

# THE VINIANI OF AGRAFA

History of residential development and  
of the settlement's architecture



MUNICIPALITY OF AGRAFA



NATIONAL TECHNICAL UNIVERSITY OF ATHENS  
INTERDEPARTMENTAL POSTGRADUATE PROGRAM  
"MONUMENT PROTECTION"



## The Vinians of Agrafa

History of the residential development and architecture of the settlement



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National Technical University of Athens  
School of Architecture - Postgraduate Program "Monument Protection"

National Technical University of Athens Publications

Vianni of Agrafa

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In the memories of the mountains



The Vinians of Agrafa.  
History of the residential development and architecture of the settlement

Contents

|                                                                                                              |           |
|--------------------------------------------------------------------------------------------------------------|-----------|
| Foreword by the Mayor of Agrafa                                                                              | <b>11</b> |
| Foreword by the Dean of the School of Architecture of NTUA                                                   | <b>12</b> |
| Foreword by the Director of the IAPM "Monument Protection" NTUA                                              | <b>13</b> |
| Introduction                                                                                                 | <b>15</b> |
| The identity and methodology of the research                                                                 | 16        |
| The contributors                                                                                             | 19        |
| Acknowledgements                                                                                             | 20        |
| <b>1</b> Historical data of a long habitation - the human geography of Vinians                               | <b>23</b> |
| 1.1 The Hellenistic antiquity                                                                                | 23        |
| 1.2 The fortified hill of Agios Georgios                                                                     | 25        |
| 1.3 The plague epidemics as a critical element of the desertion of settlements in Agrafa of the 18th century | 38        |
| 1.4 Population changes from the 15th to the 20th century                                                     | 40        |
| Concise population development of Viniani                                                                    | 40        |
| Viniani from the 15th to the 19th century                                                                    | 42        |
| From the beginning of the 20th century to World War II                                                       | 46        |
| 1.5 Italian-German Occupation, National Resistance and Civil War                                             | 48        |
| 1.6 The post-war period                                                                                      | 57        |
| 1.7 Current population, social and economic trends: 1990-today 60                                            |           |
| <b>2</b> Viniani-Agrafa-Evrytania: spatial interconnections and natural environment                          | <b>77</b> |
| 2.1 The Municipal Unit of Viniani of the Municipality of Agrafa                                              | 77        |
| 2.2 Time distances: residential network - regional and national urban centers - infrastructure               | 79        |
| 2.3 The European Path E4                                                                                     | 84        |
| 2.4 Geography elements of Viniani                                                                            | 86        |
| The mountainous volume of Agrafa                                                                             | 89        |
| The flora and fauna                                                                                          | 92        |
| The forests of Viniani                                                                                       | 95        |

|                                                                                                   |            |
|---------------------------------------------------------------------------------------------------|------------|
| Natura areas, protected landscapes and wildlife refuges                                           | 99         |
| The passage of Megdova and the mountain passes of Pindos                                          | 103        |
| <b>3 The settlement structure and architecture of Vianni</b>                                      | <b>111</b> |
| 3.1 The institutional framework for the protection of the cultural wealth of Agraфа and of Vianni | 111        |
| 3.2 Settlement structure of Vianni                                                                | 115        |
| The formation of the settlement after WWII                                                        | 115        |
| The current state of the settlement                                                               | 122        |
| 3.3 The architecture of Vianni - Characteristic buildings                                         | 127        |
| The Holy Church of the Twelve Apostles                                                            | 132        |
| The Holy Church of Zoodochos Pigi                                                                 | 134        |
| The Elementary School                                                                             | 136        |
| Five characteristic cases of residential buildings                                                | 140        |
| Brief description of architectural and structural characteristics                                 | 147        |
| Pathology and qualitative assessment of the causes of damage and deterioration                    | 159        |
| The bridges of Megdova                                                                            | 168        |
| <b>4 Geology and seismotectonics of Vianni</b>                                                    | <b>171</b> |
| 4.1 The earthquakes of 1966                                                                       | 173        |
| 4.2 Earthquake-stricken Vianni                                                                    | 176        |
| 4.3 The temporary settlement of wooden shacks                                                     | 178        |
| <b>5 Current situation: New Vianni and old settlement of Vianni</b>                               | <b>181</b> |
| 5.1 The organization of the permanent settlement                                                  | 185        |
| The new residences                                                                                | 188        |
| The era after the earthquakes                                                                     | 192        |
| The evolution of the settlement to date                                                           | 193        |
| 5.2 The current state of the old settlement of Vianni                                             | 197        |
| Access, public space and residential units                                                        | 197        |
| Assessment of the building stock                                                                  | 206        |
| Epilogue                                                                                          | 219        |
| List of images                                                                                    | 221        |
| List of tables                                                                                    | 233        |
| List of graphs                                                                                    | 235        |
| List of maps                                                                                      | 236        |
| Research and writing team                                                                         | 238        |
| Bibliography                                                                                      | 240        |
| Sources                                                                                           | 246        |

## Foreword by the Mayor of Agrafa

Mr. Alexis Kardampikis

With particular emotion and a deep sense of responsibility, I preface this publication of the National Technical University of Athens, which is dedicated to Viniani, a place that is a symbol for Agrafa, for Evrytania, and for the modern history of our country.

This publication is the result of a fruitful, substantial, and multi-level collaboration between the Municipality of Agrafa and the National Technical University of Athens, which was established with the signing of a Memorandum of Cooperation in 2022.

It was not simply an academic partnership, but a conscious strategic choice by the Municipality, with the aim of scientifically documenting, protecting, and promoting our unique cultural heritage.

Viniani, with its significant historical importance, its unique architectural identity, and its long human presence, was the subject of a model interdisciplinary research. Teams of professors, researchers, and students from the Schools of Architectural Engineers, Civil Engineers, and Agronomists and Surveying Engineers-Geoinformatics Engineers of NTUA worked methodically and enthusiastically, carrying out four on-site missions. They recorded the existing situation of the settlements, analyzed their historical and geographical identity, and recorded valuable architectural features, as well as possibilities for restoring selected buildings.

The result of this painstaking and quality work is a comprehensive scientific volume, which combines documentation with the creation of a valuable tool for the strategic planning of the area. But beyond its scientific value, this project also constitutes a proposal of hope: a basis for the cultural and social regeneration of Viniani and, by extension, of our entire region.

As Mayor of Agrafa, I would like to express my warmest thanks to Professor Nikos Belavilas and the entire Polytechnic Team who worked consistently and passionately to produce this substantial and scientifically documented work.

The recording, documentation, and promotion of the old settlement of Viniani not only as a monument but also as a living piece of our collective identity, is a work of utmost importance for the Municipality of Agrafa.

The local community embraces with gratitude such initiatives that are not limited to theory, but create substantial bridges with practice and the prospect of the future.

The Municipality of Agrafa remains steadfast in its decision to actively support every effort that serves the history, identity, and development horizon of our place.

Viniani is not only a chapter of the past; it is a living heritage, but also a promise for the future.

## Foreword by the Dean of the School of Architecture NTUA

Professor Irini Klampatsea

The School of Architecture of the National Technical University of Athens, through this research, re-submits the condensed perception that it has historically and systematically "woven" with regard to the scientific robustness, innovation and social contribution that co-shape the stigma, the imprint of the School and its community. In this light, the present research is a comprehensive interdisciplinary study that combines architectural documentation with the historical, geographical and sociological reading of the place of Viniani. The multi-layered analysis brings to the core the dialogue of collective memory, mountainousness, the natural environment and the cultural landscape that constitute background elements of the "spatial privilege" of the settlement and its wider area.

This publication reflects the dynamics of the Interdepartmental Postgraduate Program "Protection of Monuments", the experience and know-how of the Urban Environment Laboratory of our School, and the active participation of faculty, postgraduate and undergraduate students. The work in the field, the recordings, the documentation and the preparation of the Strategic Plan for the revival of the dipole of Nea Viniani and the old settlement of Viniani, highlight the connection of theory with practice, of scientific research with social contribution, the desired interactive laboratory of creativity of the School of Architects in collaboration with local communities and local government.

This publication skillfully records the methodological steps of approaching the particularities included in dipoles such as old-new, collective-unique, historical-traditional, memory-experience, natural-cultural, etc. Among other things, it is a methodological experiment and at the same time a complete application of the "Viniani" case study that was successfully implemented due to two critical factors: a) the excellent cooperation of the academic community of the School of Architecture with the Municipality of Agrafa since 2022, a sample of substantial cooperation between the university and local government, b) the scientific responsibility and contribution of fellow professors and our students to know, read and propose actions to "rehabilitate" a special place with a heavy heritage and spatial privileges that awaits a different type of activation/revival planning.

Warm thanks to the scientific supervisor and coordinator of this research project Professor Nikos Belavilas and to all those who invested valuable time and effort for the documented reading, diagnosis, evaluation and proposal for the development perspective of a "unique" place, Viniani, in the direction of sustainable strategies for cultural heritage, local development and the reactivation of areas in hibernation, degradation or abandonment.

## Foreword by the Director of the DPMS "Protection of Monuments" NTUA

Professor Nikos Belavilas

Our involvement in Viniani began with one of those unexpected challenges that one can hardly imagine happening to them: a polite phone call from the Mayor of Agrafa and a request for advice and support for the effort to revive the village, ravaged since 1966. It continued with a short trip, again, after many years, to Evrytania. The maturity that time brings allows, as we well know, to see places that once seemed different with a new eye. That's how I saw the gorges of Megdova and the peaks of Tymfristos again. The awe in front of the eternal image of the mountains, the rivers in the depths of the valleys, the green forests, the singing of the nightingales, the silence of History over the ruins of the deserted, legendary village - this was the first impression. Next to them, the warmth of the people, the hospitality, the open-hearted welcome.

Something of this magic must have been felt by the rest of the Polytechnic team. There is no other explanation for the passion and consistency with which they worked in the field, in every aspect of the documentation: in the surveys and evaluations of the buildings, in the tracing of historical phases, in the recording of memory and material traces, in the formulation of strategic proposals for the revival of Viniani.

We arrived there knowing that we would walk in the footsteps of Aris, Zervas, Woodhouse, Spyros Meletzis, the founders of the "Government of the Mountain" and the saboteurs of Gorgopotamos. But we didn't just meet them; we found signs that are lost centuries before: a fortified Hellenistic settlement, evidence of medieval Viniani, the Slavic settlement, the silent continuation of the Ottoman years, the vibrant 19th century with its mansions, shops and immigrants from America, and with them, the beginnings of the modern era.

This publication is the distillation of this collective, interdisciplinary effort that was implemented within the framework of the DPMS "Protection of Monuments" and the Urban Environment Laboratory of the School of Architectural Engineers of NTUA. Viniani – with its old and new settlement – was the field of application of a modern research methodology, which combined historical, architectural and urban documentation with environmental and soil analysis, the collection of oral testimonies and the interpretation of memory in space.

The research, which was based on the Memorandum of Cooperation between NTUA and the Municipality of Agrafa, did not simply aim at documentation, but at submitting a complete Strategic Plan for the regeneration of the settlement complex, with respect to its historicity and the unique natural landscape of Agrafa.

The contribution of the Municipality and the residents was decisive - not only with their warm hospitality, but also with their deep knowledge and love for the place. I want to thank all those who participated, and especially our young undergraduate and postgraduate students, who worked with persistence and sensitivity,

as well as the fellow academics with whom we designed and completed this project. Special gratitude to the Mayor Alexis Kardampikis and the friends of Viniani for their trust, hospitality and practical support.

Viniani is not just a "traditional settlement." It is a field where History, architecture, nature and human endurance meet. We hope that this work will contribute to the reactivation of this rare place and be a starting point for new research and creative paths.

## Introduction

Through the research of the National Technical University of Athens, 2022-2024 in the emblematic capital of the "Government of the Mountain", an unknown place of various historical phases was revealed. In addition to the glorious history of the period 1942-1944, particularly important traces were identified that run through its history in its long duration. Viniani exists as a fortified settlement from Antiquity and Hellenistic times, while its habitation is confirmed during the Byzantine Middle Ages. It was probably then colonized with the Slavic settlement in the Greek area and it owes its name to this very settlement. In the mid-15th century it flourished with a thousand inhabitants and a vibrant agricultural economy. It shrank in the late 18th and early 19th centuries due to plague epidemics, with the population decreasing to one hundred inhabitants. At that time, the ancient cradle of habitation was abandoned and the settlement moved to the nearby location of today's old settlement of Viniani. It redeveloped in the late 19th and early 20th centuries mainly due to the financial remittances of established immigrants in Constantinople and, later, in the USA. In 1940 it numbered five hundred inhabitants, more than one hundred houses, a school, workshops and shops. It went through the storm of the world war, the national resistance and the civil conflict of 1940-1949. It was destroyed twice by the forces of the Italian and German Nazis. Two decades later it was badly hit by the earthquakes of 1966 and moved, once again in its history, to the settlement of Nea Viniani, which is also an excellent urban planning example of its time - the post-war reconstruction and the organized construction of emergencies.

This publication attempts to highlight and document historically, geographically and architecturally this special place of Viniani with its two residential poles, the old and the new settlement. It is one of the most impressive examples of a historical complex within the Greek mountainous area of Evrytania. In particular, this publication includes the analysis of geophysical, anthropogeographic and generally spatial data for Viniani and the wider area of Agrafa and Evrytania, the extensive historical, archaeological, architectural and urban planning documentation, as well as the evaluation of the stock of buildings and public spaces of the residential dipole of Viniani.

As noted below, based on the above analyses, the targeted proposals of the research team of the National Technical University of Athens were drawn up, which constitute a complete Strategic Plan for the residential, social and economic revival of the dipole of the two settlements of Viniani. The whole of the

research is available in the archive of the MSc "Protection of Monuments" and the Urban Environment Laboratory of the School of Architecture NTUA.

The identity and methodology of the research

The research aiming at the revival of the historical site of Viniani was carried out under the responsibility of the Urban Environment Laboratory of the Urban Planning and Spatial Planning Sector of the School of Architectural Engineering based on the Memorandum of Cooperation of 25/02/2022 between the National Technical University of Athens and the Municipality of Agrafa. The MSc "Protection of Monuments" NTUA actively and substantially participated in the research, which carried out in Viniani the combined surveys-restoration of the curriculum with the subject of the survey, the pathology and the design of the restoration and reuse of selected buildings.

The NTUA research team worked in four successive field missions in the area: February and June 2022, April and July 2023. The research covered the wider area from the old settlement of Viniani and the hill of Agios Georgios, to Nea Viniani, the old and new bridge of Megdova.

The field missions allowed the analytical recording of the settlement and, in particular, the compilation of a file with the identity of the 115 buildings of the old settlement of Viniani, the recording of public spaces, the mapping of selected buildings and their pathologies, the recording of archaeological traces and the mapping of the hill of Agios Georgios.

The historical evolution of the settlement was carried out through extensive bibliographic and online research. Furthermore, a systematic collection of primary material was carried out through research in the archives of the Institute of Geological and Mining Research (IGME), the Hellenic Army Geographical Service (HAGS), the Building Service of the Municipality of Karpenisi and in the Earthquake Archive of the Region of Central Greece in the Army History Directorate of the HAGS. Material was drawn from the digital archives of the Hellenic Statistical Authority (ELSTAT), the National Cadastre, the Archaeological Cadastre, the Forest Maps, the European spatial data base Copernicus/Corine and from the audiovisual archives of Greek newspapers and British Pathe. In addition, during the field missions, oral testimonies of residents were collected.

The analysis of the geophysical data of the wider background of the Municipal Unit of Viniani, as well as the data on soil cover and forests, were drawn with macroscopic research from the European data system Copernicus and from the ratified forest maps. The population, social data and the

infrastructure data were drawn from ELSTAT. The field recognition

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The complete research, analysis volume and strategic planning volume, is available on the website: <https://vinianintua.blogspot.com/>

The assistant professor Stergios Tabekis of the Department of Forestry and Natural Environment of the Agricultural University of Athens was responsible for the analysis of soil cover and forest data.

was carried out with a topographic survey of the old settlement of Viniani and the hill of Agios Georgios.

The surveys followed on an urban planning scale and on the scale of buildings and public spaces. Modern topographic methods were used for the spatial surveys. Suitable geometric substrates were created to enable the depiction of quantitative and qualitative characteristics of the settlement. For this purpose, after the initial reconnaissance visit to the area of interest, the taking of documentation photos using an unmanned aerial vehicle (UAV - drone) and the required preliminary assessment of the object, existing topographic substrates were mainly used, such as:

- The diagram of the HAGS scale 1:5000, in the HATT reference system, with number 5254\_2
- The orthophotomaps with numbers 0296043140, 0296043170, 0300043140, 0300043170, which have been drawn up by KTIMATOLOGIO SA.
- The aerial photographs 1945-1960 with codes W\_BW\_46\_935509\_1946/09/07, Y\_BW\_60\_912093\_1960/08/17, Y\_BW\_60\_912094\_1960/08/17 of the archive of the National Cadastre.

Using the HAGS diagram and after the appropriate georeferencing and its conversion to the current National Reference System (EGSA '87), it was mainly possible to depict the natural relief of the study area (digital terrain model, contour lines). By utilizing the orthophotomaps, it became possible to depict the geometric characteristics of individual parts of the settlement (roads, paths, buildings, etc.).

In addition, individual topographic works were carried out, which mainly concerned the geometric documentation of characteristic buildings of the settlement, with the creation of floor plans, sections, elevations, as well as the geometric documentation of special areas, such as the area where the Holy Church of Agios Georgios is located. Using an unmanned aerial vehicle (UAV – drone), using and combining photogrammetric and geodetic methods, the orthophotomap of the specific area was created. Modern geodetic equipment (reflectorless total stations, GNSS, UAV) was used for field work and data collection.



Image 0-1. Documentary photograph taken by drone in the old settlement of Viniani,



Image 0-2. Old settlement of Viniani. Excerpt orthophoto map of the Land Registry.



Image 0-3. Orthophoto map of the top of Agios Georgios hill.

In the next stage, the urban planning mapping of the settlement and the qualitative evaluation of all the buildings of the old settlement of Viniani per building unit were carried out, through the tool of records in detailed cards. Within the framework of this work, 115 buildings, the public spaces and the uses of the buildings during the last phase of 1966 were recorded.

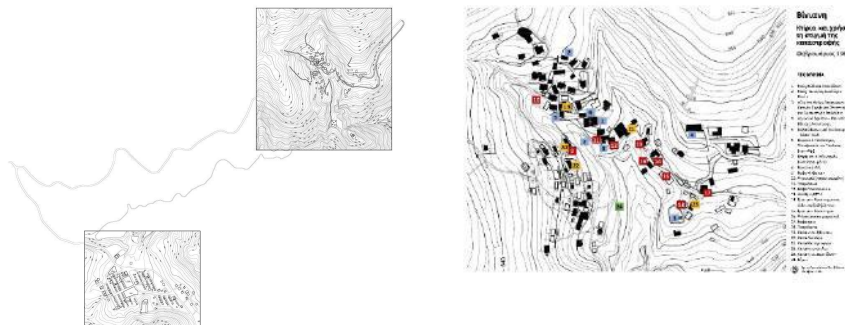


Image 0-4. Topographic representations of the residential dipole of Viniani (left) and topographic and urban planning analytical recording of buildings in the old settlement of Viniani (right).

Finally, a systematic architectural and structural mapping of the pathology of five characteristic building complexes of the settlement was carried out by the MSc "Protection of Monuments" NTUA. These are the houses of Nikopoulos, Alataris and Café-Grocery store "Switzerland", E. Karageorgou, "of Swolos", "of the Teacher". The mappings were done with conventional measurements, photographs and videos in combination with the surveys. In addition, an analysis of the data of Nea Viniani as a settlement for earthquake victims was carried out based on the topographic data and the archival data contained in the archives

earthquake victims. Were carried out architectural representations of the two characteristic types of houses in the settlement.

In conclusion, the methodology of this study was based on an interdisciplinary reading of the residential dipole of Vianiani. This reading allowed the formulation of the Strategic Plan for the Revival of Vianiani with the scenarios

rescue interventions, precursor projects, archaeological excavations, interventions in public spaces and building restorations with the aim of reviving the dipole of the two settlements. The executive proposals for infrastructure, forestry and tourism economy at the scale of the Municipality of Agrafa follow and extend the existing designs of spatial and development plans - with the exception of the designs for RES for which the NTUA research team expresses its objections, as it is estimated that they endanger the high-value natural mountain and cultural landscape of Agrafa.

#### The contributors

The interdisciplinary research team for Vianiani was formed by professors of the School of Architecture NTUA, the School of Civil Engineers NTUA, the School of Rural and Surveying Engineers NTUA, the Department of Architecture University of Thessaly and the Agricultural University of Athens, researchers of the Urban Environment Laboratory, undergraduate students of the School of Architecture and postgraduate students of the DPMS "Protection of Monuments" NTUA.

The texts of the research were written by Nikos Belavilas, Professor NTUA (scientific director), Eleftheria Tsakanika, Associate Professor NTUA, Elena Constantinidou, Associate Professor NTUA, Androniki Miltiadou, former Associate Professor NTUA, Giorgos Pantazis, Professor NTUA, Michalis Kavvadas, Emeritus Professor NTUA, Vasso Trova, Professor University of Thessaly, Stergios Tabekis, Assistant Professor Agricultural University of Athens, Iris Polyzou, Sociologist, Dr. NTUA, Scientific Secretariat DPMS "Protection of Monuments" and Dimitris Geronikos, MSc Agronomist, Graduate of GPA. Ioanna Papakonstantinou-Brati, MSc Architect Engineer, PhD NTUA, also contributed to the overall research and design.

The editing of the deliverables and the coordination of the research was carried out by the researcher of the Urban Environment Laboratory Polina Prentou, MSc Architect-Urban Planner Engineer, PhD NTUA.

The collaboration of the DPMS "Protection of Monuments" with the research team, the field exercises and the representations-restoration proposals in Vianiani of the program was coordinated by Maria Balodimou, Dr. Architect Engineer NTUA, Scientific Secretariat DPMS "Protection of Monuments". Eirini Efesiou, Emeritus Professor NTUA and Konstantinos Karadimas, Emeritus Professor NTUA also participated in the field exercises.

The research involved the postgraduate students of the MSc "Protection of Monuments" NTUA Argyro Verikaki, Architect Engineer, Argyri Vienna, Agronomist Surveyor Engineer, Konstantina Gougoula, Architect Engineer, Anna Zacharaki, Architect Engineer, Evangelia Theodorakoglou, Architect Engineer, Pavlos Aikaterini, Karagiannakidou, Architect Engineer, Zoe Kondyli, Architect Engineer, Nikolaia Krekoukia, Archaeologist, Vasiliki Laspia, Agronomist Surveyor Engineer, Vasiliki Mantelos, Architect Engineer, Marina Merou, Architect Engineer, Maria Barbounaki, Architect Engineer, Panagiotis Rovilos, Architect Engineer, Georgia Rozani, Architect Engineer, Nikoleta Sakka, Architect Engineer, Olympia Spyridaki, Architect Engineer, Athena Stephani, Architect Engineer, Despoina Tsironi, Architect Engineer, Evanthia Florou, Civil Engineer, Nikoleta Houma, Architect Engineer, Dimitra Christou, Civil Engineer, who carried out in Viniani the combined mappings-restoration (4.2-4.3) of the study program with the subject of mapping, pathology and the design of restoration and reuse of selected buildings.

The research also involved the undergraduate students of the School of Architecture NTUA Haris Vraka, Apostolis Karkasis, Athena Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Stranga, Maria Christodoulou having as object the register of the buildings of the settlement and selected architectural mappings.

The editing of the research material for this publication was undertaken by Maria Balodimou, Dr. Architect Engineer NTUA, Scientific Secretariat of the MSc "Protection of Monuments", Iris Polyzou, Sociologist, Dr. NTUA, Scientific Secretariat of the MSc "Protection of Monuments" and Polina Prentou, MSc Architect-Urban Planner Engineer, PhD Candidate NTUA. The processing of the maps was done by Maria Balodimou. The scientific responsibility was held by the Director of the MSc Professor Nikos Belavilas.

#### Acknowledgements

Warm thanks are expressed to Professor NTUA Dimitris Kaliampakos for his contribution to the promotion of scientific action in Agrafa, to Emeritus Professor NTUA Eleni Maistrou for the lessons of integration into historical ensembles, to Emeritus Professor NTUA Manolis Korres for his observations on the findings of the hill of Agios Georgios, to Emeritus Professor NTUA Theodora Rontogianni for her guidance in the geology and seismotechnical approach of the area, to the Director of Research of the Institute of Technological Research/ITE-Dimitris Dimitropoulos and to the Professor of the Department of History and Archeology of the University of Crete Ilias Kolovos for their comments and guidance in locating the Ottoman sources.

The completion of the research would not have been possible without the substantial cooperation with the Mayor of Agrafa, Alexis Kardampikis, and the Deputy Mayor, Anetta Kotrona, as well as with the President of the Vianiani Community, Pantelis Mantis. Significant assistance was provided by the Building Service of the Municipality of Karpenisi and the architect Valia Kati, from the Earthquake Victims Archive of the Technical Works Directorate of the Region of Central Greece and Christina Bania, from the civil engineer Christina E. Feggouli and civil engineer Giorgos Delis of the Technical Service of the Municipality of Agrafa, as well as from the staff of the Army History Directorate and the library manager Eleni Vobiri. We thank them.

The research could not have been completed without the warm hospitality of the large university research team in Vianiani, Krenti and Eastern Fragista, but also without the continuous valuable support with information and assistance in the field from Christina Gantzoudi-Sklapani, Kostas and Dimitris Monias, Giorgos and Grigoris Papageorgiou, Taxiarchis Tsiakos. A large part of the recording of the data found in Vianiani is also due to them.



# 1 Historical data of a long residence - the human geography of Viniani

## 1.1 The Hellenistic antiquity

Viniani is located on the eastern borders of ancient Aetolia. Throughout the residential complex, from Acheloos to Megdova, a total of 61 archaeological sites of remains have been identified. Among them, about forty ancient settlement sites of classical, Hellenistic and Roman antiquity, and five sites of early Christian and Byzantine antiquity. These are settlements, fortifications, cemeteries with their historical range reaching up to the Middle Ages. In the late Byzantine and Ottoman periods, the monasteries and the two bridges - "of Manolis" in Acheloos and of Viniani in Megdova - are the most characteristic and intact examples of human presence in Agrafa.

Archaeological research has a past in the Aetolia zone and has touched the area of Viniani. Important works, such as William Woodhouse's in 1897 and the program of the Dutch Archaeological School in Athens Aetolian Studies Project<sup>6</sup>, tried to record sites, networks and settlements.

The inhabited sites of antiquity, according to research, appear to occupy as a rule a space in which there is the possibility of exploiting the land with simultaneous access to water. The different locations tend to follow a specific spatial pattern. The ancient settlements are located on hilltops, the villages of the late Ottoman period often occupy mountainous locations as well, while finally the early modern villages are located in more accessible places.

The results of the large historical-geographical research of Aetolian Studies were published in 1986-1987. As the Dutch team reports in 1987:

We located, mapped and photographed the ancient fortifications, which are preserved in the Agia Eleousa Granitsa position, in the Paliokastro and Tsouka Palaikata positions, on the hill of Agios Georgios Palia Viniani, in the Prophet Elias Fournas position, in the Glas Hochlion position and in Mavrologos".

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Aetolia according to the archaeological literature is defined as the area from the Giώνα mountain range in the east to the Corinthian Gulf in the south and from the Acheloos river in the west to the peaks of Mount Tymfristos in the north. See Bintliff, J., Bommeljé, S. et al. (1987). *Aetolia and the Aetolians: towards the interdisciplinary study of a Greek region*. *Studia Aetolica* 1. 176 pages, 17 figures. 1987. Utrecht: Parnassus Press, p. 9. Woodhouse, William. J. (1897). *Aetolia; its geography, topography, and antiquities*. Available at <<https://archive.org/details/aetoliaitsgeogra00wood/page/300/mode/2up?view=theater>>

Research under the auspices of the Dutch Archaeological School in Athens and with the approval and authorization of the Ephorates of Antiquities of Delphi, Patras and Lamia. The program was supported by the Department of Ancient History of the University of Utrecht and by the Department of General History of the University of Leyden. See Bintliff et al. (1987), op. cit., p. 9. Bintliff et al. (1987), op. cit., p. 21.

<sup>6</sup>AD 41 (1986): *Chronicles*, p. 75 and AD 42 (1987): Part B' 1 - *Chronicles* p. 240.

The existence of a fortified settlement in the location of Tourkou or the remains is also mentioned ancient wall, with the assumption that it is a settlement of the ancient Aperantians. The location "Tourkou" or "Turkey" is located on the route between Nea Viniani and Kerasovo.

Successive publications of findings are also available from the Archaeological Service.

In particular, based on the reports, in Nea Viniani, finds from a medieval tomb from the location "in Panagia" (bronze bracelet, ring, earring) were collected and subsequently handed over to the 7th Ephorate of Byzantine Antiquities. Ruins of a late Byzantine (?) - post-Byzantine settlement were found, which are preserved on the "Keramida" hill. In the location "Livani", a subsidence of the soil revealed the existence of ceramics (pieces of pithos, round handles of vessels). In Palaia Viniani, Evrytania, the well-known section of the wall in the location of Agios Georgios is preserved, but there are and other ancient ones near the cemetery.<sup>12</sup> Finally, William Woodhouse, at the end of

19th century, searching for ancient forts in his research, he mentions that between the Agrafioti River and the Megdova River, no Palaiokastros is encountered. Along with other locations, he also lists a region between Kerasovo and Viniani as a possible one, with the only data being the toponym Palaionastiro or Palaioyklisi, which the locals have given - but he emphasizes that the only visible thing there is some ancient stones.

With the present research, the previous studies mentioned above regarding the historical development of the settlement of Viniani are confirmed. There is a long duration of habitation of Viniani, with its center being located outside the current area of the settlement and the hill of Agios Georgios. This historical duration extends from the Hellenistic Period.

During the Ottoman period, Viniani appears in the census of 1454-1455, just two years after the fall of Constantinople, as one of the large settlements of Agrafa. In the next century, in 1525, the Treaty of Tamasiou was signed between the Beyler Bey Pasha of Larissa and the elders of the villages of Agrafa, which seems to have contributed to the residential development of the mountainous area. Later, in the second half of the 18th century, Viniani is encountered again as

<sup>9</sup>Bintliff et al. (1987), op. cit., p. 112.

<sup>10</sup>The Aperantians are an Aetolian tribe that occupied the valley of the Megdova River. The narrow strip between the Megdova River and the Agrafioti River is considered to have been the land of the Aperantians, which was protected on both sides of the rivers. Remains of ancient settlements have also been found in Kerasochori, next to Viniani and elsewhere. See Stergiopoulos, K. (1939). *The Ancient Aetolia, Historical-Geographical Study, With Maps and Images*. Ed. Dimitrakou, p. 85.

<sup>11</sup>AD 42 (1987): Part B' 1 - Chronicles Plate 139 β.

<sup>12</sup>AD 42 (1987): Part B' 1 - Chronicles Plate 140 α.

<sup>13</sup>Woodhouse William. J. (1897), op. cit., p. 300

<sup>14</sup>Her specific reference in the catalog is with the code name HAB, which notes settlement locations, including non-permanent inhabited fortifications. In the catalog, the dating is done with the code (HL?) HL = Hellenistic period. See Bintliff et al. (1987), op. cit., p. 66 p. 112.

property of the Serasker of Rumelia which was transformed into a vakfi (religious dedication).

Parallel to the residential development, the existence of a large number of monasteries in Agrafa starts from the late Byzantine period in Tatarna and culminates in the 17th century. The

This last phase was mainly caused by monks from Meteora and Mount Athos, who were the founders of the new monasteries in the mountains. reference to

an unknown, burnt monastery in Viniani could not be confirmed. The image of the monasteries of Agrafa is also seen through their destruction during the third year of the Greek Revolution. In mid-1823, a large Turkish invasion began, as part of an effort to crush the uprising in Agrafa. Mustais Pasha of Shkodra entered the mountainous area from the west, from Tatarna. The expeditionary force burned at least seven monasteries and churches along the way to Tymfristos, and arrived in Viniani where the burning of a monastery is also mentioned. This information cannot be confirmed. Subsequently, Mustais Pasha of Shkodra crossed the Megdova and arrived, via Stenoma and Agios Athanasios, in Karpenisi.

## 1.2 The fortified hill of Agios Georgios

The hill of Agios Georgios is located on a steep, protected rocky peak. It dominates the gorge of Megdova, the bridge and the passage of Agrafa. It was fortified during the Hellenistic period and inhabited during the Middle Ages and the Ottoman period. It was abandoned around the end of the 18th or the beginning of the 19th century. Then the settlement was moved 450 m. to the northwest, in a gentler landscape, with water and accessible slopes, to the current old settlement of Viniani.

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<sup>15</sup>Vokotopoulos, A. (2008). History Of New Hellenism, Volume B', Turkish Rule (1453-1669), ed. Herodotus, p. 232 and A.D. (1963), p. 185 and A.D. (1986), pp. 94-5

<sup>16</sup>Tasios, G. (2009). "The Battle at Kefalovryso Karpenisiou and the death of Markos Botsaris 8-9/8/1823". Evrytanika Chronicles T. 31, pp. 44-49.



Image 1-1. The hill of Agios Georgios. Source: NTUA research team, 2023.

The on-site surveys of the NTUA research team highlighted the position of the steep hill of Agios Georgios, 300 meters from the last houses of Viniani, in the southeast as the oldest settlement point. The top of the hill is at an altitude of 545 m. From its three sides, north, east and south, it is surrounded by rocky precipices that fall to the Megdova, at an altitude 200 m lower, while to the west a relatively smoother narrow neck leads to the settlement's cemetery which is located right at the base of the hill, 20 m lower than the top. This peak, in a position with particularly strong natural fortification, dominates the entire valley, overlooking the bridge of Viniani and the old Tymfristos-Agrafa road.



Image 1-2. The top of Agios Georgios hill. The small church of 1955 and the newer enclosure are visible. Source: Orthophotograph of the NTUA research team, 2023.

On the top of the hill is built the small single-aisled church of Agios Georgios. It was built after the end of the Civil War, in 1955. Above the lintel there is a built-in marble engraved inscription "DONATION OF THE FAMILY EVAG. S.

KARAGEORGOU AND KONST/NOU AND ARETI NIKOPOULOU IN MEMORY OF THEIR SON GEORGIU 20 – S/VRIU 1955 ». The sanctuary is separated by a simple wooden iconostasis

construction with hagiographies of the same era. The icon of the Virgin Mary that flanks the left side of the holy gate bears the signature "Tzovanakis" on the bottom right and bottom left "DEDICATION OF GEORGIU K. ROGKATSOU 1956". On the back side of the wooden iconostasis there is a handwritten inscription in pencil "Dimitrios Andreakis Priest June 26, 1955".

It is a small dromic church that, according to Andriani Diagouma, belongs to a variation of the type of simple, compact, tiled cruciform

registered church. <sup>17</sup>The church is built near the site of an older one, which is mentioned at least from the end of the 19th century. <sup>18</sup>Specifically, in the eastern side of the hill - almost in contact with the steep rock of the top of Agios Georgios - the foundations of the older church of Agios Georgios were preserved until about fifty years ago, dissolved with the opening of the dirt road and the plateau in that position. At a distance of about 80 meters to the southeast, on the steep slope and at a lower altitude, in the position "Tsouknides" the foundations of a small church of Agios Nikolaos are preserved, still visible from the top of the hill.



Image 1-3. The stone heap with the traces of the masonry (semi-hewn and hewn building stones) of the small church of Agios Nikolaos in the location "Tsouknides", on the southeastern slope of the hill of Agios Georgios. Source: NTUA Research Team, 2023.

The church of Agios Georgios is surrounded by an enclosure with a polygonal plan on the edge of the rocky peak. On the back side it has the form of a fortification which has collapses in places. The sides of the wall towards the west and the entrance of the church are modern plastered masonry. However, at their junction on the northern back side of the sanctuary, the new wall follows the layout and foundation of the old one and

<sup>17</sup>Andriani Diagouma, Civil Engineer A.P.Th, MSc Protection, Maintenance and Restoration Monuments of Culture, AUTH "The traditional church building of old Vinians of Agrafta - Macroscopic recognition" at

<https://imkarpenisiou.gr/%CF%80%CE%B1%CE%BB%CE%B1%CE%B9%CE%B1-%CE%B2%CE%B9%CE%BD%CE%B9%CE%B1%CE%BD%CE%B7/>

<sup>18</sup>Agios Georgios is marked a short distance from Viniani on the 1884 map.

<sup>19</sup>Informant K., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023.

continues as unplastered stonework. The perimeter on its eastern side is much older than the temple, and this probably applies to the western side as well, while the wall has undergone repair and plastering. Recent modifications and the opening of a rural dirt road have significantly altered the landscape of the surrounding area and make it difficult to recognize the original form of the wider peak. Nevertheless, its rocky end with the built enclosure behind the sanctuary, on the steep edge of the rocks, in an inaccessible place and higher than the level of the church courtyard, gives the image of a simple fortified construction.



Image 1-4. The traces of the fortified enclosure on the hill of Agios Georgios. Below it to the east, there is mention of the existence of ruins of the older temple which were destroyed with the recent opening of the agricultural road. Source: NTUA Research Team, 2023.

At a lower altitude, on the southern slope, foundations of buildings and fragments of simple Byzantine tiles appear in three places, on the slopes of the agricultural road. In particular, the imprints identified flattened pavers, which were combined with narrower cover tiles. References to both the fortification elements and the scattered ceramics in the ground are also found in the publication of the Holy Metropolis of Karpenisi for Viniani.

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<sup>20</sup>Andriani Diagouma, op. cit.



Image 1-5 and Image 1-6. Foundations of buildings in the "Tsouknides" location of Agios Georgios hill. Source: NTUA Research Team, 2023.

That steeply sloping hillside of the peak of Agios Georgios is estimated to be the location of the oldest settlement. It extended in the area that has the toponym "Tsouknides", from the neck after the cemetery, on the western and northern side that overlooks the Mega Rema and the path to Livadia. Lower in the gorge of the Megalos Rema, towards the Megdova, there were two watermills and a fulling mill.



Image 1-7. Fragments of tiles that were found superficially scattered in the "Tsouknides" location of Agios Georgios hill. Source: NTUA Research Team, 2023.

At the same height where the foundations of buildings and fragments of tiles were found, towards the neck of the cemetery, on the western side of the hill, a section of wall with three rows of stones and a length of about seven meters is preserved. Remains of the wall

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<sup>21</sup>Informants G. and D., residents of Nea Viniani. Interview with N.B. on 2.7.2023.

are scattered around the perimeter. There are several indications of a landslide of the overlying rock, which probably destroyed part of the wall. In the publications of 1987,<sup>22</sup> the wall is characterized as Hellenistic, while more recent estimates give the possibility that it can be placed chronologically in a larger range from the period before the 4th century BC to the Roman era. In combination with the many identified Hellenistic sites in neighboring areas, the safest dating based on the data of the research so far is that of the Hellenistic period.



Image 1-8 and Image 1-9. Extensive building foundations in the form of piles of ruins are scattered superficially on the hill along with pottery. The agricultural road and soil erosion have destroyed several parts of them. Source: NTUA Research Team, 2023.

At the base of the hill to the west, where it flattens out and transforms into a saddle towards the opposite slope, is the cemetery of Viniani. A section of an ancient member with a band of relief heart-shaped ivy leaves is embedded in the perimeter of the cemetery. Nearby,

a section of an ancient building block with a horizontal band of teeth from a building corner was recently discovered. The teeth resemble cornices, but the large profile is not a cornice, or part of a cornice. If it really comes from an upper end, it is a coping. Nevertheless, the specific profile (cyma recta) characterizes bases much more often than copings. The findings show that beyond the wall of the Hellenistic period, as well as the possible makeshift newer fortification of the top of the hill, there was one or more buildings during antiquity, as well as during the Byzantine era and in more recent times.

<sup>22</sup>AD 42 (1987): Part B' 1 - Chronicles Plate 139 β

<sup>23</sup>AD 42 (1987): Part B' 1 - Chronicles Plate 140 α



Image 1-10. Viniáni, Evrytania. Agios Georgios Hill. Section of the Hellenistic wall discovered and published in 1986-1987 by the archaeological mission of the Aetolian Studies Project of the Universities of Utrecht and Leuven. Source: AD 42 (1987).

Northwest of the cemetery, at a short distance, a foundation of a low wall is located, possibly an enclosure or base of the old path from the settlement to Agios Georgios. Behind it, small-scale landslides revealed insignificant cist graves with slate slabs.

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<sup>24</sup>Warm thanks are expressed to Emeritus Professor of NTUA Manolis Korres for his observations on the findings of Agios Georgios hill.



Image 1-11. The remains of the Hellenistic wall of Agios Georgios in their current state. Source: NTUA Research Team, 2023.

From the above, and from the findings of the wider area of Viniani, it is safely concluded that there was a long habitation of the area of Agios Georgios hill. A settlement with some type of fortification in both the Hellenistic period and in more recent times, with built traces of antiquity and the Byzantine period and an older cemetery dominate above the gorge of Megdova, the bridge of Viniani and the old Tymfristos-Agrafa route. This position is overlooking and has strong natural fortification.



Image 1-12. Embedded section of an ancient member with a band of relief heart-shaped ivy leaves as found by the archaeological team of the Aetolian Studies Project and published in 1986-1987. Source: AD 42 (1987): Part B' 1 - Chronicles Plate 140 a.

Image 1-13. The same marble member in its current state in the same position, is embedded in the perimeter of the cemetery. Source: NTUA Research Team, 2023.

This settlement was abandoned at some point in modern times and the inhabitants moved to a better location, that of the old settlement of Viniani. The absence of an older core in the settlement of Viniani - which dates back to before the 19th century - reinforces this version. The reasons for the relocation may be due either to the elimination of the need for fortification or to the epidemics that plagued Agrafa in the early 19th century.



Image 1-14. Ancient architectural member of a building with a rectangular narrow glyph next to the Hellenistic wall of Agios Georgios. Source: NTUA Research Team, 2023.



Image 1-15. Ancient cauldron-shaped architectural member with a band of teeth, which was recently moved from the hill of Agios Georgios and placed next to the monument of Nea Viniani. Source: NTUA Research Team, 2023.

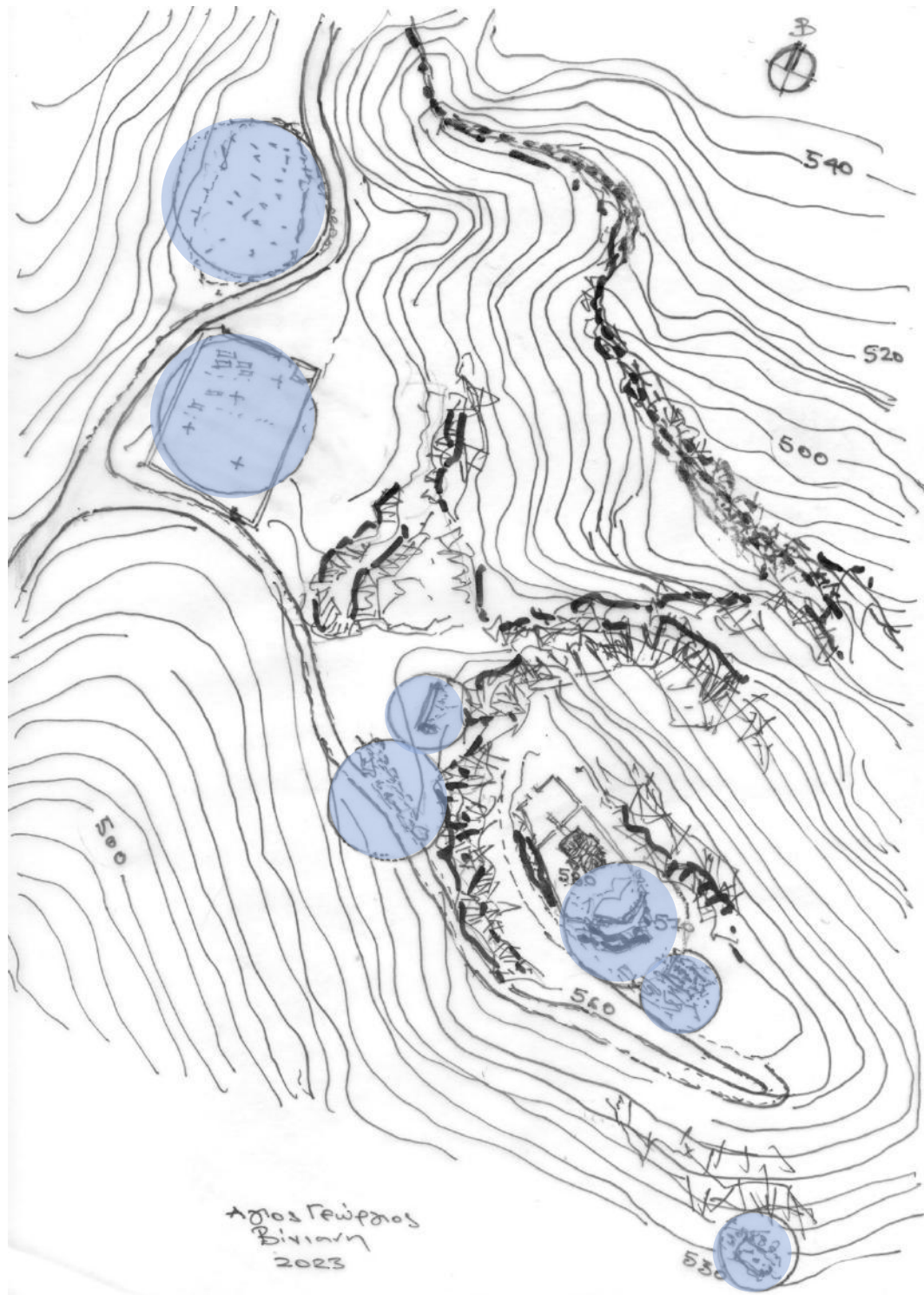


Image 1-16. The ancient traces, where they are located on the hill of Agios Georgios and in the cemetery of Viniani. Processing: NTUA Research Team, 2023.

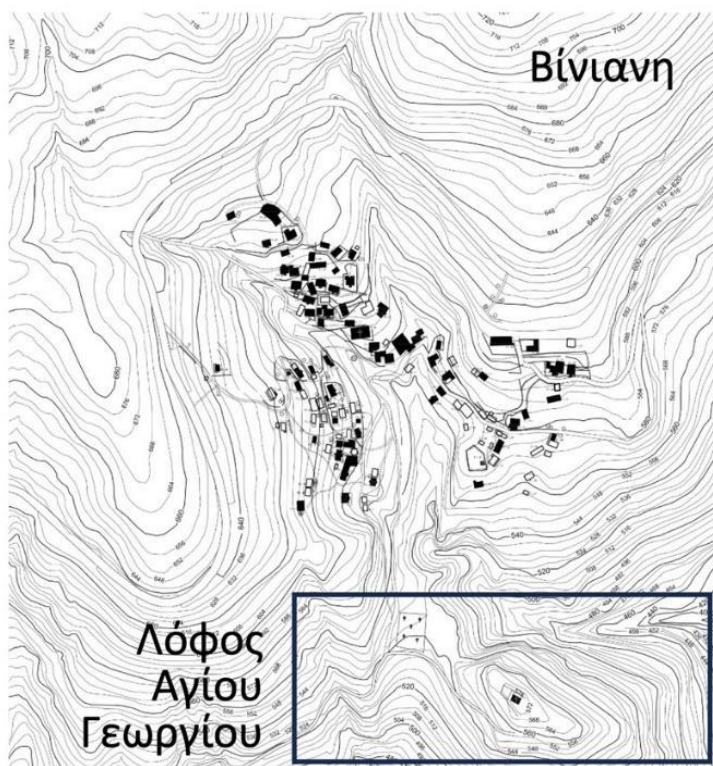
This assumption is reinforced by a handwritten note found in the documents of the priest of the settlement, Dimitrios Kanteres. It states that the first settlement of Viniani was located in the place called "Tsouknides". The toponym, as already mentioned, is identified with the southern slope of the hill of Agios Georgios. In a manuscript, an epidemic of "cholera" (clarifying in the manuscript that it was plague) devastated the village and the inhabitants were moved to the new location of today's old Viniani. It also notes that this must have happened before 1650. However, at the same time it is clarified that the church-metropolis of the settlement, initially dedicated to Saint Athanasios and then to the Holy Apostles, was built in 1650-1655 and its old iconostasis in 1774. The inhabitants of Viniani report that the church was rebuilt in 1925 and again after the war around 1955. The old 18th-century bell tower remained in place.

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<sup>25</sup>Dimitrios Kanteres, priest, born 1926, died 2020

<sup>26</sup>Informants G. and D., Nea Viniani. Interview with N.B. on 2.7.2023.

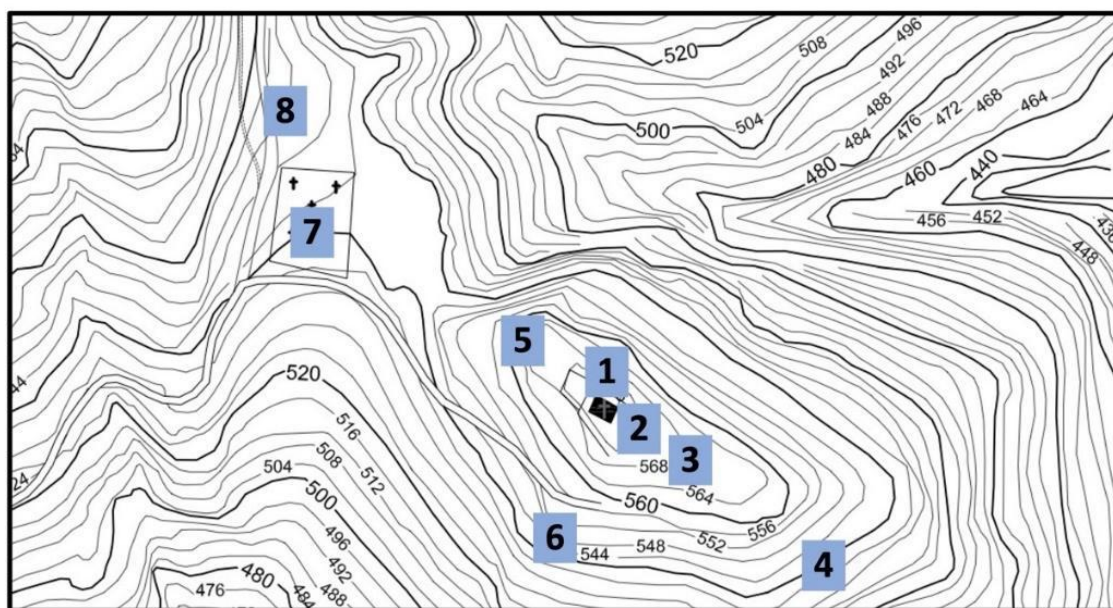
<sup>27</sup>Informants K., G. and D., Nea Viniani. Interview with N.B. on 2.7.2023.



## Λόφος Αγίου Γεωργίου

### ΥΠΟΜΝΗΜΑ

1. Ναός Αγίου Γεωργίου
2. Οχυρός Περίβολος
3. Παλιός Ναός Αγίου Γεωργίου (κατεστραμμένος)
4. Ναός Αγίου Νικολάου (κατεστραμμένος)
5. Ελληνιστικό Τείχος
6. Θέση «Τσουκνίδες»
7. Νεκροταφείο
8. Παλιό Νεκροταφείο (κατεστραμμένο)



Εργαστήριο Αστικού Περιβάλλοντος ΕΜΠ, Οκτώβριος 2023

Map 1-1. The hill of Agios Georgios. Background: National Cadastre and Hellenic Military Geographical Service. Processing: NTUA research team, 2023.

### 1.3 The plague epidemics as a critical element of the desertification of settlements in Agrafa of the 18th century

The successive desertions of villages in mountainous Greece and especially in Agrafa have been the subject of historical research since 1979, when Eleni Antoniadis-Bibikou published her article "Deserted villages in Greece, a temporary account".<sup>28</sup> She also mentioned the case of desertion of villages as

"relocation of the inhabited space, even very close, which leaves behind an abandoned space."<sup>29</sup> This also happened in old fortified settlements when

the conditions for lifting the risk of attack were created. The inhabitants abandoned the walled and inaccessible communities, moving to better locations with plenty of space and greater ease of access.

The Agrafa region had 300 Greek and Turkish villages at the end of the 18th century, while in the mid-19th century it had only 64.<sup>30</sup> As for the case of desertification

of settlements in the prefecture of Evrytania, the same research records 23 villages that existed before the mid-19th century and have not been located spatially, while another 103 continue to exist.<sup>31</sup>

Evening out the names can indicate a problem in the locating and identifying old settlements. It is mostly covered by the collective memory which preserves the old names, as well as by the older maps of the 19th century.

The causes of desertification seem to be many. The changes in conditions and the lifting of dangers from wars or robbery, the movements of populations towards urban centers and, with certainty, the pandemics which were endemic throughout the 18th and early 19th centuries in the region played a central role in the desertification of settlements that are recorded. In particular, local legends mention that an epidemic - which is also referred to as "cholera" - led to the desertification of Viniani. The manuscript of the priest D. Kanteres also records the same.<sup>32</sup>

This is one of the many plague epidemics that spread in Thessaly and Evrytania before the War of Independence.<sup>33</sup>

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<sup>28</sup> Antoniadis-Bibikou, Eleni (1979). "Deserted villages in Greece, a temporary account" in Spyros Asdrachas (ed.). The economic structure of the Balkan countries (15th -19th century). Athens: Melissa Publications, pp. 195-259.

<sup>29</sup> Antoniadis-Bibikou, Eleni, op. cit., p. 198.

<sup>30</sup> Antoniadis-Bibikou, Eleni, op. cit., p. 198.

<sup>31</sup> Antoniadis-Bibikou, Eleni, op. cit., p. 198.

<sup>32</sup> Antoniadis-Bibikou, Eleni, op. cit., p. 223.

<sup>33</sup> Dimitrios Kanteres, op. cit.



Image 1-17. The Vinians cemetery at the base of Agios Georgios hill. Source: NTUA Research Team, 2023.

Specifically, from the mid-18th century, successive waves of epidemics plagued Constantinople and the Greek peninsula (1742, 1759-1760, 1787). In 1812 a wave of plague broke out in Constantinople, extended over the next two years to Smyrna (1812-1814) and from 1813 spread to the Aegean and Thessaly. In 1813-1814, the epidemic reached Evrytania and lasted until 1816, causing the desertion of a large number of Agrafa settlements.

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<sup>34</sup>Kostis, Kostas (1995). In the time of the plague. Images from the societies of the Greek peninsula, 14th-19th centuries. Heraklion: University Press of Crete and Antoniadis-Bibikou, Eleni, op. cit., pp. 203, 220.



Image 1-18. The gate of the Vianni cemetery. Source: NTUA Research Team, 2023.

Although there are no numerical data for the mountainous zone, the effects of the disease on the plain and the settlements of Thessaly were recorded by European travelers. The plague was so strong that it devastated the large city of Tyrnavos, a commercial passage of Thessaly to Macedonia causing 8,600 deaths. The epidemic is described in detail by the French traveler himself Pouqueville, referring to the destruction in the large cities of the plain and in the mountainous area. He notes that from 1814-1819 one sixth of the population of Epirus and one fifth of the other regions was wiped out. it is considered to have had a similar impact on the villages of Agra fa with large population losses.

#### 1.4 Population changes from the 15th to the 20th century

Concise population development of Vianni

A first and unique population element is preserved and refers to Vianni, the historical moment of the end of the Byzantine Empire, through an Ottoman tax edger. The sources are missing during the next centuries.

<sup>35</sup>Kostis, Kostas, op. cit. and Antoniadi-Bibikou, Eleni, op. cit., pp. 195-259.

<sup>36</sup>Poukevil, F.K.O. (1994). Travel to Greece-Epirus . Athens: Afi Tolidi Publications. See also Korasidou, Maria (2002). When the disease threatens. Athens: «typothito» Publications, G. Dardanos and Eleftherotypia, Historical Magazine (September 20, 2001). «Plague - The Black Death». Issue 101/2001.

They reappear at the end of the 18th century and are systematized at the end of the 19th century.

The Ottoman censuses record households or, in one case, tax-paying rayahs, i.e. heads of households. The average household during the period from the 15th to the 18th century in the Greek hinterland is estimated at 4.5-5 people. From the Capodistrian period until today, the censuses record individuals. Based on these data, an attempt is made below to reconstruct the population evolution of Viniani.

| Year      | Residents | Households   |
|-----------|-----------|--------------|
| 1454-1455 | ~1.100    | 228          |
| 1783      | ~500      | 106 (rayahs) |
| 1813      | ~200      | 42           |
| 1814      | ~230      | 48           |
| 1829      | ~190      | 40           |
| 1879      | 319       |              |
| 1889      | 373       |              |
| 1896      | 413       |              |
| 1907      | 330       |              |
| 1920      | 362       |              |
| 1928      | 477       |              |
| 1940      | 504       |              |
| 1951      | 368       |              |
| 1961      | 365       |              |
| 1971      | 189       |              |
| 1981      | 207       |              |
| 1991      | 196       |              |
| 2001      | 204       |              |
| 2011      | 130       |              |

Table 1-1. Population evolution of Viniani 1454-2011. (Sources: Delilbaşı, Melek and Arikan, Muzaffer (2001). Hicri 859 tarihli Suret-i defter-i sancak-i Tirhala / metni bir giriş ile nesredenler. Ankara : Türk Tarih Kurumu Basımevi and Mavromyitis, Anargyros-Giannis (2006). Karpenisi 1810-1820. Athens: Panevrytanian Union Edition, available at the KNE/EIE Library, Government Gazette of Population Censuses (1879-2011), E.E.T.A.A. A.E. - Hellenic Local Development and Self-Government Company <https://www.eetaa.gr/metaboles/apografes.html>)

The picture that emerges from the population analysis shows a large village with more than a thousand inhabitants at the time of the Fall of Constantinople. At the end of the Ottoman period, this number had halved, with approximately five hundred inhabitants. Then there is a sharp population crash to the size of two hundred inhabitants. It is likely that it is due to the plague epidemic that struck Agrafa in the early 19th century and the war situation that followed with the War of Independence. From the

In the last quarter of the 19th century, the population was steadily increasing, with small fluctuations due to migration, until it reached the size of the late Ottoman period again. The peak was at the beginning of World War II. This was followed by the post-war shrinkage, which led Viniani to the lowest number in its history at the beginning of the 21st century. One hundred residents who now live in the new settlement, having abandoned the cradle of old Viniani after the earthquakes.

Viniani from the 15th to the 19th century

Despite the myth of non-registration and taxation of Agrafa during the Ottoman period, the mountainous complex was registered in 1454-1455 (see *Defter-i Agra*, nefs-i Agra) were registered as zeamet of the kaza of Fanari (zeamet-i Agra tabi-i kaza-ı Fener), part of the sanjak of Trikala (Turkish sancak-ı Ottoman administrative subdivision analogous to today's region).

In the household census, <sup>39</sup> a total of 3,934 households are counted, of the entire province (vilayeti) of Agrafa with non-Muslims residing in 3801 households (97%) and Muslims in 133 households (3%).

Viniani (Viranyana) together with Kerasovo (Kirasova), <sup>40</sup> Chrysova (Hrusova) later Chryso or Chryso and 4 other villages that cannot be identified with modern ones; Bijila, Panyana (possibly Panagia), Kelçu, Petril (possibly Petrilo or Petrili) were large settlements with more than 100 households.

From the recording of tax revenues <sup>41</sup> it appears that the province of Agrafa contributed 170,448 aspers (akças), <sup>42</sup> 12% of the total taxes of the Sanjak of Trikala. <sup>43</sup> In particular, Viniani contributed 4,560 aspers, Kerasovo 4,640 aspers and Chryso 8,960 aspers.

The village's production included wheat, barley, viticulture, beekeeping, walnuts, sericulture, and watermills also operated.

The proportions of production based on taxation were as follows:

<sup>37</sup> Warm thanks are expressed to the Research Director of the Institute of Neohellenic Research/EIE Dimitris Dimitropoulos and to the Professor of the Department of History and Archeology of the University of Crete Elias Kolovos for their observations and guidance in locating the Ottoman sources.

<sup>38</sup> The tax register was written in the 859th year of the Hegira (1454-55) by Murat Bey, son of Timurtas Bey. Delilbaşı, See Melek and Arikan, Muzaffer (2001). Hicri 859 tarihli Suret-i defter-i sancak-ı Tirhala / metni bir giriş ile nesredenler. Ankara: Türk Tarih Kurumu Basımevi.

<sup>39</sup> Delilbaşı, Melek and Arikan, Muzaffer (2001), op. cit., p. XXIX

<sup>40</sup> There is a possibility that Kirasova is Keresova and not Kerasovo, i.e. the later Koufala or Dafni, which is previously mentioned by the same name. See Zarodimos, G. (2021), op. cit., p. 15.

<sup>41</sup> Delilbaşı, Melek and Arikan, Muzaffer (2001), op. cit., p. XXXIII, p. XXXIX-XXXII.

<sup>42</sup> The akçe (Turkish: akçe) was a currency of the Ottoman Empire. It was a basic means of transactions from the mid-14th to the mid-17th century. The name aspro comes from ak/white and the color of the metal of the coins.

<sup>43</sup> Delilbaşı, Melek and Arikan, Muzaffer (2001), op. cit., Table 1 p. XXXIII.

<sup>44</sup> Delilbaşı, Melek and Arikan, Muzaffer (2001), op. cit., Table 2 p. 273.

- Wheat (Hinta) 160 aspers
- Barley (Sair) 100 aspers
- Vineyards (Osr-I bag) 200 aspers
- Beekeeping (Osr-i-kovan) 30 aspers
- Walnut trees (Osr-I koz) 20 aspers
- Sericulture (Osr-I kokul) 10 aspers
- Watermills (Resm-I asiyab) 30 aspers

The table of tax revenues shows that the main agricultural activities were the cultivation of cereals (wheat and barley) and viticulture, while the watermills supported the processing of agricultural products.

