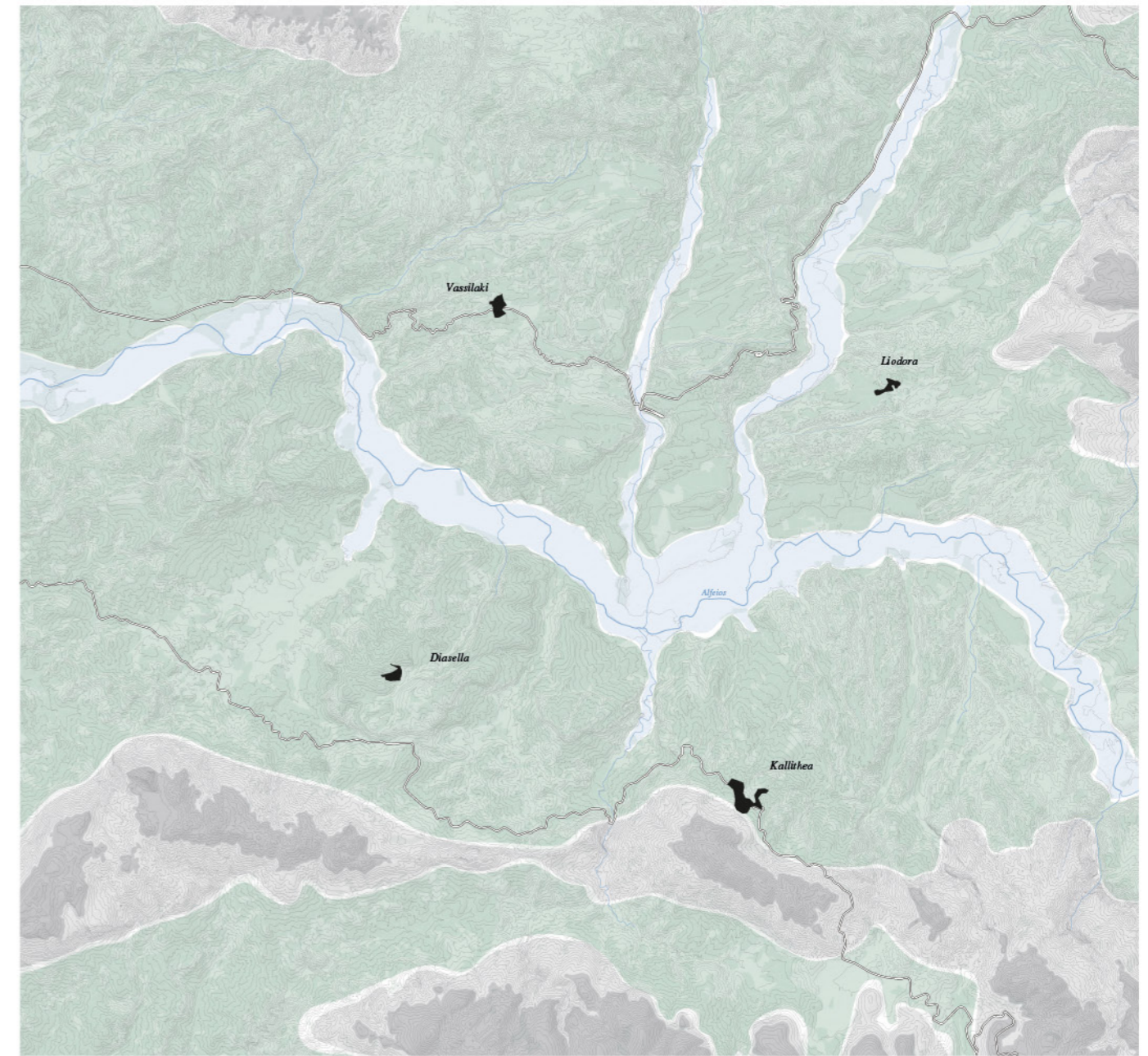
Riverside plains (top)
Semi-mountainous area
(middle)
Above the 600m altitude line
(bottom)



In Alfeios Valley, the olive groves represent the most common cultivation form. A series of minor cultivation types, such as pomegranate, corn and walnut, occur close to the riverbeds.



Semi-mountainous olive groves in Aifeios Valley



The 3 topographical areas of Aifeios valley

- Head village
- Riverside area
- Semi-mountain area
- Mountain area
- Above 600m

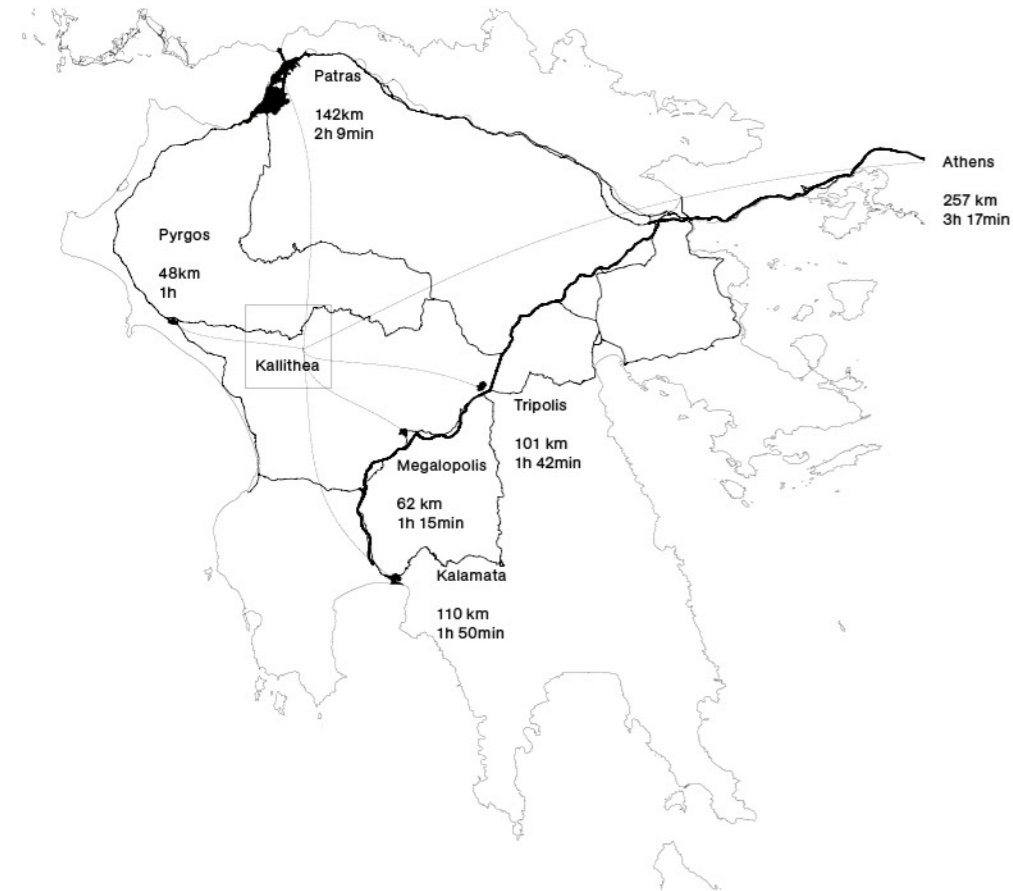
Aifeios Valley contains different topo-agricultural conditions present in Peloponnese: areas located above 600m that physically define our study, a vast semi-mountainous area and an extensive flat riverside.

The Street: Off-Road(s)

The road network in Alfeios Valley operates as a network of slow connections, mainly used for movement between the villages and the agricultural fields. There are only two main roads providing a connection to the seaside and to the mountains.

Highway 110 km/h

There is only one existing highway in Peloponnese, the Moreas motorway leading from Athens down to Kalamata. It was opened in 2012. Another highway leading to Kalamata from Athens through Patras is planned. These roads are in good conditions and are able to provide a secure and fast way of moving around.



Highway 110 km/h

Main Road 60 km/h

Two main roads connect the Alfeios Valley to the cities like Pyrgos and Tripoli. One in the north through Vassilaki, the other one in the south passing Kallithea. These two roads are safe and well maintained.

Secondary Road 40 km/h

Mostly with a single lane, these roads lead from the two main roads towards the smaller villages in the valley. One has to always be aware of possible obstacles like livestock, stones or bushes on their way. In these hilly landscapes the roads can become very steep and curvy inhibiting fast driving.

Tertiary Road 20 km/h

Tertiary roads are not accessible by any type of vehicle. These are mostly dirty roads leading to the small farms and huts in the fields. Tertiary roads are still maintained in order to provide access for the farmers.

Path 5 km/h

Paths are unofficial connections between small fields, accessible only with a tractor. They usually mark the borders between two properties and provide connections with individual olive fields.



