

26TH – 28TH NOVEMBER 2019 – DELFT

LDE HERITAGE CONFERENCE

on Heritage and the Sustainable Development Goals

PROCEEDINGS

Editors

Uta Pottgiesser Sandra Fatoric Carola Hein Erik de Maaker Ana Pereira Roders

NOVEMBER 26TH - 28TH DELFT

LDE CONFERENCE

The International LDE Heritage Conference 2019 on Heritage and Sustainable Development Goals (SDGs) took place from 26 to 28 November 2019 at TU Delft, in the Netherlands. The conference examined the theories, methodologies and practices of heritage and SDGs. The conference was organized in collaboration with the TU Delft, the LDE Center for Global Heritage and Development (CGHD), heritage researchers at the three partner universities of Leiden, Delft and Rotterdam and with other consortium and international partners.

Publisher

TU Delft Open TU Delft / Faculty of Architecture and the Built Environment Julianalaan 134, 2628 BL Delft, The Netherlands

Editors

Uta Pottgiesser Sandra Fatoric Carola Hein Erik de Maaker Ana Pereira Roders

Editorial team

Nienke Blaauw, TU Delft Margot Hols, TU Delft Karen Knols, Studio Lampro Annemijn Kuiper, TU Delft Uta Pottgiesser, TU Delft

Design & layout

Nienke Blaauw, TU Delft Vero Crickx, Sirene Ontwerpers Franklin van der Hoeven, TU Delft

©2020 TU Delft Open ISBN 978-94-6366-356-4 CC by 4.0

Contents

007 Preface

909 Scientific Committee

011 Keynote Lectures

Mike Turner, Ana Tostoes, Randall F. Mason, Giulio Boccaletti, Amareswar Galla, Ege Yildirim, Susan Macdonald

021 SESSION 1 | Time: Evolution and Dynamics

Carola Hein, TU Delft (session chair), Ignacio Galan Fernandez, Thomi Kordonouri, Ege Yildirim, Ozgun Ozcakir, Szu-Ling Lin, Caroline D'Souza

107 SESSION 2 | Roles: Tasks and Influences of Stakeholders

Ana Pereira Roders (session chair), Jovan Ivanovski, Fatma Gül Özturk, Mahda Foroughi

SESSION 3 | Disciplines: Capacities and Limitations

Erik de Maaker (session chair), Diamantino Raposinho, Teresa Cunha Ferreira, Sebnem Hoskara

SESSION 4 | Place: Local Reality vs Global Ambitions

Koosje Spitz (session chair), Dwirahmi Suryandari, Gerdy Verschuure, Ahmed Moustafai

SESSION 5 | Heritage and Well-being

Azadeh Arjomand Kermani (session chair), Andy Graham, María Teresa Pérez Cano, Sebnem Hoskara, Jingyu Li, Abeer Shaher Abu Raed

281 SESSION 6 | Heritage, Production and Consumption

Uta Pottgiesser (session chair), Christian Ost, Leo Oorschot, Nadia Pintossi, Deniz Ikiz Kaya, Camelia Chivaran, Yousef Daneshvar, Kalliopi Fouseki, Joana Gonçalves

369 SESSION 7 | Heritage and the Natural Resource Bases

Sandra Fatorić (session chair), Suzanne Loen, Jean-Paul Corten, Frederica Marulo, Francesca Vigotti

429 SESSION 8 | Heritage, Governance Institutions and Means of Implementation

Charlotte van Emstede (session chair), Ana Tarrafa Pereira da Silva, Christine Kousa, Liza Wing Man Kam, Maria Jesus Gonzalez-Diaz

SESSION 9 | Heritage, SDGs and the next Generation

Jean-Paul Corten (session chair), Hielkje Zijlstra, Jeffrey MacDonald, Ana Ivanovska Deskova, Ilaria Rosetti