Finally, the inhabitants of Viniani paid the land tax *ispence* for the conquered populations which was imposed on non-Muslims. <sup>45</sup>The *ispence* was calculated for Agrafta at 20 aspers per household and a total of 4,560 aspers for Viniani.

At that time, Viniani appears to have been one of the important settlements of the mountainous complex of Agrafta. The census of 1454-1455 recorded in the settlement 228 households (Hane), 50 single men (Muccered) and 2 widows (Bive).

Calculating the average household with 4.5-5 people, it appears that Viniani was inhabited by approximately 1,100 inhabitants at that historical moment, one year after the Fall of Constantinople and the dissolution of the Byzantine Empire.

The above raises a serious issue in the historical research for Viniani as it is revealed that in the early years of the Ottoman period, it was a settlement with more than a thousand inhabitants, much larger than that of the early 19th century and at least twice the size of the settlement of the mid-20th century.

The two known subsequent references to Viniani, in Ottoman documents, date three centuries later from 1743 and 1783. The settlement was a *vakıf* (Turkish *vakıf* real estate donation to a religious or charitable foundation).

A firman of the Sublime Porte, to the judge of the province of Karpenisi, reveals that Viniani was originally a fief of "Kalaskeri of Rumelia... who when he was alive, dedicated it by his document ratified and by Imperial decree to the Theological School of Traditions" in 1743. The translation from

Paleo-Turkish is likely to be wrong and the exact word is *Seraskeris* (General) instead of [Kal]askeris. Subsequently, Turkish officials, timariots of the neighboring villages of Kerasovo, Stenoma, Pavlopoulo, together with their inhabitants whom he refers to as "protected rayahs" encroached on the lands of the *vakouf* of Viniani. With the firman of 1783, their eviction and the return of the tithe tax to the legal beneficiaries are ordered. In the text

<sup>45</sup>The land tax existed in the Balkans since the time of the Byzantine Empire. It was called *zeugaratikion* and corresponded to the area cultivated by a pair of draught animals.

<sup>46</sup>Delilbaşı, Melek and Arian, Muzaffer (2001), op. cit., Table 2 p. 273.

<sup>47</sup>The documents were published in Mavromyitis, Anargyros-Giannis (2006). Karpenisi 1810- 1820. Athens: Publication of the Pan-Evrytanian Union, available at the KNE/EIE Library.

the boundaries of the Vakouf of Viniani, as well as the populations and tax revenues from the surrounding villages, are described in detail.

Thus, the information appears that:

"The village of Vhiniani consists of one hundred and six protected persons (rayahs) and sixteen other poor persons residing in the Lower district of the village of Stenoma, who pay a lump sum of one tenth of the cultivated places and other eight hundred and forty-six aspers noted in a special book for each married couple."

According to the translation of the firman, Kerasovo is inhabited by 410 people and Pavlopoulo by 27, while the village of Gioulcha is also included in the taxation. In the following old Ottoman censuses, Viniani is recorded with 42 tax units "haratsia" (approximately 200 inhabitants) in 1813 and 48 (approximately 230 inhabitants) in 1814.



Image 1-19. Viniani, Evrytania. Painting by Ioanna (Gianna) Xera.

After the Greek Revolution, and with the establishment of the Greek state in 1836, Viniani joined the Municipality of Agrafta with Kerasovo as its capital. A little earlier, during the Kapodistrian period, the settlement appears in a document of 1829 in the context of the first census reports of the newly established state;

Viniani belonged to the Politohoria with 25 settlements and was inhabited by 40 families (approximately 190 inhabitants).

The evolution of the village's population shows a shrinkage by half, from the beginning to the end of Ottoman rule, and then a sharp decrease in population at the turn of the 18th to the 19th century. Before 1783, the

<sup>48</sup>"List of the Province of Karpenisi. February 14, 1829. In Nafplio. Konstantinos Tsatsos", published in Mavromyitis, Anargyros-Giannis, op. cit.

encroachment of Vinians' land by timariots and residents of neighboring villages. It is unknown whether the Gate's order for their eviction was eventually implemented or not. This was followed by a decline in population, which could be justified by the plague epidemic that started in the area in 1813 and died out in 1816, and then by the war conditions of the period 1821-1829. After 1829, the population stabilized at its smallest historical size of about two hundred inhabitants.

The settlement of Viniani is probably noted for the first time on a map in 1851 with the toponym the same area, west of Karpenisi (Kirpinish the settlements Granitza, Kerassovo, Beisenitza and Kalivia are noted. The German cartographer Heinrich Kiepert in 1878 in a high-precision geographical representation notes Viniani (Viniani), and around it the settlements Stenoma (Stenoma Marathias (Marathias), Chryso or Chrysou (Khrysou), Kerasovo (Kerasovon), Fragkistes (Phrangkistas).

Several of the place names recorded in the censuses of the 18th century and the cartographies until the middle of the 19th century are a strong indication of the Slavic origin of some of the settlements, such as Viniani, Kerasovo, Granitsa, while these coexist with place names of Greek origin such as Stenoma, Pavlopoulou, Kalesmeno, Episkopi, Palaiochori, Neochori, Palaiokastros, etc. On the contrary, during that period in the mountainous area of Agrafa, Turkish place names do not appear, as is the case in the Thessalian plain. It is also noted that the relevant documents also contain special references to "Vlachochoria" or place names with the indication "Vlachs" in parentheses. Stenoma is also mentioned as having a Vlach presence.

A little later, in the Statistics of Greece of the year 1861<sup>50</sup>, the Province of Evrytania in the Aetolia-Acarnania Prefecture is recorded with 26,309 inhabitants. Its capital, Karpenisi, is home to 1/5 of the population, while the rest is located in mountainous settlements which make up six municipalities (current Agrafa] (4,652 inhabitants), Ktimenion (4,326 inhabitants), Parakampyllion (2,835 inhabitants), Aperantion (337 inhabitants), Arakynthion (2,703 inhabitants) and Kallidromiton (2,735 inhabitants). In 1884, on the Greek military map of Evrytania, Viniani and next to it the Church of Agios Georgios on the hill are noted, as well as Stenoma, Marathia, Chryso.

In the system of villages of Agrafa (Municipality of Agrafa) at the beginning of the 20th century, 13 villages (communities) belonged: Kerasovo, Viniani, Voulpi, Episkopi, Koufala, Marathia, Mavromatta (Elpani), Palaiokatouno, Palaiochori, Tripotamo (Tatarna), Eastern (Small) Fragkista, Western (Large) Fragkista and Chryso. The Municipality

<sup>49</sup>Rapkin, John (1851). Greece. (with) inset maps of Corfu and Stampalia. The Illustrations by A.H. Wray & Engraved by J.B. Allen. The Map Drawn & Engraved by J. Rapkin.

<sup>50</sup>Bafounis, Giannis (ed) (1991). Statistics of Greece. Population of the year 1861, In Athens 1862. Athens: PTI ETVA & Society for the Study of New Hellenism. Mnimon magazine.

<sup>51</sup>Bafounis, Giannis (ed), op. cit., p. 6, table 4.

<sup>52</sup> Great Greek Encyclopedia, entry "Evrytania"

Agraion was divided into the Municipality of Agraion and the Municipality of Agraion by the Royal Decree of 19.3.1876. Viniani remained in the old Municipality of Agraion.

From the beginning of the 20th century to World War II

Near the turn of the century, in 1896, Viniani is inhabited by 413 people (222 men and 191 women). In the following years, two factors led to a decline in the population: the long war period, which began with the Balkan Wars, continued with World War I and ended with the Asia Minor Campaign, and emigration. The decrease was reflected in the censuses: 330 inhabitants in 1907 and 362 inhabitants in 1920.

With the end of the wars, the shrinking trend was limited and the population increased again until the outbreak of World War II. In 1928 the village had 477 inhabitants (233 men and 244 women), while in 1940 it reached the highest population size of the modern era with 504 people (234 men and 270 women).

According to the particularly important research of Konstantinos Ath. Balomenos published in 2021, already from the end of the 19th century Viniani followed the wider trend of the Greek countryside, overseas migration to the USA. From the oral material collected by the NTUA research team, it appears that smaller migratory movements preceded to Constantinople, Egypt and other major European cities.

The research on migration to the USA was based on the American archives of Ellis Island and identified 94 people who moved in the first four decades of the 20th century - and especially from 1898 to 1939. This is ¼ of the number of inhabitants of the village who left during about a generation. It is also probable that the number may be much larger, as several declared one of the cities as their place of origin and not their village. The causes of the mass exodus are no different from those that caused migration in the Greek countryside and throughout the Mediterranean south. Especially in Viniani, these can be attributed to the inaccessible topography of the area, the poverty of the rural population and the limited employment opportunities.

The migrants were men - with the exception of three women, aged from 12 to 58 years old (average age 31 years), mostly married. A total of 52 trips were made (17 group and 35 individual), with the years of mass migration being 1920 (11 people) and 1906 (10 people). They boarded ocean liners mainly in Patras, fewer in Piraeus or in the ports of Le Havre, Naples, Cherbourg and Trieste. As places of installation in

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<sup>53</sup>Government Gazette Population Censuses (1879-2011), E.E.T.A.A. S.A. - Hellenic Company of Local Development and Self-Government <https://www.eetaa.gr/metaboles/apografes.html>

<sup>54</sup>See in detail Balomenos Ath. Konstantinos, «From Viniani Evrytania, migrants to America (1898-1939)» [online], available at <<http://amfictyon.blogspot.com/2021/01/1898-1939.html>> [last accessed: 28.05.2023]

<sup>55</sup>Informant K., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

America, mainly chose the state of New York (49%) and Virginia (15%). The rest were scattered throughout the country (North and South Carolina, West Virginia, Texas, Maryland, Kentucky, Pennsylvania). About half of the immigrants were declared as workers. However, there was also a large part of the immigrants who were employed in the field of catering and hospitality or trade and acquired fortunes.

The descriptions even today, a century later, confirm that married men left their families in the village, with women heading the households, referred to as "American women". The families were supported by the remittances of the men. This shaped a peculiarity in the microeconomy of Viniani. Within the agricultural and barter society of Viniani of the Interwar period, the "American women" were the only ones who introduced money into the settlement, activating the trade of a small number of shops that operated during that period and until the end of the old Viniani in 1966. At the same time, it seems that this population of expatriates caused a residential boom with the construction of new houses that were expensive for the economic standards of the time, as will be analyzed below.

#### The toponym Viniani

The name of the settlement is encountered in various variations from the 15th century to the present day. The first known reference appears in the Ottoman tax census of 1454 and is Viranyana. As Viniani or Vhiniani it is encountered in documents already from the 18th century, and in maps as Vinganna in 1851, Viniani in 1878 and Viniani in 1884. According to Giorgos Zarodimos,<sup>57</sup> the oikonym (settlement toponym) Viniani comes from the Slavic Vinjane which means "the winegrowers, the vine growers". The word Vinjane is formed from the Slavic word vino, which means wine and the Slavic suffix – jane or – jani which denotes the residents of a place.

This explanation clashes with the older toponym Viranyana which was identified in the census of 1454, a shortening of which is Vinjane/a as is the final Viniani. It is possible that the original Viranyana is also of Slavic origin. Moreover, in the complex of settlements around Viniani, Slavic toponyms abound, which together make up 23% of the known toponyms in the entire Municipality of Agrafa.

<sup>56</sup>Balomenos Ath. Konstantinos, "From Viniani Evrytania, immigrants to America (1898-1939)" [online], available at <<http://amfictyon.blogspot.com/2021/01/1898-1939.html>> [last accessed: 28.05.2023]

<sup>57</sup>Zarodimos, G. (2021). The oikonyms of the Municipality of Agrafa Evrytania. Athens p.7.

<sup>58</sup>According to the research, 57.29% are of Greek etymological origin, 22.92% are

of Slavic origin, 3.12% are of Vlach origin, 3.12% are of Turkish origin, 1.04% are of Italian origin and 12.50% are of disputed origin. Zarodimos, G. (2021), op. cit., p.32.

### 1.5 Italo-German Occupation, National Resistance and Civil War

With the spread of World War II in Greece, the operations of the Italian and German attack on Greece from October 1940 to April 1941 took place further north, in Epirus and Macedonia, and did not reach Agrafa.

The war events approached mountainous Evrytania from the beginning of 1942, when guerrilla groups began to operate in Roumeli and Agrafa. The two main partisan forces, E.L.A.S., which was founded in February 1942, with an area of action in the first phase in the central mountainous country, and E.D.E.S., which appeared in July of the same year in the villages of Valtos, expanded their action by creating "free" areas in mountainous Greece in an area that started from Giona in the south and reached the mountains of Trikala in the north. At the end of the war, "Free Greece" covered almost all the mountains throughout the Greek territory, while the guerrilla groups were staffed with 60,000 fighters (50,000 E.L.A.S. and 10,000 E.D.E.S.). The most important field of action of the guerrilla warfare, as well as of the missions of the Allies throughout the occupation by the Axis forces, were Roumeli and Agrafa. E.L.A.S. in the last phase of the German Occupation, in 1944, had in the wider area the XIII Roumeli Division with the 34th and 36th Regiments, headquarters, staff, artillery company, engineer company, hospital, communications company and approximately 6,500 guerrillas.

Vinians from early on was a major hub for the movements of E.L.A.S. and the British Allied missions, and the area west of Acheloos and Megdova was the field of the strongest appearance of E.L.A.S. The Allies participated in the guerrilla operations with small groups, the first being the British one which settled in occupied Greece immediately after the German invasion. The British were followed by the Soviets during the last year of the war. The guerrilla warfare of E.D.E.S. spread further west in the area of Valtos and then in the wider zone of Epirus.

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<sup>59</sup>See Collective (1964). To arms to arms. The chronicle of the struggle. History of the National Resistance. (four volumes), Giannikos, Athens, p. 278 and Album from the archives of the XIII division Roumeli, Reprint from the 1944 edition edited by Georgoula Beikou. Publications Pegasus, n.d.

<sup>60</sup>Eudes D. (1972). The Kapetanios: Partisans And Civil War In Greece, 1943-1949. Verso, p. 17.

<sup>61</sup>For Vinians in the Occupation and in the National Resistance 1941-1944 see  
Marinos, Th. (1994). Harling Mission - 1942. The Gorgopotamos operation. Papazisi, Athens.  
Meletzis S. (2002). With the partisans in the mountains. Athens: Private Edition.  
Dasios, T. (1998). In Agrafa. Miletos, Athens,  
Skalidakis, G. 2014. Free Greece, The power of EAM during the Occupation (1943-1944). Asini, Athens.  
Woodhouse, C.M. (2021). The Apple of Discord. Greece: The troubled decade (1940-45). Minoas. Athens  
Eudes D. (1972). The Kapetanios: Partisans And Civil War In Greece, 1943-1949. Verso.  
Collective (1964). To arms to arms. The chronicle of the struggle. History of the National Resistance. (four volumes), Giannikos, Athens.



Image 1-20. In a house in Viniani, the painter Valias Samartzidis paints the rebel black-capped Leontas under the gaze of Aris Velouchiotis, while Spyros Meletzis immortalizes the scene. Source: Meletzis S. (2002). *With the rebels in the mountains*. Athens: Private, p. 80.

On November 7, 1942, the leaders of E.L.A.S. and E.D.E.S. under Aris Velouchiotis and Napoleon Zervas, together with the heads of the British Mission, met in Viniani and agreed to organize the sabotage of the Gorgopotamos railway bridge bombing. The operation was successfully carried out on November 25, 1942.

Ten days after the sabotage, the first significant large-scale clash between E.L.A.S. rebels and Italian forces is recorded in the wider area around Viniani. It was the first of two devastating attacks in which a large part of the village was burned. The Italian -and later German- forces needed a large volume of troops to prevail in the mountainous rebel-held areas. Narratives speak of two campaigns of 3-5,000 men. The first in 1942 and the second in 1944.

The Italian attack lasted from December 4 to 12, 1942. Their goal was to exterminate the guerrilla nucleus which was operating with its center in Stenoma, in the gorge of Megdova. Three military columns -from Agrinio, from Amfilochia and from Karpenisi- converged towards the heart of the mountainous area, towards

<sup>62</sup>See in detail Marinos, Th. (1994). *Harling Mission – 1942. The Gorgopotamos operation*. Papazisi, Athens and Collective (1964). *To arms to arms. The chronicle of the struggle. Historical of National Resistance*. (four-volume), Giannikos, Athens, pp. 118-121.

the villages of Fragkista, Kerasovo, Stenoma and Monastiraki Agrafon. They camped in the meadows of Vinians, while in Stenoma there was a force of about one hundred rebels led by the village teacher Vasilis Priovolos (Captain Hermes). The great clash took place in the village of Chryso with losses for the Italians, which the testimonies raise. The Italians remained camped in the Nimatia position and returned on December 7. They attacked Chryso and set it on fire. According to the narrations, eighteen houses, two old churches and the school were burned in Chryso. They continued towards the village of Agrafa, which they burned on December 10, executed seven local hostages and five rebels they had captured, and returned to Vinians on December 12, burning eleven houses, ten barns and the inn of Tzortzis Karoplesitis in Livadia. They looted cows, goats, sheep, food, clothing, etc. As they withdrew, they set fire to two more houses in Kalesmeno, looted, and arrested residents. Two of them were executed in Karpenisi.



Image 1-21 and Image 1-22. Meeting of the Political Council of P.E.E.A. in May 1944 in Koryschades. Photo: Spyros Meletzis.

Nevertheless, Vinians remained on the free side of the mountains, inaccessible to the occupying forces and at the same time at the center of E.L.A.S. operations. To its north, a day's walk away, was the Allied paratrooper drop zone and makeshift airfield, on the Neaida plateau, where Lake Plastira is today. Through this passage and the paratrooper drop zone, contact was maintained between the rebels and the Allied missions with Cairo.

<sup>63</sup>See the narration of Captain Hermes about the battle in Chryso, in Grigoris D. Triantafyllou "The battle of Chryso" [http://www.xriso-evrytania.gr/?page\\_id=1013](http://www.xriso-evrytania.gr/?page_id=1013), of the eyewitness Demosthenes Triantafyllou in Kostas Karagiorgou (1979) *Roumeli in flames*, Athens and "Eighty years from the battle of Chryso Evrytania", <https://evrytanika.gr/80-years-from-the-battle-of-chryso-2/> and at Kostas Chinoporos, *The spasm of Evrytania 1943-1945*, <https://stratistoria.wordpress.com/2010/03/04/1943-1954-sparagmos-evritanias-hinoporos/>

On March 10, 1944, the Political Committee of National Liberation (P.E.E.A.) was formed in Viniani, which went down in history as the "Government of the Mountain."

The National Council of P.E.E.A. resulted from elections with the participation of almost one million citizens in the liberated areas. Its members were sworn in and met at the Viniani elementary school, while the village became the committee's headquarters and the capital of "Free Greece."



Image 1-23. Viniani. Meeting of P.E.E.A. executives in Viniani. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 61.

Image 1-24. At the May Day celebration in 1944, ELAS partisans present weapons to the president of P.E.E.A. Alexandros Svolos in the courtyard of the Viniani elementary school. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 75.

During this last year, the character of the village changed. The leadership of the partisans, the meetings of the P.E.E.A., the English and Soviet officers and the partisan groups guarding Viniani created an unprecedented new condition. Soup kitchens, a medical office, self-government assemblies, events, a photographic and artistic workshop, while houses hosted the multitude of members of the resistance organizations who came and went or settled in the mountains.

<sup>64</sup>The members of the P.E.E.A. were Alexandros Svolos (President), Euripides Bakirtzis (Vice President and Secretary of Food), Georgios Siantos (Secretary of the Interior), Emmanuel Mantakas (Secretary of Military Affairs), Stamatis Hatzimbeis (Secretary of National Economy), Angelos Angelopoulos (Secretary of Finance), Ilias Tsirimokos (Secretary of Justice), Petros Kokkalis (Secretary of Social Welfare), Kostas Gavriilidis (Secretary of Agriculture), Nikolaos Askoutsis (Secretary of Transport).

<sup>65</sup>Collective (1964). To arms, to arms. The chronicle of the struggle. History of the National Resistance. (four-volume), Yannikos, Athens, p. 267.



Image 1-25. The Polytechnic student Neilos Mastrantonis with the partisan pseudonym "Klearhos" in the threshing floors of Viniani in the spring of 1944. In September of the same year he was arrested by the Germans while carrying proclamations to Lamia and executed. Source: Archive of Giorgis Belavilas.

It's not just about Viniani. The same happened in Koryschades where the National Council of P.E.E.A. convened or in Stenoma where the Political Bureau of the K.K.E. was established, in Mavrolithari further south which functioned from time to time as the headquarters of E.L.A.S.

One of the most interesting accounts is that of the photographer of P.E.E.A. Spyros Meletzis, who lived in Viniani, set up his photographic workshop there, moved to the areas of the partisans and described or depicted the scenes of Viniani of the partisan era in his chronicle:

"Viniani, an unknown and insignificant village for so many years, becomes not only well-known during the occupation, but also the capital of Free Greece. So in this village I came and settled with my camera and with whatever I could carry from Athens for my work. In Viniani I met all the political and military services that organized and directed the entire struggle of the Greek people to expel the conquerors and who planned after the expulsion of the enemy to make the people masters in their place. That is, they would set aside all foreign influences and interventions in our national issues and the people, and only the Greek people, would be the ones who would decide their fate. Of course I was not a politician, this job was, as our people say, "another priest's gospel". I was an artist, a photographer and from this point of view I saw the struggle and that's what I photographed. Of course, it never occurred to me then how it would be possible, taking those photos then without realizing it, I would "write" History with my lens. Nor did I ever imagine that one day would come when my photos would be the most irrefutable, the most true documents that would reveal after so many years all this action and the creative spirit that was taking place in all areas and in all the manifestations of life in Free Greece."

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<sup>66</sup>Meletzis S. (2002), op. cit., pp. 20-21.



Image 1-26. Residents of Vinians in the celebration of March 25, 1944 with the snowy Agrafa in the background. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 60.

The echo of this story is reflected today in the houses of Vinians. Some bear plaques with the names of the guests of the war era; of Svolos, Woodhouse, Popow et al.



Image 1-27. Aris Velouchiotis and Babis Klaras with partisans of the Officers' School of E.L.A.S. in the "Vial" of Agioi Anargyroi in Viniani. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 81.

The German cleansing operations were repeated in November and December 1943. Clashes with the partisans took place throughout the area from Fragista to Kalesmeno. The second destruction of Viniani occurred on August 1944. Two months before the Germans abandoned Greece, they carried out a major cleansing operation in Agrafa, reinforced by the Greek Security Battalions. They entered the mountainous area with three phalanxes from three sides; from the side of Agrinio and from the side of Lamia, following the passages of Kefalovrysos and Proussos, Agios Vlasios Sidiron and Episkopi as well as the ascent of Tymfristos from Spercheiada. Starting from Karpenisi, which they destroyed to the ground, they raided a large number of villages in Evrytania (Gorgianades, Koryschades, Voutyrou, Nostimo, Mikro Chorio, Megalo Chorio, Klapsi, Miara, Myriki and Kalesmeno) and monasteries. The partisans

<sup>67</sup> Collective (1964). To arms, to arms. The chronicle of the struggle. History of the National Resistance. (four volumes), Yannikos, Athens, p. 230.

and residents abandoned the settlements, hid their belongings in pits and took refuge in the mountainous forests. In Viniani, forty-five houses, the school and twelve barns were set on fire.



Image 1-28. A unique historical document is captured in the military aerial photograph of Viniani taken on September 7, 1946. Almost all of the buildings are visible, including the Primary School after the double arson by the occupying forces. The buildings are roofless, as the fire has left only the stone walls.

Source: A/F W\_BW\_46\_935509\_ΑΣΠΡΟΜΑΥΡΗ\_7000\_1946/09/07. National Land Registry.

The end of World War II did not mean peace for Greece. The Civil War that followed from 1946 to 1949 also had dramatic consequences in the Agrafa region. Guerrilla groups of the D.S.E. were active there during the first two years.

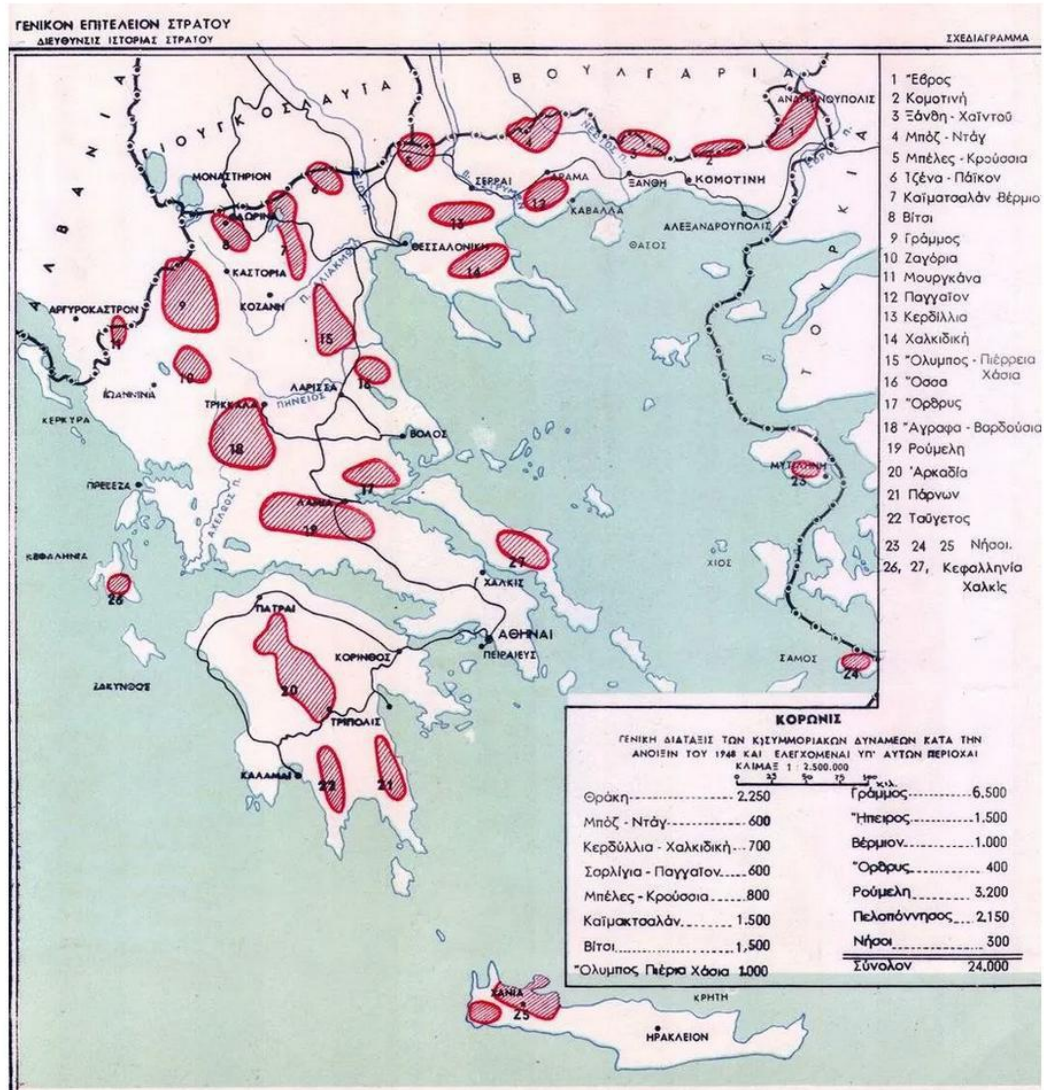


Image 1-29. The map of the HAGS shows the areas of operation of the D.S.E. in the spring of 1948. The extensive areas of Roumeli and Agrafa are distinguished between which Vinians were located. Source: "General disposition of the k/simmoriakos forces in the spring of 1948...", General Army Staff, Directorate of Army History in Apostolos Patelakis, Războiul civil din Grecia (1946 – 1949) și emigranții politici greci în România (1948 – 1982), Cetatea de Scaun, Bucuresti, 2017.

The first phase of the clashes began with the cleansing operations of the army against the rebels in April 1947, culminating in the dramatic "exit", on Good Friday, April 11, of three D.S.E. companies and about 200 citizens trapped in Roumeli. This force escaped through the snowy mountain pass of Niala Agrafa. The routes of the rebels passed through Fragista, Viniani, Kerasovo and converged towards the village of Agrafa. They were the same routes followed by both the rebel forces and the cleansing operations of the Italian-German occupation in the previous years of the war.

The next important and impressive war event was the occupation of Karpenisi, the capital of Evrytania, by the D.S.E. (Democratic Army

Greece). In the early hours of January 21, 1949, the D.S.E. with the I Division under Captain Giotis (Harilaos Florakis), the II Division under Captain Diamantis (Giannis Alexandrou), forces of K.G.A.N.E. (General Headquarters of Southern Greece Detachment) and the School of Officers, with forces of the order of 2,800-2,900 men, managed to occupy Karpenisi. The city, which was considered impregnable due to the fortifications of the National Army, was defended by 1,200 soldiers of the local guard, T.E.A. and reinforcements that had come from Makrakomi. The rebels

were able to stay there until February 9. Karpenisi was recaptured by the 1st Army Corps headed by Lieutenant General Thrasyvoulos Tsakalotos. Both battles, the capture and recapture, took place in harsh winter conditions, with Tymfristos covered in snow.

The rebels gradually disengaged from Karpenisi and retreated towards Agrafa through the Megdova gorge. And then, both the operations of the E.S. and the escape of the D.S.E. took place from the route that passed through Viniani.

The D.S.E. remained in Agrafa until the beginning of March 1949 with a force of 1,200 fighters. The government army, headed by General Thrasyvoulos Tsakalotos, carried out an impressive operation that focused on the area of Megdova and Agrafa from March 3 to 9, pushing the rebels towards Thessaly.

With the clearings of the spring of 1949, the military part of the Civil War in Agrafa essentially ended. The D.S.E. withdrew north, to Grammos, where it was finally defeated by the government army in August of the same year.

## 1.6 The post-war period

Viniani, this settlement of Agrafa unknown until 1942 and one of the thousands of small mountainous Greek settlements, was at the center of the war storm and political current affairs for the period from 1943 to 1949. With the end of this fiery era, the village sank back into obscurity, in a devastated countryside with a decimated population.

The period 1940-1949 with the two successive wars, World War II and the Civil War, led to a large reduction in the population. At the end of the war, Viniani had lost 136 people, 27% of its pre-war population. The situation then stabilized for two decades, with its population numbering 368 in 1951 and 365 in 1961.

<sup>68</sup>Margaritis, G. (2000-2001), History of the Greek Civil War, Vivliorama, p. 194.

<sup>69</sup>Margaritis, G. (2000-2001), op. cit., p. 147.

<sup>70</sup>See related Margaritis, G. (2000-2001) History of the Greek Civil War, Vivliorama . Lazos, Kostas S. «The battle, the capture and the occupation of Karpenisi by the rebels» in Koutsoukis, Kleomenis S. Sakkas, Ioannis D. (ed.) Aspects of the Civil War, 1946-1949, scientific conference, Karpenisi, September 23-26, 1999 - Athens: Philistor, 2000 and Giannis Sakkas, «The occupation of Karpenisi. The last flash of the D.S.E. (19-1/8-2-1949)», Periodical Military History, Issue 77 (January 2003).

<sup>71</sup>Government Gazette of Population Censuses (1879-2011), op. cit.

The post-war reconstruction, starting from that period, brought two major infrastructure projects to the wider area. The first was the creation of a road network that connected Karpenisi with western Greece. The road was built in 1960-1964 as a dirt road and was asphalted during the 1980s. The metal military bridge of Megdova was built for war reasons in 1947 and replaced the old arched stone bridge, moving, among other things, the crossing 5 km to the south.

The Bailey bridge was built by the military corps of Engineers (MX) headed by Brigadier General Dimitrios Markopoulos who was killed during the Civil War. There was a dedicatory plaque on the bridge to the dead officer which was vandalized.

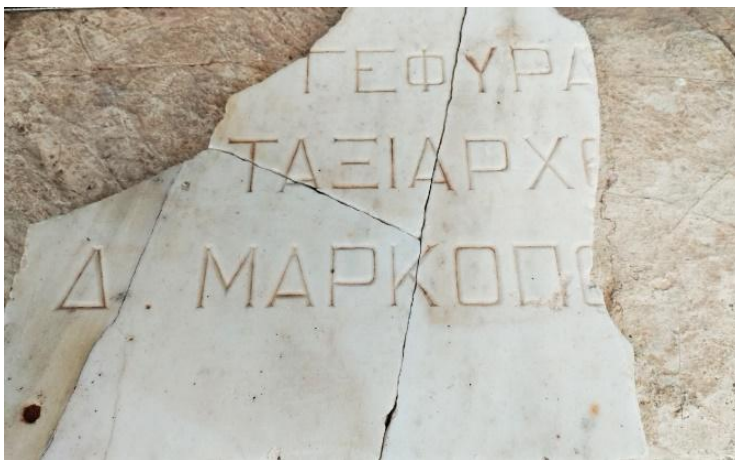


Image 1-30. The dedicatory plaque to Brigadier General Dimitrios Markopoulos on the bridge of Megdova, destroyed today.  
Source: NTUA Research Team, 2023.

Since then, in times of peace, the metal bridge remains the main crossing of the river.

The construction of the Plastiras hydroelectric dam, north of Viniani, and then the Kremaston dam to the west, changed the geography of Agrafa.



Image 1-31. Construction of Plastiras dam 1959. Source: DEI Photographic Archive.

The Megdova dam and the creation of the artificial Plastiras lake was an idea that had started since the Interwar period. The project was planned in 1951, started in December 1955 and was completed in 1959 when the filling of the lake began. The Kremasta dam and lake on the Acheloos River were completed in 1965, the filling of the lake proceeded and the Kremasta Hydroelectric Station (HES) operated in 1966.

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<sup>72</sup>see also "DEI - Historical Route" [online], available at  
<<https://www.dei.gr/el/dei-omilos/i-dei/istoriki-diadromi/>> [last accessed: 28.05.2023]



Image 1-32. Construction of the Kremaston dam 1963-1965. Photo: Kostas Balafas. Source: DEI Photographic Archive.

### 1.7 Current population, social and economic trends: 1990-present

Vinianni is in a privileged position compared to the extreme villages of Agrafa, as it is located near the municipal center of Kerasochori and closer to Karpenisi compared to the majority of the other settlements. However, like the entire settlement network of Agrafa, it exhibits characteristics of mountainous isolation, with the main problems being the dispersion of settlements, its remote location from important education and health structures, a strong demographic imbalance, as well as limited economic resources, which do not seem to be balanced by the seasonal arrivals of tourists.

The aging of the population, the absence of a productive economic base and the large lag in relation to employment, education, health and housing are the main elements of Vinianni's identity. Available data from the 2011 and 2021 Censuses, as well as targeted studies by EL.STAT, are analyzed below in order to map current population trends.

In the analysis that follows, the level of the Municipality of Agrafa is selected where possible, in the absence of data, the level of P.E. Evrytania. Emphasis is given to the level of education, employment and housing conditions of the population, as well as available data on the economy and tourism.

The continuous decrease in population at the level of the Regional Unit of Evrytania, which had already been recorded in the post-war decades, continues. The Region of Central Greece

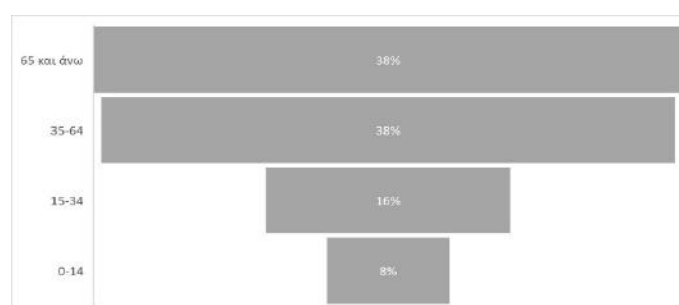
<sup>73</sup>The Municipality of Agrafa consists of the Municipal Units of Agrafa, Aperantia, Aspropotamos, Vinianni and Fragista.

Greece shows a decrease of 7.1% in the decade 2011-2021, <sup>74</sup>considerably higher than population decline at the national level (-3.1%). In particular, the P.E. Evrytania shows a decrease of 13.2%, with the Municipality of Agrafa having lost 993 inhabitants and the Municipality of Karpenisi 1,660 inhabitants.

|                           | Population |        |        |
|---------------------------|------------|--------|--------|
|                           | 2021       | 2011   | 2001   |
| Municipality of Agrafa    | 5.983      | 6.976  | 7.200  |
| Municipality of Karpenisi | 11.445     | 13.105 | 12.379 |

Table 1-2. Evolution of the population in the Municipalities of Agrafa and Karpenisi, 2021-2001. Source: panorama.statistics. gr, «Census Results 2021, bulletin 17.03.2023».

At the Municipality level, with regard to the age distribution, the data for 2011 show a large concentration in the category of 65 years and over (38%). It should be noted that in the whole country, the percentage corresponding to this age group is 19%. In 2021, the clear aging trend observed over time is confirmed, with 9,119 fewer births and a negative change in the size of households with more than three people.



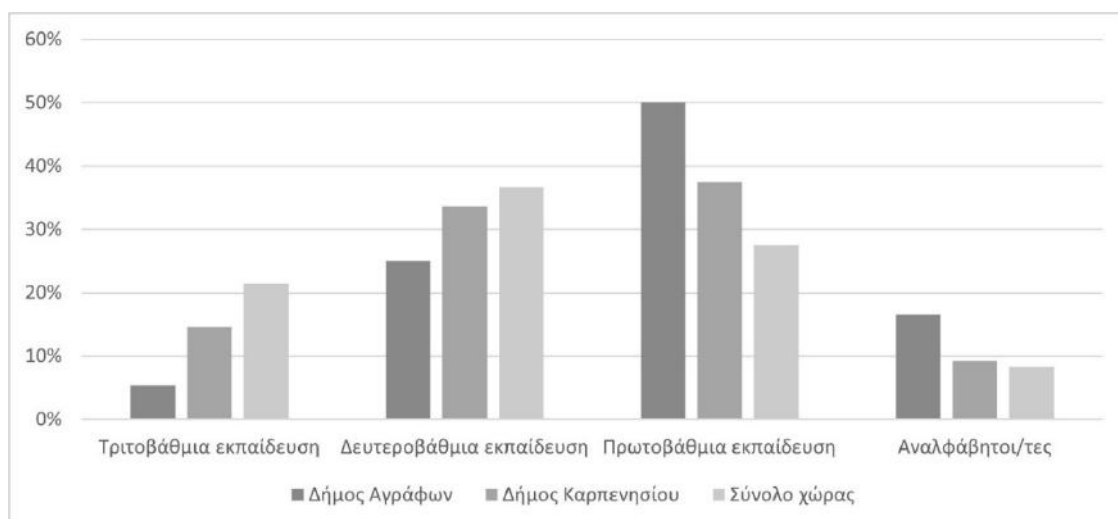
Graph 1-1. Age distribution in the Municipality of Agrafa by number of inhabitants, 2011. Source: panorama.statistics. gr, Processing: NTUA Research Team, 2023.

The level of education in the Municipality of Agrafa appears, in percentage terms, significantly lower compared to the country as a whole. In particular, the majority of residents (43%) are primary school graduates, while 13% are illiterate. In the country as a whole, only 2% of the population is recorded in this category, indicating both imbalances in the demographic distribution and issues of educational exclusion.

<sup>74</sup>From 547,390 in 2011 to 508,254 in 2021. ELSTAT, Census Results 2021, bulletin 17.03.2023, [https://elstat-outsourcers.statistics.gr/Census2022\\_GR.pdf](https://elstat-outsourcers.statistics.gr/Census2022_GR.pdf)

| EDUCATION LEVEL                                                        | MUNICIPALITY<br>KARPENISIOU | %          | MUNICIPALITY<br>AGRAFON | %          | TOTAL<br>COUNTRY | %          |
|------------------------------------------------------------------------|-----------------------------|------------|-------------------------|------------|------------------|------------|
| Doctorate                                                              | 21                          | 0          | 3                       | 0          | 41312            | 0          |
| Master's Degree                                                        | 58                          | 0          | 13                      | 0          | 155532           | 1          |
| University Degree-<br>Polytechnic and<br>equivalent schools            | 852                         | 7          | 181                     | 3          | 1076933          | 10         |
| Degree from ATEI, ASPAITE<br>and equivalent schools                    | 513                         | 4          | 59                      | 1          | 444910           | 4          |
| Degree from higher<br>vocational schools                               | 67                          | 1          | 22                      | 0          | 90400            | 1          |
| Degree<br>post-secondary<br>education                                  | 396                         | 3          | 96                      | 1          | 502079           | 5          |
| High School Diploma                                                    | 2254                        | 17         | 818                     | 12         | 2183480          | 20         |
| Vocational High<br>School Diploma                                      | 522                         | 4          | 96                      | 1          | 348916           | 3          |
| Vocational School<br>Diploma                                           | 261                         | 2          | 94                      | 1          | 253899           | 2          |
| Three-year Gymnasium<br>Leaving Certificate                            | 1368                        | 10         | 739                     | 11         | 1174591          | 11         |
| Elementary<br>School Leaving<br>Certificate                            | <b>4078</b>                 | <b>31</b>  | <b>2999</b>             | <b>43</b>  | <b>2524345</b>   | <b>23</b>  |
| Abandoned the<br>Elementary School, but<br>knows how to write and read | 832                         | 6          | 495                     | 7          | 448082           | 4          |
| Completed<br>preschool education                                       | 714                         | 5          | 232                     | 3          | 651089           | 6          |
| Does not know how<br>to write and read                                 | <b>491</b>                  | <b>4</b>   | <b>925</b>              | <b>13</b>  | <b>244363</b>    | <b>2</b>   |
| People born after<br>1/1/2005                                          | 678                         | 5          | 204                     | 3          | 676355           | 6          |
| <b>TOTAL</b>                                                           | <b>13105</b>                | <b>100</b> | <b>6976</b>             | <b>100</b> | <b>10816286</b>  | <b>100</b> |

Table 1-3. Level of education in the Municipalities of Karpenisi and Agrafa, comparison with total national figures. Source: panorama.statistics. gr.

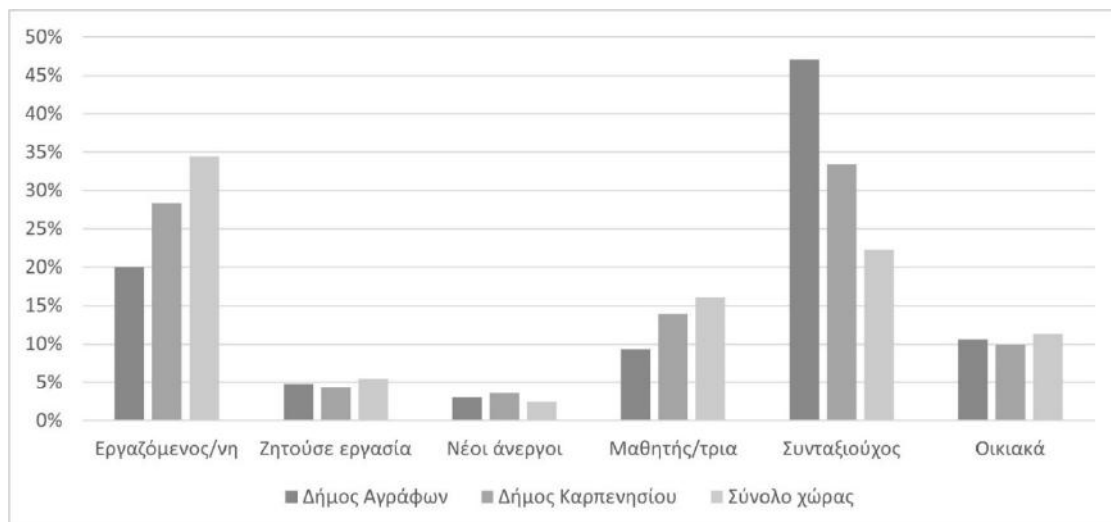


Graph 1-2. Education level in the Municipalities of Karpenisi and Agrafa, comparison with total national figures. Source: panorama.statistics. gr, Processing: NTUA Research Team, 2023.

Also critical for the employment of the population is the fact that 47% of residents declare themselves retired and only 20% employed.

| MAIN OCCUPATION                     | MUNICIPALITY<br>KARPENISSI | %          | MUNICIPALITY<br>AGRAFA | %          | TOTAL<br>COUNTRY | %          |
|-------------------------------------|----------------------------|------------|------------------------|------------|------------------|------------|
| Employee                            | <b>3715</b>                | <b>28</b>  | <b>1396</b>            | <b>20</b>  | <b>3727633</b>   | <b>34</b>  |
| Looking for work                    | 575                        | 4          | 332                    | 5          | 593235           | 5          |
| Looking for work for the first time | 470                        | 4          | 213                    | 3          | 265768           | 2          |
| Student (-tria) / Student           | 1820                       | 14         | 652                    | 9          | 1737074          | 16         |
| Retiree                             | <b>4382</b>                | <b>33</b>  | <b>3284</b>            | <b>47</b>  | <b>2407222</b>   | <b>22</b>  |
| Rentier                             | 29                         | 0          | 9                      | 0          | 22804            | 0          |
| Household                           | 1299                       | 10         | 743                    | 11         | 1224095          | 11         |
| Another case                        | 815                        | 6          | 347                    | 5          | 838455           | 8          |
| TOTAL                               | <b>13105</b>               | <b>100</b> | <b>6976</b>            | <b>100</b> | <b>10816286</b>  | <b>100</b> |

Table 1-4. Main occupation in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr.



Graph 1-3. Main occupation in the Municipalities of Karpenisi and Agrafa, comparison with total national figures. Source: panorama.statistics.gr, Processing: NTUA Research Team, 2023.

The employees, for the most part, are classified in the professional category "Skilled farmers, livestock breeders, foresters and fishermen", with 10% of the total residents employed in the primary sector of the economy, a percentage significantly higher compared to the whole country (4%).

The above data show that employment opportunities continue to be limited, while the flight trends for the new generation do not appear to have been reversed. It is noted that the employment opportunities in tourism are significantly more in the Municipality of Karpenisi, while Agrafa has not benefited to the same extent.

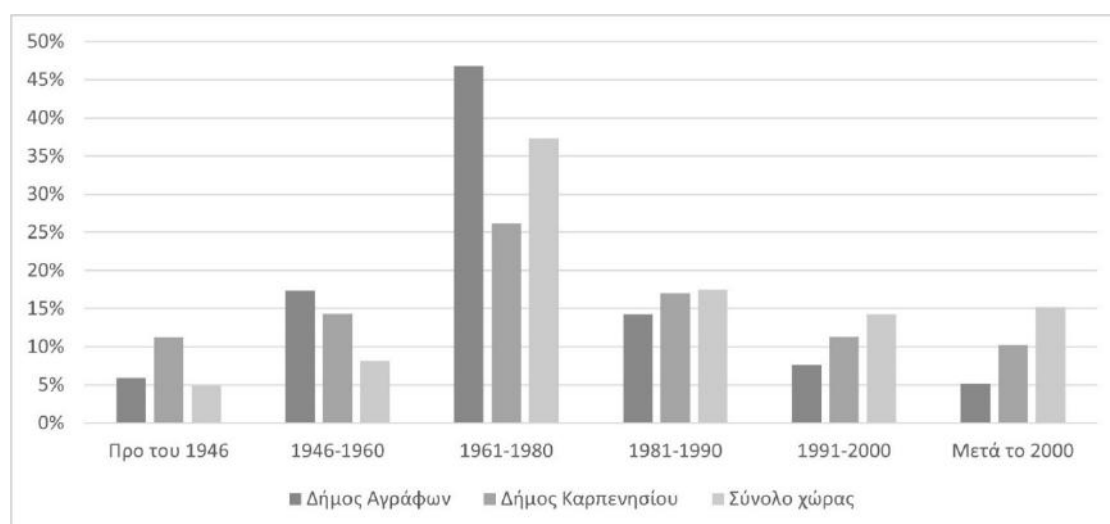
Regarding housing and housing conditions, from the data concerning the construction period, a very small number of new houses have been built since the 1990s. The majority of new houses are recorded in the 1960s-1980s, a trend that may be related to the positive economic climate of the period and the repairs that were made after the war damage.

<sup>75</sup>EKKE – ELSTAT, Panorama of census data, <https://panorama.statistics.gr/>

<sup>76</sup>Pantera, A. et al. (2003), "Mountain pastures of Evrytania Prefecture", in Livadoponia and development mountainous areas. Proceedings of the 3rd Panhellenic Livadoponic Conference.

| PERIOD<br>OF CONSTRUCTION | MUNICIPALITY<br>OF KARPENISI | %          | MUNICIPALITY<br>OF AGRAFA | %         | TOTAL<br>COUNTRY | %          |
|---------------------------|------------------------------|------------|---------------------------|-----------|------------------|------------|
| Before 1946               | 1474                         | 11         | 412                       | 6         | 527728           | 5          |
| 1946-1960                 | 1881                         | 14         | 1211                      | 17        | 874733           | 8          |
| <b>1961-1980</b>          | <b>3429</b>                  | <b>26</b>  | <b>3267</b>               | <b>47</b> | <b>4039277</b>   | <b>37</b>  |
| 1981-1990                 | 2229                         | 17         | 995                       | 14        | 1891807          | 17         |
| <b>1991-2000</b>          | <b>1484</b>                  | <b>11</b>  | <b>533</b>                | <b>8</b>  | <b>1542867</b>   | <b>14</b>  |
| After 2000                | 1344                         | 10         | 361                       | 5         | 1644363          | 15         |
| Non-regular<br>residence  | 1264                         | 10         | 197                       | 3         | 295511           | 3          |
| <b>TOTAL</b>              | <b>13105</b>                 | <b>100</b> | <b>6976</b>               | <b>10</b> | <b>10816286</b>  | <b>100</b> |

Table 1-5. Period of construction of residences in the Municipalities of Karpenisi and Agrafa in comparison with total national figures. Source: panorama.statistics. gr.



Graph 1-4. Period of construction of residences in the Municipalities of Karpenisi and Agrafa in comparison with total national figures. Source: panorama.statistics. gr, Processing: NTUA Research Team, 2023.

Regarding the use of residences, out of a total of 6,976, the majority belongs to the category of main residence. In Agrafa, 110 buildings appear as vacant residences and only 1 as a holiday home. In terms of the use of the residence. Empirically, the use of residences by residents of Evrytania who live in other urban centers or abroad, and return occasionally, during the Easter holidays or during the summer holidays, emerges. Therefore, the second residence or the seemingly vacant residences tend to correspond to other percentages.

<sup>77</sup> EKKE – ELSTAT, Panorama of census data, <https://panorama.statistics.gr/>

| MAIN RESIDENTIAL USE     | MUNICIPALITY<br>KARPENISI | %          | MUNICIPALITY<br>AGRAFA | %          | TOTAL<br>COUNTRY | %          |
|--------------------------|---------------------------|------------|------------------------|------------|------------------|------------|
| Main residence           | 12706                     | 97         | 6848                   | 98         | 10607706         | 98         |
| Holiday home             | 114                       | 1          | 1                      | 0          | 11350            | 0          |
| Empty                    | 103                       | 1          | 17                     | 0          | 15628            | 0          |
| Without characterization | 182                       | 1          | 110                    | 2          | 181602           | 2          |
| <b>TOTAL</b>             | <b>13105</b>              | <b>100</b> | <b>6976</b>            | <b>100</b> | <b>10816286</b>  | <b>100</b> |

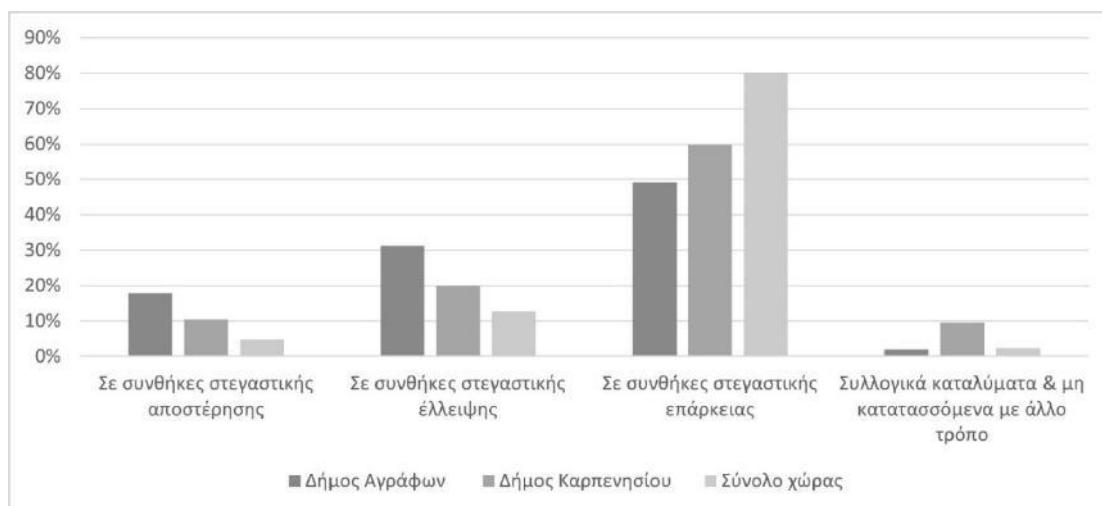
Table 1-6. Use of residences in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr.

The EL.STAT composite index for housing conditions shows a picture of housing deprivation, with 31% of residents falling into the category of housing shortage and 18% in conditions of deprivation, a percentage considerably higher compared to the country as a whole. It should be noted that in 2011, 94% of the Municipality's households did not have access to the internet (50% nationwide).

| COMPOSITE INDEX<br>HOUSING CONDITIONS   | MUNICIPALITY<br>KARPENISI | %          | MUNICIPALITY<br>AGRAFA | %          | TOTAL<br>COUNTRY | %          |
|-----------------------------------------|---------------------------|------------|------------------------|------------|------------------|------------|
| In conditions of housing deprivation    | <b>1384</b>               | <b>11</b>  | <b>1244</b>            | <b>18</b>  | <b>518745</b>    | <b>5</b>   |
| In conditions of housing shortage       | <b>2624</b>               | <b>20</b>  | <b>2172</b>            | <b>31</b>  | <b>1366421</b>   | <b>13</b>  |
| In conditions of adequate housing       | 7853                      | 60         | 3427                   | 49         | 8678551          | 80         |
| Collective accommodation & unclassified | 1244                      | 9          | 133                    | 2          | 252569           | 2          |
| <b>TOTAL</b>                            | <b>13105</b>              | <b>100</b> | <b>6976</b>            | <b>100</b> | <b>10816286</b>  | <b>100</b> |

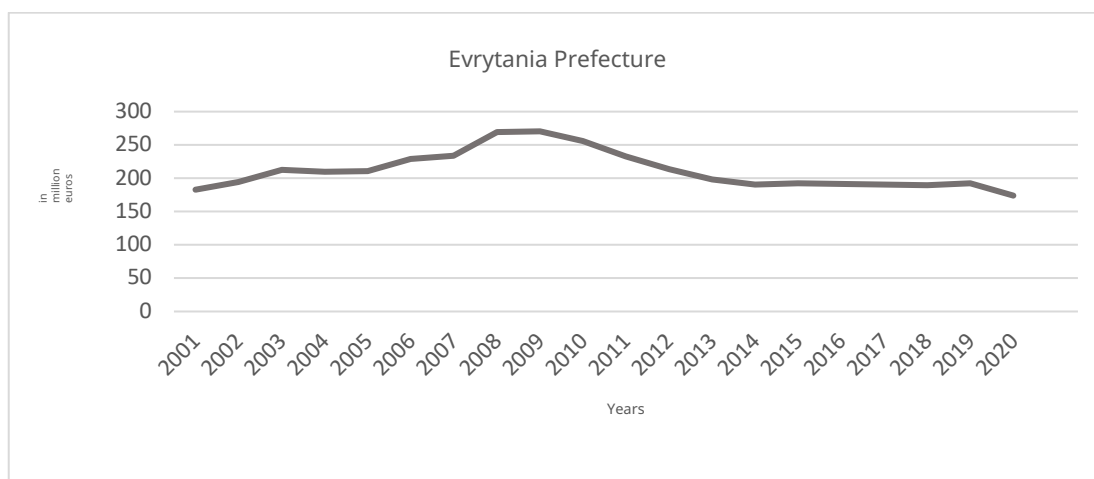
Table 1-7. Composite index of housing conditions in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr.

<sup>78</sup> Conditions of housing deprivation are defined by the lack of very basic amenities, such as toilet or W.C. inside the house, conditions of housing shortage are defined in terms of sq.m. per household member.



Graph 1-5. Composite index of housing conditions in the Municipalities of Karpenisi and Agrafa compared to overall national figures. Source: panorama.statistics. gr.

According to economic study data from EL.STAT., the Evrytania Prefecture in the period 2001-2020 shows a historically low GDP, compared to the country as a whole. In 2020, the GDP of the Prefecture is recorded at 174 million euros, one of the lowest among the Prefectures of the territory. Furthermore, the diagram below shows that the economic recession of 2008-2010 was felt in the Evrytania Prefecture, while until today - a decade later - there have been no noticeable signs of economic recovery.



Graph 1-6. Evolution of GDP of Evrytania Prefecture, 2001-2020. Source: ELSTAT, Gross domestic product by region and prefecture (Provisional Data) (2000 - 2020) <https://www.statistics.gr/el/statistics/-/publication/SEL48/->.

With regard to the sectors of economic activity, category 9 "Public administration [...]", concentrates the largest part of economic activity, followed by the categories/sectors of "Real estate management" and "Wholesale and Retail trade".

| <b>ΝΟΜΟΣ ΕΥΡΥΤΑΝΙΑΣ</b>                                                                                                                                                                                                                                                          |                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| <b>ΚΛΑΔΟΙ ΟΙΚΟΝΟΜΙΚΗΣ ΔΡΑΤΗΡΙΟΤΗΤΑΣ A10 (NACE Rev.2)</b>                                                                                                                                                                                                                         | <b>ΤΙΜΕΣ</b><br>(σε εκατ. ευρώ) |
| 1. Γεωργία, δασοκομία και αλιεία                                                                                                                                                                                                                                                 | 7                               |
| 2. Ορυχεία, λατομεία, βιομηχανία, παροχή ηλεκτρικού ρεύματος, φυσικού αερίου, ατμού, κλιματισμού και νερού, επεξεργασία λυμάτων, διαχείριση αποβλήτων και δραστηριότητες εξυγίανσης                                                                                              | 20                              |
| 3. Κατασκευές                                                                                                                                                                                                                                                                    | 1                               |
| <b>4. Χονδρικό και λιανικό εμπόριο, επισκευή μηχανοκίνητων οχημάτων και μοτοσυκλετών, μεταφορές και αποθήκευση, δραστηριότητες υπηρεσιών παροχής καταλύματος και υπηρεσιών εστίασης</b>                                                                                          | <b>27</b>                       |
| 5. Ενημέρωση και επικοινωνία                                                                                                                                                                                                                                                     | 2                               |
| 6. Χρηματοπιστωτικές και ασφαλιστικές δραστηριότητες                                                                                                                                                                                                                             | 4                               |
| <b>7. Διαχείριση ακίνητης περιουσίας</b>                                                                                                                                                                                                                                         | <b>34</b>                       |
| 8. Επαγγελματικές, επιστημονικές και τεχνικές δραστηριότητες, διοικητικές και υποστηρικτικές δραστηριότητες                                                                                                                                                                      | 4                               |
| <b>9. Δημόσια διοίκηση και άμυνα, υποχρεωτική κοινωνική ασφάλιση, εκπαίδευση, δραστηριότητες σχετικές με την ανθρώπινη υγεία και την κοινωνική μέριμνα</b>                                                                                                                       | <b>47</b>                       |
| 10. Τέχνες, διασκέδαση, ψυχαγωγία, άλλες δραστηριότητες παροχής υπηρεσιών, δραστηριότητες νοικοκυριών ως εργοδοτών, μη διαφοροποιημένες δραστηριότητες νοικοκυριών που αφορούν την παραγωγή αγαθών και υπηρεσιών για ίδια χρήση, δραστηριότητες ετερόδικων οργανισμών και φορέων | 7                               |
| <b>Συνολική ακαθάριστη προστιθέμενη αξία</b>                                                                                                                                                                                                                                     | <b>153</b>                      |

Πίνακας 1-8. Ακαθάριστη προστιθέμενη αξία κατά κλάδο στον Νομό Ευρυτανίας το 2020. Το υψηλό μέγεθος στον κλάδο «Διαχείριση ακίνητης περιουσίας» μάλλον έχει σχέση με εισοδήματα από ενοικίαση ακινήτων. Πηγή: ΕΛΣΤΑΤ, Ακαθάριστη Προστιθέμενη Αξία κατά Κλάδο <https://www.statistics.gr/el/statistics/-/publication/SEL45/->.