Two cars driving along an abandoned street

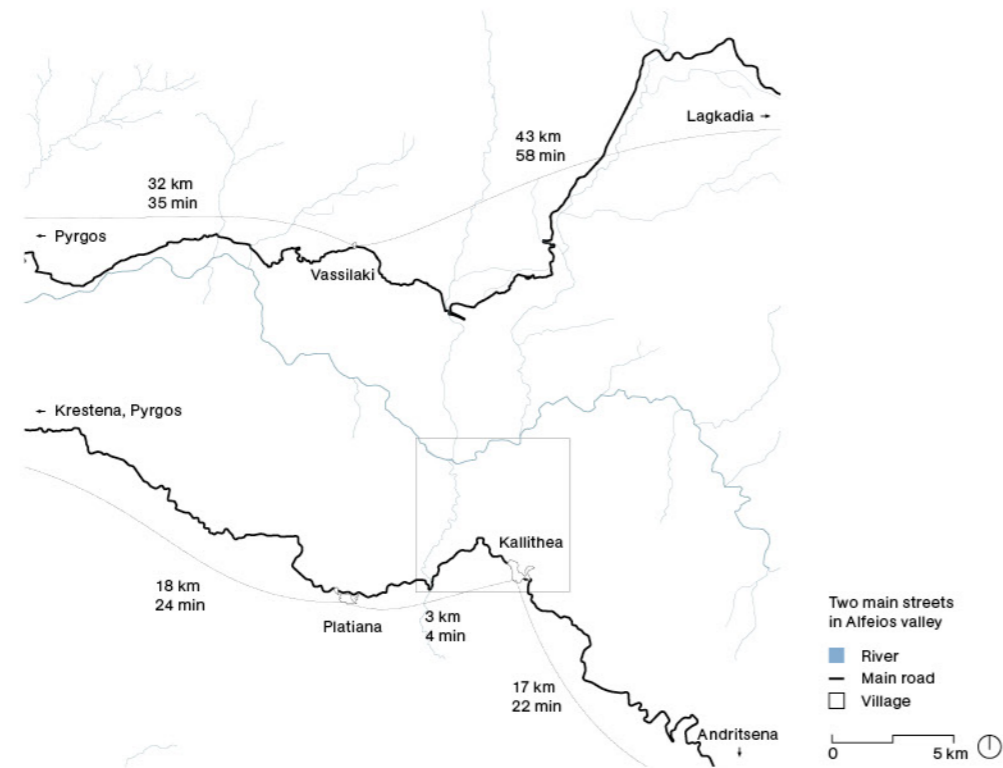


Concept drawing of the street network in Peloponnese

Main Road
60 km/h



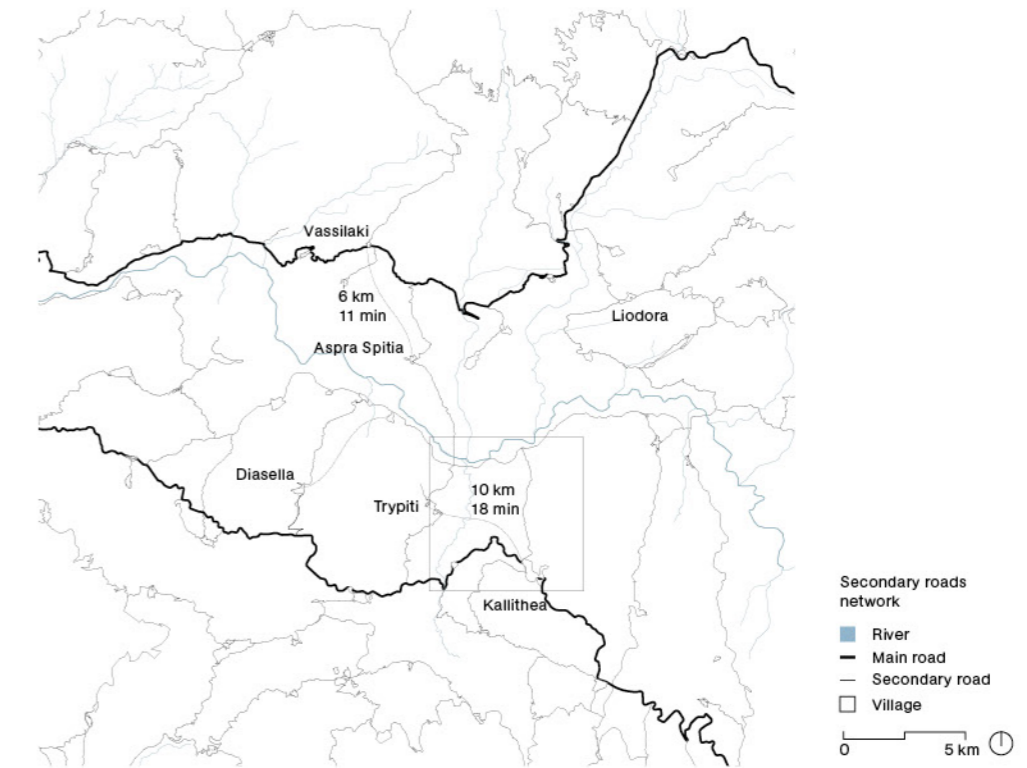
Southern main road leading to Krestena



Secondary Road
40 km/h



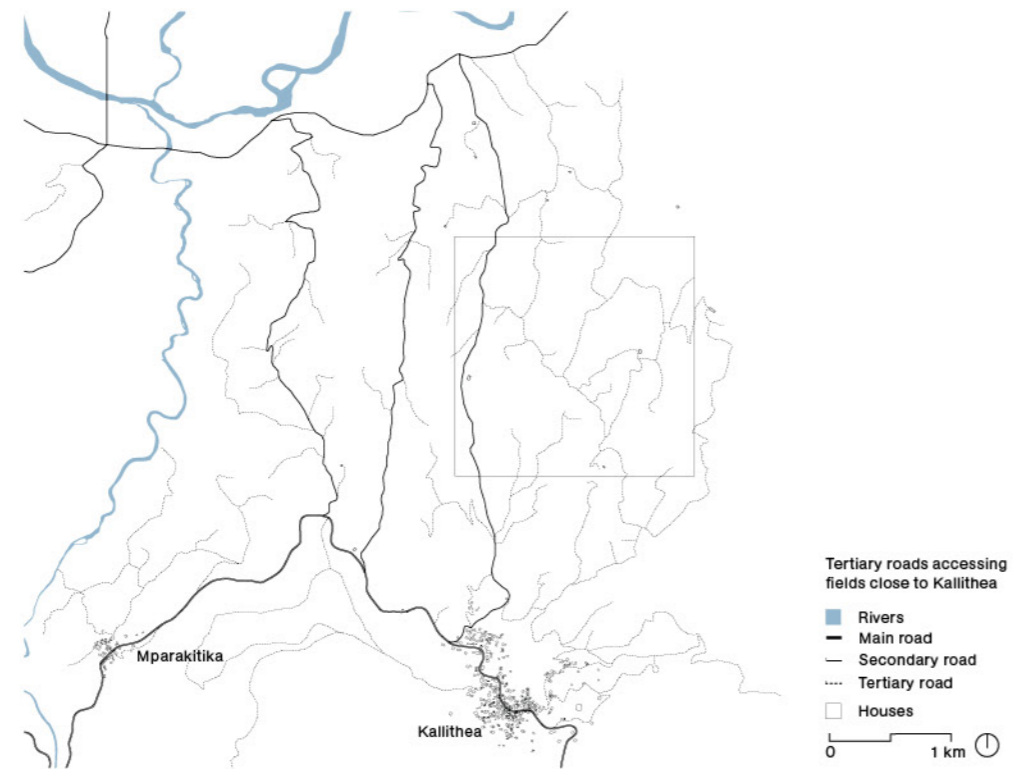
Secondary road near Diasella



Tertiary Road
20 km/h



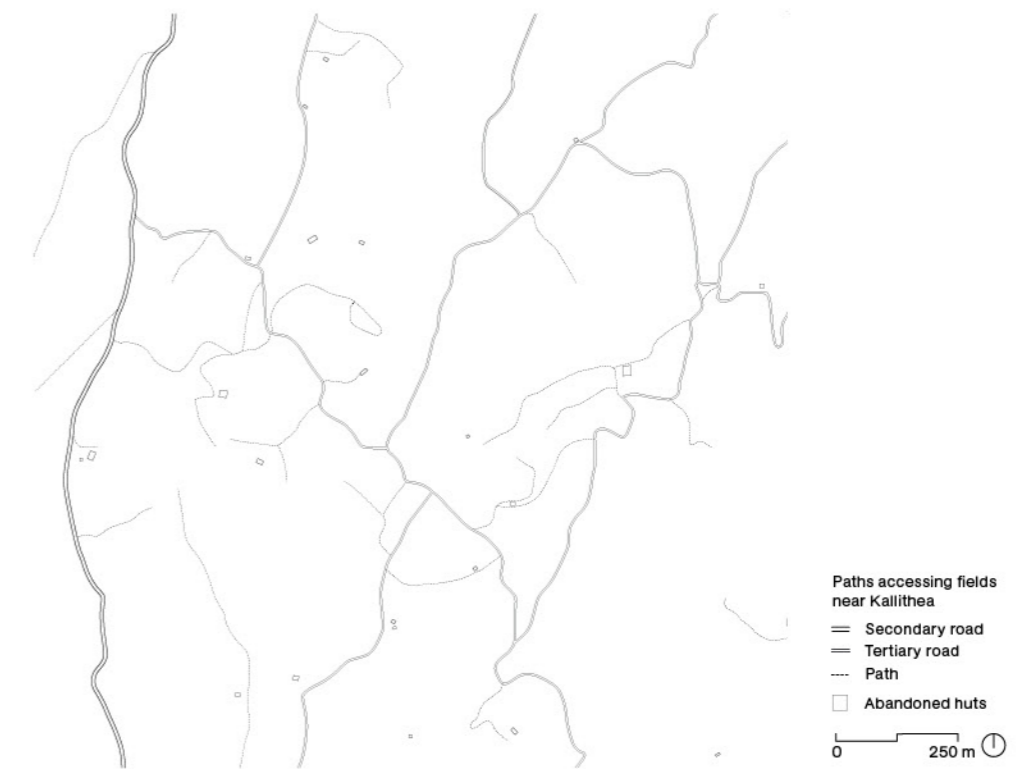
Tertiary road accessing fields close to Kallithea



Path
5 km/h

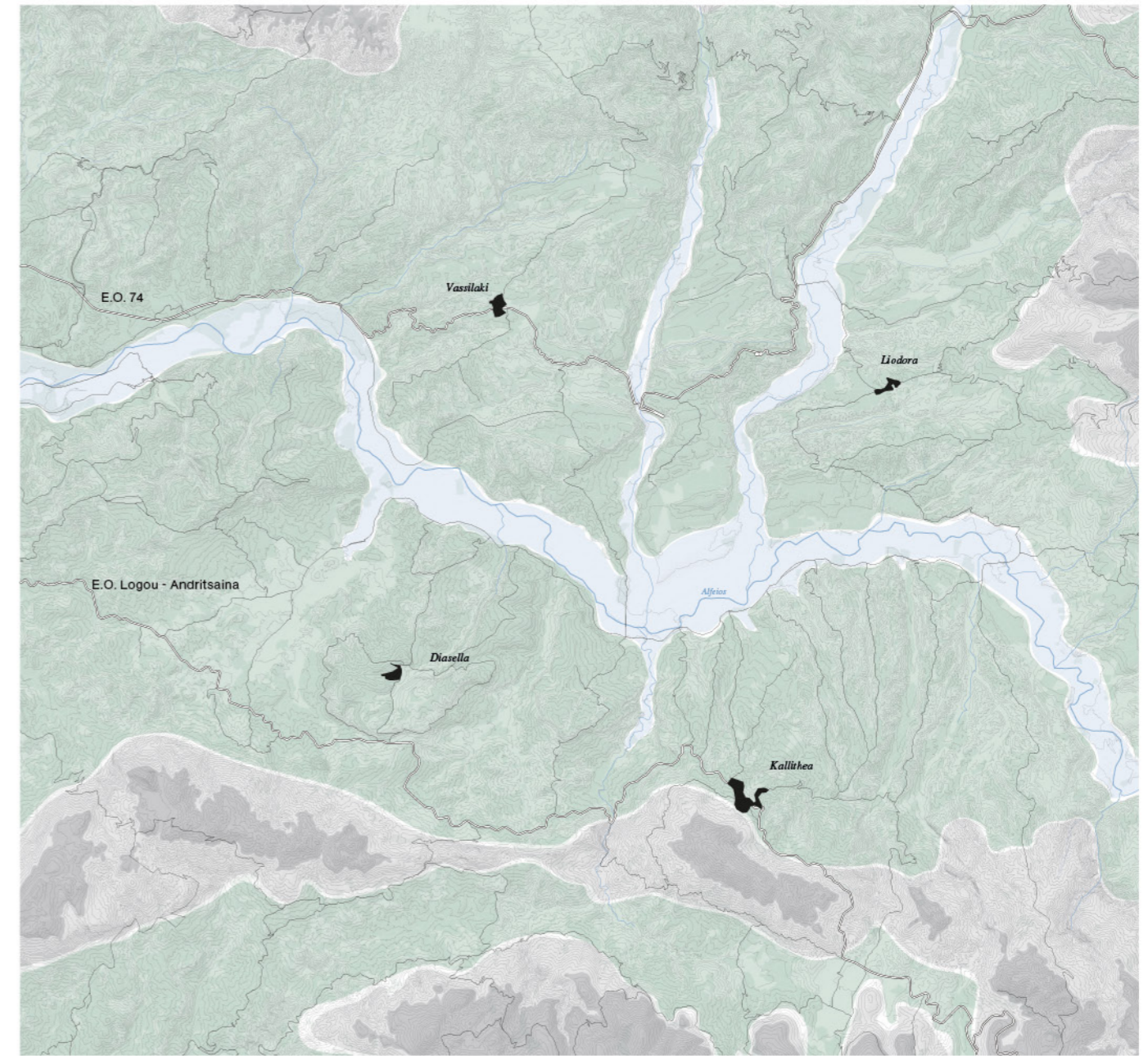


A path dividing two fields close to Kallithea





Frequent obstacles due to the fragile soil slow down the route along the main streets



The street network of Aifeios valley

- Head village
- Riverside area
- Semi-mountain. area
- Mountain area
- Secondary road 40 km/h
- Main street 60 km/h

0 5 km

The street hierarchy defines different levels of accessibility, from the villages that can be easily accessed via the main street to that of the single field that can be accessed only by foot or by tractor.

The Village: City's Fallback

The settlements in the Alfeios Region struggled for a long time with the problem of an incredible population shrinkage. From the 1940s onwards, the inhabitants started leaving their native villages in order to move to the big cities like Athens or Thessaloniki and even further afar. This process of migration continued until the 2008 financial crisis broke all the hopes of success in the larger cities of Greece. Some young people even returned after studies, hoping to build up their own business in the countryside. Mostly, it was the retired people who moved back to their home villages searching for a calm and decent lifestyle away from the bigger cities. Most of them own some olive fields from which they are able to earn a living. Although ready for retirement, these men continue to work in their fields with the help of their younger family members from the cities.

This seasonal movement is an important factor in the villages, where, during the summer and harvest months, the population doubles and fills the entire village. On the other hand, these villages are half-empty during the off-season. The only place where you can find some public life at this time is the cafeneio. This is something you can find in nearly every village. It is where the old village folks come together to discuss over a cup of a good Greek coffee.

Dependency on the City

These villages are still dependent on the nearby cities of Pyrgos and Zacharo. Hospitals, high-schools and other cultural amenities like cinemas and concert halls are only accessible in a minimum one hour car drive to the closest town. Additionally, a lack of efficient public transport connections is apparent. This is the major reason why youngsters leave for the city. This strong orientation towards Pyrgos, doesn't allow for more effective sharing between village clusters. Considered not attractive, the residents have always assumed that there is no reason to go to the other side of the valley. Could the model of the "Ring cluster" be applied to a larger scale in order to redefine the relations between the "Head villages"? In this case, would new public programs be necessary to make this form of organization functional?

Two Cluster Typologies

These villages differ a lot in their infrastructure and number of inhabitants. Some of them are bigger, have more facilities and are better connected to the main roads. Others consist of only few houses, being completely dependent on the bigger villages.

Centralized Cluster:
The Perishing Hamlet

A hamlet is a settlement that is unable to sustain without a head village. The people from the hamlet are mostly farmers living close to their fields and their livestock. In addition to their regular earnings, they receive subsidies from the European Union to maintain their farms. These settlements do not have public facilities like restau-

rants and markets. Food or medicine could be found only in the closest main village. The accessibility is mostly very low and the streets leading to and from hamlets are usually small and rough. It can sometimes take up to 25 minutes of driving to reach the next main village.

Centralized Cluster:
Resisting the Head Village

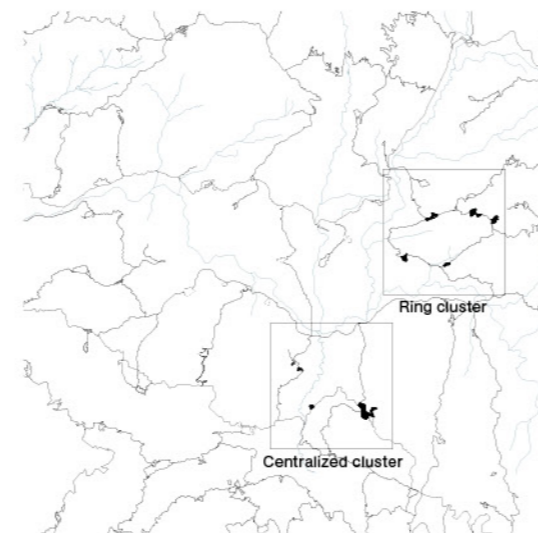
A head village is a settlement which can mostly survive independently. Major facilities like markets, restaurants, doctors and schools are provided here. Very rarely does one need to go to the big city. Even if most of the inhabitants are already retired, there are still young people who work and live in these

Ring
Cluster

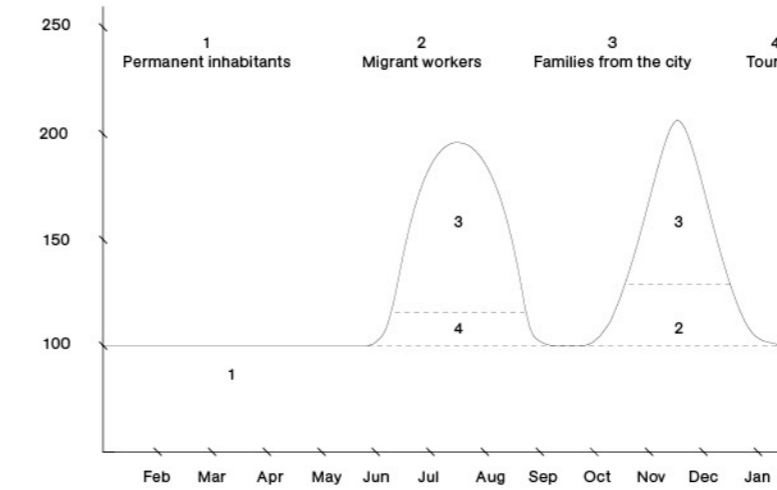
Not all the villages are so uni-directionally orientated, such as the ones described before. We have observed a group of villages that form a stable community together. Each of these settlements has only few public facilities like a school for instance, sharing it with their neighbouring villages. This way, they can benefit from each

villages. We met people working in gastronomy, crafts or even informatics, showing a wide diversity of occupations. Head villages are well connected by main roads. From time to time, there are even buses that can take you to the city in less than one hour.

