



Rural System: A key Factor in Sustainable Land Development, A Comparison between Italy (Inzago) and Iran (Bastam)

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Abstract. The present article is a summary of a one-hundred-page undergraduate thesis which examines the different methods for identifying and studying a rural system. One of the most practical analyses is the matching of two or more samples. During this several-month-long project, the cities of Inzago (Italy) and Bastam (Iran) were studied. Since during the early investigations, some similarities in aspects such as rural heritage, lifestyle, and great potential for sustainable development were found between the two samples, the major phase of research, hence, determining the research methodology was discussed. Ultimately, the final research structure was developed with the assistance of the supervising professor (Ms. Agustini). By matching the two samples, the authors have tried to provide useful strategies for sustainable rural development which is considered as one of the major cultural and economic weights for all nations.

Keywords: Rural System, cognition, Methodology, Protection, Valuation, Sustainable Development, Planning, Webpage

1. INTRODUCTION

Today, the rural territory, disregarded in urban planning laws for many years, is viewed as a valuable context for testing and implementing modern planning policies. It can help in fulfilling national and, if necessary, international demands. More importantly, it can present spatial characteristics in an informed way so that the historical roots and regional capacities can be used in formulating a policy aimed at bringing about sustainable development which aside from its economic, natural and cultural values has the ability to develop new land identities. Despite the recent globalization efforts, soil exploitation and vast socio-economic changes, rural space has reinforced the strategic and complex concept of transfer of resources, knowledge and essential life quality processes. New rural development policies add multifunction demand to agriculture. In addition to its inherent economic characteristics, such demand reveals and reinforces the social and ecological importance of agriculture. As a result, the role of rural land has expanded from a simple place for basic production with its own inherent goals to a system derived from various activities aimed at providing services to support human beings. That's why we refer to it as a system. The rural system is consisted of a number of sub-systems. Each sub-system has different needs and characteristics. Agricultural production activities and other sections' relevant activities coexist with the land maintenance and natural resources valuation requirements. Recognizing the importance and value of the land system shows how features of soil, water and vegetation can affect production progress and determine environmental and land forms.

2. OBJECTIVES AND METHODOLOGY

When rural system is integrated into government's land policies and offers a key factor in the sustainable development process, understanding its nature and monitoring its changes both

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become priority and therefore, should not be ignored. In other words, understanding the components of a rural system and its proactive approaches and requirements is quite necessary. Having this objective in mind and with the assistance of Prof. Agustini, the researchers decided to use a research method based on rural construction and agricultural-forest land units. This analysis requires a through understanding of the rural system structure and begins with the most basic components and resources (personnel, towns, soil, water, vegetation, and villages). This way, the rural proprietary and historical heritage can be estimated and the components in need of valuation and maintenance (belonging to the rural heritage) can be identified. Afterwards, the potentials and weaknesses of the basic system were identified and the consequences of urbanization including soil erosion were estimated. Finally, the results will be used to define the appropriate corrective or compensatory measures.

The method was first used in Inzago a town located in the Province of Milan in the Lombardy region, Italy. The thesis was aimed at finding whether such methodology could be generalized for use in identifying and analyzing other geographically near or far cases such as Iran or not. In fact, the researchers wanted to make sure that whether this methodology can be suitably developed and expanded in future or not. Thus, it was decided that a trip to Iran should be organized in order to complete the relevant investigations. Research began in spring 2014 and it took 10 days to complete the required fieldwork in Iran. One of the major problems that slowed down the research progress was lack of printed or digital material. The field work mostly involved investigating the lands and having close contact with farmers and public and private organizations' officials. Search for information continued even after the trip and some important data were collected after the completion of the analysis. This was accomplished with the assistance of an exterior coordinator, Dr. Faraj Fardoost at the University of Shahroud. Thus, two different samples were analyzed and compared; Inzago in Northern Italy and Bastam in Iran (Fig. 2). These two cities are completely different in terms of economy, land development and structure, management, planning tools and social and cultural profile. However, they both have a complete rural system. They are alive and full of resources even when they face threats; a potential which should not be ignored because it can play a decisive and significant role in maintaining environmental heritage and implementing sustainable development in the region.