Να τονισθεί ακόμα ότι ο κλάδος «Γεωργία [...]» είναι περιορισμένος, κάτι που συνδέεται με την ορεινότητα του Ν. Ευρυτανίας, όπως προκύπτει από τον παρακάτω πίνακα βασικών κατηγοριών χρήσης, με τα δάση και τις μεταβατικές δασώδεις εκτάσεις να καλύπτουν περισσότερο από το ήμισυ (58%) της εδαφοκάλυψης του νομού Ευρυτανίας.<sup>79</sup>

<sup>79</sup> Παντέρα, Α. κ.α. (2003), «Ορεινοί βοσκότοποι Νομού Ευρυτανίας», στο Λιβαδοπονία και ανάπτυξη ορεινών περιοχών. Πρακτικά 3ου Πανελληνίου Λιβαδοπονικού Συνεδρίου.

| BASIC CATEGORIES OF USE / COVERAGE                                           | Areas<br>(thousands of acres) | %          |
|------------------------------------------------------------------------------|-------------------------------|------------|
| Arable land                                                                  | 0,2                           | 0          |
| Permanent crops                                                              | 0,0                           | 0          |
| Pastures - Transitional wooded/shrubby areas                                 | 1,6                           | 0          |
| Pastures - Combinations of shrubby and/or herbaceous vegetation              | 44,9                          | 2          |
| Pastures - Areas with sparse or no vegetation                                | 1,2                           | 0          |
| Heterogeneous agricultural regions                                           | 148,0                         | 8          |
| Forests                                                                      | <b>810,2</b>                  | <b>43</b>  |
| Transitional wooded-shrubby areas                                            | <b>289,0</b>                  | <b>15</b>  |
| Combinations of shrubby and/or herbaceous vegetation                         | 358,3                         | 19         |
| Areas with sparse or no vegetation                                           | 160,0                         | 9          |
| Inland waters                                                                | 54,6                          | 3          |
| Inland wetlands                                                              | 0,0                           | 0          |
| Coastal wetlands                                                             | 0,0                           | 0          |
| Urban construction                                                           | 2,4                           | 0          |
| Industrial and commercial zones                                              | 0,2                           | 0          |
| Transportation networks                                                      | 0,0                           | 0          |
| Mines, landfills and construction sites                                      | 0,0                           | 0          |
| Artificial, non-agricultural green areas, sports and cultural activity areas | 0,0                           | 0          |
| Total                                                                        | <b>1.870,6</b>                | <b>100</b> |

Table 1-9. Distribution of the area of N. Evrytania by basic categories of use/coverage, 2000. Source: ELSTAT, Distribution of the Area of Greece by Basic Categories of Land Cover/Use / 2000 by Region and Prefecture <https://www.statistics.gr/el/statistics/-/publication/SPG51/->.

Regarding the Tourism sector, a total of 1,709 beds are recorded in the P.E. Evrytania in a total of 38 accommodations in 2022. The bed occupancy rate for the Municipality of Agrafa, in the same year, is recorded at 15.6%, with the number of arrivals reaching 1,252 people. Regarding the seasonality of tourism, the Municipality of Agrafa, and Evrytania more broadly, attracts the most arrivals during the winter months.

In the tables that follow, the available accommodations in the Municipality of Agrafa are recorded and the distance of the old settlement of Viniani (in kilometers and time) from them is noted. The dispersion of the settlements of the Municipality and the mountainousness of the area are evident - also from this element. Starting from Viniani, in

<sup>80</sup> ELSTAT, Hotels, camping and rental accommodations, 2022, <https://www.statistics.gr/el/statistics/-/publication/STO12/->

half an hour away, accommodations are located in Kerasochori, Dafni, Eastern and -marginally- Western Fragista (13 accommodations with 118 beds). The remaining settlements are more than an hour away.

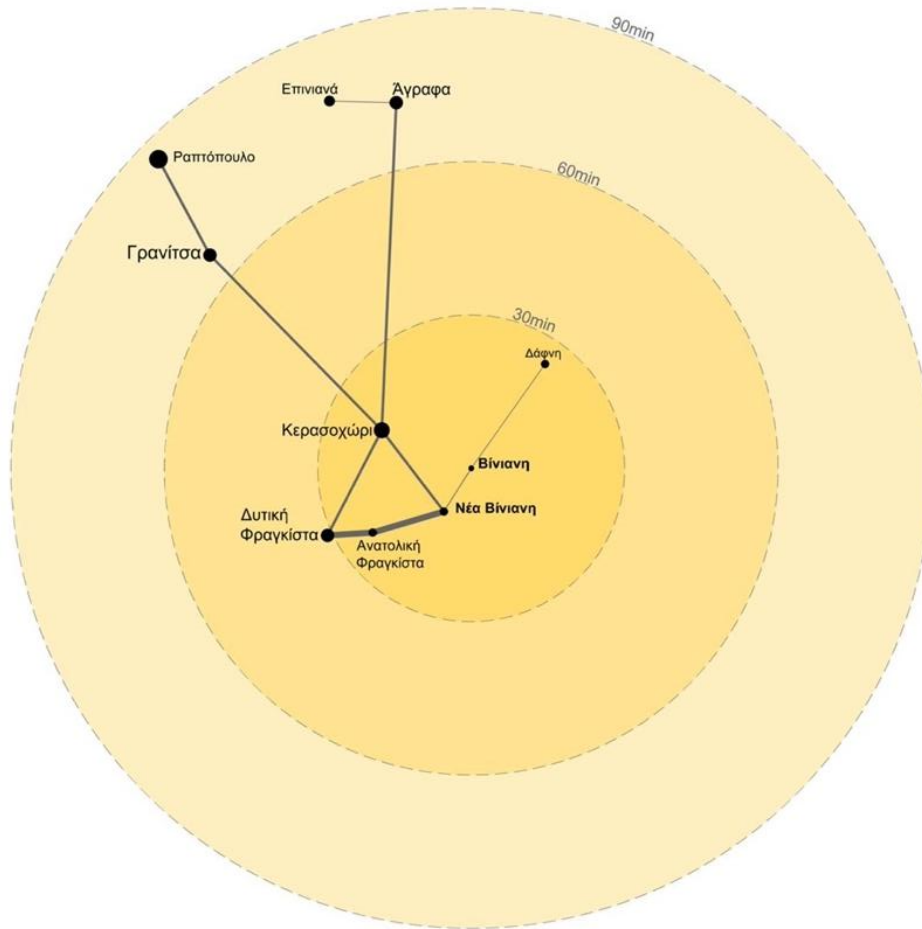
| Area                 | Number of guesthouses      | Capacity - total | Distance from Viniani (km) | Distance from Viniani (time) |
|----------------------|----------------------------|------------------|----------------------------|------------------------------|
| Agrafa               | 3                          | 50 beds          | 41,1                       | 1h 13min                     |
| Eastern Fragista     | 2 (and 2 out of operation) | 27 beds          | 15,5                       | 23min                        |
| Granitsa             | 2                          | 61 beds          | 44,3                       | 1h 6min                      |
| Western Fragista     | 6                          | 44 beds          | 19,2                       | 31min                        |
| Epiniana             | 1                          | 25 beds          | 43,9                       | 1h 17min                     |
| Kerasochori (Krenti) | 2                          | 37 beds          | 13,4                       | 19min                        |
| Raptopoulo           | 1                          | 15 beds          | 55,1                       | 1h 26min                     |
| Total                | 32                         | 259 beds         |                            |                              |

Table 1-10. Accommodation in the Municipality of Agrafa. Data source: Agrafa Municipality website, 2023, <https://agrafa.gr/>. Processing, distance measurement via google maps: NTUA Research Team, 2023.

| Area        | Number for rent accommodations via Airbnb | Capacity - total | Distance from Viniani (km) | Distance from Viniani (time) |
|-------------|-------------------------------------------|------------------|----------------------------|------------------------------|
| Kerasochori | 3                                         | 5 beds           | 10,9                       | 17min                        |
| Dafni       | 1                                         | 5 beds           | 16,5                       | 25min                        |
| Total       | 4                                         | 10 beds          |                            |                              |

Table 1-11. Accommodation for rent via Airbnb in the Municipality of Agrafa. Data source: Airbnb Platform, <https://www.airbnb.gr/>. Processing, distance measurement via google maps: NTUA Research Team, 2023.

The map below shows the relationship of Viniani with the bed capacity of the wider area and specifically the time distance of the historical settlement from the settlements of the Municipality of Agrafa that have accommodation. Within half an hour of Viniani, there are 118 beds in 13 accommodations in the settlements of Kerasochori, Dafni, Eastern and Western Fragista.



Map 1-2. Schematic representation of the time distance of the old settlement of Viniani from the settlements of the Municipality of Agrafa that have accommodation. The sizes of the circles of the settlements correspond to their population size and the sizes of their names correspond to the number of accommodations. The circles correspond to the time distances of 30, 60 and 90 minutes, respectively. Source: NTUA Research Team, 2023.

The following are summary tables of public education and health structures in the Regional Unit of Evrytania. The measurement of the distance of Viniani (in kilometers and time) from them documents the remote location of the settlement.

Regarding education structures, Viniani is covered by the Kindergarten, Primary School and Gymnasium in Krenti and Kerasochori. There is a General Lyceum only in Karpenisi, at a distance of 50 minutes, while a Vocational Lyceum (EPAL) is located in Western Fragista at a distance of 31 minutes.

Regarding health structures, the Regional Clinic in Kerasochori and the Health Center in Western Fragista are located half an hour from Viniani.

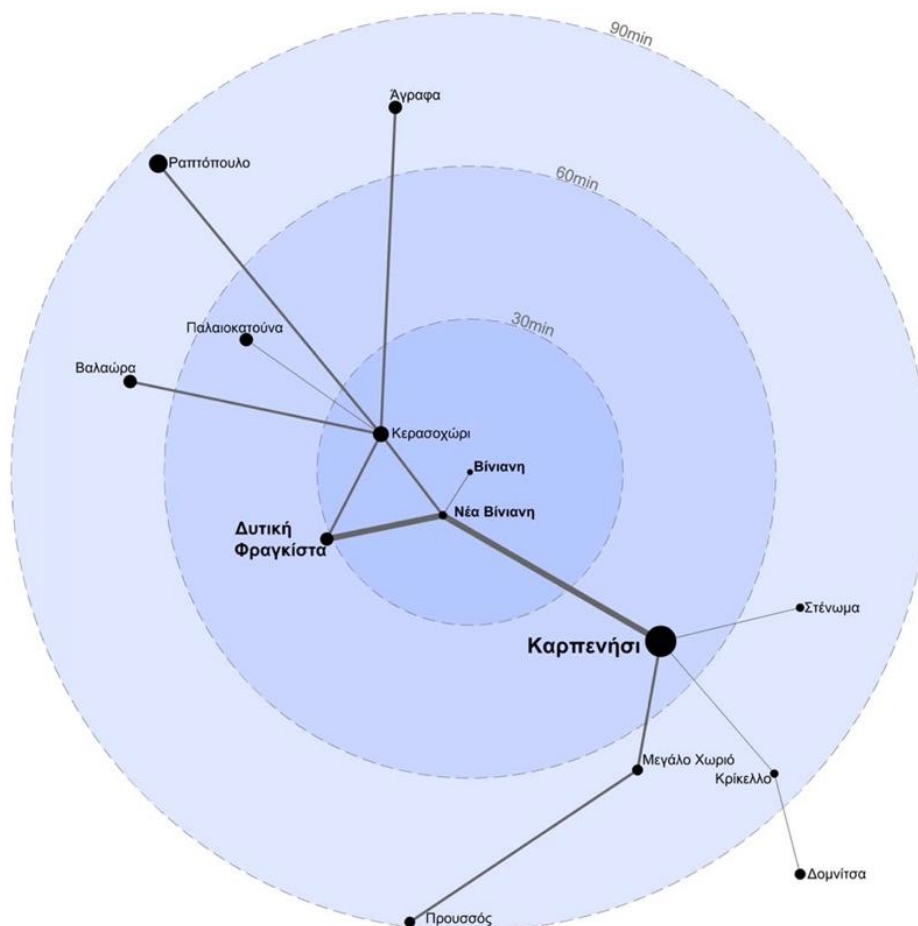
| Level           | School Unit                                | Position      | Distance from Vianni (km) | Distance from Vianni (time) |
|-----------------|--------------------------------------------|---------------|---------------------------|-----------------------------|
| Kindergarten_1  | 1st Special Kindergarten of Karpenisi      | Karpenisi     | 36.3 km                   | 50min                       |
| Kindergarten_2  | 1st Kindergarten of Agrafa                 | Agrafa        | 41 km                     | 1h 13min                    |
| Kindergarten_3  | 1st Kindergarten of Valaora                | Valaora       | 46.3 km                   | 1h 9min                     |
| Kindergarten_4  | 1st Kindergarten of Granitsa               | Granitsa      | 44.3 km                   | 1h 6min                     |
| Kindergarten_5  | 1st Kindergarten of Dafnoulia              | Dafnoulia     | 63.9 km                   | 1h 37min                    |
| Kindergarten_6  | 1st Kindergarten of West Fragistas         | West Fragista | 19.3 km                   | 31min                       |
| Kindergarten_7  | 1st 2nd Kindergarten Karpenisi             | Karpenisi     | 36.3 km                   | 50min                       |
| Kindergarten_8  | 2nd 3rd Kindergarten Karpenisi             | Karpenisi     | 36.3 km                   | 50min                       |
| Kindergarten_9  | 3rd 2nd Kindergarten Karpenisi             | Karpenisi     | 36.3 km                   | 50min                       |
| Kindergarten_10 | 4th 2nd Kindergarten Karpenisi             | Karpenisi     | 36.3 km                   | 50min                       |
| Kindergarten_11 | 1st Kindergarten of Krenti                 | Krenti        | 14.0 km                   | 21min                       |
| Kindergarten_12 | 1st Kindergarten Palaiokatounas            | Palaiokatouna | 31.2 km                   | 51min                       |
| Kindergarten_13 | 1st Kindergarten Raptopoulou               | Raptopoulou   | 55.3 km                   | 1h 26min                    |
| Kindergarten_14 | 1st Kindergarten of Fournas                | Fournas       | 77.4 km                   | 1h 46min                    |
| Primary_1       | 2nd Special Elementary School of Karpenisi | Karpenisi     | 36.3 km                   | 50min                       |
| Primary_2       | 1st Primary School of Agrafa               | Agrafa        | 41 km                     | 1h 13min                    |
| Primary_3       | 2nd Primary School of Valaora              | Valaora       | 46.3 km                   | 1h 9min                     |
| Primary_4       | 1st Primary School of Granitsa             | Granitsa      | 44.3 km                   | 1h 6min                     |
| Primary_5       | 1st Primary School of Dafni                | Dafni         | 16.5 km                   | 25min                       |
| Primary_6       | 1st Primary School of Dafnoulia            | Dafnoulia     | 63.9 km                   | 1h 37min                    |
| Primary_7       | 2nd Primary School of West Fragistas       | West Fragista | 19.3 km                   | 31min                       |
| Primary_8       | 1st 7th Primary School Karpenisi           | Karpenisi     | 36.3 km                   | 50min                       |
| Primary_9       | 2nd 10th Primary School Karpenisi          | Karpenisi     | 36.3 km                   | 50min                       |
| Primary_9       | 3rd 7th Primary School Karpenisi           | Karpenisi     | 36.3 km                   | 50min                       |
| Primary_10      | 4th 6th Primary School Karpenisi           | Karpenisi     | 36.3 km                   | 50min                       |

|        |                                                 |                    |         |          |
|--------|-------------------------------------------------|--------------------|---------|----------|
| Dim_11 | 2nd Primary School of Krenti                    | Krenti             | 13.4 km | 19min    |
| Dim_12 | 1st Primary School<br>Palaiokatounas            | Palaiokatouna      | 31.2 km | 51min    |
| Dim_13 | 1st Primary School of Platanos -<br>Mesochoriou | Mesochori Kleitsou | 87.6 km | 2h 11min |
| Dim_14 | 2nd Primary School<br>Raptopoulou               | Raptopoulo         | 55.3 km | 1h 26min |
| Dim_15 | 1st Primary School of Stenoma                   | Stenoma            | 48.4 km | 1h 10min |
| Dim_16 | 1st Primary School of Fournas                   | Fournas            | 77.4 km | 1h 46min |
| Gymn_1 | 1st Gymnasium<br>Karpenisiou                    | Karpenisi          | 36.3 km | 50min    |
| Gymn_2 | Gymnasium of Western<br>Fragkista               | Western Fragkista  | 19.3 km | 31min    |
| Gymn_3 | Gymnasium<br>Palaiokatounas                     | Palaiokatouna      | 31.2 km | 51min    |
| Gymn_4 | 2nd Gymnasium<br>Karpenisiou                    | Karpenisi          | 36.3 km | 50min    |
| Gymn_5 | Gymnasium of Granitsa                           | Granitsa           | 44.3 km | 1h 6min  |
| Gymn_6 | Gymnasium<br>Kerasochoriou                      | Kerasochori        | 10.9 km | 17min    |
| Gymn_7 | Gymnasium<br>Raptopoulou                        | Raptopoulo         | 55.3 km | 1h 26min |
| Gymn_8 | Gymnasium of Fournas                            | Fournas            | 77.4 km | 1h 46min |
| Lyk_1  | General Lyceum<br>Karpenisiou                   | Karpenisi          | 36.3 km | 50min    |
| EPAL_1 | EPA.L.<br>Karpenisiou                           | Karpenisi          | 36.3 km | 50min    |
| EPAL_2 | EPA.L. of Western<br>Fragkista                  | Western Fragkista  | 19.3 km | 31min    |

Table 1-12. Public education structures in the Regional Unit of Evrytania. Data sources: Directorates of Primary Education (data 2022-2023) and Secondary Education of Evrytania (2013-2014). Processing, distance measurement via google maps: NTUA Research Team, 2023.

| Level              | Health Unit                | Municipality              | Distance from Viniani (km) | Distance from Viniani (time) |
|--------------------|----------------------------|---------------------------|----------------------------|------------------------------|
| Hospital           | General Hospital Karpenisi | Municipality of Karpenisi | 36.3 km                    | 50min                        |
| Health Center      | H.C. Western Fragkista     | Municipality of Agrafa    | 19.3 km                    | 31min                        |
| Regional Clinic_1  | P.I. Agrafon               | Municipality of Agrafa    | 41 km                      | 1h 13min                     |
| Regional Clinic_2  | P.I. Valaoras              | Municipality of Agrafa    | 46.3 km                    | 1h 9min                      |
| Regional Clinic_3  | P.I. Domnitsas             | Municipality of Karpenisi | 74 km                      | 1h 42min                     |
| Regional Clinic_4  | P.I. Kerasochoriou         | Municipality of Agrafa    | 10.9 km                    | 17min                        |
| Regional Clinic_5  | P.I. Krikellou             | Municipality of Karpenisi | 65.7 km                    | 1h 24min                     |
| Regional Clinic_6  | P.I. Megalou Choriou       | Municipality of Karpenisi | 49.3 km                    | 1h 7min                      |
| Regional Clinic_7  | P.I. Palaiokatounas        | Municipality of Agrafa    | 31.2 km                    | 51min                        |
| Regional Clinic_8  | P.I. Proussou              | Municipality of Karpenisi | 65.1 km                    | 1h 29min                     |
| Regional Clinic_9  | P.I. Raptopoulou           | Municipality of Agrafa    | 55,3                       | 1h 26min                     |
| Regional Clinic_10 | P.I. Stenomatos            | Municipality of Karpenisi | 48.4 km                    | 1h 10min                     |
| Local Clinic       | Karpenisi Clinics          | Municipality of Karpenisi | 36.3 km                    | 50min                        |

Table 1-13. Health Structures and Primary Health Care Structures in the Regional Unit of Evrytania. Data source: Ministry of Health, Primary Health Care, 2022. Processing, distance measurement via google maps: NTUA research team, 2023.



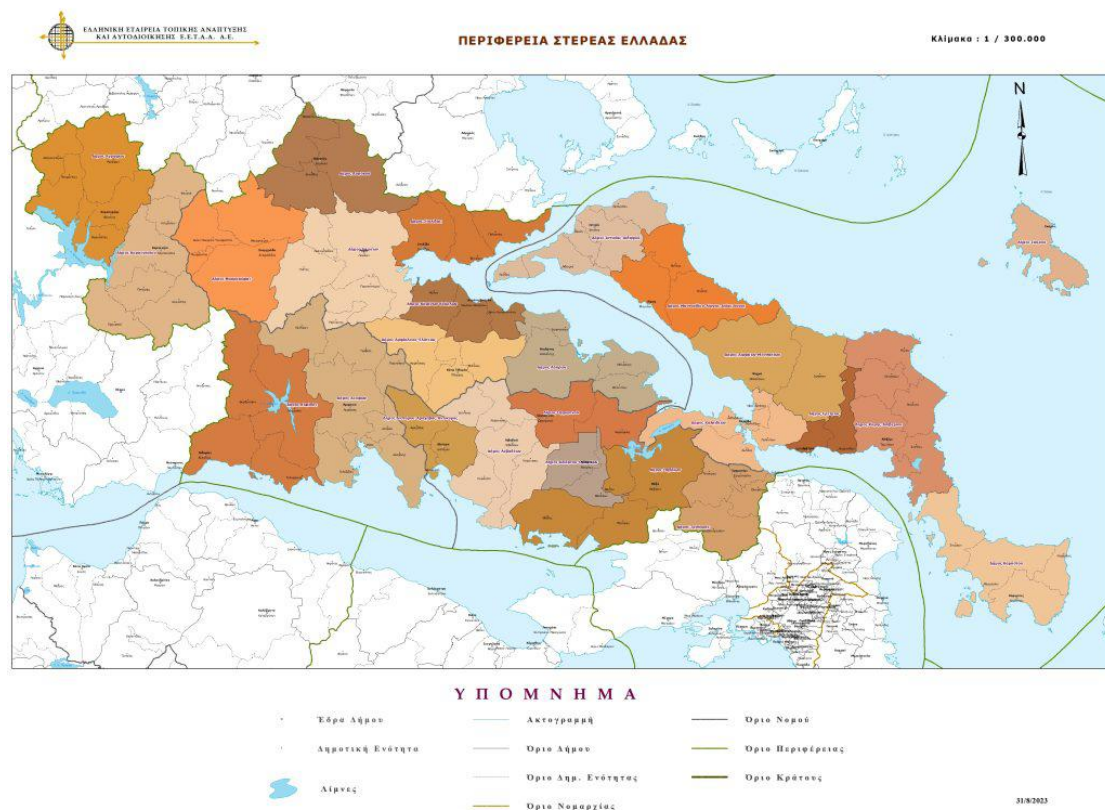
Map 1-3. Schematic representation of the time distance of Viniani from the settlements of the P.E. of Evrytania that have health structures. The sizes of the circles of the settlements correspond to their population size and the sizes of their names correspond to the level of the health structure. The circles correspond to the time distances of 30, 60 and 90 minutes, respectively. Source: NTUA Research Team, 2023.



## 2 Vinian-Agrafa-Evrytania: spatial connections and natural environment

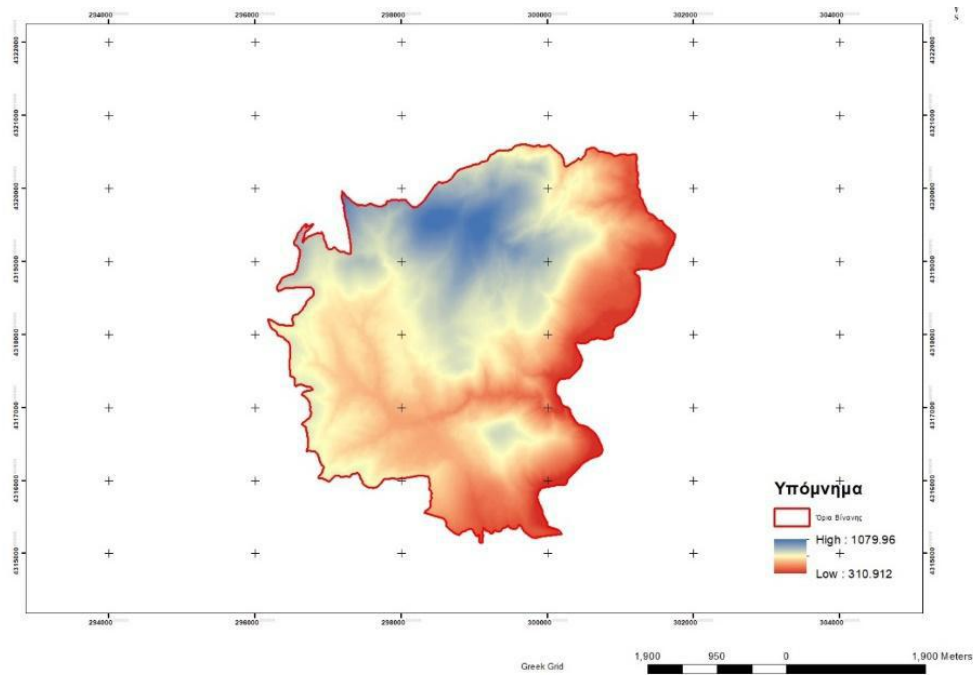
### 2.1 The Municipal Unit of Viniani of the Municipality of Agrafa

The Municipal Unit of Viniani is located, as shown in Map 2-1, in the central and northwestern part of the Regional Unit of Evrytania. It is one of the five Municipal Units of the Municipality of Agrafa. It borders to the North and West with the Regional Unit of Karditsa and with the Municipal Units of Agrafa and Fragkista of the Municipality of Agrafa and Karpenisi, Ktimenia and Fourni of the Municipality of Karpenisi.

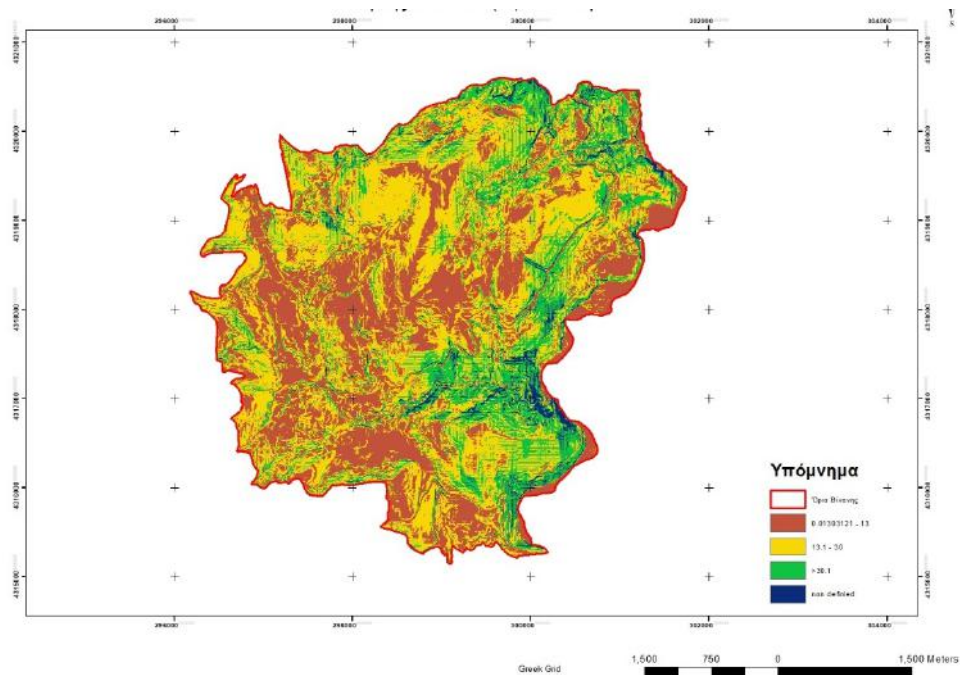


Map 2-1. General Map of the municipalities. The Municipal Unit of Viniani in Agrafa. Source: EETA

It is a mountainous area which extends at an altitude from 310m to 1079m (Map 2-2) with the lowest altitudes in the east where the gorge and the valleys of Megdova and its tributaries are located in the east and the highest in the peaks of Agrafa in the north. The largest part of the soil has particularly large slopes which exceed 30%. This also contributes to the problem of landslides.



Map 2-2. Elevation map of the Municipal Unit of Viniani. It is a predominantly mountainous area with elevations ranging from 300 m in the Megdova zone to the east and exceeding 1,000 m to the north. Source: Corine, 2018.



Map 2-3. Slope map of the Municipal Unit of Viniani. Large parts of the area have particularly steep slopes which exceed 30%. This also contributes to the problem of landslides. Source: Corine, 2018.

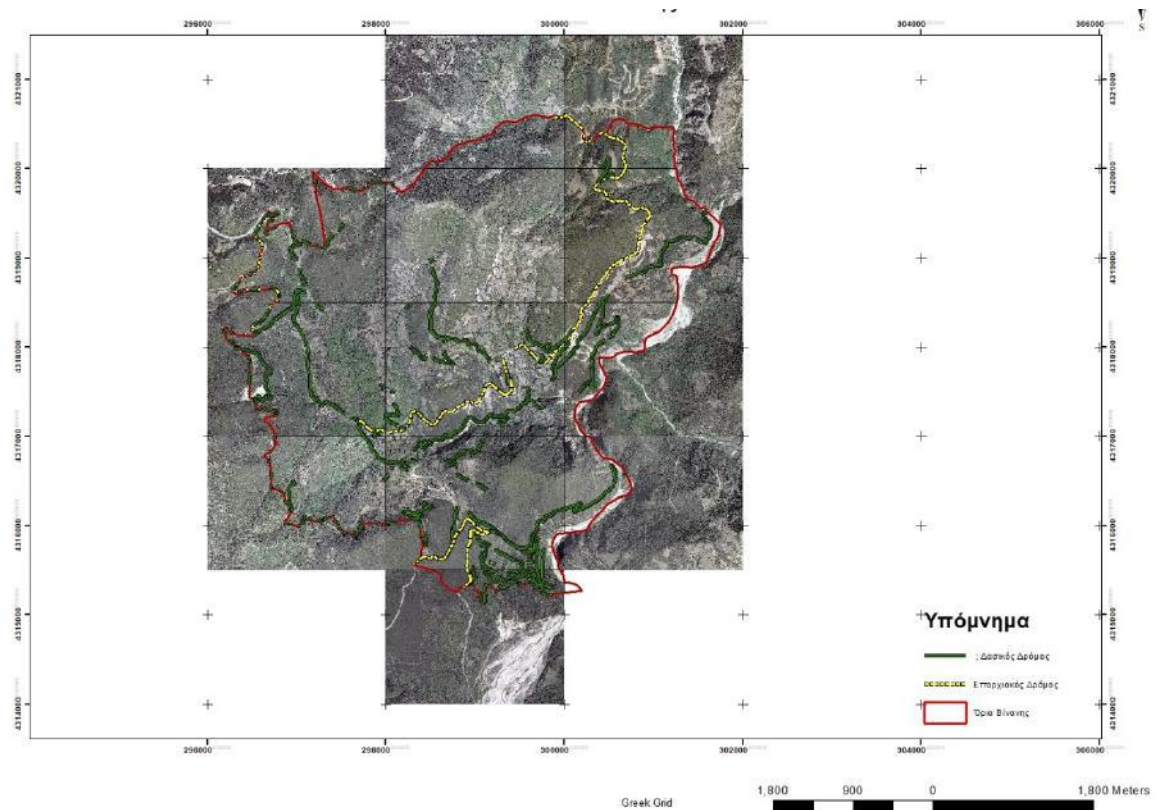
## 2.2 Travel times: settlement network - regional and national urban centers - infrastructure

The Municipality of Agrafa consists of five Municipal Units (former Kapodistrian Municipalities), the M.U. Agrafa, Aperantia, Aspropotamos, Vianni and Fragista, with the seat of the Municipality in Kerasochori and 32 Local Communities.

Agrafa has a sparsely populated settlement network, a complex of dozens of small and medium-sized villages scattered in the mountainous area of Agrafa, with a total population of 5,983 inhabitants (2021). The settlements are connected to each other through a complete but extensive provincial road network with many inaccessible points due to the mountainousness and winter conditions. The distances form one of the most important conditions of exclusion as the extreme villages of Agrafa are up to 3.5 hours away from Karpenisi, a basic regional center with administration and hospital health infrastructure.

In particular, the settlement network of the Municipality of Agrafa is distributed as follows: seven Local Communities fall under the Municipal Unit of Agrafa: Agrafa, Vrangiana, Epiniana, Marathos, Monastiraki, Tridendro and Trovato. Seven Local Communities fall under the Municipal Unit of Aperantia: Granitsa, Valaora, Voulpi, Limeri, Lithochori, Sivista and Topoliana. Five Local Communities fall under the Municipal Unit of Aspropotamos: Raptopoulo, Kedra, Lepiana, Neo Argyri and Prasia. Six Local Communities fall under the Municipal Unit of Vianni: Kerasochori (which is the seat of the Municipality of Agrafa), Agios Dimitrios, Vianni, Dafni, Mavromata and Chryso. Seven Local Communities fall under the Municipal Unit of Fragista: West Fragista, East Fragista, Episkopi, Marathias, Palaiokatouna, Palaiochori and Tripotamos.

<sup>81</sup> Agrafa Municipality website, 2023, <https://agrafa.gr/>

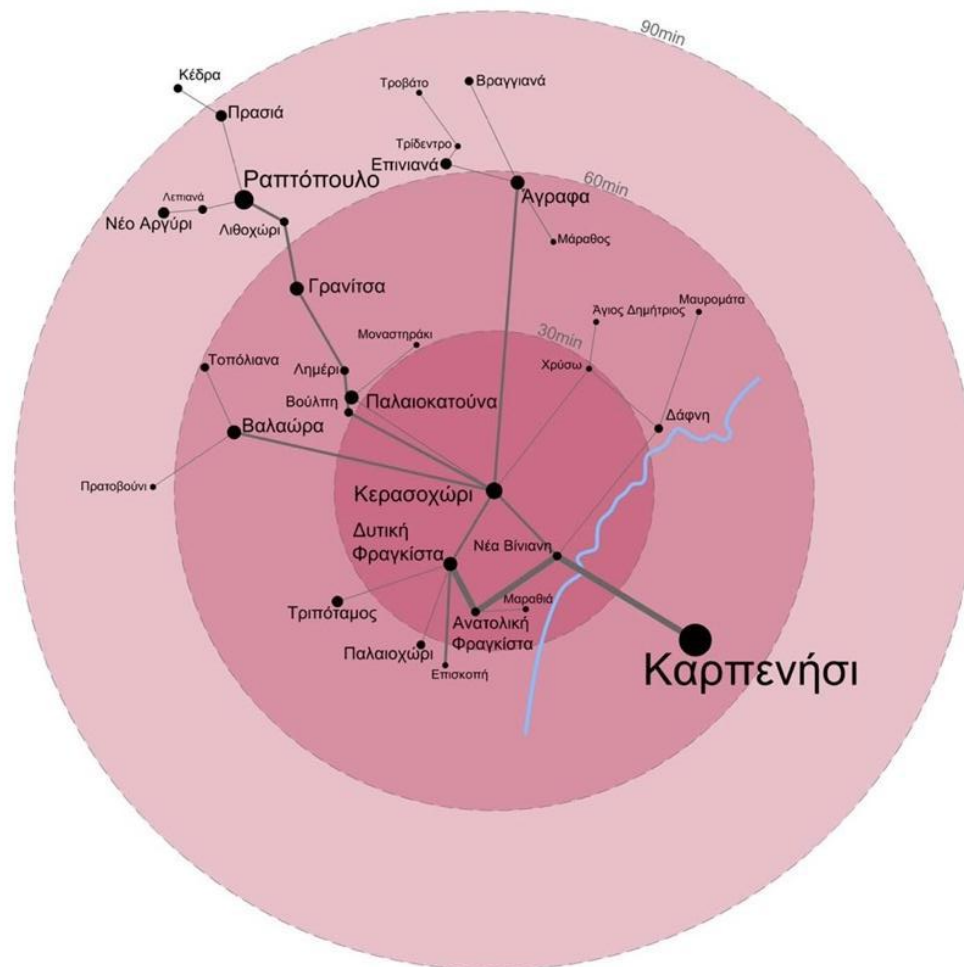


Map 2-4. Road network of the Municipal Unit of Viniani. Provincial roads (yellow) and forest roads (green) are distinguished

The following table and map show the population sizes of the Local Communities of the Municipality and their distance (in time and kilometers) from Kerasochori, the seat of the Municipality. The proximity of the seat of the Municipality (within 30 minutes) is only found with the Municipal Unit of Fragkista. Correspondingly, the Municipal Units of Agrafa, Aperantia and Aspropotamos are about or more than an hour away from Kerasochori.

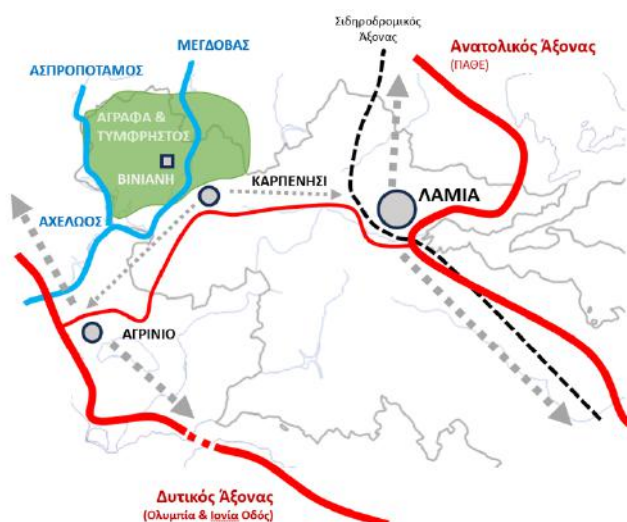
|                                             | Time distance from Kerasochori |               | Population   |
|---------------------------------------------|--------------------------------|---------------|--------------|
| MUNICIPALITY OF AGRAFA                      | Time (min)                     | Distance (km) | <b>5.983</b> |
| <b>MUNICIPAL UNIT OF VINIANI</b>            |                                |               | <b>846</b>   |
| Municipal Community of Kerasochori          | 0 min                          | 0 km          | 438          |
| Municipal Community of Agios Dimitrios      | 37 min                         | 16.2 km       | 37           |
| Municipal Community of Viniani              | 17 min                         | 11 km         | 127          |
| Municipal Community of Dafni                | 33 min                         | 22.7 km       | 130          |
| Municipal Community of Mavrommata           | 51 min                         | 34.4 km       | 64           |
| Municipal Community of Chrysos              | 29 min                         | 22.6 km       | 50           |
| <b>MUNICIPAL UNIT OF AGRAFA</b>             |                                |               | <b>1.044</b> |
| Municipal Community of AgraFA               | 58 min                         | 30.5 km       | 377          |
| Municipal Community of Vragianon            | 1h 17 min                      | 38.6 km       | 141          |
| Municipal Community of Epinianon            | 1h 2 min                       | 33.4 km       | 251          |
| Municipal Community of Marathos             | 48 min                         | 25.4 km       | 69           |
| Municipal Community of Monastiraki          | 31 min                         | 19.7 km       | 88           |
| Municipal Community of Tridendro            | 1h 5 min                       | 34.6 km       | 46           |
| Municipal Community of Trovato              | 1h 16 min                      | 38.5 km       | 72           |
| <b>MUNICIPAL UNIT OF APERANTIA</b>          |                                |               | <b>1.440</b> |
| Municipal Community of Granitsa             | 53 min                         | 33.7 km       | 363          |
| Municipal Community of Valaora              | 50 min                         | 33.6 km       | 316          |
| Municipal Community of Voulpi               | 31 min                         | 20.8 km       | 181          |
| Municipal Community of Limeri               | 36 min                         | 24.3 km       | 184          |
| Municipal Community of Lithochori           | 1h 4 min                       | 39.5 km       | 175          |
| Municipal Community of Sivisti (Pratovouni) | 1h 4 min                       | 42.8 km       | 57           |
| Municipal Community of Topoliana            | 59 min                         | 38.8 km       | 164          |
| <b>MUNICIPAL UNIT OF ASPROPOTAMOS</b>       |                                |               | <b>1.386</b> |
| Municipal Community of Raptopoulo           | 1h 12 min                      | 44.7 km       | 549          |
| Municipal Community of Kedron               | 1h 36 min                      | 59 km         | 150          |
| Municipal Community of Lepiana              | 1h 16 min                      | 47.1 km       | 176          |
| Municipal Community of Neo Argyriou         | 1h 21 min                      | 53.3 km       | 240          |
| Municipal Community of Prasia               | 1h 27 min                      | 53.9 km       | 271          |
| <b>MUNICIPAL UNIT OF FRAGISTA</b>           |                                |               | <b>1.267</b> |
| Municipal Community of Western Fragista     | 16 min                         | 10.3 km       | 336          |
| Municipal Community of Eastern Fragista     | 23 min                         | 12.4 km       | 150          |
| Municipal Community of Episkopi             | 34 min                         | 23.9 km       | 24           |
| Municipal Community of Marathia             | 23 min                         | 16.7 km       | 39           |
| Municipal Community of Palaioikatouna       | 32 min                         | 20 km         | 369          |
| Municipal Community of Palaiochori          | 32 min                         | 21.4 km       | 137          |
| Municipal Community of Tripotamos           | 36 min                         | 22.7 km       | 212          |

Table 2-1. Population of the Municipality of AgraFA per Municipal and Local Unit and their distance from Kerasochori. Source: "Census Results 2021, bulletin 17.03.2023". Processing, distance measurement via google maps: NTUA research team, 2023.



Map 2-5. Schematic representation of the time distance and centralities in the Municipality of Agrafa with center (starting point) Kerasochori. The sizes of the circles and the names of the settlements correspond to their population size. The circles correspond to the time distances of 30, 60 and 90 minutes, respectively. Source: NTUA Research Team, 2023.

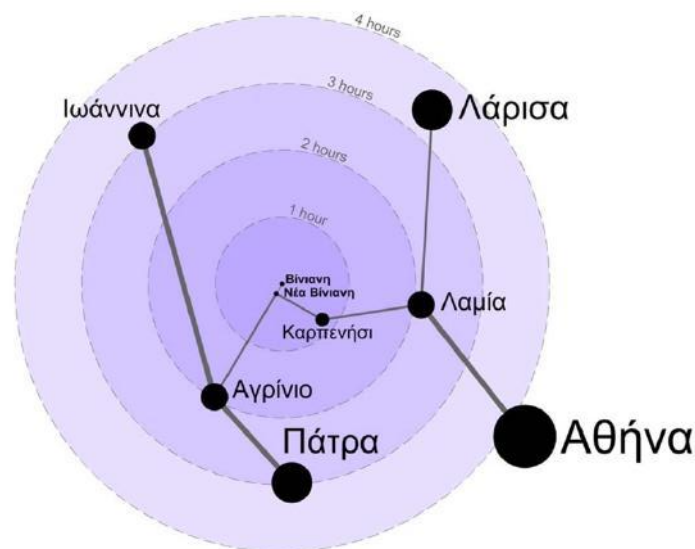
As already mentioned, Agrafa and the Viniani area are in the most remote zone in relation to the international, national and regional axes. In the center of mountainous Central Greece and at great distances from the axes, the area is connected via local provincial roads to Karpenisi to the east and Agrinio to the west. Through these, the area communicates with the eastern national road (PATHE) and railway axis and with the western (Ionia Odos). In particular, Viniani is 36 km from Karpenisi and 106 km from Lamia, PATHE and the railway axis, 96 km from Agrinio and Ionia Odos. Due to the mountainous nature of the routes, the time distances are particularly long. Specifically 48' from Karpenisi, 2 hours and 06' from Lamia and 1 hour and 58' from Agrinio.



Map 2-6. The remote location of Agrafa and the Viniani area in relation to international, national and regional axes. Source: NTUA Research Team, 2023.

| City      | Distance from Viniani |         |
|-----------|-----------------------|---------|
| Karpenisi | 48 min                | 36.3 km |
| Lamia     | 2h 6 min              | 106 km  |
| Athens    | 4h 17 min             | 315 km  |
| Patras    | 2h 58 min             | 176 km  |
| Larissa   | 3h 26 min             | 193 km  |
| Agrinio   | 1h 58 min             | 96.4 km |
| Ioannina  | 3h 3 min              | 191 km  |

Table 2-2. Distance (kilometric and temporal) of Viniani from important urban centers. Source: NTUA Research Team, 2023.



Map 2-7. Schematic representation of the time distance of Viniani from important urban centers. The sizes of the circles and the names of the cities correspond to their population size. The circles correspond to the time distances of 1, 2, 3, and 4 hours, respectively. The nearest urban center is Karpenisi, one hour away. Lamia and Agrinio are about two hours away, Patras and Ioannina three hours, Larissa three and a half, and Athens four hours by car. There is also a railway connection to Athens via Lamia (Lianokladi), which corresponds approximately to the times of the road connection. Source: NTUA Research Team, 2023.

In conclusion, the settlement pair of Viniani is isolated within the mountainous volume of Agrafa. The analysis of the distances shows the dependence on the nearest urban center of Karpenisi, which is about one hour away, while the other regional centers are approximately two (Lamia, Agrinio) to three and a half hours away (Patras, Ioannina, Larissa). The capital is four hours away by road or in combination with a road-rail connection via Lamia (Lianokladi). Within the Municipality of Agrafa, the pair of Viniani is centrally located, near Kerasochori (17min), the seat of the municipality, and Fragkista (16min). At long distances exceeding one hour, through difficult mountain routes, are most of the settlements of the remaining municipal units of Agrafa, Aperantia and Aspropotamos.

### 2.3 The European Path E4

Agrafa is crossed by one of the most important mountain hiking networks in Europe. The European path E4 is an international path under the supervision of the European Union of Mountain Hiking with a total length of over 10,000 km. It starts from Tarifa in Spain and ends in Larnaca, Cyprus. It crosses the countries of Spain, France, Switzerland, Germany, Austria, Hungary, Serbia,

Bulgaria, Greece and Cyprus. In its Greek part, it covers a section of approximately 1,800 km starting from Florina and ending in Kato Zakros in Crete.

In the Municipality of Agrafa, the E4 trail starts north from Vrangiana, continues to Trikedro, Agrafa and Monastiraki, to reach Krenti and Kerasochori from the west. With a route almost parallel to the provincial road, the path reaches Nea Viniani and from there to the Viniani bridge on Megdova. It crosses the river at Stenoma and from there follows the route of the provincial road to Karpenisi.

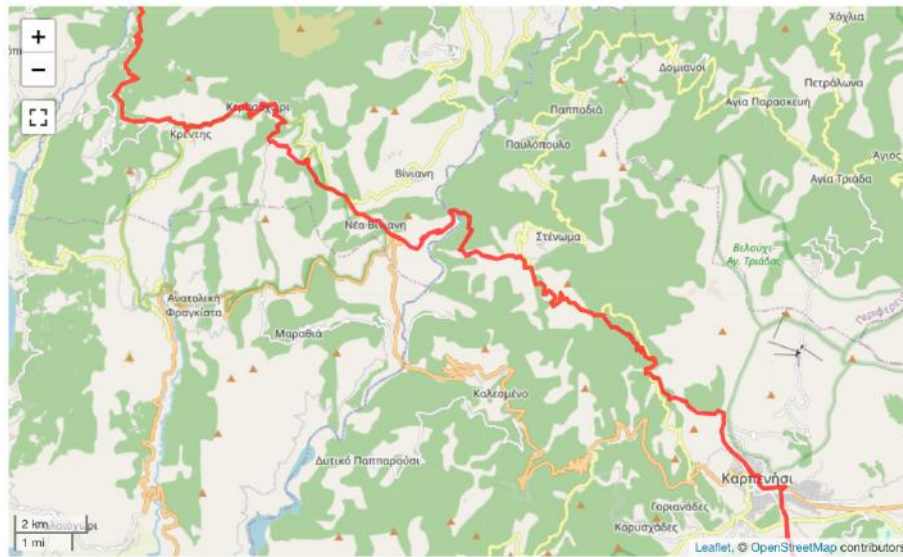


Image 2-1. Section of the European Path E4 in the wider area of Viniani. Source: "European Path E4". <https://www.trailpath.gr/eurwpaiko-monopati-e4/>.

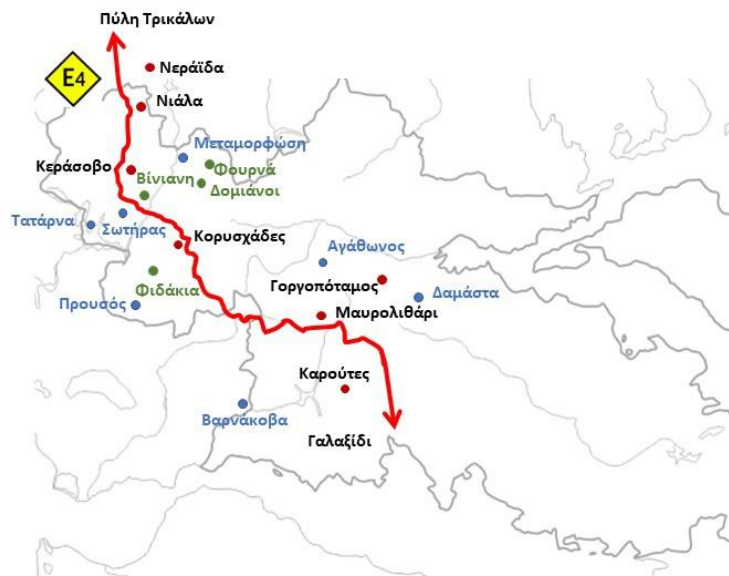
The mountain route of the European Path E4, from Thessaly to the Corinthian Gulf, through Evrytania and Fokida, combined with the network of places of cultural and historical interest as well as ecological interest, is one of the most beautiful sections. It is a particularly dense network with medieval and newer monuments, traditional settlements, historical places of the National Resistance 1941-1944, historical monasteries. These routes cross places of particular natural beauty and ecological interest (mountain passes and gorges, forests, rivers). The path starts from the Gate of Trikala in the north, crosses Agrafa and continues to Vardousia and Giona to end in Galaxidi in the south. Through Viniani it branches towards the Acheloos zone to the west and the Tymfristos zone to the east. On these routes are:

- The historical site of Viniani.

<sup>82</sup>European Path E4. <https://www.trailpath.gr/eurwpaiko-monopati-e4/> [last accessed: 27.10.2023].

- The traditional settlements of Evrytania Fournia, Fidakia and Domiani.
- The monasteries of Tatarna, Sotira, Metamorphosis, Prousos, Damasta, Agathonos, Varnakova.
- The battle sites and staff sites of the National Resistance 1941-1944 Vinianni, Kerasovo, Koryschades, Mavrolithari, Gorgopotamos, Kouroutes, Neraida and the mountain pass of Niala.
- The bridges of Megdova, Manolis and the smaller protected bridges of tributaries.

83



Map 2-8. The main points of cultural and historical interest along the route of the European Path E4 in Central Greece. Processing: NTUA Research Team, 2023.

## 2.4 Geography data of Viniani

The mountainous massif of Agrafa is part of the Pindos and is the southernmost part of the Balkan mountain range. It is characterized by strong morphological slopes and maximum altitudes exceeding 2,000m.

(Velouchi) and the Agrafa complex, the deep valleys and gorges of Acheloos and its branches are formed. Within these, the Megdovas river springs from the Neraida plateau - today the artificial Lake Plastira - and flows south between Tymfristis and Agrafa to meet the Acheloos at the height of Tatarna, in the artificial lake of Kremasta. In particular, the Agrafa region geologically exhibits a "strong vertical and horizontal dissection that modifies it

<sup>83</sup>Traditional Settlements of Evrytania Prefecture: Domiani, Fournia, Fidakia. Government Gazette 594/D/13.11.1978 "Regarding the designation as traditional settlements..."

<sup>84</sup>Apostolidis, Emm. (2005). "Report of a technical-geological examination in an area of the D.D. Dafnis Municipality Vinianis". Institute of Geological and Mining Research (IGME).

on high peaks, ridges and spurs, alternating with deep and multi-faceted ravine valleys.



Figure 2-2. The Megdova Valley and Agrafa from Viniani to the north. Source: NTUA Research Team, 2023.

The settlement of Viniani belongs to the Evrytania prefecture and is located approximately 51 km northwest of the city of Karpenisi. The village develops at an altitude of 560-640 meters, which develops in the eastern and central slopes and valleys of Agrafa, above Megdova and up to Acheloos. It is one of the old network villages which today has two main poles: the two Fragistas and Kerasochori (Kerasovo). Together with Marathia, Dafni and Chryso, it is one of the villages built west of Megdova. Opposite, on the steep slopes of Tymfristos, the residential network thins out with a few old villages at the lower altitudes of the mountain, Kalesmeno, Stenoma and Pavlopoulo.

<sup>85</sup> Eleftheriou, Ant., Mougias, N. (1981). "Reports of geotechnical research in settlements of the Prefecture Evrytania". Institute of Geological and Mining Research (IGME).

<sup>86</sup> Topographic Sheet G.Y.S. scale 1:50,000 "Fragista"

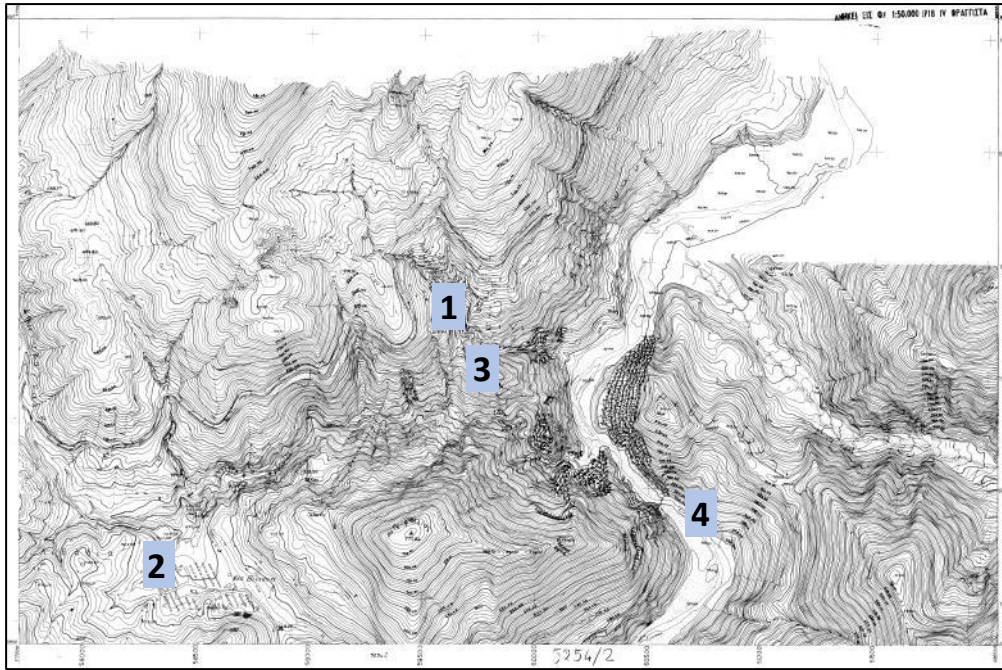


Image 2-3. The relief of Agrafta and the residential dipole of Viniani next to the gorge of Megdova.

Legend: 1. Viniani. 2. Nea Viniani (Livadia). 3. Agios Georgios hill and "Tsouknides". 4. Arched bridge of Megdova. [Background: Topographic Sheet G.Y.S. scale 1:50,000 "Fraggista"]

Viniani was in that position, on the slope on either side of a double forked stream that flows into Megdova, for many centuries until its abandonment, after the earthquakes of 1966 which struck the area. After this catastrophic event, the settlement was abandoned and Nea Viniani was built at a distance of approximately 1.7 km southwest of the old location, in the small plateau of Livadia. There was an older location of the settlement from Hellenistic times until the 18th century, which according to archaeological findings was located a short distance from the current historical settlement of Viniani, on the hill of Agios Georgios and the slope of "Tsouknides".

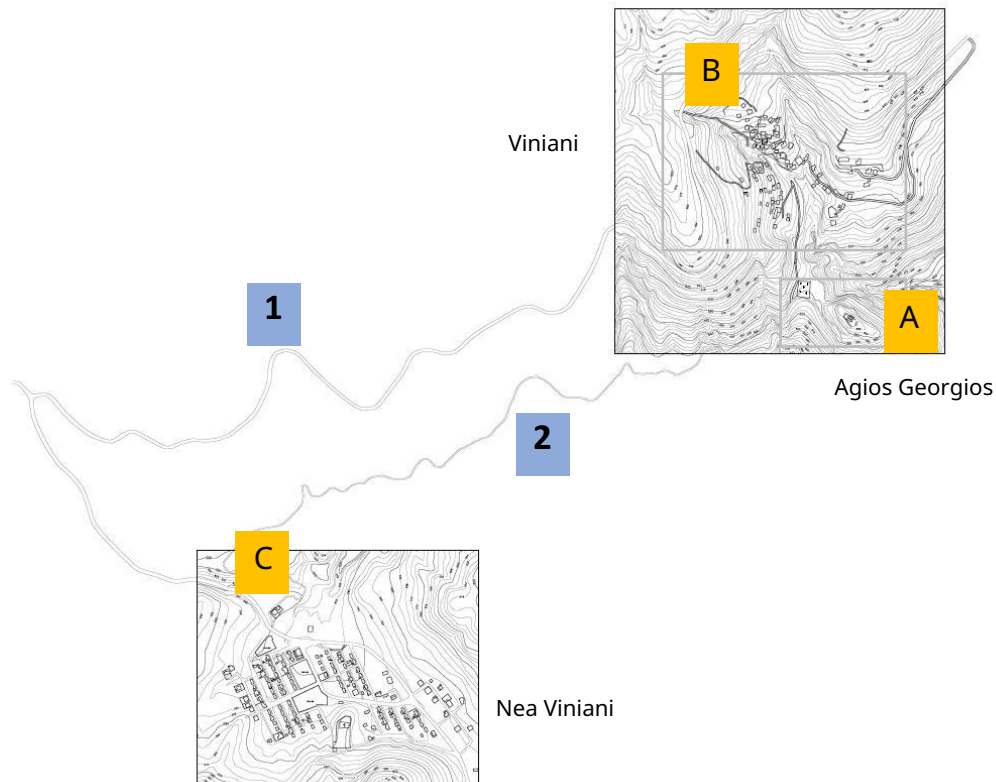


Image 2-4. The complex of three overlapping settlements, the hill of Agios Georgios, the old settlement of Viniani and Nea Viniani (Livadia).

Legend: A. The original Viniani from Hellenistic times to the 18th century. <sup>th</sup>century. B. Viniani from the 18th century to 1966. C. Nea Viniani from 1966. 1. The post-war provincial road. 2. The old path. Backgrounds: National Cadastre and Army Geographical Service. Processing: NTUA research team, 2023.

At a distance of approximately 1.5 km southeast is the single-arched old bridge with the passage of the river, the road of the Ottoman period that connected Karpenisi with Agrinio and Arta. Today's national road moves further south and passes over a metal military bridge of 1947, which is located 5 km from the old bridge. The entire zone of Viniani is covered by forests with small sections of cultivated land around the settlements. To the west is the Viniani-Marathias Wildlife Refuge.

The mountainous volume of Agrafa

Agrafa is one of the most interesting mountain complexes in the country. They stretch over a large volume that the Agrafiotis River divides into eastern and western sections. They stretch from north to south for 50 km and from east to west for 30 km, with a total area of more than 1,500 sq.km. They constitute one of the southern sections of the Pindos mountain range, bordering Tymfristos to the east, Tzoumerka and Koziakas to the north, the Mountains of Valtos to the west and Vardousia and Gkiona to the south. Rivers and deep ravines

cross the mountains, the main ones being Aspropotamos-Acheloos, Tavropos-Megdova, Agrafiotis and hundreds of tributaries. As a whole, the river network ends up in the artificial lake of Kremasta, while Megdovas starts from the artificial lake of Plastira, which is the border with Thessaly.



Image 2-5. The artificial lake of Kremasta on the Acheloos River. Photo: Dimitris Geronikos.

The peaks of the Agrafa mountain ranges, which consist of limestones, reach an altitude of over 2,000 meters, with the highest being Karava (2,184 meters). The consequence of the fact is the characteristic of the geomorphological relief - as almost every mountain range consisting of limestone rocks - with the large slopes of the slopes, as well as the presence of deep ravines and some valleys.

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<sup>87</sup> <https://dapgeol.tripod.com/geologiaellados.htm>



Image 2-6. The Megdovas River flows in the depths of the Agrafa valleys. Photo: Dimitris Geronikos.

In the area of Viniani, the Megdovas-Tavropos river, which flows into the Acheloos, separates the mountainous volume of Tymfristos from the rest of Agrafa with a deep ravine. The dipole of the settlements of Viniani are located exactly at the confluence of the valleys and the main gorge of Megdovas, near the river, on the route that connects them with Karpenisi.



Image 2-7. Herd of goats in a small meadow above Lake Kremaston. Photo: Dimitris Geronikos.

The climate of Agrafa is clearly influenced by the geographical location, the mountainous masses and the exposure of their slopes, the rivers and the artificial lakes. An important role in its formation is played by the humidity of the air in the form of fog or low clouds. The climate varies from Mediterranean with cool wet winters and hot dry summers, which are observed at lower altitudes - to the Mediterranean climate of high mountain ranges with harsh and prolonged winters where high values of annual atmospheric precipitation and dry summers are observed.

#### The flora and fauna

Agrafa, as can be seen from the records below, is one of the most important mountain wildlife refuges in Greece with rich flora and dominant forest and alpine character. They are covered by dense coniferous and broad-leaved forests with fir, black pine, chestnut and oak forests dominating.

The rich biodiversity of the area is characterized by many species of plants that create the appropriate conditions for the production of high nutritional value products with an export orientation.



Image 2-8. Coniferous forest in Agrafa. Photo: Dimitris Geronikos.

In the Municipal Unit of Viniani, coniferous forest areas account for 77% of forest cover with an area of approximately 110 sq. km.

The dense forests of Agrafa are covered by Macedonian fir (*Abies borisii-regis*), Cephalonian fir (*Abies cephalonica*), black pines (*Pinus nigra*), beeches (*Fagus*

*sylvatica*), καστανιές (*Castanea sativa*) και πολλά είδη βελανιδιάς (*Quercus sp.*) ενώ υπάρχουν σφενδάμια (*Acer sp.*), σορβιές (*Sorbus sp.*), βουνοκυπάρισσα (*Juniperus communis*), σκλήθρα (*Alnus glutinosa*), φτελιές (*Ulmus minor*), οστρυές (*Ostrya carpinifolia*), γάυροι (*Carpinus betulus*), ιτιές (*Salix sp.*), κουμαριές (*Arbutus unedo L.*) όπως και πλατάνια (*Platanus orientalis*) στις κοίτες των ποταμών, στις πηγές και στα ρέματα. Στα μεγάλα αλπικά υψόμετρα υπάρχουν χορτολιβαδικές εκτάσεις.