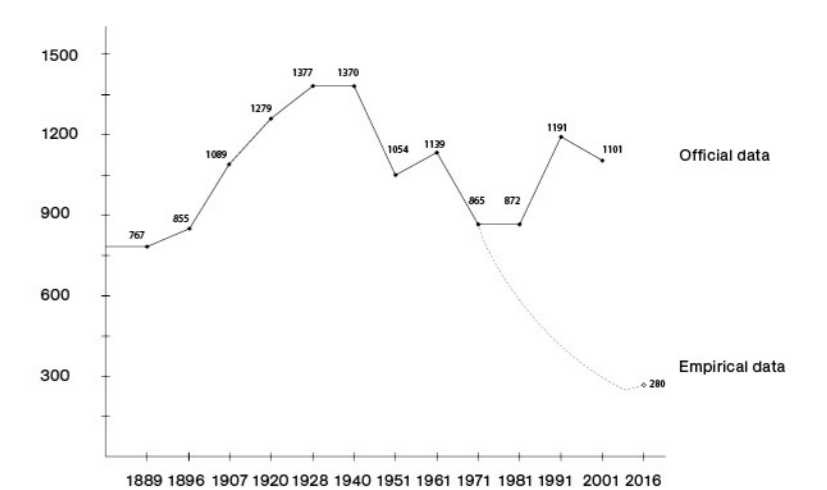
other, at the same time maintaining a certain degree of independence from the city of Pyrgos. The movement through this belt of villages is also supported by a short-cut street that connects Pirris and Lotis, passing through the landscape of cultivated olive groves and wild plants mixed together.



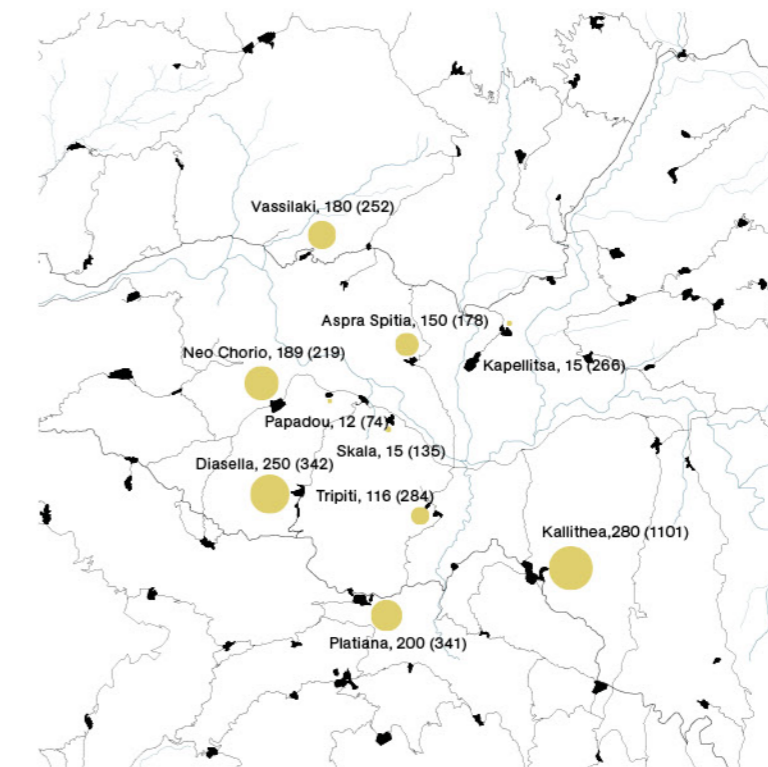
Two cluster typologies



Seasonal demography

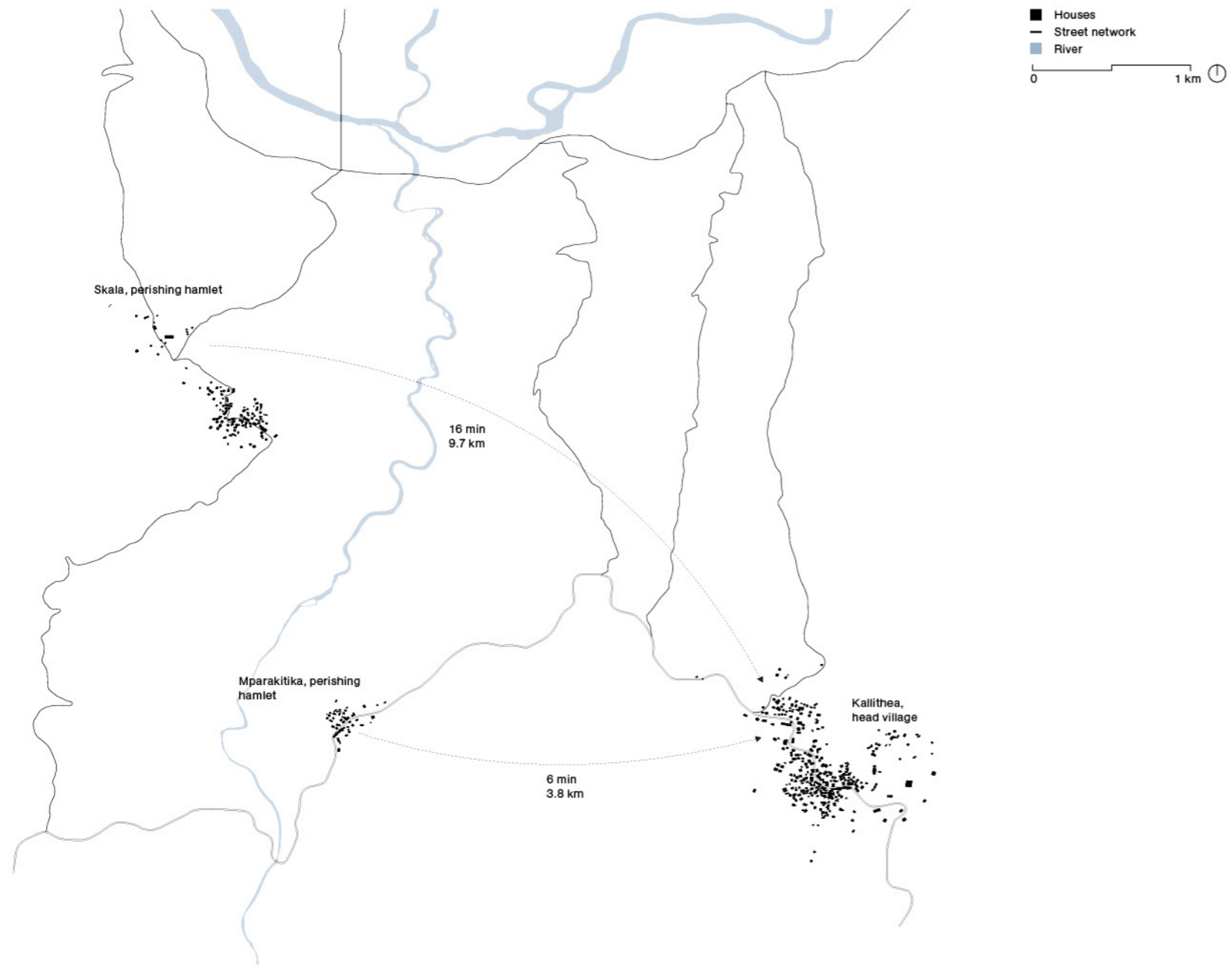


Kallithea
Demography in historical timeline



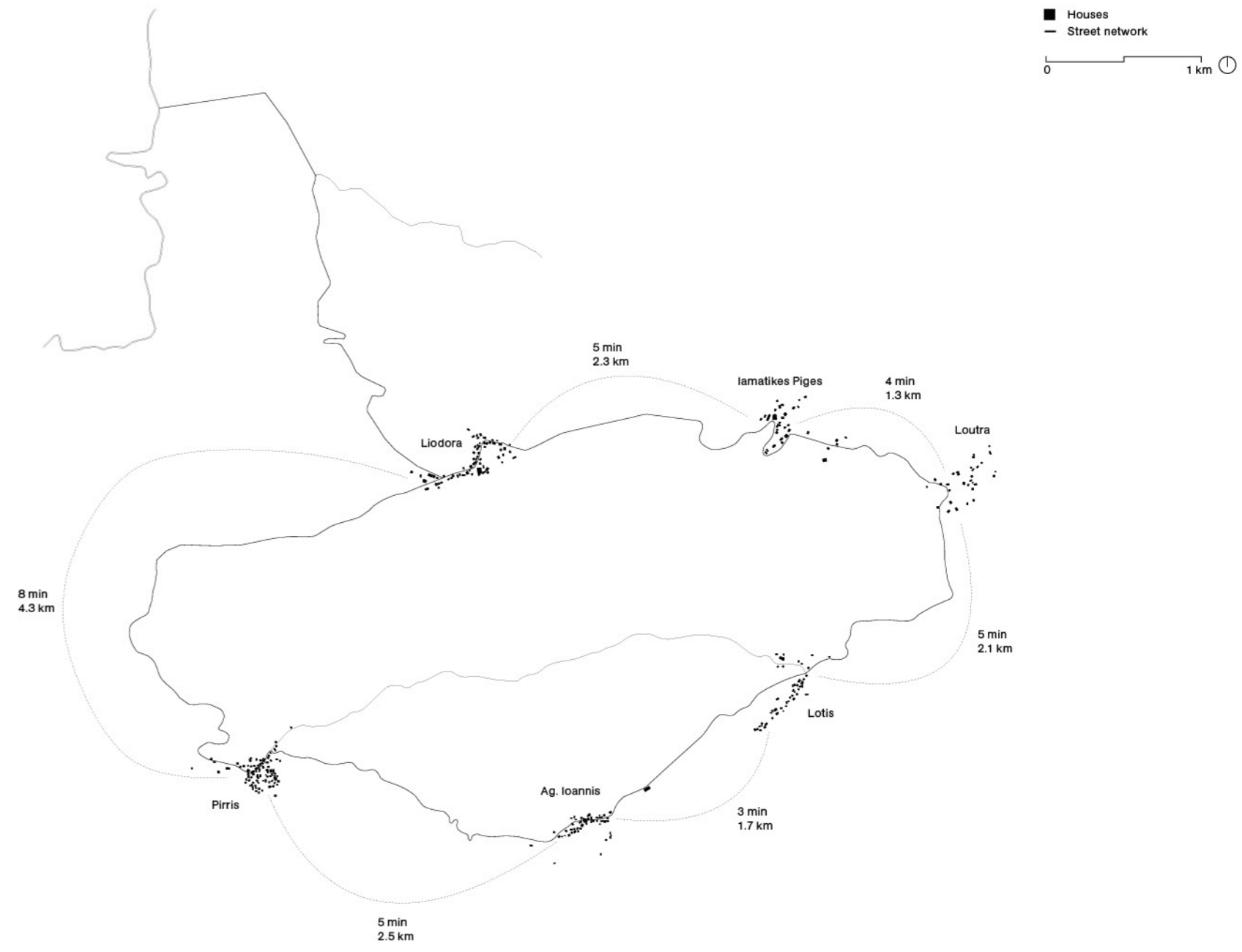
Off-season demography,
empirical data (official data)

Centralized Cluster



- | | | | |
|---|--|---------------------------------|---------------------------------------|
| Kallithea - Head village | Secondary school | Skala - Perishing Hamlet | Mparakitika - Perishing Hamlet |
| Petrol station
Primary school
Church
Museum
Hotel | Animal food
Electronic equipment
Pharmacy
Hairdresser
Cemetery | Chapel
Cemetery | Kafeneio
Cemetery |

Ring Cluster



- | | | | | | |
|----------------------------------|--|----------------------------|------------------|----------------------------|----------------------------|
| Liodora | Iamatikes Piges | Loutra | Lotis | Ag. Ioannis | Pirris |
| Restaurant
Kafeneio
School | Restaurant
Mini market
Thermal bath
Hotel | Primary School
Cemetery | School
Chapel | Church
Cemetery
Mill | Church
Cemetery
Mill |



Skala
Perishing hamlet

Mr. Nikolaos (67), Retired

What do you do for living?

Since I don't earn much through the rent, I still work on my farm. I take care of the sheep, some corn and olive trees. For me and my wife, this is a full time job and quite tough for our age.

Do you receive any subsidies from the EU?

For my olive trees and the sheep, I receive about 5000 euros of subsidies per year from the European Union. Out of this amount, I have to directly pay 800 euros in form of taxes to the Greek government. Without these subsidies it would be difficult to survive here.



Skala
Mr. Nikolaos



Skala - Perishing Hamlet

- A Chapel
- B Cemetery



Kallithea
Head village

Mr. Kostantinos (83), Retired

What was your profession?

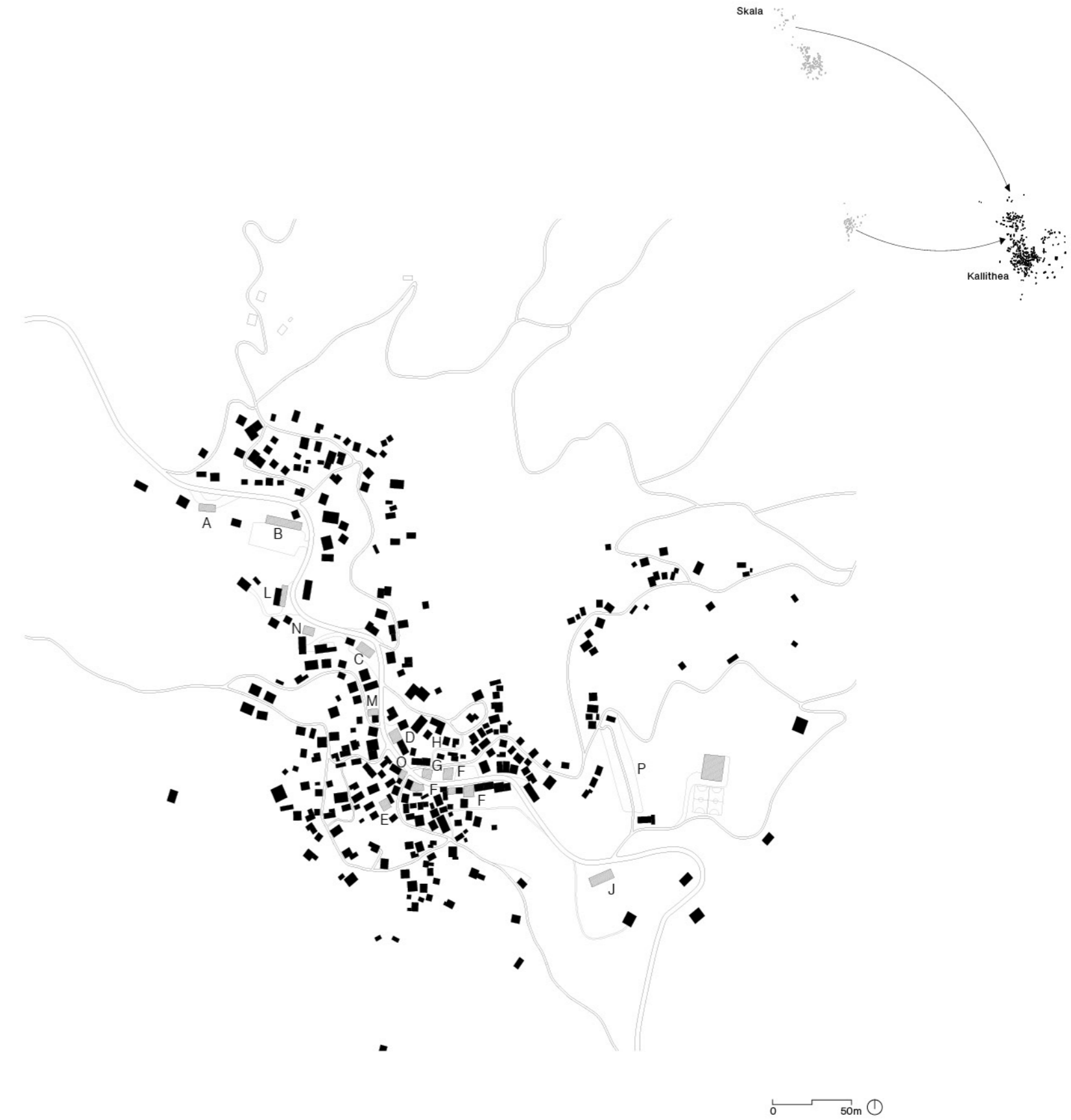
Until my retirement 20 years ago, I was working regularly in the olive fields. I was helping with the harvest, cutting trees during the off-season and from time to time I worked in the olive mills. At this moment, I own about 100ha of olive fields. Every harvest, my family comes to help with collecting the olives used for making one of the best oils in the region!