511 ROUNDTABLES

513 Roundtable I: Water and Heritage

Kaiyi Zhu, Cheh-Shyh Ting, Szu-Ling Lin, Carola Hein, Tino Mager

517 Roundtable II: Heritage and Environment

Maurits Ertsen

521 Roundtable III: Climate Change Adaptation of Cultural Heritage

Gül Aktürk, Sandra Fatorić

525 Roundtable IV: Heritage, Digitalization and Sustainability

Nan Bai, Ana Pereira Roders, Jean Paul Corten

Roundtable V: Disaster, Rebuilding, Memorials and Heritage Narratives Related to Natural Disasters

John Hanna, Lucija Ažman Momirski, Sabina Tanović

8533 Roundtable VI: Exploring Heritage as Culture: Disciplines, Theories, Method

Ilaria Rosetti. Silvia Naldini. Erik de Maaker

837 Roundtable VII: Time and Unlisted Heritage

Hedieh Arfa, Uta Pottgiesser

541 Roundtable VIII: Changing Religious Built Heritage

Joana Goncalvez, Nicholas Clarke, Alexander de Ridder

545 Workshops

Workshop I: Heritage Impact Assessment (HIA)

Mara de Groot, Ana Pereira Roders

Workshop II: Rising damp in buildings: a digital tool support for diagnosis and decision-making

Barbara Lubelli

Workshop III: Monument Diagnosis and Conservation System (MDCS): An interactive Support Tool

Silvia Naldini, Wido Quist

549 Workshop IV: Historic Concrete and Conservation Approaches

Wido Quist, Gabriel Pardo Redondo

550 Workshop V: Landscape Biography

Karin Stadhouders, Edwin Raap

551 Workshop VI: From Living Labs to Community of Practice

Goncalo Canto Moniz, Américo Mateus



Beyond Economic Indicators: Rural landscapes as heritage: community-centred preservation and management methodologies towards sustainability inclusive perspectives

Francesca Vigotti

Politecnico di Milano, Department of Architecture and Urban Studies; Fondazione Fratelli Confalonieri, Italy, Francesca.vigotti@polimi.it

Abstract

Rural landscapes as heritage might represent an ideal "demonstration laboratory" to monitor the progress towards the achievement of Sustainable Development Goals, being a complex system encompassing the different dimensions of heritage. In this context, the research considers actions to support social inclusion and sustainable development in Italian sites listed in the National Register of Historical Rural Landscapes and set in the so-called Inner areas, through a systematization and a cross analysis of the available information as expressed by projects and strategies in the Italian context. In analysing a peculiar case study of rural landscape as heritage in Italy, the paper outlines the main critical aspects in achieving sustainability in a broader perspective, setting the importance of communities' well-being to foster preservation and development. In conclusion, the contribution proposes some first considerations on complementary indicators and actions that might be addressed to facilitate monitoring processes in the context of rural landscapes heritage sites.

Keywords

 $Rural\ landscapes,\ heritage,\ indicators,\ communities,\ sustainability$

1 INTRODUCTION

Preservation and management actions specifically focussed on rural landscapes as heritage have been recently defined and implemented. The application of these programs has posed newer challenges, particularly in the regards of monitoring processes and of the assessment of sustainability. In the framework of the Sustainable Development Goals, targets that might address rural landscape as heritage are not limited within the solely 11.4, but comprise also targets 2.3, 2.4 and a consistent range of the ones as defined in goal 15, together with the indicators as specified under each target.

Rural landscapes as heritage represent, in fact, the continuous relationship between cultural and natural dynamics, being an association of complex social, cultural and biological systems. In the context of the rising consideration of rural sites as heritage, a wider and inclusive perspective in monitoring conservation and management of heritage as stated under target 11.4 should be fostered, which must not be reduced solely to economic indicators. Attention should therefore be set over supplementary indicators, considering for instance parameters related to social sustainability.

In this direction, UNESCO is developing a set of thematic indicators. The recent publication *Culture* | 2030 indicators outlines indicators expressed according to the diverse domains in which culture could play a central role in addressing Sustainable Development Goals targets. Being management and preservation of rural heritage sites the subject of this research, the domain "Environment and resilience" is considered relevant for the purpose of this paper: the dimension addresses how "the integration of intangible cultural heritage and traditional knowledge into policies and strategies encourages sustainable development, through sustainable food production, resilient agriculture, and the conservation of natural resources" (UNESCO, 2019).