Στη βιβλιογραφία αναφέρεται ότι στα Άγραφα ευδοκούν 1.200-1.300 είδη φυτών.<sup>88</sup>

Τα πιο σημαντικά από αυτά είναι η κενταύρια (*Centaurea messenicolasiana*), το κολχικό (*Colchicum rausii*), η *Aquilegia vulgaris*, η *Asperula pinifolia*, η *Asperula oetaea*, η *Achillea pindicola subsp pindicola*, ο κρίνος (*Lilium albanicum*), το *Laburnum alpinum*, το *Veratrum nigrum L.*, το θυμάρι (*Thymus dolopicus*), το *Helichrysum plicatum*, το *Podospermum roseum subsp peristericum*, η *Satureja horvatii subsp macrophylla*, η Σιληνή (*Silene congesta*), το *Cirsium heldreichii subsp heldreichii*, το *Seseli parnassicum*, οι Βιόλες (*Viola epirota* και *Viola rupestris*), το *Erigeron alpinus*, η Φριτιλάρια (*Fritillaria thessala subsp ionica*), το *Doronicum austriacum*, το Γεράνι (*Geranium reflexum*), η *Aubrieta scardica* και το *Rhynchocorys elephas subsp elephas*.

Άλλα είδη της χλωρίδας των βουνών είναι το *Vincetoxicum speciosum*, η *Pinguicula crystallina subsp hirtiflora*, ο Κρίνος (*Lilium chalcedonicum*), η *Pedicularis graeca*, το *Acantholimon graecum*, το Κολχικό (*Colchicum graecum*), η *Artemisia absinthium*, η *Limosella aquatica*, το Αγριογαρύφαλλο (*Dianthus sylvestris subsp sylvestris*), η *Saxifraga sempervivum*, το *Sempervivum heuffelii*, το *Sempervivum marmoreum subsp marmoreum*, η *Veronica orsiniana*, η *Anemone apennina*, η *Orthilia secunda*, η *Scutellaria alpina*, η *Rorippa thracica* και η *Noccaea brevistyla subsp pseudorivularis*.

<sup>88</sup> Για τις αναφορές στη χλωρίδα και πανίδα των Αγράφων τα στοιχεία αντλούνται από το αναλυτικό άρθρο «Ορεινοί όγκοι - Άγραφα», naturagraeca (ένας οδηγός για την άγρια φύση της Ελλάδας), <https://www.naturagraeca.com/ws/122,184,191,1,1,Άγραφα> [τελευταία πρόσβαση: 16.10.2023]. Τα στοιχεία για τις δασικές εκτάσεις αντλούνται από σύστημα δεδομένων Copernicus και τους ελληνικούς δασικούς χάρτες.



Image 2-9. Ecosystem of Viniani with its anthropogenic elements: Ruins, crops and small flock of goats and sheep. Photo: Dimitris Geronikos.

The orchids *Cephalanthera* also thrive in the aforementioned ecosystems  
*damasonium Cephalanthera rubra Epipactis atrorubens Epipactis helleborine Epipactis*  
*subclausa , Dactylorhiza sambucina, Dactylorhiza pindica , Dactylorhiza saccifera ,*  
*Himantoglossum jankae , Gymnadenia conopsea , Neottia ovata , Platanthera chlorantha ,*  
*Neotinea maculata Orchis mascula Orchis purpurea Orchis simia Orchis pallens Ophrys*  
*reinholdii, Ophrys apifera , Ophrys epirotica and Ophrys hebes .* Additionally, in the area  
 species such as oregano (*Origanum vulgare*), mountain tea ( *Sideritis* sp. L.) ,  
 chamomile (*Matricaria recutita*), thistle (*Onopordum acanthium*), broadleaf  
 Phillyrea ( *Phillyrea latifolia* ), nettle (*Urtica* sp. L.), mint (*Mentha* sp.),  
 chestnut ( *Castanea sativa*), walnut ( *Juglans regia*), olive ( *Olea europaea* ),  
 vine (*Vitis vinífera*).

The avifauna, due to the large extent of the mountain range, is also particularly rich with several rare species of vultures and occasional presence of the Egyptian vulture. Rock partridges are found on most mountain slopes, while eagle owls live in the ravines. The great variety of birds of prey appears with eagles and hawks. Specifically, golden eagles, snake eagles, Bonelli's eagles, honey buzzards, buzzards, sparrowhawks, hobbies, lanners, peregrine falcons, lesser kestrels, forest falcons and rarely saker falcons fly. Alpine zones are home to snow finches, pale rockfinches, snow buntings, black-eared wheatears, rock thrushes, snow thrushes, wallcreepers, yellow-billed choughs, red-billed choughs, snow sparrows and alpine accentors. The avifauna of Agrafa is complemented by the well-known species of the Greek mountains,

<sup>89</sup>See "Mountain ranges - Agrafa", naturagraeca (a guide to the wildlife of Greece), <https://www.naturagraeca.com/ws/122,184,191,1,1,Agrafa> [last accessed: 16.10.2023]

such as woodcocks, stock doves, wood pigeons, turtle doves, cuckoos, owls, eagle owls, nightjars, rock thrushes, crag martins, hoopoes, black woodpeckers, green woodpeckers, pine woodpeckers, white-backed woodpeckers, treecreepers, tree warblers, grey wagtails, dippers, wrens, scrub warblers, nightingales, redstarts, blue rock thrushes, thrushes, fieldfares, subalpine warblers, wood warblers, goldcrests, firecrests, spotted flycatchers, coal tits, marsh tits, long-tailed tits, treecreepers, rock nuthatches, wallcreepers, jays, nutcrackers, finches, linnets, siskins, hawfinches, rock buntings, snowfinches and citril finches.

The amphibian fauna near the rivers and streams consists of salamanders, common newts, alpine newts, toads, green toads, yellow-bellied toads, tree frogs, Greek frogs, agile frogs and Balkan frogs.

In Agrafta, the distribution areas of all three terrestrial turtles that live in Greece are found: the Mediterranean turtle, the Hermann's tortoise, and the marginated tortoise. The reptile fauna is very rich in snakes and lizards and includes species such as the snake-eyed skink, the European blind snake, the Mediterranean house gecko, the Balkan green lizard, the ocellated lizard, the European legless lizard, the ruin lizard, the Taurus lizard, the Balkan whip snake, the Caspian whipsnake, the four-lined snake, the Aesculapian snake, the dice snake, the western whip snake, the European cat snake, the Aesculapian snake, the house snake and the common viper.

The area is a habitat for large and small mammals. There is occasional presence of the bear and permanent presence of the wolf, while roe deer and wildcats still live in the forests. Herds of wild boars, weasels, martens, badgers, foxes, hares, forest dormice and tree dormice, squirrels and various species of rodents and bats complete the fauna. There are otter populations in the rivers. Finally, the fish fauna of the rivers is also important. The predatory Ionian trout (*Salmo farioides*), the Peloponnesian barbel (*Barbus peloponnesius*), the Peloponnesian chub (*Squalius peloponnesius*), the American trout (*Oncorhynchus mykiss*), the river blenny (*Salaria fluviatilis*) and the Vistonis roach (*Telestes pleurobipunctatus*) are found. From the great variety of insects, the most interesting is a rare narrow-range endemic species of grasshopper, the *Oropodisma karavica*, which lives near the top of Karava.

The forests of Vinians

The area of Viniani is covered by dense forests in an area that reaches 80%. Only 10% of the municipal unit's area is transitional land and agricultural land.

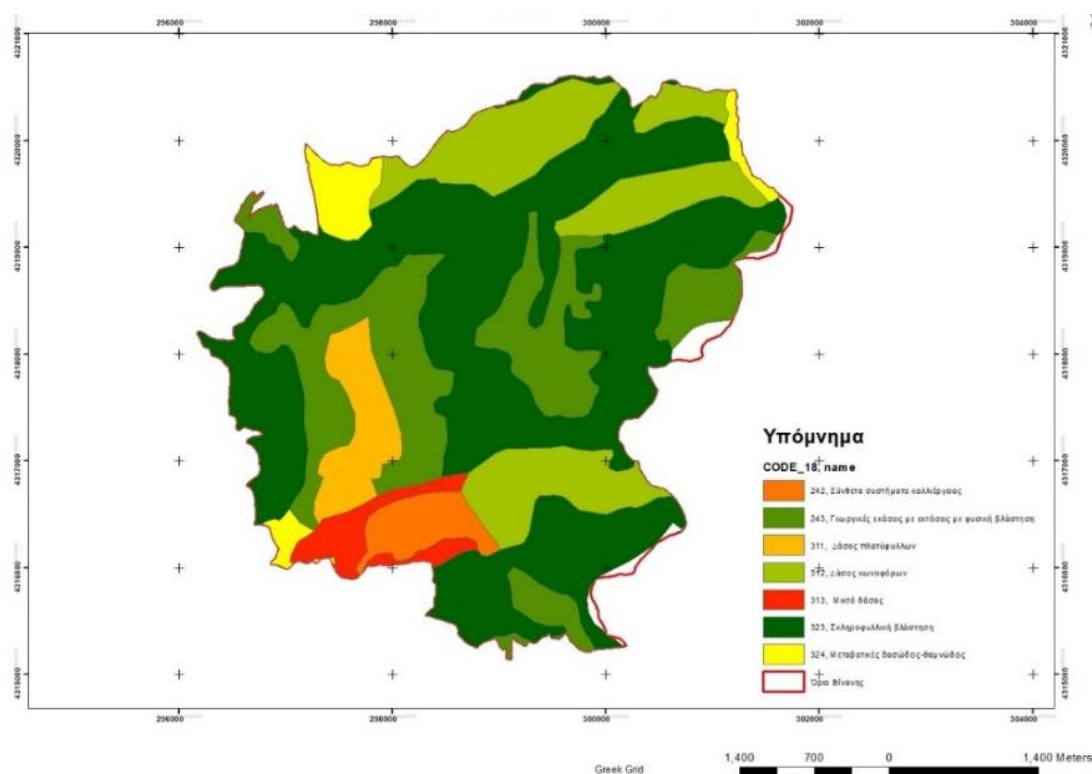
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<sup>90</sup>See "Mountain ranges - Agrafta", naturagraeca (a guide to the wildlife of Greece), <https://www.naturagraeca.com/ws/122,184,191,1,1,Agrafta> [last accessed: 16.10.2023]

<sup>91</sup>See "Mountain ranges - Agrafta", naturagraeca (a guide to the wildlife of Greece), <https://www.naturagraeca.com/ws/122,184,191,1,1,Agrafta> [last accessed: 16.10.2023]

The forest categories of the Municipal Unit of Viniani are recorded in detail in the land cover maps of Copernicus (Corine) and in the Greek forest maps. Conifers dominate. According to Corine (2018) (Map 3.3.-1) and as detailed in Table 3.3.-1, the areas in the Municipal Unit of Viniani have the following form:

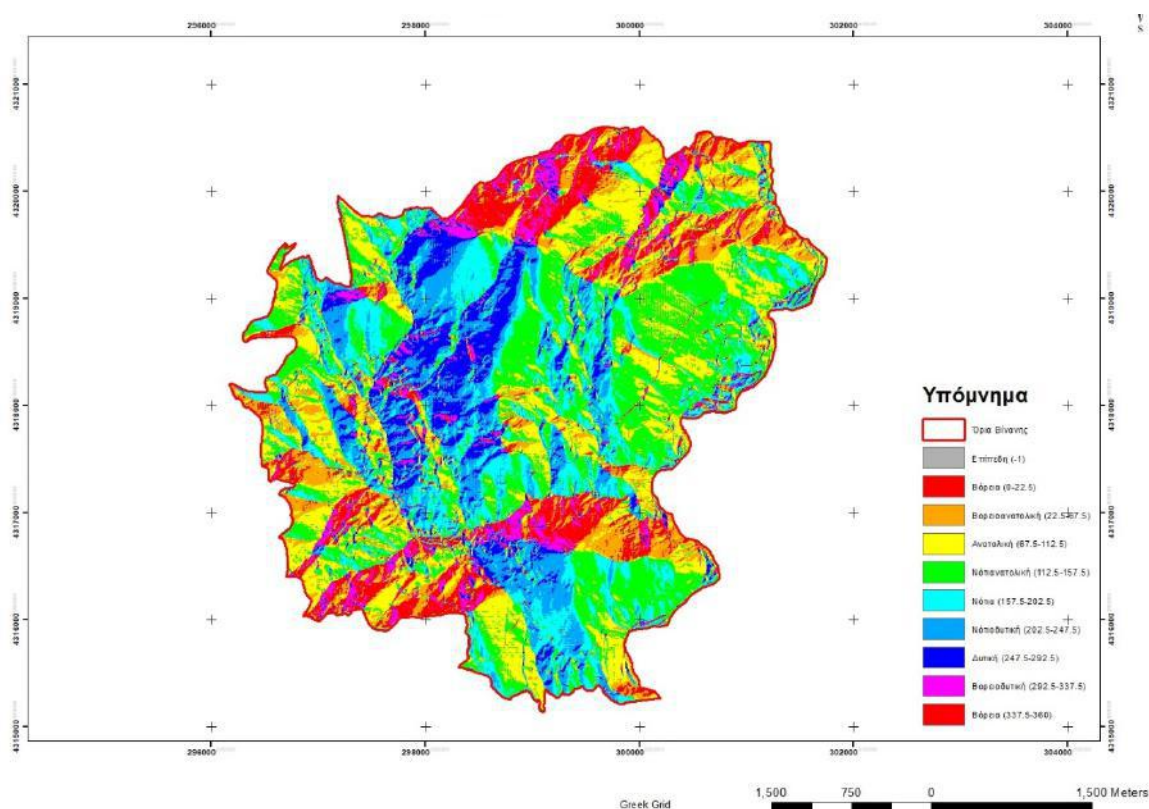
- The broadleaf forest covers an area of 83.21 ha.
- The mixed forest covers an area of 81.23 ha.
- The coniferous forest covers an area of 10,982.29 ha.
- 4. Agricultural land in combination with land with natural vegetation covers an area of 547.33 ha.
- The transitional wooded-shrubby areas cover an area of 695.65 ha.
- The beaches, dunes, sandy beaches (undefined) cover an area 81.81ha.
- The sclerophyllous vegetation covers an area of 1611.61 ha.
- The complex cultivation systems cover an area of 52.80 ha.



Map 2-9. Vegetation cover in the Municipal Unit of Viniani. Source: Corine, 2018.

| a/a      | Category                                  | Area (Ha)        | Percentage   |
|----------|-------------------------------------------|------------------|--------------|
| 0        | Broadleaf forest                          | 83,21            | 0,6%         |
| 1        | Mixed forest                              | 81,23            | 0,6%         |
| <b>2</b> | <b>Coniferous forest</b>                  | <b>10.982,29</b> | <b>77,7%</b> |
| 3        | Agricultural land with natural vegetation | 547,33           | 3,9%         |
| 4        | Transitional woodland-shrub               | 695,65           | 4,9%         |
| 5        | Beaches, dunes, sandy beaches             | 81,81            | 0,6%         |
| 6        | Sclerophyllous vegetation                 | 1.611,61         | 11,4%        |
| 7        | Complex cultivation patterns              | 52,80            | 0,4%         |
|          | Total                                     | 14.135,93        | 100,0%       |

Table 2-3. Vegetation cover in the Municipal Unit of Viniani. Source: Corine, 2018.

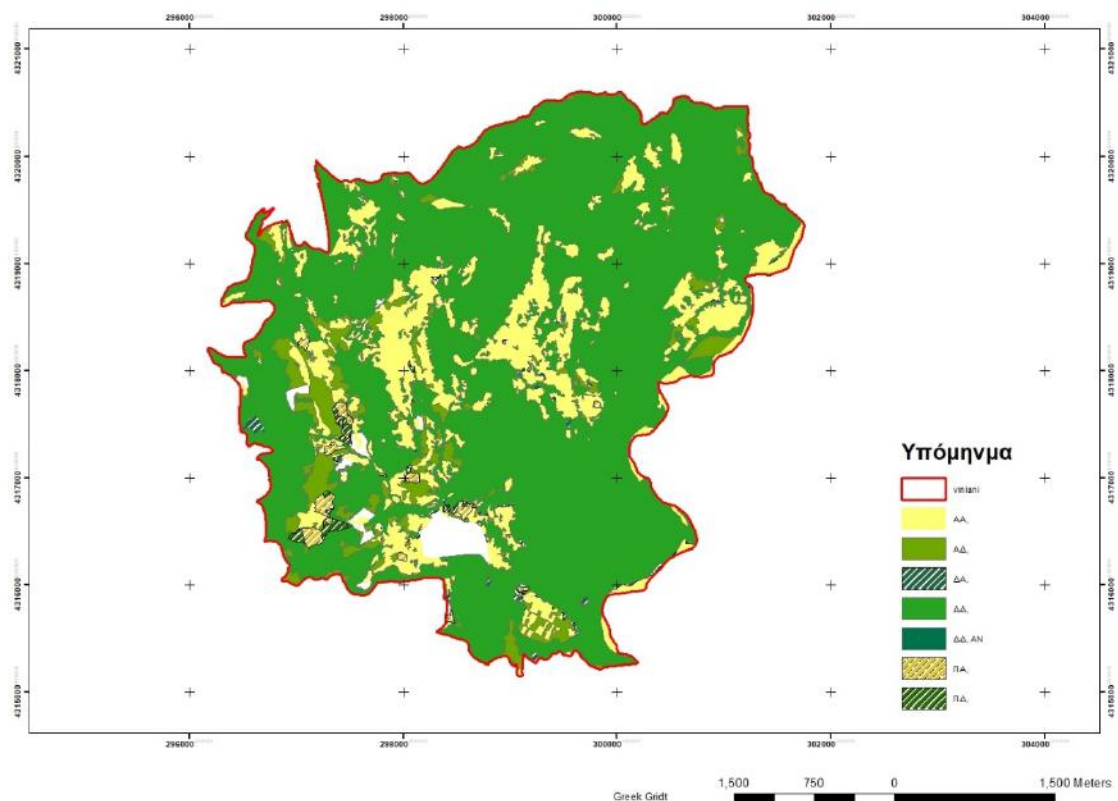


Map 2-10. Orientation exposures in the Municipal Unit of Viniani. Source: Corine, 2018.

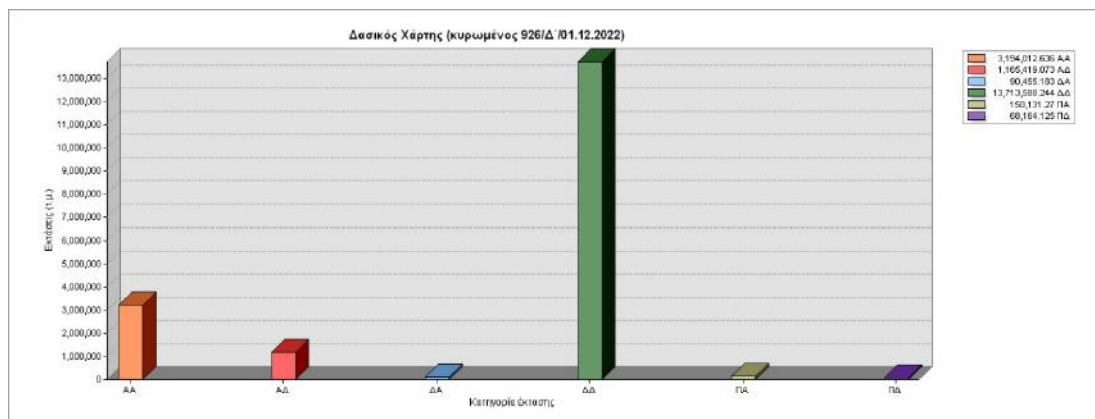
The Forest Map of the Municipal Unit of Viniani of the Municipality of Agrafa was ratified with decision 926/D'/01.12.2022 (Ratification of the forest map of the Regional Unit of Evrytania).

As shown on Map 2.-11 and described in detail below, the areas with designation:

1. ΑΑ (areas of different form / coverage in older aerial photos and other areas of different form / coverage in recent aerial photos & on-site inspections) cover an area of 319.40 ha.
2. ΑΔ (areas of different form / coverage in older aerial photos and forests and forest areas in recent aerial photos & on-site inspections) cover an area of 116.54 ha.
3. ΔΑ (forests and forest areas in older aerial photos or pre-existing elements and areas of different form / coverage in older aerial photos) cover an area of 9.04 ha.
4. ΔΔ (forests and forest areas in older aerial photos or pre-existing elements and forests and forest areas in recent aerial photos & on-site inspections) cover an area of 1,371.36 ha.
5. ΠΑ (final acts & characterization decisions - non-forest) cover an area of 15.01 ha.
6. ΠΔ (final acts & characterization decisions – forest) cover an area of 6.82 ha.



Map 2-11. Ratified Forest Map of the Municipal Unit of Viniani (decision 926/D'/01.12.2022 [Ratification of the forest map of the Regional Unit of Evrytania]).



Graph 2-1. Land cover percentages in the forest map of the Vinians Municipal Unit

#### Natura areas, protected landscapes and Wildlife Refuges

A strong and adequate protection framework with successive institutional declarations shields the forest wealth and wildlife of the entire mountainous zone at different levels: Natura areas at European level, five protected forests by the Region of Central Greece in the Agrafa zone, one of which is in Viniani, and seven Wildlife Refuges. The problem now lies not so much in the institutional shielding as in the management, protection from disasters and the overall sustainable treatment of them. The multi-level declarations constitute an important issue as different authorities (Ministry of Environment, Region of Central Greece, Municipality of Agrafa) are involved in responsibilities while at the same time no mechanisms are formed nor are resources available that will allow the substantial protection and safe environmental management of all this enormous wealth.

The Natura area "Agrafa Mountains" with code GR2430002 also covers part of the Municipality of Agrafa. The area was established in 2010 and has an area of 39050.84 Ha.

<sup>92</sup>ORI AGRAFA - GR2430002,

<https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=GR2430002> [last accessed: 16.10.2023].

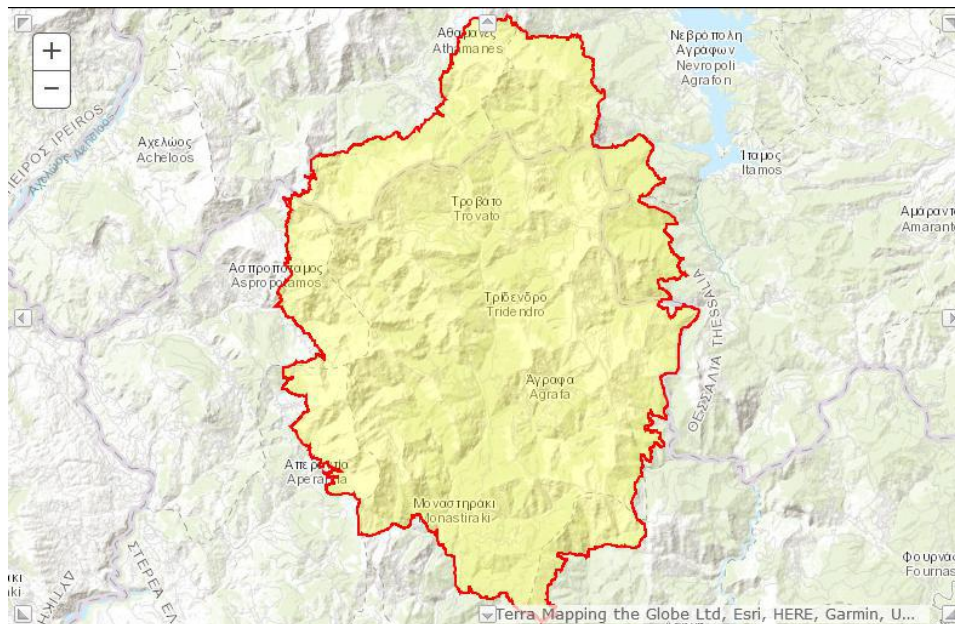


Image 2-10. The area Natura «ORI AGRAFA - GR2430002». Source: <https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=GR2430002>

In the mountainous region of Agrafa and Tymfristos there is a large number of protected landscapes according to Law 3937/2011 (Article 5). They are landscapes that have been formally designated as "areas of great ecological,

geological, aesthetic or cultural value and areas that are particularly suitable for public recreation or contribute to the protection of natural resources due to their special natural or man-made characteristics. In protected landscapes

may be given, based on their main characteristics, more specific names, such as aesthetic forest, geopark, wilderness landscape, agricultural landscape, urban. Parts or components of the landscape that have special ecological, aesthetic or cultural value or contribute to the protection of natural resources due to their special natural or man-made characteristics, such as groves, traditional crops, farmhouses, paths, stone fences, dry stone walls and terraces, fountains, are designated as protected elements of the landscape."

In particular, the following are designated by decisions of the Region of Central Greece:

1. Public forest as absolutely protective, with an area of 267 acres in the location «Prophet Elias» periphery of D.D Granitsa, Municipality of Aperantion (Government Gazette 74/D/10.02.06, Decision 218/06)<sup>94</sup>

<sup>93</sup> Government Gazette 60/A/2011, Law 3937/2011. «Conservation of biodiversity and other provisions».

<sup>94</sup> Government Gazette 89/D/10.02.06, Decision 218/06. «Designation of Public forest as absolutely protective, with an area of 267 acres in the location «Prophet Elias», periphery of D.D. Granitsa, Municipality of Aperantion, Prefecture of Evrytania.

2. Public forest as absolutely protective, covering 610 acres in the location "Koukourountzos", periphery of D.D. Agrafon, Municipality of Agrafon (Government Gazette 80/D/10.02.06, Decision 305/06)<sup>95</sup>
3. Public forest as absolutely protective, covering 331 acres in the location "Ailias-Kato Valaora", periphery of D.D. Valaoras, Municipality of Aperantion (Government Gazette 80/D/10.02.06, Decision 306/06)<sup>96</sup>
4. Public forest as absolutely protective, covering 729 acres in the location "Kerasochori-Kafki", periphery of D. D. Kerasochoriou, Municipality of Vinians (Government Gazette 80/D/10.02.06, Decision 307/06)<sup>97</sup>
5. Public forest as absolutely protective, covering 400 acres in the location "Paliochori", periphery of D. D. Paliochoriou, Municipality of Fragkista (Government Gazette 104/D/13.02.06, Decision 245/06)<sup>98</sup>

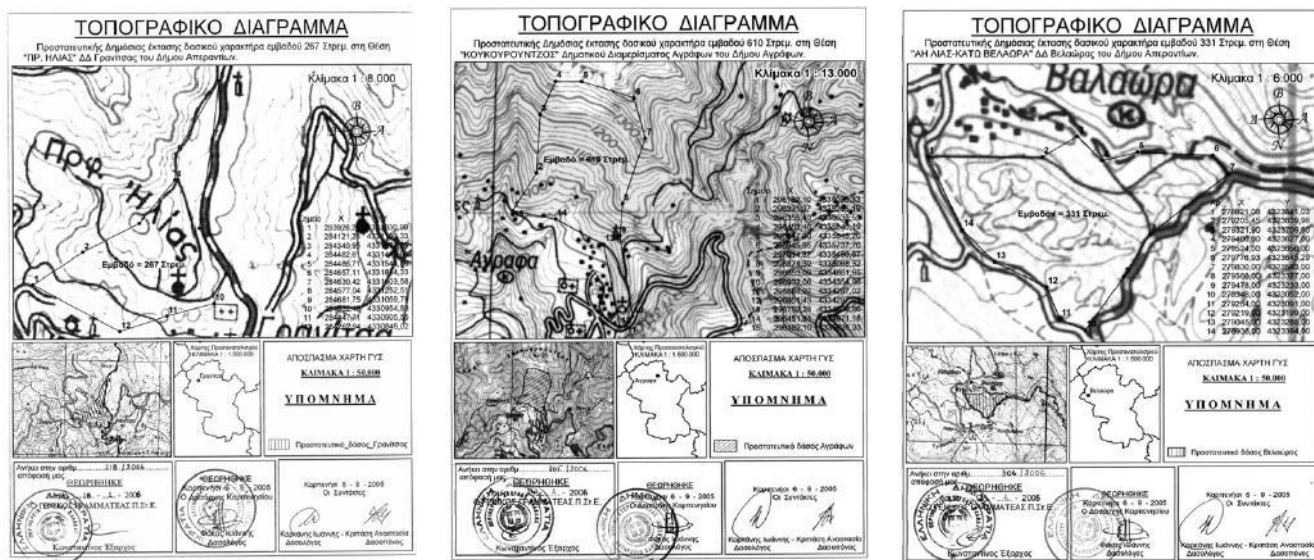


Image 2-11. The delimitation of the Public forest as absolutely protective, covering 267 acres in the location "Prophet Elias". Source: Government Gazette 78/D/10.02.06, Decision 218/06.

Image 2-12. The delimitation of the Public forest as absolutely protective, covering 610 acres in the location "Koukourountzos". Source: Government Gazette 80/D/10.02.06, Decision 305/06.

Image 2-13. The delimitation of the Public forest as absolutely protective, covering 331 acres in the location "Ailias - Kato Valaora". Source: Government Gazette 80/D/10.02.06, Decision 306/06.

<sup>95</sup>Government Gazette 80/D/10.02.06, Decision 305/06. "Characterization of Public forest as absolutely protective, covering 610 acres in the location "Koukourountzos", periphery of D. D. Agrafon, Municipality of Agrafon, Evrytania Prefecture."

<sup>96</sup>Government Gazette 80/D/10.02.06, Decision 306/06. "Characterization of Public forest as absolutely protective, covering 331 acres in the location "Ailias - Kato Valaora", periphery of D.D. Valaoras, Municipality of Aperantion, Evrytania Prefecture."

<sup>97</sup>Government Gazette 80/D/10.02.06, Decision 307/06. "Characterization of Public forest as absolutely protective, covering 729 acres in the location "Kerasochori-Kafki", periphery of D. D. Kerasochoriou, Municipality of Vinians, Evrytania Prefecture."

<sup>98</sup>Government Gazette 104/D/13.02.06, Decision 245/06. "Characterization of Public forest as absolutely protective, covering 400 acres in the location "Paliochori", periphery of D. D. Paliochoriou, Municipality of Fragkista, Evrytania Prefecture."



Image 2-14. The delimitation of the Public forest as absolutely protective, an area of 729 acres in the location «Kerasochori-Kavki». Source: Government Gazette 80/D/10.02.06, Decision 307/06.

Image 2-15. The delimitation of the Public forest as absolutely protective, an area of 400 acres in the location «Paliochori». Source: Government Gazette 104/D/13.02.06, Decision 245/06.

At the same time, there are eight Wildlife Refuges in the mountainous area according to Law 3937/2011 (Article 5).

These are terrestrial and wetland areas (terrestrial and wetland), which are of particular importance as important places for the development of wild flora or as habitats for the reproduction, feeding, hibernation of wild fauna species, or as fish breeding areas and fry concentration.

The Wildlife Refuges are the WR of Viniani-Marathia (K304), to the west the WR of Ag. Nikolaos (K623) and Varvadiada (K907), to the north the Municipal Forest of Agrafa-Kamaria (K279) and the WRs Besioti-Megdova-Lachanorema (K287) and Matsas-Kokkinovrysi (K284) and to the east the WRs Velouchi-Ag. Triada and Rovia-Karavaki-Rovolakkas (K312).

<sup>99</sup>Government Gazette 60/A/2011, Law 3937/2011. «Conservation of biodiversity and other provisions».

<sup>100</sup>«Wildlife Refuges in Greece», <https://www.geogreece.gr/refuge.php> [last access: 16.10.2023].

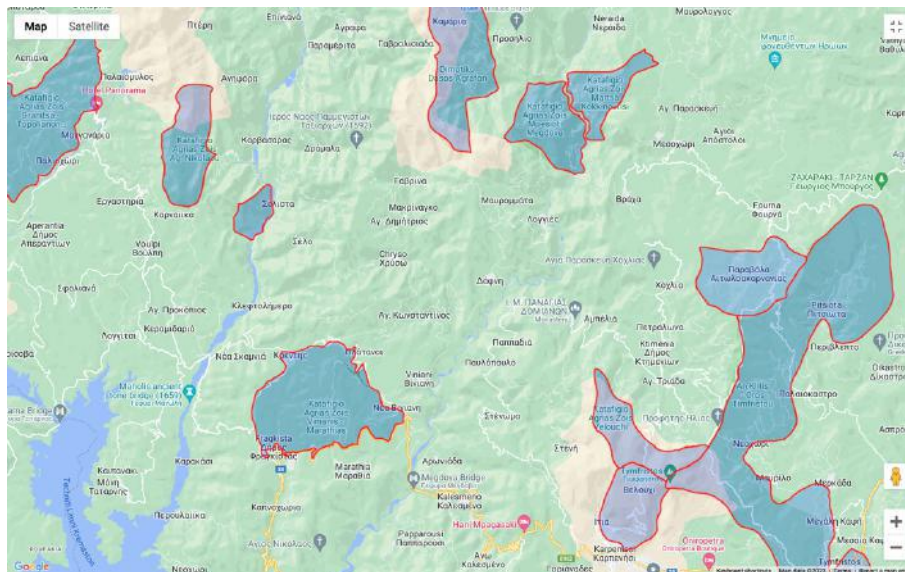


Image 2-16. Wildlife Refuges (KAZ) in the mountainous area of Agrafa. Source: «Wildlife Refuges in Greece», <https://www.geogreece.gr/refuge.php>.

The passage of Megdova and the mountain passes of Pindos

Vinianni is located on this important mountain pass which connects the Aegean with the Ionian Sea and the fertile plain of Lamia with those of the Acheloos estuary and Agrinio, Amvrakikos and Arta. The mountainous Greek peninsula, with the inaccessible mountains of Pindos which slope towards the south, has always been a natural obstacle to the communication of the western with the eastern coasts, but also to navigation which had to circumnavigate the Peloponnese to connect the cities of one and the other side. This is the reason why, despite their mountainous nature, these roads existed and functioned in all eras.

The most important such passages are of Bralos and Gravia, from Thermopylae to Amfissa, of Karpenisi from Lamia to Amvrakikos - with Vinianni being in a critical position above the gorge and the bridge of Megdova-, of Pyli (Portes) of Trikala via Aspropotamos to Arta, of Katara which connected Thessaly with Ioannina via Metsovo and finally, the northernmost, from Konitsa to Grevena and Kozani, via Vovoussa which was also connected to the major Balkan roads. They were passages through which mainly products were transported to and from the cities and flocks of goats and sheep, either in seasonal movements or in the bazaars of the cities.



Image 2-17. The single-arched bridge in the Megdova gorge in a photograph from Viniani. It connected eastern with western Evrytania on the route from Karpenisi to Agrinio. It has not been dated, but its construction is believed to have taken place in the 17th century. Source: NTUA Research Team, 2023.

The road from the plain of Lamia to Karpenisi, the mountain pass of Tymfristos, the two rivers of Megdova and Aspropotamos (upper Acheloos) to its estuaries and the Amvrakikos was imprinted by Pouqueville in 1828<sup>101</sup> on the map of, in 1852 on the French military map of Dépôt de la Guerre,<sup>102</sup> on the map of Kiepert in 1878 and on the Greek military map of 1884.<sup>103</sup>

The French map notes the route which from Karpenisi leads through the mountain pass of Tymfristos (Velouchi) to the gorge of Megdova with two branches. One heads to the bridge of Viniani, to Kerasovo (Kerásovon), from there to Granitsa (Granitsá) and, following the bed of the upper Acheloos, ends in Arta. The southern branch from the mountain pass deviates and reaches Megdova at the height of the post-war metal bridge. From there it follows the bed of Megdova and Acheloos (Aspropotamos) downstream to Agrinio.

<sup>101</sup>Carta della Grecia antica e moderna : disegnata secondo le istruzioni e memorie di molti celebri viaggiatori e specialmente del signor Pouqueville intagliata da Gio. Batista Bordiga ; e pubblicata l'anno MDCCCXXVIII, 1828

<sup>102</sup>Carte de la Grèce à l' Echelle de 1/900.000, servant de Tableau d' Assemblage à la Grande Carte en 20 feuilles. Publiée par le Dépôt de la Geurre, Paris 1852.

<sup>103</sup>Map of the Kingdom of Greece, scale 1/300.000, Royal Military Geological Institute, Vienna 1884 (Sheet III). Source: Archive of Lieutenant General S.D. Balodimos.



Image 2-18. Carte de la Grèce at a scale of 1/900,000, serving as an Assembly Table for the Grande Carte in 20 sheets. Published by the Dépôt de la Guerre, Paris 1852.

The same route is also noted on the Greek military map of 1884 with greater details, while the path appears to pass next to Stenoma, Viniani and Chryso. The difference lies in the fact that on this particular map the road from Lamia to Karpenisi is depicted as a formed road, while from there to the west it is a path.

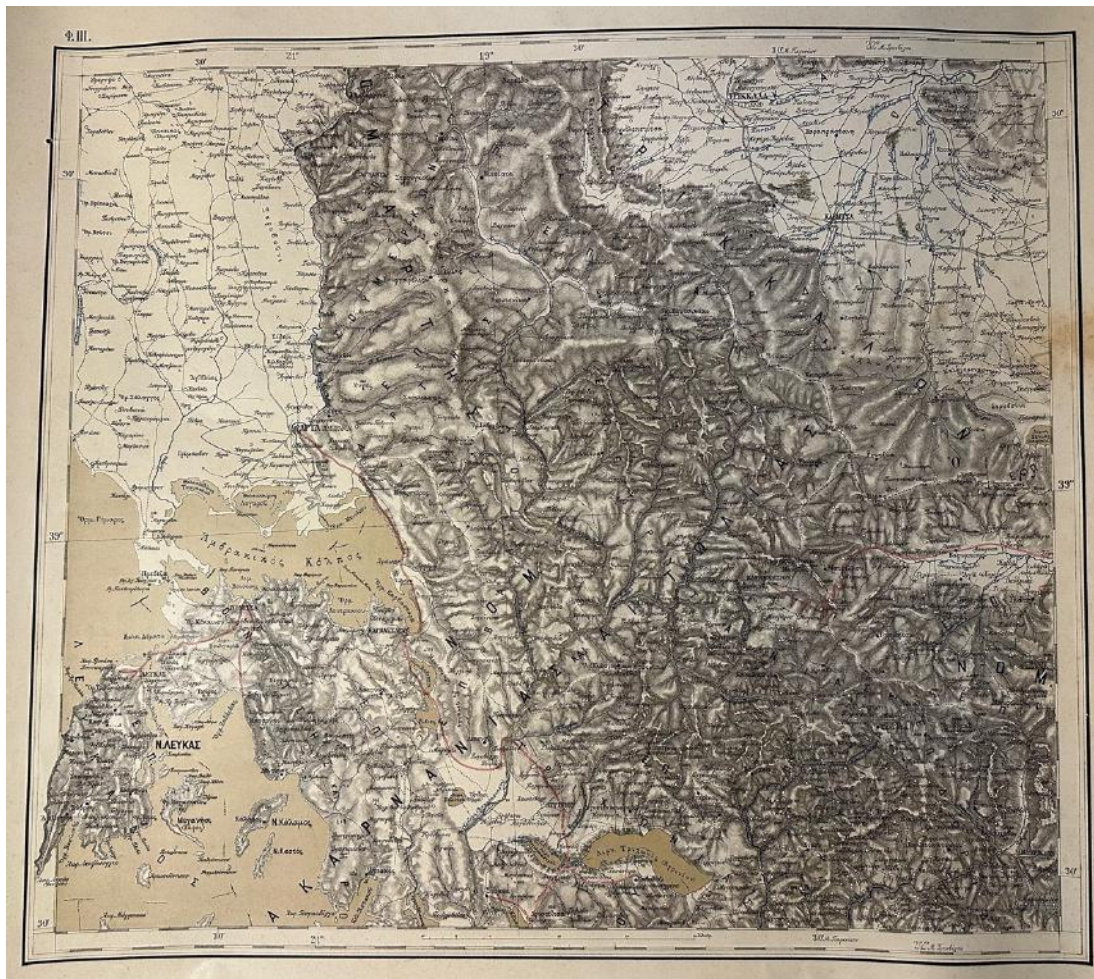


Image 2-19. Map of the Kingdom of Greece, scale 1/300,000, Royal Military Geological Institute, Vienna 1884 (Sheet III). Source: Archive of Lieutenant General S.D. Balodimos.

An important role in this route, which connected the Aegean with the Ionian and the entire network of mountain villages with the cities of Karpenisi, Agrinio and Arta, was played by the stone-built single-arched bridge of Viniani at the crossing of Megdova. This typical bridge, which is found in variations of its architecture throughout the Balkans and Asia Minor, belongs to the Ottoman period and has not been dated with certainty to this day.

The route, after the bridge of Megdova, goes uphill parallel to the river to the point where it meets the neck that leads to Livadia, in today's Nea Viniani.

The place of Livadia was inhabited by livestock farmers and was a station of passage. At the entrance of the small plateau, from the side of Megdova, there was the inn of Karoplesitis, a ground floor relatively small building that offered food and

<sup>104</sup> Comparing the corresponding single-arched bridges of the same wide mountainous region, that of Plaka on Arachthos began to be built in 1863 in place of an older one that had collapsed in 1860, the bridge "of Manolis" on Acheloos - the closest and on the same route to that of Viniani - was built in 1659 and that of Pyli (Porta) of Trikala in 1514.

sleep for travelers, as well as a stable for animals.

<sup>105</sup>The inn was demolished with the

construction of the new settlement. The road started from Livadia through a stream towards Viniani, which it met from the side of the hill of Agios Georgios. Shortly after Livadia, on the same route, another small stone bridge covers the stream narrow at that point. A new rural road was built on this alignment to Agios Georgios, which destroyed the traces of the old path. The small bridge has been preserved.



Image 2-20. The mountainous landscape of Agrafa and the snowy peak of Tymfristos from Viniani. Source: NTUA Research Team, 2023.

Until modern times, in addition to the stone bridge, there was also a unique aerial transport structure, the "kareli", which crossed the river at the height of the modern bridge. It was a cage hanging on a taut wire rope from a pulley, with a guide rope for moving the cage from one side to the other, which was operated by someone from the bank. A construction of this type existed until recently in the next western tributary of the Acheloos, the Agrafiotis.

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<sup>105</sup>In the cadastral table accompanying the decision of the Minister of Social Welfare (18/5/1967) for the declaration of compulsory expropriation in Livadia of Viniani, the Karoplesiti Inn is recorded as ruined with an area of 190 sq.m.



Εικόνα 2-21. Το Βελούχι (Τυμφρηστός) ζωγραφισμένο από τα υψώματα της Βίνιανης. Σχεδιάστηκε από τον Δημήτρη Μεγαλίδη, σκηνοθέτη του κινηματογραφικού συνεργείου στο Γενικό Στρατηγείο του ΕΛΑΣ από τον Οκτώβριο του 1943. Αποτελεί το πρώτο σχέδιο στο Λεύκωμα του Αγώνα που δημοσιεύθηκε τρία χρόνια αργότερα. Πηγή: Μεγαλίδης Δημήτρης, Λεύκωμα Αγώνα. Σχέδια-Λιθογραφίες-Ξυλογραφίες, Αθήνα 1946.

Το ιδιόμορφο εκείνο ποτάμιο πέρασμα του Μέγδοβα και μία μοναδική αναφορά για το «καρέλι», συνοδευόμενη από φωτογραφία διέσωσε ο φωτογράφος Σπύρος Μελετζής περιγράφοντας την πορεία του από το Λιανοκλάδι προς το Καρπενήσι, με προορισμό την ανταρτοκρατούμενη Βίνιανη:

*«[...] Πριν από τη Βίνιανη κυλά ο ποταμός Μέγδοβας. Γεφύρι δεν υπήρχε και τον περάσαμε πάνω στο καρέλι. Το καρέλι είναι πρωτόγονο μέσο. Από την μία και την άλλη άκρη του ποταμού ήταν δεμένο ένα χοντρό συρματόσχοινο τεντωμένο. Το καρέλι είναι ένα κασόνι ή καλύτερα ένα είδος κάρου με δύο τροχαλίες που προσαρμόζονται μέσα στο συρματόσχοινο και είναι στερεωμένες στο κασόνι. Έτσι αυτό το κασόνι κρέμεται στον αέρα. Μία γριά που ήταν μόνιμη γι' αυτή τη δουλειά ανέβαζε δυο ανθρώπους επάνω και μετά άρχιζε και τραβούσε το συρματόσχοινο. Έτσι το περίφημο καρέλι κυλούσε με τις τροχαλίες του και σε 5-6 λεπτά βρισκόσουν στην απέναντι μεριά του Μέγδοβα. Αυτό το καρέλι πρόσφερε τόσες υπηρεσίες εκείνη την εποχή όσες δεν πρόσφεραν εκατό άλλα γεφύρια. Και τι κόσμος δεν πέρασε απ' αυτό το καρέλι [...].»<sup>106</sup>*

<sup>106</sup> Μελετζής Σ. (2002). *Με τους αντάρτες στα βουνά*. Αθήνα: Ιδιωτική, σελ. 20.



Image 2-22. The only photograph that preserves as an image the aerial "carelli" with the wooden cage and the wire rope for the passage of Megdova was taken by Spyros Meletzis in 1943 during the supply transports of E.L.A.S. Source: Meletzis S. (2002). *With the partisans in the mountains*. Athens: Private, p. 52.

From the same narration of Meletzis at the time of the war, it seems that the old bridge of Megdova and the descent from Vinniani to it were not in such intense use as in earlier times. The busy route was from Vinniani to Livadia and from there to today's passage, to "carelli". The photographer, going from Vinniani to Koryschades, went down from the stream towards Megdova and met the bridge which he ignored as on his arrival he had crossed the river from the southernmost point with the "carelli":

«[...] Without wasting time, I went to my workshop, prepared the backpack with the machine and the films and instead of going through the well-known posts that were blocked and of course there was no other path, I went down from a steep and precipitous place that only wild goats would dare to go down and reached the river Megdova. In that place there was a bridge that I found without having it in mind, because I was determined to cross it even swimming. I crossed it and started to go up to Velouchi. From this moment on I was going to carry out my mission [...]».

In 1947, a new Bailey-type metal military bridge was constructed on the Megdova, which changed the route from Karpenisi to Agrafa. With the new bridge, the road from Stenoma to the old bridge lost its role and the

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<sup>107</sup> Meletzis S. (2002), op. cit., p. 22.

a passable road which was formed in the following years moves further south passing through the village of Kalesmeno.



Image 2-23. The new Bailey-type metal bridge over the Megdova. It was built by the army in 1947. At a distance of about 50 meters downstream, the "kareli" - the aerial transport cage - crossed the river. Source: NTUA Research Team, 2023.

### 3 The settlement structure and architecture of Viniani

#### 3.1 The institutional framework for the protection of the cultural wealth of Agrafa and of Viniani

In Agrafa there is an extensive network of more than thirty scattered archaeological sites with finds from prehistoric, classical and Hellenistic antiquity, religious monuments, monuments of the Byzantine and Ottoman era as well as more recent monuments. Several of them are located in the area of Viniani

In particular, it appears that there is a timeless habitation in the long duration of History. The remains of this habitation are spread throughout Agrafa.

In this whole range of archaeological wealth, in reality, the research is fragmented. Apart from a few archaeological missions several decades ago, which highlighted sites of ancient habitation, the medieval period, as well as the later centuries from the end of Byzantium, the Ottoman period, even the 19th century when Agrafa was incorporated into the new Greek state have not been researched. Apart from the ancient and medieval remains, settlement cores, bridges, fountains and individual remarkable buildings of the period from the 17th to the beginning of the 20th century are located throughout the mountainous area.

Most sites with traces of antiquity, such as those of the medieval and modern historical periods, are recorded only in the literature, inaccessible and unknown to the general public. Many of them have been lost, as they were located at some point in the past without any continuity and care for their rescue, protection and promotion. Religious monuments (monasteries and churches) differ in this respect due to the involvement of the Church of Greece and the continuous care on the part of local communities. A significant number of such monuments - Christian churches and monasteries - exist in the wider area. They mainly date back to the post-Byzantine years. For the most part, only these religious monuments are known, safe and visitable.

All the monuments are protected by the general protection of archaeological legislation. Some of them are institutionally protected by special declarations, while others, such as the Megdova bridge or the archaeological site of Agios Georgios in the old settlement of Viniani, do not have a special protection status.

Within this important field with the monuments of cultural heritage, Viniani has a central position. The complex of the settlement with the headquarters and the Museum of National Resistance (1941-1944), the extremely important buildings of the late 19th and early 20th centuries, the Hellenistic and medieval core of the Agios Georgios hill and the Megdova bridge dating back to around the 16th century constitute a historical park of high quality.



Also, the Old Elementary School was designated as a Historical Preserved Monument in 1986 (Government Gazette 333/B/1986).<sup>110</sup> The National Museum is housed in the building today Resistance.

We designate as a historical preserved monument, which needs special state protection, according to the provisions of Law 1469/50, the building of the old Elementary School of the Vinians Community in the Prefecture of Evrytania because it is connected with our National History.

In the above building, on March 10, 1944, the Political Committee of National Liberation, known as the "Mountain Government", was formed for the first time. The Mountain Government decided to convene the national council (People's Parliament), which would institutionalize the new popular power (the national council). The oath of the Mountain Government was taken in this school by the village priest, in the presence of the Metropolitan of Kozani Joachim.

The building is imposing, harmonized with its environment and one of the most important in the settlement. It was built during the interwar period and is a single-story, stone-built tiled building with a rectangular plan.

It is simple in the morphology of its facades and in its main facade the openings are symmetrically placed, in relation to a central axis defined by the entrance of the building. Also, the corners of it as well as the frame of its entrance have been constructed with large hewn parallelepiped stone (cornerstones).



Image 3-2. The Historical Site of Viniani and the monument of the Old School of Viniani in the Archaeological Cadastre. Source: <https://www.arxaiologikoktimatologio.gov.gr/>

<sup>110</sup>Government Gazette 333/B/1986, YA G/924/13405. «Designation as a historical preserved monument of the old Elementary School of Viniani in the Prefecture of Evrytania».

According to the Spatial Planning of Open City (SXOAAP) of the Municipal Unit of Viniani (2018), the located archaeological sites and monuments under the protection of the Ministry of Culture <sup>112</sup>are the following:

A. Archaeological sites of the prehistoric and classical period

T.K. Mavrommatas

- Mavrommata - Kyfou-Paliochori location. Residential remains and surface pottery
- Mavrommata - Kravasaras location. Residential remains and surface pottery
- Mavrommata - Palaiokastros location. Ruins of an ancient fortification-observatory for the control of the area

T.K. Chryso

- Chryso Settlement: Within and outside the settlement of Chryso there are indications of ancient residential remains

T.K. Dafnis

- Dafni - Agioi Taxiarchoi location, to the right of the Gavrenitis stream: Surface indications and surface pottery
- Dafni - Palioklisi location, hill northwest of the settlement and the Kastritseika settlement: Remains of ancient fortification, residential remains and abundant surface pottery
- Dafni - North of the Palioklisi location: Remains of tombs and surface pottery
- Dafni - Sotira location: Residential remains and surface pottery

T.K. Kerasochori

- Kerasochori - Kastraki-Karaouli location: Remains of fortification and buildings and abundant surface pottery
- Kerasochori - Kastro location: On the hill north of the settlement there are remains of an ancient fortification and abundant surface pottery

T.K. Viniani

- Old Viniani - Tourkou location: Hill south of the settlement with remains of ancient fortification and abundant surface pottery
- Nea Viniani - Keramida hill: Residential remains and surface pottery
- Nea Viniani - Livani location: Abundant surface pottery
- Nea Viniani: Northeast of the settlement of Nea Viniani, a site with abundant surface pottery has been identified
- Nea Viniani - Tsitsa location: Residential remains and surface pottery
- Nea Viniani - Panagia location: Tombs and surface pottery

B. Archaeological sites - monuments of the Byzantine and post-Byzantine era

T.K. Chryso

- I. Agios Nikolaos Church
- I. Agia Paraskevi Church

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<sup>111</sup>Government Gazette 62/AAP/2018, YA 533/26424. «Approval of the Spatial Planning of Open City (S.X.O.O.A.P.) D.E. Viniani Municipality of Agrafa P.E. Evrytania».

<sup>112</sup>In the Agrafa area, the declarations of monuments have been made by the Ministry of Culture. There are no declarations of traditional settlements by the Ministry of Environment.

- Church of the Dormition of the Theotokos

- Church of the Taxiarchs

- Church of Agios Athanasios

T.K. Dafnis

- Monastery of the Transfiguration of the Savior

T.K. Kerasochoriou

- Church of Agioi Apostoloi

- Church of the Dormition of the Theotokos (Government Gazette 138/B/18.2.1998)

- Church of Agia Paraskevi

### C. Proclaimed newer monuments

- Old Elementary School in Palaia Viniani (YA YPPO/DILAP/G/924/13405/15.04.1986, Government Gazette 333/B/15.5.1986) as a historical preserved monument

- Pelagia Theodoropoulou's House in Kerasochori (YA YPPO/DILAP/G/3726/80721/17.01.1983, Government Gazette 154/B/7.4.1983) as a historical preserved monument.

- Watermill in Chryso (YA YPPO/DILAP/G/2328/29514/17.06.1997, Government Gazette 745/B/25.8.1997) as a historical preserved monument.

- Fountain in Chryso (YA YPPO/DILAP/G/2328/29514 /17.06.1997, Government Gazette 745/B/25.8.1997) as a historical preserved monument.

- Two bridges in Chryso (YA YPPO/DILAP/G/2328/29514/ 17.06.1997, Government Gazette 745 B/25.8.1997) as historical preserved monuments.

- The settlement of Palaia Viniani, as already mentioned, is designated as a historical site (Government Gazette 592 B/24.8.1988).

## 3.2 Settlement structure of Viniani

The formation of the settlement after World War II

Viniani, in its last phase after the Civil War, recovered, in part. The burned buildings were repaired, the school had students, and a small number of two dozen shops and workshops continued their operation in the settlement. Livadia continued to be the small fertile plateau of the Vinians with crops, agricultural huts and pastures, although the Karoplesitis Inn, the reference point of the passage of Agrafa, had been burned to the ground in the war.

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<sup>113</sup>In the cadastral table accompanying the decision of the Minister of Social Welfare (18/5/1967) for the declaration of compulsory expropriation in Livadia of Viniani, the Karoplesitis Inn with an area of 190 sq.m. is characterized as "ruin". The inn had been set on fire on December 12, 1942, during the clearing operations of the Italian occupation forces.



Image 3-3. In the aerial photograph of Viniani in 1946, the settlement is visible in its full development (top right), the large perimeter zone of "gardens" and fields, the mountains deforested due to logging and grazing. Megdovas bottom right and the two paths that connected Viniani with Livadia, Megdovas and the surrounding residential network Source: A/F W\_BW\_46\_935509\_BLACK AND WHITE\_7000\_1946/09/07. National Land Registry.

In the ancient core of Viniani, on the hill of Agios Georgios, there were only ruins. After the war, the small church was rebuilt on its top. Viniani, after the Civil War and until the earthquakes of 1966, was an organized settlement that extended between and around the two streams, on land with a fairly steep slope.

In areas around the settlement, the inhabitants had their vegetable gardens, while in a wider perimeter there were also agricultural estates. Free vegetation and tall trees existed only in linear zones in the stream and at a distance from the settlement. As was the case in all mountainous settlements in previous centuries, so in Viniani a very wide perimeter zone was deforested. The intensive grazing of cattle and sheep, as well as the use of wood for construction, heating and cooking hearths led to complete disappearance

of the forest and shrub vegetation within a radius of several hundred meters around the settlement.

In the periphery to the east were the threshing floors, while deep in the Mega Rema towards Megdova the watermills operated.

The core of the settlement was around the Church of the Twelve Apostles (building 1 on map 3-1 & 3-2), which is probably the founding church of Viniani after the relocation of the settlement from the hill of Agios Georgios to its current location. According to sources, the church must have been built between 1650-1655. It was destroyed in the 19th century and rebuilt in 1925. <sup>The residents report</sup>

the existence of tombs from earlier times on the back side of the church. The precinct of the church, together with the neighboring plateau of the fountain of 1915, is the only public gathering space for the residents within the settlement (position 7 on map 3-1). During the same chronological period, around 1925, the chapel of Zoodochos Pigi and the "Vial" of Agioi Anargyroi are built, while in 1938 the elementary school is also built. Thus, three more public spaces are added to the settlement, two courtyards and the large plateau. (See maps 3-1 & 3-2).

The oldest churches on the opposite hill, of Agios Georgios and Agios Nikolaos, are gradually destroyed along with the residential core there and the hill is completely deserted.

The church, according to the notes of the priest Dimitrios Kanteres, <sup>115</sup>existed in that location since 1650 with the old iconostasis of the church dating back to 1774. The original building was dedicated to Agios Athanasios and then to the Holy Apostles. It was rebuilt at an unknown time, possibly with a larger size, while the bell tower was preserved in its original position.

Just below the entrance to the precinct of the Holy Apostles, several meters lower and next to the stream bed, there was the stone-built fountain with a canopy, troughs and "kazanaria" (an open community laundry next to the fountain supplying drinking water) (position 7 on map 3-1).

The elaborate stone-built fountain was built according to its founding inscription in 1915 with a donation from Theofanis Nikopoulos.

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<sup>114</sup>Andriani Diagouma, op. cit.

<sup>115</sup>Dimitrios Kanteres, op. cit.

<sup>116</sup>See related: Theodorakoglou E. (Arch. Eng.), Mantelos V. (Arch. Eng.), Florou E. (Civ. Eng.), Houma N. (Arch. Eng.) Restoration Study of Nikopoulos House in Viniani, Evrytania MSc "Protection of Monuments NTUA (Postgraduate Thesis), July 2023.

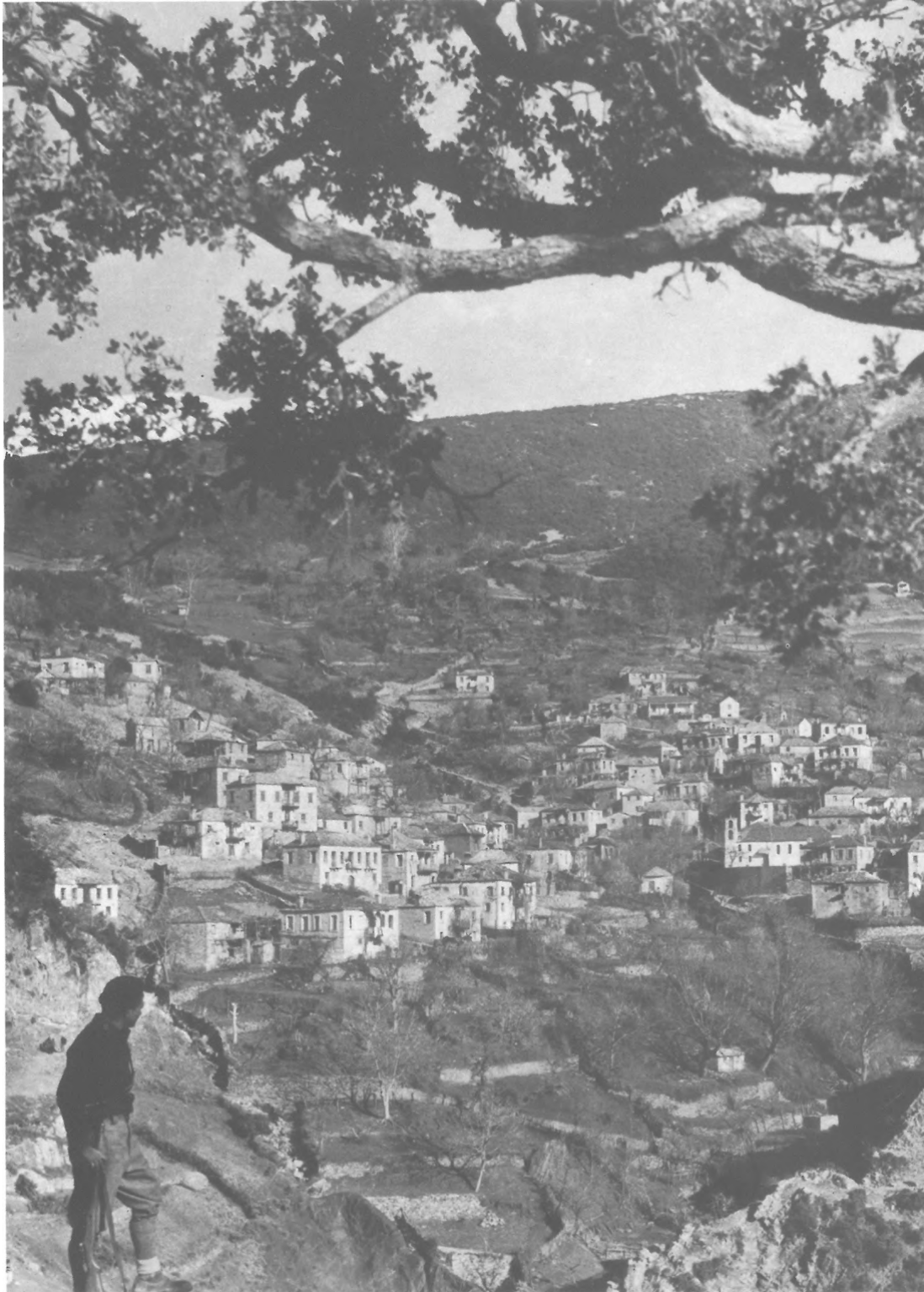


Image 3-4. Viniani. First capital of Free Greece. With this photograph from 1943-1944, taken from Agios Georgios, the image of a living mountain settlement in the last phase of its prosperity is uniquely preserved. The village had more than one hundred houses, five hundred inhabitants, organized neighborhoods, gardens and crops that surround the residential area and descend as low as the stream. Source: Meletzis S. (2002). *With the partisans in the mountains*. Athens: Private, p. 57.

Above the fountain and opposite the Holy Apostles to the west, there was a second small plateau, formed with retaining walls with the ground floor community store (building 5 on map 3-1). During the war, it housed the administrative headquarters of P.E.E.A. The image of the small square on the facade of the building with a gathered crowd and the protagonists of the resistance has been preserved in photographs by Spyros Meletzis.



Image 3-5. At the headquarters of P.E.E.A. After a gathering of executives in the small square in front of the community store of Viniani. Source: Meletzis S. (2002). *With the partisans in the mountains*. Athens: Private, p. 68.