What is your favourite place here in Kallithea?

The Kafeneio we're just sitting in, for sure. This is where we all meet together and drink some nice Greek coffee.



Kallithea
Mr. Kostantinos



Kallithea - Head village

- | | | | | | |
|---|----------------|---|------------------|---|----------------------|
| A | Petrol station | F | Restaurant | L | Animal food |
| B | Primary school | G | Mini market | M | Electronic equipment |
| C | Church | H | Doctor | N | Pharmacy |
| D | Museum | J | Olive mill | O | Hairdresser |
| E | Hotel | K | Secondary school | P | Cemetery |



Liodora
Ring cluster

Mr. Vasilis (63), Farmer

What is your profession?

Since many generations, my family is in the olive oil business. I have over 240 acres of fields which my employees cultivate for me. I export the oil directly to Italy and Athens.

Do you enjoy living here in Liodora?

I have a nice house here in the forest where my whole family lives, the olive fields are in the area and I have some good old friends living just next door. Being here is just perfect for me.



Liodora
Mr. Vasilis

Liodora

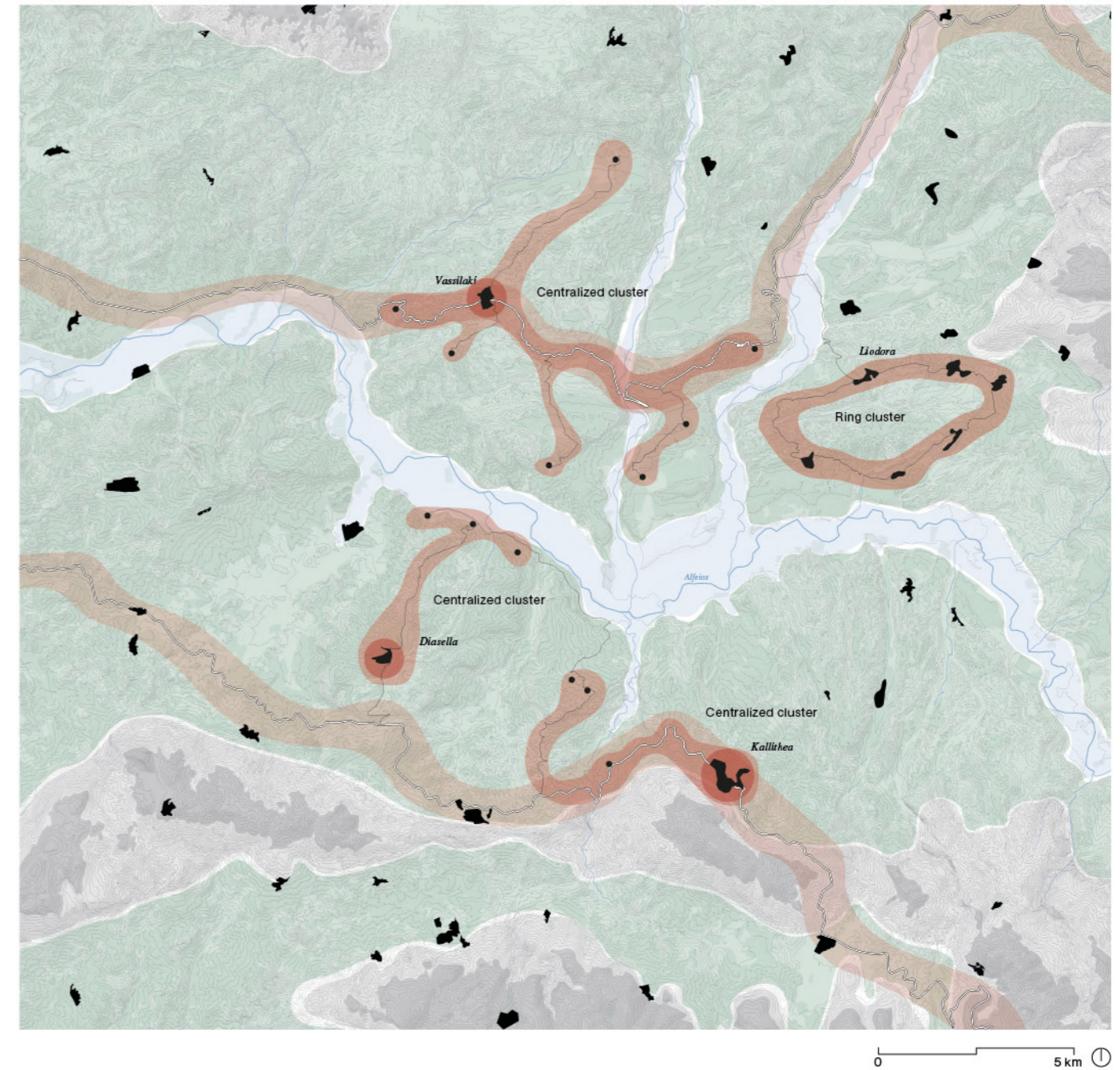


Liodora - Ring cluster

- A Kafeneio
- B Primary school
- C Restaurant



Xirokampos
The village



The village clusters

- Village
- Riverside area
- Semi-mountain area
- Mountain area (+600m)
- Street network
- Drainage to the city
- Cluster relations
- Resisting head village

The different characters of the villages in Alfeios Valley implies different relations they have among themselves and with the city. The most visible is a dependency on cities like Pyrgos and

Zacharo, while closer inspection reveals a movement from the perishing hamlets to head villages like Kallithea, Diasella and Vassilaki. The group of villages that share different facilities make an exception.

The Field: Irrational Landscape

The olive fields characterise the image of Alfeios Valley. The cultivation in the area remained quite traditional throughout the years, without use of pesticides and following the cycles of soil regeneration. The incredible biodiversity of natural species remained with the image of a landscape “en mouvement”, reminding of Gilles Clement’s concept about gardens. Apart from the fire of 2007 that strongly changed the relation between forest and olives in favor of the latter, very slow and small changes can be observed over time: densification of olive plantations, refinement of field perimeters through small paths, and a general shift to organic agriculture. Terracements are the traces of a previous cultivation type that is not anymore visible nowadays: a vineyard. Even if they facilitate the movement through steep fields, they don’t allow the water to flow away. Topography, of course, plays a central role in the distribution across fields and accessibility that is far from being comfortable. What appears from the outside as a unified pattern of cultivation, is actually highly fragmented through different areas defined by natural limits like cliffs, rivers, and forest. In addition to this, a chronic parcellization, obtained due to dowries and heritage, makes field property very small and thus not so profitable. Nonetheless, the non-intensive agriculture approach makes the trees of the Koroneiki olive variety the best olive producers in the country.

Alfeios: Uneven Pattern

Comparison of the Alfeios Valley with the famous olive fields in Kalamata, or even the huge olive production in Spain, points to the significant difference. In Jaën, the fields are organized in a grid only divided with small access roads. In Kalamata, the pattern is also organised geometrically but the landscape contains other elements like forests or other forms of cultivation. In the Alfeios Valley, fields appear in a random arrangement, they are not easily accessible and there are not so many forests.

Formalizing Ownership

Greece does not have a very precise cadastral map. In order to receive subsidies from the European Union, they use something called ‘the olive catalogue’. In this catalogue every farmer marks their farm on a Google Earth base. Through this, the government can ascertain the exact ownership of every farm and avoid farmers claiming a bigger share than they are actually entitled to.

Small & Scattered Land Property

The fields of cultivation in our area are especially small and scattered. It can happen that a farmer has more than ten different fields scattered in a wide area, with each not bigger than 400m². Some of these fields have only few trees and make harvesting and maintainance more complicated. Additionally, this dispersion discourages farmers from investing into technology, keeping the agriculture in this area on the level of traditional handwork.

Abandoned Huts

Alfeios Valley once had a very different appearance than the one we associate with it nowadays. Vineyards were the main agricultural typology in the area, while small huts for the storage of agriculture tools and equipment dominated the landscape. Gradually, people started turning their fields into olive plantations, and the huts lost their utility mostly turning into ruins, and rarely into wood storage spaces.



Abandoned hut

Natural Barrier Group Olive Groves

The Alfeios Valley has many smaller valleys that run perpendicular to it. The areas between these valleys are defined by groups of olive producers and are accessible through roads and paths. There is almost no physical connection between these groups due to the presence of rivers and dense forests.



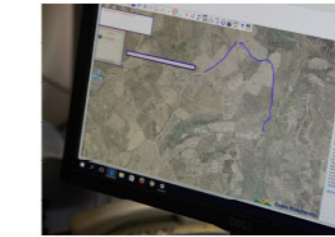
‘Olive room’ defined by forests and a cliff



Farmers working in the fields, 1910



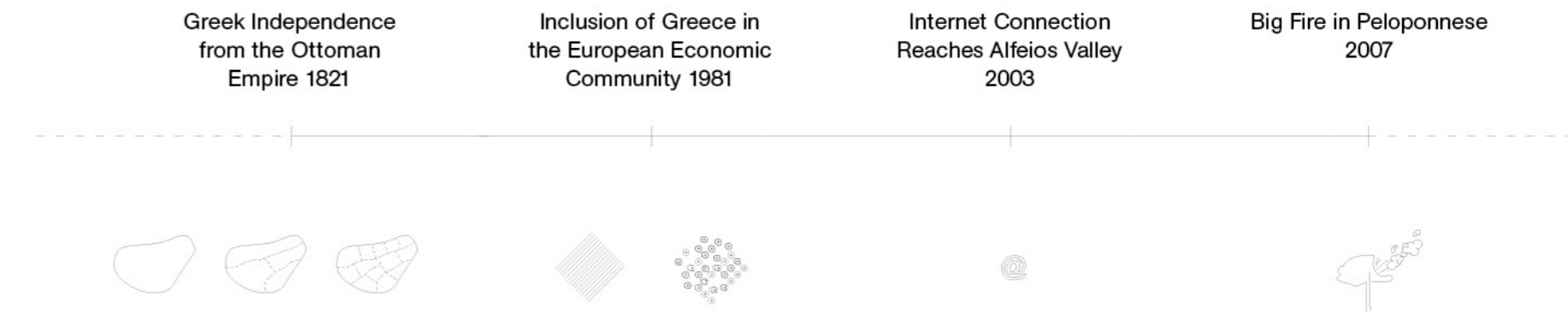
Alfeios valley, engraving, 1861



Peloponnese olive cadastral plan based on Google Earth



A satellite image of Peloponnese during the 2007 fire



From Tsiflikia to Small Fields

After the fall of the feudal system introduced by the Ottoman Empire, the farmers claimed the land they were cultivating. Due to the inheritance and dowry, the plots are becoming smaller. The fact that these olive trees belonged once to their ancestors, brings a certain level of nostalgia among the farmers. This nostalgia refrains farmers from exchanging or selling their fields in order to have more efficient cultivation.

From Vineyards to Olive Groves

Vineyards once represented the main agriculture type in the Alfeios Valley. Since Greece entered the European Union, subsidies became available to farmers. Around 40 years ago, the destruction of the vineyards started, resulting in obsolete huts and the rise of the olive groves as a cultivation type.

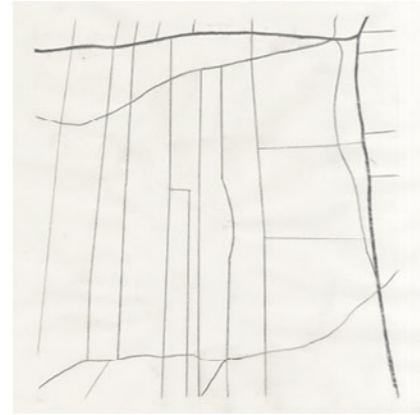
Olive Catalogue

In 2003, the first Internet connection was provided to the main villages of the Alfeios Valley, such as Kallithea. Among the many benefits that this brought, Google Earth played a fundamental role in the ‘formalisation’ of agricultural land property. Earlier, more land surface was declared in order to receive more subsidies from the EU. Now, the introduction of the olive catalogue is both facilitating and controlling land declaration.

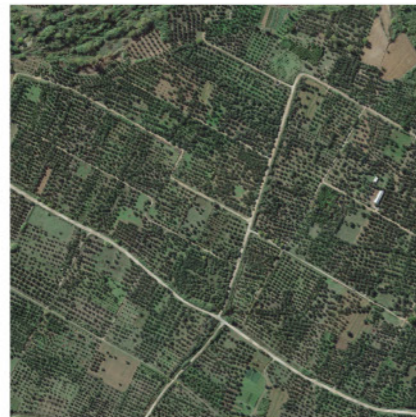
Burned Landscape

Throughout the summer of 2007, a whole series of fires broke out in several areas across Greece. The worst fire of the last 50 years didn’t spare Alfeios Valley; in fact it came from its southern part and destroyed a big portion of the forests. The river acted as a limit to the spread of the fire. That’s where the actual land configuration becomes visible, showing northern side as more wild and southern side as more calm with olive trees dominating the forest.

