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CONTENT

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"Translocal" narration of environmental issues through graphic novels: two Italian case studies

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Abstract: The prevalence of mainstream media as source of information on environmental issues and their tendency to draw global attention around a few major, dramatic environmental disasters (melting of glaciers in the Arctic, desertification and drought in the African continent, deforestation of the Amazon, oil pollution in the oceans, etc.), is creating in less conative readers/audience a lack of awareness of the damages suffered in the local territorial systems to which they belong and low willingness to collective action. Therefore, crossing and comparing the highest possible number of sources of information, preferring those that can generate a proactive response to events and themes concerning environmental sustainability and highlight deep local/global interconnections, is essential to attain an independent, critical, and responsible narration. After shortly illustrating some theoretical and methodological considerations developed in the areas of popular geopolitics, anti-geopolitics and ecocriticism, this paper reviews two Italian graphic novels providing a bottom-up representation of local environmental issues: the first one deals with the eutrophication of the Orbetello Lagoon (Tuscan Maremma); the second one concerns the collapse of the tailings dams of the Prestavèl fluorite mines located in Val di Stava (Trentino Alto Adige), a disaster that caused the death of 268 people. We will try to point out how the authors, who are totally "embedded" in their works, provide a "translocal" narration, condemning effectively and immediately the environmental damages in the territorial context analysed and, at the same time, highlighting the interconnections between such site-specific events and global sustainability, inviting readers to adopt an holistic view of the nature-culture relationship, beyond the anthropocentric and instrumentalist production model which considers biosphere a mere tool to satisfy the contingent needs of contemporary society.

Key words: popular geopolitics, anti-geopolitics, ecocriticism, graphic novel, Italian environmental issues, Orbetello Lagoon, Val di Stava.

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1. INTRODUCTION

According to the report "Special Eurobarometer 501 – Attitudes of European Citizens towards the Environment", based on the direct interview of a sample of 27,498 units conducted from 6 to 19 December 2019 in the 28 Member States [1], environmental protection is a major public concern for practically all the EU citizens (94% of respondents). To the question asking them to pick the four environmental issues which they considered the most important, the respondents asked focusing their attention on climate change (53%), the growing amount of waste (46%), air pollution (46%) and marine pollution (40%). Among the ways of tackling environmental problems in the new millennium, Italian respondents (1.020

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units)[2] considered less important both the way we consume (IT: 28%; EU average: 33%) and the way we produce and trade (28%; 31%) compared to the whole European sample. With reference to the behaviours adopted in the last six months (multiple choice question), individual actions, such as separating waste for recycling (IT: 60%; EU average: 66%) or avoiding single-use plastic goods (37%; 45%), clearly prevail compared to proactive cooperation within the local community: in particular, only 1/5th of Italian respondents stated to have spoken to others about environmental issues. Luckily, this attitude is more commonly found at a European level (32%). The unwillingness to "act locally" by joining a demonstration, attending a workshop or taking part in an activity (UE average: 7%; IT: 9%) seems to show that the majority of interviewed citizens perceive environmental issues "around their backyard" as something "not related to themselves" or even ignore them.

Such behaviour is certainly influenced by the narrative power of mainstream media, that represent the main channel to spread news on such themes: actually, television news was the most frequent answer given to the survey question which asked to select up to three sources of information out of a list of eight, accounting 66% of total answers, a percentage still higher (75%) in the Italian sub-group of respondents. On average, one third of EU citizens (38%) keeps informed on the Internet (compared to 1/4th of the Italians); whereas, respondents who get informed through local and regional newspapers account for less than one fifth (EU average: 13%; IT: 15%); equally moderate is the face-to-face information sharing through family friends, neighbours or colleagues (EU average: 16%; IT: 14%) or through social networks (EU average: 20%; IT: 14%).

Unfortunately, in order to capture the audience attention, given the short time available for each headline in the daily news format, the top-down communication of TV news and, in general, of mainstream media, tends to give global visibility to a few major, dramatic "worldwide" environmental disasters (melting of glaciers in the Arctic, desertification and drought in the African continent, deforestation of the Amazon, oil pollution in the oceans, etc.), often described as catastrophes arisen from cruel nature who rages against humans, failing to mention the complex host of underlying anthropic causes. Though mainstream media are periodically concerned with the sub-regions of the "Bel Paese" brought to their knees by unsustainable economic activities (such as steel production in Taranto or illegal landfills of the so called "Land of Fires" in Campania), cameras and microphones are turned off and move quickly away in frantic search of new, unknown environmental horrors to catch the audience attention. Therefore, for less conative readers/audience, flash news on these local issues (eventually occurring in close proximity of one's own lived space!), from time to timeemphatically reported or, on the contrary, intentionally obscured by mainstreammedia, mayend up being classed as a mere humming noise accompanying the repetitive acts of daily life. By passively accepting those contents, we lose the ability to decode them, and to understand the seriousness of the problems "around our backyard", their deep interconnection with global environmental issues and, above all, the need for urgent action on our part as members of the local community.

In the light of the above, it becomes evident that in order to "resist" the systematic biases produced by mainstream media [3] and achieve one's own independent, critical and responsible narration it is advisable to cross and compare the highest possible number of sources, preferring those that can generate a proactive response to events and themes concerning environmental sustainability. This is why geographers are devoting greater attention to the narrative value of popular cultural instruments, including comics, that, rather than a language, are considered a real "ecosystem" - [4](pp. 1–3) - by several artists whose goal is to create *a world, a place* instead of *telling a story,* as highlighted by Horrocks [5]. Through such "world-building" process and, sometimes even placing themselves «within their works, metanarratively or as a character» [6](p. 16), those authors, that can be considered "embedded", are able to take advantage of the whole iconic and textual expressive potential of comics. To explain the "world-building" process, Horrocks makes reference to Magic Boy, a nice character created by Kochalka [7,8] who, waking up after a nightmare on comics epistemology, in a strip explains "the horrible truth about comics" (that is indeed the very title of the comics): «Comics are a way of creating a universe and populating it with characters using a secret code that works in the simplest and most direct way possible to enter the "reader's" brain» [8](p. 133). Here Kochalka uses the word *readers* in quotes - as we will do in this paper - almost trying to highlight the difference between comics and literature: actually, as Tosti observes, too often we are led to believe that the sequential model of "western" writing has to be automatically applied

to comics "reading", «according to the order left-to-right and down that Cohn [9] calls "Z-path"» [10](p. 550). If, on the contrary, we assume that comics create *a world, a place*, then the "reader" has to be considered as an "explorer" and comics, rightly defined by Cristante as an "amphibian" [11](p. 85) art, could be compared to a kind of swamp «in which we get lost and sink ,and, while sinking, we look around in search of any possible escape routes» [10](p. 557). In particular, in the works of "embedded" comics artists it seems that «the physical world fades away as we step into this new reality. We are alive in a living world» [8](p. 131). A powerful synergy is therefore created between the comics artist and the reader, and as McCloud says «every act committed to paper by the comics artist is aided and abetted by a silent accomplice, an equal partner in crime known as the reader» [12](p. 68).

Moreover, on the same wavelength, Sarayeva [13] states that, despite suffering the stigma of being considered an entertainment product, comics are instead conceived with the aim to meet the needs and the sensibilities of diverse audiences; this is in itself a relevant advantage in order to explain and interpret universal topics, and, consequently, help the "reader" in building its own perception. This could, at a superficial reading, suggest a sort of process of indoctrination by the artist towards the reader; actually, it would be rather a pedagogical process, based on the assumption that the perceptual world of the artist differs so profoundly from the one of its "readers", but at the same time comics and graphic novels act as a medium to make clear, processable and assimilable a specific representation of an issue of collective interest. Consequently, the "reader" cannot avoid asking himself/herself questions, putting himself/herself into the game, "committing himself/herself". The strength of comics, compared to other expressive-literary forms, would be in the evocative potential of images. In this regard, Sarayeva always states [13](p. 7)

> «Images in entertainment comics can convey a certain amount of emotion and depth. However, the interpretation of these images may differ due to the different imaginative natures of the readers. These comics stitch together readers' experiences and authors' perception of the real world. Thus, while reading, the reader has to "translate" the narrative and create their own visual image in their minds eye».

In the comics varied universe, of particular interest are graphic novels, that is post-modern comics presenting «a publishing scale allowing them to compete on the book market (thus disengaging them from traditional media, first of all from the European comic-book or magazine)» [14](p. 17) and that apparently connects them to a more thoughtful consumption [15](e-book position 2410). They generally have a powerful plot and span from history/biography to autobiography up to graphic journalism, which, in turn, can take the form of the reportage (mainly/solely resulting from the direct observation of the author) or the investigation (consequence of a broad reading/interpretation of indirect testimonies - interviews, quantitative data, bibliographic sources, maps, etc.), thus showing a clear intention to communicate information, positive judgements and/or critics concerning single spatio-temporal contexts and/or the global scenario as a whole.

After shortly illustrating some theoretical and methodological considerations developed in the areas of popular geopolitics, anti-geopolitics and ecocriticism, this paper reviews twoItaliangraphic novels providing a bottom-up representation of local environmental issues: the first one deals with the eutrophication of the Orbetello Lagoon (Tuscan Maremma)[16]; the second one concerns the collapse of the tailings dams of the Prestavèl fluorite mines located in Val di Stava (Trentino Alto Adige), a disaster that caused the death of 268 people [17]. We will try to point out how the authors, who are totally "embedded" in their works, provide a "translocal" narration, condemning effectively and immediately, the environmental damages in the local environment of reference and, at the same time, highlighting the interconnections between such site-specific events and global sustainability, inviting "readers" to adopt an holistic view of the nature-culture relationship, beyond the anthropocentric and instrumentalist production model which considers biosphere a mere tool to satisfy the contingent needs of contemporary society.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

In the field of geographical research, the interest in comics develops within critical geopolitics, whereby each geographic analysis, far from being objective and detached «is the result of a particular point of view, located in a given place, in a precise historical moment, in a certain cultural perspective»

[18](p. 9): geography is not a mere *description,* but a *discursive narration* of the world, «a set of practices producing a meaning that makes the world intelligible to ourselves and the others» [19](p. 322). The meaning of each narration is linked to the reference terminology, the fundamental postulates and, above all, the stereotyped statements that characterise daily life and that, though resulting from a specific reference spatio-temporal context, tend to be considered as an absolute truth, to accept and use without any interpretation [20](p. 739).

Within critical geopolitics, popular geopolitics [21–24] identifies media as a preferred field of creation for such narrations: actually, popular culture, also through "politically correct" forms of expression not expressly aimed at propaganda, conveys with high "im-mediacy" [25] (p. 177) multiple and often conflicting discursive meanings able to become a reference model for the myths, symbols, values, historical events (in short, the identity) of whole "socio-spatial classes" (local, national or supranational) [26]. These forms of expression «apparently harmless» [19](p. 324), such as movies, TV series, advertising images, music, etc., may well include comics and their heroes: this is what the geographer Dittmer made with the comic-books of Captain America [27,28], also compared to those of the Watchmen miniseries [29] and with those of Captain Canuck [30] and Captain Britain [31].

Besides popular geopolitics, "anti-geopolitics" [32](pp. 286–289) deals with the analysis of the depictions conveyed by the instruments of generalist culture and the new media that are able to amplify the "resistance" to hegemonic narrations produced by mainstream media. In this regard, Pepicelli underlines that the graphic novel expressive medium «is particularly appropriate for such purpose, as a narrative instrument able to bring out stories and memories of "other individuals", marginalised by hegemonic narrations» [33](p. 237). In particular, Favaro also states that «the comics technique and its linguistic potential allow it to work as a time machine creating collective historical consciousness», fostering «an ethical and pre-political participation to social issues in the readers' community» [34](pp. 149–151).

The success and the international awards obtained by works as "Palestine" by Joe Sacco [35] and "Persepolis" by Marjane Satrapi [36], which can be considered, without any doubt, as real "world building" graphic novels [5] show that autobiographical/biographical stories, reportages and investigative reports using the framework of comics on "challenging" spatio-temporal contexts (war, social decline, migration, environmental disasters, etc.) are widely appreciated by the public; therefore, it can be said that the graphic novel formula seems to offer the artist and his "silent accomplices" [12] (p. 68) two kinds of approach: a therapeutic approach to overcome the sense of loss «in a quick and restless transition world» [14](p. 21), and a «self-reflective approach to the significant events of recent history» (ibid.). Brancato defines such type of graphic novel as «a sort of passionate historiography» (ibid.), a definition we would combine with that of "sensitive geography" provided by Frémont [37] and that we consider consistent since the authors of such works are unknowingly geographers, exploring the world not only through the sight but the touch, taste, smell and hearing as well, awakening also the senses of their "silent accomplices" that happen to *inhabit* their creative works.

Therefore, in view of the above, graphic novels "world-building" [5] may be considered as a qualified geographic source of data and information on multiple (present and past) spatio-temporal contexts, a real «pivotal element of those complex symbolic systems connected to the relationship between man and environment» [38](p. 10), without forgetting, however, that these are what Bianchi would call "private geographies", i.e. «documents of individuals not officially qualified as scholars of the territory», whose narrations «are therefore filtered by the individual experience they are living and not specifically determined by a scientific code» [39](p. 15). As a result, the information contained in graphic novels should be duly compared with and integrated by field research and the utilization of other indirect quantitative and qualitative observation sources.

In Italy, within the Associazione dei Geografi Italiani (A.Ge.I.), the working group "Media and Geography" (established in 2009 and coordinated by Elena dell'Agnese and later by Fabio Amato) started a fruitful line of research on the relationship between geography and popular cultural instruments [40-43]; further, in 2017 it established the sub-group "Comics and Geography", a specific project on comics; shared documents and reference materials are available for consultation at the link of the "Media and Geography" group on A.Ge.I. website [44], where it is possible to monitor the progress of the ongoing activities of the sub-group that already organised several discussion and in-depth seminars, thanks to

which the interest around the theme is increasing and the first contributions from Italian geographers start to appear [45–51].

3. METHODOLOGY OF RESEARCH

This paper forms an integral part of a line of research started by the authors together with other colleagues of the University of Salento (Fabio Pollice and Marco Sponziello) and of the University of Bari Aldo Moro (Francesca Rinella) within the above-mentioned A.Ge.I. sub-group "Comics and Geography".

It must be said that, in general, the attention paid to comics in Italy is rather recent; proof of this is the fact that, unlike other European countries (first and foremost, France), there are no surveys aimed at delineating the readers' profiles. However, this does not mean that comics in Italy are not experiencing a period of strong expansion.

Firstly, it could be useful to make an overview of the rich and lively kaleidoscope of small and very small independent publishers - for an in-depth analysis refer to the specific discussions of Tosti [10] (pp. 843–913) and Brandigi [6] (pp. 39–44) - some of which, unfortunately, are out of business (PuntoZero, Rasputin Libri, Coniglio editore, etc.), which started to shift comics from newsstands product to book published in specific series at the end of the '90s. Among the publishers that brought comics into new forms of use, we mention in particular Coconino Press [52], that was established at the beginning of the new millennium in Rome and joined the Fandango Group in 2009 [53]. From the very beginning, their goal was the distribution in bookshops and comics book stores through the launch of easily recognisable series, characterised by titles and formal elements that basically remained unchanged over time, though being highly innovative in contents. In 2004 it was the turn of Tunué [54], based in Latina, which ranges from books of essay on comics to multiple proposals on drawn narrative, in particular concerning books for children. In 2010, Bao Publishing [55] was established in Milan. It ranges across national, European, American, and Japanese comics genres. Their leading author is Zerocalcare (aka Michele Rech), who had his artistic training in the underground and social centre circuit, the most famous comics artist among the Italian general public. It should also be stressed that, over the years, many publishers specialised in comics were acquired by publishing giants - e.g. in 2008, the Rizzoli Group acquired Lizard, a publishing company formed in 1993 by Hugo Pratt [56]- that are progressively increasing the space devoted to comics in their series [57–59]. In 2012, the Fandango Group [53] also acquired BeccoGiallo, a publishing house established in Treviso in 2005 (later moved to Padua), specialised in civil commitment graphic journalism, mainly by authors coming from the Italian underground and self-publication landscape. «Its name is a tribute to the brave anti-fascist satirical magazine "Il Becco Giallo", that in the 1920s used the drawing - together with written journalistic investigation - to criticize and press the Authority; its symbol was a blackbird with its beak always open to shout the truth that in those times they wanted to deny» [60]. In 2005, the Roman publishing house Round Robin [61], whose name makes reference to the mariners' custom, mentioned in Björn Larsson's [62] novel, of signing a petition against their higher-ups creating a ring, so as to fully share the responsibility and not to disclose the initiator, was also established. The metaphor of navigation can be found in all of their ten series, four of which ("Libeccio", "Tortuga", "East River", "Bolina") are dedicated to the graphic novel: in particular, "Bolina" makes reference to boats sailing close hauled, a situation in which «it's harder to achieve a result and it's difficult to handle the ship. Twice the journey and thrice the effort. This means sailing close-hauled. Like the organizations working in social contexts that never give up navigating. Knowing that they will always have to fight against dark forces. In waters that are never easy to navigate, even though they are full of beauty» [61]. Such name, in our opinion, fairly represents the resilience of the comic investigation journalism that can be found in the series.