Image 3-6. In the same area, Miltiadis Porphyrogenis, one of the military leaders of E.L.A.S., speaks at a gathering of partisans. Source: Meletzis S. (2002). *With the partisans in the mountains*. Athens: Private, p. 69.

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<sup>117</sup> Meletzis S. (2002), op. cit., pp. 68-69.

After the war, a new community store was built a short distance away, on the north side of the church (building 6 on map 3-1). It was a single-story, stone-built building with a reinforced concrete roof slab. The construction includes an unfinished floor, with only the piers of its perimeter walls. The building was intended to also be used as a community guesthouse on the floor. The first telephone line in the village was installed in that community office on the ground floor. Lower than the church, above the stream, there were also community toilets.

The ground floor spaces of six buildings functioned as cafes, taverns, a dance and event hall, and even a final "cafeteria" before the earthquakes. All are located in a linear zone that starts above the fountain, passes by the parish church, and follows the main route to the exit from the central core of the settlement, at the height of the Agioi Anargyroi plateau.

Some of the cafes also functioned as grocery stores. In total, there were three commercial stores. There was also a commercial warehouse that served the transportation of products by bus, when these began to take place on the new Karpenisi-Agrinio road by car, instead of the old mule road. A shoemaker's shop "tsagkaradiko" operated under the church.

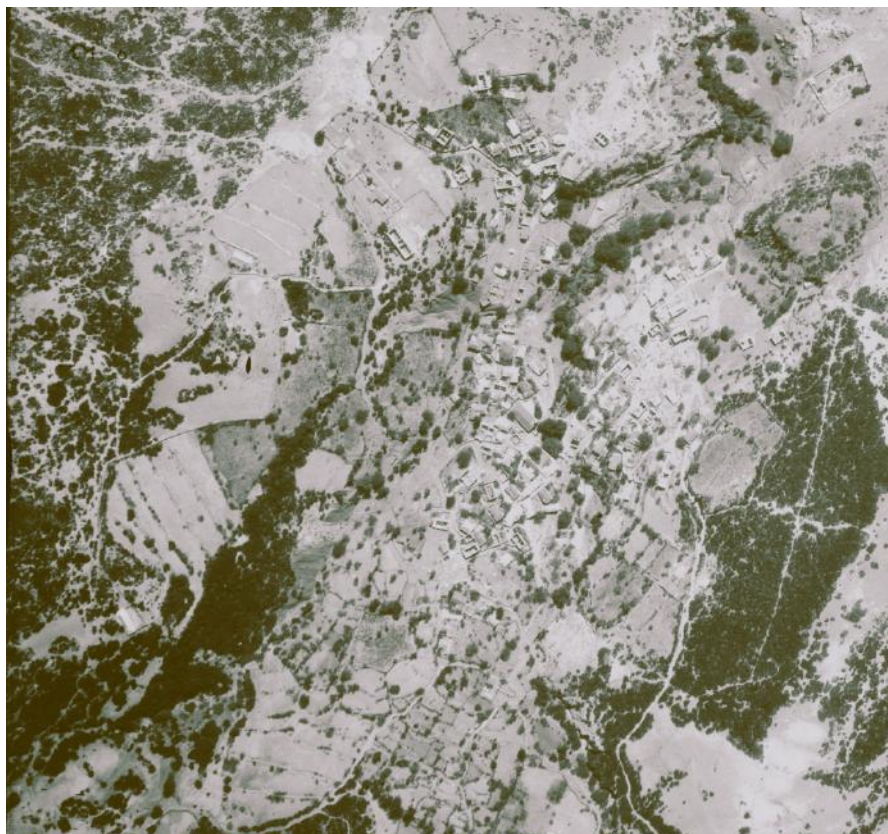


Image 3-7. In the excerpt of the aerial photograph of Viniani in 1946, the settlement is visible, burned down (in most buildings there are only walls while the roofs have been destroyed). The zone of "gardens" and fields that occupies the entire perimeter of  
Source: A/F W\_BW\_46\_935509\_BLACK AND WHITE\_7000\_1946/09/07. National Land Registry.

The most characteristic of the buildings that had a dual function, with cafes or shops on the ground floor and a residence on the upper floor, is the two-story building of the Alatari family (buildings 9 and 20 on map 3-1), which is located on the western, opposite slope from the parish church and directly above the village fountain. The neighborhood was called "Alatareika" after the surname of many related families who lived there.

Before the earthquakes, it was operated by Athanasios and Urania Alatari, under the name COFFEE-GROCERY STORE, Ath. Alataris. ELVETIA". The cafe had tables and chairs in the outdoor area, both on the plateau created by the road to the east and in the northern courtyard, which was covered with a vine. The ground floor cafe was used as a kitchen for the rebels during the war. The building was abandoned in 1968, but occasionally operated as a cafe for the village festival.

At the NE edge of the settlement, there was the elementary school with its courtyard (building 4 on map 3-1). The school was probably the last building built in Viniani in 1938 and during the post-war period it operated as a two-teacher, six-grade school. According to testimonies, before the earthquakes it had 95 students.

A little further down the slope there was the large plateau of Agioi Anargyroi (point 3 on map 3-1). There, the army after the war organized open-air film events and in the same place the school demonstrations of the students of Viniani took place at the end of the school year.

The building activity after 1949 mainly concerned repairs after the destruction from the war, which were undertaken by groups (boulloukia) of craftsmen who may have come from Tzoumerka, as had happened before the war. Many buildings had been burned or abandoned. Most of the building materials came from small quarries in the surrounding area. There were also lime kilns, the so-called "asvestaries". They used sand from the river and from the local crushed schist rock "gremnitsa". For the wood of the roofs and floors, they cut fir and oak trees. There was a water-powered splitter in the Gravenitikos river. "Gypsy" ironworks existed in Kerasovo.

Cement, steel reinforcement and French tiles came from the cities <sup>120</sup>, which replaced almost all the old roofs with slate covering. Even before the destruction of the war, some of the mansions of the early 20th century had French tiles on the roofs instead of slate slabs, as the houses of Viniani were built until then. These are visible in the photos of 1943-1944.

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<sup>118</sup> The information comes from the current owner Urania Dalla, née Alatari and her mother Amalia Alatari. See related: Karagiannakidou Katerina, (Architect Eng.), Krekoukia Nikolaia, (Archaeologist), Merou Marina, (Architect Eng.), Old cafe building, Viniani Evrytania. MSc "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

<sup>119</sup> Informants K. and T., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

<sup>120</sup> Roof tiles that were found in buildings of Viniani are produced by the Dilaveri pottery in Piraeus

Mansions mainly of "American immigrants", already before the war, were equipped with furniture imported from the cities. It is reported that in the interwar period, before the construction of the road, a cast iron bathtub was transported to Viniani, which came lifted in the hands from the old path as its size did not allow it to be loaded on pack animals.

The erection/construction of these mansions has largely characterized the identity of Viniani, as it has been preserved to this day, despite the blows it suffered from earthquakes and landslides. It is an architectural idiom that dates back to the first two decades of the 20th century. These two-story, large as a rule, houses were built by immigrants either upon their return to the place, or with the remittances they sent from the United States

The current state of the settlement

Viniani is a typical mountain settlement with a sparse structure. Today it consists of about one hundred residential buildings, two churches within the settlement and the elementary school. After WWII, no new buildings appear to have been built except for small warehouses, attachments and repairs to walls, roofs, etc. which were made to the buildings that had been destroyed in the war.

To the south of the settlement is located the cemetery (position 5 on map 3-2) and higher up on the steep hill, in the position "Tsouknides" (position 7 on map 3-2) are the Hellenistic and medieval remains of the oldest settlement of the area with the small post-war Church of Agios Georgios.

A large number of buildings are in a dilapidated condition. In some of those located in the area next to the cemetery, only the walls are preserved at a very low height. The NTUA Research Team in 2023, after carrying out a complete mapping of the area, recorded a total of 115 buildings in Viniani and assessed their condition. The result of this recording corresponds exactly to the maximum population sizes of the late Ottoman period and the era of World War II, when about 500 people lived in the settlement in 100-120 households.

The settlement, as mentioned, has sparse construction and the road network consists of cobblestones (cobblestones), dirt paths and a dirt road that crosses it. It has a NE orientation and is built on land with steep slopes that in places reaches 45%. It occupies an area of 170 acres in a horseshoe shape which is crossed by two streams that converge below the center of the settlement. These streams also form the boundaries of the three neighborhoods that make up the settlement.

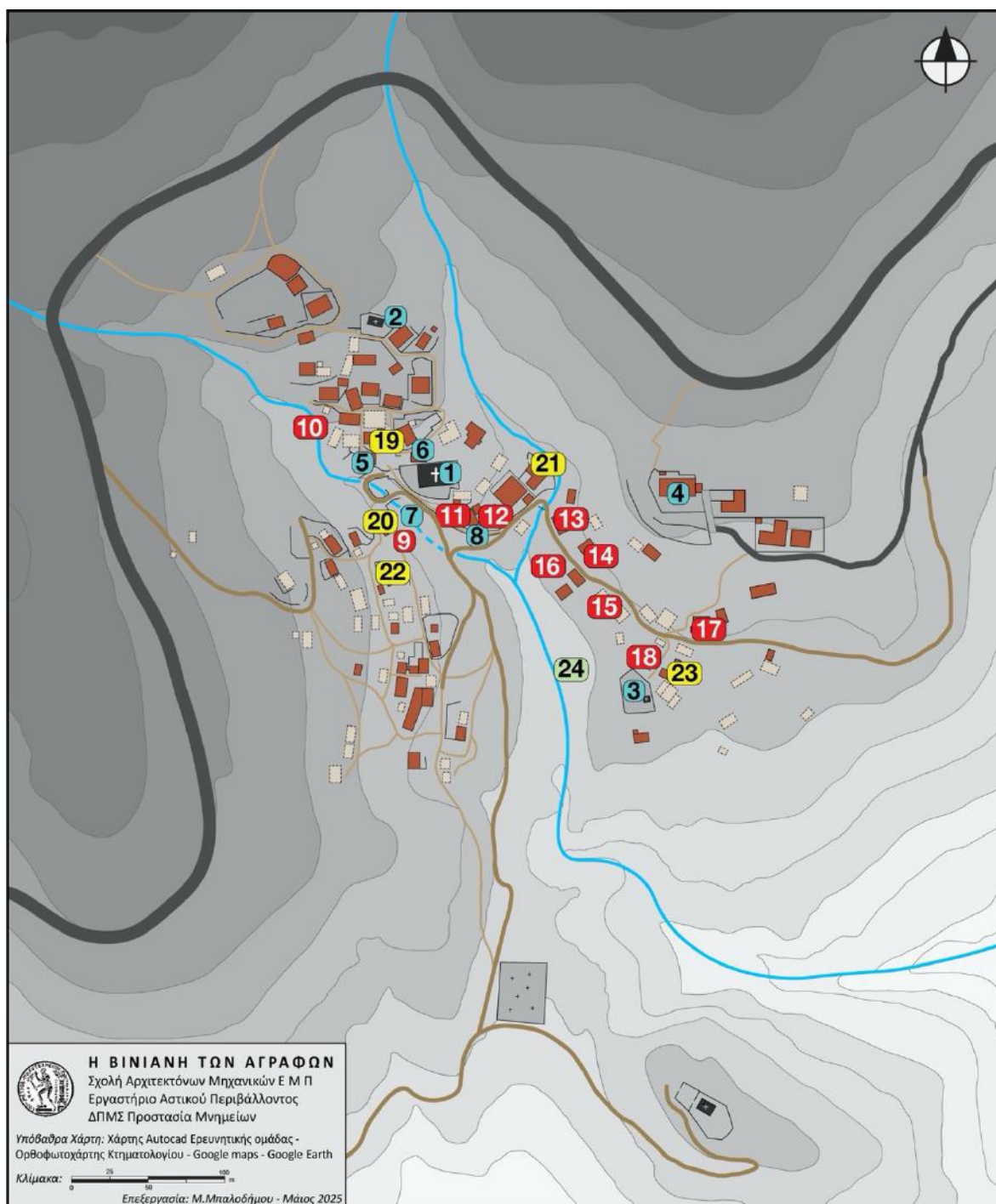
Before the start of the settlement's decline, in its older historical phases, it was surrounded by areas with crops, had estates and gardens, while a large part of the mountainous environment around Viniani was bare of wild vegetation

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<sup>121</sup>Informant K., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

and forests due to grazing by cattle and sheep. A compact forest section existed only on the northwestern slope above the settlement.

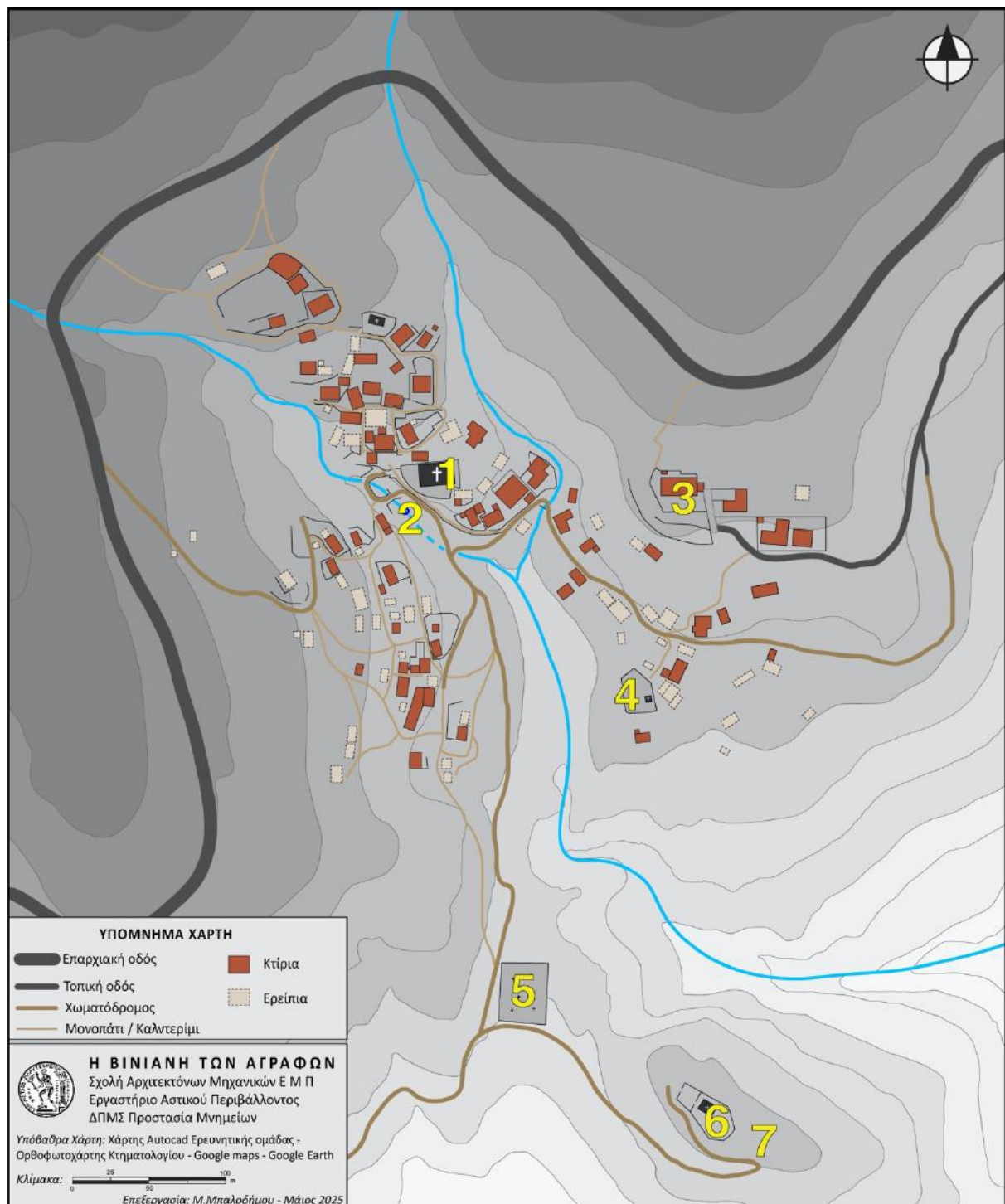
The buildings are generally built parallel to the contour lines, with the main facade facing south and the view. The central core is located next to the descent of the western stream and includes the parish church, the town hall, the fountain and the laundries (See map 3-2). At the same time and almost at the base of the three neighborhoods runs with a small slope the central road which concentrated the public uses of shops, cafes and workshops. The building of the elementary school is located in the east, at the edge of the old settlement (position 3 on the map 3-2).



### Βίνιανη - Κτίρια και χρήσεις την στιγμή της καταστροφής από τον σεισμό του Φεβρουαρίου 1966

- |                                                                          |                                            |
|--------------------------------------------------------------------------|--------------------------------------------|
| 1_Ι.Ναός Δώδεκα Αποστόλων                                                | 13_Αποθήκη ΚΤΕΛ                            |
| 2_Ι.Ναός Παναγίας Ζωοδόχου Πηγής                                         | 14_Εμπορικό κατάστημα & Αίθουσα Εκδηλώσεων |
| 3_Φιάλη Αγ.Αναργύρων [Θερινές προβολές Στρατού & Γυμναστικές Επιδείξεις] | 15_Εμπορικό Κατάστημα                      |
| 4_Δημοτικό Σχολείο - Μουσείο Εθνικής Αντίστασης                          | 16_Κατάστημα Ψιλικών [Κατεστραμμένο]       |
| 5_Παλαιό Κοινοτικό Κατάστημα - Έδρα ΠΕΕΑ                                 | 17_Καφετέρια                               |
| 6_Κοινοτικό Κατάστημα-Τηλεφωνείο-Ξενώνας [Ημιτελής]                      | 18_Τσαγκαράδικο                            |
| 7_Κρήνη και Καζαναριά                                                    | 19_Οικία Σβώλου                            |
| 8_Κοινοτικά WC                                                           | 20_Οικία Αλατάρη                           |
| 9_Καφενείο "Ελβετία"                                                     | 21_Οικία Καραγεώργου                       |
| 10_Ψησταριά [Κατεστραμμένη]                                              | 22_Οικία Νικόπουλου                        |
| 11_Τσαγκαράδικο                                                          | 23_Οικία του Δασκάλου                      |
| 12_Καφενείο - Παντοπωλείο                                                | 24_Κήποι                                   |

Map 3-1. Buildings and uses of Vinians before the earthquake, in February 1966.



Map 3-2. The settlement of Viniani today.

Legend: 1. Holy Church of the Twelve Apostles. 2. Fountain and "kazanaria". 3. Elementary School. 4. Plateau and "Vial" of Agioi Anargyroi. 5. Cemetery. 6. Holy Church of Agios Georgios. 7. "Tsouknides"

Public spaces and platforms are few, due to the steep slopes. We find them in the two courtyards of the churches, the most important of which is that of the Twelve Apostles (image 3.8), which is combined with the fountain, the "kazanaria" or laundry rooms and the large plane tree, now cut down, in the schoolyard and in the large plateau of Agioi Anargyroi, which is also the place where festivals and events take place.



Image 3-8. The Holy Church of the Twelve Apostles in the center of Viniani. Its perimeter is the main public space in the settlement today. Behind the church is the unfinished community store, which housed a telephone exchange on the ground floor and was intended to house a hostel on the first floor. It was built after the war and was not completed. Source: NTUA Research Team, 2023.

Regarding the dating of the settlement's buildings, it should be noted that no building was found that could be dated as earlier than the 19th century, while almost the entire complex dates back to the late 19th and the first two decades of the 20th century. It should also be noted that no traces of an older densely built settlement core were found to help draw conclusions about older phases and the urban development of the settlement.

The above findings reinforce the scenario of the existence of the older settlement on the hill of Agios Georgios and on its southern slope with the place name "Tsouknides", as well as the relocation to a newer location of Viniani during the plague epidemics of the 18th and early 19th centuries.

The residential network appears heterogeneous, with different density in the building in each of the three neighborhoods, with strong elevation differences.

It should be noted that the total number of buildings in Viniani would have been much larger if the dramatic war events of the period 1941-1949, which resulted in the burning of many buildings, the earthquakes and the long-term abandonment, had not taken place. It is also noted that in Evrytania there are very few cases of demolition of old buildings, with the aim of erecting new ones, because as the area began to be abandoned during the period 1960-1980, the building activity was small to non-existent.

### 3.3 The architecture of Viniani - Characteristic buildings

As has been mentioned in the description of the settlement of Viniani, the layout of the buildings is free, aligned with the elevation curves, with the facades oriented towards the downstream and the south, taking advantage of the natural relief and insolation. As a rule, they are wide-fronted. The architecture of buildings in Viniani adapts to the particularly adverse climatic conditions and the intense relief, utilizing local building materials, such as the corresponding architecture of the mountainous settlements of central Greece and the Peloponnese, but also with some peculiarities that are noted below. The majority of houses are accompanied by courtyards, which are often formed with small vegetable gardens, spaces for domestic animals or free undeveloped areas in the immediate vicinity. The houses of all types almost never touch each other. There are courtyards with stone walls and courtyard doors, often with two entrances, due to elevation differences. In many cases, the existence of a courtyard is unclear due to the collapse of the boundaries and the ruin. Their shape and relationship with the building varies, but usually the main part of the courtyard is in front of the main facade. It is rarely paved, while where there is a steep slope, retaining walls are created.

The buildings of the settlement have a uniformity in construction, with the main characteristic being the simple shape, often supplemented with attached outbuildings, either in contact with or near the main building. The roofs are generally hipped. In the first phase, they were covered with slate slabs. After the war burnings and the aging of the buildings, these were covered with French tiles and in some cases with corrugated zinc sheets, replacing the slate slabs.

The shape of the rectangle prevails in terms of the plan, from which the (semi)two-story building results with its rear part on the ground floor level and the part of the main facade two-story, but also the full two-story. There are still a few two-story buildings in the settlement with a "Γ" shape and more complex plans mainly due to

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<sup>122</sup> A very important and unique source of information especially for the architecture (morphology and typology), as well as for the construction techniques and details, is the dissertation of the emeritus professor of NTUA, G. Yannitsaris (2010), on the architecture of Evrytania. See Yannitsaris G. (2010). The traditional architecture of Evrytania. Doctoral Dissertation NTUA, p. 16.

<sup>123</sup> The main facade is usually formed on the long side.

later additions. In several buildings, there are additional auxiliary buildings in the courtyard (kitchens, storage areas, sanitary facilities, etc.), constructed in various periods, either in contact with the original buildings or not.

The use of the buildings was generally residential on the upper floor, while the ground floor, constructed with less care (unplastered stonework, absence of a ceiling, floor of packed earth, etc.), was suitable for domestic livestock farming and/or for storing goods and livestock products. In at least a dozen cases, the ground floor was used as a shop, cafe, or workshop.

The main entrance was located either on the main facade (longitudinal side facing the view) or on the rear facade (buildings located on a steep slope - semi-detached), leading directly to the main living area on the upper floor. In these cases, there was a second entrance for the ground floor areas.



Image 3-9. Two-story and semi-detached buildings in Viniani. Source: NTUA Research Team, 2023.

The constructions as a whole are made of stone masonry, which is unplastered and usually with non-visible external wooden ties. In more elaborate buildings, the main facade is constructed with roughly rectangular stones. The cornerstones and the outer perimeter of the openings (the low arches above the wooden lintels and the jambs) are also made of hewn or roughly hewn stones.

The partition walls of the upper floor are usually constructed with a wooden frame, without filling, plastered with the "bagdati" method. The interior walls of the ground floor are either made of rubble masonry or, more rarely, of a wooden "bagdati" frame.

The floors are wooden, and the also wooden roofs are constructed either with the "beam on column" system ("seated") or with simple triangular trusses. Wooden plank ceilings cover the roofs and the floor beams when the use of the ground floor is not secondary.

In the center of the main facades of the two-story buildings, there are usually covered wooden balconies. A distinctive architectural and morphological element of the settlement's buildings are the repeating wooden decorative motifs, in the form of drops, which are placed at the termination of the roofing of the balconies and in

shelters above the main entrance of the buildings. Similar motifs are also used for the railings of the balconies.

From research conducted in the context of this study, <sup>124</sup>it was found that in

Constantinople, a new architectural and structural current (romanticism and wooden structures with wall panels without filling and plank cladding), spread quickly and was expressed around the end of the 19th century, with very important buildings, in combination with the industrial development in the field of production and processing of timber. In particular, a large Turkish industrial unit, the "Ahirkapı Timber Factory" was founded in 1893, which produced standardized wooden and decorative elements, similar to those found in Viniani, which could be ordered through commercial catalogs. The above assumption is confirmed by Yannitsaris, <sup>125</sup>who identifies the balconies with the characteristic wooden

decorative motifs in other settlements in the area. He notes a strong influence of Constantinople throughout Evrytania. The great metropolis of the Ottoman Empire, in addition to being the spiritual and economic center for Hellenism in the late 19th and early 20th centuries, had a significant Evrytanian community, which flourished spiritually and economically in the 2nd half of the 19th century. As he characteristically mentions, the final purpose of the migrant was the construction of his house in the village, with a size and luxury corresponding to his position in society, with equipment and even furniture and utensils from the City. The architecture of the wooden houses of the late 19th and early 20th centuries in Constantinople, with elements from the Ottoman Baroque and the peculiar eclecticism that prevailed throughout Europe, was a model for the Evrytanians in the City. The wealthy migrants hired the best craftsmen of the time (carpenters and Epirus builders for the masonry), who, according to information from carpenters in the area, also brought the wooden elements of the shelters and balconies, probably from Constantinople, which were assembled by local craftsmen.

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124 According to Dr. Damla Acar, Conservation Architect- KORUMA AKADEMISI, Istanbul, and her related publications. See Damla Acar (2017). «Evolution and rationalization of timber frame design in Istanbul in the second half of the nineteenth century». Journal of Architectural Conservation, Issue: 3. Volume: 23, pp.190-210. 125 Yannitsaris G. (2010), op. cit., p. 407.

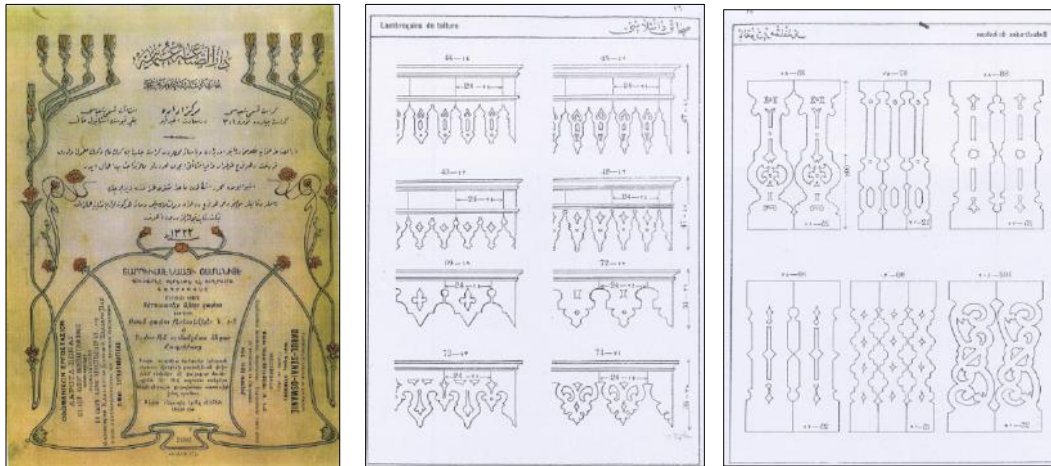


Image 3-10. "Ahirkapi Timber Factory" in Istanbul, 1906 catalog. Wooden standard decorative elements of roof ends and railings, similar to those found in Viniani. Source: Acar D., 2017.

This trend, initially brought by Viniani immigrants from Constantinople and subsequently adopted by immigrants from America, created buildings in the settlement that were built with the above characteristics, around the turn of the century and in the first two decades of the 20th century. These buildings, always two-story or semi-two-story, are the most complex and elaborate, with covered balconies with rich decoration, courtyards with carved stones, and strong retaining walls. The "mansions" or "American" houses are a phenomenon that has largely characterized the identity of Viniani, as it has been preserved to this day, despite the impact of earthquakes and landslides.

It is interesting that at the same time, the introduction of early reinforced concrete into the construction of the settlement, which is mainly found in the "American" houses, on the balconies, external staircases, and sometimes on lintels and opening sills, mainly as a repair. In several cases, reinforced concrete replaced wooden elements after the war during the repair of buildings burned down during the war.



Image 3-11. Decorative relief; rosette on a doorpost block and hammered metal "fork" connector, anchoring the wooden frame. Source: NTUA Research Team, 2023.



Image 3-12. Wooden railings and hanging stalactites in the shape of a drop on a covered balcony. Source: NTUA Research Team, 2023.

### The Holy Church of the Twelve Apostles

The parish church of Viniani (position 1 on map 3-1 & 3-2) is located in a prominent position, in the center of the settlement where the paths intersect with the two streams. It occupies approximately half an acre in total. It is surrounded on three sides by a retaining wall or parapet with metal railings. It has an old built gate from the east and a rather newer one from the west, above the fountain. On the north side and the east side there is no enclosure and the building is separated to the north by the cobblestone which is higher with a deep drainage ditch. On the south side there is a wide courtyard of approximately 250 sq.m. with a large plane tree and a perimeter low stone parapet overlooking the southern horizon, the stream and the settlement.

The Holy Twelve Apostles is a stone-built three-aisled basilica with a wooden roof and a slightly elevated central aisle. The building has dimensions of 20m. length by 10m. It has a triple sanctuary with a circular plan. The bell tower is partially integrated into the southwestern corner of the church and has a tower-like shape with five levels. According to a manuscript by the priest of Viniani Dimitrios Kanteras (1926-2020), the period of the church's foundation is mentioned, in the initial phase dedicated to Saint Athanasios and later to the Twelve Apostles, the year 1650 and the construction of the first iconostasis dates back to 1774. The same historical element is also mentioned in the article by Andrianis Diagouma in a related publication of the Holy Metropolis of Karpenisi for the church building of Viniani.

According to the same publication, the church was built in 1650-1655 and was probably destroyed in the 19th century, to be rebuilt in 1925, as mentioned in a wall inscription in the enclosure. The bell tower was built in the 18th century, probably in 1779. The church was not burned down by Ali Pasha when he, according to legend, destroyed Viniani, nor during the two destructions of the village by the occupation troops in 1941-1944.

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<sup>126</sup>Andriani Diagouma, op. cit.

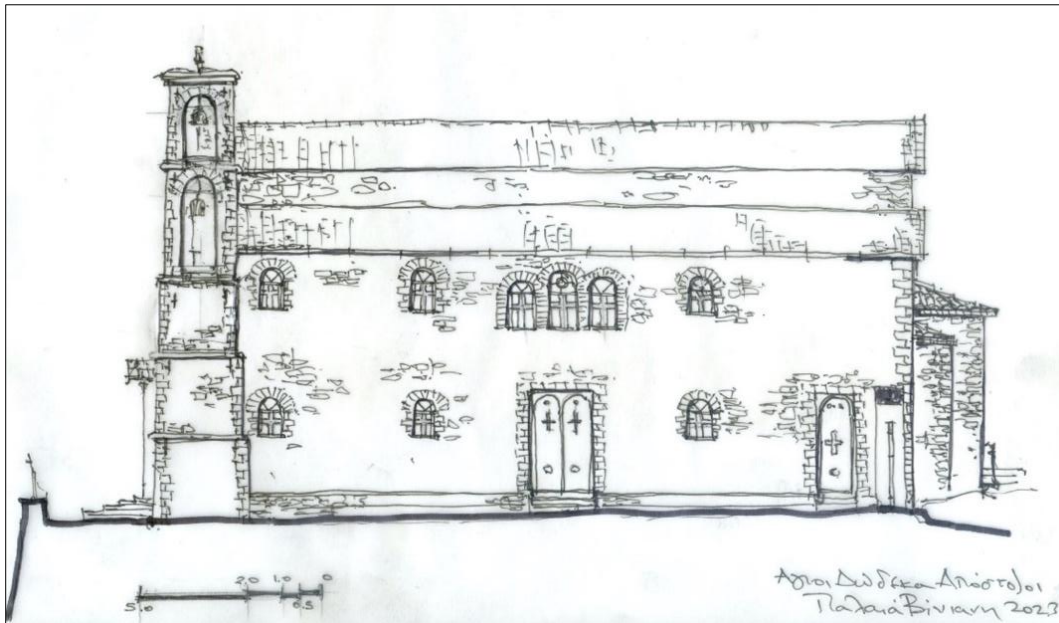


Image 3-13. South side of the Church of the Holy Twelve Apostles. The church was built in 1650-1655 and was probably destroyed in the 19th century to be rebuilt in 1925, as mentioned in a wall inscription in the enclosure. The bell tower was built in the 18th century, possibly in 1779. Source: NTUA Research Team, 2023.

The main facade of the church has a propylaeum, probably later, with unfluted concrete cylindrical columns and a pediment. The door is a double metal door, obviously newer. On the same facade above the central one there is a three-lobed arched opening at the height of the women's quarters. On the south side there are two rows of arched narrow openings, one on the lower level and one on the level of the women's quarters. Especially on the first level there are two narrow arched openings, a double side metal door with a staircase to the courtyard, then an equally narrow window and finally a small door to the sanctuary. On the second level there is the same number of windows on the same axes as those on the ground floor, with an additional three-lobed arch above the side door.

The construction of the church is probably combined with the relocation of the settlement from the hill of Agios Georgios to that new location, although the erection of a church does not automatically mean the existence of a settlement. Also, the assumption of the existence of two nuclei at the same time stands: an ancient nucleus on the hill with at least two churches (of Agios Georgios and Agios Nikolaos in "Tsouknides"), which shrinks and is abandoned, and a newer one which was founded in the 17th century, around the Church of

Agios Athanasios (later Holy Twelve Apostles), developed into a settlement from the end of the 18th to the end of the 19th century, flourished and reached its peak in the first half of the 20th century and was abandoned after 1966.

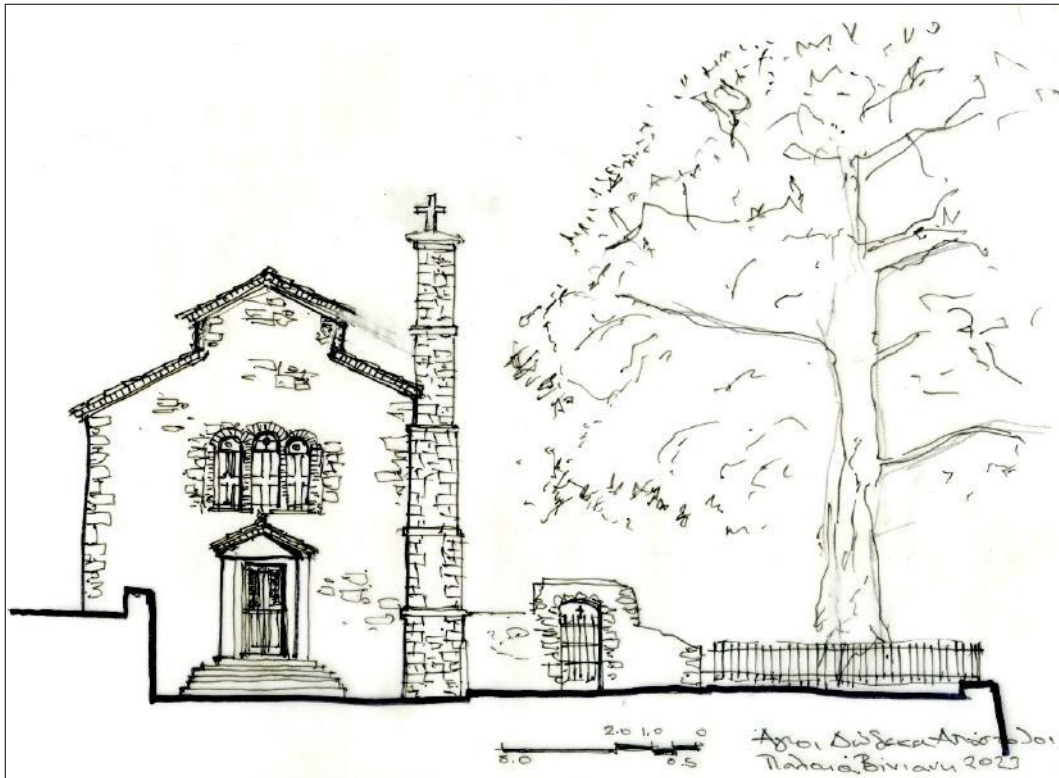


Image 3-14. West view of the Church of the Holy Twelve Apostles. The church was built in 1650-1655 and was probably destroyed in the 19th century to be rebuilt in 1925, as mentioned in a wall inscription in the enclosure. The bell tower was built in the 18th century, probably in 1779. Source: NTUA Research Team, 2023.

#### The Holy Church of Zoodochos Pigi

A second small church, on the hill at the edge of the settlement, dedicated to Zoodochos Pigi, was also built according to a founding inscription in 1925, at the time of the reconstruction of the Holy Twelve Apostles (building 2 on map 3-1). It is a single-aisled gable church with stone masonry and a wooden tiled roof.



Image 3-15. The Life-Giving Spring of Viniani. Photo: © Grigoris Antoniou. Source: Municipality of Agrafa.

The small bell tower is integrated into the main facade as an extension of the pediment. The church is built with jointed stone, a door on the main facade, three narrow openings on the south side, marble cornerstones and frames with exposed marble blocks, pilasters and lintels in the openings.

Above the entrance on the facade there is a small niche, while in the masonry of its south facade there is an external low sill.

"Fiale" of Agioi Anargyroi

Finally, the "Fiale" of Agioi Anargyroi (position 3 on map 3-1) is located on the homonymous plateau, which was used for events even after the war. Its construction should be placed chronologically in the same interwar period. The construction with the columns and the small dome is also visible in the photographs of the war period.



Image 3-16. The plateau and the "Bottle" of Agioi Anargyroi. The plateau was used for gymnastic performances of the school and for outdoor film screenings by the army after the war. Source: NTUA Research Team, 2023.

### The Elementary School

The school of Viniani (building 4 on map 3-1) was built in 1938 based on the architectural type of the two-row elementary schools which had been issued by the Ministry of Education. The state school housing program had started in 1930 and the school was built with funds from the Royal Welfare. During the war it was used as a meeting and ceremony space for the "Mountain Government", the P.E.E.A.

It is a ground floor, elevated from the ground, broad-fronted stone building with a hipped roof. The plan is perfectly symmetrical and includes two identical rooms, the vestibule with the double-leaf entrance door in the center and the teacher's office. According to the researchers of the 1986 repair, it was built by Tzoumerkioti craftsmen.

<sup>127</sup>Tania Zografou, Nelli Marda (1986). Application Study of the Old Viniani Elementary School, Evrytania Prefecture, Department of Urban Planning and Urban Applications, p.4.



Image 3-17. Southern view of the Viniani Elementary School with the busts of the ministers of the "Mountain Government". Source: NTUA Research Team, 2023.

The school according to the typological plans published by the Technical Chamber of Greece in 1938<sup>128</sup> has external dimensions of 21.90m in length and width

7.20m and a total area of 158 sq.m. It has a main orientation to the south and three large triple windows in each room, while to the north there are two smaller double windows in each room. The rooms have dimensions of 8.70m in length and 6.00m in width. They communicate with the vestibule and from there directly with the large courtyard. In the center, the small office oversees the classrooms, the vestibule and the entrance. It has dimensions of 3.60m by 2.75m. The western hall had in the back corner next to the teacher's seat a small flue with a chimney for the placement of a heater.

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<sup>128</sup>TEE (1938). The new school buildings, Athens.



Image 3-18. The political and military leadership of the "Mountain Government" headed by General Stefanos Sarafis, enters the Viniani Elementary School with an honorary detachment of partisans on May Day 1944. Source: Meletzis S. (2002). *With the partisans in the mountains*. Athens: Private, p. 77.

Until the Occupation, as can be seen from the photographs of Spyros Meletzis, the schoolyard was unformed with soil. On the eastern side, in contact with the wall, there is a low, elongated built platform. It is probably a construction that has to do with the use of the courtyard as a space for gymnastics or events. From the testimonies it is also known that for similar events and for the school gymnastics demonstrations, the southernmost plateau of the "Fiali" of Agioi Anargyroi was used.

It is also interesting to note the asymmetrical placement of the arrangement of the two halls inside. In the western one, the teacher's seat with the heater next to it and the blackboard are at the back, while in the eastern one next to the door. That is, in both halls the position of the seat is in the west. The reason for this distribution has to do with the natural lighting from the left of the desks so that the writing and reading of the usually right-handed students is comfortable according to the pedagogical perceptions of the time. It seems that the western hall with the wood stove heating was intended for the young ages and the eastern one without

heating for older students. The relatively small northern windows, compared to the southern ones, ensured cross-ventilation. Finally, the school had two small auxiliary buildings from its construction, one of which housed the W.C.

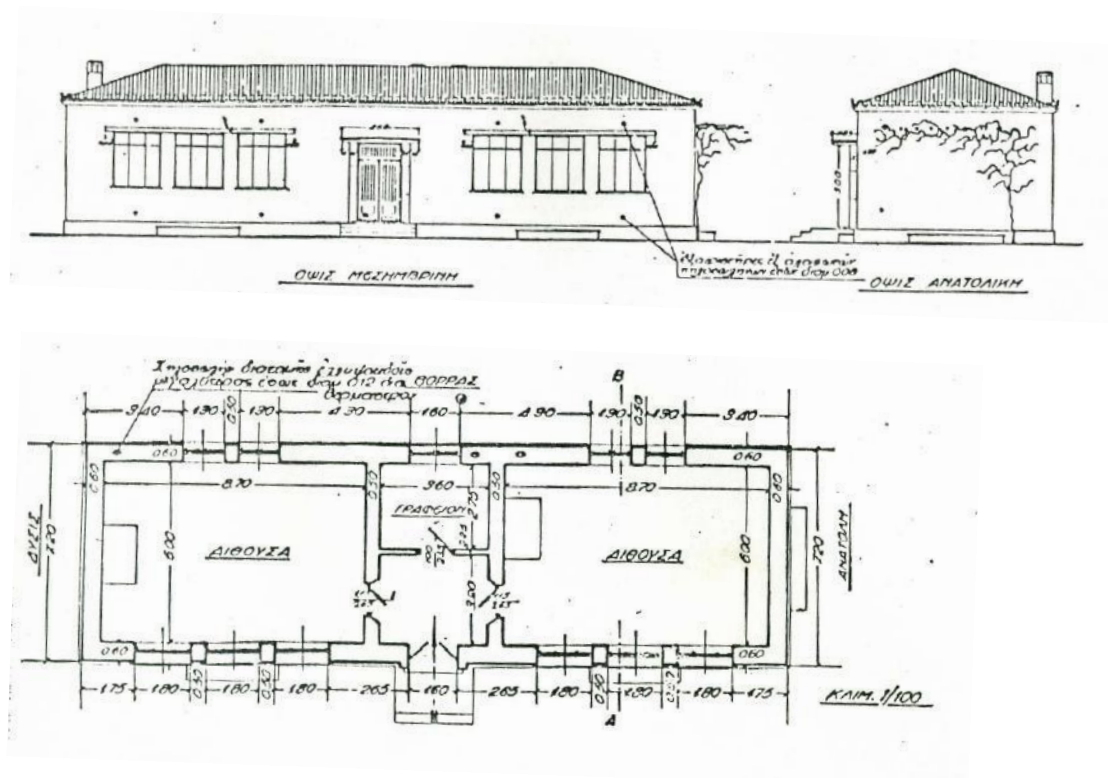


Image 3-19. The typological plans (plan, meridian and eastern view) of the Ministry of Education for the two-class mountain schools. This typology was applied to the school of Viniani. The plans of the state school building program of 1930 were published in the 1938 edition of the Technical Chamber of Greece. Source: TEE (1938). The new school buildings, Athens.

The roof of the building is raised by 1.50 m. In the initial phase it was covered with Byzantine tiles. After the repairs, the Byzantine tiles on the sides of the roof were replaced by French tiles. Its internal walls are running brickwork. The floor in the initial phase was mosaic which was replaced by gros-beton. The internal and external frames were wooden opening, with upper reclining skylights and beton-arme lintels. In the first repair of the burned building, the frames were replaced with metal strantzarista. Between the raised base of the foundation by about one meter and the trunk of the building runs a cornice with hewn narrow stone. Finally, the external staircase, marble in the initial phase, was replaced by a beton-arme staircase.

The Primary School of Viniani was burned twice by the Italian-German occupation forces. After the war it was repaired in the 1950s and operated

until the 1966 earthquakes as a two-seater six-row. In the last years of its operation it had 95 children.

It was repaired again in 1983 by the School Buildings Organization. In 1986 it is reported that the building was in poor condition with cracks, dilapidated metal frames, as well as corroded roof trusses with plane trees which had created a problem with their roots in the foundation.

After a new study proceeded and new repairs, the wooden frames were restored, the roof and floors as well as the entrance staircase were replaced and the courtyard was shaped. The school now functions as a Museum of National Resistance while at the same time the building was declared a preserved monument by the Ministry of Culture.

The initiative for the repair of the school and the creation of the museum is the work of old fighters of the National Resistance 1941-1944, residents of Vinians and the Society for the Rescue of Historical Archives headed by the resistance fighter Vardis Vardinogiannis and the professor of the School of Architecture Mich. NTUA Konstantinos Papaioannou. The repair study was done by the architects Tania Zografou and Nelly Marda and the school was declared listed.

The busts of the members of P.E.E.A., the work of sculptors Thymios Panourgias and Sotos Alexiou, were placed in the schoolyard.

The museum was founded and acquired institutional status on March 7, 2006 in the form of a municipal N.P.D.D. and since 2016 it has been under the Municipality of Agrafon.

#### Five characteristic cases of residential buildings

In the context of this research <sup>135</sup>four characteristic cases were studied

cases of mansions, the houses of Nikopoulos, Karageorgos and two houses in Alatareika, one of which is said to be the one where Alexandros Svolos, President of P.E.E.A., was hosted. A fifth case, which does not belong to the mansions, was also the subject of research. This is the house where the last teacher of the village lived before the school closed, after the earthquakes.

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<sup>129</sup>Informants K. and T., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

<sup>130</sup>See Tania Zografou, Nelly Marda (1986), op. cit., p.4.

<sup>131</sup>Government Gazette 333/B/1986, YA G/924/13405. «Characterization as a historical preserved monument, of the old Primary School of Viniani of N. Evrytania».

<sup>132</sup>Tania Zografou, Nelly Marda (1986), op. cit.

<sup>133</sup> The Museum of P.E.E.A.-National Resistance in Viniani Evrytania. Rescue Company Historical Archives (information leaflet) n.d,

<sup>134</sup>See related Government Gazette 2816B/5/07-09-2016, Abolition of the Municipal N.P.D.D. of the Municipality of Agrafon

of the Prefecture of Evrytania under the name «Museum of National Resistance Viniani», Government Gazette 1765B/2/05-08- 2011, Preservation of the legal entity of the municipality of Agrafon under the name «Museum of National Resistance Viniani» as an independent and Government Gazette 275B/13/07-03-2006, Establishment of the legal entity of the municipality of Agrafon under the name «Museum of National Resistance Viniani».

<sup>135</sup>See related: Exercise of Strengthening and Restoration, DPMS «Protection of Monuments NTUA, July 2023 [teaching team Nikos Belavilas, Androniki Miltiadou, Maria Balodimou, Irini Efesiou, Konstantinos Karadimas].

### Theophanis Nikopoulos House

The two-story house of Theophanis Nikopoulos is located on the western side of the settlement above the community fountain (building 22 on map 3-1). Nikopoulos emigrated in 1905 at the age of 15 to Clarsburg, Virginia and worked as a laborer until 1914 when he returned to Viniani. He traveled again in 1921 to the same city declaring himself a merchant. He made another trip in 1947. He also served as president of the community. On the western side of the Nikopoulos residence building is incorporated an inscription which states the year of construction as June 1915, the date that coincides with the date of his first repatriation to the village. He is also the donor of the community fountain which was built in the same year as his residence.



Image 3-20. Nikopoulos House. Longitudinal section. Source: Theodorakoglou E. (Arch. Eng.), Mantelos V. (Arch. Eng.), Florou E. (Civ. Eng.), Houma N. (Arch. Eng.) Restoration Study of Nikopoulos House in Viniani, Evrytania. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

### Alataris family house

The second house of the Alataris family (building 20 on map 3-1), which also housed the ground floor cafe "Switzerland", also belonged to a migrant family, but it is not certain that it was built with migrant money - although it is "American" - as the mentioned Dimitrios Alataris, ancestor of the current family of owners, seems to have died on the first trip to America in the early 20th century, so logically he did not manage to invest money for

<sup>136</sup> See related: Theodorakoglou E. (Arch. Eng.), Mantelos V. (Arch. Eng.), Florou E. (Civ. Eng.), Houma N. (Arch. Eng.) Restoration Study of Nikopoulos House in Viniani, Evrytania. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

building construction.<sup>137</sup> Another Dimitris Alataris, also an immigrant, appears to be the founder of a nearby two-story residence.<sup>138</sup> Finally, Apostolos Alataris, and he, an immigrant to the USA, returned to Viniani in the early 1920s and has since been the village carpenter.

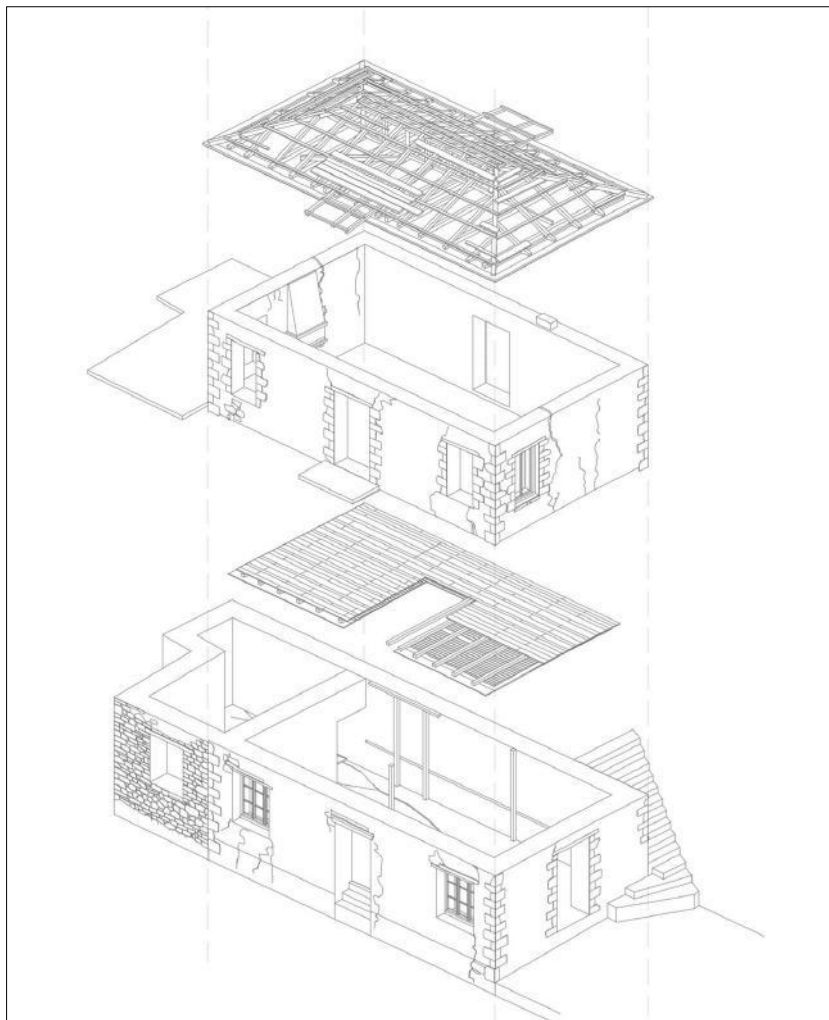


Image 3-21. Alatari House and Café-Grocery Store "Switzerland". Axonometric section and views. Source: Karagiannakidou Katerina, (Arch. Eng.), Krekoukia Nikolaia, (Archaeologist), Merou Marina, (Arch. Eng.), Old cafe building, Viniani Evrytania. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023

<sup>137</sup> See Related: Karagiannakidou Katerina, (Arch. Eng.), Krekoukia Nikolaia, (Archaeologist), Merou Marina, (Arch. Eng.), Old cafe building, Viniani Evrytania. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023

<sup>138</sup> See Related: Verikaki Argyrou (Arch. Eng.), Barbounaki Maria (Arch. Eng.), Tsironi Despoina (Arch. Eng.) Building 15, Viniani Evrytania Settlement. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

<sup>139</sup> Informants G. and D., Nea Viniani. Interview with N.B. on 2.7.2023.

## Evangelos Karageorgos Mansion

The mansion of Evangelos Karageorgos is the most impressive of the immigrant houses of Viniani (building 21 on map 3-1). It is located on the southeastern side of the settlement, on a steeply sloping plot. It has the stream on one side and faces both the main road and a cobbled street on the upper side of the plot. Karageorgos worked for 23 years in the USA, a restaurateur in the city of Frederick, Maryland. His first trip took place in 1907, the second in 1930 and another in 1938, having now obtained American citizenship. The well-built building was a point of reference for his successful professional career in America. Its dating is placed between the second and third decades of the 20th century.



Image 3-22. House of E. Karageorgos. Side view. Source: Vienna Argyri (Agronomist Surveyor Eng.), Zacharaki Anna (Architect Eng.), Kondyli Zoi (Architect Eng.), Sakka Nikolettta (Architect Eng.), Laspia Vasiliki (Agronomist Surveyor Eng.), Spyridaki Olympia (Architect Eng.), Stephani Athena (Architect Eng.), Christou Dimitra (Civil Eng.) Mansion E. Karageorgou, Viniani Evrytania. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

The building that is said to be the residence where Alexandros Svolos was hosted during the National Resistance is located in the central core of the settlement, in the

<sup>140</sup>See also: Vienna Argyri (Agronomist Surveyor Eng.), Zacharaki Anna (Architect Eng.), Kondyli Zoi (Architect Eng.), Sakka Nikolettta (Architect Eng.), Laspia Vasiliki (Agronomist Surveyor Eng.), Spyridaki Olympia (Architect Eng.), Stephani Athena (Architect Eng.), Christou Dimitra (Civil Eng.) Mansion E. Karageorgou, Viniani Evrytania. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

Alatareika neighborhood, a little higher than the community store. It was also built on a steeply sloping and transparent plot with upper and lower entrances. With careful architecture, it dominates the center of Viniani between the few public buildings and the fountain. According to Giorgos Giannitsaris, the building belonged to Dimitrios Alataris, an immigrant to the USA, namesake and obviously a relative of the other Alataris of the building with the ground floor cafe.



Image 3-23. House "of Svolos". Side view. Source: Verikaki Argyrou (Architect Eng.), Barbounaki Maria (Architect Eng.), Tsironi Despoina (Architect Eng.) Building 15, Settlement Viniani Evrytania. MSc "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

<sup>141</sup>See Also: Verikaki Argyrou (Architect Eng.), Barbounaki Maria (Architect Eng.), Tsironi Despoina (Architect Eng.) Building 15, Settlement Viniani Evrytania. MSc «Protection Monuments» NTUA (Postgraduate Thesis), July 2023.



Image 3-24. The ground floor community store and the "Svoulou" House in the central neighborhood of Viniani. Source: NTUA Research Team, 2023.

#### The Teacher's house

The "Teacher's" house is located relatively far from the central core, in the school neighborhood and next to the entrance of the Agioi Anargyroi plateau (building 23 on map 3-1). The teacher Pavlos Bakoyannis stayed in it, the period before the earthquakes and the destruction of Viniani. In contrast to the houses of the "Americans," this building belongs to a less wealthy category of residents.

The house with a courtyard, residence on the floor, lower floor, kitchen in an extension and outbuildings, is a typical rural residence of the village with many of the common characteristics found in similar buildings in the settlement. It is located next to the entrance of the Agioi Anargyroi plateau.

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<sup>142</sup>See also: Gougoula Konstantina, Kalyfommatos Pavlos, Rovilos Panagiotis, Rozani Georgia (Architects Eng.) The teacher's house in old Viniani. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

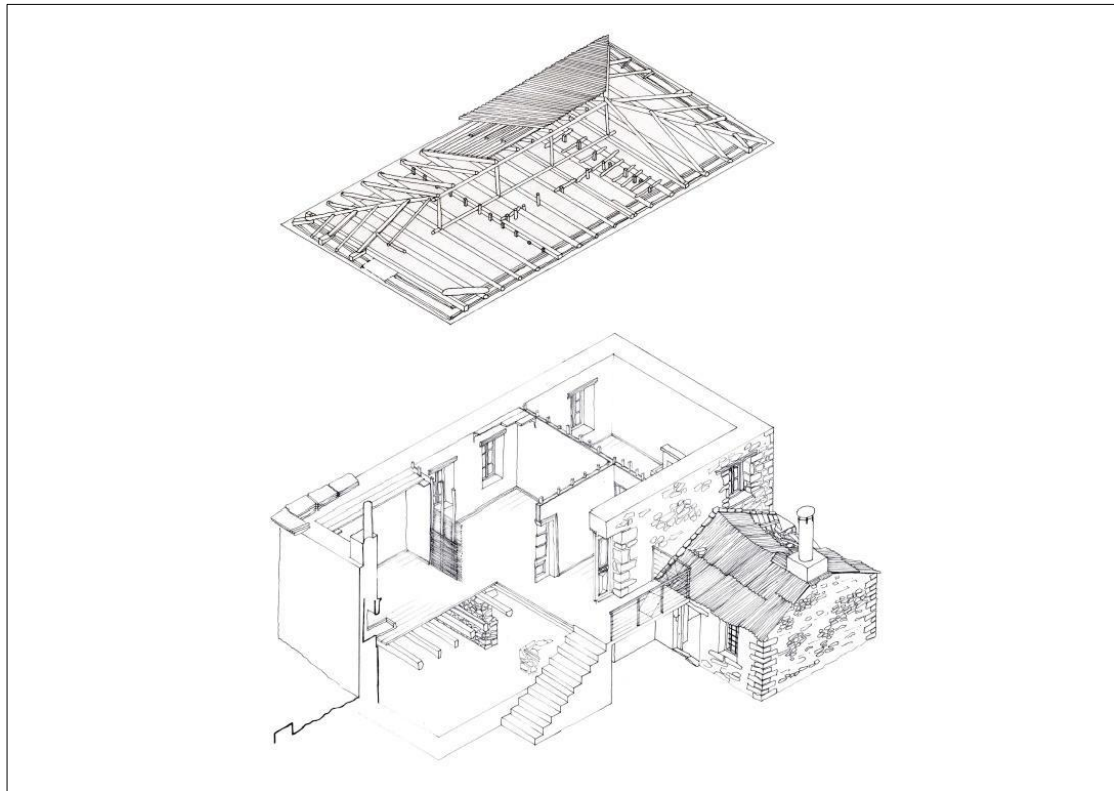


Image 3-25. House of the "Teacher". Axonometric section and views. Source: Gougoula Konstantina, Kalyfommatos Pavlos, Rovilos Panagiotis, Rozani Georgia (Architects). The teacher's house in old Viniani. DPMS "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

The economy of Viniani, a purely agricultural economy, began to rely on migration, already from the time of the movements to Constantinople in the 19th century and even more so from the migration to America during the Interwar period. In the post-war years, Viniani continued to be a typical mountainous agricultural village. The local agricultural economy covered livestock farming of goats and sheep and calves, cultivation of cereals, corn, clover, hay, irrigated and dry vegetables and legumes, vineyards as well as olive trees low in the river. At the same time, the forest economy continued with logging. The households of Viniani kept chickens and pigs, and there was also domestic cheesemaking, while there were pack animals in the village; mules and a few donkeys.

Communication with Karpenisi took place after 1947 via the metal bridge of Megdova. The new road opened in the early 1960s and was asphalted in the 1980s. Travel was done with an old military  $\frac{3}{4}$  vehicle that transported passengers and goods on a 2.5-3 hour journey to Karpenisi.

Before 1966, electricity had been installed by the PPC in only a few houses in Viniani. The earthquake was the reason, after 1966, for the complete electrification of the new settlement and the construction of a water supply network.

#### Brief description of architectural and structural characteristics

Attempting to record the architectural typology and construction of the buildings of Viniani, several common characteristics are identified. The private buildings of Viniani follow a relatively homogeneous typology with a rectangular plan, usually with their long dimension placed parallel to the elevation curves with the main longitudinal facade facing the view. However, there are also a few cases where the narrow side is placed parallel to the elevation curves. They have approximately the same dimensions and volume with a length to width ratio of ~2:1 (~12.0m length X 6.0m width X 6.0 m total wall height of two floors without the roof). An exception are some of the "mansions" with complementary volumes and a Γ-shaped or more complex plan), which are either original or were added in later phases.

The majority of the buildings are:

a) two-story, with the entrance to the ground floor centrally to the main facade and with an internal wooden staircase leading to the floor (see Nikopoulos House). In other cases, such as in the two-story House "of the Teacher", the entrance to the floor is from the main facade via an external stone staircase, while the entrance to the basement is located under the landing of the staircase, which has often been constructed or reconstructed with reinforced concrete.

b) semi-two-story due to the steep slope of the ground. In this case, the section towards the main facade is two-story and the section towards the rear facade is ground floor, where the main entrance of the building to the living areas of the floor is often located. The secondary entrance to the semi-basement space with secondary uses (kitchen areas, storage, etc.) is usually located on the narrow sides of the building.

c) combination of the above.

In the settlement there are also other buildings for auxiliary uses, either single-story or two-story, with less careful construction, simple opening design, and sometimes a gable roof (auxiliary building next to the House "of Svolos").

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<sup>143</sup>Informant K., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023



Image 3-26. Two-story building -Karageorgou House- (left), half-story building with external staircase (center), two-story building with external staircase (right-House "of the Teacher"). Source: NTUA Research Team, 2023.