Spain
Jaën



Kalamata
Greece

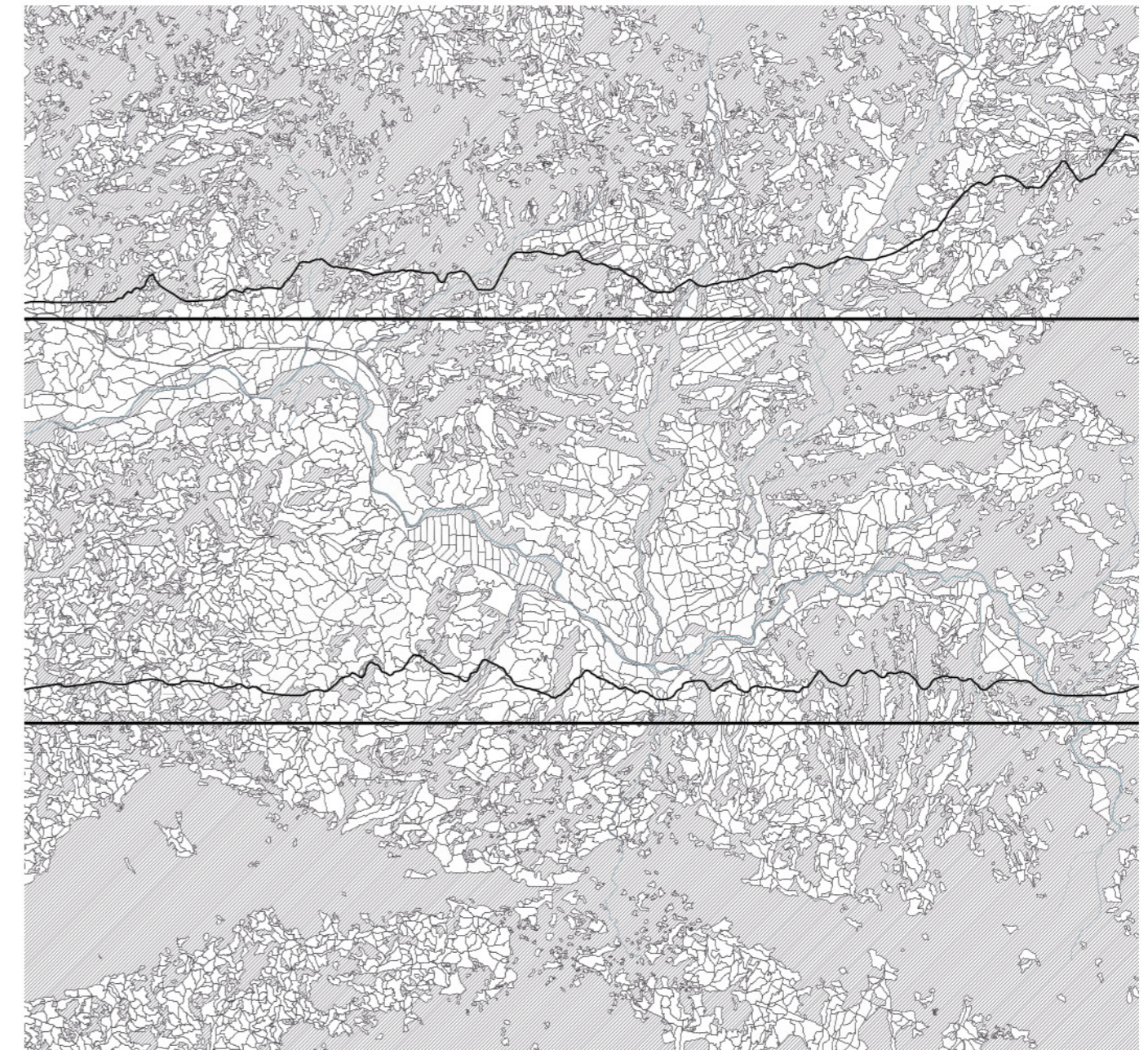


Alfeios
Greece



The olive fields in Jaën are organised in a regular grid spreading all over the plantation. In Kalamata, the grid is also present, but the elements of forest and other plantations can be seen as

well. The Alfeios pattern is quite different, the fields are randomly organised, there is no planned grid and there is a significant presence of the forest between the fields.



The Alfeios pattern

- Agriculture
- Forest
- River

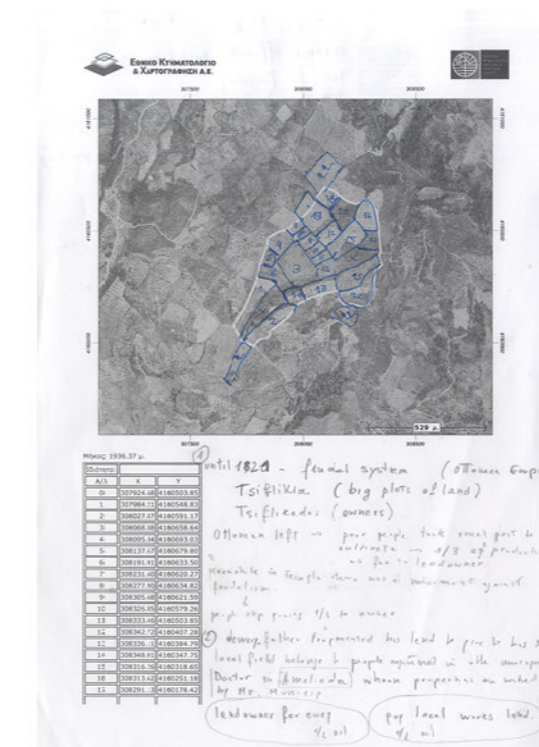
The forest has an important status in the Alfeios Valley. Dense trees with fields are appearing only in the form of the 'rooms' in the forest, especially on the northern side.



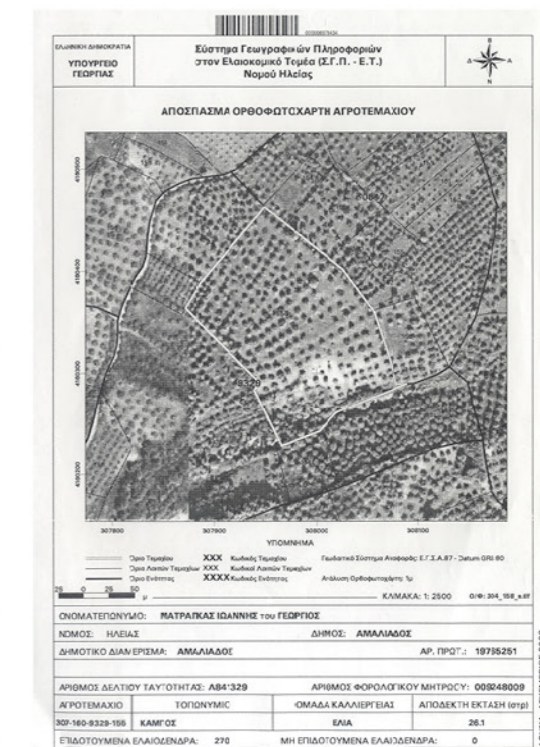
1. Asimakopoulos Antonis
fields: 6, acres: 50
2. Dedousis Panagiotis, ATHENS
fields: 2
3. Matragas AMALIADA
4. Sourelli Theouli
fields: 2, acres: 25
5. Ramos Athanasios
fields: 3, acres: 15
6. Doganis Ioannis
fields: 7, acres: 120
7. Kostadaras Nikolaos
fields: 6, acres: 50
8. Bithas Nikolaos
fields: 4, acres: 25
9. Bithas Georgios, ATHENS
fields: 2, acres: 5
10. Karanatsis Ilias
fields: 2, acres: 10
11. Diamadopoulos Fotis
fields: 2, acres: 10
12. Diamadopoulos Ilias, ATHENS
fields: 2, acres: 10
13. Christopoulos Anastasios, ATHENS
fields: 1, acres: 10
14. Spyropoulos Vasilius
fields: 3, acres: 35
15. Diamadopoulos Theodoros
fields: 12, acres: 180
16. Tsardis Trifonas
fields: 5, acres: 50
17. Karnaros Kostadinos
fields: 4, acres: 30
18. Doganis Nikolaos, ATHENS
fields: 6, acres: 60
19. no name ATHENS
20. Tsatsris Vasileios, ATHENS
fields: 4, acres: 20



Diverse field ownership:
70% of the owners are
non-locals

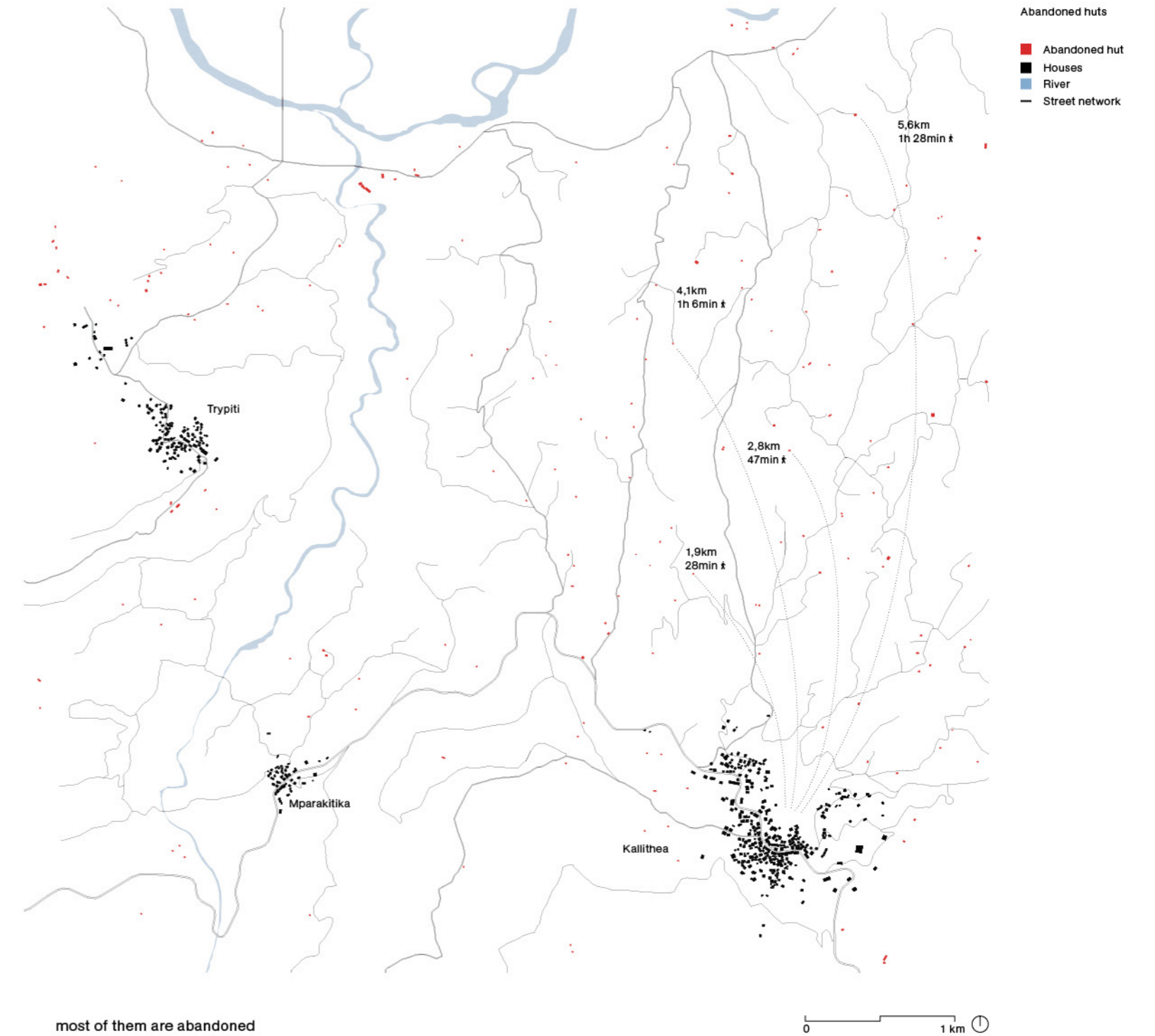


Olive catalogue





An abandoned hut in the middle of an olive field



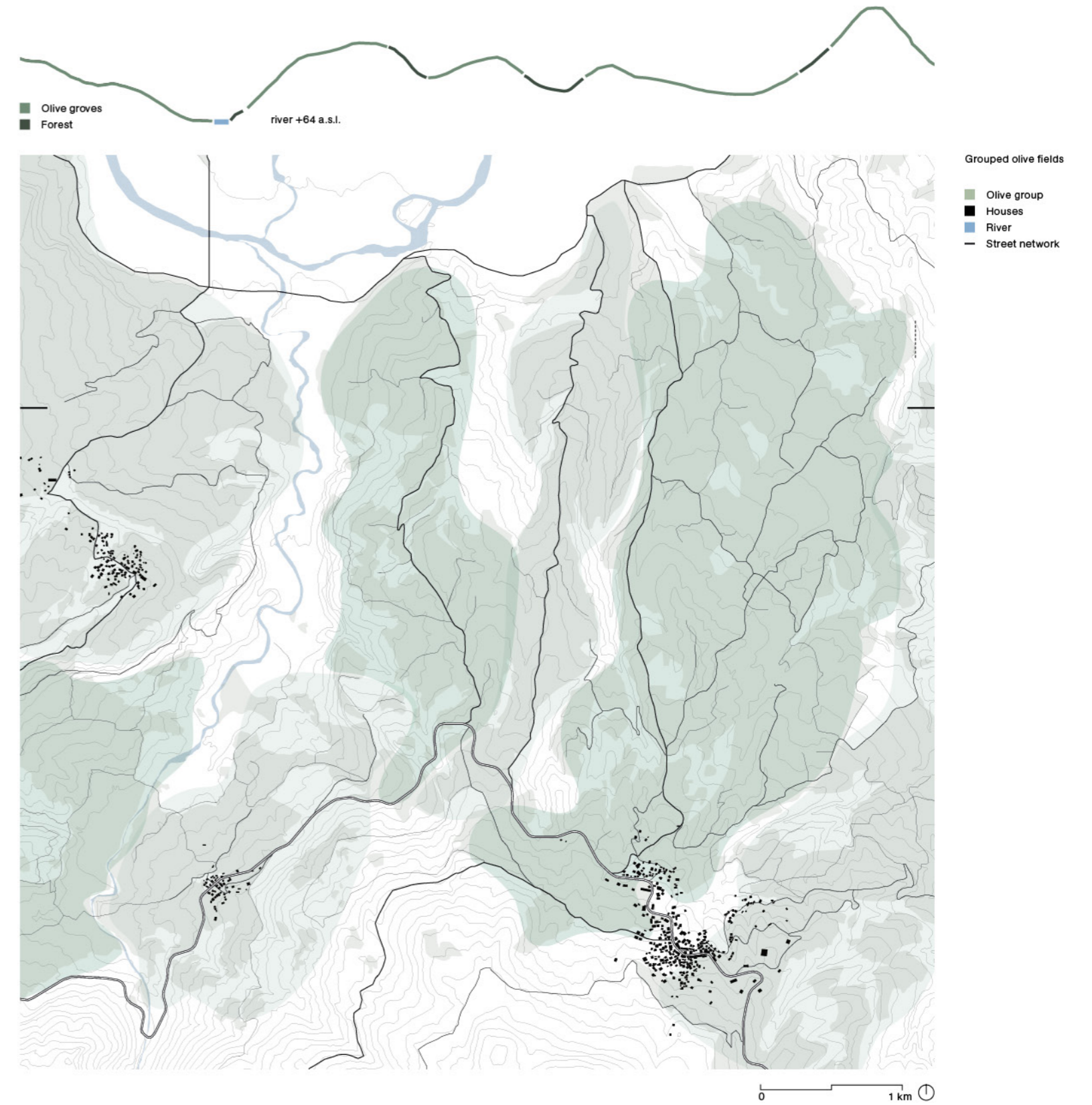
Until the late 1960's vineyards were the main agriculture cultivation type in the area. In order to take care of the grapes, many storage units were built. Nowadays