Given these premises, rural heritage sites have the potential to represent "demonstration laboratories" to understand if the strategies and actions for their management and conservation are moving towards objectives as expressed by SDGs.

On the international level, efforts in order to promote the preservation and management of agricultural heritage are already set towards sustainability in a broader perspective. Since 2002 the Food and Agriculture Organization (FAO) has developed the *Globally Important Agricultural Heritage Systems* (GIAHS) program. The initiative relies on the fact that rural heritage can bring benefit, if correctly managed, to the populations who are its custodians. The program integrates preservation and sustainable development within the sites, considering them as a system in which every component is crucial for the conservation of the whole and its balance in time.

As of January 2020, the GIAHS program recognizes 59 sites, set in 5 regions and 22 countries¹. China is the country that registers the major number of sites over the total, counting 15 presences (FAO, January 2020a).

Along with the development of GIAHS initiative on the international level, attention over preservation of rural heritage sites has risen on the national level in different countries, leading to the urge to structure local programs specifically designed to safeguard rural heritage. Besides being actively involved in the GIAHS program since its launch, China has started in 2012 the *China-Nationally Important Agricultural Heritage Systems* (China-NIAHS) initiative, a safeguard program of agricultural heritage on the national level. Between 2013 and 2017, 91 sites have been listed as eligible to become China-NIAHS (Min & Zhang, 2019).

A similar approach to the identification and classification of rural heritage sites has been developed in Italy. The *National Catalogue of historical rural landscapes* was firstly published in 2010 (Agnoletti, 2010), as the result of an extensive research conducted by diverse Italian universities (Agnoletti et al., 2019). The catalogue identifies 123 rural landscapes distributed on the Italian territory. As a further step towards preservation of this heritage, the *National Observatory of Rural Landscape* (*Osservatorio Nazionale del Paesaggio Rurale*) and the *National Register of Historical Rural Landscapes* (*Registro Nazionale dei Paesaggio Rurali Storici*) were both established in 2012 (D.M. n. 17070 – Osservatorio Nazionale del Paesaggio Rurale).

The National Observatory collects applications from stakeholders on the national territory. The Ministry of Agriculture then lists in the National Register traditional rural landscapes of historical interest and related traditional practices among the candidacies received. As of China-NIAHS, sites listed in the National Register of Historical Rural Landscapes in Italy are eligible for candidacy to become GIAHS.

The 59 GIAHS sites are distributed in regions as follows: 3 sites in Africa; 36 sites in Asia and the Pacific; 7 sites in Europe and Central Asia; 4 sites in Latin America and the Caribbean; 9 sites in Near East and North Africa (FAO, January 2020b).

In time, the 123 rural landscapes as identified in the *National Catalogue* have been further classified by applying, on each site, a set of indicators that returns a "general" picture of analysed areas. These criteria include: the total area of the site identified, expressed in HA; the Geographical location (North; Center; South and Islands); the altitude band; the surface area subjected to landscape and monumental constraints as of Italian national law expressed in percentage; the surface area of the site as protected on the national and international level, expressed in percentage; the "type of landscape" defined by homogeneous clusters of landscape (ISMEA & Mipaaf, 2018).

As of January 2020, 13 historical rural landscapes are listed in the *National Register*, together with two traditional agricultural practices: the *Transumanza* and the *Piantata Veneta* (Rete Rurale Nazionale, 2019).

2 RESEARCH METHODOLOGY

2.1 ANALYSIS OF INDICATORS

The research methodology involved the cross analysis of indicators already identified in different databases, relying on accessible data (e.g. Italian National Institute of Statistics - ISTAT), in order to recognise the most suitable ones within the purpose of the study in the Italian context.

The indicators and database chosen are considered significant in the context of rural landscape heritage conservation, management and sustainable development.