The analysis of a huge number of graphic novels edited by such publishing companies, which was conducted in past researches [48–50] showed that, in fact, works from "embedded" authors represent a real trip within space/time contexts which are real/dystopic, past/ future, near/far. This consideration pushed usdrawing inspiration by the methodology proposed by Scaramellini for the study of travel literature [63,64], so to outline an evaluation grid for the reading/interpretation of graphic novel, taking into consideration a set of "external" and "internal" elements (called "frame" and "picture") (Table 1).

Table 1. Reading grid for graphic novels.

Categories	**Mode**
"Frame"	
Publisher	Mission, catalogue series, graphic novel publishing series, etc.
Author's biography	Age, place of birth, places of residence, professional background, working experience, political orientation, etc.
Annexes	Presence of: premise, conclusions, events history, bibliographic review, etc.
"Picture"	
Graphic and content style	Realistic or unrealistic nature of the spatio-temporal contexts (iconic/non iconic style)[12](p. 51); graphic technique (use of colour, black and white, etc.; text style, type of balloon; regular/irregular form and size of panels, etc.); terminology, stereotypes, "resistant" messages, etc.
Narration of places	Presence/absence of panels on the narration places; analysis of the symbolic elements mentioned and/or drawn (physical, morphological, hydrographic, vegetal elements, etc.; anthropic components: cultural heritage, economic activities, etc.)

Source: processing by F. Pollice, A. Rinella, F. Rinella, F. Epifani, M. Sponziello.

As far as the "frame" is concerned, we start considering the publisher, gathering the information usually found in the company website, relating to its establishment, mission as well as the title, the purpose and the composition of the series to which the books belong to. Likewise important are the biographical information (generally found on the publisher website or in the blogs of the artists), interviews and reviews of the authors, as well as the pursuit of a direct contact with them, to learn more about their stylistic and content choices. Another "frame" element to analyse is the presence of annexes (premise, final considerations, events history, bibliographical review, etc.) than can also be authored by third parties.

Shifting from the "frame" to the "picture", a stylistic analysis will be carried out, whose aim is not one of critic-artistic nature, but simply to provide basic information, useful for a comparison between the works under analysis and regarding aspects as the use of black and white and/or colour, text style (block, italics, bold, etc.), the type of balloon (shape, outline, presence/absence of tails, etc.) and "closure", the relationship between words and images, the prevalence of realism or, on the contrary, of iconic symbolism.

The content analysis, instead, aims at identifying terminology, stereotypes in each narrative "ecosystem", trying to highlight the sentiments, emotions, feelings, and memories of protagonists. Of course, in our geographic research particularly interesting is the artists' attention on the "setting" (its "where") rather than on the plot, characters and covered themes, that is, the presence of "world-building" process [5].

Usually, graphic novels edited by the publishing companies we already mentioned play the role of real *"rebel" geographies* [48,65] «depicting disadvantaged situations where we can witness the denial of human rights, extreme living conditions, racial and social discrimination (e.g. regarding the elderly and homosexuals), crisis, uprootedness» and, in particular, «environmental crimes, natural disasters» [34](p. 148). For example, in their series we find several "non-fiction" comics concerning Italian environmental issues, such as the Vajont disaster, the chemical pollution of Porto Marghera, the conflicts among steel industry, environment and health in Taranto and between the Val di Susa community and the construction of TAV (high-speed train) [66–69]. There is no shortage of graphic novels dealing with the unsustainability of the contemporary capitalist model [70,71] also dedicated to younger "readers" [72].

In the next paragraph, by using the aforementioned grid, we focus our attention on two graphic novels that can be rightfully considered "embedded" for they possess an important strength: as far as the first novel, on the problem of the eutrophication of Orbetello (Tuscany) arisen in July 2015 [16], both the publishing house Effequ – which inaugurates with this work the first series dedicated to graphic novel - and the author, Stefano Cardoselli, are based in the lagoon location; as for the second one, published by Round Robin and focusing on the collapse of the tailings dams of the Prestavèl fluorite mine occurred on 19 July 1985 [17], the writer Silvia Pallaver and the comics artist Elia Tomaselli both come from Tesero, the small town located in the province of Trento hit by the disaster, where in 2002 the Val di Stava

Foundation, sponsor of the graphic novel and engaged in fostering active memory and environmental education "for" and "with" new generations, was created.

In line with the reflections arising within ecocriticism, a literary research field that gives priority to the analysis of environmental issues [73](p. 27), we also try to answer to the following questions, considered crucial by Buell in the ecocritical analysis of every (not only) literary work [74]: «How does the text represent the interdependence of humans and the environment? Does the text show us a deep environmental context in which humans are limited, constrained, or even marginalised with the deliberate intention of correcting somehow the anthropocentric view? Does the work focus on animal life or depicts humans as a consequence or as victims of the physical world they produced? (p. 6). Further, does the artist «show a connection with the place or, on the contrary, a migration or diasporic attitude?» (p. 7).

In the conclusions, our research aims to underline if the authors could manage to provide "translocal" narrations, i.e. representations «place-sensitive and, at the same time, aware of the necessarily global nature of the contemporary experience, even when such experience is rooted in a given place» [73](p. 33), succeeded in conveying implicit or explicit "resistant" messages against «the anthropocentric-instrumentalist view according to which the human being (especially in western societies) is the centre of interest and value, while nature and other forms of life are simple means for his wellbeing» [75](p. 19).

4. RESULTS

4.1 The eutrophication of the Orbetello Lagoon through the graphic novel "Persival" by Stefano Cardoselli

The volume entitled "L'ecosistema non è acqua. Di lagune, disastri ambientali e futuro" ("You cannot buy the ecosystem. Lagoons, environmental disasters and the future")(196 pages, size 21 x 14 cm)[16] was published in 2016 by the independent publisher Effequ, established in Orbetello (a town of the Tuscan Maremma) in 1995 by Fernando Quatraro, who chose his initials to designate the new business (now based in Florence) because they were the same of his sons Federico and Francesco; the latter is now managing editor. Effequ logo is an egret - a migratory bird who lives in marshy areas - in the act of taking flight. It represents the publisher determination to promote its territory and, at the same time, to publish more far-reaching works, looking further ahead, «without forgetting the waters where they come from» [76]. The volume deals with eutrophication, frequently found in the Orbetello Lagoon - due to urban wastewater discharge until 2005, pollutant emissions of manufacturing activities, drainage of neighbouring lands, etc. - focusing on the extremely serious dystrophic crisis occurred between 15 July and 16 August 2015, also covered by national media. During that month, a persisting heat dome in the Tyrrhenian Sea caused the macroalgae to proliferate, a severe anoxia and in three cases, the death of thousands of fishes, bringing aquaculture to its knees and seriously damaging the bathing activities and the tourist image of Argentario.

The work, representing the first graphic novel of this publisher, belongs to the "Saggi Pop" series, consisting of texts defined by the publisher as «cross-cutting, hybrid, unconventional but authoritative, with the overbearing idea of reinventing previously known coordinates. Because, as everyone knows, each book is a world itself and, in our opinion, each book does not have necessarily to change the world but it has to try, at least» [77]. The narration chosen is certainly remarkable, and combines a scientific essay of the biologist Mauro Lenzi, head of the Ecology Laboratory of Orbetello Pesca Lagunare - which has the exclusive right of fishing in the lagoon by virtue of an agreement with the Orbetello municipality - with a "sci-fi" graphic novel by Stefano Cardoselli, an artist born in Orbetello and very well-known in the world of the American indie comics, thanks to his twenty-years long relationship with Heavy Metal Magazine.

The essay by Mauro Lenzi (pp. 17–68), that in our analysis we consider one of the elements of the "frame" of the graphic novel (see Table 1) is divided into five chapters. The first two chapters provide general information on the effects of climate change on hydrosphere, as well as on the topic of eutrophication of coastal ponds. The third chapter contains the description of the physical aspects of the Orbetello Lagoon and of the activities of environmental management carried out to protect this fragile and vulnerable ecosystem (pumping of water through draining pumps, seaweed harvesting, water quality monitoring, etc.). The fourth chapter focuses on the dystrophic crisis of 2015 and on the decisions and the technical interventions that directly involved the author, implemented to bring together the interests of

the various economic activities and the protection of the lagoon. The fifth chapter underlines the difficulty/impossibility to find solutions to address "upstream" the issue of eutrophication (e.g. by removing the drains of manufacturing activities), leading Mauro Lenzi to state that «if I have to imagine the future of coastal environment, including lagoons and ponds... I cannot think about it in a positive way» [16] (pp. 66–67), adding a dire prediction:

> «We will continue to witness the extinction of many species, we will see the remaining large forests and sea grass beds disappear. We do not tolerate other beings, whether wolves, foxes, bears, pigeons, crows, starlings. Some of them just bother us, soil, cause us economic loss or could hurt us. We are many, we fill all places and there is no space left for the *others.* We will remain surrounded by opportunist species: macroalgae, parietaria, rats, seagulls, cockroaches» (p. 68).

The above statements, only apparently apocalyptic, introduce "Persival" (pp. 75–193), the intense, dystopic graphic novel in black and white by Stefano Cardoselli, set in the Orbetello Lagoon which, 80 years after the dystrophic crisis of 2015, has become a kind of fetid and violent cemetery, «a very hard and dangerous place to live in» (opening panel, p. 71 – Figure 1). The main characters are Ismaele, the warrior, who, for his resemblance to the author could be his alter ego, and his friend/bodyguard Gnè Gnè, the only surviving pink flamingo (Figure 2). Behind the fierce appearance and the foul language, Ismaele hides a noble heart. He deeply and tenderly loves the beautiful Dorotea, daughter of an ugly, ruthless businessman who wants to build a large car park for ten thousand new summer homes, covering the lagoon with super-concrete blasted from futuristic flying cement mixers; further, he has a very strong awareness of his territorial identity, showed for example by the following reflection:

> «that's weird, reality is stinky and violent, but sometimes, when I see the sky, the sun mirrored in this pool of green and smelly water moves me, as if there is still a chance» (p. 96).

After shooting two men that were beating up an unarmed man, Ismaele finds out that he is Arturo Cuorveloce, the last biologist of a mission aiming at bringing back to life the lagoon ecosystem through a mechanic device called Persival - hence the title of the graphic novel - to be positioned in the lagoon, near the Ansedonia ridge, where the corporation of Dorotea's father is located. While dying, Arturo entrust the device to Gnè Gnè and Ismaele, thus the two protagonists begin their journey to Ansedonia, in an unfriendly, fetid landscape, inhabited by extremely dangerous and aggressive giant mosquitoes. They manage to defeat a gang of cannibals thanks to Gnè Gnè's frightening voice that has the power to "smash" their enemies' heads. Later, they join a group of separatist warriors that wish to make the Neghelli district independent from the rest of the lagoon territory fighting against the soldiers of the "New State of the Presidi" that in turn, catch Gnè Gnè and Ismaele, imprisoning them in the Gusman powder magazine, sentencing them to be burnt at the stake. Luckily, once again Gnè Gnè screams prevail on enemies. The two characters, reach at last Ansedonia, where meantime Dorotea, disobeying her father, has diverted the flying cement mixers to save the lagoon: the silent panels at page 179 lead the "readers" to imagine that the young woman has not survived the firefight with her father. Finally, the only survivor of the no-holds-barred fight of Ismaele and the separatist warriors against the gang of parking guys pursuing the concreting of the lagoon, is Gnè Gnè, who, laying Persival in water will succeed to bring the ecosystem back to life (closing panel, p. 193 - Figure 1).

Without focusing on the undeniable artistic value of the panels (free of any predefined grid, fully analogic, powerful and highly cinematic, characterised by the clear prevalence of drawing on text - often limited to simple onomatopoeia without balloon), it is worth underlining how the author's abstract and tendentially iconic style is nevertheless able to keep the realistic nature of various symbolic elements of the lagoon and Orbetello (the Spanish mill and the Podestà Palace - Figure 3 -, the Guzman powder magazine, the Leopoldiana dam, the Ansedonia ridge). This, added to the real toponyms used (the Neghelli district, the golf club in Terra Rossa location, the Argentario pinewood, the Tombolo della Feniglia) and to the historic references (such as the Etruscan ruins on the Ansedonia ridge or the State of the Presidi - a Spanish protectorate dating back to the middle of XVI century, of which Orbetello was the capital), allow insider "readers" to identify immediately their "living space", while outsiders, not knowing the local territorial system at all, are nevertheless able to check the truthfulness of the author's drawings, comparing them with the pictures of the lagoon available on the Internet.

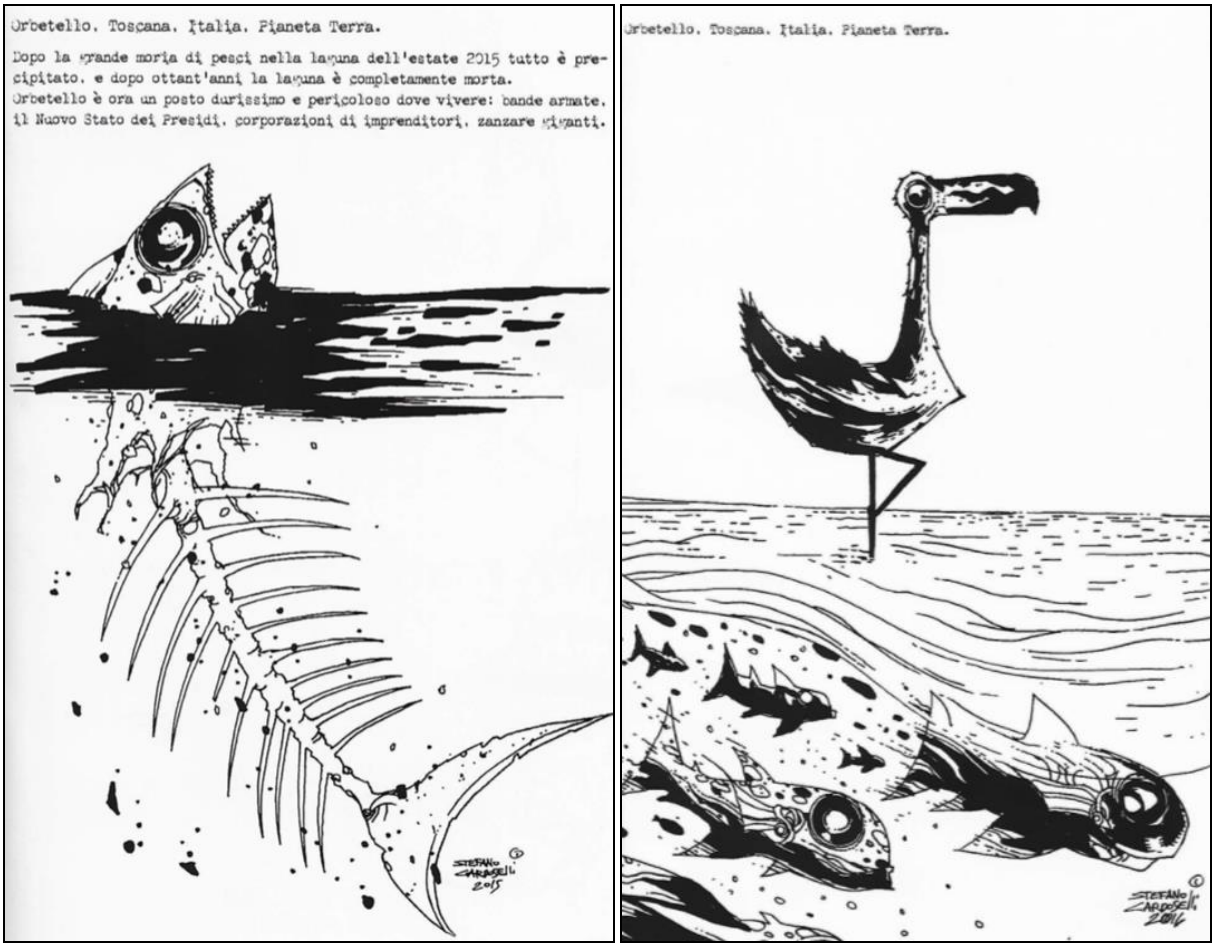

Figure 1. Opening panel [16](p. 71) and closing panel (p. 193) of the graphic novel "Persival" by Stefano Cardoselli.
Source: © 2016 Effequ

Figure 2. The protagonists of the graphic novel "Persival" by Stefano Cardoselli: Ismaele and Gnè Gnè [16](p. 135).
Source: © 2016 Effequ