most of them are abandoned or occasionally used to store wood. These buildings represent the only built typology in the fields and are inaccessible by cars.



Aifeios valley
Olive groupings

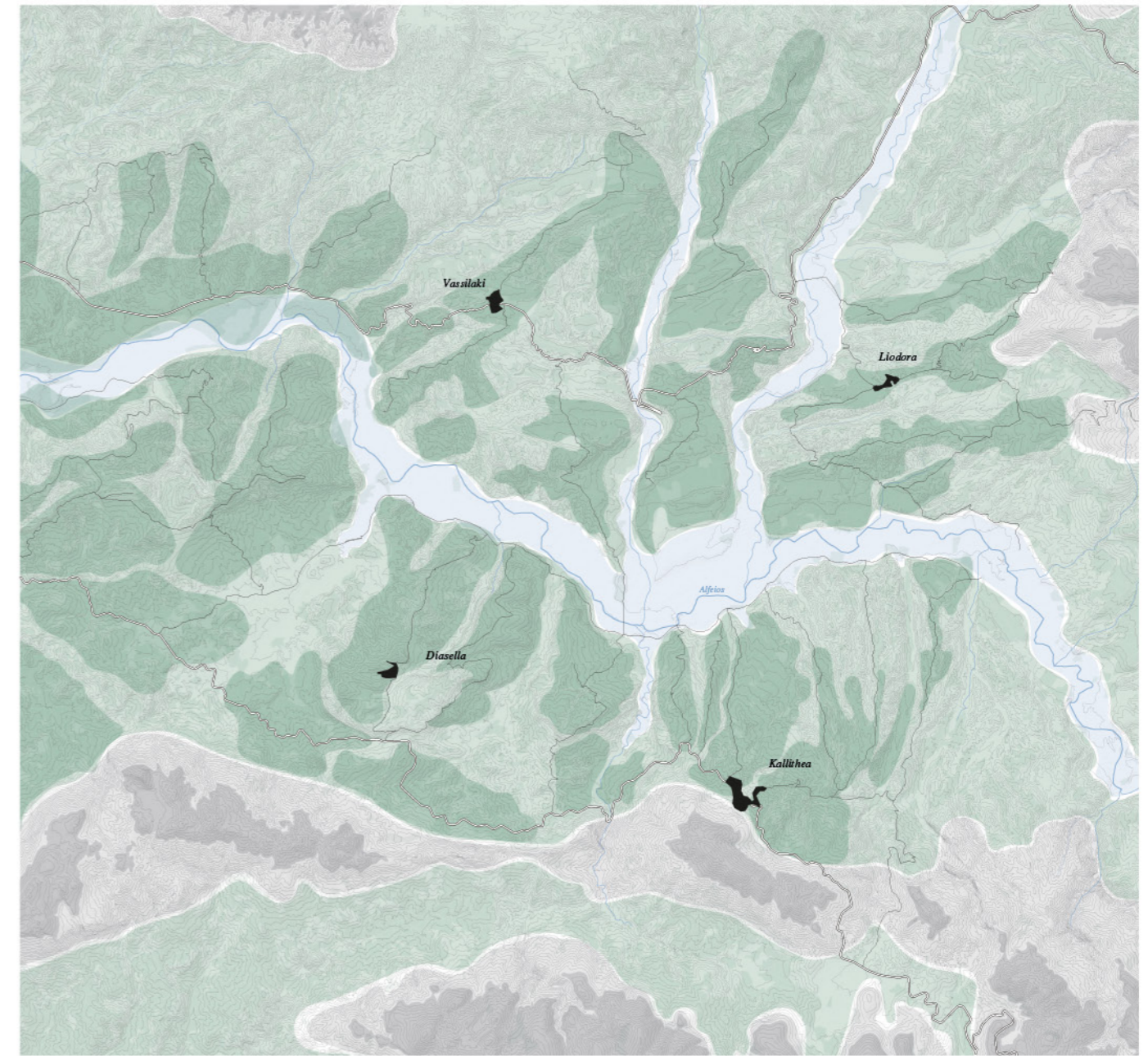
There is a significant presence of steep valleys that form clear borders between the olive fields.



Topography and street network shape and serve precise areas of the olive production.



'Olive room' defined by the forest.



Grouped olive fields in Aifeios valley

- Head village
- Riverside area
- Semi-mountain area
- Mountain area (+600m)
- Street network
- Olive group

0 5 km

Steep valleys are formulating clear borders between the olive fields.

The Mill: A Public Facility

From the informal ground of cultivation to a formal receptor, the cultivated olives are brought to the olive mills for processing. Here the olives are pressed, then the raw oil is separated from water and refined through a centrifugal process. The farmers bring their olives to the closest mill where they pay for the service through share (10-12%) of the produced oil, instead of paying in cash. The portion of oil that the farmer doesn't need for himself, is sold to the mill usually at the rate of about 2-3 euro per litre.

A well equipped mill then brands the oil and sells it across Europe. However, the most of the mills in Alfeios Valley, instead just sell bulk oil to Athens and Italy, making less profit in the process. The mills occupy the built environment as structures independent from the dynamics of the villages. Five out of eight mills in the Alfeios Valley area are located along the two main streets that cross parallel to the valley and connect the Arcadian mountains to the coast of Pyrgos. This is done in order to insure accessibility for the large number of people that visit it during the harvest period.

In the past, the mills used to lie closer to the river to take advantage of the mechanical power from the water flow, but due to the frequent floods of the river, they are more often relocated higher up towards the villages.

Family-Business Mill

Most of the mills present in the Alfeios Valley were founded in the 1970s. From then on, the successive generations took up the activity of their ancestors and implemented it with new machinery, provided through the EU subsidies. Subsidies would usually cover up to 50% of the total investment. Still, the owners needed a secondary off-season revenue stream. That is the reason why you can seldomly find mills with construction material storage, solar panels or gravel digging in this area. During harvest, these spaces of production transform into round-the-clock working spaces.

Bio Mill: a Model

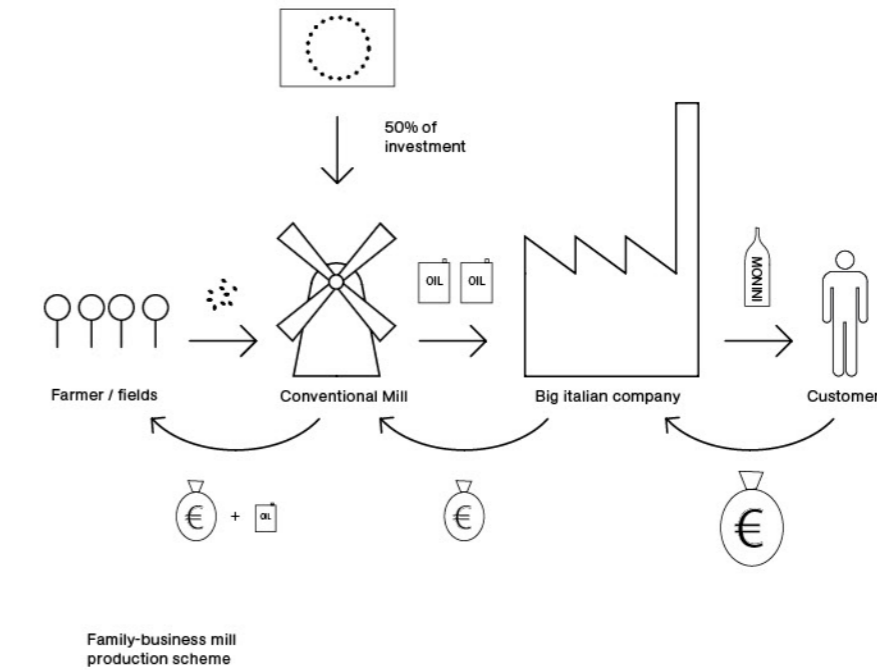
In 2014, a new olive oil mill opened up in Krestena, a bigger village close to the Alfeios valley. In addition to the conventional machines that mills normally own, it also has a machine used for extracting energy out of olive's kernel, as well as a laboratory for bottle labelling. Meetings organised with farmers where knowledge about bio-cultivation is shared, represent important activity in the process of production. As a matter of fact, in order to compete abroad, these mills need quality certificates from the EU. Being able to export its own branded olive oil not only means that most of the profit stays local, but also that these companies compete on a market, different than the one where big industrial companies rely more on quantity rather than quality.



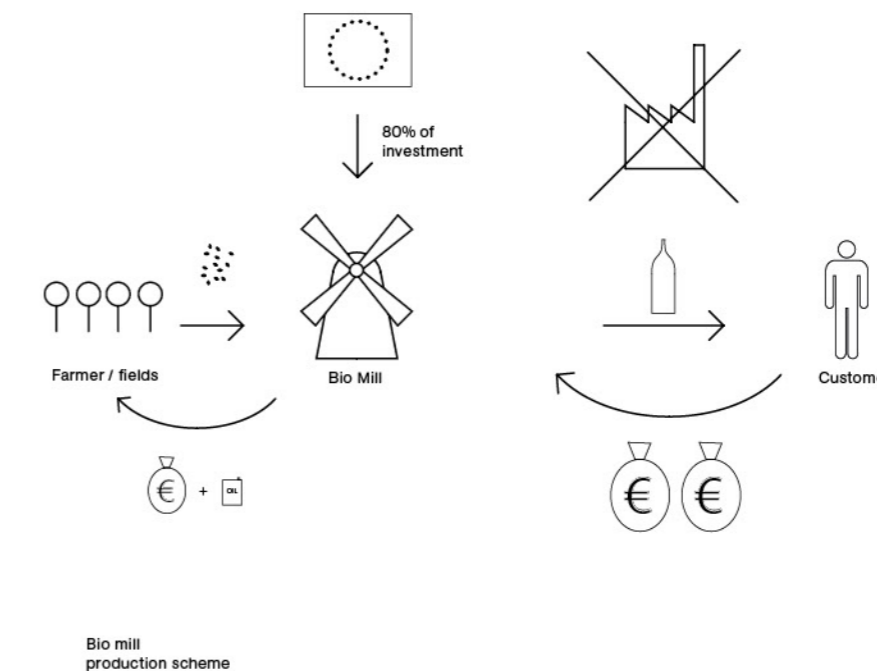
Olive mill with farmers waiting for their oil



Alfeios Valley: A family business mill (Ag. Ioannis) & bio mill (Krestena)



Unlabelled olive oil bottle



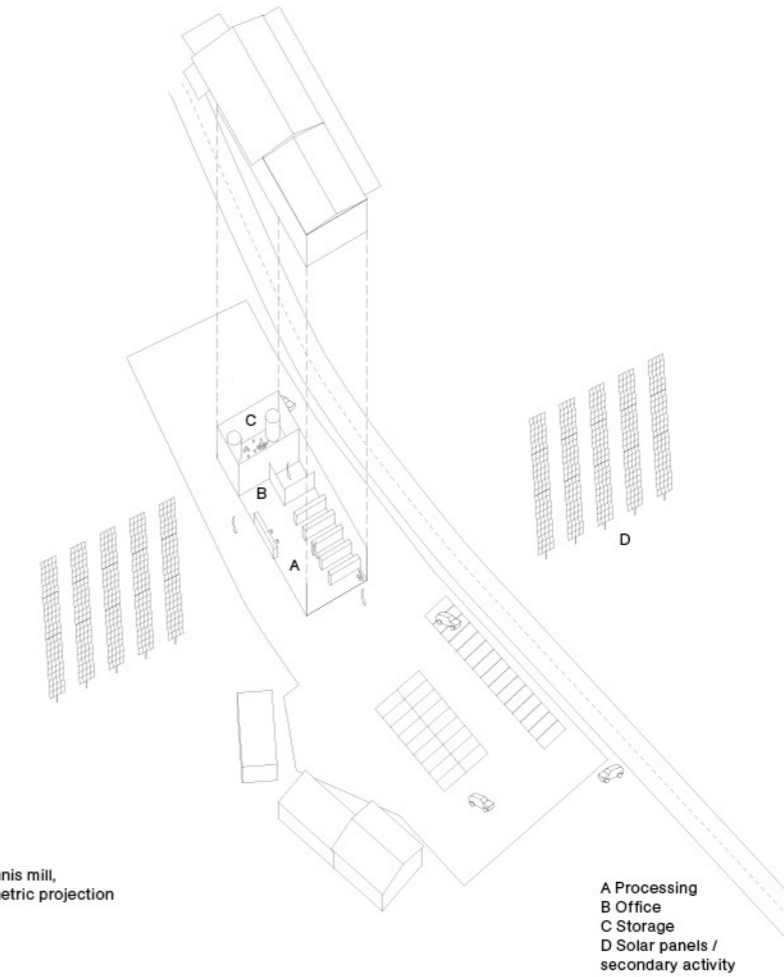
Labelled olive oil bottle



An exterior view of the mill



An interior view of the centrifuge room



Ag. Ioannis mill, axonometric projection

A Processing
B Office
C Storage
D Solar panels / secondary activity



Mr. Papadopoulos (41), Mill owner

What is your profession?