In the Italian context, the monitoring process for the implementation of the SDGs targets is assessed not only on the national level, but also on the regional one, depending on the availability of data. Considering the dimension of heritage, the global indicator 11.4.1 is declined on the national level by comprising also biodiversity and landscape heritage (ISTAT, 2019a).

Another step in this direction is the development of the BES project (*Benessere Equo e Sostenibile* – Equitable and Sustainable Well-being), started in 2010 by the Italian National Institute of Statistics – ISTAT and CNEL (ISTAT, 2019b). The initiative follows the need to assess the quality of life going beyond the data ascribable to the economic dimension. Thus, a set of indicators that might be complementary to the economic ones was developed within the project. The indicators are divided in 12 domains, aimed to assess well-being under a completer and more general framework²; among them, the domain of landscape and cultural heritage was included, given the relevance of both themes in Italy (ISTAT, 2012).

The analysis on the different domains aims also to guide policies, by raising awareness concerning critical aspects and strengths of each sphere considered on the national level (ISTAT, 2019c). Concerning the monitoring indicators as proposed within the domain of landscape and cultural heritage, the role of rural landscape is recognized as central. Specifically, rural landscape is defined in the indicators as follows:

The domains are identified as follows: health, education and training; work and life balance; economic well-being; social relationships; politics and institutions; security; subjective well-being; landscape and cultural heritage; environment; innovation, research and creativity; quality of services (ISTAT, 2012: https://www.istat.it/it/files//2018/04/12-domains-scientific-commission. pdf).

- Erosion of rural space from urban sprawl;
- Erosion of rural space from abandonment;
- Spread of rural tourism facilities (ISTAT, 2012; ISTAT, 2019d).
 The general domains and the indicators on rural landscape as defined in the BES project recall another strategy developed in Italy: the National Strategy for Inner Areas (Strategia Nazionale per le

Aree Interne - SNAI), particularly in addressing the phenomena of abandonment of rural areas.

SNAI is a pioneering example of cohesion strategy within the European Union: the strategy structures an innovative polycentric reading of the Italian territory (Cersosimo et al., 2018). The mapping of the so-called *Inner Areas* starts from the analysis of three services essential to citizenship: education, health and mobility; municipalities that have these services are classified as "poles", while others are categorized by travel times (20'- 40'; 40'-75';> 75). If a municipality is set at more than 20' from a "pole", it is classified as *Inner Area* (Carrosio & Faccini, 2018).

It is estimated that *Inner Areas* constitute about the 60% of the Italian territory, representing the 52% of the municipalities and almost ¼ of the Italian population (Carrosio & Faccini, 2018).

As of January 2020, the SNAI has recognized 72 *project areas*, scattered over the entire national territory. Each project area is identified after an assessment of specific domains, such as: demography; primary services to population (healthcare, education), accessibility, economy, digital divide, agriculture, heritage and tourism (Agenzia per la Coesione Territoriale, 2018).

The data analysed through SNAI indicators provide a general picture of the state of the arts of each project area examined, by including also variations of the criteria surveyed in a diachronic reading. The criteria are expressed by comparing each investigated project area with the corresponding information of the reference region and of the Italian territory. Thus, the analysis of SNAI data and indicators returns also the social and development dimensions of territories, and might represent a roadmap to assess the accomplishment of SDGs targets (Barca et al., 2018).

Starting from these premises, it is clear that rural landscape should be considered among the main pillars to achieve well-being and, at the same time, to assess the progress towards the SDGs in the Italian context.

2.2 THE SELECTION OF CASE STUDIES

Completed the review on indicators, strategies and data, the selection of case studies was conducted accordingly, so as to better address the identification of complementary indicators within the scope of the research. The intersection of different data, in the context of Italian historical rural landscapes, might help to recognise the presence of sites set in marginal areas, which could be threatened by dynamics related to land abandonment and de-population.

To do so, data referring to the localization and general information of the 123 sites listed in the *National Catalogue of historical rural landscapes* were associated with the ones of SNAI *project-areas*. Concerning the sites of the *National Catalogue*, the data were collected from the documents as provided by the National Rural Network Italian program (ISMEA & MIPAAF, 2018) and integrated with information retrieved from the description of sites as of the *National Catalogue*, which presented

localization information (municipalities covered, also partially, by the presence of rural landscape heritage sites). As of SNAI, the research in this phase taken into account the classification of municipalities as *Inner Areas* and the data referred to *project-areas*.