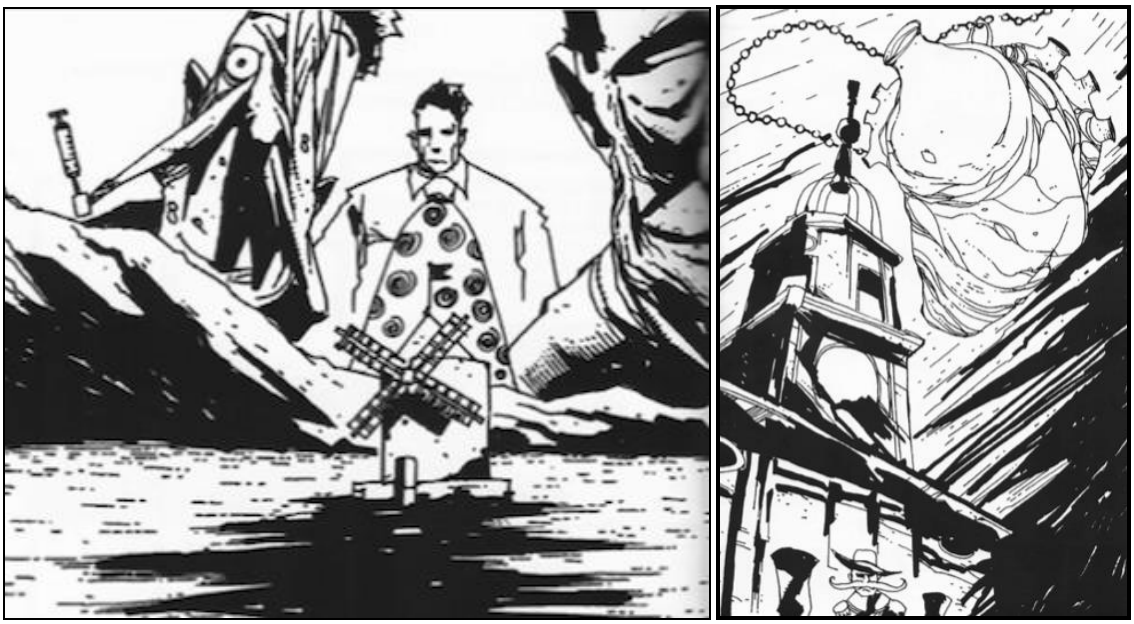

Figure 3. The lagoon landscape elements in the graphic novel "Persival" by Stefano Cardoselli: on the left the Spanish Mill [16](p. 96); on the right the Podestà Palace (p. 141).
Source: © 2016 Effequ

4.2. The disaster of the Prestavèl mines through the graphic novel "L'estate in cui Stava ci venne a cercare" by Silvia Pallaver and Elia Tomaselli

The graphic novel entitled "L'estate in cui Stava ci venne a cercare" [17] ("The summer when Stava came looking for us"), published in 2015 by Round Robin in the "Bolina" series (see § 3), was created by two emerging artists: the writer Silvia Pallaver and the comics artist Elia Tomaselli, respectively born in 1982 and 1983 in Tesero, a location of Val di Stava (Trentino Alto Adige) where, on 19 July 1985, the tailing dams of the Prestavèl fluorite mine collapsed, causing the death of 268 people. The authors belong to a generation that experienced the tragedy through the painful narrations and angry silences of adults that had lived it first-hand. On the thirtieth anniversary of the disaster, thanks to the sponsorship of Val di Stava Foundation, established in 2002 to foster a proactive memory of the disaster as well as a strong path of environmental education "for" and "with" young people, the graphic novel was released. While belonging to fiction, its location, Val di Stava, is absolutely realistic. The graphic novel, all in black and white, having a lean, flat style, mainly iconic for characters and non-iconic for places, opens with a drawing showing a panoramic view of Tesero in 1985 [17] (p. 13 - see Figure 4) and Anna, the main character, a commuting university student, created by Silvia Pallaver and Elia to represent their generation. Anna, while travelling by train from Bologna to Tesero (where she is going to spend her summer holidays with her parents), falls asleep and dreams of herself as a child running near the tailing dams and hearing her mother's voice telling her to stop. After realizing she had missed her stop at Ora, she calls her father asking him to go by car to Bolzano to meet her. During their travel by car from Bolzano to Tesero, passing though Val d'Ega, Anna gets motion sickness on hairpin turns, so they stop in Pozzole, at the foot of the mountain Prestavèl, where the tailing dams were located. The girl feels that her father is uneasy and wishes to hit the road again but cannot understand the reason. In the following days, Anna, who works as a waitress in a hotel to pay her tuition, spends her free time carrying out a real geographic research. She uses direct observation going through the valley with her grandfather (who recounts her the adverse impacts of mining observed in the first half of the 1980s: the fish kill in the Stava river, the traffic of trucks carrying waste material, the harmful dusts on the balconies) and with some friends of her age (all born shortly before 1985, that know little or nothing of the disaster) accompanying her on the Prestavèl, at an altitude of 1,500 meters above sea level, near one of the entrances to the abandoned mines. Afterwards, Anna starts to refer to indirect sources found in the library and, finally, she uses direct interviews stopping to talk with to two old men: Ernesto and Raffaele. The first is a tourist staying at the hotel where Anna works who was in Tesero on 9 July 1985 and to whom she confides, telling him: «I can't

remember anything but the smell. However I don't know if it's autosuggestion. I often think of it in these days, I'd like to ask questions because neither I nor my friends know much» (p. 72). The second one is a townsperson who explains her the fluorite production process, the functioning of the tailing dams and the reasons of their collapse, related to bad management, the lack of effective controls and extreme greed. Anna's research makes her father furious and he asks her in anger:

> «What do you want to talk about, exactly? Tell me! Explain me. Do you want me to talk you about the smell of those days? Of what we saw through our windows? Of all the people taken away by the sludge? [...] What is the difference of knowing the truth? [...] They sold our land and air out, playing with people's lives» (pp. 108–110).

Anna is surprised by such a reaction, apparently irrational, but her grandfather will explain her that her father, a volunteer firefighter, was one of the first rescuers to reach the disaster site (see p. 118 and fig. 4). Anna's mother, instead, agrees to speak with her and tells her daughter that she often took her through the wood in the stroller up to the top of the Prestavèl when she was a child, but always prevented her to go near the dams that she felt were very dangerous (pp. 124–125). At last, Anna's mother words explain the meaning of the dream that opened the graphic novel.

The "frame" of the graphic novel is made of a wide set of annexes that precede (pp. 9–11) and follow (pp. 139–169) it, providing the "reader" many useful information to deepen the knowledge of the origin, the causes and the responsibilities of the disaster. In particular, the appendix containing the photographs coming from the archive of the Val di Stava Foundation allows outsider "readers" to appreciate the highly realistic nature of the landscape elements drawn by Elia Tomaselli, while "insider" users, thanks to the images depicting the places before 1985, immediately after the collapse and nowadays (Figure 4 and Figure 5) as well as the toponyms (Ora, Val d'Ega, Spianez, Pozzole, Passo di Pampeago, Prestavèl, via Molini) may immediately feel "embedded" in the graphic novel.

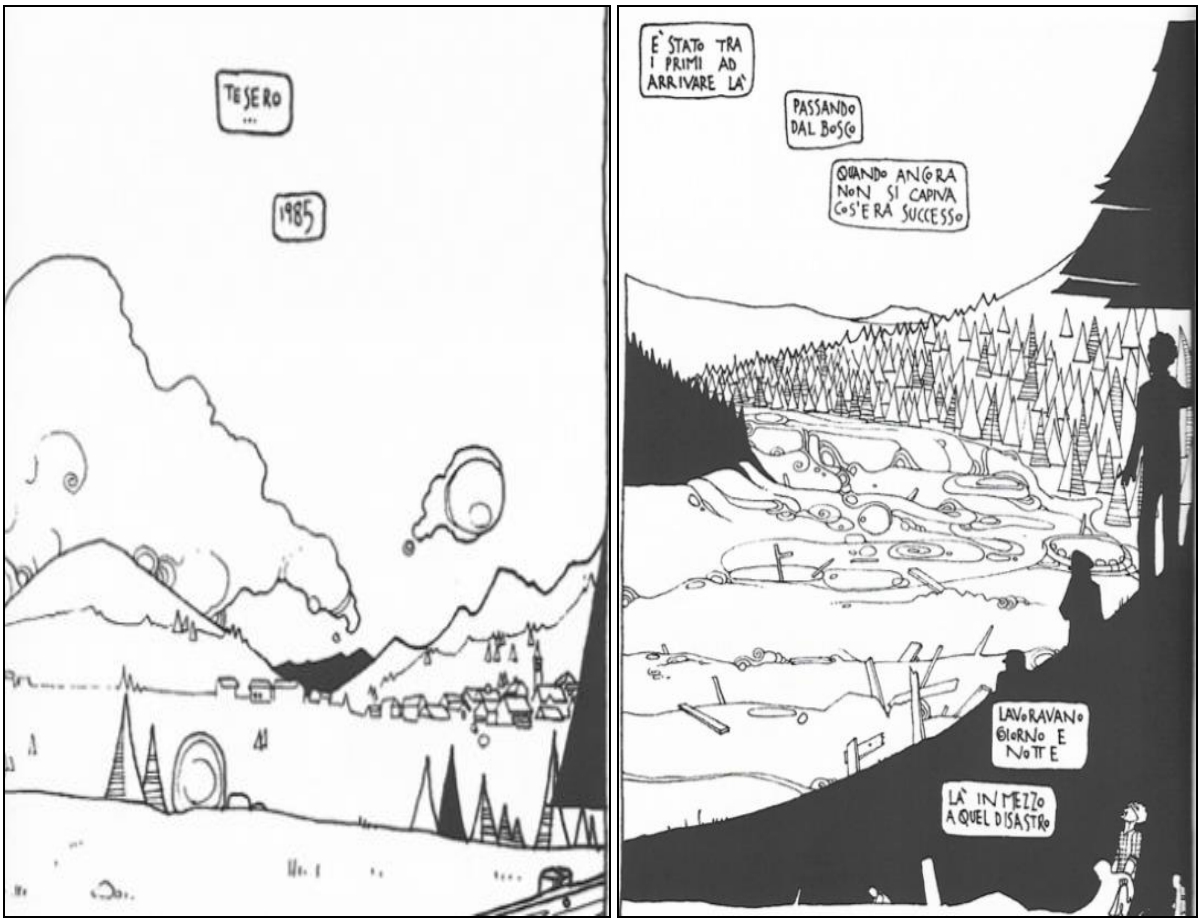

Figure 4. On the left the opening panel of the graphic novel "L'estate che Stava ci venne a cercare" by Silvia Pallaver and Elia Tomaselli [17] (p. 13); on the right an image of Val di Stava immediately after the disaster of 19 July 1985, provided by the authors (p. 118).

Figure 5. An image of Tesero in 2015 provided by the authors [17] (p. 58).
Source: © 2015 Round Robin Editrice.

5. CONCLUSIONS

The first graphic novel has 11 incipit that mention the place where the events happen (Orbetello or a specific site within its territory: see pp. 79,95,119,137,141,152,157,174,177,180,193). These locations are presented as a kind of "little matryoshka" within many other bigger "dolls" (see incipit Figure 1): this is a clear proof of the "translocality" of the graphic novel, that seems to combine the neo-bioregionalist view [78] with the globalist and cosmopolitan one [79]. It is therefore clear that the safety of the lagoon is the result of the combined efforts of humans (Ismaele, Arturo Cuorveloce, Dorotea) and, above all, of different living species, evidenced by the osmotic friendship between Ismaele and Gnè Gnè. The opening and closing panels of the graphic novel plastically juxtapose the negativity of the anthropocentric-instrumentalist view based on dualism and competition, that caused the death of the lagoon, making of it a place for bloody events, weapons of any kind (arquebuses, swords, halberds, spiked batons, blades, AKs, pitchforks, armoured vehicles), to the positive value of the collaborative model based on the horizontality among living species, that allows to restart the natural cycle of the lagoon ecosystem, but not to save the human civilization from its self-destruction.

Actually, as we observed in the first graphic novel, thanks to the effective cooperation of living beings it is possible to save the Orbetello Lagoon; while in the second graphic novel the search for "truth" by the

protagonist can be viewed as a starting point to strengthen the territorial identity and preserve the local system from new attacks. Particularly, the final appendix, condemning and listing 94 tailing dam collapses occurred in mines all over the world between 1961 and 2014 (therefore about two per year), together with a thematic map which highlights their spatial distribution, closes the "frame" under the sign of "translocality", fully in line with the end of the graphic novel [17] (pp. 137–137], showing Anna reading "Das Prinzip Verantwortung" by Hans Jonas [80]. The "translocality" is even more evident in a sort of sequel of "L'estate in cui Stava ci venne a cercare", a short comics released following the collapse of the Brumadinho landfill (Brazil) on 25 January 2019 (Figure 6) .

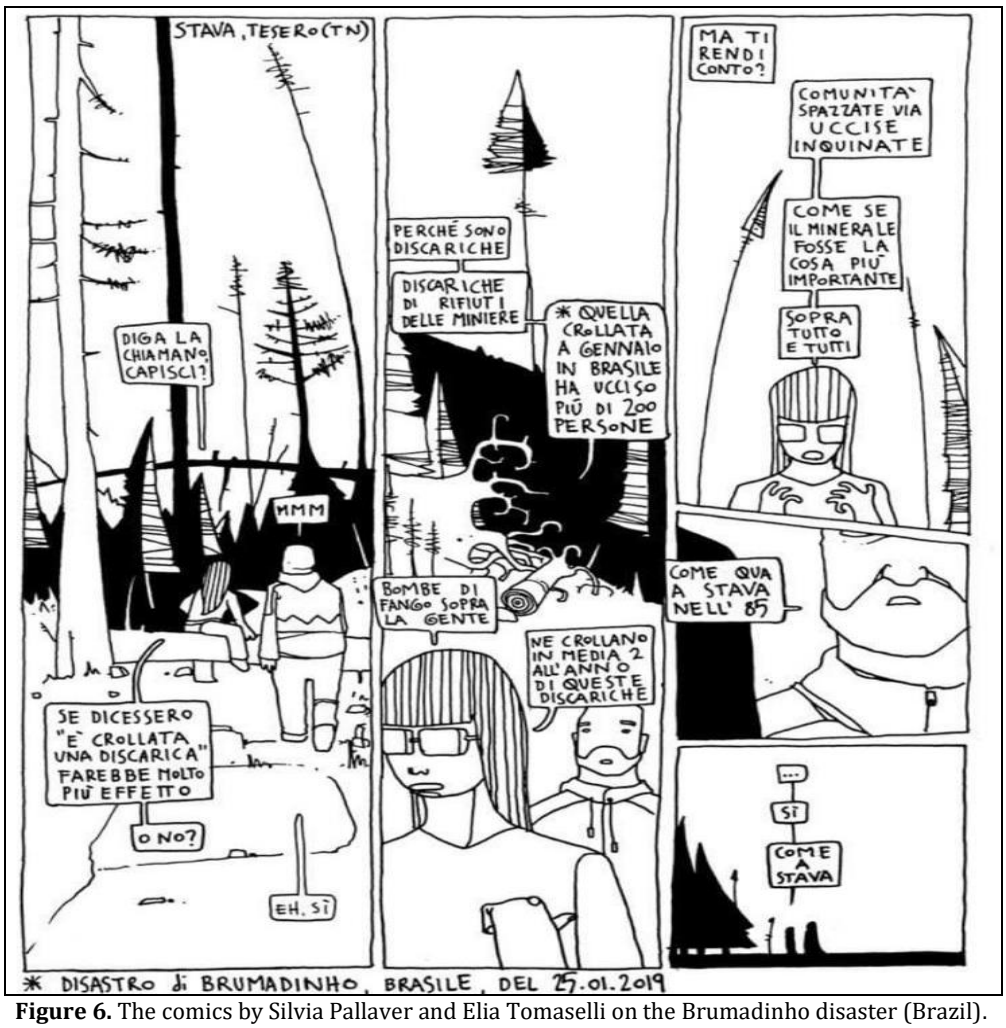

Figure 6. The comics by Silvia Pallaver and Elia Tomaselli on the Brumadinho disaster (Brazil). Source: Silvia Pallaver, Elia Tomaselli.

In this work Anna, once again the main character chosen by the two authors, "embedded" in the Tesero wood, thinks about this new disaster:

> «They call it dam, you see? If they said "a landfill collapsed" it would be more impressive, isn't it? Because they are landfills, mining landfills. The one that collapsed in January in Brazil killed more than 200 people. Mud bombs on people. Every year two of those landfills collapse. Communities blown away, killed, polluted. As if mineral was the most important thing. Above everything and everyone. As in Stava» (Figure 6).

Therefore, we believe we can refer to Stefano Cardoselli, Silvia Pallaver and Elia Tomaselli as "ecological artist", a definition used by Salabè [81]: «an intellectual focused on present emergencies and critical of the hegemony of the market and consumer ethics», who considers reflection and sharing «as preconditions for a real cultural progress, able to meet man's deepest desires». An artist who does not wish to «play the role of foreteller of natural disasters, but, on the contrary, to convey, as suggested by Ernst Bloch [82], a pedagogy of hope» [81] (p. XVI), always keeping a high level of attention on environmental damage of "yesterday" and "today", "near" and "far".