I am the owner of an olive mill since 2007. The mill belonged to my father since 1972. Next to this, I run a small business with solar energy. I built up solar panels in my garden, with help of EU subsidies. I sell the electricity produced through the solar business to the state of Greece. It helps in earning some extra money during the off-season.

How much oil do you produce and who do you sell it to?

I press olive oil for about 1100 families in the area of Alfeios valley and they pay me with 10% of their oil. Usually they take 200 kg back for their personal use, the rest I buy and then sell to big companies in Athens and Italy.

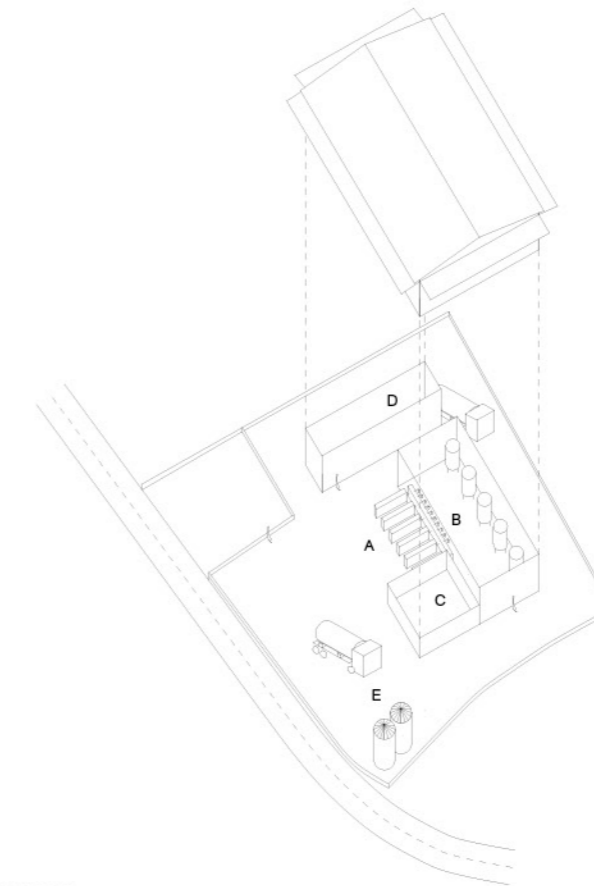
Did you ever think about creating your own olive oil brand?

As you probably know, the investment for your own brand is really high. You need new machines, connections to big markets in Europe and a lot of energy. I prefer to keep my mill how it is for now and stay out of trouble.

Mill owner looking sceptically toward his olive press



Exterior view with bioenergy silos



Mill in Krestena, axonometric projection

- A Processing
- B Storage
- C Labelling
- D Offices
- E Bio Energy



Inside view, storage room



Mill's owner showing his labelling machineries

Mr. Papadipadopolus (38), Mill Owner

What is your profession?

After studying economics, I worked for a big olive oil company based outside of Athens. Some years back I decided to return back to my hometown Krestena and open my own mill in 2012. Since then, this has been my full time job.

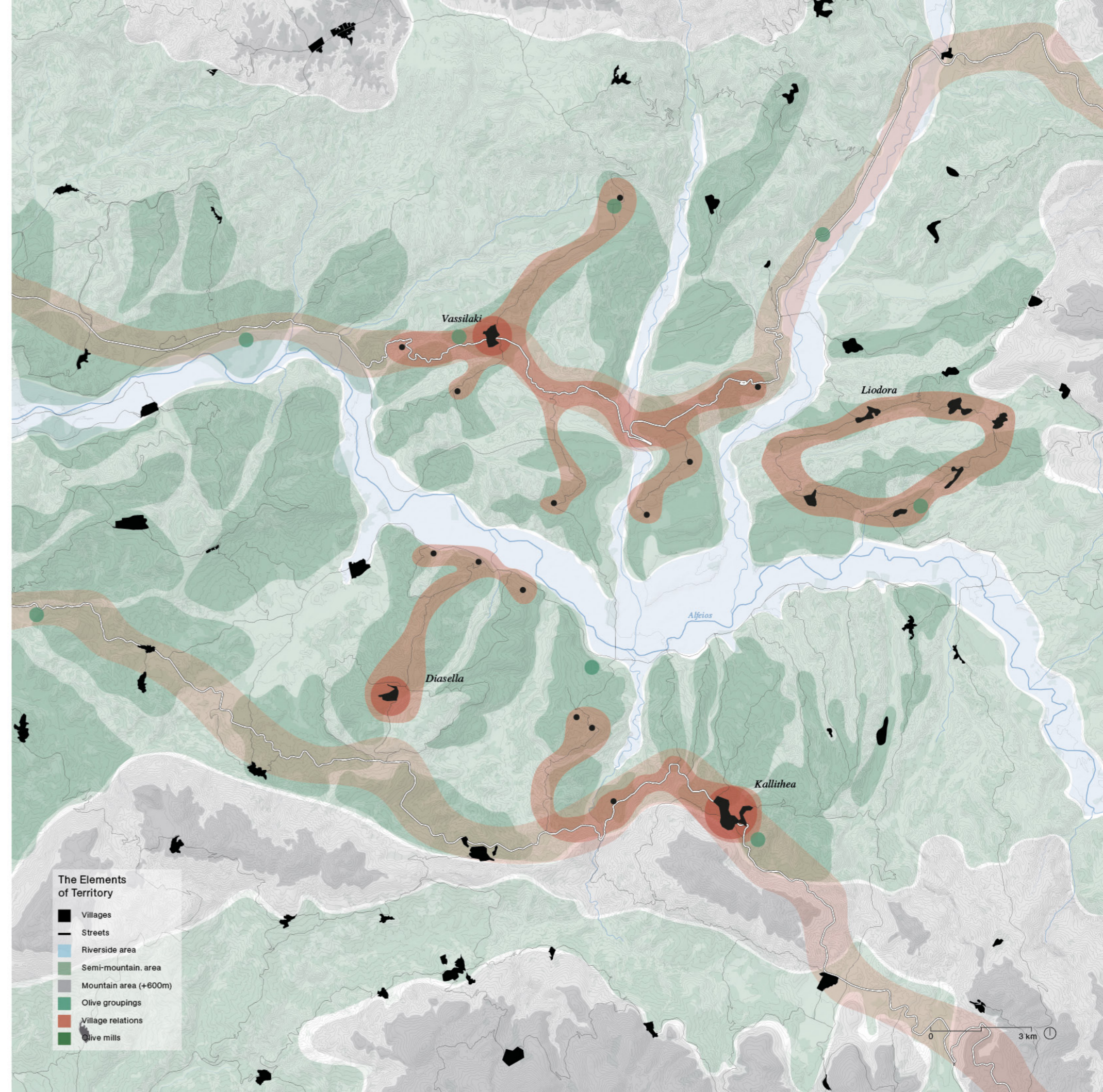
How much oil do you produce & who do you sell it to?

I press olive oil for about 600 families in Alfeios Valley, they all have organic farms and take good care of their plants. I brand this oil in my mill and sell it directly to Europe and America.

Slow Agriculture: Territorial Elements

The villages of Alfeios Valley face an uncertain future. Hamlets are perishing and the main villages are still dependent on the major cities of Pyrgos and Zacharo. Even when the street network is in a slow but stable condition, there is no public transport which would encourage the exchange between the villages or provide a faster connection to the cities. The fields that are grouped around the access streets and shaped between the valleys do not benefit from cooperative thinking or common infrastructure. Every farmer takes care of their own field and their own machines, they only share the public access to streets. The olive mills, which are mostly well positioned next to the main roads, do not profit from their location. They are mostly enclosed industrial buildings which do not reveal their function openly to the people passing by.

Thesis Map



Working & Living in the Olive Groves: Eleopolis

Having started with a series of problems concerning our study framework, we decided to keep using those problems as productive tools rather than questions to answer. We imagine the countryside as an environment where 'slow living' can both resist urbanisation and be fortified by fast digitalisation. In a time that allows us to be connected through the internet and quickly move from one place to another, a physical, static presence in the city is not needed anymore. Therefore, we think that the countryside can develop, not as an alternative but rather as a condition for itself, where living and working are no longer separated.

We tried to tackle this issue in our case-study with a strategy that can be roughly divided into three parts:

- Initiate a local structure independent from the city. In this constellation, head villages are emphasised and their role is enhanced through implemented public facilities
- Rethink connectivity so as to support a local network and connection to big cities
- A new modus for living and working: with a coexistence of agriculture activities with a new pattern of living.



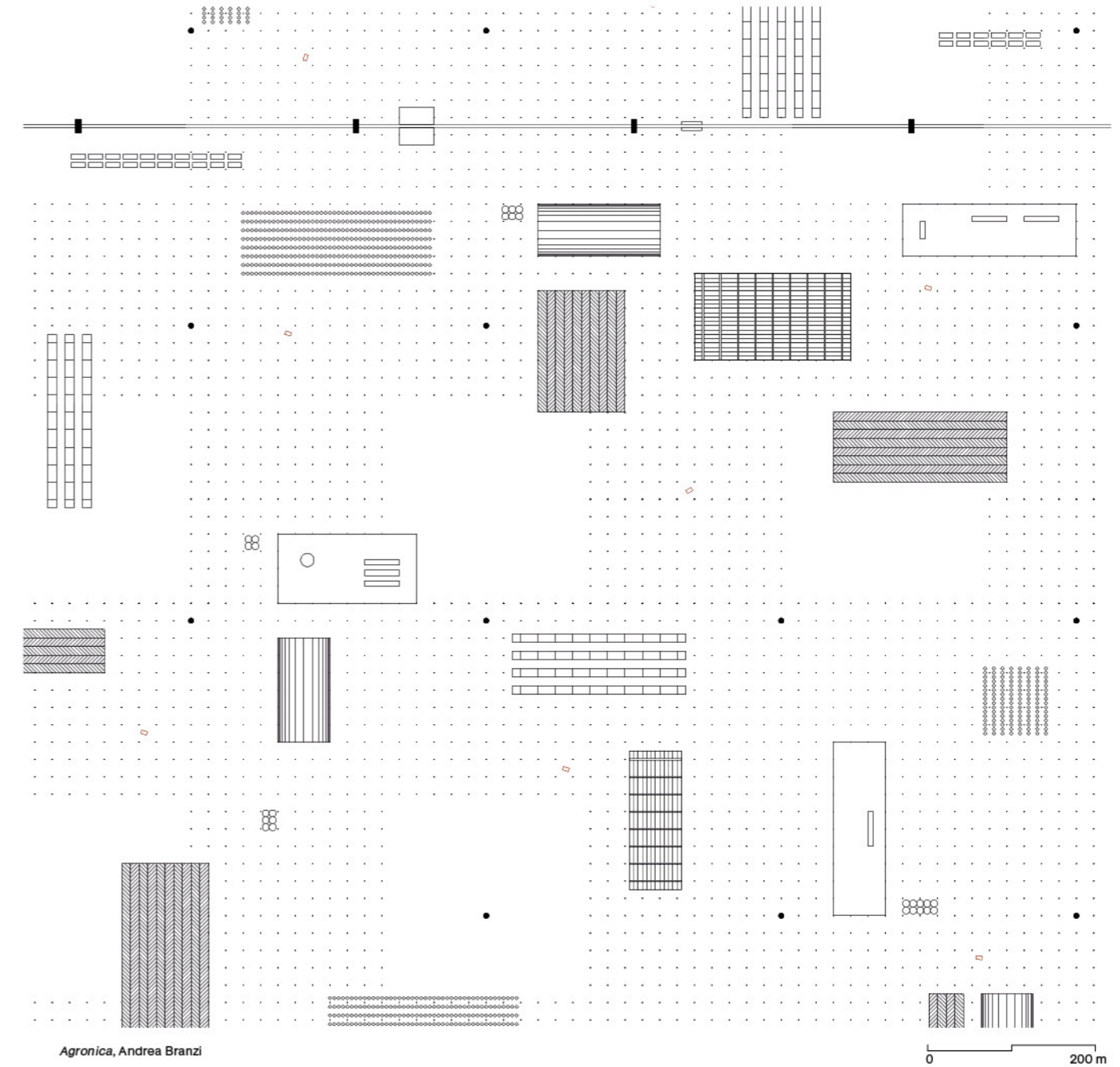
Concept sketch



Agronica, Andrea Branzi

Agronica aims to overcome the gap between the city and the countryside, allowing agriculture and nature to exist side by side in a urban system. It begins with an agricultural territory in which, a system of architectural ele-

ments (roofs, walls, platforms) come together as a system. This way, a semi-urbanised and semi-agricultural territory is created, with temporary service structures combined without creating permanent configurations.



Agronica, Andrea Branzi

Head Village Stability: Public Infrastructure for Locals

The four main villages of Kallithea, Diasella, Vassilaki and Liodora do not have any shared infrastructure. Even if big squares like the one in Diasella or terraces like in Kallithea do exist, most of the time they are not used and are lying empty. In order to strengthen the local connections of the place and make inhabitants less dependent on the city, we propose a cultural hub in each village using simple architectural elements like a public roof.

Public Programs for a Self-Sustained Urbanity

Based on the specificity in each of the villages, we would like to come up with a unique character for each of them. Kallithea, with its beautiful views, speciality restaurants and Kafeneios has a good potential to attract people. Diasella has a big public square at the centre of the village on which we imagine a 'public roof' to support the market. Vassilaki has a well positioned olive

mill next to the main street. Along with providing a platform for cultural activities, the mill could be more open to the public in order to attract clients and share knowledge with them. Liodora is positioned in the middle of a dense forest. An existing bath and the presence of a river next to it, shows its potential in becoming a village for leisure.