In order to better define the localization of sites within municipalities limits, and to update the data retrieved concerning to date administrative boundaries, information were further processed through a GIS map³. The GIS file uses as source also the open maps created in late 2018 by ISMEA, representing 80 of the 123 sites of the *National Catalogue* (ISMEA, 2018). The application of these criteria resulted in 28 sites within the *National Catalogue* of historical rural landscapes, which are also set in one of the 72 project-areas as defined by SNAI.

A further process of the data returns which sites, among the 28 identified, are also recognized in the *National Register of Historical Rural Landscapes*. The sites matching the criteria of selection are two: the *Mandrolisai Vineyards*, in Sardinia (nominated in 2018) and the *Sylvo-Pastoral landscape of Moscheta*, in Tuscany (nominated in 2016). This additional filter for the selection of case studies was necessary, in order to understand which of the sites were subjected to the actions of each program. This variation has allowed to further investigate the sites potentials and vulnerabilities, creating the base to identify more specific indicators to assess the progresses in the areas.

Besides the ones mentioned, it was felt the need to apply other criteria related to heritage in the selection of case studies. Information related to the incidence of heritage identified or in charge by national and supra-national heritage protection agencies were therefore added, including: sites managed by the Fondo Ambiente Italiano (FAI – National Trust for Italy); World Heritage Sites (World Heritage Center, UNESCO), and specifically on rural landscapes as heritage, the presence of listed Globally Important Agricultural Heritage Systems (GIAHS, FAO).

This last adjustment was considered in order to verify, on the sites examined, the possible simultaneous application of different heritage management and conservation programs. In the context of the two rural landscapes sites as identified, none of them matched with the last criteria added.

3 FIRST OUTCOMES OF THE RESEARCH AND DISCUSSION

As the identification of the potential case studies is concluded, referring to those sites both listed in the *National Register of Historical Rural Landscapes* and part of a project-area as defined by SNAI, specific reflections over the *Mandrolisai Vineyards* in Sardinia will be explored.

The site was listed in the *National Register of Historical Rural Landscapes* in 2018, following the integration of the candidacy dossier in the same year (Dettori et al., 2018). The site is comprised in the municipalities of Atzara and Sorgono, which are encompassed in the SNAI project-area "Gennargentu-Mandrolisai": the strategy concerning this area was adopted in the early months of 2019 (Comunità Montana Gennargentu-Mandrolisai, 2019).

By analysing the candidacy dossier as presented for the recognition in the *National Register of Historical Rural Landscapes*, the main vulnerabilities to the preservation, effective management

Some municipalities were subjected to fusion with others and do not represent a singular administrative unit anymore, which might generate criticalities in the process of data elaboration.

and sustainable development of the site are related to dynamics of population degrowth and ageing, together with the progressive abandonment of rural land (Dettori et al., 2018). In relation with the wider territory considered in the SNAI "Gennargentu – Mandrolisai" area, in which the rural landscape heritage site is set, the examination of the dossier recognizes the importance of rural areas to foster the general development: the presence of vineyards, of rural tourism facilities and of manifestation related to intangible heritage related to cultivations emerge as potentialities.

As already evidenced in the candidacy dossier for the *National Register of Historical Rural Landscapes*, the strategy individuates as critical aspects affecting the area the ageing of population, abandonment of the territory and several issues related to primary services to citizens (SNAI, 2019). If compared with the domains of BES project as previously outlined, seems evident that the well-being of population is crucially intertwined with the preservation of rural landscape as heritage and its sustainable development as a system.

In order to invert the process that might lead to the collapse of the system, the strategy sets the community at the centre of the actions proposed, by strengthening the existing services to citizens, reinforcing the rural activities towards inclusion policies, connecting the system of widespread heritage and developing specific education programs that involve the awareness of the territory.