In the light of the above, we can confirm, as Han states [83] (p. 41), that «*like maps, comics simplify a complex three-dimensional reality into a more manageable version*», that is, comics speak the language of *graphicacy* [84]. Therefore, it can be an effective and immediate communication instrument for geographic information also useful, as in the two analysed cases, in promoting a real "environmental literacy" [85,86], a proactive invitation to face the ecological crisis by overcoming the mainstream representation of the relationship between "human" and "non human". Moreover, by delivering alternative narratives (which can be defined as "native", "marginal", "peripheral", "eccentric") [87] expression of a new no more anthropocentric humanism, comics become a precious driver for "divergent thinking" [88] as well as fundamental speaker for an "ecological citizenship" [89] able to develop "a synthesis between bioregional awareness and the needs of a global environmental ethics" [87](e-book position 1098).

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Effect of Governance on Accelerating Literacy Rate to Ensure Sustainable Forestland: A Multiple Regression Analysis on Developing Countries

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Abstract: Deforestation has long been considered an alarming issue, while every developing country focuses on accelerating the GDP growth, while backlogging the environment quality. The literacy rate is a handy and effective tool that has a long-lasting impact on the economy; an efficient government body can launch a sustainable learning system which can develop and enrich the practice of a green economy. This paper aims to investigate the joint effect of good governance and literacy rate on sustainable forestland in developing countries. The researcher uses World Bank secondary open data, on which a multiple regression model is applied with the aim of analising the impact on forestland. Due to the use of secondary data, several missing values exist, where the author implies interpolation in R studio to imply regression Model. A sound and effective educational policy, coupled with government intervention can maintain a good balance among ecology, economy and socio-culture.

Key words: Forestland, deforestation, literacy rate, good governance, local people

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1. INTRODUCTION

Deforestation has become one of the threatening and most concerning issues in recent times because people sacrifice the image and value of environment by forcing an acceleration of the economic growth. Deforestation is closely linked with sudden climatic change, greater carbon gas emissions, economic development and changing the nature of biodiversity wherein civilization is significantly impacted in the long-term due to the removal of forest land to achieve short term benefits. According to the view of some researcher's, deforestation means the removal of forest land and using the land for other purposes like industrialization and habitation etc. Despite all necessary initiatives, the world is experiencing the loss of about 15 hectares of forest land annualy which severely affects biodiversity on which numerous living organs are closely dependent [1]. In essence, deforestation is caused by two major issues. Several researchers work to find how a governing body impacts the development of the forestland while they consider a group of relevant governance factors to understand the effect of it [2]. In addition, the world loses 50 acres of land every hour due to slash and burn; however intentional fire setting cannot always be controlled due to unpredictable behavior of human-beings. A group of researchers highlighted a study showing the linkage between deforestation and climate change in Pakistan [3]. A recent study shows that a piece of normal timber is being purchased at US$20 per m^3 in Singapore and Indonesia which generally sells at US$ 1000 per m^3 in USA and to Canadian buyers after processing; yet the government is losing huge amounts of revenue due to this illegal log-trade. In general, the governments of these countries like Indonesia and Singapore lose US$10 billion annually due to black-market trade of timber [4].

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In most developing countries, governing bodies in charge of forestlands are badly corrupted and these institutions are directly or indirectly related with deforestation while most of the local populace is not concerned about the negative effect of deforestation on their life. The massive deforestation can impede the local ecological efforts and it can raise the health-cost of local people, while forest-land is described as carbon-sink. Most of the wild animals and birds find shelter in forests, forming an essential part of the environment, but their existence is severely threatened due to massive clearance of woodland. Most of the people in developing countries are not serious about forestland protection, because they lack the notion of environmental education. A literate person can understand the blessing of forestland, understanding that he cannot destroy the forestland due to ethical purposes mainly, but an illiterate person does not understand the long-term impact of deforestation, that threatens the environment.

2. LITERATURE REVIEW

Ongoing deforestation is one of the biggest threats on developing economies where numerous living factors are intensively connected with forestland but the forestland is in danger of extinction due to illegal activities by human beings. The author attempted to show the relationship between economic development and forest cover from satellite data. The author will measure the differences of deforestation activities across different countries where per-capita income was proved a robust variable using Kuznets curve [11].

The Food and Agriculture Organization (FAO) reports that South-Asian countries are the core providers of round-wood and precious environmental services wherein deforestation causes a major threat for sustainable use of forestland and reflecting the bad image of breaking the circle of biological diversity, lessening the quality of environment, land productivity and lowering the agricultural productivity etc. Contrarily, it helps to enhance the income of local people ensuring large amount of supply of fuelwood and timber. The author conducted an intensive investigation identifying the connection between governance structures and forestland destruction in Indonesia, where weak governance is the root cause for the destruction of forestland [6].

There are several forces working negatively to reduce forestland where poor regulation of forest governance, dislocation of aboriginal people, reckless migration activities, imbalance factor allocation etc. A research mentioned that the Indonesian government loses about $1 billion to $1.9 billion in revenues due to illegal log trade that causes huge losses for the national government as well [11]. This report shows that the Indonesian economy demands 60 million cubic on average every year in which sustainable forest land supply 20 million cubic meters per year, the 40 million demand is fulfilled by illegal activities of trade. In addition, A paper mentioned that due to poor governance performance, Philippines government losses about $1.8 billion (over ten years) due to illegal trade of logging and forest wood smugglers [14,18].

Illegal logging trade is one of the most profitable businesses in China, Thailand and Myanmar where it destroys the forestland recklessly causing the sudden change of climate and biodiversity as well. A study mentioned Myanmar is being considered as one of the major log exporter to Thailand but armed conflict in this border impacted the log harvesting negatively. In addition, forest-pirates of Myanmar conducted illegal log-trading with Indonesia due to weak performance of central government and inadequate environmental understanding [15].

Considering the region of the Brazilian Amazon, it has been encountering a huge destructive mode of deforestation due to illegal logging and land capturing of land-pirates, it causes huge crisis of environmental quality and human-life [21,29]. A statistic shows that about 2% of rainforest had experienced deforestation but this number jumps as high as 14 % in 2000. In addition, this value jumps again 20 percent in 2009, indicating the fact that future generations will be encountering severe environmental challenges. A study mentioned the situation that how deforestation is closely connected with the tragedy of commons that Nigeria loses 35.7% averagely from year 1990 to 2005 [26]. A group of researchers try to find the connection between climate change and forestland in the long term but they try to focus on green economy and sustainable policies to ensure forestland [32].

According to a recent study, about 40% of rainforest disappeared in the last few decades, 1.6 billion people being badly affected, especially in livelihood and climatic change for this unpleasant condition. Deforestation is the main reason for drastic climatic change and aggravating the vulnerability of local-people [30]. A study highlighted that most of economic activities solely depends on rainforest, women are closely engaged on zonal forest. Sub-Saharian zone encountered a huge crisis of deforestation, 15.4 million from 1980 to 1990, As late as 1990, the sub-Saharian countries loses 528 million hectares of forestland due to direct intervention of human-being [8].

A researcher investigated the effect of poor-governance on deforestation, where it impacts the standard of livelihood. At the end, it is proved that the huge level of corruption and unplanned structure of poor-governance are the core factor for deforestation [22].

The study of social-networking based corruption besides neighbouring countries are the prime reason for the increase in illegal logging trade where bribery and random forest laws breaking can be considered an essential factor for deforestation [27]. Besides this, the study tried to maintain a connection among environmental policy, democratic behavior and institutional polices on deforestation [20]. On the other hand, a paper conducted a survey on corruption, welfare and forest policy that connect with huge level of deforestation, but stakeholders feel problems to implement forest policies due to war, government weakness and poor governing bodies [9]. A researcher published an article based on forest governance and land allocation policies in Vietnam where the paper tried to trace the role of local inhabitants as local-actors on forestland [13]. A study highlighted that most of economic activates solely depends on rainforest, women are closely engaged on zonal forest. Sub-Saharian zone encountered a huge crisis of deforestation, 15.4 million from 1980 to 1990, At the last period of 1990 where the sub-Saharian countries losses 528 million hectares of forestland due to direct intervention of human-being [10].

In addition, community-based forest conversation with effective forest-governance can enable a sustainable capacity of forestland in Vietnam. A paper highlighted the effect of institutions and forest-devaluation policies on forestland in wider perspective as well [16]. Besides, an article indicated the connectivity of local-livelihood and forestland where forest devolution polices can be handy strategy to ensure sustainable forestland [5]. A paper highlighting the forestland and sustainability from Congo perspective as well. In Congo, about 107 million hectares are covered in forestland that majority of rural-people depending on them to sustain their minimum livelihood [23]. The ignorance of bad-governance system affects the livelihood and poverty badly where defective bureaucratic system, massive corruption, institutional incapacities make the situation worst on the forestland in Congo.

A investigation mentioning that effective forest management is the first and foremost condition to ensure sustainable forest management and diminishing forest degradation in African zone [4]. Basically, forest governance is described as policy creation, regulatory quality and institutional efficiency where transparency, accountability, equity and effectiveness are well maintained to ensure the sustainability of forest area. Forest management is closely involved with governmental bodies and law-enforcement agencies. Besides that, private bodies, civil groups, local stakeholders and local level people are mostly connected with forest sustainability. A paper based on accessing and monitoring the effect of forest governance showed that local governance is the main responsible factor to ensure forest sustainability [19].

The paper addressed the relationship between deforestation and climate change. The author mentioned that about 46-58 thousand square miles are lost every year due to deforestation [4]. In addition, the world loses 50 acres of land every hour due to slash and burn activities but intentionally fire setting cannot be controlled sometimes due to unpredictable way of human-beings. A group of researchers highlighted a paper showing the linkage between deforestation and climate change in Pakistan perspective at all [2]. Rapid industrialization in Pakistan and worst disasters are the main responsible factor for this sudden climatic change in Pakistan. Continuous emissions of greenhouse gases are the main responsible factors for deforestation that leads to rise the unpredictable sea-level, that causes the encountering situation of food crisis and fresh water scarcity in earth [1,31].

A researcher mentioned that deforestation causes rising sea-level, health-disaster, salinity increases, and displacement of local inhabitants [24]. A paper highlighted that carbon emissions are one of the main responsible factor for deforestation because forestland, specially rainforest works as filter of carbon emissions [25]. Forestland performs as a hub to maintain food chain ensuring the biodiversity, ensuring hydrochloric cycle maintaining, soil protection, water purification by bonding with soil etc.

Deforestation has negative impact on climate change and extinction of wild species that all living organisms directly or indirectly depend on forestland [17,28]. A report shows that a powerful forest ecosystem can counter in amazon where image of amazon forest has been declined due to rapid increasing of cattle farming, soy cultivation in Brazilian state by household at large level [33]. A statistic shows that about 2% of rainforest had experienced as deforestation but this number jumps at 14 % at 2000. In addition, this digit jumps again 20 percent at 2009 but this number leads the future generations into dangerous situation at all.

In this paper, the author tries to measure the joint effect of governance and literacy rate on forestland in developing countries perspective from 1996 to 2017, where the deforestation issue was being proved as burning factor for policy generating authority.

3. METHODS AND DATA

A pair of researchers investigates to find out the effectiveness of short-term policies to protect forestland while they consider 6 variables of good governance from World Bank (WB) to measure the effect of these variables on forestland [22].

Table 1. Variables Indication of Independent Variables that affect Dependent Variable

Independent Variable Name	Measurement Unit	Literature Reference
Agricultural Land (AL)	In Square	[2]
Wages Level (WL)	Wage and salaried workers, total (% of total employment) (Modelled ILO estimate)	[2]
Infrastructural Quality (IQ)	WEF (1=extremely underdeveloped to 7=well developed and efficient by international standards)	[2]
CPIA property rights and rule-based governance rating (PR)	(1=low to 6=high)	[2]
Costing over Science & Technology (ST)	Percentage in GDP	[2]
GDP per Capita (GDP)	IN US$	[28]
Population (PP)	In Number	[28]
External debt Shocks (EDS)	External debt stocks (% of GNI)	[18]
Terms of Trade (TOT)	In percentage	[30]
Economic Growth (EG)	In percentage	Author own compilation
Population Density (PD)	People per sq. km of land area)	[30]
Literacy Rate (LR)	In percentage	[08]
Voice and Accountability (VA)	Definition given in main text. Scaled to lie between -2.5 and +2,5 with higher values corresponding to better outcomes (Kaufmann et al. 1999a)	[22]
Voice and Accountability (VA)	Definition given in main text. Scaled to lie between -2.5 and +2,5 with higher values corresponding to better outcomes (Kaufmann et al. 1999a)	[22]
Political Stability and Lack of Violence (PS)	Definition given in main text. Scaled to lie between -2.5 and +2,5 with higher values corresponding to better outcomes (Kaufmann et al. 1999a)	[22]
Government Effectiveness (GE)	Definition given in main text. Scaled to lie between -2.5 and +2,5 with higher values corresponding to better outcomes (Kaufmann et al. 1999a)	[22]
Regulatory Quality (RQ)	Definition given in main text. Scaled to lie between -2.5 and +2,5 with higher values corresponding to better outcomes (Kaufmann et al. 1999a)	[22]
Control of Corruption (CC)	Definition given in main text. Scaled to lie between -2.5 and +2,5 with higher values corresponding to better outcomes (Kaufmann et al. 1999a)	[22]
Rule of Law (RL)	Definition given in main text. Scaled to lie between -2.5 and +2,5 with higher values corresponding to better outcomes (Kaufmann et al. 1999a)	[22]
Dependent Variable : Forestland in Square Kilometers		

Source: Author Own Compilation based on World Bank Open Data Source, 2020 [35]

The author considers secondary data of year 1996-2017 from world bank website to conduct this study. There are 58 Upper Middle Income countries and 46 lower middle income countries listed by World Bank open data (Income basis) where all developing countries are considered to conduct this study. The author considers one dependent variable forest land measured by squared kilometers, 12 independent variables and 5 government variables (Table 1) to measure the impact of independent variables on forestland. Moreover, the author considers some interacted variable (Good governance variables with literacy rate) to measure the effect of all interacted variables on forestland using multiple regression. A report of World Bank (WB) shows that sustainable forestland helps to protect ecological and environmental balance at positive way that can lessen the effect of climate change [34].

In this paper, the author measures the joint effect of literacy and good governance on forestland in developing countries characterized by income level of WB.

4. MERGING EFFECT OF GOVERNANCE AND LITERACY RATE ON FORESTLAND

In recent times, forestland has been reduced drastically to ensure economic growth but it nevertheless endangers the quality of the environment. A strong and well-organized governing body can protect forestland from illegal logging and save forestland from black-market trade. In recent times, climate change mitigation can be implemented strategically if good governance handles this crucial issue from top to bottom level.

Table 2. Multiple Regression Analysis for UMI and LMI countries with Interacted and without Interacted Variables

Dependent Variable: Forest Land (Per Square kilometers)							
	Variable Name	**Variable Indicator**	**World Bank Indicators**	**1. Multiple Regression UMI_Without Interacted Variable**	**2. Multiple Regression UMI_With Interacted Variable**	**3. Multiple Regression LMI_Without Interacted Variable**	**4. Multiple Regression LMI_With Interacted Variable**
1	*Agricultural Land*	*AL*	AG.LND.AGRI.K2	1.377*** (0.062)	1.426*** (0.063)	0.128*** (0.022)	0.168*** (0.022)
2	*Wages Level*	*WL*	SL.EMP.WORK.ZS	6,055.543*** (1,563.113)	6,950.443*** (1,571.405)	-3,858.804*** (328.414)	-3,956.201*** (318.682)
3	*Infrastructural Quality*	*IQ*	IQ.WEF.PORT.XQ	-20,409.250 (25,173.000)	-21,757.690 (24,902.690)	-21,328.560*** (5,032.222)	-14,417.470*** (5,172.444)
4	*CPIA property rights and rule-based governance rating*	*PR*	IQ.CPA.PROP.XQ	-26,578.150*** (8,770.462)	-24,509.580*** (8,717.497)	1,156.388 (10,857.250)	8,107.881 (10,615.390)
5	*Costing over Science & Technology*	*ST*	GB.XPD.RSDV.GD.ZS	223,558.000*** (46,180.400)	234,281.800*** (46,492.710)	-54,918.320*** (19,140.640)	-42,919.590** (18,746.490)
6	*GDP per Capita*	*GDP*	NY.GDP.PCAP.CD	-3.032 (9.278)	-8.381 (9.591)	2.348 (5.653)	-4.785 (5.628)
7	*Population*	*TP*	SP.POP.TOTL	-0.004*** (0.0003)	-0.004*** (0.0003)	0.00001 (0.0001)	-0.00001 (0.0001)
8	*External Debt Shocks*	*EDS*	DT.DOD.DLXF.CD	0.00000*** (0.00000)	0.00000*** (0.00000)	0.00000*** (0.00000)	0.00000*** (0.00000)
9	*Terms of Trade*	*TOT*	TT.PRI.MRCH.XD.WD	-130.341 (715.577)	109.102 (713.263)	376.676** (148.292)	441.155*** (143.876)
10	*Economic Growth*	*EG*	NY.GDP.MKTP.KD.ZG	-88.608 (2,441.428)	251.259 (2,430.836)	694.617 (1,118.276)	848.526 (1,081.963
11	*Population Density*	*PD*	EN.POP.DNST	217.586 (141.621)	342.762** (141.353)	-202.828*** (27.879)	-231.530*** (27.965)
12	*Literacy Rate*	*LR*	SE.ADT.LITR.ZS	10,339.280*** (3,476.845)	13,750.630*** (4,363.407)	2,760.762*** (313.715)	3,937.297*** (584.061)
13	*Government Effectiveness*	*GE*	GE.EST	-552,165.400*** (94,746.050)	-454,956.400 (1,374,671.00	46,648.100*** (17,649.580)	75,472.700 (74,892.030)
14	*Political Stability*	*PS*	PS.EST	-190,800.500*** (40,830.670)	2,905,271.000*** (487,743.200)	-15,305.300** (7,757.380)	189,034.900*** (31,004.430)
15	*Regulatory Quality*	*RQ*	RQ.EST	339,309.100*** (68,233.910)	848,192.100 (799,657.200)	5,188.580 (13,394.740)	197,665.200*** (63,549.090)
16	*Control of Corruption*	*CC*	CC.EST	70,453.490 (83,126.960)	-213,465.400 (1,193,309.000)	-40,144.410** (16,337.030)	-379,701.900*** (73,854.680)
17	*Rule of Law*	*RL*	RL.EST	69,214.380 (78,773.310)	-3,085,242.000*** (1,123,423.000)	-43,321.950** (17,262.210)	182,365.000** (80,584.860)
18	*Government Effectiveness* Literacy Rate*	*GE*LR*			-911.354 (14,716.180)		-338.595 (1,016.273)
19	*Political Stability* Literacy Rate*	*PS*LR*			-33,876.030*** (5,294.111)		-2,753.382*** (408.390)
20	*Regulatory Quality* Literacy Rate*	*RQ*LR*			-6,274.474 (8,633.363)		2,495.914*** (793.533)
21	*Control of Corruption* Literacy Rate*	*CC*LR*			3,411.939 (12,684.620)		4,486.891*** (985.014)
22	*Rule of Law* Literacy Rate*	*RL*LR*			34,102.820*** (11,858.460)		-2,862.279*** (1,067.520)
	Constant			*-1,400,707.000*** (383,031.400)*	*-1,790,836.000*** (453,459.000)*	*47,118.900 (45,739.750)*	*-77,385.630 (61,360.000)*