Due to the steep slope of the ground, retaining walls of very high height are constructed at the lower limits of the properties to form the foundation area of the buildings, which are stressed with significant earth thrust loads, especially if there is no or does not function properly a water drainage system or in some cases loads from the foundation of the buildings. These walls show great vulnerability and damage and are a priority in terms of immediate rescue measures concerning the settlement.



Image 3-27. The successive retaining walls on the central plateau with a particularly large height, constitute and retain the core of the settlement. Source: NTUA Research Team, 2023.

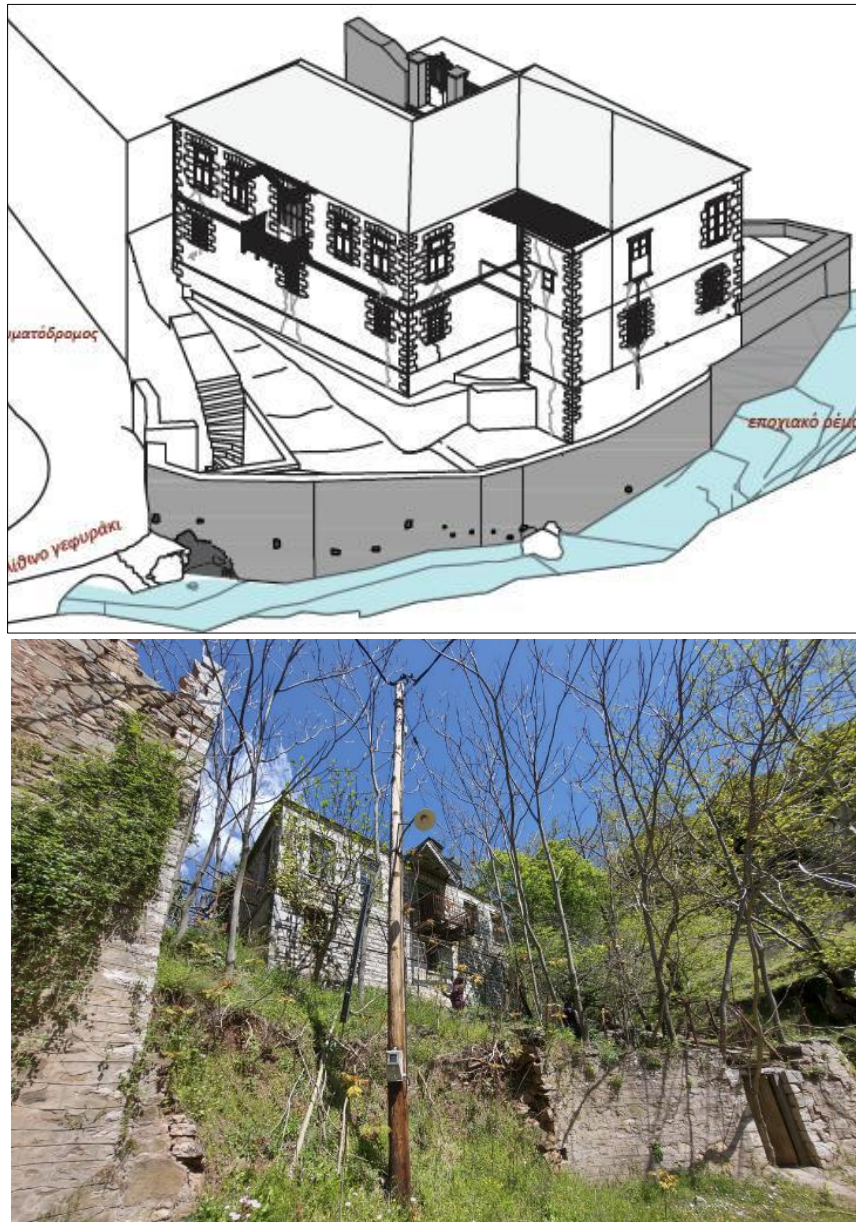


Image 3-28. Karageorgos House. The retaining wall at the property boundary is visible, part of which has collapsed. Source: NTUA Research Team, 2023. Drawings: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V. Laspia, O. Spyridaki, A. Stefani, D. Christou, postgraduate students of the MSc "Monument Protection" NTUA.

The construction of the masonry is usually done with a three-layer stonework (ground floor thickness ~0.6-0.75 and floor ~0.5-0.7, i.e. in some cases reduced by 5-10 cm), probably without through stones, consisting of semi-hewn and rough stones on the outer surfaces and rough stones of smaller dimensions (usually slate or sandstone of gray or green color) on the inner surfaces, the quality of which varies from very good (Karagiorgou House) to moderate or even low in places with small stones without engagement and continuous vertical joints (Nikolopoulos House, House "of the Teacher").



Image 3-29. Three-layer masonry. Source: NTUA Research Team, 2023.

The binding mortar and joint mortar are either lime mortar or clay mortar depending on the quality of the construction. The buildings are unplastered externally and plastered internally except for the ground floor or semi-basement secondary spaces. In several buildings, newer joints have been made with cement (with the technique of covering part of the stones and carving joints to give the impression of more careful construction).

The cornerstones are an important element of the facades of all buildings, whether simple (House "of the Teacher") or larger and more carefully constructed. Quoins with carved or roughly carved faces with a carved decorative strip around their perimeter are used, made of off-white hard limestone. The cornerstones in some buildings bear decorative motifs and the date of construction of the buildings. The date also exists on carved stone slabs embedded in the masonry.



Image 3-30. Cornerstones with roughly carved faces with a carved decorative strip around their perimeter (left), cornerstones with careful carving over the entire surface of their faces (right). In the upper part of the corner there is a decorative motif on a cornerstone as well as the date of construction of the building. Source: NTUA Research Team, 2023.

The off-white cornerstones in some cases differ sharply in color from the rest of the masonry, which is constructed with slow stones of gray color.



Image 3-31. Argolithodomies with gray stones and white cornerstones. (area of the "Teacher's" House). Source: NTUA Research Team, 2023.

In some buildings of the settlement, reinforcements were observed in the lower part of the corners of the buildings, with the use of a larger surface of stones or cornerstones with carved faces. This reinforcement exists in only some of the four corners of the buildings, usually on the side towards the slope and is also a special construction feature of this particular settlement.



Image 3-32. Building corners reinforced with a larger surface of stones with carved faces. Source: NTUA Research Team, 2023.

The use of a protruding zone of semi-carved stones was found in some buildings at the floor level. It is a special morphological characteristic, which may characterize a time period, a workshop of craftsmen or a type of building constructed with greater care.

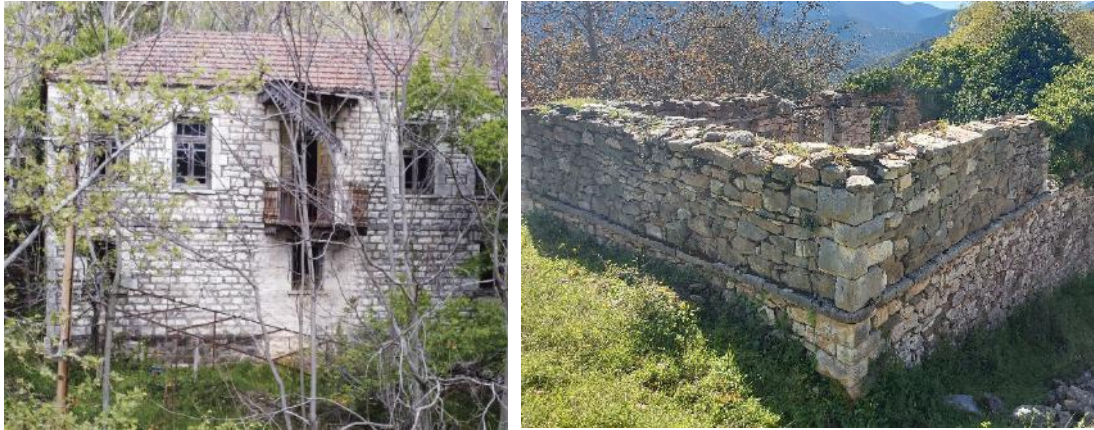


Image 3-33. Semi-carved protruding zones at the floor level in two buildings of the settlement. On the left is the Karageorgou House. Source: NTUA Research Team, 2023.

Most of the masonry materials came from the area, where there were small stone quarries and lime kilns "asvestaries", sand from the river and the local crushed schist rock "gremnitsa".

The masonry usually has timber ties at the level of the feet, the windows, at the level of the floors and roofs and in some cases at intermediate levels and at the level of the lintels. There are two longitudinal timbers, one on the inner side and one on the outer side (usually hidden behind a series of small stones that stops before the corner due to the existence of the cornerstones). Their position is distinguished on the inner side of the stonework and on the facades by the horizontal zones with stones of small height. In the Nikopoulos House they are visible on two of the four external walls of the building. In the House "of Teacher"

the use of a third timber tie in the middle of the wall thickness was also identified. It is noted that their cross-section is quite small, a sign of degeneration of the system. The reduction of their cross-section also due to rot is an element of vulnerability of the structural system.

The internal walls are parallel to the small dimension of the building. On the ground floor they are usually made of three-layer or more rarely two-layer masonry, without however being connected to the external ones, although they were built at the same time. It is assumed that it is a local construction technique to build the external walls up to the floor and then build the internal ones, different from the usual one, where all the walls, internal and external, are built at the same time, in order to reduce the stress on the longitudinal walls in the earthquake.

On the floor, the internal walls are non-load-bearing, partition walls, made of wooden frame without filling, covered with plaster (bagdati). They are made particularly roughly, with vertical uprights of small dimensions (~6-8 X 6-8cm, with an axial distance of ~50cm), without sleepers in the cases studied, neither in the upper nor in the lower part of them. Also, they often do not rest, as one would expect, on walls made of stonework or walls made of bagdati on the ground floor - Nikopoulos House), but

on beams or planks of the wooden floor - House "of the Teacher"), presenting significant vertical displacements.



Figure 3-34. Wooden partition walls made of bagdati on the first floor (left-House "of the Teacher" and center-House "of Swolos") and on the ground floor (right-House of Nikopoulos). Source: NTUA Research Team, 2023.

The window openings are placed approximately symmetrically with respect to the central door but very close to the corners of the buildings. Sometimes they touch the cornerstones, which is an inherent weakness of the load-bearing structure. The openings on the other sides are much fewer and vary from case to case. Often the width of the openings has been widened, causing local disturbance and damage. In some cases, due to the slope of the ground, many openings are placed only on certain walls, usually in the free part of the building that overlooks the slope, thus introducing an asymmetry in the distribution of the stiffness of the building, as is the case with the Nikopoulos House, which leads to failures on the side with many openings, specifically in the SE corner.

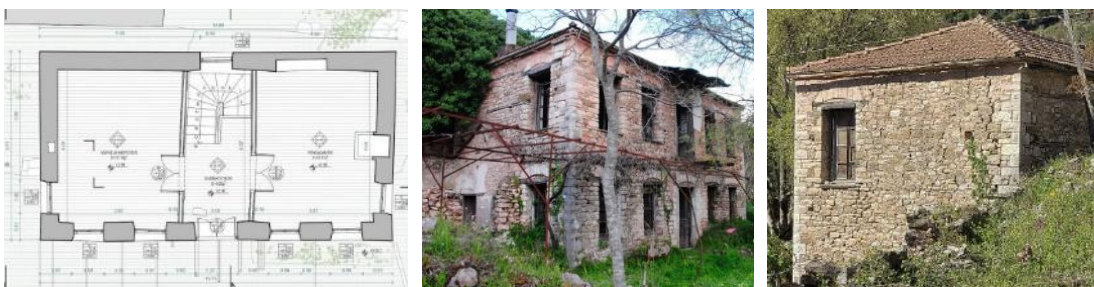


Figure 3-35. Nikopoulos House: a) floor plan, b) view from SW and c) view from E. Source: NTUA Research Team, 2023. Drawings: E. Theodorakoglou, V. Mantelos, E. Florou, N. Houma, postgraduate students of the MSc "Protection of Monuments" NTUA.

In the lintels of the openings there are either only wooden lintels, or, to avoid overloading the wooden lintel in the middle, wooden lintels with carved stone particularly low arches (more elaborate buildings, influenced by neoclassicism - early 20th century), which do not contribute sufficiently to the safer transport of the

overlying loads on the lamps to avoid overloading the wooden frame in the middle. The external vertical sections of the openings (jambs) are also formed either with orthogonal stones with carvings, or with roughly carved faces. No timber connections were found at the level of the lintels.



Image 3-36. Configuration of lintels and jambs of windows with a low arch above the wooden frame on the left and only with a wooden frame in the center and on the right. Source: NTUA Research Team, 2023. Drawings: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V. Laspia, O. Spyridaki, A. Stephani, D. Christou, postgraduate students of the MSc «Monument Protection» NTUA.

The external main doors of the buildings are usually constructed like the windows, with greater care in each case (using stones with carved or roughly carved faces on the jambs), placed on the axis of the longitudinal sides, while the secondary ones, as mentioned above, on the narrow sides of the buildings.

The frames are all wooden. The wooden main exterior doors are decorated and carefully constructed, especially in the most important buildings. The configuration of the openings and the wooden frames is an indication of the economic situation and social position of the owner.



Image 3-37. Wooden doors of main entrances - Karageorgiou House, Swolou House, etc.). Source: NTUA Research Team, 2023. Drawings: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V. Laspia, O. Spyridaki, A. Stephani, D. Christou, postgraduate students of the MSc «Monument Protection» NTUA.

The buildings are surrounded by stone walls with particularly elaborate courtyard gates, with jambs constructed from a double vertical row of stones with carved faces. Metal jineets visible on the facade hold the casing of the wooden

door. The upper part of many of them was destroyed and replaced by makeshift reinforced concrete, altering a particularly important architectural element of the settlement which must be restored.



Image 3-38. Courtyard doors made with jambs of stones with carved faces. The upper part of them in the area of the lintel has been replaced with a reinforced concrete slab. Source: NTUA Research Team, 2023.

The wooden floors, as in most traditional constructions, consist of planking which is supported by wooden beams placed parallel to the short sides of the buildings, so that they have a smaller span and therefore behave better in bending. The cross-section of the beams varies from building to building, as does the axial distance between the beams.

However, wooden floors of this type (planking on strong wooden beams) provide little stiffness in their plane. They are connected only to the longitudinal walls and therefore cannot function as a diaphragm and effectively connect the walls to each other. In particular, the walls that are parallel to the beams (short sides of buildings) are unconnected at the floor level, with the result that they bend out of plane at a height of at least 2 floors.



Image 3-39. Wooden floors. Source: NTUA Research Team, 2023.

Most wooden roofs are hipped with local extension or differentiation for the roofing of the balconies. Their structural system is either of the type «beam on

column" (seated roofs), or simply triangular trusses. The main roof supports are based on wooden sleepers (tie beams) at the top of the walls. There is usually no planking on the sloping plane of the roof.

On top of the purlins, rafters are placed, and on top of these, usually French tiles or corrugated zinc sheets (zinc), which, as found from the slope of the roofs (~28°) and from old photographs and videos (visit King Constantine to the earthquake-stricken Viniáni in 1966-[britishpathe.com](http://britishpathe.com)), replaced the original slate covering.

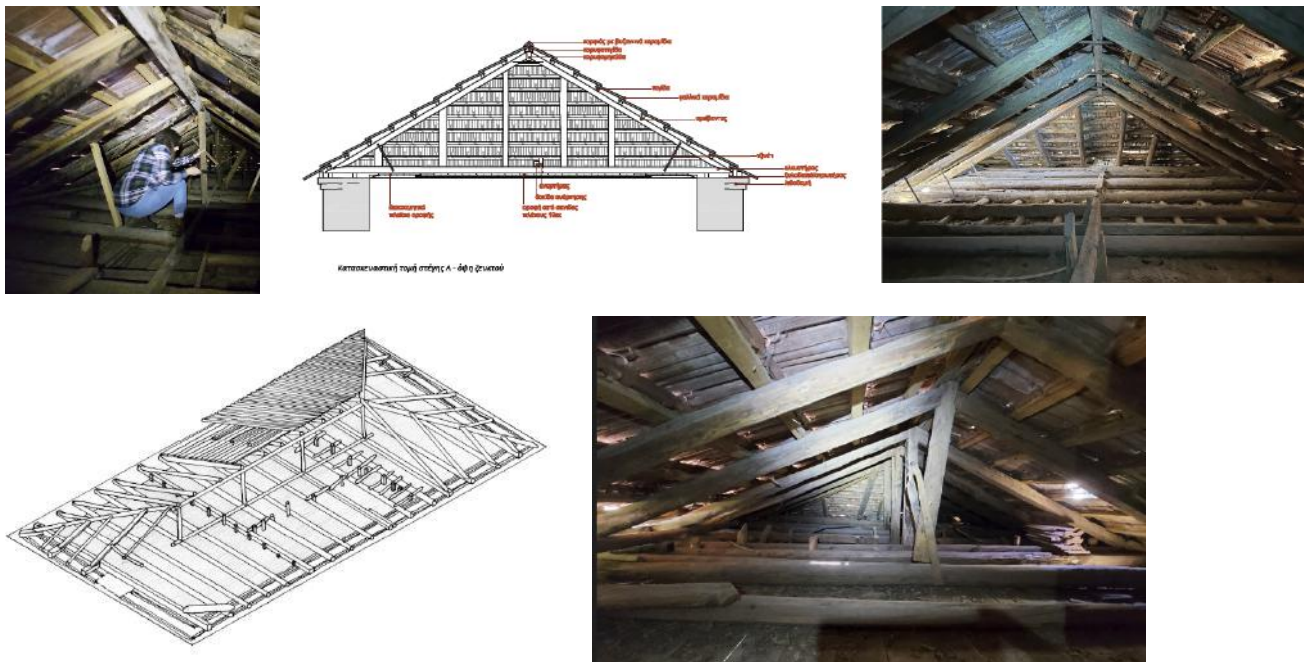


Image 3-40. Roofs of buildings in Viniáni. Source: NTUA Research Team, 2023. Drawings: A. Vienna, A. Zacharáki, Z. Kondýli, N. Sákka, V. Laspiá, O. Spyridáki, A. Stefaní, D. Chrístou, K. Gougoula, P. Kalyfómmatos, P. Rovílos, G. Rozaní, postgraduate students of the MSc "Protection of Monuments" NTUA.

For the timber of the roofs, ceilings and floors, fir and oak trees were felled. There was a water-powered splitter in the Gravenítikos river. Ironworks ("gypsy"), existed in Kerásovo, while the roof tiles that replaced the slates were produced by the Evstathíou and Krítonos Dilavéris pottery in Piraeus and N. & S. Tsalapáta in Volos. The eaves of the roofs are stone with protruding convex stone slabs.



Image 3-41. Tiles from the Dilaveri potteries of Piraeus and Tsalapata of Volos. Source: NTUA Research Team, 2023.

Ceilings made of wooden planks usually cover all the roofs and beams of the floors when the use of the ground floor is not secondary. In the Nikopoulos House, the ceiling on the floor is more elaborate.



Image 3-42. Ceilings in the Nikopoulos, Svolos, Karageorgou houses. Source: NTUA Research Team, 2023.

Roofs, in contrast to the floor, connect all the external walls due to their four-sloped shape. The diaphragm function, when there is a ceiling on the horizontal plane and planking on the inclined plane of the roof, is improved, but possibly not sufficient. The existence of wooden ties in the support of the roofs, if they are in good condition, improves their connection with the underlying masonry and ties the building at this level. The adequacy of the diaphragm function of the load-bearing structure of the roofs and ceilings and their connection with the masonry is directly related to their behavior in an earthquake, as more detailed

presented below in the pathology and restoration proposals.

The covered wooden balconies are a very important architectural, morphological and typological feature of the buildings of Viniani. They are located in the center of the main facades of the two-story buildings, decorated along the termination of their roofing with various wooden decorative motifs in the form of

drops. Corresponding wooden motifs are also used for the railings of the balconies, while in some cases metal railings are used.



Image 3-43. Wooden balconies with wooden and metal railings. Source: NTUA Research Team, 2023.



Image 3-44. The best preserved wooden balcony of the House of "Svólos" (left). Balconies made of reinforced concrete that replaced wooden ones. Source: NTUA Research Team, 2023.

Wooden canopies with corresponding decorative motifs also existed above the main entrance on the floor -Xirou House and others). Most balconies show significant problems of rot and exhibit local or total collapse mainly due to abandonment. The replacements of wooden balconies with concrete (e.g. House of "the Teacher"), which were made in some cases, usually hastily and without adequate connection to the masonry, is a later modification of the structural system which is a weakness and a cause of damage during the earthquake.



Image 3-45. Wooden canopies with wood-carved decorative "drops" which also had the use of a water dropper, above the main entrances. Source: NTUA Research Team, 2023.

Pathology and qualitative assessment of the causes of damage and deterioration

The building stock of Vinians has been strained by intense external actions, environmental (high rainfall and floods, low temperatures, etc.) and seismic, but also local soil. The damages that are observed today are undoubtedly the result of these actions. However, as in all old constructions, the pathology of the buildings in Vinians and their vulnerability is inextricably linked to the architectural and structural characteristics of the buildings and the weaknesses of their structural system, either inherent or as it has been modified over time.



Image 3-46. Characteristic image of the stream from the 1980s. The small bridge, the path, and the ground-floor tavern-grill building upstream of the Vinians fountain are visible. This configuration and the building were completely destroyed in the following years, after a flood that caused embankment failures at a higher point. Photo: Kostas Monias.

The inherent weaknesses of the structural system of the buildings, which coexist on a case-by-case basis in the five buildings studied as well as in other buildings in the settlement, are summarized as follows:

- the foundation of the buildings on ground with a steep slope,
- the unsuccessful formation of the retaining walls so that they are able to take on adequately the earth pressures (back walls in the semi-basement part of the buildings, retaining walls at the front boundary of the properties, as well as walls retaining public spaces of the settlement which present serious problems),
- the construction of openings near the corners of the buildings and the subsequent widening of their width,
- the absence of connection between external and internal masonry on the ground floor,
- the absence of internal masonry on the floor and the use of wooden non-load-bearing partition walls, without adequate support, which do not contribute to the connection of the longitudinal external walls,
- the absence of connection of the floors with the masonry (small sides of buildings),

- the insufficient horizontal wooden belts (wooden ties) at the crown of the walls, in intermediate positions and at the support level of the floors (small cross-sections and rot), and their interruption in the area of the cornerstones,
- the insufficient diaphragm function of floors and roofs,
- The local and makeshift interventions that have been carried out from time to time with elements from reinforced concrete and cement mortars (replacement of wooden balconies, lintels, legs, wooden ties, filling of cracks, etc.),
- the undersizing of wooden members (failure or large bending arrow).
- the inadequate configuration of nodes and connections of wooden elements between them (roof, ceiling, walls made of bagdati) and with the underlying masonry and the wooden floor.



Image 3-47. Retaining walls with significant damage. Source: NTUA Research Team, 2023.

The long-term abandonment, especially in cases where the roofs either locally or totally, allowed the destruction of the wooden elements of the buildings, load-bearing and non-load-bearing, the corrosion and disorganization of the interior and exterior of the masonry, especially those built with mud mortar and the collapse of parts of them.



Image 3-48. Abandoned buildings. Source: NTUA Research Team, 2023.

In particular, the damages observed are summarized by structural element as follows:

- Roof tiles, Roof: Displacement, breakage of tiles, partial or total collapse of the roof. Moisture penetration and damage to the roof, ceilings and interior of buildings (floors, walls, furniture, etc.).
- Balconies, wooden and metal railings: Displacement, breakage of tiles, partial or total collapse, rot. Loss or alteration of colors, oxidation of metal elements.
- Masonry: Detachment and overturning of internal walls made of bagdati, corrosion of external stonework due to moisture, vegetation and other biological factors.
- Plasters: Loss, detachment, blistering, cracks in covering positions wooden or metal elements due to loss of adhesion, corrosion and decomposition (due to moisture, expansion and contraction, rot or oxidation of underlying elements), biological deterioration.
- Frames: Loss or alteration of colors, failure of wooden elements, breakage of glass, oxidation and failure of metal elements.
- Covering of ceilings and lintels with boarding or bagdati: detachment and failure of boards, rot or failure of wooden elements (slats) and loss of plaster elements from bagdati.
- Alteration of building materials due to environmental actions (corrosion due to moisture in clay mortars of rubble masonry, rot and disintegration wooden elements) or due to incompatibility of materials (e.g. use of cement mortars jointing and plastering in older interventions).

Regarding the main damages and the qualitative assessment of the causes that caused them, the most important role has been played by the seismic activity of sixty years ago. The impact of the 1966 earthquake on the building stock of the settlement of Viniani is immediately apparent today in the buildings, which with limited or

serious damages stand upright to this day, despite their abandonment. The relocation of the settlement prevented their maintenance, consolidation intervention works and restoration, leaving them prey to the harsh environmental actions for the area. Even more obvious is the action of the earthquake in those buildings with heavy damage and which, due to abandonment, are saved today in a dilapidated form. Of course, in these cases, the coexistence of soil problems, which was not detected in the five standing buildings that were studied, cannot be ruled out, a fact that could, in combination with the inherent weaknesses of their construction, explain the great degree of damage that led to collapse.

From the research data it was found that similar damages due to earthquake developed in almost all buildings, which are usually found in traditional settlements in relatively good quality masonry buildings. In particular:

- Longitudinal walls show cracks due to shear and within level bending: oblique cracks in the piers between the openings or in the lintels of the openings, in the corners of the openings (oblique, horizontal or almost vertical on the floor).
- 



Image 3-49. Nikopoulos House. Transverse Western wall with cracks due to out-of-plane bending. Source: NTUA Research Team, 2023. Drawings: E. Theodorakoglou, V. Mantelos, E. Florou, N. Houma, postgraduate students of MSc "Monument Protection" NTUA.



Image 3-50. Nikopoulos House. Southern longitudinal wall with cracks due to shear and in-plane bending. Source: NTUA Research Team, 2023. Drawings: E. Theodorakoglou, V. Mantelos, E. Florou, N. Houma, postgraduate students of the MSc "Monument Protection" NTUA.



Image 3-51. Nikopoulos House. Eastern transverse wall with cracks due to out-of-plane bending. Source: NTUA Research Team, 2023. Drawings: E. Theodorakoglou, V. Mantelos, E. Florou, N. Houma, postgraduate students of the MSc "Monument Protection" NTUA.

- Cracks due to bending perpendicular to the plane appear on the transverse walls them. Due to their lack of connection to the floor and their inadequate connection

with the roof, this bending leads to the appearance of approximately vertical cracks in the middle and at the ends of the wall, with a larger opening at the top on the floor and smaller downwards, which may continue to the ground floor. These cracks are also accompanied by deviations from the vertical and local disorganization of the masonry in some cases.



Image 3-52 and Image 3-53. Old Cafe. Cracks due to out-of-plane bending in the transverse walls (left and right respectively). Source: NTUA Research Team, 2023. Drawings: K. Karagiannakidou, N. Krekoukia, M. Merou, postgraduate students of the MSc "Monument Protection" NTUA.



Image 3-54. Old Cafe. Cracks due to shear and in-plane bending in the longitudinal wall. Source: NTUA Research Team, 2023. Drawings: K. Karagiannakidou, N. Krekoukia, M. Merou, postgraduate students of the MSc "Monument Protection" NTUA.



Image 3-55. House "of the Teacher". Cracks due to out-of-plane bending of the transverse walls. Source: NTUA Research Team, 2023.

Cracks at the edges are observed either in the transverse wall before the cornerstones, especially if there is also an opening near the corner, or in the longitudinal wall after the cornerstones respectively, if the transverse wall is complete or has small openings at a distance from the corners. The role of the openings in where the cracks will appear was systematically confirmed in the buildings examined, especially when they are located near the corners of the building. In the case of openings in both walls, two quasi-cracks are created that pass through the openings and cut off the corner, leading to intense local disorganization of the masonry or even collapse.

Cracks and disruption of the masonry were also observed due to the widening of the openings as well as due to the replacement of a wooden balcony with a new one made of reinforced concrete with simple "beading" to the masonry.

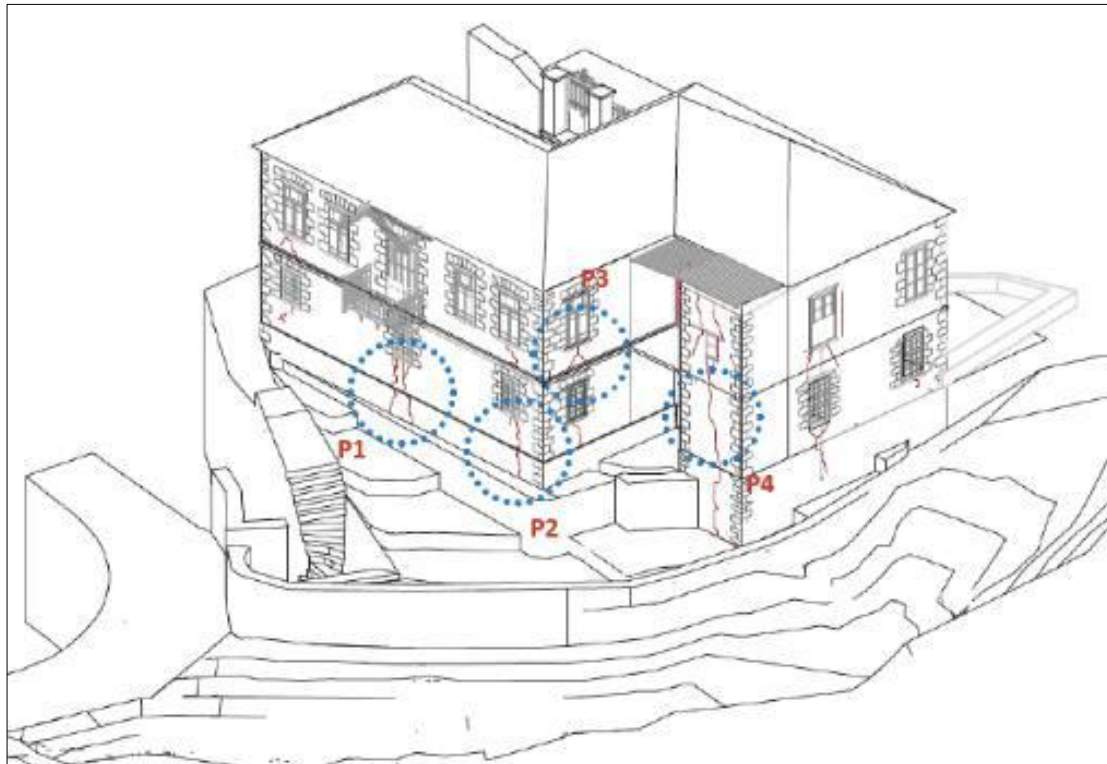


Image 3-56. Earthquake cracks near the corner of buildings (Nikopoulou House, "Teacher's" House, Karageorgou House). Source: NTUA Research Team, 2023. Drawings: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V. Laspia, O. Spyridaki, A. Stephani, D. Christou, postgraduate students of the MSc "Monument Protection" NTUA.

Finally, it should be emphasized that the damages and deteriorations that occurred in these buildings are common in traditional settlements in buildings of relatively good quality, which is also confirmed by the fact that despite the abandonment they are still preserved intact with only minor collapses of individual structural members.

### The bridges of Megdova

The Megdova bridge, which probably dates back to the 17th century, is not designated as a listed monument and has no institutional protection to date. The undermining of the foundation of the eastern pier, the detachment of stones and limited collapses in parts of the parapets, as well as the disintegration of the path on the two banks of the river are the points on which it is proposed to focus the maintenance and upgrading works of the bridge. It is also important to limit the descent of private cars to the level of the bank and the formation of a small parking space higher up, the remodeling of the accessible pedestrian route and the maintenance of the dirt road - old path - which connects the bridge with Nea Viniani.

An interesting visitor point of historical interest is the metal post-war Bailey bridge of Megdova. The bridge has been reinforced with reinforced concrete piers. It is proposed to check their adequacy and the basic maintenance of the metal prefabricated elements. It is also important to restore and reposition the destroyed dedicatory plaque to the creator of the bridge, Brigadier General D. Markopoulos, a dead man of the Civil War.

The river complex of Megdova, with its two bridges, passages and paths to the mountains, constitutes a parallel, extremely attractive and beautiful monumental and natural park, next to that of Viniani. The Viniani revival projects are proposed to be extended for this reason, to the two bridges of the river.



Image 3-57. Loss of stones in the parapet of the bridge. Source: NTUA Research Team, 2023.

Image 3-58. The eastern foundation of the bridge's pier has been undermined. It is the greatest danger that threatens the monument. Source: NTUA Research Team, 2023.



Image 3-59. Damage to the stone-built retaining wall of the path leading up to the bridge from the east. Source: NTUA Research Team, 2023.



Image 3-60. The Bailey bridge has reinforced concrete piers. Basic maintenance of its metal elements is required. Source: NTUA Research Team, 2023.



Image 3-61. It is proposed that the damaged dedicatory marble plaque should be restored and placed in its original position. Source: NTUA Research Team, 2023.



## 4 Geology and seismotectonics of Viniani

144

The wider area of Agrapha and especially Viniani belongs, geologically, to the geotectonic zone of Pindos, which is characterized by a complex structure and intense tectonism. A variety of geological formations alternate rapidly due to multiple folds, successive overthrusts and large faults. This image is evident on the geological map of the province.

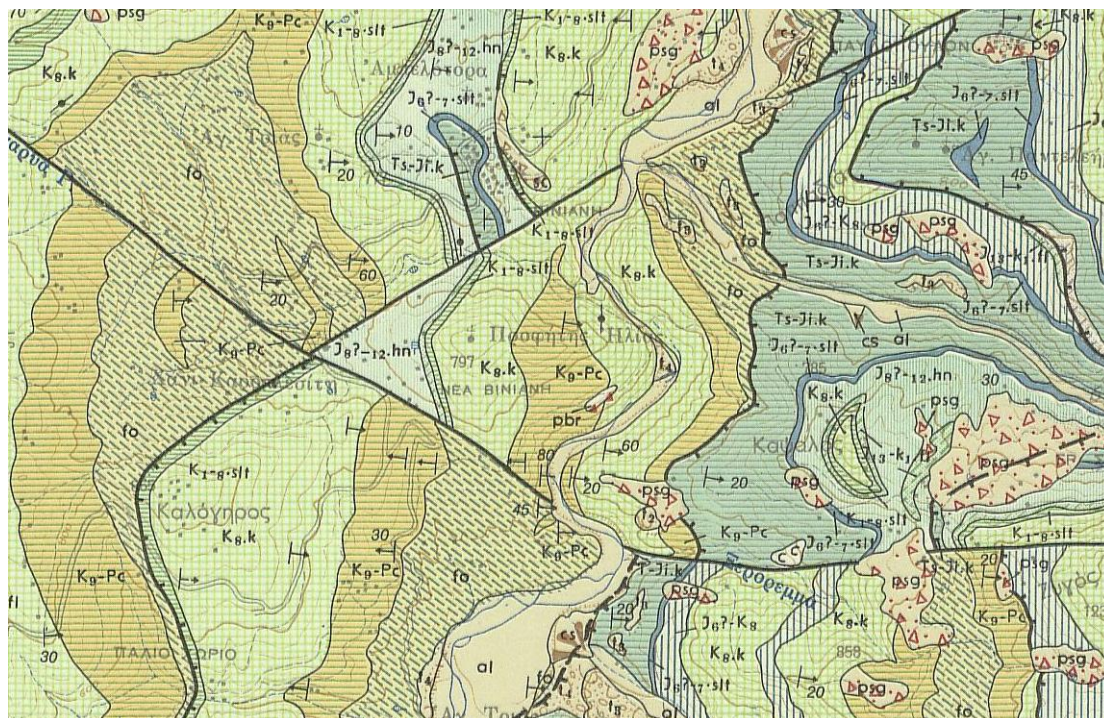


Figure 4-1. Section of the geological map "Fragista", scale 1:50,000, with the area of Viniani. Source: Institute of Geological Studies (IGME).

The Aetolian offshoots of the Pindos mountain range originate from the Alpine orogeny (50-15 million years ago). The forces that followed this orogeny were directed from E to W, both in northern and southern Greece. The tectonic uplift began in eastern Greece and gradually progressed westward. Erosion began in the already elevated areas, producing sediments that covered the submerged western areas. The combined processes of tectonic uplift, erosion and subsidence moved westward, creating thus

<sup>144</sup>Emeritus Professor of NTUA Theodora Rontogianni contributed to the writing of the chapter in which warm thanks are addressed. The text was based on the notes of the research team of postgraduate students of the MSc "Monument Protection": Theodorakoglou E., Arch. Eng., Mantelos V., Arch. Eng., Florou E., Civil. Eng., Houma N., Arch. Eng.

<sup>145</sup>Fleury J.J. & Charre J.P. (1980). Geological map of Greece scale 1:50,000, Sheet Fragista, IGME, Athens.

differences in the relief and quality of the stones, which remain important for today's landscape.

The levels of overthrusts follow the main structure of the Hellenides, with an approximately N-S direction, while the faults have various directions, with the main one being E-W and the secondary one NW-SE, while only a few have a NE-SW direction. The Pindos mountain range is a clear example of this formation.

Three geological zones are widely recognized in the wider area: the Eastern Zone, Pindos Flysch, the Pindos Zone and the Gavrovo Zone. In the area of Vinianis, limestones and flysch prevail. The limestones in thin layers and the lithology of the flysch, with the alternations of siltstone and sandstone layers, favor instability phenomena in the area. From the newer geological formations, debris appear originating either from gravity phenomena and lateral slides or from water flow and movements due to earthquakes. Also, older and more recent alluvium is found along the Tavropos river that flows east of Viniani, as well as along the streams of the area.

Specifically, in the narrow area of Viniani, light-colored platy limestones prevail, which in some places contain thicker layers of latipages, as well as layers of chert nodules. The age of this formation is Cretaceous (about 80 million years). A smaller area is covered by limestones, in thin layers, rich in silicon oxide, of Triassic age (about 200 million years), as well as Jurassic formations (between 180 and 150 million years), which consist (from the lower to the upper members) of green or red siltstones and radiolarites, with intercalations of limestones.

The same formations also structure the area of Nea Viniani, with the additional appearance here of sandstones and siltstones, in alternations between them as well as with pelagic limestones. These layers constitute the successive transition from the limestone masses to the flysch layers and are about 65 million years old. The flysch, consisting mainly of alternations of siltstones and sandstones (and about 60 million years old) appears, to a considerable extent, south of Nea Viniani.

From a tectonic point of view, two fault-generated overthrust surfaces with a NNW-SSE direction appear in the area of Viniani, "disturbing" the normal transition of the geological formations from the older to the newer ones, while in the area of Nea Viniani, this transition takes place normally. Noteworthy is the presence of two large faults with a NE-SW direction in the area of Viniani and NW-SE in the area of Nea Viniani. These specific faults have not been studied in particular so that we know the degree of their activity and their correlation with seismic potential.

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<sup>146</sup>Bintliff et al. (1987), op. cit., p. 33.

<sup>147</sup>Bintliff et al. (1987), op. cit., p. 33.

In addition, these faults "cut" the continuity of geological formations. As large surfaces of discontinuity, due to the lithologies of the area, they favor landslide movements and phenomena of secondary displacements in the event of an earthquake. After all, landslide phenomena are very frequent along the Pindos zone, which has the highest frequency and spatial density of landslides in the entire Greek area. For the area of Vinians, as well as for neighboring areas, studies have been published which warn of landslide phenomena, due to the loose soil deposits that appear locally.

For the village of Viniani, the references found in the literature refer to the years 1966 and 1995.<sup>149</sup>

Regarding the general seismicity of the area, it is characterized by medium-degree seismicity, defined as Zone 2, according to the Greek Anti-Seismic Regulation, which divides Greece into three zones depending on the their seismic hazard. The Kiliass et al.<sup>151</sup> mention the existence of the large fault zone of Kremasta, which they consider active. This consists of numerous smaller faults. The Kremasta zone connects the area of central Pindos with the area of the Spercheios river and the homonymous fault zone.

#### 4.1 The earthquakes of 1966

On February 5, 1966, an earthquake of surface magnitude  $M_s = 6.2$  and  $M_w = 6.0$  occurred with an epicenter 14 km N-NE of Viniani, in the area of the artificial lake of Kremasta and specifically in the area of Mavromata. The earthquake caused damage to many villages in Evrytania, mainly due to landslides. The same happened in the area of Viniani, where many houses collapsed while others became uninhabitable, resulting in the village being abandoned and moved to another location. In total, 731 houses were destroyed in the area, 2,040 suffered irreparable damage and 4,318 minor damage. One person was killed and sixty were injured.

<sup>148</sup>Karageorgiou El. D. (1966). "Report on the determination of areas for the construction of towns for the housing of the residents of the earthquake-stricken and landslide-prone settlements of the prefecture of Evrytania". Institute of Geology and Subsurface Research. Athens, 15/2/1966.

<sup>149</sup>See Kontogiorgos V. (2018). "Landslide phenomena in the Regional Unit of Evrytania, the case of the Old Small village". Thesis. Harokopio University, Department of Geography, Athens and Tzaftani F. (2013). "The causes and mechanism of operation of landslide phenomena in the mountainous drainage basins of the torrent streams of the Greek area. Principles and settlement systems." Doctoral dissertation. Aristotle University of Thessaloniki, School of Forestry and Natural Environment, Thessaloniki.

<sup>150</sup>Earthquake Planning and Protection Organization (OASP) (2003). Greek Anti-Seismic Regulation. Athens.

<sup>151</sup>Kiliass A., Tranos M., Papadimitriou E., Karakostas V. (2008). The recent crustal deformation of the Hellenic orogen in Central Greece, *Zeitschrift der Deutschen Gesellschaft für Geowissenschaften*, 159/3, 533-547.

<sup>152</sup>Papazachos V. and Papazachou K. (2003). The earthquakes of Greece, Ziti publications.

Figure 4-2 shows the distribution of seismic events of magnitude greater than 3.4, which are related to the main earthquake.

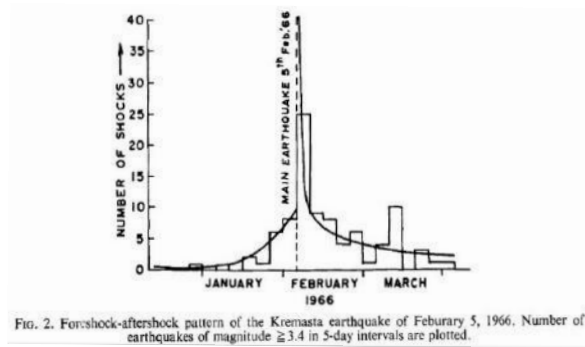


Image 4-2. Distribution of seismic events related to the main earthquake on 5/2/1966 Source: Gupta et al., 1972.

Figure 4-3 shows the areas where the greatest intensities were observed.

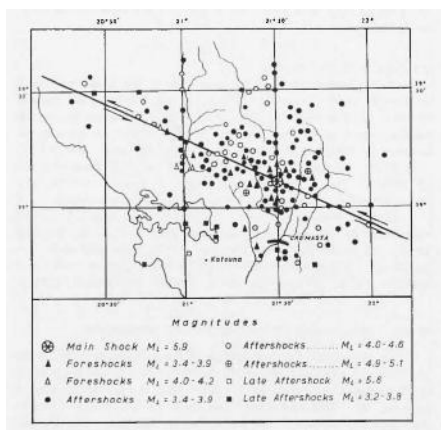


Figure 4-3. Areas where the greatest seismic intensities were observed on

5/2/1966. Source: Papazachos & Papazachou, 2003.

The filling of the Kremasta lake reservoir began in July 1965. Vibrations began to be felt in the area in August of the same year. According to Papazachos and Papazachou

the earthquake was preceded by an unusually large number of foreshocks, with the largest magnitude  $M=4.7$ , as well as a large number of aftershocks, with the strongest magnitude  $M=5.2$ .

A total of 740 seismic events were recorded in an area of 200 km around the dam between August 1965 and February 1966.

## The distribution of the

<sup>153</sup> epicenters of the seismic sequence and the solution of the mechanism of the earthquake showed that it was due to an almost vertical, left-handed  
Gupta H.K., Rastogi B.K., Narain H. (1972). "Some discriminatory characteristics of earthquakes near

<sup>154</sup> the Kariba, Kremasta and Koyna artificial lakes." Bulletin of the Seismological Society of America. Vol. 62, No. 2, pp. 493-507. April, 1972.

<sup>155</sup> Papazachos V. and Papazachou K. (2003), op.cit.

<sup>156</sup> Papazachos V. and Papazachou K. (2003), op.cit.

Pytharouli S. (2007). "Study of the long-term deformation of the Kremasta dam based on analysis of geodetic data and reservoir level changes". Doctoral dissertation. University of Patras, Patras.

overriding fault, with slip to the NW and dip to the SE, <sup>157</sup>direction B 114°. The artificial lake of Kremasta and the village of Viniani are located in the submerged section which moved to the NE. The focal depth was 16 km. In the Table 2 shows the angles and directions of slip and dip of the fault as calculated by Gupta et al.

| Slip angle | Strike direction | Dip direction | Dip | Slip angle |
|------------|------------------|---------------|-----|------------|
| 60°        | 122°             | 213°          | 40° | 48°        |

Table 4-1. Geometry of the fault. Source: Gupta et al., 1972.

The event was directly linked by the relevant scholars <sup>160</sup>with the filling of the Kremasta dam reservoir. At the same time, explanations were formulated and published internationally regarding the mechanism by which artificial lakes can affect the generation of earthquakes. In any case, the phenomenon is combined with a fairly large height of water on active faults. The water penetrates the rocks, resulting in a reduction of friction between the sides of the fault or, according to another view, the intensity results from the redistribution of stresses on them and their concentration at certain points. The seismic activity caused by artificial lakes includes a greater number of foreshocks and aftershocks than in ordinary seismic sequences. Also, the difference in magnitude between the largest aftershock and the main event is relatively small. In the location of the Kremasta dam there is a series of faults almost vertical in arrangement parallel to the axis of the dam (NW-NE).

Today, based on the results of corresponding examples and research worldwide, the theory of the connection of strong and destructive earthquakes with the "loading" of artificial lakes is confirmed, which increases the local tectonic stresses in the area of the lake and causes or accelerates the occurrence of an earthquake. Perhaps Carder first reported the effect of artificial lake loading on the seismicity of the Boulder dam area, in the USA. Galanopoulos <sup>163</sup>

<sup>157</sup>Stein S., Wiens D.A, Fujita K. (1982). "The Kremasta reservoir earthquake sequence". Earth and Planetary Science Letters, 59 (1982) 49-60. Elsevier Scientific Publishing Company, Amsterdam - Printed in the Netherlands.

<sup>158</sup>Gupta H.K. et al. (1972), op. cit.

<sup>159</sup>Gupta H.K. et al. (1972), op. cit.

<sup>160</sup>There were divergent scientific views on the degree of contribution of the dam to the seismic event See Comninakis P. et al. (1968), op. cit., Gupta H.K. et al. (1972), op. cit., Stein S. et al.. (1982), op. cit.)

<sup>161</sup>Papazachos V. and Papazachou K. (2003), op. cit.

<sup>162</sup>Carder D . S. (1945). Seismic Investigations in the Boulder Dam, Area, 1940-1914, and the Influence of Reservoir Loading on Local Earthquake Activity. Bull. Seism. Soc. Am., 35, 175-192.

<sup>163</sup>Galanopoulos A . (1966). The Influence of the Fluctuation of Marathon Lake Elevation on Local Earthquake Activity in the Attica Basin Area. Ann. Geol. Pays Hell., 18, 281-306.

also reported that a swarm of small earthquakes of magnitude between  $M=1$  and  $M=3$  occurred in the spring of 1953, near Lake Marathon, noting their correlation with a seasonal maximum filling of the lake.

According to Gupta <sup>164</sup>, worldwide there are about 100 cases where the seismic activity is associated with the "loading" of artificial lakes, taking into account the correlations of the size of the artificial lake with the size of the earthquake and taking into account the tectonic conditions of the area as well as the hydraulic properties and pore pressure in the surrounding rocks.

#### 4.2 The earthquake-stricken Viniani

The end of the settlement of Viniani came after the earthquake in February 1966. The geological disaster struck most of the villages of Agrafa and thousands of residents were left homeless. One woman lost her life in Kerasovo, while fifty injuries were reported. The relevant article in the newspaper Evrytanikos

Palmos gives the description of the stricken area:

«February 5, 1966, Friday dawned with a tragic toll for Evrytania. In the early morning hours, a series of severe seismic vibrations occurred at 4.12', 4.57' and 4.58'. am, while a week of micro-earthquakes had already preceded, the largest of which was 5.6 Richter, which resulted in the complete destruction of 15 villages in Eastern and Western Evrytania, huge material damage, 9,000 homeless, 50 injured and the loss of a human life. The epicenter of the earthquake was between the villages of Vrachia and Mavromata, in the gorge of Megdova. The devastating earthquake turned the villages of Fournia, Vrachia, Neraida, Karoplesi, Molocha, Kleitso, Mavrommata, Petralona, Hochlia, Agia Triada, Agios into ruins. Charalambos, Dafni, Viniani, Marathia, Stenoma, Paparousi, Krenti and Kerasochori.»

In Viniani, six people were seriously injured, while 80% of the buildings became dilapidated and uninhabitable.

<sup>164</sup> Gupta K.H. (2002). A review of recent studies of triggered earthquakes by artificial water reservoirs with special emphasis on earthquakes in Koyna, India. *Earth-Science Reviews* 58, 279–310.

<sup>165</sup> Evrytanikos Palmos , (06.02.2020), «54 years Evrytania was leveled by the earthquake», <https://www.evrytanikospalmos.gr/54-χρόνια-η-εβρυτανία-ισοπεδώθηκε-από-το/> [last accessed: 06.08.2023]

<sup>166</sup> Eleftheria , issue 06/02/1966, 11 and Macedonia , issue: 06/02/1966, 1.



Image 4-4. Queen Anne-Marie with earthquake victims in the ruins of Viniani during the visit the day after the disaster. Source: [www.evrytanikospalmos.gr](http://www.evrytanikospalmos.gr).

Image 4-5. The arrival of the royal couple in Viniani in a video document snapshot. Constantine and Anne-Marie landed by helicopter in a shaped field on the eastern slope of the settlement. Source: King Constantine and queen Anne- Marie are in the Evritania area where an earthquake has left people homeless, <https://www.britishpathe.com/asset/155013/>.

As the archives of the local press testify, the news received great publicity and King Constantine and Queen Anne Maria, accompanied by the Minister of Social Welfare and an army major, visited the settlement.<sup>167</sup> The arrival of the royal couple has remained in the memory of the residents to this day. "[...] After the earthquake, Constantine came by helicopter to the plateau of the stadium outside the village and landed in an area that probably

was formed for this purpose, flat on the steep slopes of the village and has since remained as a makeshift stadium. The fact of the royal visit to Viniani was extensively promoted at national and international level. Greece was in the midst of the great long political crisis of July, which shortly afterwards led to the dictatorship of April 21, 1967. Viniani at the same time was a symbol of the National Resistance. All this created peculiar and obviously undesirable associations in the public opinion and the post-civil war state. Thus Viniani was a fertile ground for highlighting the philanthropic identity of the kings, Constantine and Anne Maria. The visit to the destroyed village

<sup>167</sup> Eleftheria, issue 08/02/1966, 7.

<sup>168</sup> Informant K., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

recorded by the film camera of British Pathé<sup>169</sup> as well as the publications of the newspapers. The first image of the destruction of Viniani appears during the visit of Constantine and Anna Maria. The residents are still in the village outside their homes, emptying their households from the ruins or gathering around makeshift fires in winter cold conditions.

The earthquake-stricken residents remained in tents next to their homes or in Livadia. Reports of the time speak of Constantine's intervention who expressed objections to the use of tents because, as he said, in case of a change in the weather they would not provide any protection ».



Image 4-6. Front page of the Newspaper Macedonia , issue: 06/02/1966, 1.

#### 4.3 The temporary settlement of wooden shacks

For the immediate housing of the earthquake victims, a temporary camp was built on the small plateau, in Livadia of Viniani. It was inaugurated by the Minister of Social Welfare Michail Galinos on June 4, 1966<sup>170</sup> corresponding settlements were set up over a wide area in the earthquake-stricken areas. In total, in Evrytania, 6,000 homeless people were housed in 1,500 such houses.

<sup>169</sup> See related GREECE: KING CONSTANTINE VISITS EARTHQUAKE VICTIMS (1966), <https://www.britishpathe.com/asset/155013/> and GREECE: EARTHQUAKE DEVASTATES VILLAGES, LEAVES 4,000 HOMELESS (1966) <https://www.britishpathe.com/asset/210219/>

<sup>170</sup> Evrytanian Pulse (06.02.2020), op,

<sup>171</sup> Eleftheria , issue 31/05/1966, 10 and Eleftheria , issue 04/06/1966, 8.

<sup>172</sup> Evrytanian Pulse (06.02.2020), op.

According to the testimonies of the residents<sup>173</sup> and the data of the military archives,<sup>174</sup> the project of emergency housing in the earthquake-stricken villages of Evrytania was undertaken by the Mixed Reconstruction Machine Units (M.O.M.A.). Among them, they probably built the settlement of wooden shacks, where New Viniani was to be created a little later.

The participation of M.O.M.A. in the post-war reconstruction projects of the countryside was an important and large-scale activity of the army which lasted from 1957 to 1990. These were mainly road construction, land reclamation and hydraulic works, construction of airports, small public utility projects and projects for earthquake-stricken areas.

In 1958, the 4th M.O.M.A. was created with headquarters in Lamia and field in Central Greece and Evia. Meanwhile, from 1957, the Military Reconstruction Works Construction Service (S.Y.K.E.A.) had also been established. These are the two services that were involved in 1966 immediately after the disaster in the restoration of the earthquake victims of Evrytania.

In the same context of emergency works eleven new settlements were built in Evrytania with a prefabrication system undertaken by S.Y.K.E.A. in collaboration with the NTUA and the Reinforced Concrete Laboratory. The responsibility was held by Professor Theodoros Tassios.

According to the military archives, 200 houses with a total area of 12,000 sq.m. and three community centers were built in Karpenisi.

In the military records so far the research did not locate Viniani in the relevant catalogs, despite the testimonies of the residents about the army's participation in the projects.

The prefabricated buildings, the "shacks" as the residents still remember them, were probably built with a wooden frame and asbestos cement panels. This fact arises from the only remaining building, that of the old school of Nea Viniani. Today this building remains closed due to its construction material (asbestos) and its special demolition is planned.

The temporary residences of the settlement consisted of a room and a kitchen, with shared toilets. They were demolished for the construction of today's permanent settlement. According to the testimonies of the residents, the stay in the temporary settlement lasted about 6 years until the construction of Nea Viniani:

<sup>173</sup> Informant K., resident of Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

<sup>174</sup> Thanks are expressed to the staff of the Army History Directorate and to the head of the library Eleni Vobiri for their contribution to the research.

<sup>175</sup> Charal. P. Panagiotareas (Brigadier General Mch ea), The Army's Engineering Corps. One hundred and ninety years since its establishment, 1829-2019. October 2019. Library of the Army History Directorate, pp. 107-111.

<sup>176</sup> Charal. P. Panagiotareas, op. cit., pp. 110-111 and Hellenic Army General Staff, Directorate of Engineering, 180 Years (1829-2009) since the founding of the Engineering Corps. Commemorative Edition, Printing TYES, November 2009. Library of the Army History Directorate, p.70.

<sup>177</sup> Charal. P. Panagiotareas, op. cit., p. 129.

<sup>178</sup> Charal. P. Panagiotareas, op. cit., p. 129.

"[...] We stayed in shacks for a long time. These had a room and a kitchen. Three families lived in each one. M.O.M.A. did a serious job. Then came contractor crews, blacksmiths, plasterers, builders [...]."

The narrowness of the space in the temporary settlement forced many residents to continue living in the earthquake-stricken village next to the destroyed buildings or with tents in Livadia. The earthquake-stricken village was gradually abandoned until the construction of Nea Viniani was completed. Then the last ones left.

"[...] I went to the six-grade two-seater school of Viniani. After the earthquake, the lesson took place in Nea Viniani. We went on foot. We stayed in tents next to the houses that had been hit by the earthquake or in tents next to the huts in Livadia. Wooden shacks of approximately 25 square meters were built with a kitchen and a shared toilet every three. The shacks existed from 1967 to 1973 [...]."

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<sup>179</sup>Informant K., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

<sup>180</sup>See also the testimony of Ourania Ntalla, née Alatari and her mother Amalia Alatari in Karagiannakidou Katerina, (Architect Eng.), Krekoukia Nikolaia, (Archaeologist), Merou Marina, (Architect Eng.), Building of an old cafe, Viniani Evrytania . MSc «Protection Monuments NTUA (Postgraduate Thesis), July 2023. The Alatari family moved to Nea Viniani in 1968, occasionally operating the ground floor cafe during festivals.

<sup>181</sup>Informant T., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

## 5 Current situation: New Viniani and old settlement of Viniani

New Viniani gives the image of a particularly attractive settlement in slumber. It does not have the historical elements of the old settlement of Viniani, but it is characterized by the elements of coordinated urban planning, public spaces and the human scale of building with two-story houses and gardens.

The road network, the sewage system, the formation of parks, a sports area and a playground, the direct connection with the provincial road network, the ease of parking and, finally, the dominance of the semi-mountainous forest landscape that surrounds it give an interesting identity. With basic maintenance and new plantings, the condition of public spaces and green spaces could be upgraded.



Image 5-1. New Viniani with its organized urban plan, the comfortable free public and private spaces, the low-rise two-story houses with roofs and the surrounding forests and agricultural land, is an interesting example of an emergency settlement. Source: Hellenic Land Registry.

Two central points form the core of its life, with uses as a cafe, restaurant and small grocery store. New Viniani offers the possibility of stopping for travelers as well as gathering for residents. However, the lack of available beds prevents accommodation. The biggest problem of New Viniani is the shrinking and aging of the population, as well as the existence of a large number of vacant houses. The lack of care of the houses inevitably leads to their destruction and the overall degradation of the image of the settlement.

The project to create New Viniani began in the spring of 1967, a year after the earthquakes and landslides that followed.

The Ministry of Social

Welfare gave its opinion on the need to relocate the residents and in May 1967 the Expropriation Directorate of the Ministry of Finance proceeded with the expropriation procedures of 144.3 acres of agricultural land in the Livadia Viniani area with the aim of transferring the landslide settlement.

are located 1.8 km from the old settlement. It was a place of agricultural and livestock exploitation of Viniani with a small settlement of "huts" where the livestock farmers lived.



Image 5-2. New Viniani was built on the Livadia plateau, 1.8 km southwest of the old settlement. Source: NTUA Research Team, 2023.

From the expropriation data, it appears that the small plateau was divided into farms throughout its area. Overall, the cadastral table of

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<sup>182</sup>The construction files of New Viniani were located in the Building Service of the Municipality Karpenisi and in the Earthquake Victims Archive, Technical Works Directorate of the Region of Sterea Hellas. Thanks are expressed to the staff of the two services, to the architect Valia Kati and to Christina Bania.

<sup>183</sup>Ministry of Social Welfare, Directorate of Popular Housing, "Declaration of compulsory expropriation in the Viniani Evrytania area" 18/5/1967 and Ministry of Spatial Planning, Housing and Environment, Directorate G6B', JMD 59486/1668/3.10.1983 "Reformation and modification of the decision D4g/10545/168/30.7.1970 "On the implementation of a housing rehabilitation program for residents of N. Evrytania affected by earthquakes and landslides".

expropriation which accompanies the decision of the Minister of Social Welfare Efstathios Poulantzas of May 18, 1967, 41 properties with its area their use and the names of the owners.



Image 5-3. The Livadia of Viniani in an aerial photograph of August 1960. The burnt down during the war, by the occupying forces, Karoplesitis Inn next to the road, with a wide estate around it and a linear array of cypresses, is visible in the center.

Source: A/F Y\_BW\_60\_912094\_BLACK AND WHITE\_16000\_1960/08/17. National Land Registry (Excerpt).

Of these, a plot of 7,580 sq.m. is communal, the next one with an area of 1,310 sq.m. is characterized as "church" and the Karoplesitis Inn is recorded as "ruin" with an area of 190 sq.m. There is also a privately owned "garden" of 900 sq.m. and an unidentified, probably unknown owner, estate of 2,100 sq.m. The remaining 36 estates are characterized as "fields". They have surfaces ranging from 10,650

<sup>184</sup>Ministry of Social Welfare, Directorate of Popular Housing, Declaration of compulsory expropriation in the Viniani Evrytania area. In Athens on 18-5-1967 and Ministry of Public Works, Settlement Service, Cadastral Table of Viniani Area, Evrytania Prefecture. Athens May 1967. Accompanies diagrams no. 103/1, 103/2, 103/3. Earthquake Victims Archive, Directorate of Technical Works, Region of Central Greece, Karpenisi. For the same issue, it also appears that Decision No. 4664/67 of the Central Housing Council had preceded.

sq.m. maximum up to 270 sq.m. minimum. However, most plots of land have sizes of the order of 2,000 to 5,000 sq.m. (2 to 5 acres).



Image 5-4. In the aerial photograph of Livadia Viniani in 1960, the plateau (top left) where the settlement of Nea Viniani was built after the earthquakes of 1966 is visible. Megdovas (bottom right) and the network of paths. A large part of the slope above the bank of the river is formed with terraces "pezoules" and cultivable estates which follow the contour lines.

Source: A/F Y\_BW\_60\_912094\_BLACK AND WHITE\_16000\_1960/08/17. National Land Registry.

Shortly after the decision on expropriations, in July 1967, a budget was approved for the construction of new houses. The financing took the form of a housing loan and non-refundable aid for the construction of new houses, to the residents of Viniani who had submitted the relevant applications from February to November 24, 1966. Among them were the permanent residents of Livadia. The state allocated an amount of 50,000 drachmas for each earthquake-stricken household for the construction of a new "from scratch" residence with the non-

refundable state aid to amount to 15,000 drachmas, and the loan to 35,000 drachmas. The July 1967 decision concerned 92 beneficiaries with a budget of 4,600,000 drachmas. It is noted at the end of the same decision that another table will follow as well as a table with rejected applications.

the documentary evidence, 98 houses were built for the corresponding households. All the houses were two-story detached houses with a plot of land with a garden.