Italy (Inzago)



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Iran (Bastam)



Figure 1. The geographical location of cities under study: Italy (Inzago) and Iran (Bastam).

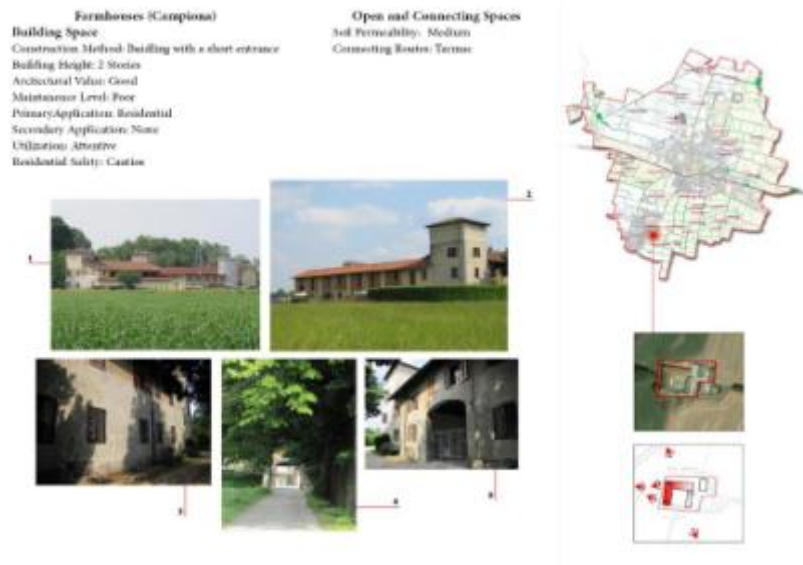
The research is divided into three parts (Fig. 3):

Figure 2. Overall Project Structure.

The first part deals with the Italian case (Inzago).

After the initial framing, the aforementioned methodology is applied in order to define the rural scenario. Thus, policies and problems are examined according to the region's governmental

policies and the success rate of the project's sustainable development tools are measured and evaluated.



The components of agricultural outlook in Inzago: Farmhouses in wheat, barely, and corn fields (May, 2013)

In the second part, Bastam's rural system was also examined within a land framework. Bastam is located in the north of Iran. A process similar to the one implemented in the first part was applied in order to investigate the details and to determine the potentials and critical points. Thus, significant information was collected for the future planning.

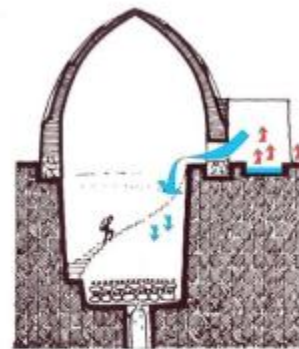
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Atlas of Bastam's rural heritage water artifacts (March, 2014)



Saeedi Yakhchal (Natural Refrigerator)

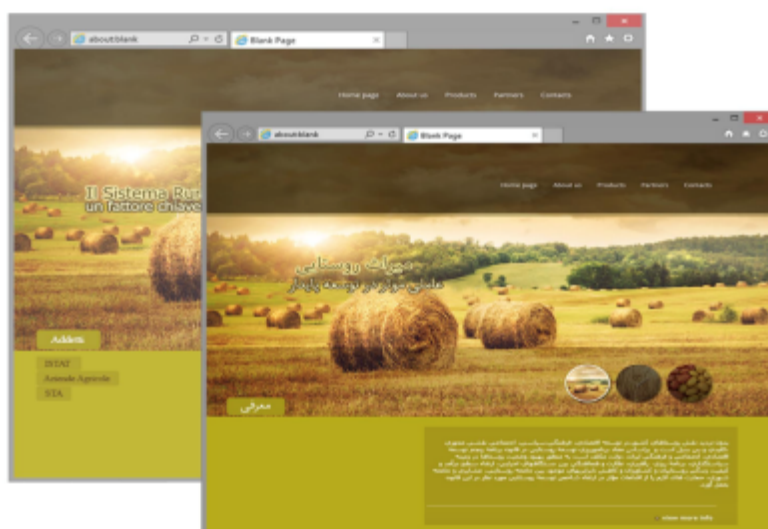


At the bottom, there was a hole for collecting melted ice allowing the maintenance of temperature during cold desert nights. The compartment was often linked to a Qanat. In Summers, its temperature was lowered by the wind flowing through a cone-shaped structure.