	Observations		*1276*	*1276*	*990*	*990*
	R2		*0.526*	*0.542*	*0.566*	*0.598*
	Adjusted R2		*0.52*	*0.534*	*0.558*	*0.588*
	F Statistic		*82.229****	*67.398****	*74.537****	*65.253****
	Significance Level: *p<0.1; **p<0.05; ***p<0.01					
Formula	Model 1: UMI: Gini Index = β0 + β1 AL + β2 WL+ β3 IQ + β4 PR+ β5 ST + β6 GDP + β7 TP + β8 EDS + β9 TOT + β10 EG + β11 PD+ β12 LR+ β13GE+ β14 PS + β15 RQ + β16 CC + β17 RL + ui					
	Model 2: UMI_IV: Gini Index = α 0 + α 1 AL + α 2 WL+ α 3 IQ + α 4 PR+ α 5 ST + α 6 GDP + α 7 TP + α 8 EDS + α 9 TOT + α 10 EG + α 11 PD+ α 12GE*LR+ α 13 PS*LR + α 14 RQ*LR + α 15 CC*LR + α 16 RL*LR + ui					
	Model 3: LMI: Gini Index = μ 0 + β1 AL + μ 2 WL+ μ 3 IQ + μ 4 PR+ μ 5 ST + μ 6 GDP + μ 7 TP + μ 8 EDS + μ 9 TOT + μ 10 EG + μ 11 PD+ μ 12 LR+ μ 13GE+ μ 14 PS + μ 15 RQ + μ 16 CC + μ 17 RL + ui					
	Model 4: LMI_IV: Gini Index = γ 0 + γ 1 AL + γ 2 WL+ γ 3 IQ + γ 4 PR+ γ 5 ST + γ 6 GDP + γ 7 TP + γ 8 EDS + γ 9 TOT + γ 10 EG + γ 11 PD+ γ 12GE*LR+ γ 13 PS*LR + γ 14 RQ*LR + γ 15 CC*LR + γ 16 RL*LR + ui					
	Note: IV means interacted variables					

Source: Author Own Compilation based on World Bank Open Data Source, 2020

4.1. Multiple Regression Result for UMI Countries (Model 1 and Model 2)

From the above Table no 2, it is highlighted that if the agricultural land is increased by one squared kilometers, then forest land will be increased at 1.377 (Model 1) and 1.426 (Model 2) square kilometers significantly. It is statistically significant at 1 percent level of significance. If the wage level increases by 1 percent of total employment, forest land will be increased at 6,055.54 (1st Model) and 6,950.44 (2nd Model) square kilometers, that two value are statistically significant at 1 percent level of significance. In addition, property rights mean the legal access of property that is counted by governance based index ranked from 1 to 6 score. If the property rights increased by 1 rank, forestland will be reduced at 26,578.15 (Model 1) and 24,509.58 (Model 2) square kilometers per year. When the people try to get more access of CPIA property rights, they will try to expand into the forestland which causes deforestation in UMI. This is a bad sign if the goal is to ensure forest sustainability. These values are statistically significant at 1 percent level of significance. If the expenditure of science and technology cost increases by 1 percent of total GDP in UMI countries, forestland will be increased at 2,23,558 (Model 1) and 2,34,281 (Model 2) squared kilometers in UMI, these are statistically significant at 1 percent level of significance. When innovation and new technologies are adapted by local people easily, they will not be highly dependent on forestland. The forestland expansion is highly dependent on the latest innovation of science and technological sector.

From the population view from Table 2, it is observed that, with the increasing of 1000 people in UMI, forestland will be diminished by 4.00 (Model 1) and 4.00 (Model 2) squared kilometers, these value are statistically significant at 1 percent level of significance. When population growth has gone beyond control, people settle their home on forestland and depend on it to earn their livelihood, this creating a negative impact on forest sustainability. Not only it hampers forestland but it destroys the ecological chain of forest. If the external debt shocks increase 1 percent of total GNI in UMI, forestland will be decreased significantly at 1 percent level.

From the point of view of literacy from Table 2, if the literacy rate is increased by 1 percent in UMI, forestland will be increased at 10,339.28 (Model 1) and 13,750.63 (Model 2) squared kilometers, these value are statistically significant at 1 percent level of significance. When the people are becoming educated, they will get more environmental knowledge about sustainability and climate change. A literate man cannot destroy forestland recklessly because he knows the importance forestland has on climate. Literacy is one of the crucial variables that can ensure sustainability of forestland.

From the perspective of government effectiveness from Table 2, if GE increases by 1 point then it leads to decrease the forestland by 5,52,165.400 (Model 1) squared kilometers for UMI. This variable is statistically significant at 1 percent level of significance. In addition, if PS increases by 1 points, it will reduce 1,90,800.500 square kilometers of forestland (Model 1) and increases 29,05,271 square kilometers of forestland in UMI. These values statistically significant at 1 percent level of significance. With the increases of point of RQ in UMI it will increased forestland by 3,39,309.100 (Model 1) square kilometers of forestland. This variable is statistically significant at 1 percent level of significance. With the increases of point of RL in UMI it will increased forestland by 30,85,242.00 (Model 2) square kilometers of forestland. This variable is statistically significant at 1 percent level of significance.

4.1.1. Effect of Interacted Variables on UMI Countries

From Table 2, it is seen that when the good governance variables are interacted with literacy rate as seen in Model 2 starting from column no 18, if PS*LR increases by 1 point, it will reduce forestland by 33,876.030 square kilometers, this variable is statistically significant at 1 percent level of significance. In

addition, if if RL*LR increases by 1 point, it will increase forestland by 34,102.820 square kilometers, this variable is statistically significant at 1 percent level of significance for UMI. Only this interacted variable (RL*LR) create positive effect to ensure the sustainability of forestland. A better and effective government rules can enrich the forestland which is pre-condition to achieve maximum sustainability of forest. Sustainability of forestland can ensure ecological balance and effective chain of food diversity.

The value of constant means that if all variables are not activated in these two Models then it lessens the forestland by 14,00,707.00 (Model 1) and 17,90,836.00 (Model 2) square kilometers. These variables are statistically significant at 1 percent level of significance. The value of R^2 are 0.52 (Model 1) and 0.54 (Model 2) so independent variables represent the dependent variable (forestland) by 0.52 and 0.54 percent respectively.

4.2 Multiple Regression Result for LMI Countries (Model 3 and Model 4)

From the Table 2 in Models 3 and 4, it is highlighted that if the agricultural land is increased by one squared kilometers, then forest land will be increased at 0.128 (Model 3) and 0.168 (Model 4) square kilometers significantly. It is statistically significant at 1 percent level of significance. If the wage level increases by 1 percent of total employment, forest land will be decreased at 3,858.80 (Model 3) and 3,956.20 (Model 4) square kilometers, that two value are It is statistically significant at 1 percent level of significance.

In addition, from Table 2, the infrastructural quality increases from 1 to 3 scale based on business executive perception based on world class standard. If the infrastructural quality increased by 1 rank, forestland will be reduced at 21,328.56 (Model 3) and 14,417.47 (Model 4) square kilometers per year. When people decides to extend road and port quality for better communication facilities, it should lessen forestland at the time of road extension. Generally, with the increasing of infrastructural quality, it normally lessens the forest area significantly.

If the expenditure of science and technology cost increases by 1 percent of total GDP in LMI countries, forestland will be decreased at 54,918.32 (Model 3) and 42,919.59 (Model 4) squared kilometers in LMI, these are statistically significant at 1 percent and 5 percent level of significance respectively. At the time of increasing costing pattern of behind science and technology sector, entrepreneurs set up new industries and infrastructure to accelerate the growth of modern technological based business where it lessens the forestland automatically. From the perspective of debt shocks of LMI, increasing the debt shocks by 1 percent lessens the forestland significantly. In addition, from the viewpoint of TOT, it means that how much export units or volume will be compulsory to purchase 1 unit of import goods.

Suppose, if Germany exports more goods (in monetary amount) while it purchases fewer import goods, then the TOT will be positive in Germany. Besides, if the TOT percent ratio increases by 1 percent, forestland will be increased by 376.67 (Model 3) and 441.15 (Model 4) square kilometers points holding other variables constant. It is statistically significant at 5 and 1 percent level of significance respectively. If the population density increases by 1, forestland will be reduced at 202.82 (Model 3) and 231.53 (Model 4) square kilometers, these variables are 1 percent level of significance respectively.

From the point of view of literacy, if the literacy rate is increased by 1 percent in LMI, forestland will be increased at 2,760.76 (Model 3) and 3,937.29 (Model 4) squared kilometers, these value are statistically significant at 1 percent level of significance.

If the GE increases by 1 points then it increases forestland by 46,648.100 (Model 3) square kilometers of forestland holding other variables constant, it is significant at 1 percent level of significance.

If the PS increases by 1 point then it decreases 15,305.30 (Model 3) and increases 1,89,034.90 (Model 4) square kilometers of forestland holding other variables constant, both variables are significant at 1 percent level of significance.

If the RQ increases by 1 points then it decreases forestland by 1,97,665.200 (Model 4) square kilometers of forestland holding other variables constant, it is significant at 1 percent level of significance.

If the CC increases by 1 point then it decreases 40,144 (Model 3) and increases 3,79,701.900 (Model 4) square kilometers of forestland holding other variables constant, both variables are significant at 5 percent and 1 percent level of significance respectively.

If the RL increases by 1 point then it decreases 43,321.95 (Model 3) and increases 1,82,365 (Model 4) square kilometers of forestland holding other variables constant, both variables are significant at 5 percent level of significance.

4.2.1 Effect of Interacted Variables on LMI Countries

If Political stability interacted with literacy (PS*LR) increases by 1 point then it decreases forestland by 2,753.38 square kilometers holding other variables constant, it is significant at 1 percent level of significance. If Regulatory quality interacted with literacy (RQ*LR) increases by 1 point then it increases forestland by 2,495.91 square kilometers holding other variables constant, it is significant at 1 percent level of significance. If Control of corruption interacted with literacy (CC*LR) increases by 1 point then it increases forestland by 4,486.89 square kilometers holding other variables constant, it is significant at 1 percent level of significance. If Rules of law interacted with literacy (RL*LR) increases by 1 point then it decreases forestland by 2,862.27 square kilometers holding other variables constant, it is significant at 1 percent level of significance.

The value of R^2 are 0.55 (Model 3) and 0.58 (Model 4) so independent variables represent the dependent variable (forestland) by 0.55 and 0.58 percent respectively.

From the four Models, it is seen that, some interacted variables act negatively with forestland. Besides, some other interacted variables activate positively with forestland where (CC*LR) and (RL*LR) variables can ensure sustainable forestland, that helps to ensure environmental benefits on economy. If the government takes necessary steps to control corruption from upper to lower level because most of the corruption causes due to bureaucratic complexity. Furthermore, forest governance is being corrupted severely because they clear forest due to profitable logging business, and wild-animal trafficking.

5. DISCUSSION

From the viewpoint of UMI countries in Table 2, Illegal logging business causes forest clearance because corrupted bodies exports wood to illegal buyers with less than market value, wherein central governance loses huge level of revenue every year due to unexpected illegal wood-trade.

In addition, if the rules of law are implemented strictly all over the countries with forest governance, forestland will be increased significantly that is good sign for ensuring environmental sustainability. Conversely, from the viewpoint of LMI, the variables (RQ*LR) and (CC*LR) work positively with ensuring the forestland. Actually, lower middle income countries are suffering badly due to bad regulatory control and poor administrative wings that are highly polluted due to bad governance. If the governmental bodies implement sound and sustainable polices to ensure the sustainability of forestland, it will create a positive impact on environment. The author finds some difference on the implementation of interacted variables between UMI and LMI countries. Education is always proved as effective factor to create awareness for societal variable like education and poverty. In this case, the author tries to interact the variables of good governance with literacy rate (that raises awareness within people) on forestland. In this paper, one interacted variable (RQ*LR) work negatively (-6,274) to lessen forestland but the same variable works positively (2,495) to increase forestland significantly. Moreover, the variable (RL*LR) work positively (34,102) to increase forestland in UMI countries significantly but the same work negatively (-2,862) on forestland in LMI countries.

From the following viewpoint, it is evident that forestland is being cleared due to ensuring economic sufficiency and economic growth at desired prices, it backlogs our environmental knowledge about plantation. The losses of forestland cause desertification, drastic climate change, soil erosion, flooding as well as other climate shifts which can increase the global temperature in recent time.

a. Firstly, the central government should take important steps to reduce the level of corruption among forest governing bodies, then the deforestation percentage should be lowered and the government can earn more revenue from legal logging business.

b. Legal frameworks should be maintained with public participation, forest related polices and active participation for policy sanctions and implementation.

c. Government bodies should justify different sustainable polices regarding forest with civil society, native people and forest-communities for any decision making purposes.

d. Transparency should be maintained about forest related products like timber and log where transparency should be ensured for revenue allocation, budgeting, expenses and redistribution and audit system as well.

e. An internal monitoring shell needs to be established for accountability and performance testing of employees and regular contact maintaining with native people.

f. Most of the people in LMI countries do not have the knowledge of environmental literacy that causes negative effect on forestland. They even do not have the ideas how forestland protect them from disaster and natural calamities. So, it is really important to launch a programme to literate local people with better environmental knowledge.

6. CONCLUSIONS

The paper tries to find the effective procedures about forest sustainability which play a significant role in balancing the ecological system and coping up with climatic change. Policy-makers should adopt appropriate polices to ensure sustainable forestland because forestland is the biggest source of revenue; governments in developing countries lose huge amount of revenue due to illegal logging and wild-animal trafficking due to corrupted systems. If the governing bodies of developing countries take diversified steps to tend the value towards +2.5 (According to WB website), it can ensure a sustainable forestland, safeguarding the local livelihood ensuring biodiversity, reducing rural poverty with sustainable earning scopes and mitigating the vulnerable effects of climate change which is a most concerning issue in recent times. Due to high pressure of population, a sound and conservative ecosystems are correlated with sustainable forestland, where the joint impact of literacy and good governance can increase the sustainable forestland significantly. In developing nations, the practice of sustainable forestland has not been so popular because forest-governing body does not consider this issue as important one for the local citizen.

There is some interacted variable like (Regulatory Quality* Literacy Rate) and (Control of Corruption*Literacy Rate) that should be considered as an effective variable that can increase forestland in sustainable nature in LMI countries. On the other hand, if the rules of law merged with the literacy rate, the forestland will be increased in UMI countries. Not all variables act in the same manner in UMI and LMI so that governing bodies can take necessary steps based on country-wise socio-economic characteristics.

The population living in regions surrounded by forestlands cut down trees for their daily livelihood, which that damages the quality of the environment, breaks down ecological systems and reduces land fertility. A strategic and applied educational system lauched by central goverance can enrich the forestland and focus the view of green economy positively.