As the *Mandrolisai* site was listed in the *National Register* just two years ago and basing on the fact that *Gennargentu-Mandrolisai* strategy has been approved recently, it is still early to evaluate if the actions put in place will be effective to strength sustainability of this area in a broader conception.

The investigation of this specific case study in the Italian context returns some considerations not only in the regards of the management of rural landscapes as heritage, but also concerning the need to set the community inhabiting these sites in a central role to achieve sustainability.

Besides the indicators as expressed in the strategies and projects analysed, other information might be useful to recognise the inclusion of communities and the assessment of SDGs targets. As seen in the case study examined, the importance of intangible heritage, education and awareness of the territory, the presence of programs for the transmission of traditional ecologic knowledge and of rural productions recognized at the national and international level might contribute to the well-being of communities and, as a consequence, contrast abandonment and loss of traditional rural landscapes and practices. Among the complementary indicators might be included: the incidence of intangible heritage in the examined area; the number of programs specifically dedicated to traditional ecologic knowledge; the presence of training and capacity building activities related to rural heritage.

Given the recent recognition of sites in the *National Register* and the possible lack of updated information, in addition to a diachronic monitoring of trends made on available data, a capillary field work on the territory can integrate assessment in shorter times than to those of the censuses, based on interviews, focus groups and checklists. Such activities might also provide information necessary for *in itinere* adjustments of the actions aimed at the protection of such a complex heritage, when needed.

Although these considerations are specific to the Italian context, having analysed strategies put in place on the national level, this investigation might be useful in similar international cases.

About monitoring of the progress towards the achievement of SDGs, the paper suggests how a cross reading among existing indicators as structured by different strategies and projects might be beneficial to better guide policies and actions. The choice to analyse historical rural landscape sites

in the *inner areas* to assess sustainability is given also by the already well-defined set of indicators accessible for the areas examined.

The recognition of rural landscapes as heritage, both on the national and international level, represents a first step towards investigation, safeguard and possible valorisation strategies of a system encompassing many components, set at risk of disappearance for various reasons. In this perspective, the association of complementary indicators besides the ones referring to the economic domain can provide a first framework to structure more precise indications and actions towards the protection of this heritage.

Rural landscape heritage sites might represent a model for testing the effectiveness of policies implemented towards the achievement of Sustainable Development Goals, given the heterogeneity of their components; to accomplish this objective, well-being and inclusion of communities should be set as focal points in policies, so as to contrast and prevent the possible abandonment and loss of this heritage-system.

Acknowledgment

This paper is an output of the post-doctoral research the Author is conducting at Politecnico di Milano – DAStU with the support of Fondazione Fratelli Confalonieri (Milan).

References

Agenzia per la Coesione Territoriale (2018) Indicatori per la "Diagnosi aperta" delle aree-progetto: indicatori utilizzati durante l'istruttoria. Available: http://old2018.agenziacoesione.gov.it/it/arint/OpenAreeInterne/index.html

Agnoletti, M. (2010). Paesaggi rurali storici. Per un catalogo Nazionale (Historical rural landscapes. For a National Register), Laterza, Roma-Bari

Agnoletti, M. et al. (2019). Monitoring rural landscapes. The case of Italy. Sustainability 11(21), pp. 1-19

Barca F., Carrosio, G., Lucatelli, S. (2018) Le aree interne da luogo di disuguaglianza a opportunità per il Paese: teoria, dati, politica, in Paolazzi, L., Gargiulo, T., Sylos Labini, M. (eds.) Le sostenibili carte dell'Italia, Marsilio: Venice, pp. 167-186

Carrosio, G., Faccini, A. (2018) Le mappe della cittadinanza nelle aree interne, in De Rossi, A. (ed.) Riabitare l'Italia. Le aree interne tra abbandoni e riconquiste, Donzelli editore, Roma, pp. 51-78.

Cersosimo, D., Ferrara, A.R., Nisticò, R. (2018) L'Italia dei pieni e dei vuoti, in De Rossi, A. (ed.) Riabitare l'Italia. Le aree interne tra abbandoni e riconquiste, Donzelli editore, Roma, pp. 21-50.