### 5.1 The organization of the permanent settlement

The study of the new settlement was prepared by the Ministry of Public Works and approved in July 1969. The settlement is organized in the smooth part of the area, leaving the provincial road Karpenisi / Agrinio - Karditsa on its outer boundary. This feature marks the provincial road passing through the border of Nea Viniani. This was probably some planning of the time that did not materialize. The urban plan of Nea Viniani consists of orthogonal elongated building blocks, oriented northeast, towards the provincial road. The building blocks are usually divided into a series of identical through plots of land measuring 22m x 16m. In addition to the building blocks where the 98 houses are located, the urban plan provides for some additional blocks, on the edge of the settlement, for future expansion.

<sup>185</sup> Ministry of Social Welfare, Social Welfare Center of Evrytania. Recognition of beneficiaries of housing assistance affected by the earthquakes of February 1966 until 24-11-1966 as well as the landslides recorded until the same date (24-11-1966) of the Settlement of Viniani Evrytania. In Karpenisi on 27/7/1967. Earthquake Victims Archive, Directorate of Technical Works, Region of Central Greece, Karpenisi.

<sup>186</sup> Ministry of Public Works Decision E6/26500/4996/9-7-69 «On the approval of a study for the construction of 98 houses in the settlement of Viniani».

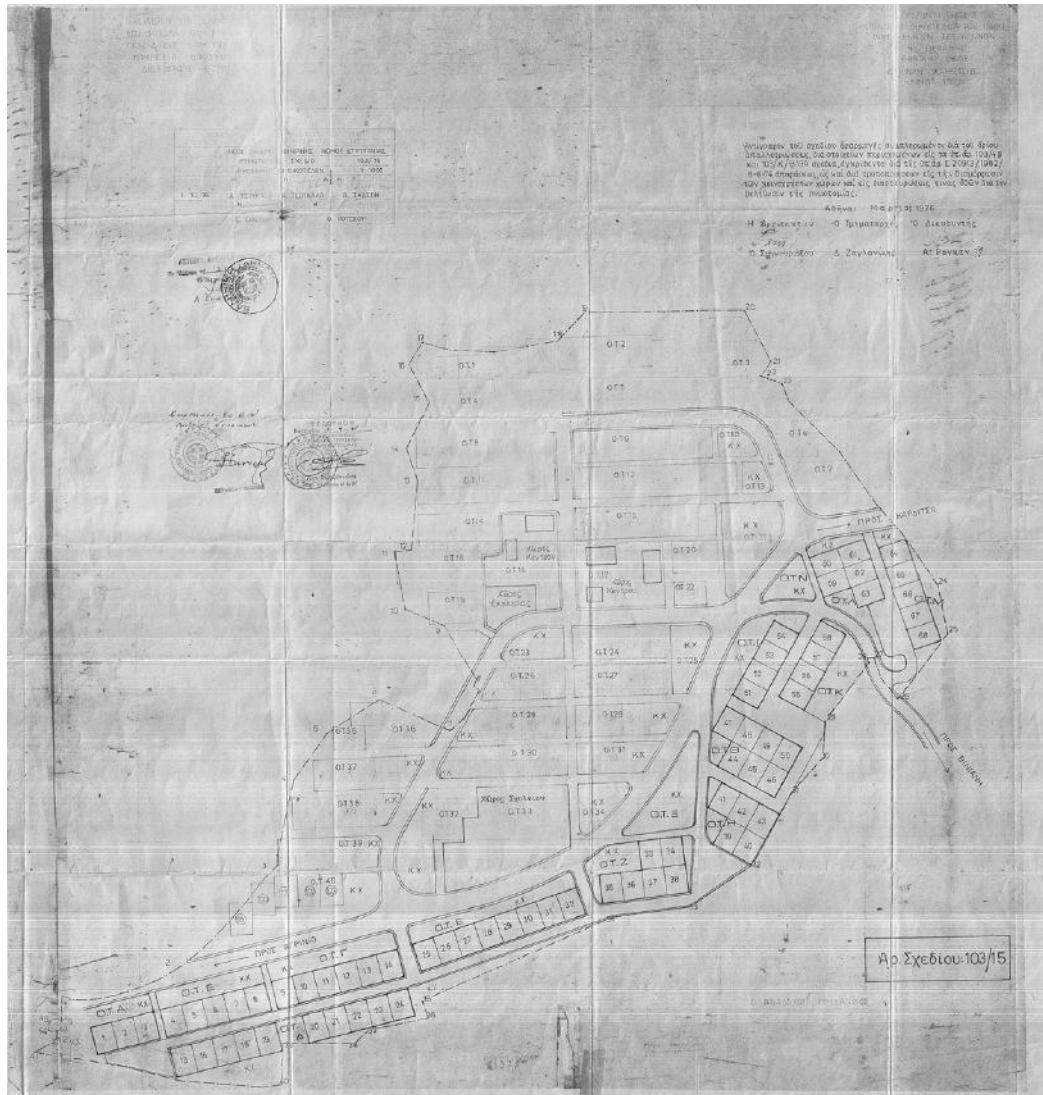


Image 5-5. New Settlement of Viniani, Evrytania Prefecture. Town Plan. 01.10.1979.

Source: Archive of the Urban Planning Office of the Municipality of Karpenisi.

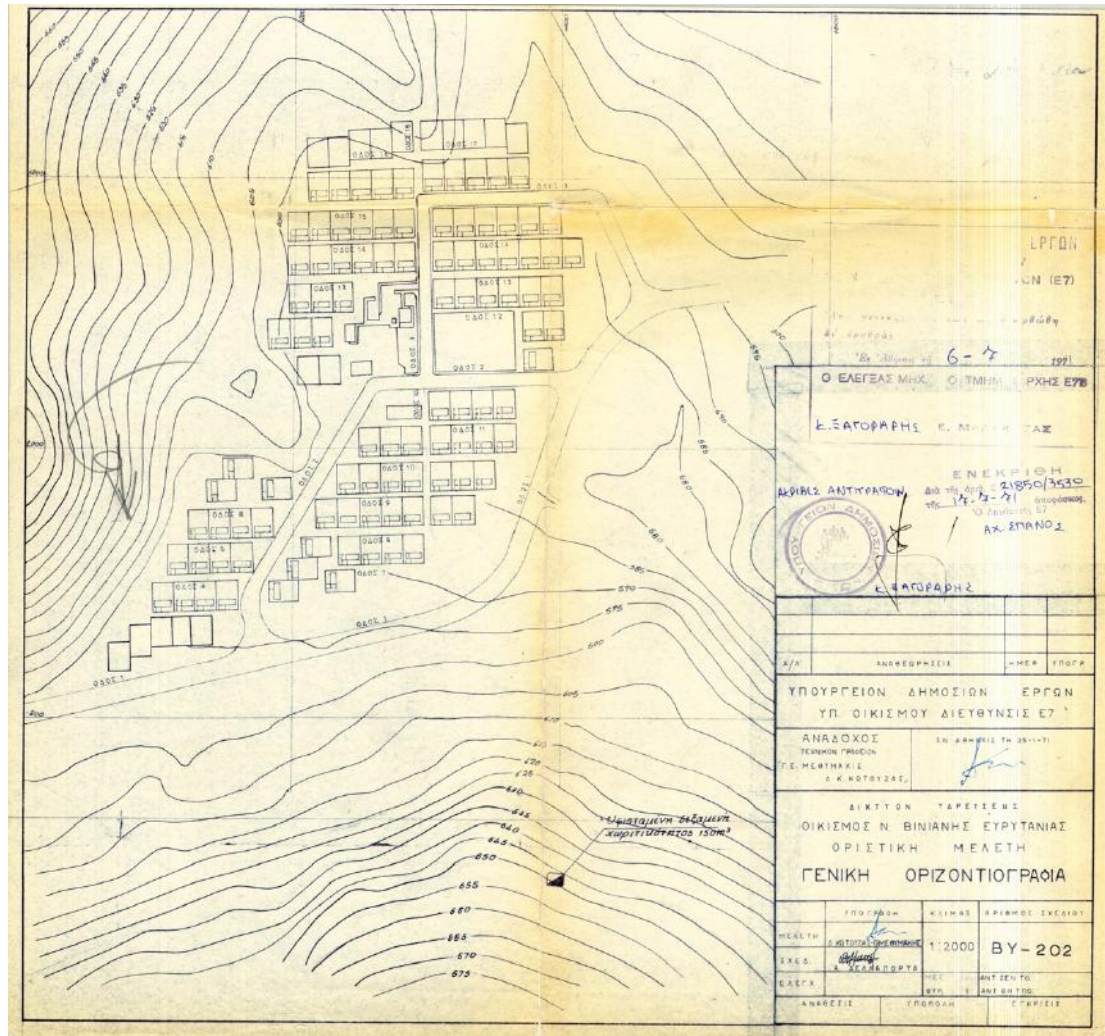


Image 5-6. New Viniani Settlement, General Horizontal Plan. Ministry of Public Works, Ministry of Settlement, Directorate E7. Source: Earthquake Victims Archive of the Technical Works Directorate of the Region of Central Greece.

Two main wide roads (Road 2 and Road 3) form the core of the new settlement. At their intersection, the plan provided for a large square, a space for the erection of a church, as well as small buildings that would house community activities. Smaller width roads organized the movement network in the settlement. The initial plan does not locate a school.

The common infrastructures of the plan's forecast were partially implemented. The square was formed in the place where it was designed. The church was built in a new location, in a dominant position, on the hill above the settlement, but with considerable difficulty in accessing it from the residents. In its place, a community center was built which today houses the community office, a rural clinic and a cafe / grocery store of the settlement. Public toilets were built at a short distance, also next to the main road.

The logic of the organization of the settlement refers to the models of the first garden cities, with small standardized houses in large gardens and with

generous configuration of public spaces. It is a typical example of organized interventions during the interwar and post-war period of the 20th century in the Greek rural area when an urgent need for housing arose. This slightly evolving model is found both in refugee rural settlements and in emergency or forced displacement settlements, especially in the first two decades after World War II.



Image 5-7. The public space of Nea Viniani was organized with a wide central road, squares and small parks. Source: NTUA Research Team, 2023.

#### The new residences

The residences were constructed in an organized and uniform manner based on the types of rural housing of the Ministry of Public Works. They are two-story tiled buildings, free on all sides, each with its own garden. They are located in the same way and in the same position on the plot, 4m away from the road. The main facade is always northeast with the largest openings of the house, the entrance and the ascending staircase. On the back side (southwest) the facade of the building has few and small openings. The garden of each residence is also formed on that side.

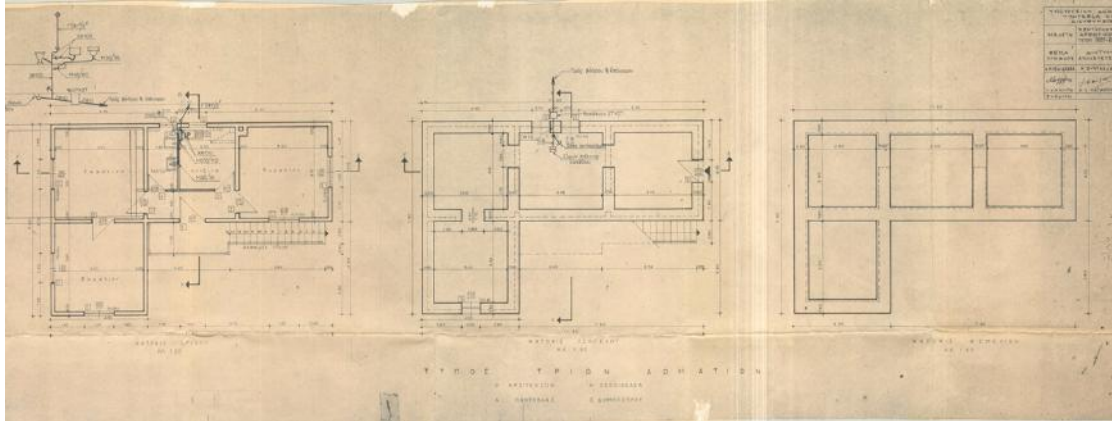


Image 5-8. Housing typologies in Nea Viniani. Source: Earthquake Victims Archive of the Technical Works Directorate of the Region of Central Greece.

The ground floor has exposed stone masonry, with minimal openings and use as an agricultural warehouse. The floor is accessed by an external staircase and is the main living space of the family, with an entrance hall, kitchen, one or two rooms and a toilet. The roof of the ground floor, as well as the external staircase, is made of reinforced concrete which rests on the stone walls of the ground floor. The walls of the floor are made of plastered brickwork.



Image 5-9. Typical two-story buildings of organized construction of Nea Viniani, with residence on the floor, covered entrance balcony, external staircase and basement or workshop on the ground floor. Source: NTUA research team, 2023.

The wooden roofs with French tiles are separated from the main areas of the floor by a false ceiling of light metal mesh-sheets with coating.

The original buildings were small for the size of the Viniansky households in 1960. A one-room house had 30 sq.m. gross floor area and a two-room house had 47.5 sq.m. gross floor area. The original layout plan provided for the possibility of expanding the houses, a possibility that began to be implemented after 1978.

In the period 1978-1979, the expansion of the houses by one or two rooms was approved depending on the number of people in the family at the time of the draw. Residents could use either the corresponding type of the Housing Directorate of the Ministry of Social Services, or contact a private engineer. According to the decision, the addition had to be a single organic with the existing building and not affect it statically and aesthetically.<sup>187</sup> For the addition of a room, a housing allowance of 70,000 drachmas was allocated, of which 7,000 drachmas were free aid, 32,000 drachmas with an interest-free loan and 31,000 drachmas with an interest-bearing loan.



Image 5-10 and Image 5-11. Square with fountain and monument in Nea Viniani. Source: NTUA Research Team, 2023.

Indicative of the narrowness of the space of the original houses is that in February 1979, 86 applications of beneficiaries (out of the 98 already installed) were approved for the expansion of one or two rooms in the original house that had been granted to them. From the table accompanying the decision of the Prefecture of Evrytania, it appears that these 86 households represent 423 people, i.e. 5 people / household on average, while the granted houses have a size of 30 sq.m. or 47.5 sq.m.

Finally, the new settlement was planned in 1967, began to be built in 1969 and was completed in 1973. As the residents of Viniani themselves say, the new village

<sup>187</sup>Joint Ministerial Decision "On granting housing assistance for expansion granting ready-made housing and determining its amount and method of granting it" 30/6/1978

<sup>188</sup>Decision of the Department of Social Welfare of the Prefecture of Evrytania "Recognition of beneficiaries for the granting housing assistance for the purpose of expanding ready-made housing from the transferred settlement of Viniani" 3/2/1979

it was built from 1969 to 1973 and installed in the years 1973-1974.<sup>189</sup> The population of the village lived in shacks from 1966 to 1974, an eight-year period. The delay in construction combined with poor temporary housing conditions probably led many of the beneficiaries to permanent relocation, to Karpenisi or elsewhere. Probably for the same reasons, the large number of extensions in 1979 does not appear to have been implemented in the scale indicated by the corresponding approvals.



Image 5-12. The community shop and rural medical office of Nea Viniani with the cafe-restaurant. Source: NTUA Research Team, 2023.

Image 5-13. The closed elementary school of Nea Viniani. Source: NTUA Research Team, 2023.

Bureaucratic delays, along with construction delays, created different obstacles to the smooth transition of residents to the new settlement. It is characteristic that the Town Planning Scheme of Nea Viniani Settlement was approved by the Prefecture of Evrytania in 1977, three years after the settlement has been inhabited and eight years after the start of its construction. The same delays apply to the transfers of houses to the beneficiaries. The houses are owned by the Ministry of Social Services. They were given to the beneficiaries around the late 1970s, with concession documents that also define the procedure for repaying their loan.

The beneficiaries have the full right of ownership, possession and possession of the building and its plot but do not have the right to transfer until the amount of the loan corresponding to the house they have received is repaid. All those delays dragged along the construction costs and the amounts of housing assistance. In January 1979, the price of a house with its plot amounted to 138,144 drachmas instead of 50,000 drachmas, which was the cost in 1967. From the final amount,

<sup>189</sup>Informant T., Nea Viniani. Interview with N.Mp.-P.Pr. on 26.4.2023

30% was free state aid with the remainder repayable over 20 years and an interest rate of 4%.

#### The era after the earthquakes

The blow of the earthquakes and landslides of 1966 led on the one hand to the relocation of the settlement to Nea Viniani with a parallel gradual desertion of the old settlement and on the other hand to a new large population loss. Thus, in 1971 the community as a whole had been reduced by half, with 189 inhabitants. Of these, 62 continued to live in the old village, while 127 had moved to the new one.

In those critical years of abandonment of Viniani, hit by the earthquake, and the relocation to the new settlement, a paradoxical discrepancy appears in the population records. In 1961, 365 residents were registered, in 1971, 189 respectively. However, in the repetition of the table of earthquake-stricken beneficiaries of housing assistance in 1967,

where the beneficiaries at the time of the grant of housing are noted and how many members their household had, 86 households with a total of 425 residents appear. It is a rather excessive size which does not correspond to the actual population censuses. If local testimonies are true, there may have been gratuitous inclusions in the list or an increase in the number of family members in order for residents to receive a larger home.

Finally, after 1981, the population stabilizes at around 200 inhabitants, the vast majority of whom had now moved to Nea Viniani. In the 1981 census, out of a total of 207 inhabitants, 22 lived in the old village and 185 in the new one. In 1991, out of a total of 196 inhabitants, only 8 lived in the old village. In 1986 it appears to be inhabited only by five shepherds.

In 2001, out of a total of 204 inhabitants, only 7 lived in the old village. In 2011, the population had decreased to 130 inhabitants - of these, only three remained in the old village. According to the data of the 2021 census, the population remains stable (127 inhabitants).

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<sup>190</sup> Evrytania Prefecture, Department of Social Welfare, Decision of Grant, Number Grant Deed 1643/4.1.1979. Earthquake Victims Archive, Directorate of Technical Works, Region of Central Greece, Karpenisi.

<sup>191</sup> Evrytania Prefecture, Department of Social Welfare, Recognition of beneficiaries for the granting of housing assistance, for the purpose of expanding the granted ready-made housing, from the relocated settlement of Viniani. Karpenisi, February 3, 1979. Earthquake Victims Archive, Directorate of Technical Works, Region of Central Greece, Karpenisi.

<sup>192</sup> The authors of the architectural study for the repair of the school mention five shepherds with their flocks, the only inhabitants of Old Viniani. See Tania Zografou, Nelli Marda (1986), op. cit.

<sup>193</sup> Government Gazette of Population Censuses (1879-2011), op. cit.

<sup>194</sup> ELSTAT, Population Census 2021.

The evolution of the settlement to date

In 1982, an expansion plan for the settlement was approved on the opposite side of the provincial road, in the northern part of Livadia, with approximately 80 plots of land measuring 15m by 30m. Therefore, the settlement is almost doubled in terms of area and buildings. The expansion plan also includes a school area, on the provincial road and next to the building of the old school.

Some of the building conditions of the expansion are compatible with the organized existing settlement (plot integrity at 300 sq.m. plot sizes, maximum building height 7.5 m, mandatory roof), while others, such as the Building Factor 1, allow the construction of a much larger volume than the corresponding existing houses. Today, very few buildings have been constructed in this zone, as the population has been shrinking in recent decades.

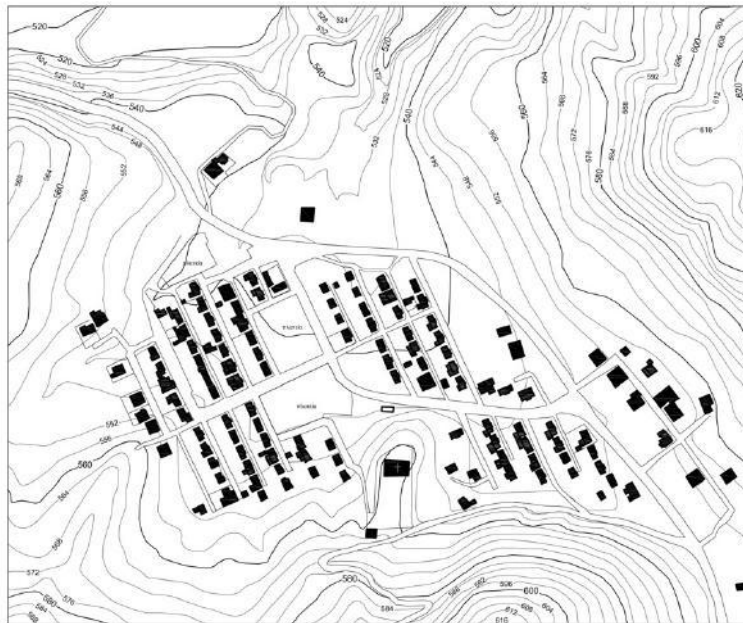


Image 5-14. The settlement of Nea Viniani today, scale 1:5,000. Background: National Cadastre and Army Geographical Service. Processing: NTUA Research Team, 2023.

In the organized settlement of Nea Viniani, from 1973, when it was inhabited until today, there have been changes in the use and form of the houses but not to the extent that they alter their general characteristics as defined in the original design. Some of the ground floors were used as main living areas with the addition of toilets and a kitchen. In several cases, the stone masonry was plastered and larger openings were made.

<sup>195</sup> Evrytania Prefecture, Department of Urban Planning "Approval of modification of the settlement plan of Nea Viniais, Evrytania Prefecture" 23/11/1982

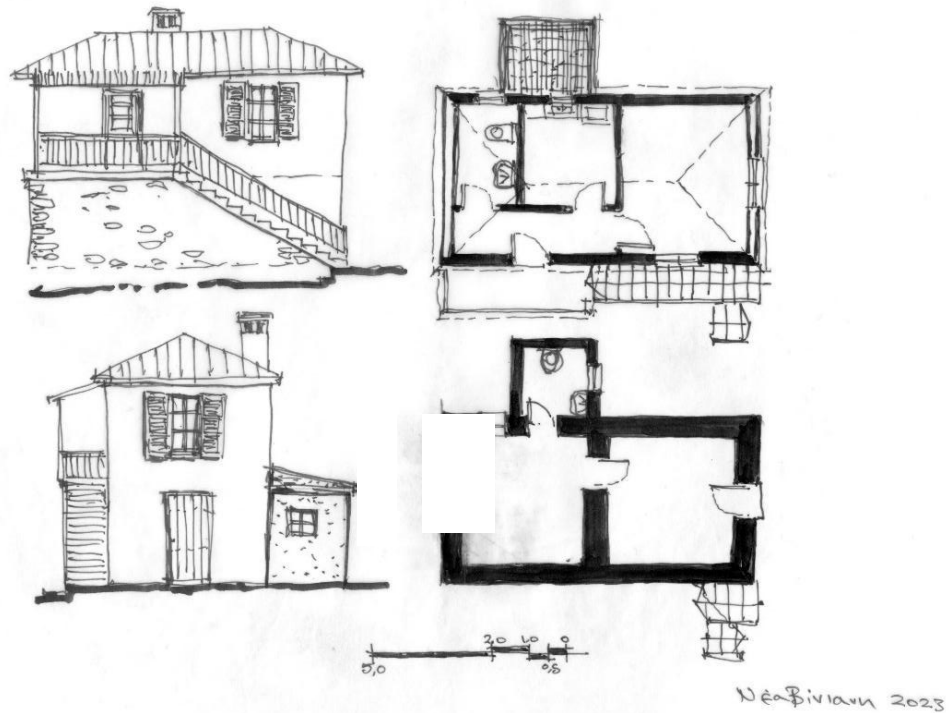


Image 5-15. Type of two-story house with two rooms and addition of W.C. on the ground floor "katogi", one bedroom, kitchen, bathroom, entrance hall, covered balcony and external staircase. The ground floor, plan and elevations. New Viniani. Source: NTUA Research Team, June 2023.

Some of the open balconies were closed with wood constructions / aluminum constructions and glass were added. In a few cases, large additions were made to the buildings. In general, those who lived systematically needed to intervene in the buildings to adapt them to the size of the household, the harsh winter climatic conditions and their daily activities.

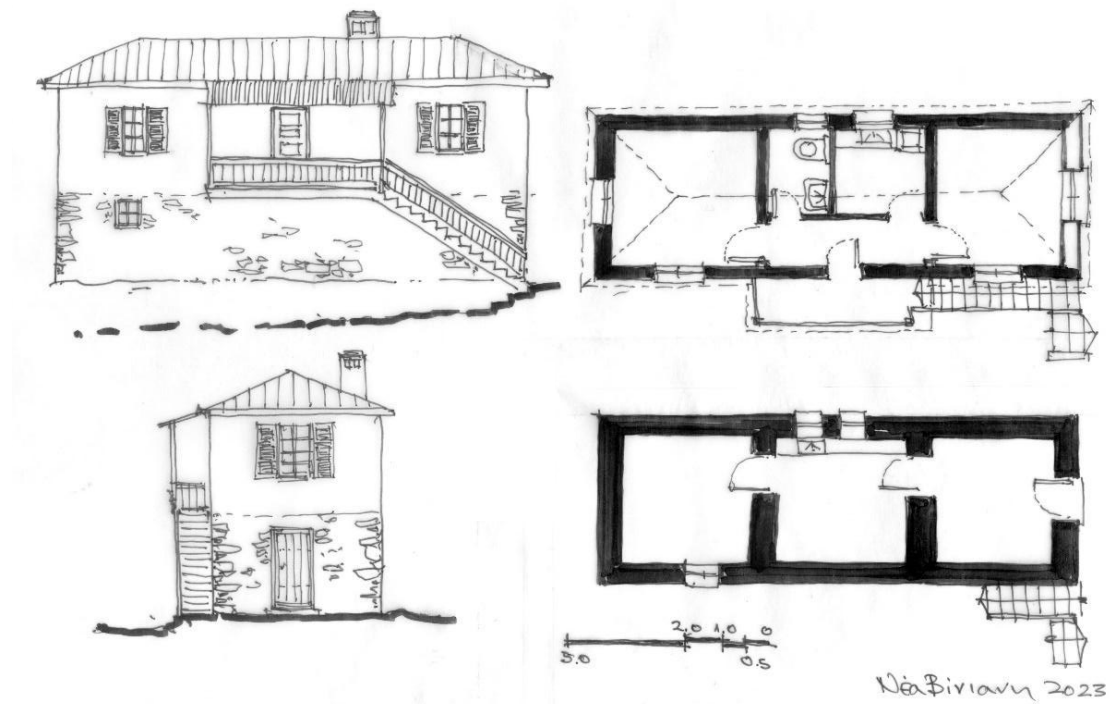


Image 5-16. Type of two-story house with three rooms on the ground floor "katogi", one bedroom, kitchen, bathroom, entrance hall, covered balcony and external staircase. Plan and elevations. Nea Viniani. Source: NTUA Research Team, June 2023.

Several buildings appear not to have been inhabited systematically and therefore retained the size and morphology of the original design. Today the settlement continues to have the original form of a "garden city" and many houses are used as holiday homes of descendants of the old residents who return for holidays to their birthplace.

The public spaces of the settlement were planted and supplemented with outdoor equipment, a playground, and a small sports field. These spaces today are overgrown with tall greenery and are maintained in relatively good condition. Infrastructure networks with water supply, sewerage and electricity were also built from scratch in the village. This created an image of a well-maintained settlement, with much higher standards than those of the neighboring villages of the 1970s, when the construction of Nea Viniani was completed.

In the 1980s, the effort to revive the old settlement of Viniani began. The repair of the municipal school, the seat of P.E.E.A., with its surrounding area and the establishment of the National Resistance Museum was one of the steps in this direction. It started with the initiative of old fighters of the National Resistance 1941-1944, residents of Viniani and the Historical Archives Rescue Company headed by resistance fighter Vardis Vardinogiannis. The planning of the effort was undertaken by the professor of the School of Architectural Engineers of NTUA, Konstantinos Papaioannou. The repair study was carried out in 1986 by the architects Tania

Zografou and Nelly Marda<sup>196</sup> and the school was declared a listed monument by the Ministry of Culture in 1986.<sup>197</sup>

The busts of the members of P.E.E.A., the work of sculptors Thymios Panourgias and Sotos Alexiou, were placed in the schoolyard. The school was founded on 7 March 2006 as a municipal legal entity under public law and since 2016 it has been fully under the Municipality of Agrafa. Viniani was declared Historical Place.<sup>200</sup> At the same time, several cases of repair and revival of houses in Viniani created a climate of relative recovery. Finally, in this context, the maintenance of the historic bridge of Megdova, which took place in 1994, is also taken into account.



Image 5-17. The main facade and the courtyard of the Viniani Elementary School, built in 1938. In 1986 it was declared a listed monument by the Ministry of Culture and since 2006 it has been the Museum of National Resistance. In the courtyard are the busts of the members of the "Mountain Government". Source: NTUA Research Team, 2023.

<sup>196</sup>Tania Zografou, Nelly Marda (1986), op. cit.

<sup>197</sup>Government Gazette 333/B/1986, YA G/924/13405. «Characterization as a historical listed monument of the old Elementary School of Viniani of Evrytania Prefecture».

<sup>198</sup> The Museum of P.E.E.A.-National Resistance in Viniani, Evrytania. Historical Rescue Company Archives (information leaflet) n.d.

<sup>199</sup>See related Government Gazette 2816B/5/07-09-2016, Abolition of the Municipal Legal Entity under Public Law of the Municipality of Agrafa of Evrytania Prefecture under the name «Museum of National Resistance of Viniani», Government Gazette 1765B/2/05-08-2011, Preservation of the legal entity under public law of the Municipality of Agrafa under the name «Museum of National Resistance of Viniani» as an independent entity and Government Gazette 275B/13/07-03-2006, Establishment of the legal entity under public law of the Municipality of Agrafa under the name «Museum of National Resistance of Viniani».

<sup>200</sup>Government Gazette 592/B/1988, YA YPPO/DILAP/G/1257/31799. «Characterization as a historical site of the settlement of Palaias Vinianis of Evrytania Prefecture» and Government Gazette 858/D/2021, YA 228723 «Redefinition of the historical site of Palia Viniani, Municipality of Agrafa, P.E. Evrytania, Region of Central Greece».

## 5.2 The current state of the old settlement of Viniani

### Access, public space and residential units

As mentioned in this edition, the historical settlement of Viniani develops in a particularly imposing mountainous landscape, on a steep slope, amphitheatrically with a southeast orientation, at the lowest point of the Rekka Gorge. The streams that run through the slope and end up in the Megdova, play an important role in the creation and evolution of the settlement, and separate it into three distinct residential units - neighborhoods.



Image 5-18. Facade development of Viniani. Source: NTUA Research Team, 2023.



Image 5-19. Schematic diagram of the three neighborhoods of Viniani. Background: Google Earth. Processing: NTUA Research Team, 2023.

Access to the settlement by road is via the New Viniani-Mavrommatas provincial road, a newer road axis that connects the Chalkiopoulos-Viniani provincial road with the settlements of the Viniani Municipal Unit. The road descends into the settlement to a point paved with concrete and then, as a dirt road, branches off towards the National Resistance Museum and the central core of the settlement. This central dirt road crosses the settlement

ending southeast at the cemetery. It branches towards the hill of Agios Georgios and from that intersection continues in the footsteps of the old path that connects Viniani with Livadia (present-day Nea Viniani). Both new rural roads that were built to Agios Georgios and Nea Viniani destroyed the old paths.

The strong identity of the place arises as a result of human/historical data and the characteristics of the natural and built environment. The rich natural landscape and the morphology of the soil, the density of the building, the prevailing architecture of the buildings, the scale, the arrangements, the proportions, the volumetric organization and the ways of their construction, the form of the urban fabric and the composition into individual residential units - neighborhoods, determine the special architectural character of the settlement. Furthermore, the special buildings and some plateaus in the urban fabric function as landmarks and points of reference, meeting points of the people of the settlement in the past, such as the churches and the "Fiale", perhaps most characteristic of the interwar elementary school in the past, today the emblematic National Resistance Museum of the Municipality of Agrafon.

The rough natural landscape in which the rough mountain formations, the gorges, the escarpments with the gentle wooded slopes and the meadows alternate, in combination with the abandonment of the built space, constitutes a field of direct interdependence of the natural and man-made environment, particularly charming. The stone constructions in the color of the local rocks sprout from the ground, are arranged in sequence with the shape of the slope and the relief, between the large plane trees of the central zone of the settlement.

The network of roads and paths is often indistinct and impassable, and is characterized by discontinuities and fragmentation. Although it seems to retain its original form to a large extent, it is in poor condition, while much of the building stock of the settlement and the corresponding "use capacitors", such as shops, workshops, cafes and public buildings, have been lost. The organic layouts, in combination with the small widths of the paths, form a complex system of routes that offers optical escapes and a sense of exploration to the walker. These layouts followed the old routes or were re-formed by the movement of animals and people. Some of the old paths can be recognized by accompanying constructions (stone steps, retaining walls). Few cobbled streets with wedged schists are found in the central core, while others are hidden by the rich vegetation.

Apart from the basic dirt road (minimum width of 4 meters), there is an extensive network of narrow paths (1-2 m) that develops parallel and perpendicular to the contour lines, with a gentle or more intense slope, and alternation of soil and stones, mainly at the points where stairs have been formed. There are also some dirt roads accessible by wheeled vehicles, mainly in the central residential unit (3), one of which leads to the central provincial road.

Specifically, in the east, the first residential unit (1) following the modern entrance of the settlement from the main provincial road, develops on either side and along the dirt road that runs through the settlement, on a slope with a gentler slope. The road network is indistinct, with the exception of the cobblestone path connecting this central axis to the museum. The route continues, via a stepped ascent, thus functioning as an entrance to the settlement for pedestrians.

A second connection to the provincial asphalt road functions as a descent to the village for hikers. It is located in the third residential unit (3), via a stepped descent to the small church of Zoodochos Pigi and the center of the village. This central neighborhood develops on land with a steep slope (<45%) and is bounded by the two streams. It has the densest construction and is covered by an almost complete network of routes, while it is traversed by a basic cobblestone path that starts from the lowest to the highest point of the slope. It seems that this constituted the central passage of the settlement. The residential unit (2) faces the first, occupying the second pole of the petal of the residential structure of Viniani. It also has indistinct and difficult roads, mainly dirt roads.

The retaining walls and the retaining walls are mainly located in the residential unit (3). They are important elements of the public space and contribute to the formation of its physiognomy, interacting harmoniously but also dynamically with the buildings and the natural environment, receiving the slopes of the ground, often defining the movement and the properties, producing pedestrian flows in the relief.

Free flat spaces constitute stopping-viewing points. They are formed in the courtyards of churches and the museum. In particular, in the residential unit (1), important outdoor spaces/plateaus constitute the courtyard of the museum. It is the courtyard of the interwar elementary school in the past, today organized with busts and a monument, dedicated to the Government of the Mountain. The large plateau below the church of Agioi Anargyroi with the dedication ("Fiali"), hosted in the past, outdoor film events of the army and later school demonstrations. The plateau continues to be the most impressive public space of Viniani with a panoramic view of the settlement, the hill of the ancient settlement of Agios Georgios and the mountainous volumes that surround it, as far as the gorge of Megdova and the peaks of Tymfristos.



Image 5-20. Panoramic view of Viniani from the hill of Agios Georgios. Source: NTUA Research Team, 2023.

The perimeter of the Church of the Twelve Apostles, in the third residential unit (3), is still a central public space today, while the heart of the settlement is located there and a little lower, in the area where the two neighborhoods (2, 3) meet. At this point, next to the bed of the western stream that runs through Viniani, an interesting complex develops with plateaus and retaining walls, small bridges, the stone-built fountain and the remnant of the open community laundry that operated in the past. Interesting routes develop from that point, while the terraces with walls receive the slopes and lead uphill towards the central part of the settlement and the temple.

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<sup>201</sup>The historical formation of the space also changed during the period 2010-2013 within the framework of regeneration of various walls of the wider surrounding area, a project that was carried out on the initiative and funding of the owner of a neighboring building, originally from Cyprus.



Image 5-21. View of Vinians at the confluence of residential units (2, 3). Source: NTUA Research Team, 2023.

The once upon a time core of the settlement, with cafes, grocery stores and commercial shops, developed in a linear zone above the fountain, towards the parish church to the exit from the central core of the settlement, at the height of the plateau of I.N. Agioi Anargyroi, no longer exists.



Image 5-22. The fountain, where the "kazanaria" were once located in the center of the settlement, and in the foreground behind it, the two-story building with the former "Switzerland" cafe on the ground floor and the residence of the Alatari family on the first floor. To the right in the stream there was also a ground-floor tavern-grill which was destroyed in a flood around 1990. Source: NTUA Research Team, 2023.

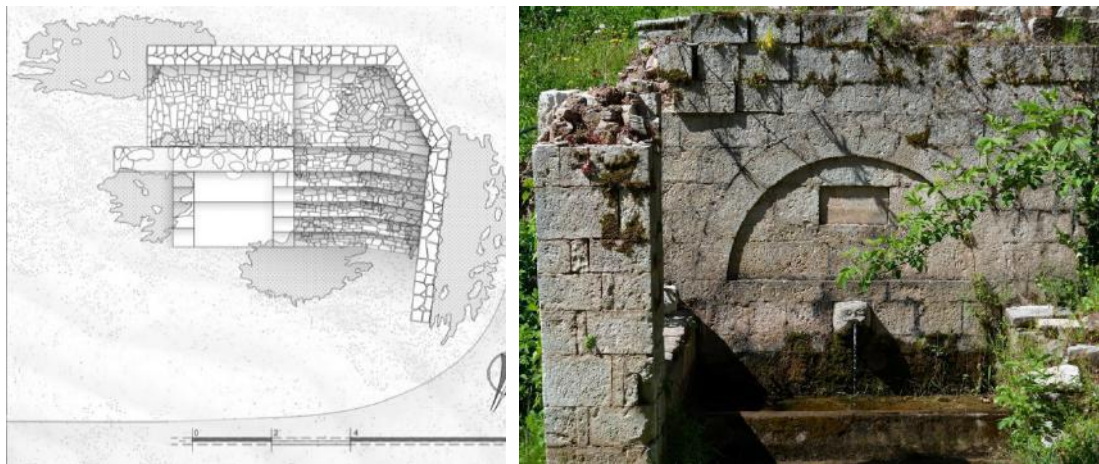


Image 5-23. Plan and photograph of the fountain. Next to it were the covered community laundries "kazanaria". It was built according to the building inscription "EXPENSES Theophanous Nikopoulos 1915 ". Plan: Apostolis Karkasis, undergraduate student of the School Architectural Eng. NTUA, NTUA Research Team, 2023.

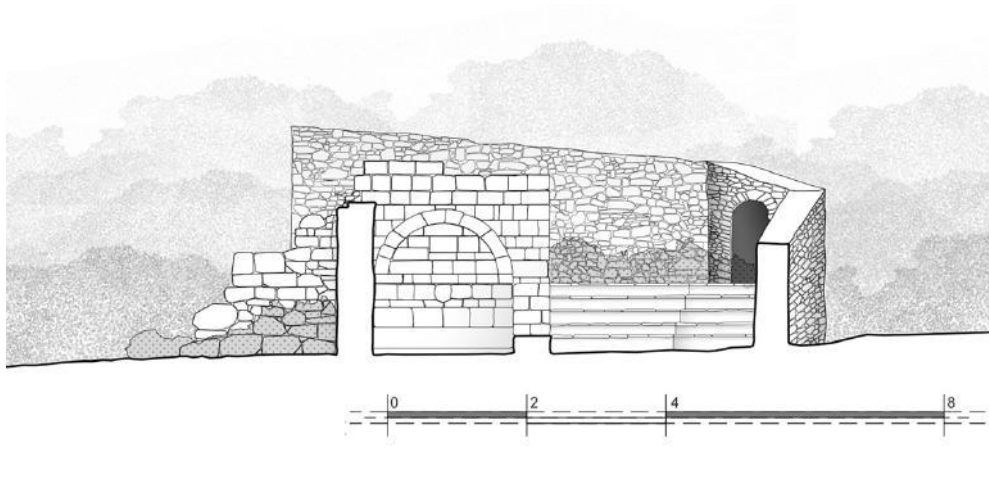


Image 5-24. Western view of the fountain. It was built according to the founder's inscription EXPENSES Theophanes Nikopoulos 1915 ". Drawing: Apostolis Karkasis, undergraduate student of the School of Architecture Eng. NTUA, NTUA Research Team, 2023.

According to Yannitsaris,<sup>202</sup> the buildings of the traditional settlements in Evrytania belong

to two categories and corresponding time periods. The first period includes the buildings that were built until the end of the 19th century and express the social, economic and cultural conditions that had been formed during the Ottoman period (lower quality buildings, defensive character, smaller openings and common elements with the constructions in the wider Ottoman Empire), while the second period includes those that were built from the end of the 19th century until the 1950s to 1960s and express the conditions that were formed in the free Greek state (construction with improved technology, larger openings, influence from Athenian neoclassicism, distinction of spaces, use of mobile furniture, etc.).

<sup>202</sup> Yannitsaris G. (2010), op. cit., p. 48.



Image 5-25. The buildings that housed the former core of the settlement, above the fountain and next to the Church of the Holy Twelve Apostles. On the left are the old community shop and headquarters of P.E.E.A. with the small square, the house of "Svoulos", in the center and the descent to the fountain from the entrance of the church of the Holy Twelve Apostles on the right. Behind the courtyard door of the church is the post-war community shop and telephone exchange with the unfinished guesthouse on the floor. Source: NTUA Research Team, 2023.

Finally, the building boom of the period and especially of the first two decades of the 20th century is largely justified by the remittances of American immigrants, who sent money to build their houses, while at the same time giving the locals a daily wage, boosting the local economy.

Here it is worth adding the catalytic influence of Constantinopolitan urban architecture which influenced the entire Balkan region and especially the mansions in Zagori, Pelion and, as it seems, in Agrafa as well. The buildings of Viniani with these interesting influences, in their simple or elaborate form, today correspond to the above period of about half a century (1890-1940) and therefore the image of the settlement is chronologically linked to the end of the 19th and the beginning of the 20th century,

while the buildings, mostly ruined, retain the morphology, typology and structure of their last period of use, when they were permanently abandoned in 1966.

<sup>203</sup>The absence of an older core in the settlement of Viniani - which dates back to before the 19th century - reinforces this version.

The on-site exercises of the NTUA Research Team show that in the first residential unit (1) the buildings are arranged freely in the space, simple and free of any decoration, mostly two-story, usually long parallel to the contour lines (wide-fronted), and mainly have a southern orientation. The area presents sparse construction that thickens at the starting point of the cobblestone path

that connects the central dirt road to the museum. Most of the buildings are in a dilapidated state with complete collapse of the roof and walls, while the simultaneous retreat of the perimeter masonry makes the boundaries of the properties unclear. In this unit there are some buildings in good condition that are inhabited or host some use from time to time.

In the residential unit (2) the building is relatively denser in individual areas, the buildings mainly two-story, with an eastern orientation, arranged as a rule with the long side parallel to the contour lines. The unit in the past was much denser, as shown by the traces of the ruins in the area. Today most of the buildings are in a dilapidated state and the boundaries of the properties are unclear, while there are also some more elaborate buildings, in relatively better condition of preservation, such as the building of the old cafe.



Image 5-26. View of the residential unit (2). The lower side of the slope is crossed by the path that connects the village with Agios Georgios, the cemetery and Livadia (Nea Viniani). This was the old entrance to the settlement. Lower down to the stream there were the terraced gardens of the family vegetable crops. Source: NTUA Research Team, 2023.

The residential unit (3) has, as already mentioned, a higher density compared to the other two. The buildings are mainly placed parallel to the contour lines (broad-fronted), but there are some cases of narrow-fronted buildings (perpendicular to the contour lines). Due to the steep slope, the buildings are often two-story from the south side and single-story from the north side, creating a semi-basement level and a ground-floor level. Generally, the buildings face the slope and are in close proximity (built-to-free space ratio 1:1), creating an interesting composition of volumes. The unit concentrates the least dilapidated and most well-kept and elaborate buildings of the settlement, with larger dimensions and better quality in construction, the so-called mansions of the "Americans".

#### Assessment of the building stock

In the settlement of Viniani, the entire building stock was recorded, which numbers 115 units. Of these, 19 (16% of the total) are in good condition, while 43 (37%) are in a dilapidated condition. A significant differentiation in the state of preservation of the buildings is found between the three neighborhoods. In Neighborhoods 1 and 2, half of the buildings are ruins, while only 15% and 9% of the total are in good condition. In contrast, in the central Neighborhood 3, the majority of the buildings are in good or fair condition. This differentiation is of particular interest, as it makes it likely that both the earthquake and the landslides affected specific zones and not the entire settlement. For the classifications good, fair, poor, dilapidated, the criteria of urban planning records of settlements and cities were used. In particular:

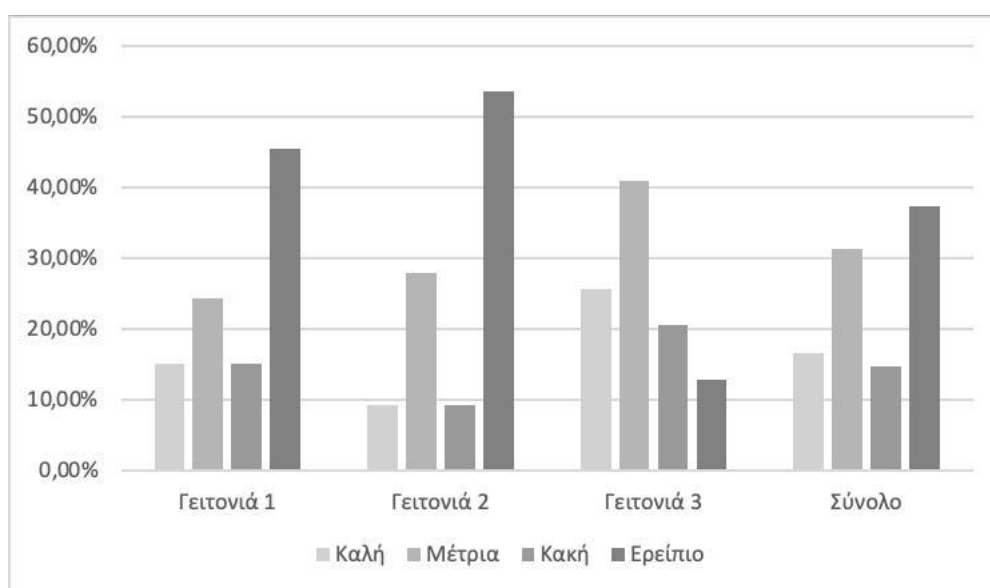
Good condition constitutes the existence of a complete load-bearing structure, roof, walls, floors, frames, plaster. Fair condition constitutes the presence of slight damage due to aging or lack of care which does not affect the static adequacy and allows the normal use of the building. It needs simple maintenance repairs.

Poor condition constitutes serious damage that endangers the static adequacy of the building and makes its use problematic, damaged frames, problematic roofs or floors, worn plaster. It needs extensive repairs.

Dilapidated condition constitutes the collapse of the roof, floors, walls. In this case, there is absolute inability to use or inhabit the building which is not repairable.

| Condition of buildings | Neighborhood 1 | %             | Neighborhood 2 | %             | Neighborhood 3 | %             | Total      | %             |
|------------------------|----------------|---------------|----------------|---------------|----------------|---------------|------------|---------------|
| Good                   | 5              | 15,2%         | 4              | 9,3%          | 10             | 25,6%         | 19         | 16,5%         |
| Moderate               | 8              | 24,2%         | 12             | 27,9%         | 16             | 41,0%         | 36         | 31,3%         |
| Bad                    | 5              | 15,2%         | 4              | 9,3%          | 8              | 20,5%         | 17         | 14,8%         |
| Ruin                   | 15             | 45,5%         | 23             | 53,5%         | 5              | 12,8%         | 43         | 37,4%         |
| <b>Total</b>           | <b>33</b>      | <b>100,0%</b> | <b>43</b>      | <b>100,0%</b> | <b>39</b>      | <b>100,0%</b> | <b>115</b> | <b>100,0%</b> |

Table 5-1. Condition of the buildings of Viniáni per neighborhood. Source: NTUA Research Team, 2023.

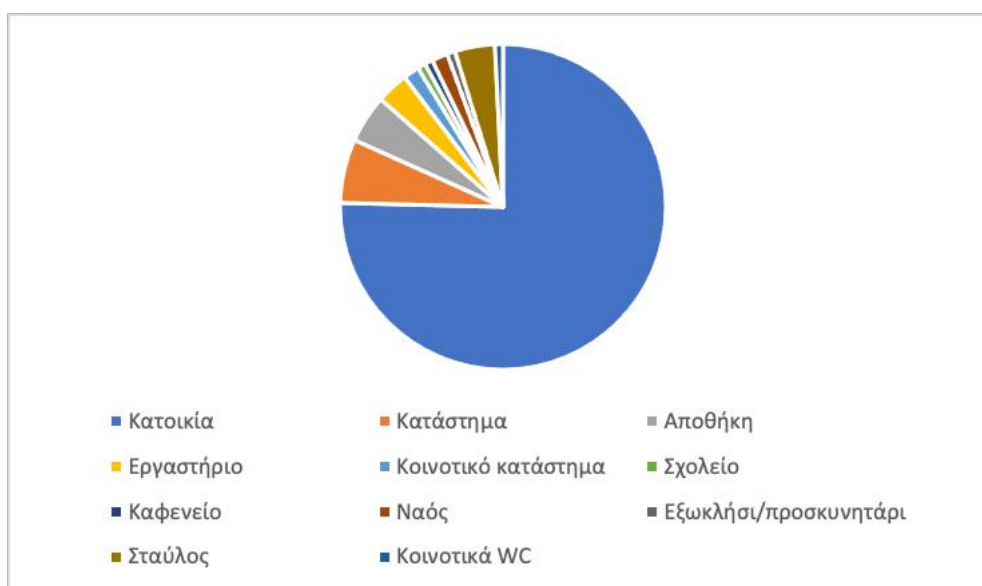


Graph 5-1. Condition of the buildings of Viniáni per neighborhood, percentage of the total. Source: NTUA Research Team, 2023.

Regarding the use of the buildings, before the abandonment of the settlement (1966), housing prevails, while public and commercial functions are located on the central road up to the plateau of the fountain and the Church of the Holy Twelve Apostles. All public uses of the settlement (community store, cafe, churches) are located in the central Neighborhood 3. It should be noted that the uses were recorded based on the data collected in the field with the surveys and, additionally, from the testimonies of the residents.

| Uses            | Neighborhood 1 | Neighborhood 2 | Neighborhood 3 | Total     |
|-----------------|----------------|----------------|----------------|-----------|
| Residence       | 23             | 40             | 32             | <b>95</b> |
| Store           | 6              | 1              | 1              | <b>8</b>  |
| Warehouse       | 3              | 2              | 1              | <b>6</b>  |
| Laboratory      | 1              |                | 3              | <b>4</b>  |
| Community store |                |                | 2              | <b>2</b>  |
| School          | 1              |                |                | <b>1</b>  |
| Cafe            |                |                | 1              | <b>1</b>  |
| Temple          |                |                | 2              | <b>2</b>  |
| Chapel/shrine   | 1              |                |                | <b>1</b>  |
| Stable          | 4              | 1              |                | <b>5</b>  |
| Community WC    |                |                | 1              | <b>1</b>  |

Table 5-2. Distribution of the uses of the buildings of Viniani per neighborhood, before the abandonment of the settlement (1966). Source: NTUA Research Team, 2023.



Graph 5-2. Distribution of the uses of the buildings of Viniani before the abandonment of the settlement (1966). Source: NTUA Research Team, 2023.

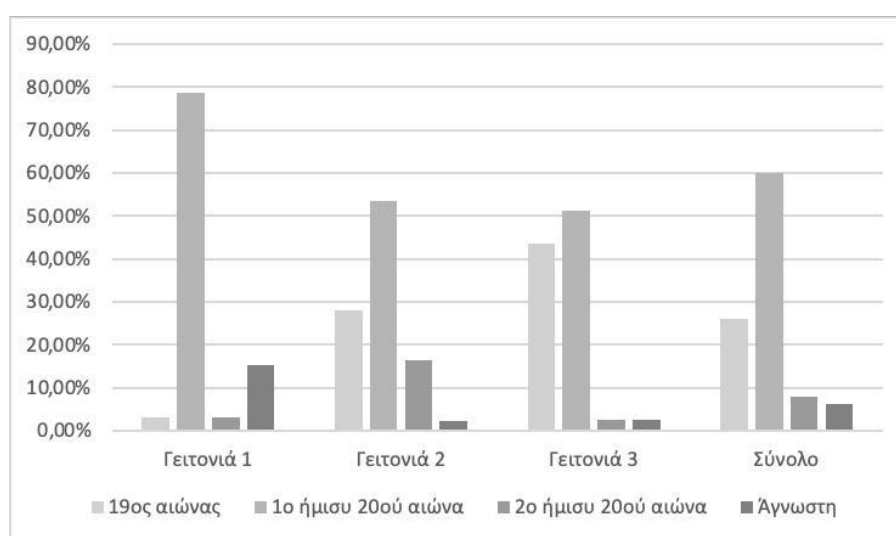
The majority of the buildings were built in the first half of the 20th century (69 buildings, 60%) according to testimonies and field data. The percentage of buildings dating back to the 19th century is also significant (30 buildings, 26%). Of interest is the minimal presence of 19th-century buildings in Neighborhood 1 and, as a result, the higher-than-average concentration of buildings from the first half of the 20th century there.

The documentation of the construction period was carried out macroscopically, based on the characteristics of the form and construction of the building or based on the narrations of the residents. Accurate dating was possible for fourteen buildings as well

evidence of this was found (inscriptions on the walls or on the lintel or in the courtyard of the building).

| Construction Period          | Neighborhood 1 | %             | Neighborhood 2 | %             | Neighborhood 3 | %             | Total      | %             |
|------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|------------|---------------|
| 19th century                 | 1              | 3,0%          | 12             | 27,9%         | 17             | 43,6%         | 30         | 26,1%         |
| 1st half of the 20th century | 26             | 78,8%         | 23             | 53,5%         | 20             | 51,3%         | 69         | 60,0%         |
| 2nd half of the 20th century | 1              | 3,0%          | 7              | 16,3%         | 1              | 2,6%          | 9          | 7,8%          |
| Unknown                      | 5              | 15,2%         | 1              | 2,3%          | 1              | 2,6%          | 7          | 6,1%          |
| Total                        | <b>33</b>      | <b>100,0%</b> | <b>43</b>      | <b>100,0%</b> | <b>39</b>      | <b>100,0%</b> | <b>115</b> | <b>100,0%</b> |

Table 5-3. Distribution of Vinians' buildings according to their construction period per neighborhood. Source: NTUA Research Team, 2023.

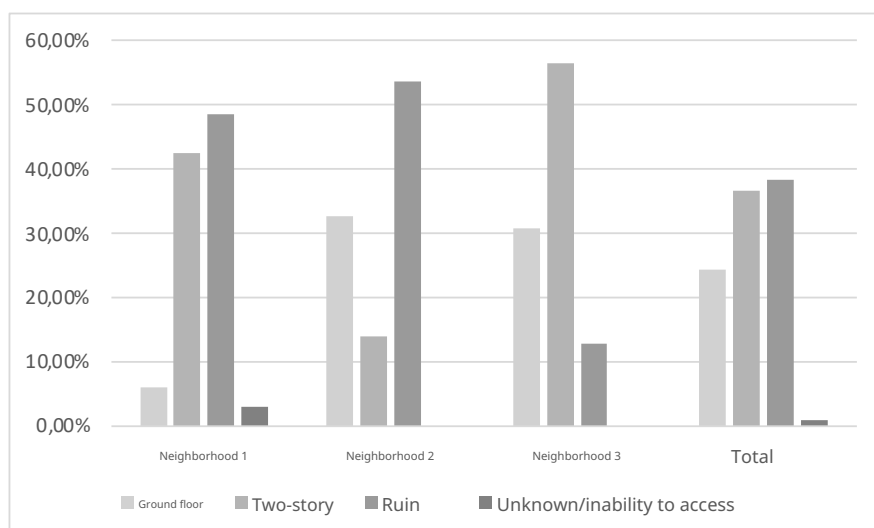


Graph 5-3. Construction period of Vinians' buildings per neighborhood, percentage of the total. Source: NTUA Research Team, 2023.

The majority of the buildings preserved today are two-story (42 buildings, 36%), with the largest concentration found in Neighborhoods 1 and 3.

| Building floors             | Neighborhood 1 | %             | Neighborhood 2 | %             | Neighborhood 3 | %             | Total      | %             |
|-----------------------------|----------------|---------------|----------------|---------------|----------------|---------------|------------|---------------|
| Ground floor                | 2              | 6,1%          | 14             | 32,6%         | 12             | 30,8%         | 28         | 24,4%         |
| Two-story                   | 14             | 42,4%         | 6              | 14,0%         | 22             | 56,4%         | 42         | 36,5%         |
| Ruin                        | 16             | 48,5%         | 23             | 53,5%         | 5              | 12,8%         | 44         | 38,3%         |
| Unknown/inability to access | 1              | 3,0%          | 0              | 0,0%          | 0              | 0,0%          | 1          | 0,9%          |
| Total                       | <b>33</b>      | <b>100,0%</b> | <b>43</b>      | <b>100,0%</b> | <b>39</b>      | <b>100,0%</b> | <b>115</b> | <b>100,0%</b> |

Table 5-4. Distribution of Vinians' buildings according to the number of floors per neighborhood. Source: NTUA Research Team, 2023.



Graph 5-4. Number of floors of the buildings of Viniani per neighborhood, percentage of the total. Source: NTUA Research Team, 2023.

Regarding the construction materials, stonework prevails in the load-bearing structure and in the perimeter formations (walls, courtyards, external stairs) in combination with wood as the material of the roofs, floors, internal stairs and frames. However, bricks and reinforced concrete elements (reinforced concrete) are found in addition to the main construction materials in a significant number of buildings. Reinforced concrete coexists in the buildings of the Interwar period with the stone-built walls in lintels, floors and balcony projections as well as the metal sections in the balconies or frames.

Regarding the pathology of the buildings, the collapse of the roof (partial or total), walls (partial or total) and floors (partial or total) and the destruction of frames (partial or total) were examined.

Total roof collapse is found in almost half of the settlement's buildings (53 buildings, 46% of the total) and in the majority of the buildings in Neighborhood 2 (26 buildings, 60% of the neighborhood's buildings). In addition, partial roof collapse is found in 13 buildings (11% of the total).

Wall collapse is found in almost half of the settlement's buildings (57 buildings, 49% of the total). The situation of partial collapse of these prevails (38 buildings, 33% of the total). However, it is noteworthy that total wall collapse is found almost exclusively in Neighborhood 2 (17 buildings, 39% of the neighborhood's buildings).

Floor collapse is found in half of the settlement's buildings (58 buildings, 50% of the total). The situation of total collapse of these prevails (47 buildings, 40% of the total), with the majority of these being found in Neighborhood 2 (25 buildings, 58% of the neighborhood's buildings).

Frame destruction is found in the majority of the settlement's buildings (79 buildings, 68% of the total). It is the most common pathology damage in uninhabited buildings.

buildings. And in this case, the majority of buildings with total destruction of frames are located in Neighborhood 2 (25 buildings, 58% of the neighborhood's buildings).