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Mongolian Domestic Tourists' Motivation and Revisit Intention: Mediating Effect of Perceived Benefit and Perceived Value

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Abstract: An understanding of domestic tourists' motivation and its relationship between perceived value and revisit intention is important for prediction of future travel demand. This study aims to examine domestic tourists' motivation on revisit intention mediated by perceived benefits and perceived values. The quantitative data was collected through self-administered questionnaires from domestic tourists who travelled in Mongolia in the summer of 2019. An effect of domestic tourists' travel motivation on revisit intentions; and the mediating effect of perceived benefit and perceived value were analyzed through factor analysis, regression analysis to test the proposed research hypotheses. The research result indicates that the mean ranking of the constructs of travel motivations for Mongolian domestic tourists were escape from daily life, relaxation, sightseeing, affordability of services, seeking variety, and culture were the top reasons to travel to the local destinations. The research findings contribute to the notion of domestic tourists' travel motivation, its relationship between perceived benefit, perceived value of their trip on their willingness to return and recommendations to others. Furthermore, the research result could be beneficial for destination planners and tourism practitioners to enhance destination attributes and launch a variety of products, services, affordable pricing and accessible environment. Overall, the result provides background for an appropriate and effective marketing strategy to develop domestic tourism in Mongolia; and increase the competitiveness of the destinations with higher length of stay and more tourist spending.

Key words: Mongolia, domestic tourists, push and pull travel motivations, mediating factors, revisit intention

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1. INTRODUCTION

Tourism generates income, creates job opportunities, increases foreign exchange earnings, and maintains sustainable development. Tourism plays an important role as a driving force of economic growth of developing countries. From the economic importance to the host country, to the satisfaction that tourism brings to the tourists, there is an extensive value and significance of the tourism industry. Today, the tourism industry has become one of the largest economies that generates US$1.7 trillion international receipts from 1.4 billion international tourists in 2019 [1]. The impact of tourism in the global economy accounts for 10.3% of global GDP and 330 million jobs which is 1 in 10 jobs worldwide [1]. The tourism is primarily categorized as domestic and international tourism [2]. International tourism is defined as traveling to places outside of their country of residence not more than one year for leisure and business purposes whereas domestic tourism involves the travel activities of residents in their respectful countries. Domestic tourism is defined as the tourism activities of a resident within the country of residence [2]. Domestic tourism is an important element of the tourism industry and contributes

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significantly to the social and economic development of the country. Domestic tourism has recently been increased by a large scale in the international context. Domestic tourism accounts for 73% of total global tourism spending in 2018, consequently it has become crucial for the tourism industry worldwide [1]. As the unprecedented global pandemic Covid-19 has swept the world, the tourism industry suffers most with a drop of 74% in international arrivals in 2020 due to travel restrictions, lockdowns and curfews. The collapse of international tourism shows a loss of USD 1.3 trillion revenues – the biggest in the tourism industry crisis in the past [1]. Domestic tourism in many countries has been set back due to pandemic travel restriction and curfews, however, UNWTO expects domestic tourism would return faster than international tourism. Domestic tourism will help destinations recover from the economic impacts of pandemic, while securing jobs, protecting the livelihood of those who rely on tourism income [1].

Domestic tourism is often more important than international tourism in terms of the contribution to the tourism economy, especially its capacity to redistribution of income from urban to rural areas and contribute to sustainable development, economic integration and poverty reduction. UNWTO states that 9 billion domestic tourism trips were made worldwide in 2018, which is six times higher than the number of international tourist arrivals, specifically 1.4 billion in 2018 [1]. However, it is problematic to make a detailed economic analysis of domestic tourism since there is a lack of a standard measurement system. As tourism academics and practitioners primarily emphasis on international tourism volume, expenditures and its impact on economy, the research on domestic tourism is fewer. Thus, there is a lack of available statistics, policies, regulations, and strategies on domestic tourism in developing countries [3].

Technology and innovation have brought significant changes in working hours, holiday entitlement, and increase in disposable income in the last two decades, thus domestic tourism has shown considerable growth worldwide. Affluent middle classes earn more income to engage in leisure activities in regional and domestic tourism in Asia [4]. Thailand, India, Indonesia and China are major contributors to domestic tourism developers since these countries are most populated and have promising economies. The governments of these countries have deliberately promoted domestic tourism through various marketing communications. Correspondingly, domestic tourism has acted as a relief tool for tourism crises and sudden shocks in the past. Countries in Asia, particularly China and Thailand, have been encouraging domestic tourism during Covid-19 pandemic for maintaining employment, products, services, and accommodation [5]. According to the statistics of domestic tourism released by the China National Tourism Administration [6], China has experienced rapid growth in domestic tourism as of 2018, with records of the total of 5.5 billion domestic trips, up to 10.7% increase compared to 2017. A revenue from domestic tourism reached US$764 billion in 2018 which registered a 12% increase from the previous year [6]. Although domestic tourism contribution to Indian economy is evident, it is less familiar by tourism stakeholders. The Ministry of Tourism report [7] states that the domestic tourism has reached from 220 million domestic visits in 2000 to 1.85 billion domestic visits in 2018 in India. The government of India aims to develop domestic tourism due to its direct contribution to job creation and redistribution of incomefrom urban to rural areas. The government of India challenged his residents to travel to 15 tourist destinations within India by 2022 for the promotion of domestic tourism [7]. Meanwhile, the domestic tourism accounted for 166 million domestic travelers with THB1.084 trillion receipts in Thailand [8] in 2019. With a population of 230 million, domestic tourism has huge market potential in Indonesia. The National Socio-Economic Survey report [9] states that there are 40 million nationals travelling within Indonesia spending IDR180 trillion in 2015. The economic development, digital technology, growth in disposable income, transportation, accessibility, information availability on social platforms, improvement of tourism facilities and popularity of tourist destination have boosted the growth of domestic tourism in Asian countries.

1.1. Mongolia and tourism potential

Mongolia is a landlocked country in Asia with vast territory and located between Russia and China. Total land territory is 1,564,116 sq.km with a population of 3.2 million. Mongolia has great potential for tourism development, yet the tourism sector has just started to develop. Mongolia has a beautiful, open and unpopulated landscape, untouched natural beauty with rare flora and fauna coupled with traditional

nomadic lifestyle. Mongolian tourism offers many opportunities for horse, camel and yak riding, trekking, birdwatching, fishing, mountain climbing, and dinosaur tours.

The direct contribution of the travel and tourism industry to Mongolia's GDP in 2018 was US$569.5 million, or 11.0% of the total GDP [10]. The National Statistics Officeout of the total 639, 920 international visitors arrived in Mongolia in 2019, 577,300 were holiday tourists with the purpose of leisure, visiting friends and relatives [10]. The government of Mongolia has proclaimed tourism industry as a priority sector of the sustainable development and considered tourism as an industry for diversifying its economy away from its reliance on the mining sector. Tourism stakeholders perceive that tourism has a good potential to increase incomes, generate employment, conserving nature, protecting cultural heritage, and addressing poverty. Therefore, both government and tourism private sector have paid more attention to the international inbound tourism than domestic tourism. However, tourism stakeholders in Mongolia started to realize that there is potential of domestic tourism market, thus domestic tourists have become a subject of interest recently. Traveling within their country has been essential for nomadic herders who live in the vast landscape of Mongolia. D. Amartuvshin [11] states that Mongolians have strong family connections therefore it has an impact on domestic travel patterns since visiting friends and relatives is common among Mongolians.

Similar to other countries, the domestic tourism pattern in Mongolia is defined by per capital increase, disposable income, changes in lifestyle traditions, seasonality of tourism, and holiday privilege. D. Amartuvshin [11] notes that holiday and leisure played important roles among Mongolians, which supported by the socialist government of Mongolia prior to 1990. The government owned spas and sanatoriums were built near the hot and cold natural springs and exotic landmarks around the country for holidaying of the factory workers and citizens. As of 1990, approximately 180 000 domestic tourists visited these holiday and recreational camps [11]. Summer camps of school children for 14 days holidays with cultural and sport activities were common in the socialist times. After the democratic revolution in 1990, Mongolia faced major political and economic reforms by shifting from centrally planned economy to a market economy. Like many socialist countries which were directly dependent on Soviet Union, Mongolia confronted serious transformational recession in the early 1990s and suffered from hyperinflation, high unemployment rates, and shortages of consumer goods.

Domestic tourism during this period was almost non-existent. Mongolians were less willing to travel due to the fact that they were trying to adjust themselves to a new political and economic system [11-12]. However, in last two decades, Mongolia has performed major socio-economic and institutional reform by tripling its GDP per capita US$1460 in 1995 to US$4,200 in 2019 [13]. Due to the foreign direct investment in the mining sector, the government economic and structural policy, the standard of living has been substantially improved in the last two decades. As of 2018 about 24.8% of the population lived under the poverty line on the contrary to 39.4% in 1995 [14]. The average annual salary in Mongolia is US$4750 as of December 2019[14]. Democracy has brought freedom for Mongolians to obtain passports to work, live, and move to foreign countries since 1990s. International migrations have increased; it is estimated that 144,483 Mongolian migrants were living abroad in 2018 with approximately 65% for economic reasons [14]. These migrants are mainly males and traveling to work purposes to South Korea, Japan, USA, Sweden and Czech Republic [13]. As of 2018, there are 49 000 Mongolians live and work in South Korea exclusively. Mongolians work in manufacturing, constructions and SMEs in various sectors legal and illegal basis in South Korea. Therefore, a remittance from Mongolian workers overseas may have a significant impact on the growth of disposable income of the per household. Annual remittances from workers in South Korea to Mongolia approximately totals US$ 100 million [13].

As household disposable income increase, majority of middle-class households own private vehicles that enable them travel within their country. Improved asphalt road network, and ease of accessibility to the remote national park caused the growth in domestic travel.

Urbanization, social congestion, and weather are another factor to explain rising demand of domestic tourists. Out of 3.2 million population, 1.4 million reside in the capital city Ulaanbaatar. As climate extremely continental, Mongolians experience a harsh, cold and long winter. Escaping from urban congestion, pollution, and celebration of warm summer months are another major reason for Mongolians to travel in their country.

During the national holiday-Naadam Festival that celebrates on the 11 July annually, Mongolians have longer holiday entitlements, thus they travel to national parks, famous lakes, and rivers; home provinces for reasons of leisure, visiting friends and relatives, high school reunions, pilgrimages, health, and special interest tours.

O'Gorman and Thompson [12] state that the most common purpose of Mongolians travelling in their country is visiting friends and relatives (40.5%), and leisure (35.2%) with 63% of the respondents

indicated that they travel to the countryside one or two times per year. Although there is an evidence of domestic tourism existence, the tourist numbers, travel patterns, and behaviors are uncertain. Domestic tourists' flow is hard to track down since there is a lack of standard measurements. The Ministry of Environment and Tourism [15] report presents that approximately 360,000 domestic tourists purchased tickets to enter 12 national parks in Mongolia in 2017. The actual number of domestic tourists is perhaps larger than this statistic.

Despite the fact of domestic tourism existence, there is a research gap to study domestic tourists' motivations, revisit intentions, their perceived benefit, and perceived values and relationship between these attributes. As research on domestic tourists' travel patterns is sparse, this research aims to evaluate domestic tourists'travel motivations to revisit intention mediated by perceived benefits and perceived value. An understanding of domestic tourists' travel motivation, perceived value, intention to return, and its potential contribution to the economy is the important component of the development of well-balanced and resilient national tourism sector.

The research result could assist development of effective strategy planning for regional tourism policy makers as well as providing background information about domestic tourists' travel motivation and demand patterns for tourism stakeholders which latter would be a framework for product and service development for this market segment.

2. LITERATURE REVIEW

2.1. Travel motivations

There is a significant body of literature about travel motivation, tourist behavior, patterns and revisit intention [16-25]. Travel motivation is a state of need and desire that enables people to do an activity to reach their travel goals.

Katsikari [16] states that travel motivation of people is to look outside for what they cannot find inside that have been created by society and everyday life. The theory identifies systematic motivational structures and the individual's needs in order of motivational importance as physiological safety, social esteem and self-actualization.

Pearce [26] classifies five-stage category for travel motivations of the travelers. Moreover, Pearce [26] suggests that there are motivational careers in travel that derived from the concept of more experienced travelers having higher needs than less experienced travelers.

The widely accepted travel motivation to explain why people to travel is push and pulls factor theory. Crompton [27] identifies two types of travel motivations; the first type refers to escape from everyday routine, exploration, self evaluation, relaxation, prestige, relationship enhancement, social interaction and second type constitutes novelty, culture and education.

The first type of motivation is considered as the push factor for travel and the second type is explained by the pull factor. On the contrary, Dann [28] suggests that there are clear differences between the reasons why people travel, what factors push them to travel such as escapism or what factors pull them to travel to a certain destination as pleasant climate, beaches and ocean.

The push and pull theory of travel motivation explains intrinsic and intangible push forces motivate people to travel [29], while destination features pull the people to travel and satisfy their need. Moreover, Dann [28] suggests anomie and ego-enhancement play an important role in the push factor. Anomie means a desire to escape from everyday routine, simply wishing to get away from it. On the other hand, ego-enhancement originates from the need of recognition and status enhancement through travel. Dann [28] further notes that push and pull factors are significant to the traveler's decision-making process. The push factor is based on the internal aspects of the travelers and basically installs a wish to travel. The pull factor is external to travelers and affects where, when, how people travel given the first desire to travel.

Goosens [30] states that the push factor explains people's desire to travel, whereas pull factor describes people's destination choices. Crompton [27] expands Dann's [28] theory on push and pull factor by conceptualizing people's motivation for leisure travelers. Moreover, the concept regarding to push and pull factor is that the internal forces push people to travel and external factors of destination elements, expectations, benefits, and perceptions pull them to travel [31].

However, research on domestic tourist's motivations, the relationship between perceived benefit and value, and revisit intention is uncommon. A few researchers [32-34] contribute to the research on domestic tourist's motivation in various countries' context.

2.2. Perceived benefit

It is considered that people often feel happier, healthier, and more relaxed after travel and vacation. Millman [35] states that health and wellness benefits of tourism can contribute to human health and well-being. People have recognized tourism as an inseparable part of human life rather than just a luxury of the privileged, the theme of travel benefits has attracted attention in several fields of study, including organizational behavior [36], health science [37], and tourism [38,39].

Organizational behavioral research has widely examined whether taking leisure travel have can help to reduce individuals job stress [36]; or travel and vacation can reduce job burnout [36]; or job performance. These research findings state that traveling and taking holiday is important for employees to maintain work place enjoyment and employers should encourage their employees to take travel. Furthermore, research [40] identifies the health benefits of travel and the effects of travel on an individual's psychological well-being [39].

These research findings demonstrate that most people have been found to be happier and more relaxed soon after a travel vacation. Lin et al. [41] describe that motives and desire to buy tourism products and services include functional and non-functional need. Functional needs states emotional, psychological features, for example enjoyment from travel that is crucial to understand by tourism service providers.

A positive emotional state during and after the trip may affect critically on the perceived benefits of tourists. An establishment of benefit required to tourists visiting at the destination is important for creation of successful product and service development and marketing communication. Wang and Fesenmaier's [42] study identified four categories of benefits including functional benefit (knowledge acquiring, learning); psychological benefit (sense of belonging, satisfaction); social benefit (better communication and interaction with others) and hedonistic benefits (more leisure time, relax and enjoyment). Moreover, Yen et al. [43] propose three types of perceived benefits of participation in travel as self-enhancement, rewards, and problem solving.

In this research paper, four benefits (learning or knowledge acquiring, self-esteem, social, and hedonic) are proposed to be analyzed through relationship between push and pull travel motivations and revisit intention. Learning benefits are described as personal growth, life skill increasement, and knowledge acquirement through travelling. Social benefits are the enhancement of social relationship through interaction with the community that provides a sense of belonging and social identity [44]. Self-esteem benefit is identified as better individual status and reputation. Hedonic benefits are the pleasure obtained through the travel experience with the tourism service and associated with individual feelings [45]. Tourists purchase tourism goods and services for the perceived benefit they will gain from it. These perceived benefits with additional opinions about goods and service create tourists' perceived value about the overall destination.

2.3. Perceived value

Perceived value is derived from the notion of what benefits individuals get and what costs they pay when they purchase and utilize tangible and intangible products and services [46]. Individual's perceived value of goods and services directly affects satisfaction and revisit intention [45]. Xiaoting et al. [47] state that the perceived value is a result of product and service evaluation. Perceived value depends on the type of goods and services, and measurement [48]. Therefore, tourism stakeholders put more efforts to enhance the perceived value of tourists, since perceived value has strong impact on overall satisfaction, revisit intention and recommendations to others [49].There are number of research works have dedicated to the importance of tourists' perceived value regarding to tourist service quality and tourist satisfaction [47-52]. Chen and Petrick [53] state that perceived value is the feelings and attitudes of a tourist in regard to a product or service purchased. Perceived value reflects on the price of the goods and service of tourism facilities [54]. Parasureman and Grewal [55] state that it is crucial to determine tourists' perceived value that affects their revisit intention. Tourism literature suggests that the perceived value is the tourists' overall evaluation of the utility of tourism products and services based on the perception which is given [53]. In addition, Wearing and Deane [56]'s study determines that the interaction between tourists, places, people and activities supports the understanding of individuals for self-realization. Brown and Lehto [57] note that positive perceived value from overall travel experience and self-fulfillment directly related to the interaction with local community, travel memories, and enhancement of family relationships. Tourist perceived value at the destination [58], and perceived quality of the services influence on revisit intention [59]. Xiaoting et al. [47] state that perceived value is a crucial attribute in tourist behavioural studies, moreover, its ability to make prediction of overall tourist satisfaction and destination loyalty is evident.