Comunità Montana Gennargentu-Mandrolisai (February 2019). SNAI. Approvata la Strategia d'Area del Gennargentu Mandrolisai. Available: https://www.gennargentumandrolisai.it/ente/notizie/36

Decreto del Ministro n. 17070 del 19 novembre 2012 - Osservatorio Nazionale del Paesaggio Rurale.

Available: https://www.politicheagricole.it/flex/cm/pages/ServeAttachment.php/L/IT/D/9%252Ff%252F8%252FD. a 17c677602d6 caacde 19/P/BLOB % 3AID % 3D5832/E/pdf

Dettori, S. et al. (August 2018). Paesaggio policolturale del Mandrolisai: i vigneti di Atzara e Sorgono: Dossier di candidature al Registro Nazionale dei Paesaggi Rurali Storici.

 $A vailable: https://www.reterurale.it/downloads/Dossier_Policoltura Atzara-Sorgono_Agosto.zip and the property of the proper$

FAO (January 2020a). GIAHS Around the World. Asia and the Pacific.

Available: http://www.fao.org/giahs/giahsaroundtheworld/designated-sites/asia-and-the-pacific/en/

FAO (January 2020b). GIAHS Designated Sites Around the World.

Available: http://www.fao.org/giahs/giahsaroundtheworld/designated-sites/en/

ISMEA (December 2018) La valorizzazione dei paesaggi rurali del catalogo nazionale dei paesaggi rurali storici: schede sintetiche dei paesaggi rurali per la creazione delle mappe attraverso l'app Google MyMaps.

A vailable: https://www.reterurale.it/downloads/documenti/schedepaes aggiomy maps.pdf and the property of th

ISMEA and Mipaaf (2018). Linee guida per la certificazione dei paesaggi rurali storici: la metodologia seguita e gli indicatori

ISTAT (2012). Description of the Bes domains and indicators selected by the Scientific Commission and launched on 22 June 2012.

Available: https://www.istat.it/it/files//2018/04/12-domains-scientific-commission.pdf

ISTAT (December 2019a). Italian data for UN-SDGs, Sustainable Development Goals of the 2030 Agenda, Goal11: Make cities and human settlements inclusive, safe, resilient and sustainable.

Available: https://www.istat.it/storage/SDGs/SDG_11_Italy.pdf

ISTAT (July 2019b). Well-Being and Sustainability.

Available: https://www.istat.it/en/well-being-and-sustainability

ISTAT (2019c). Rapporto Bes 2019 | Il benessere equo e sostenibile in Italia.

Available: https://www.istat.it/it/files/2019/12/Bes_2019.pdf

ISTAT (December 2019d). The measurement of Well-Being.

A vailable: https://www.istat.it/en/well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-measurement-of-well-being-and-sustainability/the-well-being-and-sust

Min, Q. and Zhang, B. (2019) Research Progress in the Conservation and Development of China-Nationally Important Agricultural Heritage Systems (China-NIAHS). Sustainability 12(1)

Rete Rurale Nazionale (January 2020). Elenco dei siti iscritti al Registro.

Available:https://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/17423

SNAI (February 2019). Strategia Area Gennargentu Mandrolisai. Una vita di qualità nel cuore della Sardegna.

Available:https://www.gennargentumandrolisai.it/download/eyJpdil6IndiWlI0RzRaNGFBeHA0aU9tMEc4MFE9PSIsInZhbHVII-joiMGpmYnpRazNMaGYybWpyQ1lUVVhoYkhCNXdFbmR6WkNQMHp2YXpSbUF2Yz0iLCJtYWMi0iIwZWQxZjkzNjU50DRkZGNi-Y2E4YzAwYjE3MjVmNjhmYmQxZTdmNWZlNjFiY2M5MDcwNTJmNWVl0TAyZmYwY2FhIn0=/strategia_d_area_approvata.pdf UNESCO (2019). Culture | 2030 indicators, UNESCO, Paris







Erasmus University Rotterdam