As already noted, Neighborhood 2 has the largest number of buildings in a dilapidated condition, which explains the high rates of pathology damage in this specific spatial unit.

| Pathology             |              | Neighborhood 1 | %      | Neighborhood 2 | %      | Neighborhood 3 | %      | Total      | %      |
|-----------------------|--------------|----------------|--------|----------------|--------|----------------|--------|------------|--------|
| Collapse<br>roof      | Partial      | 5              | 15,2%  | 6              | 14,0%  | 2              | 5,1%   | <b>13</b>  | 11,3%  |
|                       | Total        | 16             | 48,5%  | 26             | 60,5%  | 11             | 28,2%  | <b>53</b>  | 46,1%  |
|                       | Not detected | 12             | 36,4%  | 11             | 25,6%  | 26             | 66,7%  | <b>49</b>  | 42,6%  |
|                       | Total        | 33             | 100,0% | 43             | 100,0% | 39             | 100,0% | <b>115</b> | 100,0% |
| Collapse<br>walls     | Partial      | 15             | 45,5%  | 13             | 30,2%  | 10             | 25,6%  | <b>37</b>  | 32,2%  |
|                       | Total        | 2              | 6,1%   | 17             | 39,5%  | 0              | 0,0%   | <b>19</b>  | 16,5%  |
|                       | Not detected | 16             | 48,5%  | 13             | 30,2%  | 29             | 74,4%  | <b>59</b>  | 51,3%  |
|                       | Total        | 33             | 100,0% | 43             | 100,0% | 39             | 100,0% | <b>115</b> | 100,0% |
| Collapse<br>floors    | Partial      | 2              | 6,1%   | 7              | 16,3%  | 2              | 5,1%   | <b>11</b>  | 9,6%   |
|                       | Total        | 14             | 42,4%  | 25             | 58,1%  | 8              | 20,5%  | <b>47</b>  | 40,9%  |
|                       | Not detected | 17             | 51,5%  | 11             | 25,6%  | 29             | 74,4%  | <b>57</b>  | 49,6%  |
|                       | Total        | 33             | 100,0% | 43             | 100,0% | 39             | 100,0% | <b>115</b> | 100,0% |
| Destruction<br>frames | Partial      | 12             | 36,4%  | 11             | 25,6%  | 13             | 33,3%  | <b>36</b>  | 31,3%  |
|                       | Total        | 12             | 36,4%  | 25             | 58,1%  | 6              | 15,4%  | <b>43</b>  | 37,4%  |
|                       | Not detected | 9              | 27,3%  | 7              | 16,3%  | 20             | 51,3%  | <b>36</b>  | 31,3%  |
|                       | Total        | 33             | 100,0% | 43             | 100,0% | 39             | 100,0% | <b>115</b> | 100,0% |

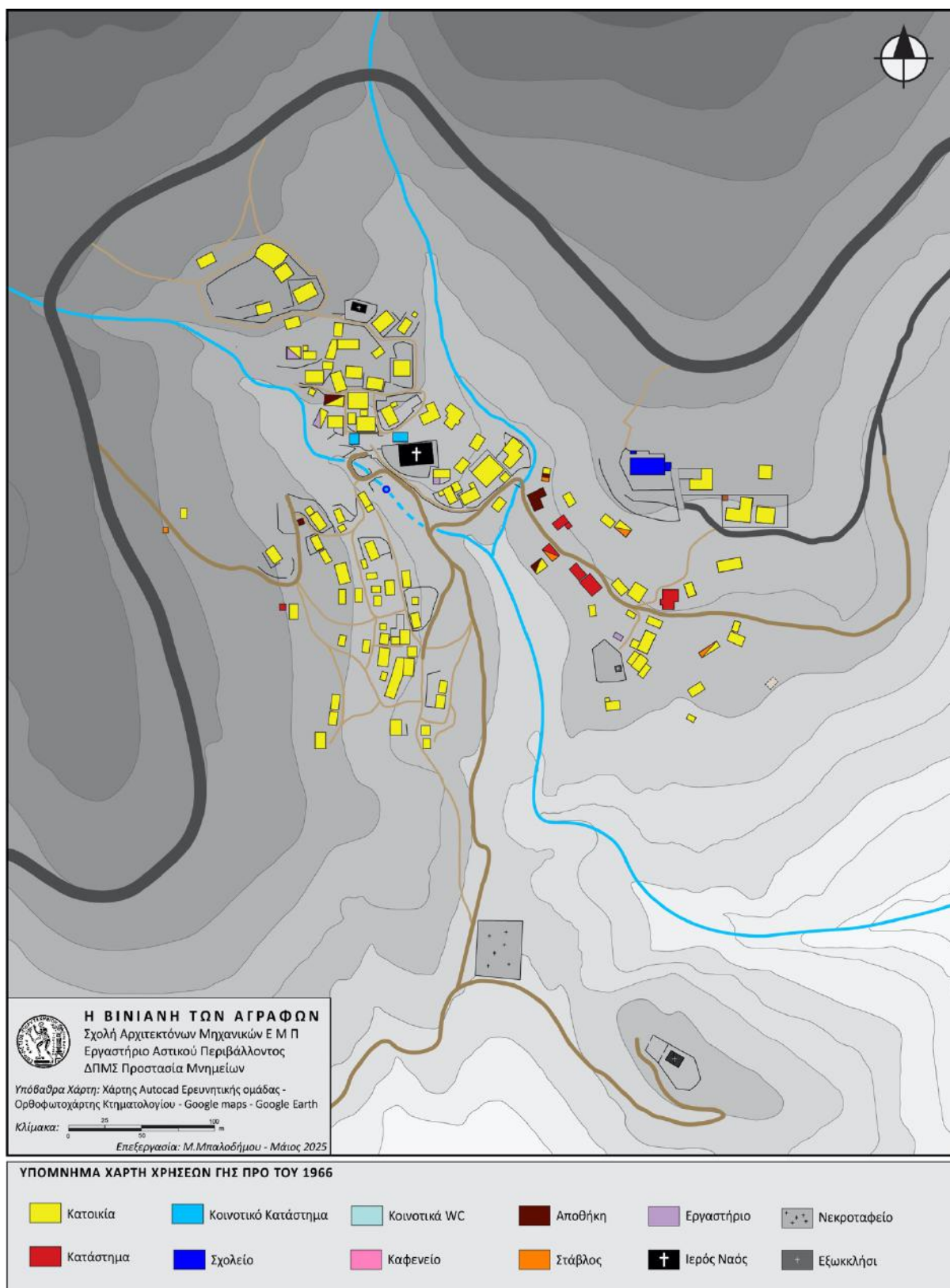
Table 5-5. Pathology damage to the buildings of Viniani per neighborhood. Source: NTUA Research Team, 2023.

The issue of significant static damage to buildings due to soil subsidence was also approached. And in this case, the differentiation per neighborhood is evident. Almost all buildings with indications of subsidence are located in the central Neighborhood 3 as well as in Neighborhood 2, specifically in the areas around the streams.

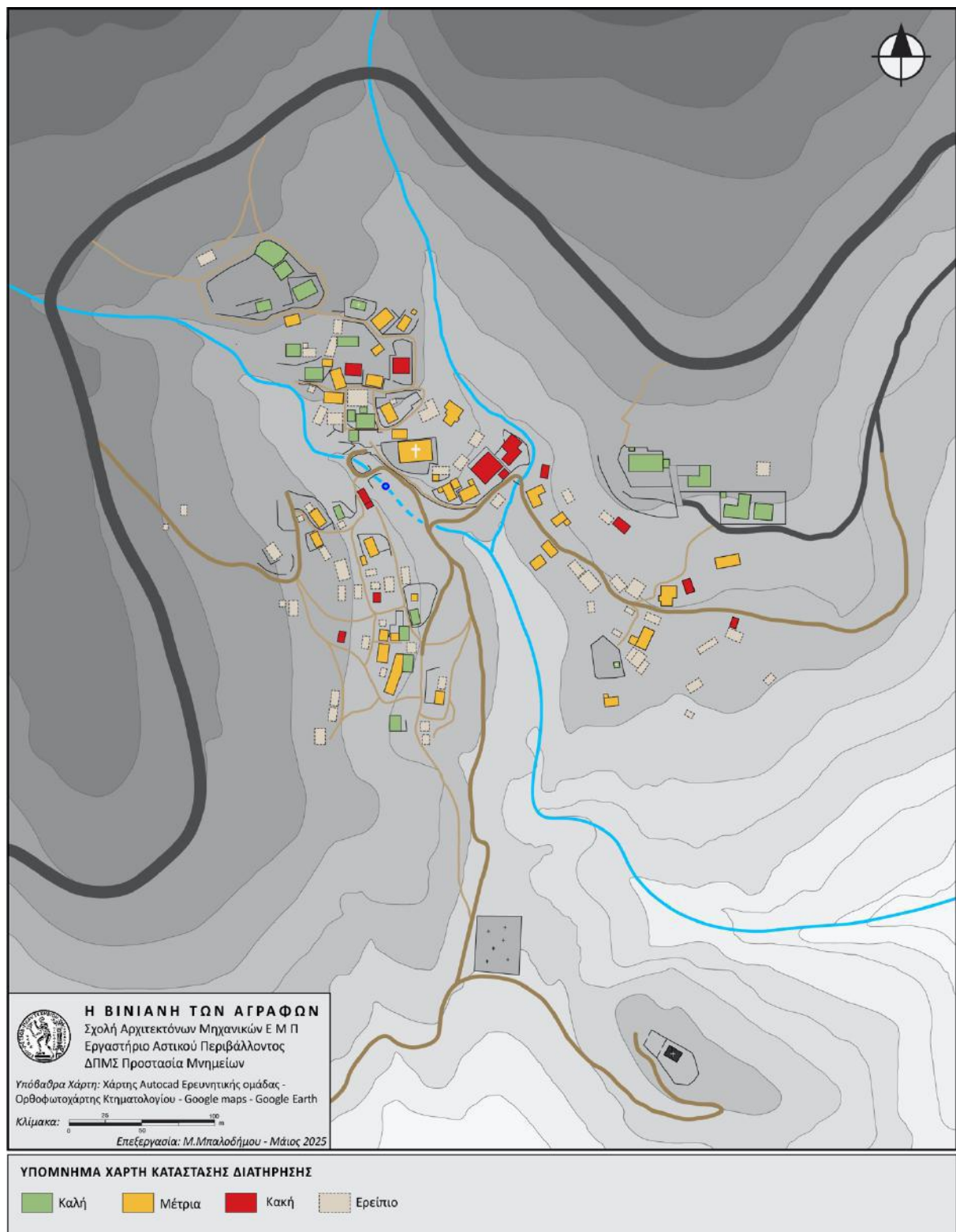
| Subsidence   | Neighborhood 1 | %      | Neighborhood 2 | %      | Neighborhood 3 | %      | Total      | %      |
|--------------|----------------|--------|----------------|--------|----------------|--------|------------|--------|
| Partial      | 1              | 3,0%   | 11             | 25,6%  | 7              | 18,0%  | <b>19</b>  | 16,5%  |
| Total        | 0              | 0,0%   | 0              | 0,0%   | 1              | 2,6%   | <b>1</b>   | 0,9%   |
| Not detected | 32             | 97,0%  | 32             | 74,4%  | 31             | 79,5%  | <b>95</b>  | 82,6%  |
| Total        | 33             | 100,0% | 43             | 100,0% | 39             | 100,0% | <b>115</b> | 100,0% |

Table 5-6. Subsidence of the buildings of Viniani per neighborhood. Source: NTUA Research Team, 2023.

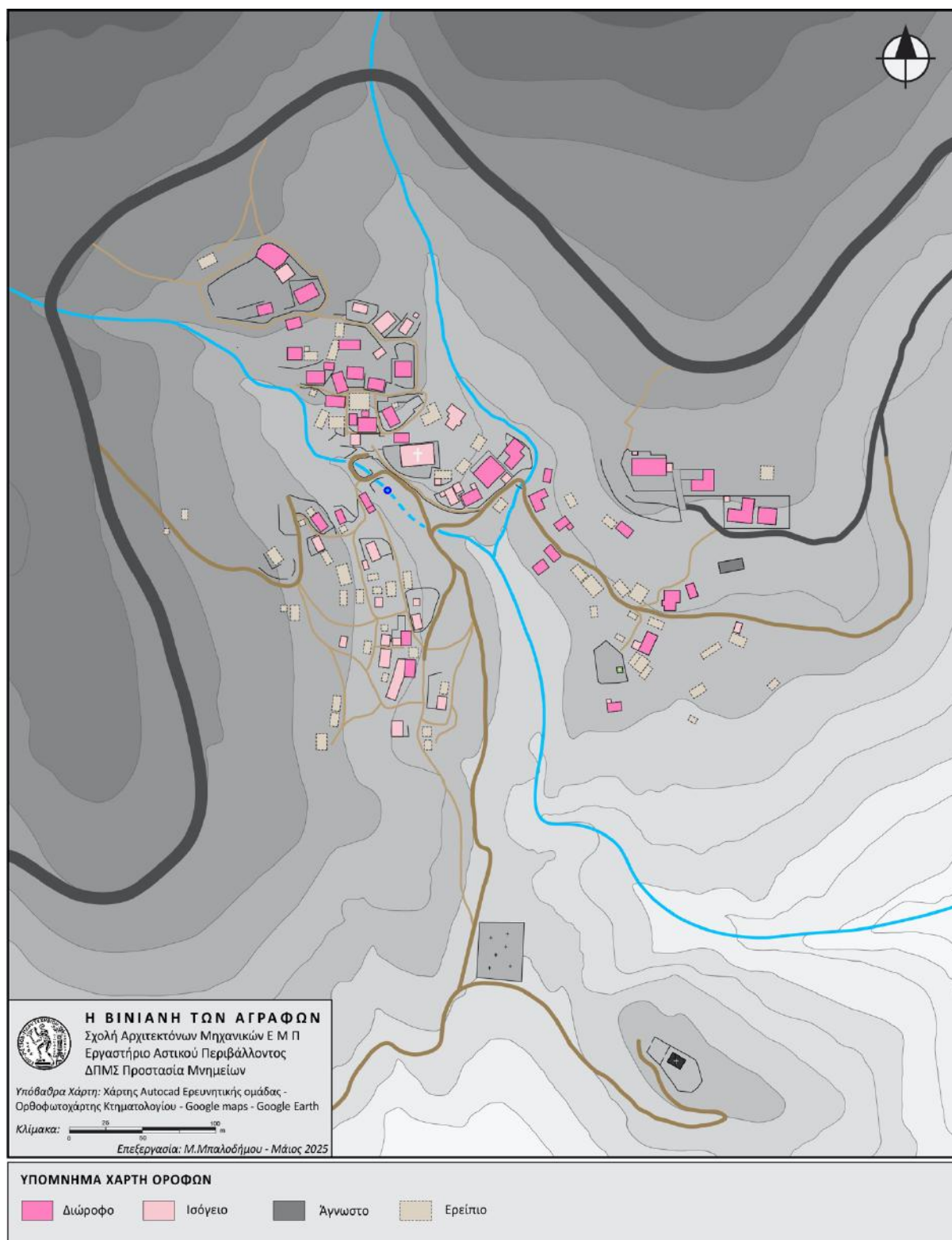
The following is a map of the uses of the buildings of Viniani before the abandonment of the settlement (1966) as well as the thematic maps (condition, floors, period of construction and subsidence problems) that describe the current image of the settlement.



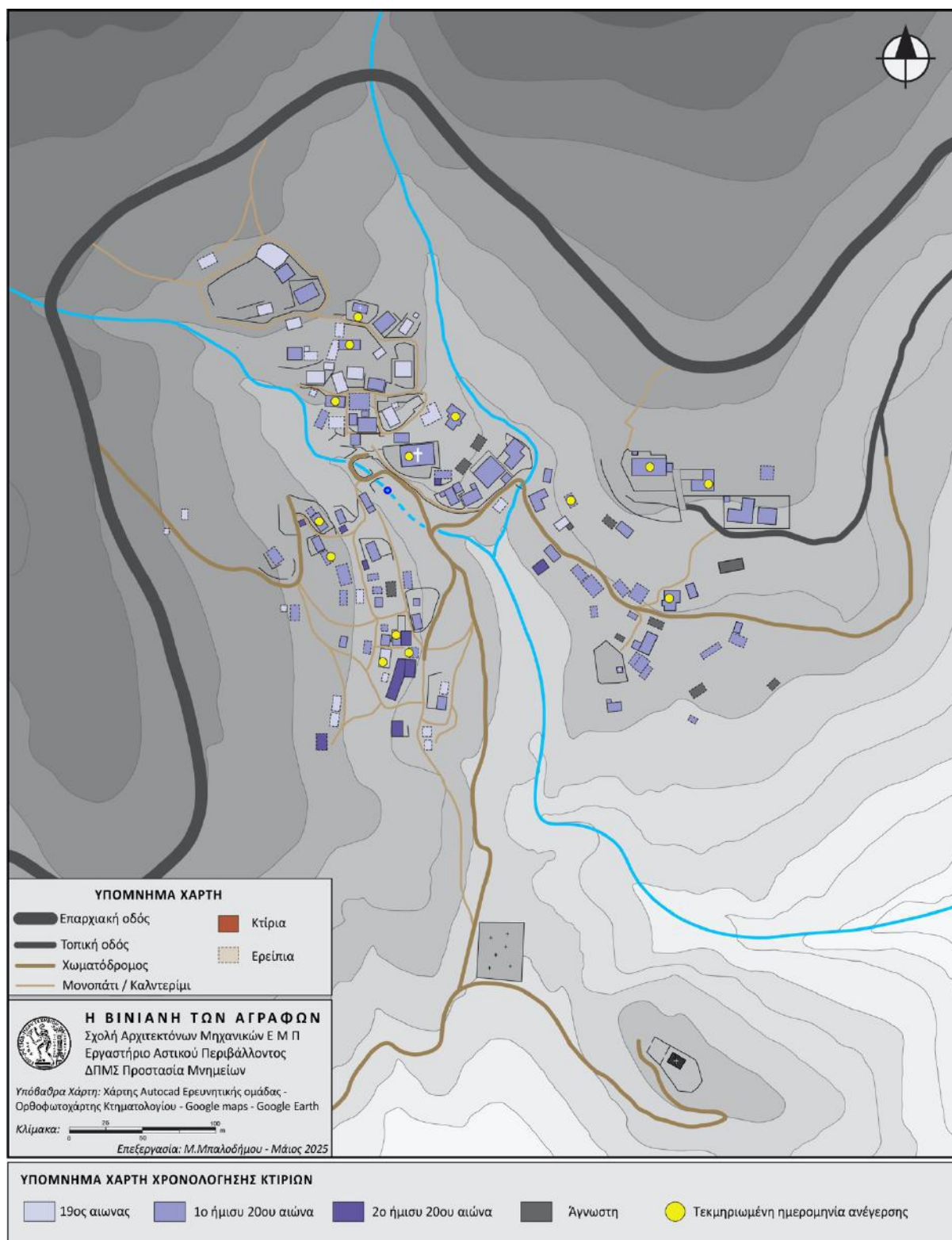
Map 5-1. Uses of the buildings of Viniani before the abandonment of the settlement (1966). Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Surveying Engineers, postgraduate students of the MSc "Monument Protection". On-site recordings: Haris Vraka, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Stranga, Maria Christodoulou, undergraduate students of the School of Architecture NTUA.



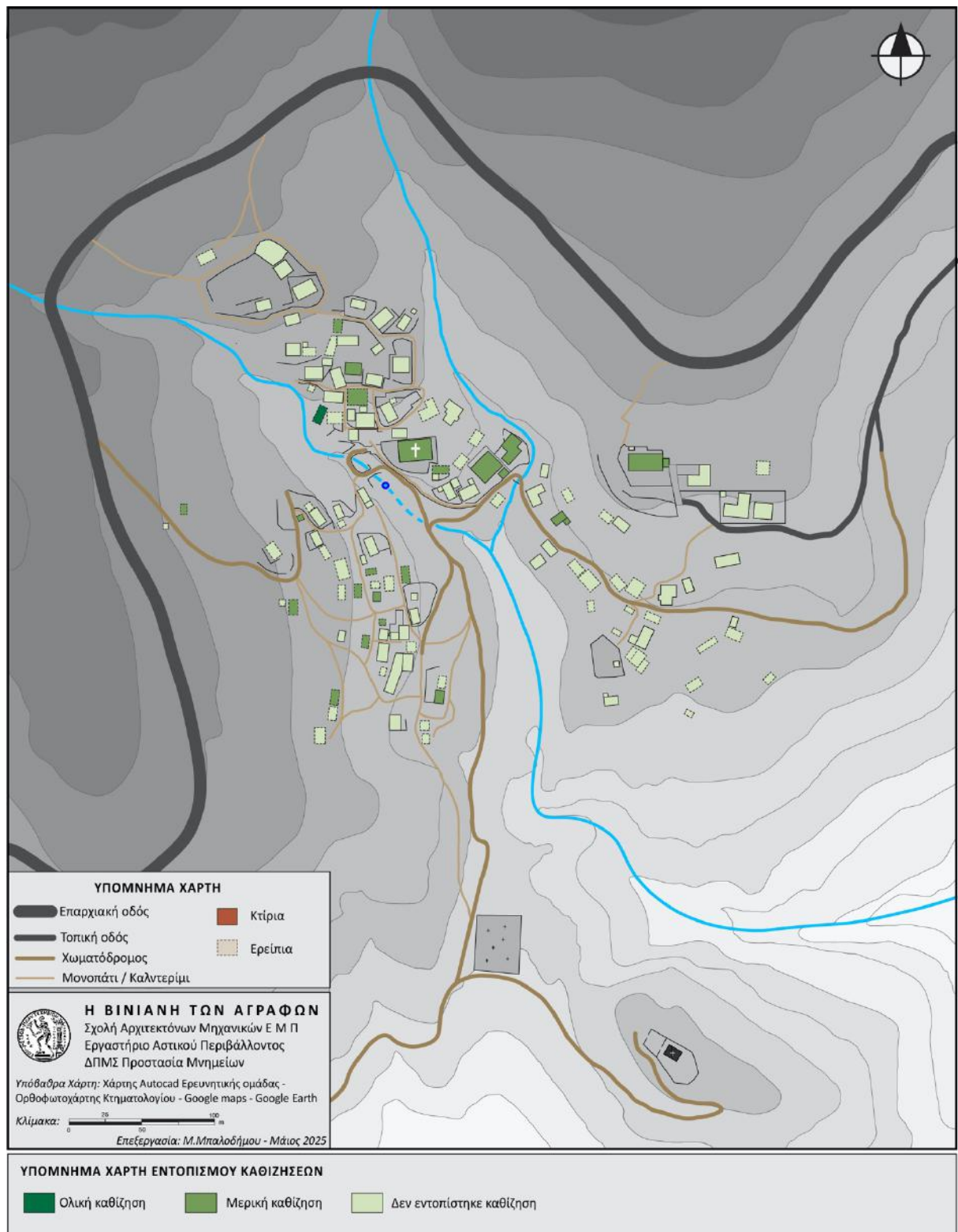
Map 5-2. Condition of the buildings of Viniani. Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Agr. Surveying Engineers, postgraduate students of MSc "Monument Protection". On-site recordings: Haris Vraka, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Straga, Maria Christodoulou, undergraduate students of the School of Architecture NTUA.



Map 5-3. Number of floors of the buildings of Viniani. Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Agr. Surveying Engineers, postgraduate students of the MSc "Monument Protection". On-site recordings: Haris Vraka, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Straga, Maria Christodoulou, undergraduate students of the School of Architecture NTUA.



Map 5-4. Construction period of the buildings of Viniani. Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Agronomist Surveyors Engineers, postgraduate students of the MSc "Monument Protection". On-site recordings: Haris Vraka, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Straga, Maria Christodoulou, undergraduate students of the School of Architecture NTUA.



Map 5-5. Buildings with subsidence problems in Viniani. Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Agr. Surveying Engineers, postgraduate students of MSc "Monument Protection". On-site recordings: Haris Vraha, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Stragka, Maria Christodoulou, undergraduate students of the School of Architecture NTUA.



## Epilogue

This publication highlights Viniani of Agrafa as a settlement with significant landscape, spatial and social characteristics of strong historical, cultural and political identity. The first chapter documented the long historical course of development of the settlement, through bibliographic and original sources. The population fluctuations were presented in detail, with emphasis on the 20th century, which testify to phases of concentration and phases of shrinkage of the so-called residential dipole of Viniani. The second chapter focused on the spatial connections of the wider geographical unit Viniani - Agrafa - Evrytania, highlighting the multiple discontinuities of the infrastructure network which, to a large extent, make it difficult to inhabit or re-inhabit the area. The physical geography of Viniani was analyzed in detail, with the mountainous volume of Agrafa, the rich flora and fauna, the forests and the Wildlife Refuges forming a place with unique characteristics. The third chapter analyzed the institutional framework for the protection of the built environment, attempting to analyze the residential structure of Viniani. The architectural characteristics of specific buildings were analyzed. In the fourth chapter, material was collected for the analysis of the earthquakes in the transformations experienced by Viniani during the 1960s. This analysis allowed the analysis of the current situation of these two basic poles - New Viniani and the old settlement - in the fifth chapter. In particular, the analysis focused on the existing building infrastructure and its evaluation.

The research carried out brought to the fore the signs of abandonment of this historic place and attempts to highlight its latent potential. Abandonment has been a major reason for the relatively unchanged morphological character of Viniani, while the place exudes a special atmosphere integrated into a natural landscape of high quality. The building stock, the present signs of History, the important monuments, the Museum of National Resistance, the archaeological site of Agios Georgios, the Megdova bridge and the high quality mountain landscape constitute the latent wealth that can revive the residential and landscape complex within the wider field of Megdova and Agrafa.

It is necessary for the old and new settlements to continue to live, with a modern condition based on highlighting and preserving their special character, as a very important example of a place of historical memory. In this direction, the appropriate development planning will contribute, with the aim of reviving and re-inhabiting Viniani, the functional connection of the two settlements - the old and the new, the protection and promotion of the natural and residential landscape, the creation of infrastructure but the strengthening of the visitability and creation of cultural actions and cultural routes. The immediate and long-term answer to the problem of landslides and the rescue of existing archaeological,

of medieval and modern monuments is a prerequisite for starting any recovery effort.

The object of the NTUA Research Program, beyond the analysis presented in this edition, was the preparation of a Strategic Plan, which was presented publicly and submitted to the competent local authorities. The strategic planning will combine the recovery of the rural economy with quality characteristics (agriculture, forestry economy, beekeeping, livestock farming), quality tourism services (tourist, cultural and historical) on a small scale while simultaneously lifting the geographical exclusion through basic social infrastructure of education, welfare, health and communication.

The research project "Vinian of Agrafa" was completed by a large university team, which included eight professors from the National Technical University of Athens, two from the University of Thessaly and the Agricultural University, five doctoral candidates and postdoctoral researchers, eight undergraduate and twenty-two postgraduate students of the School of Architecture, the latter with the specialties of architects, civil engineers, surveying engineers and archaeologist.

The overall size and specialties of the multidisciplinary team made it possible to implement a particularly ambitious scientific endeavor. Viniani, the local community and the local government, through this large-scale original research, has the Strategic Plan for launching projects and actions that will bring the reversal of decline, will lift Viniani from obscurity and will lead to the recognition of the important role it played in a critical moment of Greek history, as the "Capital of the Mountain" and seat of the National Resistance 1941-1944.

## List of images

Image 0-1. Documentary photograph taken by drone in the old settlement of Viniani,

Image 0-2. Old settlement of Viniani. Excerpt from the Cadastre orthophoto map.

Image 0-3. Orthophoto map of the top of Agios Georgios hill.

Image 0-4. Topographic representations of the residential dipole of Viniani (left) and topographic and urban analytical recording of buildings in the old settlement of Viniani (right).

Image 1-1. The hill of Agios Georgios. Source: NTUA Research Team, 2023.

Image 1-2. The top of Agios Georgios hill. The small church of 1955 and the newer enclosure are visible. Source: Orthophotograph of NTUA research team, 2023.

Image 1-3. The stone heap with the traces of the masonry (semi-hewn and hewn building stones) of the small church of Agios Nikolaos in the location "Tsouknides", on the southeastern slope of Agios Georgios hill. Source: NTUA Research Team, 2023.

Image 1-4. The traces of the fortified enclosure on the hill of Agios Georgios. Below it to the east, there is mention of the existence of ruins of the older church which were destroyed with the recent opening of the agricultural road. Source: NTUA Research Team, 2023.

Image 1-5 and Image 1-6. Foundations of buildings in the "Tsouknides" location of Agios Georgios hill. Source: NTUA Research Team, 2023.

Image 1-7. Fragments of tiles which were found superficially scattered in the "Tsouknides" location of Agios Georgios hill. Source: NTUA Research Team, 2023.

Image 1-8 and Image 1-9. Extensive foundations of buildings in the form of piles of ruins are scattered superficially on the hill along with pottery. The agricultural road and soil erosion have destroyed several parts of them. Source: NTUA Research Team, 2023.

Image 1-10. Viniani Evrytania. Agios Georgios hill. Section of the Hellenistic wall which was located and published in 1986-1987 by the archaeological mission of the Aetolian Studies Project of the universities of Utrecht and Leuven. Source: AD 42 (1987).

Image 1-11. The remains of the Hellenistic wall of Agios Georgios in their current state. Source: NTUA Research Team, 2023.

Image 1-12. Embedded section of an ancient member with a decoration of a strip of embossed heart-shaped ivy leaves as found by the archaeological team of the Aetolian Studies Project and published in 1986-1987. Source: AD 42 (1987): Part B' 1 - Chronicles Pin. 140 a.

Image 1-13. The same marble member in its current state in the same position, is embedded in the perimeter of the cemetery. Source: NTUA Research Team, 2023.

Image 1-14. Ancient architectural member of a building with a rectangular narrow glyph next to the Hellenistic wall of Agios Georgios. Source: NTUA Research Team, 2023.

Image 1-15. Ancient cauldron-shaped architectural member with a tooth band, which was recently moved from the hill of Agios Georgios and placed next to the monument of Nea Viniani. Source: NTUA Research Team, 2023.

Image 1-16. The ancient traces, where they are located on the hill of Agios Georgios and in the cemetery of Viniani. Processing: NTUA Research Team, 2023.

Image 1-17. The cemetery of Viniani at the base of the hill of Agios Georgios. Source: NTUA Research Team, 2023.

Image 1-18. The gate of the Viniani cemetery. Source: NTUA Research Team, 2023.

Image 1-19. Viniani Evrytania. Painting by Ioanna (Gianna) Xera.

Image 1-20. In a house in Viniani, the painter Valias Samartzidis paints the rebel blackcap Leontas under the gaze of Aris Velouchiotis, while Spyros Meletzis immortalizes the scene. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 80.

Image 1-21 and Image 1-22. Meeting of the Political Council of P.E.E.A. in May 1944 in Koryschades. Photo: Spyros Meletzis.

Image 1-23. Viniani. Gathering of P.E.E.A. executives in Viniani. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 61.

Image 1-24. At the May Day celebration in 1944, partisans of E.L.A.S. present weapons to the president of P.E.E.A. Alexandros Svolos in the courtyard of the Viniani elementary school. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 75.

Image 1-25. The Polytechnic student Neilos Mastrantonis with the partisan pseudonym "Klearchos" in the threshing floors of Viniani in the spring of 1944. In September of the same year he was arrested by the Germans while transporting proclamations to Lamia and executed. Source: Archive of Giorgis Belavilas.

Image 1-26. Residents of Viniani at the celebration of March 25, 1944 with the snowy Agrafa in the background. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 60.

Image 1-27. Aris Velouchiotis and Babis Klaras with partisans of the Officers' School of E.L.A.S. in the "Fiali" of Agioi Anargyroi in Viniani. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 81.

Image 1-28. A unique historical document is captured in the military aerial photograph of Viniani which was taken on September 7, 1946. Almost all of the buildings are visible, including the Elementary School after the

double arson by the occupying forces. The buildings are roofless, as the fire has left only the stone walls.

Image 1-29. The map of the HAGS shows the areas of action of the D.S.E. in the spring of 1948. The extensive areas of Roumeli and Agrafa are distinguished between which Vinians were located. Source: "General disposition of the k/simmoriac forces in the spring of 1948...", Hellenic Army General Staff, Army History Directorate in Apostolos Patelakis, *Războiul civil din Grecia (1946 – 1949) și emigranții*

politici greci în România (1948 – 1982) , Cetatea de Scaun, Bucuresti, 2017.

Image 1-30. The dedicatory plaque to Brigadier General Dimitrios Markopoulos on the Megdova bridge, destroyed today. Source: NTUA Research Team, 2023.

Image 1-31. Construction of Plastiras dam 1959. Source: DEI Photographic Archive.

Image 1-32. Construction of Kremaston dam 1963-1965. Photo: Kostas Balafas. Source: DEI Photographic Archive.

Image 2-1. Part of the European Path E4 in the wider area of Vinians. Source: «European Path E4». \_\_\_\_\_  
<https://www.trailpath.gr/eurwpaiko-monopati-e4/>.

Image 2-2. The Megdova valley and Agrafa from Vinians to the north. Source: NTUA Research Team, 2023.

Image 2-3. The relief of Agrafa and the residential dipole of Vinians next to the Megdova gorge.

Image 2-4. The complex of the three overlapping settlements, of the hill of Agios Georgios, of the old settlement of Vinians and of Nea Vinians (Livadia).

Image 2-5. The artificial lake of Kremaston on the Acheloos river. Photo: Dimitris Geronikos.

Image 2-6. The Megdovas river flows in the depths of the Agrafa valleys. Photo: Dimitris Geronikos.

Image 2-7. Herd of goats in a small meadow above Lake Kremaston. Photo: Dimitris Geronikos.

Image 2-8. Coniferous forest in Agrafa. Photo: Dimitris Geronikos.

Image 2-9. Vinians ecosystem with its anthropogenic elements: Ruins, crops and small herd of goats and sheep. Photo: Dimitris Geronikos.

Image 2-10. The Natura area «ORI AGRAFA - GR2430002». Source:  
<https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=GR2430002>

Image 2-11. The demarcation of the Public forest as absolutely protective, an area of 267 acres. in the location «Prophet Elias». Source: FEK 78/D/10.02.06, Decision 218/06.

Image 2-12. The demarcation of the Public forest as absolutely protective, an area of 610 acres. in the location «Koucourountzos». Source: FEK 80/D/10.02.06, Decision 305/06.

Image 2-13. The demarcation of the Public Forest as absolutely protective, an area of 331 acres in the location "Ailias - Kato Valaora". Source: Government Gazette 80/D/10.02.06, Decision 306/06.

Image 2-14. The demarcation of the Public Forest as absolutely protective, an area of 729 acres in the location "Kerasochori-Kafki". Source: Government Gazette 80/D/10.02.06, Decision 307/06.

Image 2-15. The demarcation of the Public Forest as absolutely protective, an area of 400 acres in the location "Paliochori". Source: Government Gazette 104/D/13.02.06, Decision 245/06.

Image 2-16. The Wildlife Refuges (KAZ) in the mountainous volume of Agrafa. Source: "Wildlife Refuges in Greece", <https://www.geogreece.gr/refuge.php>.

Image 2-17. The single-arched bridge in the Megdova gorge in a photograph from Viniani. It connected eastern with western Evrytania on the route from Karpenisi to Agrinio. It has not been dated, but its construction is estimated to have taken place in the 17th century. Source: NTUA Research Team, 2023.

Image 2-18. Carte de la Grèce à l'échelle de 1/900.000, servant de Tableau d'Assemblage à la Grande Carte en 20 feuilles. Publiée par le Dépôt de la Guerre, Paris 1852.

Image 2-19. Map of the Kingdom of Greece, scale 1/300.000, Royal Imperial Military Geographical Institute, Vienna 1884 (Sheet III). Source: Archive of Lieutenant General S.D. Balodimos.

Image 2-20. The mountainous landscape of Agrafa and the snowy peak of Tymfristos from Viniani. Source: NTUA Research Team, 2023.

Image 2-21. Velouchi (Tymfristos) painted from the heights of Viniani. Designed by Dimitris Megalidis, director of the film

crew at the ELAS General Headquarters from October 1943. It is the first drawing in the Album of the Struggle published three years later. Source: Megalidis Dimitris, Album of Struggle. Drawings-Lithographs-Woodcuts, Athens 1946.

Image 2-22. The only photograph that preserves as an image the aerial "carelli" with the wooden cage and the wire rope for the passage of Megdova was taken by Spyros Meletzis in 1943 during the supply transports of E.L.A.S. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 52.

Image 2-23. The new Bailey-type metal bridge in Megdova. It was built by the army in 1947. At a distance of about 50 meters downstream, the "carelli" -the aerial transport cage- crossed the river. Source: NTUA Research Team, 2023.

Image 3-1. The redefinition of the Historical Site of Viniani (Government Gazette 858/D/2021).

Image 3-2. The Historical Site of Viniani and the monument of the Old School of Viniani in the Archaeological Cadastre. Source: <https://www.arxaiologikoktimatologio.gov.gr/>

Image 3-3. In the aerial photograph of Viniani in 1946, the settlement is visible in its full development (top right), the large perimeter zone of "gardens" and fields, the mountains deforested by vegetation due to logging and grazing. Megdovas bottom right and the two paths that connected Viniani with Livadia, Megdovas and the surrounding residential network Source: A/F W\_BW\_46\_935509\_AΣΠΡΟΜΑΥΡΗ\_7000\_1946/09/07. National Land Registry.

Image 3-4. Viniani. First capital of Free Greece. With this

photograph of 1943-1944, which was taken from Agios Georgios, the image of a living mountain settlement in the last phase of its flowering is preserved in a unique way. The village had more than a hundred houses, five hundred inhabitants, organized neighborhoods, gardens and crops that surround the residential area and go down as low as the stream. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 57.

Image 3-5. At the headquarters of P.E.E.A. After a meeting of executives in the small square in front of the community store of Viniani. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 68.

Image 3-6. In the same area, Miltiadis Porphyrogenis, one of the military leaders of E.L.A.S., speaks at a gathering of partisans. Source: Meletzis S. (2002). With the partisans in the mountains. Athens: Private, p. 69.

Image 3-7. In the excerpt of the aerial photograph of Viniani in 1946, the settlement is visible, burned down (in most buildings there are only walls while the roofs have been destroyed). Also visible is the zone of "gardens" and fields which occupies the entire perimeter of the settlement. Source: A/F W\_BW\_46\_935509\_AΣΠΡΟΜΑΥΡΗ\_7000\_1946/09/07. National Land Registry.

Image 3-8. The Holy Church of the Twelve Apostles in the center of Viniani. Its perimeter is the main public space in the settlement today. Behind the church is the unfinished community store which housed a telephone exchange on the ground floor and

was to house a guesthouse on the first floor. It was built after the war and was not completed. Source: NTUA Research Team, 2023.

Image 3-9. Two-story and semi-two-story buildings in Viniani. Source: NTUA Research Team, 2023.

Image 3-10. "Ahirkapı Timber Factory" factory in Constantinople, catalog of 1906. Wooden standardized decorative elements of roof ends and railings, similar to those found in Viniani. Source: Acar D., 2017.

Image 3-11. Decorative relief; rosette in a doorpost dome and wrought iron "hairpin" connector, anchoring the wooden frame. Source: NTUA Research Team, 2023.

Image 3-12. Wooden railings and hanging stalactites in the shape of a drop on a covered balcony. Source: NTUA Research Team, 2023.

Image 3-13. South side of the I.N. Holy Twelve Apostles. The church was built in 1650-1655 and was probably destroyed in the 19th century to be rebuilt in 1925,

as mentioned in a wall inscription in the enclosure. The bell tower was built in the 18th century, possibly in 1779. Source: NTUA Research Team, 2023.

Image 3-14. West view of the Church of the Holy Twelve Apostles. The church was built in 1650-1655 and was probably destroyed in the 19th century to be rebuilt in 1925, as mentioned in a wall inscription in the enclosure. The bell tower was built in the 18th century, possibly in 1779. Source: NTUA Research Team, 2023.

Image 3-15. The Life-Giving Spring of Viniani. Photo: © Grigoris Antoniou. Source: Municipality of Agrafa.

Image 3-16. The plateau and the "Vial" of Agioi Anargyroi. The plateau was used for gymnastic performances of the school and for outdoor film screenings by the army after the war. Source: NTUA Research Team, 2023.

Image 3-17. South view of the Viniani Elementary School with the busts of the ministers of the "Government of the Mountain". Source: NTUA Research Team, 2023.

Image 3-18. The political and military leadership of the "Government of the Mountain" led by General Stefanos Sarafis, enters the Elementary School of Viniani with an honorary detachment of rebels on May Day 1944. Source: Meletzis S. (2002). *With the rebels in the mountains*. Athens: Private, p. 77.

Image 3-19. The typological plans (plan, south and east view) of the Ministry of Education for the two-class mountain schools. This typology was applied to the school of Viniani. The plans of the state school building program of 1930 were published in the 1938 edition of the Technical Chamber of Greece. Source: TEE (1938). *The new school buildings*, Athens.

Image 3-20. Nikopoulos House. Longitudinal section. Source: Theodorakoglou E. (Arch. Eng.), Mantelos V. (Arch. Eng.), Florou E. (Civ. Eng.), Houma N. (Arch. Eng.) *Restoration Study of Nikopoulos House in Viniani, Evrytania*. MSc "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

Image 3-21. Alataria House and Café-Grocery Store "Switzerland". Axonometric section and views. Source: Karagiannakidou Katerina, (Architect Eng.), Krekoulia Nikolaia, (Archaeologist), Merou Marina, (Architect Eng.), *Building of old cafe, Viniani Evrytania*. MSc "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023

Image 3-22. House of E. Karageorgou. Side view. Source: Vienna Argyri (Agronomist Surveyor Eng.), Zacharaki Anna (Architect Eng.), Kondyli Zoe (Architect Eng.), Sakka Nikoletta (Architect Eng.), Laspia Vasiliki (Agronomist Surveyor Eng.), Spyridaki Olympia (Architect Eng.), Stephani Athena (Architect Eng.), Christou Dimitra (Civil Eng.) *Mansion of E.Karageorgou, Viniani Evrytania*. MSc "Protection of Monuments" NTUA (Postgraduate Thesis), July 2023.

Image 3-23. House "of Swolos". Side view. Source: Verikaki Argyro (Architect Eng.), Barbounaki Maria (Architect Eng.), Tsironi Despoina (Architect Eng.)

Building 15, Viniani settlement of Evrytania. MSc "Monument Protection" NTUA (Postgraduate Thesis), July 2023.

Image 3-24. The ground floor community store and the "Svoulou" House in the central neighborhood of Viniani. Source: NTUA Research Team, 2023.

Image 3-25. "Teacher's" House. Axonometric section and elevations. Source: Gougoula Konstantina, Kalyfommatos Pavlos, Rovilos Panagiotis, Rozani Georgia (Arch. Eng.) The teacher's house in old Viniani. MSc "Monument Protection" NTUA (Postgraduate Thesis), July 2023.

Image 3-26. Two-story building -Karageorgou House- (left), semi-two-story building with external staircase (center), two-story building with external staircase (right - "Teacher's" House). Source: NTUA Research Team, 2023.

Image 3-27. The successive retaining walls on the central plateau with a particularly large height, constitute and hold the core of the settlement. Source: NTUA Research Team, 2023.

Image 3-28. Karageorgou House. The retaining wall at the property boundary is visible, part of which has collapsed. Source: NTUA Research Team, 2023. Plans: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V. Laspia, O. Spyridaki, A. Stephani, D. Christou, postgraduate students of MSc "Monument Protection" NTUA.

Image 3-29. Three-layer masonry. Source: NTUA Research Team, 2023.

Image 3-30. Cornerstones with roughly hewn faces with a carved decorative strip around their perimeter (left), cornerstones with careful carving over the entire surface of their faces (right). In the upper part of the corner there is a decorative motif on a cornerstone as well as the date of construction of the building. Source: NTUA Research Team, 2023.

Image 3-31. Rubble masonry with gray stones and white cornerstones. (area of the "Teacher's" House). Source: NTUA Research Team, 2023.

Image 3-32. Building corners reinforced with a larger surface of stones with carved faces. Source: NTUA Research Team, 2023.

Image 3-33. Semi-carved protruding zones at the level of the floors in two buildings of the settlement. On the left is the Karageorgou House. Source: NTUA Research Team, 2023.

Image 3-34. Wooden partition walls made of bagdati on the floor (left-"Teacher's" House and center-"Svoulou" House) and on the ground floor (right-Nikopoulou House). Source: NTUA Research Team, 2023.

Image 3-35. Nikopoulou House: a) floor plan, b) view from SW and c) view from E. Source: NTUA Research Team, 2023. Plans: E. Theodorakoglou, V. Mantellou, E. Florou, N. Houma, postgraduate students of MSc "Monument Protection" NTUA.

Image 3-36. Formation of lintels and jambs of windows with a low arch above the wooden lintel on the left and only with a wooden lintel in the center and on the right. Source: NTUA Research Team, 2023. Plans: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V.

Laspias, O. Spyridaki, A. Stefani, D. Christou, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-37. Wooden doors of main entrances - Karageorgou House, Swolou House, etc.). Source: NTUA Research Team, 2023. Drawings: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V. Laspias, O. Spyridaki, A. Stefani, D. Christou, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-38. Courtyard doors constructed with jambs of stones with carved faces. The upper part of them in the area of the lintel has been replaced with a reinforced concrete slab. Source: NTUA Research Team, 2023.

Image 3-39. Wooden floors. Source: NTUA Research Team, 2023.

Image 3-40. Roofs of buildings in Viniani. Source: NTUA Research Team, 2023. Drawings: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V. Laspias, O. Spyridaki, A. Stefani, D. Christou, K. Gougoula, P. Kalyfommatis, P. Rovilos, G. Rozani, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-41. Tiles from the Dilaveri potteries of Piraeus and Tsalapata of Volos. Source: NTUA Research Team, 2023.

Image 3-42. Ceilings in the Nikopoulou, Swolou, Karageorgou houses. Source: NTUA Research Team, 2023.

Image 3-43. Wooden balconies with wooden and metal railings. Source: NTUA Research Team, 2023.

Image 3-44. The best-preserved wooden balcony of the "Swolou" House (left). Reinforced concrete balconies that replaced wooden ones. Source: NTUA Research Team, 2023.

Image 3-45. Wooden canopies with wood-carved decorative "drops" which also served as gargoyles, above main entrances. Source: NTUA Research Team, 2023.

Image 3-46. Characteristic image of the stream of the 1980s. The small bridge, the path, and the ground-floor tavern-grill building upstream of the Viniani fountain are visible. This configuration and the building were completely destroyed in the following years, after a flood that caused embankment failure at a higher point. Photo: Kostas Monias.

Image 3-47. Retaining walls with significant damage. Source: NTUA Research Team, 2023.

Image 3-48. Abandoned buildings. Source: NTUA Research Team, 2023.

Image 3-49. Nikopoulou House. Transverse Western wall with cracks due to out-of-plane bending. Source: NTUA Research Team, 2023. Drawings: E. Theodorakoglou, V. Mantelos, E. Florou, N. Houma, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-50. Nikopoulou House. Southern longitudinal wall with cracks due to shear and in-plane bending. Source: NTUA Research Team, 2023. Drawings: E.

Theodorakoglou, V. Mantelos, E. Florou, N. Houma, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-51. Nikopoulos House. Eastern transverse wall with cracks due to out-of-plane bending. Source: NTUA Research Team, 2023. Drawings: E. Theodorakoglou, V. Mantelos, E. Florou, N. Houma, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-52 and Image 3-53. Old Cafe. Cracks due to out-of-plane bending on the transverse walls (left and right respectively). Source: NTUA Research Team, 2023. Drawings: K. Karagiannakidou, N. Krekoukia, M. Merou, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-54. Old Cafe. Cracks due to shear and in-plane bending on the longitudinal wall. Source: NTUA Research Team, 2023. Drawings: K. Karagiannakidou, N. Krekoukia, M. Merou, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-55. House "of the Teacher". Cracks due to out-of-plane bending of the transverse walls. Source: NTUA Research Team, 2023.

Image 3-56. Cracks due to earthquake near the corner of the buildings (Nikopoulos House, House "of the Teacher", Karageorgou House). Source: NTUA Research Team, 2023. Drawings: A. Vienna, A. Zacharaki, Z. Kondyli, N. Sakka, V. Laspia, O. Spyridaki, A. Stephani, D. Christou, postgraduate students of the MSc "Protection of Monuments" NTUA.

Image 3-57. Loss of stones in the parapet of the bridge. Source: NTUA Research Team, 2023.

Image 3-58. The eastern foundation of the bridge's base has been undermined. It is the greatest danger that threatens the monument. Source: NTUA Research Team, 2023.

Image 3-59. Damage to the stone retaining wall of the path leading up to the bridge from the east. Source: NTUA Research Team, 2023.

Image 3-60. The Bailey bridge has reinforced concrete piers. Minimal maintenance of its metal elements is required. Source: NTUA Research Team, 2023.

Image 3-61. The destroyed dedicatory marble plaque is proposed to be restored and placed in its original position. Source: NTUA Research Team, 2023.

Image 4-1. Section of the geological map "Fragkista", scale 1:50,000, with the area of Viniani. Source: Institute of Geological Studies (IGME).

Image 4-2. Distribution of seismic events related to the main earthquake on 5/2/1966 Source: Gupta et al., 1972.

Image 4-3. Areas where the greatest seismic intensities were observed on 5/2/1966. Source: Papazachos & Papazachou, 2003.

Image 4-4. Queen Anne-Marie with earthquake victims in the ruins of Viniani during her visit the day after the disaster. Source: [www.evrytanikospalmos.gr](http://www.evrytanikospalmos.gr).

Image 4-5. The arrival of the royal couple in Viniani in a snapshot

video document. Constantine and Anne-Marie landed by helicopter in a converted field on the eastern slope of the settlement. Source: King Constantine and queen Anne-Marie are in the Evritania area of central Greece, where an earthquake has left 4.000 people homeless, <https://www.britishpathe.com/asset/155013/>.

Image 4-6. Front page of the newspaper Macedonia, issue: 06/02/1966, 1.

Image 5-1. Nea Viniani with its organized city plan, comfortable free public and private spaces, the low construction of two-story houses with roofs and the surrounding forests and agricultural land, is an interesting example of an emergency settlement. Source: Hellenic Cadastre.

Image 5-2. Nea Viniani was built on the Livadia plateau at a distance of 1.8 km southwest of the old settlement. Source: NTUA research team, 2023.

Image 5-3. The Livadia of Viniani in an aerial photograph of August 1960. In the center is the Karoplesitis Inn, burned down in the war by the occupying forces, next to the road, with a large estate around it and a linear array of cypresses.

Image 5-4. The aerial photograph of Livadia Viniani in 1960 shows the plateau (top left) where the settlement of Nea Viniani was built after the earthquakes of 1966. Megdovas (bottom right) and the network of paths. A large part of the slope above the bank of the river is formed with terraces and cultivable estates which follow the contour lines.

Image 5-5. New Viniani Settlement of Evrytania Prefecture. Town Planning Scheme. 01.10.1979.

Image 5-6. Nea Viniani Settlement, General Horizontal Plan. Ministry of Public Works, Ministry of Settlement, Directorate E7. Source: Earthquake Victims Archive of the Technical Works Department of the Region of Central Greece.

Image 5-7. The public space of Nea Viniani was organized with a wide central road, squares and small parks. Source: NTUA research team, 2023.

Image 5-8. Housing typologies in Nea Viniani. Source: Earthquake Victims Archive of the Technical Works Department of the Region of Central Greece.

Image 5-9. Typical two-story buildings of organized construction of Nea Viniani, with a residence on the floor, a covered entrance balcony, an external staircase and a basement or workshop on the ground floor. Source: NTUA research team, 2023.

Image 5-10 and Image 5-11. Square with fountain and monument in Nea Viniani. Source: NTUA research team, 2023.

Image 5-12. The community store and rural medical center of Nea Viniani with the cafe-restaurant. Source: NTUA research team, 2023.

Image 5-13. The closed elementary school of Nea Viniani. Source: NTUA research team, 2023.

Image 5-14. The settlement of Nea Vinians today, scale 1:5,000.  
Background: National Cadastre and Army Geographical Service.  
Processing: NTUA Research Team, 2023.

Image 5-15. Type of two-story house with two rooms and addition of W.C. on the ground floor "katōi", one bedroom, kitchen, bathroom, entrance hall, covered balcony and external staircase. The ground floor, plan and elevations. Nea Vinians. Source: NTUA Research Team, June 2023.

Image 5-16. Type of two-story house with three rooms on the ground floor "katōi", one bedroom, kitchen, bathroom, entrance hall, covered balcony and external staircase. Plan and elevations. Nea Vinians. Source: NTUA Research Team, June 2023.

Image 5-17. The main facade and courtyard of the Viniani Elementary School, built in 1938. In 1986 it was declared a preserved monument by the Ministry of Culture and since 2006 it has been the National Resistance Museum. In the courtyard are the busts of the members of the "Mountain Government". Source: NTUA Research Team, 2023.

Image 5-18. Development of the facade of Viniani. Source: NTUA Research Team, 2023.

Image 5-19. Schematic diagram of the three neighborhoods of Viniani. Background: Google Earth. Processing: NTUA Research Team, 2023.

Image 5-20. Panoramic view of Viniani from Agios Georgios hill. Source: NTUA Research Team, 2023.

Image 5-21. View of Viniani at the confluence of residential units (2, 3). Source: NTUA Research Team, 2023.

Image 5-22. The fountain, where the "kazanaria" once existed in the center of the settlement, and in the foreground behind it the two-story building with the former "Switzerland" cafe on the ground floor and the Alataris family residence on the floor. To the right in the stream there was also a ground-floor tavern-grill which was destroyed in a flood around 1990. Source: NTUA Research Team, 2023.

Image 5-23. Plan and photograph of the fountain. Next to it were the covered community laundries "kazanaria". It was built according to the founder's inscription "ΔΑΠΑΝΑΙΣ Θεοφάνους Νικόπουλου 1915". Design: Apostolis Karkasis, undergraduate student of the School of Architecture NTUA, NTUA Research Team, 2023.

Image 5-24. Western view of the fountain. It was built according to the founder's inscription "ΔΑΠΑΝΑΙΣ Θεοφάνους Νικόπουλου 1915". Design: Apostolis Karkasis, undergraduate student of the School of Architecture NTUA, NTUA Research Team, 2023.

Image 5-25. The buildings that housed the former core of the settlement, above the fountain and next to the I.N. Agion Dodeka Apostolon. On the left are the old community store and headquarters of P.E.E.A. with the small square, the house "of Swolos", in the center and the descent to the fountain from the entrance of the church of Agion Dodeka Apostolon on the right. Behind the courtyard door of the church is the

post-war community store and telephone exchange with the unfinished guesthouse on the floor. Source: NTUA Research Team, 2023.

Image 5-26. View of the settlement unit (2). The lower side of the slope is crossed by the path that connects the village with Agios Georgios, the cemetery and Livadia (Nea Viniani). This was the old entrance to the settlement. Lower down to the stream there were gardens with terraces of family crops of fruits and vegetables. Source: NTUA Research Team, 2023.

## List of tables

Table 1-1. Population development of Viniani 1454-2011. (Sources: Delilbaşı, Melek and Arikan, Muzaffer (2001). Hicri 859 tarihli Suret-i defter-i sancak-i Tirhala / metni bir giris ile nesredenler. Ankara : Türk Tarih Kurumu Basimevi and Mavromyitis, Anargyros-Giannis (2006). Karpenisi 1810-1820. Athens: Panevrytania Union Edition, available at the KNE/EIE Library, Government Gazette of Population Censuses (1879-2011), E.E.T.A.A. S.A. - Hellenic Company of Local Development and Self-Government <https://www.eetaa.gr/metaboles/apografes.html>)

Table 1-2. Evolution of the population in the Municipalities of Agrafa and Karpenisi, 2021-2001. Source: panorama.statistics. gr, «Census Results 2021, bulletin 17.03.2023».

Table 1-3. Level of education in the Municipalities of Karpenisi and Agrafa, comparison with total national figures. Source: panorama.statistics. gr.

Table 1-4. Main occupation in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr.

Table 1-5. Period of construction of houses in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr.

Table 1-6. Use of houses in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr.

Table 1-7. Composite index of housing conditions in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr.

Table 1-8. Gross value added by sector in the Evrytania Prefecture in 2020. The high size in the sector «Real estate management» probably has relation to income from renting real estate. Source: ELSTAT, Gross Value Added by Sector <https://www.statistics.gr/el/statistics/-/publication/SEL45/->.

Table 1-9. Distribution of the area of Evrytania by basic categories of use/coverage, 2000. Source: ELSTAT, Distribution of the Area of Greece by Basic Categories of Land Cover/Use / 2000 by Region and Prefecture <https://www.statistics.gr/el/statistics/-/publication/SPG51/->.

Table 1-10. Accommodation in the Municipality of Agrafa. Data source: Agrafa Municipality website, 2023, <https://agrafa.gr/>. Processing, distance measurement via google maps: NTUA research team, 2023.

Table 1-11. Accommodation for rent via Airbnb in the Municipality of Agrafa. Data source: Airbnb platform, <https://www.airbnb.gr/>. Processing, distance measurement via google maps: NTUA research team, 2023.

Table 1-12. Public education structures in the Regional Unit of Evrytania. Data sources: Directorates of Primary (data 2022-2023) and Secondary

Education of Evrytania (2013-2014). Processing, measuring distances via google maps: NTUA research team, 2023.

Table 1-13. Health Structures and Primary Health Care Structures in Regional Unit of Evrytania. Data source: Ministry of Health, Primary Health Care, 2022. Processing, measuring distances via google maps: NTUA research team, 2023.

Table 2-1. Population of the Municipality of Agrafa by Municipal and Local Unit and their distance from Kerasochori. Source: «2021 Census Results, bulletin 17.03.2023». Processing, measuring distances via google maps: NTUA research team, 2023.

Table 2-2. Distance (in kilometers and time) of Viniani from important urban centers. Source: NTUA research team, 2023.

Table 2-3. Vegetation cover in the Municipal Unit of Viniani. Source: Corine, 2018.

Table 4-1. Geometry of the fault. Source: Gupta et al., 1972.

Table 5-1. Condition of the buildings of Viniani by neighborhood. Source: NTUA research team, 2023.

Table 5-2. Distribution of the uses of the buildings of Viniani by neighborhood, before the abandonment of the settlement (1966). Source: NTUA research team, 2023.

Table 5-3. Distribution of the buildings of Viniani with respect to their construction period by neighborhood. Source: NTUA research team, 2023.

Table 5-4. Distribution of the buildings of Viniani with respect to the number of floors per neighborhood. Source: NTUA research team, 2023.

Table 5-8. Pathology damages of the buildings of Viniani by neighborhood. Source: NTUA research team, 2023.

Table 5-9. Subsidence of the buildings of Viniani by neighborhood. Source: NTUA research team, 2023.

## List of graphs

Graph 1-1. Age distribution in the Municipality of Agrafa by number of residents, 2011. Source: panorama.statistics. gr, Processing: NTUA research team, 2023.

Graph 1-2. Level of education in the Municipalities of Karpenisi and Agrafa, comparison with total national figures. Source: panorama.statistics. gr, Processing: NTUA research team, 2023.

Graph 1-3. Main occupation in the Municipalities of Karpenisi and Agrafa, comparison with total national figures. Source: panorama.statistics. gr, Processing: NTUA research team, 2023.

Graph 1-4. Construction period of houses in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr, Processing: NTUA research team, 2023.

Graph 1-5. Composite housing conditions index in the Municipalities of Karpenisi and Agrafa compared to total national figures. Source: panorama.statistics. gr.

Graph 1-6. GDP evolution of Evrytania Prefecture, 2001-2020. Source: ELSTAT, Gross domestic product by region and prefecture (Provisional Data) (2000 - 2020) <https://www.statistics.gr/el/statistics/-/publication/SEL48/->.

Graph 2-1. Land cover percentages in the forest map of Viniani Municipal Unit

Graph 5-1. Condition of the buildings of Viniani per neighborhood, percentage of the total. Source: NTUA research team, 2023.

Graph 5-2. Distribution of the uses of the buildings of Viniani before the abandonment of the settlement (1966). Source: NTUA research team, 2023.

Graph 5-3. Construction period of the buildings of Viniani per neighborhood, percentage of the total. Source: NTUA research team, 2023.

Graph 5-4. Number of floors of the buildings of Viniani per neighborhood, percentage of the total. Source: NTUA research team, 2023.

## List of maps

Map 1-1. The hill of Agios Georgios. Background: National Cadastre and Army Geographical Service. Processing: NTUA Research Team, 2023.

Map 1-2. Schematic representation of the time distance of the old settlement of Viniani from the settlements of the Municipality of Agrafa that have accommodation. The sizes of the circles of the settlements correspond to their population size and the sizes of their names correspond to the number of accommodations. The circles correspond to the time distances of 30, 60 and 90 minutes, respectively. Source: NTUA Research Team, 2023.

Map 1-3. Schematic representation of the time distance of Viniani from the settlements of P.E. Evrytania that have health structures. The sizes of the circles of the settlements correspond to their population size and the sizes of their names correspond to the level of the health structure. The circles correspond to the time distances of 30, 60 and 90 minutes, respectively. Source: NTUA Research Team, 2023.

Map 2-1. General Map of the municipalities. The Municipal Unit of Viniani in Agrafa. Source: E.E.T.A.A.

Map 2-2. Altitude map of the Municipal Unit of Viniani. This is a predominantly mountainous area with altitudes ranging from 300 m in the Megdova zone in the east and exceeding 1,000 m in the north. Source: Corine, 2018.

Map 2-3. Slope map of the Municipal Unit of Viniani. Large parts of the area have particularly large slopes which exceed 30%. This also contributes to the problem of landslides. Source: Corine, 2018.

Map 2-4. Road network of the Municipal Unit of Viniani. The provincial roads (yellow) and the forest roads (green) are distinguished

Map 2-5. Schematic representation of the time distance and centralities in the Municipality of Agrafa with the center (starting point) Kerasochori. The sizes of the circles and the names of the settlements correspond to their population size. The circles correspond to the time distances of 30, 60 and 90 minutes, respectively. Source: NTUA Research Team, 2023.

Map 2-6. The remote location of Agrafa and the Viniani area in relation to the international, national and regional axes. Source: NTUA Research Team, 2023.

Map 2-7. Schematic representation of the time distance of Viniani from important urban centers. The sizes of the circles and the names of the cities correspond to their population size. The circles correspond to the time distances of 1, 2, 3, and 4 hours, respectively. The nearest urban center is Karpenisi, one hour away. Lamia and Agrinio are about two hours away, Patras and Ioannina three hours, Larissa three and a half and Athens four hours by car. There is also a railway connection to Athens via Lamia

(Lianokladi) which corresponds approximately to the road connection times. Source: NTUA Research Team, 2023.

Map 2-8. The main points of cultural and historical interest on the route of the European Path E4 in Central Greece. Processing: NTUA Research Team, 2023.

Map 2-9. Vegetation cover in the Vinians Municipal Unit. Source: Corine, 2018.

Map 2-10. Orientation reports in the Vinians Municipal Unit. Source: Corine, 2018.

Map 2-11. Approved Forest Map of the Vinians Municipal Unit (decision 926/D'/01.12.2022 [Ratification of the forest map of the Evrytania Regional Unit]).

Map 5-1. Uses of the buildings of Vinians before the abandonment of the settlement (1966). Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Agr. Surveying Engineers, postgraduate students of the MSc "Protection of Monuments". On-site recordings: Haris Vraka, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Straga, Maria Christodoulou, undergraduate students of the School of Architecture Eng. NTUA.

Map 5-2. Condition of the buildings of Vinians. Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Agr. Surveying Engineers, postgraduate students of the MSc "Protection of Monuments". On-site recordings: Haris Vraka, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Straga, Maria Christodoulou, undergraduate students of the School of Architecture Eng. NTUA.

Map 5-3. Number of floors of the buildings of Vinians. Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Agr. Surveying Engineers, postgraduate students of the MSc "Protection of Monuments". On-site recordings: Haris Vraka, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Straga, Maria Christodoulou, undergraduate students of the School of Architecture Eng. NTUA.

Map 5-4. Construction period of the buildings of Vinians. Processing: NTUA Research Team, 2023. Geographic Information System: Argyri Vienna, Vasiliki Laspia, Agr. Surveying Engineers, postgraduate students of the MSc "Protection of Monuments". On-site recordings: Haris Vraka, Apostolis Karkasis, Athina Kourkoulou, Haris Lysikatos, Kalli Bourcha, Zoe Rizaki, Nota Straga, Maria Christodoulou, undergraduate students of the School of Architecture Eng. NTUA.

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