There has been limited empirical research conducted on perceived value and its relationship with push and pull factors of travel motivations, perceived benefits and revisit intention. The proposed research model in this study aims to examine tourist motivations to revisit intentions mediated by the perceived benefit and perceived value of domestic tourists in Mongolia.

2.4. Tourist revisit intention

The tourist revisit intention is a widely researched topic in the tourism literature [60]. Revisit intention is a tourist evaluation of the overall experience at the destination, the likelihood of revisiting to the same destination and their willingness to recommend the destination to potential tourists [58]. It is considered that repeat visitors tend to stay longer at their destination, participate more in leisure activities, be more satisfied, and spread positive word-of-mouth, while require lower marketing costs than first-time visitors [61-63]. There are attributes of behavioral intention of tourists identified by Zeithaml et al. [64] including revisit intentions, word-of-mouth, customer loyalty, and price sensitivity. Positive tourist experiences with excellent quality of service, destination attributes, for example, beautiful beaches, local cuisine, landscape, hospitality of locals, and rich cultural heritage often bring favorable intentions where as worse service quality and lack of destination attributes lead to unfavorable revisit intentions [65-70]. Islam and Bora [71] state that regions of Mongolia have rich traditions of local cuisine that could bring favorable experiences to both international and domestic tourists. Kassawneh&Alfandi [68] state that favorable travel intention presents revisit intention, more expenditure of money at the destination, paying a superior price for tourism service and destination loyalty. Som and Badarneh [72] present that previous tourism literature determined behavioral intentions using three features including intention to return, willingness to recommend to others, and word-of-mouth marketing. Overall, a positive tourist experience brings more likelihood to repeat visit to the destination [73,65,68]. Customer loyalty is an important aspect of tourism marketing communication as it is a key feature for destination attractiveness. Destination customer loyalty and revisitation of existing tourists require low marketing cost than appealing new customers. Loyal tourists are more likely to recommend tourist destinations to the friends, relatives or other potential customers by delivering positive word-of-mouth promotions. Khasawne and Alfandi [68] state that customer loyalty is a crucial background for success of the marketing strategy of destination planners. Tourism developers and marketers evaluate their marketing strategies and management policies based on the revisit intentions of tourists, their willingness to recommend others and delivery of positive word-of-mouth information.

Therefore, the authors of this research have proposed hypotheses based on the literature review:

H_1: Push factor of travel motivation is positively and directly affect tourist revisit intention.
H_2: Pull factor of travel motivation is positively and directly affect tourist revisit intention.
H_3: Perceived benefit mediates relationship between push travel motivation and revisit intention.
H_4: Perceived benefit mediates relationship between pull travel motivation and revisit intention.
H_5: Perceived value mediates relationship between push travel motivation and revisit intention.
H_6: Perceived value mediates relationship between pull travel motivation and revisit intention.

3. METHODS AND DATA

3.1. Research design

This study applies a quantitative method to examine push and pull travel motivations of domestic tourists in Mongolia; to investigate domestic tourists' motivations to revisit intention mediated by perceived benefits and perceived value. According to the literature review on the push and pull travel motivations, perceived benefits, perceived value, and revisit intentions, the following research model was developed (Figure 1).

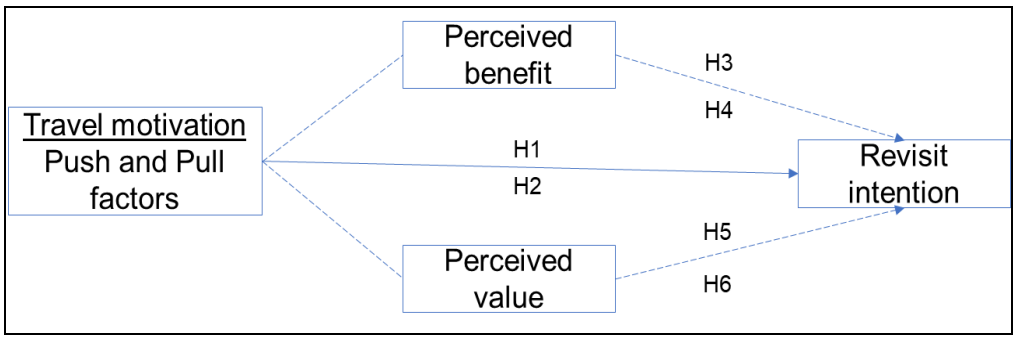

Figure 1. Proposed research model
Source: Own literature research

3.2. Data sampling

Despite the researchers' effort, it was problematic to conduct random sampling due to the uncertain measurement and statistics of domestic tourists. Thus, the researchers adopted objective sampling method for this research study. The research target was Mongolians living in Ulaanbaatar, the capital city of Mongolia who recently participated in domestic tourism activities. Prior to actual data collection, the pilot test was performed and correction were made. The data was collected from Mongolians from August to September 2019. The survey was designed to expansively address the travel motivation of domestic tourists, perceived benefits, perceived value, and intention to revisit. The survey was conducted in the five populated sites of the capital city Ulaanbaatar, including the state department store, supermarkets, student campus, Gandan monastery, and coffee shops in the biggest malls of the town. The respondents were informed first about the purpose of the survey and asked whether they travelled in the countryside recently. As the total statistics of domestic tourists is not certain, the researchers aim to achieve the proposed sample of 1,300. The complete and returned size of the survey was 1,068, which represents a response rate of 82.5%.

3.3. Research instrument

The questionnaire was the main tool for collecting primary data from domestic tourists in Mongolia. The self-completed and paper-based printed questionnaire was delivered to the respondents. The questionnaire was conducted in Mongolian language. Push and pull factors of travel motivations were measured by items developed by previous travel motivation studies [24,29,74,75]. A total of 80 close-ended questions which comprise of 21 questions for push factors; 20 questions for pull factors; 13 questions for perceived benefit, 18 questions for perceived value, 3 questions for behavioral intentions and 5 questions for demographic profile of the respondents. The survey participants requested to indicate 41 motivational items when made travel decision-making. As the literature review suggested, the importance of items was measured by five-point Likert scale (5 being strongly agree and 1 being strongly disagree). Out of the 41 motivational items, 21 items were push factors of travel motivation and the remaining 20 belonged to the pull factor of travel motivation. The questions for perceived benefit and perceived value were based on literature review suggestions [44,76]. Therefore, 13 items of perceived benefit and 18 items of perceived value were considered by using five-point Likert scales (5 being strongly agree and 1 being strongly disagree) measurement. The evaluation of revisit intention was developed on the items adopted from Muhammed et al. [77] and Kwenye & Freimund [78] studies included revisit intentions, and recommendations to others. Demographic and travel patterns' questions were included in the last part of the questionnaire. The returned questionnaires were examined for checking suitability, missing data, and outliers. Data was analyzed by using SPSS 23.0 statistical software program that produced descriptive and inferential statistics. In addition, SPSS and excel programs were used for data presentation, tabulation, and graphs.

4. RESEARCH FINDINGS

4.1. Socio demographic characteristics

As Table 1 shown, out of the total1,068 respondents, majority of the respondents (57.3%) were female and (42.2%) were men respectively. There are somewhat different distributions between age groups with (59%) for 18-30 years old; (23.9%) for 31-40 years old; (12.6%) for 41-50 years old; and

(3.2%) for 51-60 years old. The most of the respondents (54.5%) travelled with their family; (19.9%) with their friends;(9.8%) with their relatives, and only (7.8%) were travelled with four groups. In terms of monthly income,(22.3%) of respondents earn less than MN₮499,000, (15.6%) earn between MN₮500,000 –799,000; (23.9%) earn between MN₮800,000–1,000,000; (18.9%) earn between MN₮1,000,000-1,500,000; (10.9%) earn between MN₮1500,000–2,000,000; and only(8.4%) earn more than MN₮2,000,000(USD1=MN₮2,850 as of 15 April, 2021).

Table 1. Socio-demographic characteristics of the respondents

Characteristics	Categories	Number	Sample percentage
Gender	Male	449	42.6
	Female	613	57.4
	Others	6	0.6
Age	18-20 years old	265	24.8
	21-30 years old	369	34.6
	31-40 years old	255	23.9
	41-50 years old	135	12.6
	51-60 years old	34	3.2
	Over the 60s	10	0.9
Traveling with	Alone	73	6.8
	Tour group	83	7.8
	Family	585	54.8
	Friends	212	19.9
	Relatives	105	9.8
	Colleagues	10	0.9
Monthly family income (MNT)	240.000-499.000	238	22.3
	500,000-799,000	167	15.6
	800,000-1,000,000	255	23.9
	1,000,001-1,500,000	202	18.9
	1,500,001-2,000,000	116	10.9
	2,000,001-2,500,000	60	5.6
	Over the 2,500,001	30	2.8

4.2. Exploratory Factor Analysis

In order to assess the dimensionality of the 41 items, the exploratory factor analysis (EFA) was conducted. The EFA is a statistical method used to reduce the observed variables to a smaller set of factors (Table 2). After data cleaning, the final sample size was 1,068. To reduce the number of items, the factor loading values that indicate the correlation between items and factors were identified in order to verify group of variables can be presented by the factor or not. The eigenvalue 1 was identified and items with factor loadings of greater than 0.5 were taken into the consideration. Cronbach's α was applied to test reliability of factor groupings. The factors with Cronbach α greater than 0.6 were taken in the analysis. The mean scores of the push and pull travel motivations were analyzed to identify what factors were perceived more important among respondents.

Table 2. The exploratory factor analysis (EFA) and reliability test results of latent variables

Construct	Variable	Number of items	Cronbach's alpha
Travel motivation	Push factors	21	.884
	Pull factors	20	.891
Perceived benefit	Benefit	13	.847
Perceived value	Value	18	.894
Revisit intention	Intention	3	.671

The EFA results are shown in the Tables 3 and Table 4. The mean scores of the push and pull factors of travel motivations were analyzed to identify what factors were perceived more important among respondents.

Table 3. The exploratory factor analysis and reliability test results of push factor of travel motivation

Push Factor	Loading	Cronbach α
Factor 1: A self exploration		
Travel boosts my knowledge & experience	0.735	0.782
Travel allows me to reach my dream and curiosity about places that I want to visit	0.693	
I learn new things or diverse lifestyle when I travel	0.771	
I learn new and interesting things during my travel	0.696	
Factor 2: Escapism and relaxation		
I rest and relax when I travel	0.623	0.798
I feel happy and excited at the tourist places	0.561	
Travel makes me feel relaxed	0.751	
I gain joy and happiness when I travel	0.734	
Travel makes me feel inspired	0705	
Factor 3: Social interaction		
I expect to meet people with the same interests while traveling	0.670	0.734
I can share my experiences with a personwho I knew or who are new when I travel	0.643	
My social status will increase my when I travel	0717	
Factor 4: Belongingness		
I communicate with locals or other tourists when I travel	0.719	0.769
It is interesting to meet and chat with local people	0.764	
It is entertaining to meet and chat with other tourists	0.765	
I like visiting friends and relatives who live in other places	0.620	
KMO = .905; Bartlett's Test of Sphericity, p value = .000.		

Table 4. The exploratory factor analysis and reliability test results of pull factors of travel motivations

Pull Factors	Loading	Cronbach α
Factor 1: Nature and Environment		
Nature has many attractions	0.746	0.805
Nature has beautiful scenery	0.752	
Nature has calm atmosphere	0.805	
Climate is pleasant to travel	0.677	
There are nice lakes and rivers	0.650	
Factor 2: Events		
Places I travel have active nightlife	0.729	0.854
Places I travel have lots of sightseeing	0.755	
Places I travel have offered lots of entertainment opportunity	0.684	
I have a lots of sport activities when I travelled	0.771	
I attend a lot of cultural activities	0.740	
Factor 3: Ease of Accessibility		
Places I visit have decent facility to elder people	0.734	0.853
Places I visit have decent facility to children	0.852	
Places I visit have good hospitality	0.818	
Factor 4: Culture		
I enjoy local cuisine when I travel	0.690	0.721
I enjoy being with friendly locals	0.624	
I enjoy visiting heritage sites	0.593	
I enjoy visiting historic places	0.556	
KMO = .899; Bartlett's Test of Sphericity, p value = .000.		

4.3. Analysis of hypothesis testing direct and indirect effects

The objective to test the proposed research model is to examine the relationship between domestic tourists' motivational factors on revisit intention mediated by perceived benefits and perceived value. Thus, the perceived benefit and perceived value were tested as the mediating variables between push and pull factors of travel motivations and revisit intention. Linear regression analysis was applied to determine the relationship among variables.

4.3.1. Testing of direct hypotheses

The results show that there is a statistically significant relationship. The push factors of travel motivation directly and positively influence on revisit intention (β=.379, p<.001), thus hypothesis 1 is strongly supported. On the other hand, the pull factors of travel motivation directly and positively affect on revisit intention, therefore this result indicates statistically significant. However, a linear regression analysis result is shown as (β=.032, p>.001), thus hypothesis 2 was rejected. The results of direct hypotheses are summarized in Table 5.

Table 5. The results of the direct relationships among constructs

Independent Variable	**Unstandardized Coefficients**		**Standardized Coefficients**	***t***	***p***
	B	**S.D**	**Beta**		
Push factor of travel motivation	.558	.045	.379	12.266	.000
Pull factor of travel motivation	.038	.036	.32	1.032	.302
***p<0.001, **p<0.05, *p<0.1	R^2=.155, Adjusted R^2=.153, F=.72515				

4.3.2. Testing of indirect hypotheses

Mediating effect of perceived benefit (PUSH and PULL factors of Travel Motivation)

Mediating regression analysis was performed to verify Hypothesis 3 and 4. The result of testing hypothesis 3 shows mediating effect of perceived benefit on revisit intention, which is shown inTable 6 and Figure 2. The result indicates that the value of the explanatory power was (R^2) =.270; and the F value was 201.095, therefore, it is statistically significant. Moreover, the result suggests that there is a statistically significant relationship between the push factors of travel motivation and revisit intentions mediated by perceived benefit (β=.430, p<.001). The hypothesis 4 results are shown in the Table 7. In Figure 3, the value of explanatory power was (R^2) =.261 and the F value was 191.235, which represents statistical significance. Thus, H_3 and H_4 were supported.