The third or final part begins with the comparison of the two samples. Identifying the common and homogenous points allows us to determine whether the chosen methodology is applicable to the Iranian case or not and if so, under what conditions. Additionally, it makes it possible to find

mutual solutions and proper measures and includes rural system in the planning perspective of an adequate government. Designing a website is the first suggestion. The main objective of such a website is to provide information on the issue as the first step towards change is information provision. Thus, increasing the data and information regarding agricultural lands is essential for identifying and advancing protective measures.

The main idea is to use rapid and complete information tools in order to implement the environmental and historical-architectural identities on the web. The webpage also includes various suggestions, tips, and users' questions and answers. These items are put in a section called the frequently asked questions and are aimed at developing individuals who are able to create rural systems that have the potential for sustainable development. The project mainly seeks to promote future, deepen the relevant knowledge and exchange experience and methodology between the two countries. Consequently, the accurate mechanisms for exchange of skills and learning processes between the two countries become operational.



3. FREQUENTLY ASKED QUESTIONS

What is a rural system?

According to the law 12/2005 (art 8, 10, 15, 18), rural system is defined as an environment outside urban territories. However, this definition is not accurate. Rural system is a complicated element including jungles, farms, irrigation canals, agricultural complexes, towns, satellite townships, wild forests, and the routes allowing travel between these places.

What is a village?

According to the European Law on villages adopted on 20th of October, 2000 in the city of Florence, Village is defined as follows: An area identified on all land defined by its own people with characteristics originating from natural/human parameters and influenced by the relationships of such parameters. According to the law L'art. 131, comma 1 del DLgs 42/04 (Cultural Property and Roads Law), the following definition is suggested: village is a specific area on a land with characteristics originating from nature, human history and the links between these two elements.

What is rural heritage?

According to a relevant section in CEMAT (Council of Europe Conference of Ministers Responsible for Special/Regional Planning) guide, rural heritage consists of material and nonmaterial elements of a region representing the historical relationships of members of a society with their land.

What is ISTAT and what are its roles?

ISTAT (The National Institute of Statistics) is a state research institute which conducts research and investigation in different fields. Since 1926, it has been majorly assigned to provide official statistic reports and services to the country and its citizens. As of 1989, ISTAT guides, coordinates, technically supports and internally prepares national statistical systems. Since then, SISTAN (The National Statistical System) operates in full independence and is closely linked with academic and scientific institutions. ISTAT plays a key national role in the following cases: conducting population censuses, producing statistics relevant the production sector (industrial, agricultural, etc.), carrying out research on household sampling (lifestyle, consumption, labor, health, free time, etc.), and conducting macroeconomic research (economic problems, market pulse, etc.). The collected information is valuable for many organizations and individuals within different professions.

What are the responsibilities of Department of Natural Resources of the Islamic republic of Iran?

Continuous and inclusive protection of national and natural resources, forests, protected pastures, forest reserves using ground and air vehicles, provision and distribution of wireless and telecommunication hardware and equipment and information used in violation prevention, fire control, and training safety officers and agents, and coordinating in order to draw the attention of law enforcement and judicial forces encouraging them to cooperate in national and natural resources protection and engage other authorities in this process.

4. CONCLUSION

The project reflects the numerous values and potentials of the rural system including several practical benefits that involve the whole land and the harvesting process. The gradual growth of globalizations and urbanization and the increase in soil exploitation and erosion has placed much more importance on the maintenance and protection of agricultural-forest systems. Serious and deep land changes during the recent years prove that we are now more knowledgeable and aware of such systems. The key words are as follows: “«Knowledge for decision-making”. We should start with the concepts of knowledge and learning in order to develop appropriate planning and major decision-making methods and create adequate context for the implementation of projects. The rural system plays a critical role in sustainable development. However, achieving sustainable development requires adequate protection and maintenance of planning and decision-making phases and thorough understanding of its nature and structure.

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