Public Transport

The dependency on a car to move around makes life difficult, especially for the younger people in the area. An efficient public transport system is a basis for strengthening the existence of Alfeios valley as an entity. Keeping pace with the friendliness towards the environment, we imagine these vehicles to run with electric motors and solar energy.

Fast City-Line Bus

To make the living in the fields possible, one needs a fast connection to the main cities of Pyrgos, Patras or even Athens. We propose a fast city-line bus which would make a loop from Pyrgos to Vassilaki, Liodora, Kallithea, Diasella, Krestena and back to Pyrgos. Through

Alfeios Local Bus

In order for everybody from the valley to benefit from the new public programs, like market, the villages need a good connection with each other. A slow, but reliable, bus connection would make

Self Driving TukTuk

People who live in the fields need a proper connection with the village. In order to avoid too many cars in the area, we propose small, driverless cars that can be ordered via the internet, and

Alfeios Hiking Map

In order to connect different olive groves, we imagine a hiking path which transverses the Alfeios Valley. This trail would re-use existing paths in the fields and would

this connection, big institutions like hospitals and high schools could be accessible to the people from remote regions. It would be imaginable to live in the fields of Alfeios Valley while working in bigger cities like Pyrgos or Zacharo.

the link between Vassilaki, Liodora, Kallithea and Diasella more feasible. With such a connection, the inhabitants of the valley can benefit from the diverse characteristics of the area.

can pick you up from your doorstep. These autonomous TukTuks could potentially be driven with solar power to preserve an eco-friendly environment.

need only small interventions at spots where it crosses bushes or streams. This path is drawn down as a hiking map and helps visitors to discover the area by foot.

Working and Living in the Olive Groves

Not everyone wishes to live in big cities anymore. More and more people are looking for a calm and simple way of life like the one they can find in the countryside. A diverse set of professionals like information scientists, artists or even architects could potentially live in areas like this. Fast digital connections enable people to work in their gardens while the actual office is based far away.

A Prototype for a New Way of Living

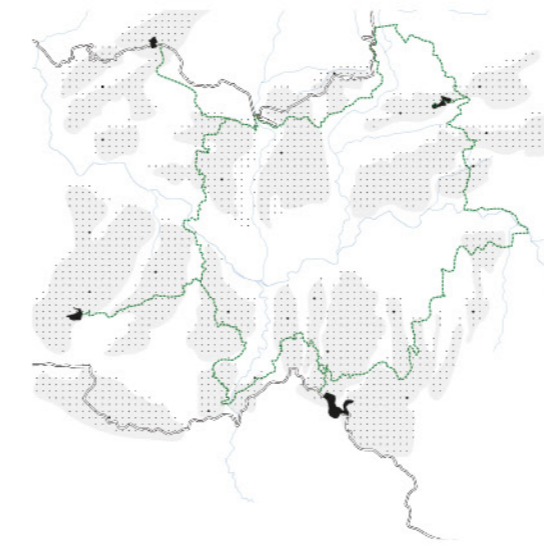
The houses in the fields should not provide a luxurious living. The size and function of these autarkical huts should be kept at a minimum to avoid the emergence of big villas. Through restricting them to come up only on ex-

Public Storage for Agricultural Equipment

To strengthen the local agriculture production, a public storage in form of shelves is provided. In these, one can find farming machines, tools, and water supply for the fields. This facility is not private, but an open source and available to all the

isting structures or ruins, the houses are placed reasonably in the landscape. Solar panels and wells provide the basic resources for the house.

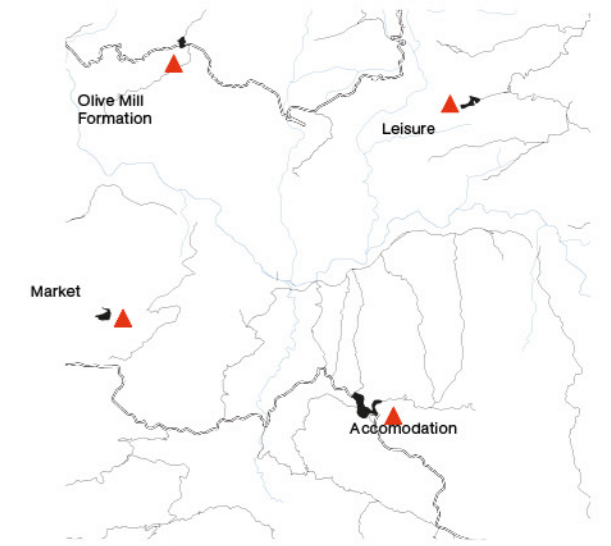
farmers. Next to the storage we propose a cultural platform which connects the local farmers to the new inhabitants. People could meet for a coffee or trade their farming products.



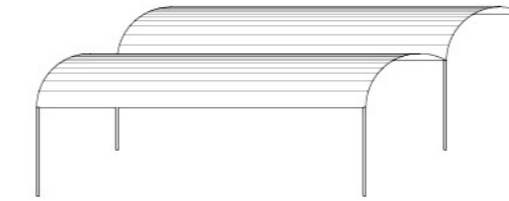
Living & working in the fields



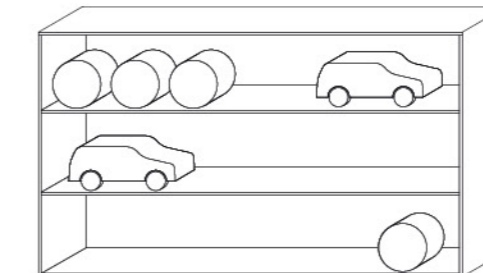
Public transport



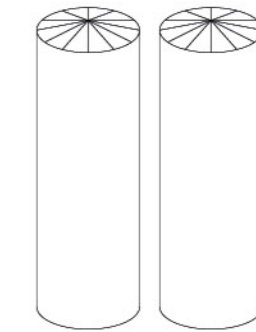
Public program for the village



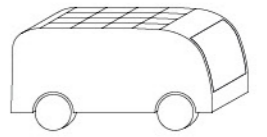
Public roof



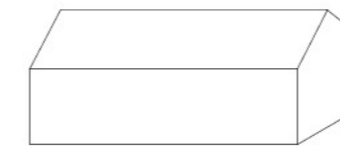
Agriculture storage



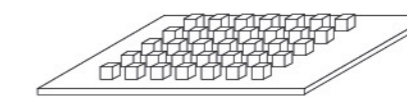
Bio energy



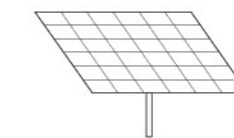
Self driving tuktuk



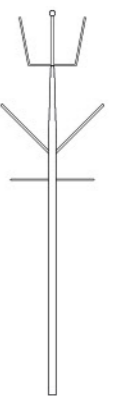
Prototype for a new living



Cultural platform



Solar panels



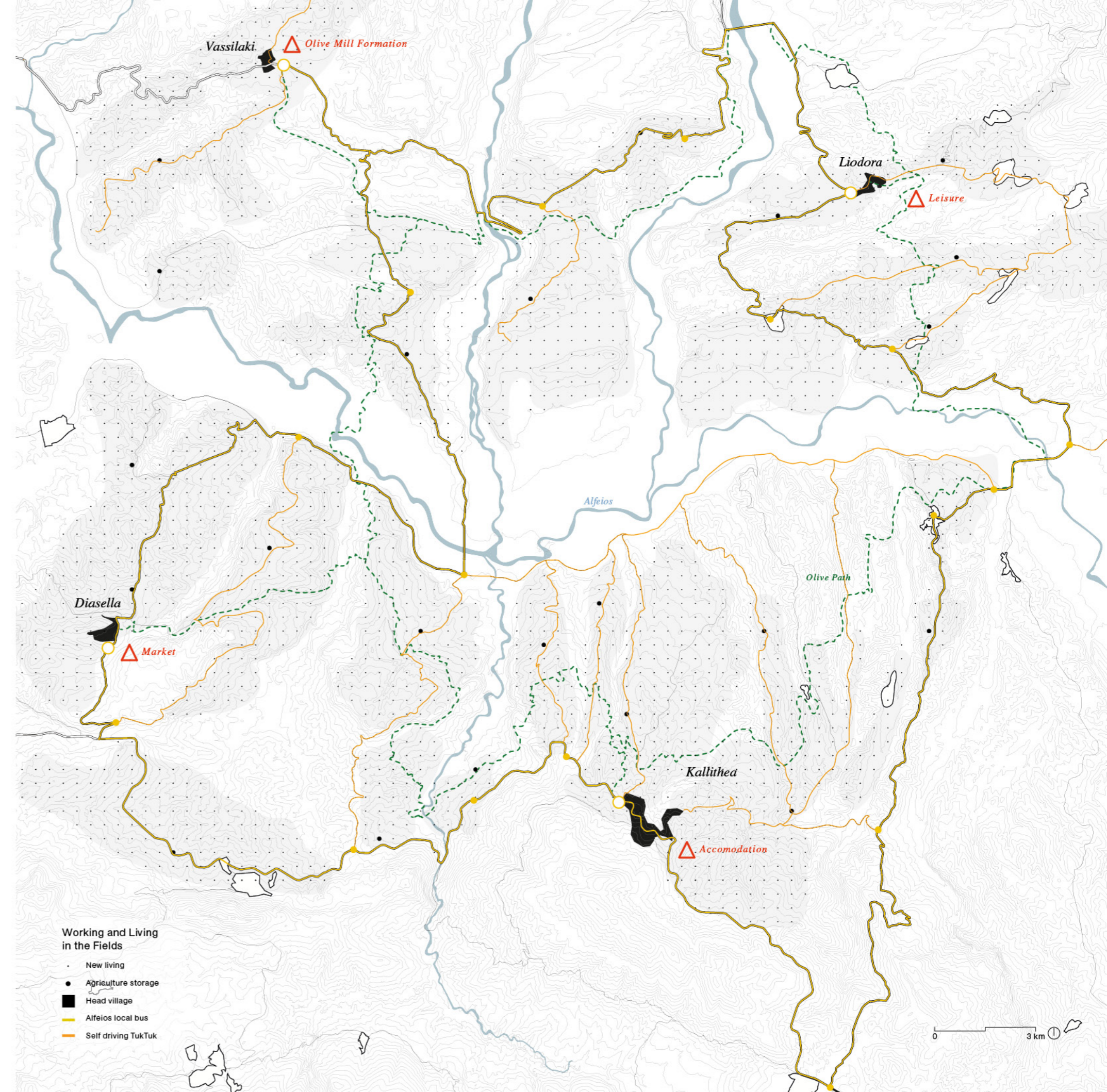
Fast digital connection



Public roof as a market on
the main square in Diasella

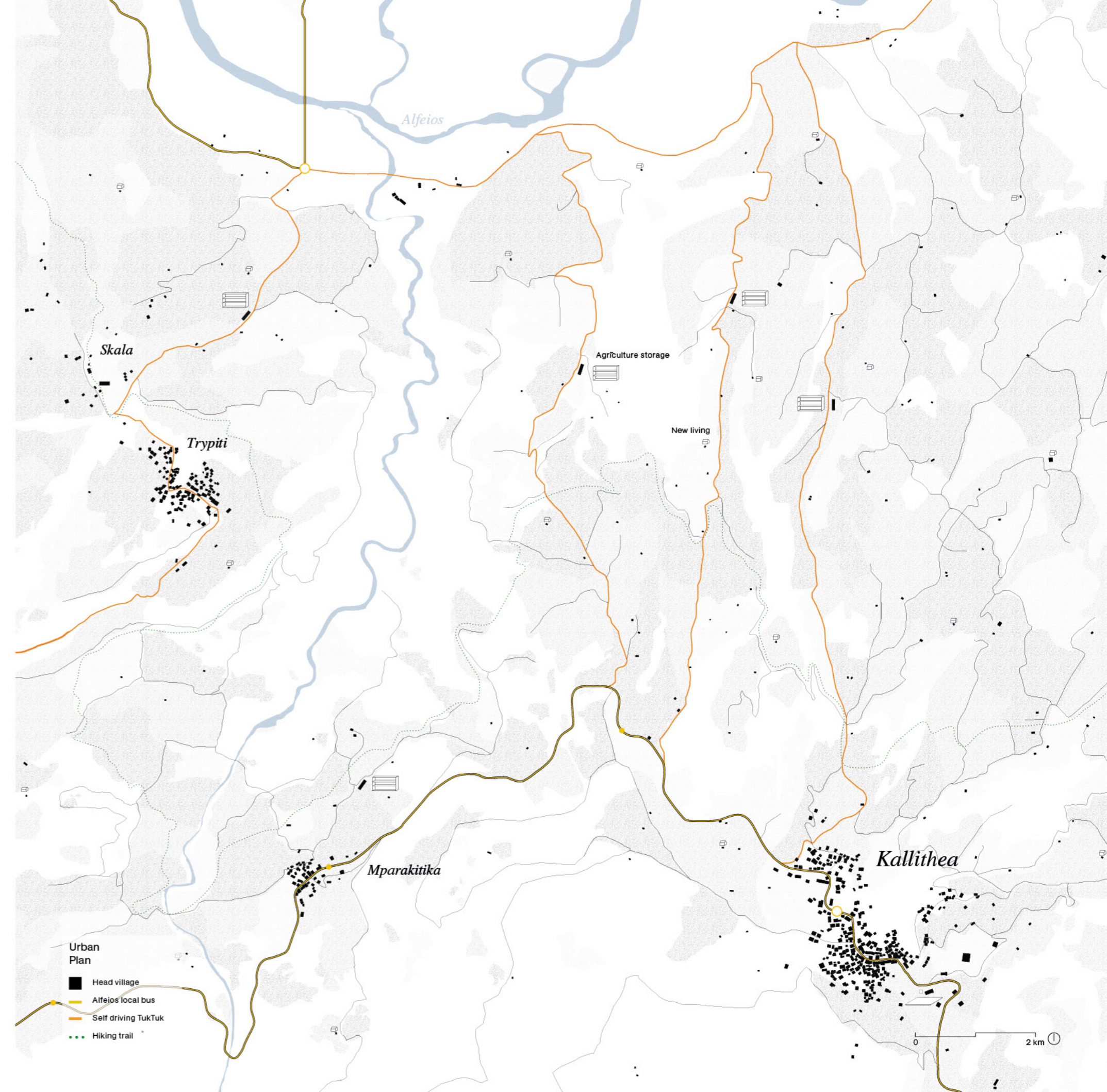


Cultural platform in front
of an olive mill





Working and living in the olive groves





New living and working
in the olive groves





A hiking map for the olive groves