Table 6. Mediating effect of perceived benefit (Push factor of travel motivation)

Dependent variable⇒	**Perceived benefit**	**Revisit intention**	
Input variable ⇓	**B**	**β**	
	Step 1	**Step 2 (Model 2)**	**Step 3 (Model 2)**
Push factor of travel motivation	607***	.392***	.131***
Perceived benefit			.430***
Adj.R2			.117 (F=173.512)
R2	.368	.154	.270

F	632.562***	197.332	201.095
***p<0.001, **p<0.05, *p<0.1			

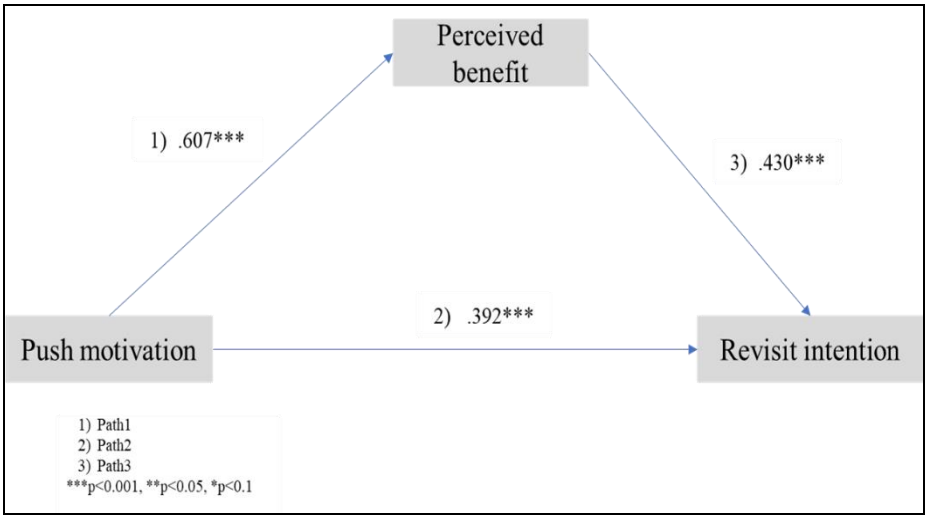

Figure 2. Mediating effect of perceived benefit (Push factor of travel motivation)
Source: Own research outcome

Table 7. Mediating effect of perceived benefit (Pull factor of travel motivation)

Dependent variable⇒	**Perceived benefit**	**Revisit intention**	
Input variable ⇓	**β**	**β**	
	Step 1	**Step 2 (Model 2)**	**Step 3 (Model 2)**
Pull motivation	.438***	.193***	-.037
Perceived benefit			.525***
Adj.R2			.223 (F=327.638)
R2	.191	.037	.261
F	257.413***	197.332	191.235
***p<0.001, **p<0.05, *p<0.1			

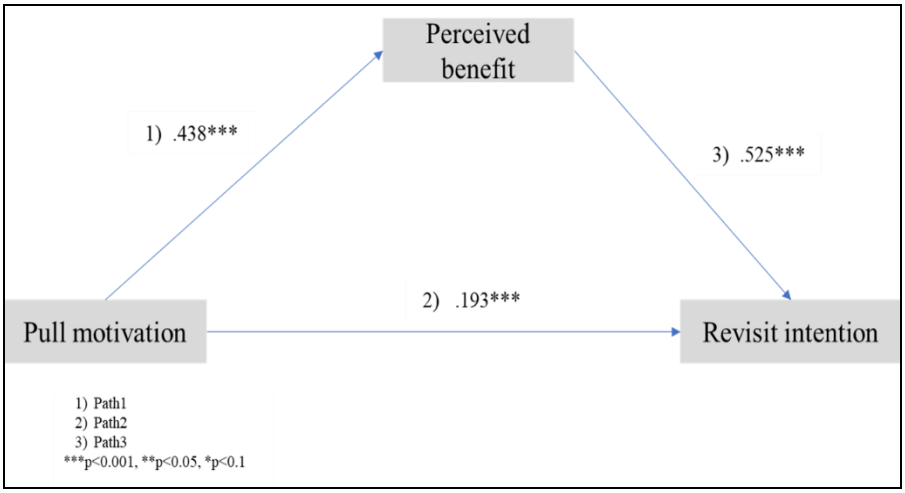

Figure 3. Mediating effect of perceived benefit (Pull factor of travel motivation)
Source: Own research outcome

Mediating effect of perceived value (PUSH and PULL factors of Travel Motivation)

Mediating regression analysis was performed to verify Hypotheses 5 and 6. The result of testing H_5 as a mediating effect of perceived value on revisit intention is shown in Table 8 and Figure 4. The result shows that the explanatory power was (R^2) =.297 and the F value was 229.680, which represents the statistical significance of the model. Consequently, the result suggests that there is a statistically significant relationship between push travel motivation and revisit intention mediated by perceived value (β=.471, p<.001). The H_6 result is shown in Table 9 and Figure 5. The result indicates the explanatory power was (R^2) =.295 and the F value was 226.275, which shows statistical significance. Therefore, there are statistically significant relationships between pull factors of travel motivation and tourist's revisit intention mediated by perceived value. Thus, H_5 and H_6 were supported.

Table 8. Mediating effect of perceived value (Push factor of travel motivation)

Dependent variable⇒	**Perceived value**	**Revisit intention**	
Input variable ⇓	**β**	**B**	
	Step 1	**Step 2 (Model 2)**	**Step 3 (Model 2)**
Push motivation	593***	.392***	.113***
Perceived value			.471***
Adj.R2			.144 (F=221.891)
R2	.351	.154	.297
F	589.021***	197.332	229.680
***p<0.001, **p<0.05, *p<0.1			

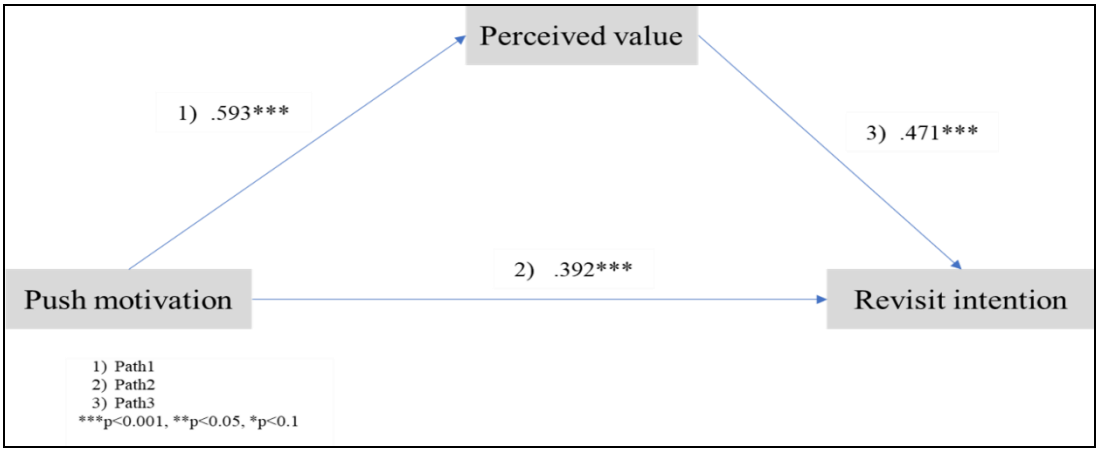

Figure 4. Mediating effect of perceived value (Push factor of travel motivation)
Source: Own research outcomes

Table 9. Mediating effect of perceived value (Pull factor of travel motivation)

Dependent variable⇒	**Perceived value**	**Revisit intention**	
Input variable ⇓	**β**	**β**	
	Step 1	**Step 2 (Model 2)**	**Step 3 (Model 2)**
Push motivation	481***	.193***	-.085**
Perceived value			.578***
Adj.R2			.257 (F=395.737)
R2	.231	.037	.295
F	326.770***	42.154	226.275
***p<0.001, **p<0.05, *p<0.1			

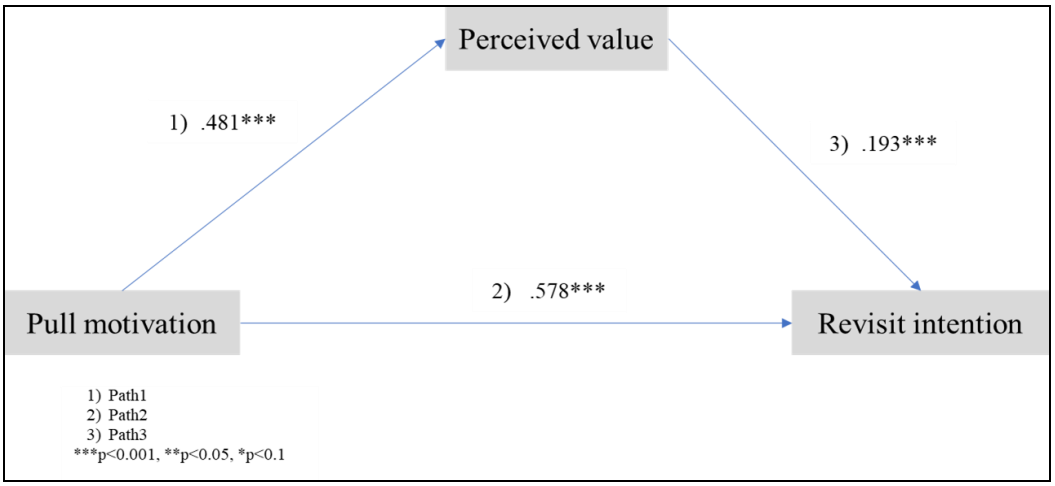

Figure 5. Mediating effect of perceived value (Pull factor of travel motivation)
Source: Own research outcomes

5. DISCUSSION

An understanding of the domestic tourist' motivation, their perceived benefits, perceived value about travel and revisit intentions is crucial to destination developers and tourism stakeholders. Domestic tourism is important component of the tourism sector since it generates income, creates employment opportunities, enhance infrastructure, and ease of tourism seasonality. However, the majority of tourism research rather focus on international tourists' behavior and pattern than domestic tourists [79]. Nonetheless, there are few academic studies that dedicated to investigate the relationship between domestic tourists' travel motivations, satisfaction, and behavioral intentions [20]; the direct effect of push and pull motives on domestic tourists' motivations [80]; identification of domestic tourists' motivations in small islands [34]; and push and pull motivations of Indian domestic tourists to Kerala [33]. Previous studies examined tourists' motivations by push and pull factors in general [60, 24] and summarized that revisit intentions of tourists and destination loyalty are based on these tourist motivational concepts [81, 82]. This empirical study attempts to understand domestic tourists' motivation, perceptions towards perceived benefits, perceived value, and their revisit intentions. Moreover, the study pursues to contribute to the theoretical and empirical evidence on the relationships between push and pull motivations and revisit intention mediated by perceived benefits and perceived value of Mongolian domestic tourists.

The study findings identify relationships between 1) travel motivations and revisit intention; 2) mediating effects of perceived benefit between travel motivations and revisit intention; 3) whether perceived values mediate the relationship between the main hypothesis of push and pull factors of travel motivation and revisit intention or not. Moreover, the research result indicates that perceived benefits and perceived value have a strong mediating effect on the relationship between travel motivation and revisit intention. Incorporating all constructs of push and pull travel motivations, perceived benefits, and perceived value and revisit intentions, the research results are presented as follow.

First, the research result indicates that the push factor of travel motivation directly and positively affects the revisit intention of domestic tourists in Mongolia. The test result was statistically significant, therefore the research prediction of (H_1) push motivation factors directly influence on revisit intention (β=.379, p<.001) was supported. The results provide evidence that the relationship between push motivation and revisit intention. The items of push travel motivations, for example, self-exploratory, relax and escape, social status, and togetherness were significantly important for revisit intentions of domestic tourists in Mongolia.

Second, the researchers hypothesized that the pull factor of travel motivation is positively and directly affecting tourists' revisit intention. However, H_2result was rejected, thus the relationship between pull factors of travel motivation and revisit intention has no direct effect (β=.032, p>.001). The next research hypotheses focus on the push and pull travel motivation on revisit intention mediated by perceived benefits and perceived value. The H_3 was tested to determine that the perceived benefit mediates the relationship between push travel motivation and revisit intention. The H_3 test result was supported with (β=.430, p<.001) value. The H_4 test result was similar to H_3, the pull travel motivation influence on revisit intention mediated by perceived benefit (β=.525, p<.001). In addition, the research further purposes to identify the direct effect of push and pull travel motivations on revisit intention

mediated by the perceived value of domestic tourists. The H_5 tested perceived value mediates the relationship between the push factor of travel motivation and revisit intention (β=.471, p<.001). At last, H_6 was tested that perceived value mediates the relationship between the pull factor of travel motivation and revisit intention (.578, p<.001). Overall, the perceived value mediates the relationship between pull factors with travel motivations. Therefore, H_5 and H_6 were supported. In summary, there is a statistically significant relationship between all constructs, therefore the push and pull travel motivations of domestic tourists' revisit intention have statistically significant and mediated by perceived benefit and perceived value.

The findings of this study support previous studies of push and pull travel motivation for predicting satisfaction and post-trip tourist behaviors [29,81]. One of the interesting findings of this study is the existence of a negative relationship between pull motivation and intention to revisit of domestic tourists albeit not significant. However, in the case of Mongolian domestic tourists' behavioral study, the push travel motivation is a more significant variable that influences on revisit intention. On the contrary, the relationship between pull factors of travel motivation and revisit intention has no direct effect. This might be explained by the pull factors of travel motivations, for example a lack of accessibility of destination tourist facilities, poor tourist infrastructure, and less family-friendly services. In addition, domestic tourists are not attached to cultural attributes (visiting cultural and heritage sites, historical places) of the destination which were that important attribute of pull travel motivation. The further study is needed to investigate the relationship between pull travel motivations and revisit intentions of domestic tourists in Mongolia.

6. CONCLUSIONS

As domestic tourism has become an important market segment for the tourism industry in Mongolia, this study can be a contribution to the policy makers and destination marketing organizations for launching innovative and demand-oriented services in domestic tourism markets.The findings suggest that a positive and direct relationship exists between travel motivations and tourists' revisit intention.The push factors of travel motivations are most important for Mongolians when they make travel decisions including self-exploration (knowledge/education/new experience), relaxing and escapism, social achievement, and belongingness. Destination loyalty is measured by the intention to repeat visitation to the destination, which is based on the overall feelings about thevisit, recommend destination to others, and encourage friends and relatives to visit to the destination. The primary goal of destination marketers is to have a better understanding of the travel motivation of tourists to satisfy them by providing excellent products and services. Tourists who receive a good value and benefit from the trips tend to revisit or recommend the destination to others.

According to the research results, Mongolians prefer to travel with their families and relatives for relaxation and escape from their every day routine. The extremely continental weather, long and harsh winters, continuous academic years for secondary, and university education from September to May might explain that why Mongolians more emphasized the push factors of travel motivations. Domestic travel enables to acquire new knowledge about their country, and to learn new things. In regard to the relationship between pull travel motivations to revisit intention were not significant. However, research-oriented efforts to design tourism products that correspond to both push and pull travel motivations of domestic tourists are likely to lead to a positive perceived benefit and perceived value of their travel, the latter to reflect revisit intentions and destination loyalty.

Consequently, demographic characteristics of the study revealed that most domestic tourists were lower income earners and travelled with their families. As Mongolians have strong family ties, travelling with family, friends, and relatives are common. Therefore, there is need for developing child-friendly, family-oriented tourism activities and products offered by the tourist destinations. In addition, destination management organizations, managers and product developers should improve accessibility to tourists' attractions for the emerging domestic market. The push factors of travel motivation are more statistically important than pull factors of travel motivations for 18 to 20 years old respondents. For the 50 and above years of old respondents, both pull and push factors of travel motivations are not statistically important. This could reflect that Mongolians retire early and instead of seeking social attachment, they tend to look after their grandchildren and prefer to travel with their families rather than with friends. In order to have in-depth understanding of the travel motivations of domestic tourists in Mongolia, future research is suggested. Additional attributes such as destination image, place attachment, and satisfaction are needed to be investigated on the relationship between push and pull travel motivations and revisit intentions.

The study results contribute to the increase in frequency of domestic travels, prolong length of tourist stay, improved satisfaction and increasing destination loyalty. Therefore, the tourism practitioners in Mongolia can develop appropriate strategies and promotional programs based on the travel motivations of domestic tourists' market in order to satisfy their needs.

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Apulia agro-biodiversity between rediscovery and conservation: the case of the «Salento km0» network

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Abstract: Green Revolution and the birth of the current global economic system had two opposite, subsequent effects. If, initially, they led to processes of crop homogenization, seasonal adjustment, homogenization of the landscape and markets standardization, they have subsequently pushed local communities towards a recovery of endemic biodiversity at risk of extinction because of such planetary processes, as well as a fundamental element in terms of local development, food security and sovereignty and reduction of environmental impacts. Starting from these instances of recovery and protection, which are increasingly taking place in Apulia, this work will examine both projects created "from above" and initiatives "from below", being the latter the result of a new consciousness that renews social cohesion and gives new value to the territorial milieu. In this regard, the case of the **«**Salento km0**»** network will be examined: born in 2011 and now made up of 61 local subjects including producers, restaurateurs, associations, ethical purchasing groups and traditional stores, which represent a key symbol of a territory that resists and a population that has chosen to stay and innovate according to economic, social, cultural and environmental sustainability.

Key words: biodiversity, landscape, Alternative Food Networks, local development, food security.

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1. INTRODUCTION

The Mediterranean Region, whose basin covers a surface of 3,800 km from east to west and 1,000 km from north to south, is an area characterized by similar climatic conditions having a level of biodiversity among the highest globally and whose name means «a sea made of seas», surrounding a land divided into nations. It is a crossroads and a melting pot of cultures, rich in traditions, history and civilizations that, living one after another, crossing, contaminating and evolving, characterized and still characterize this «space-movement», as Braudel defines it: a series of sea and land routes, of cities holding hands, from the smallest towns to the metropolitan areas [1] (p. 55); a shared area of osmosis among men, products, cultures, whose identity «only exists by exchanging, sharing "natural" diversities» [2] (p. 73).

The very designation *mare nostrum*, given to the Mediterranean by Romans, enshrined not only their political philosophy but the cultural union as well (*ibid*), which identified in oil, bread and wine the symbols of their food tradition. After the collapse of the Empire and the Germanic invasion, Roman's tradition met and merged with the invaders' one, thus creating a new heritage which afterwards, in turn, due to the Muslim occupation of Africa, Spain and part of Sicily, merged with the Arabian culture. Thus, the *mare nostrum* became an «Arabian lake», a sea border separating two extremely different traditions [2] (p. 74). However, that event did not determine the end of cultural changes and food-related fusion. Indeed, the Arabians drove an agricultural, technical and crop renewal. The introduction of new plants (citrus fruit, sugar cane, rice, eggplants, spinach, artichokes, etc.) changed the landscape and led to new recipes. Later, the discovery of America and the import of several alien species (potato, tomato, bell pepper, cocoa,

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etc.), will transform once more and in such a way the agricultural production and the ancient landscape of the Mediterranean Region that, as Febvre imagines, if Herodotus, father of history and geography [3], should come back from the dead to visit our time, could not recognize it. Actually, he would see orange, lemon and tangerine trees (imported from Far East), agave, aloe, prickly pears (imported from America), eucalyptus trees (of Australian origin) as well as eggplants (India), chili pepper (Guyana), corn (Mexico), rice (a gift from the Arabians) and much more [1,4]. Therefore, he would notice the transformation of ancient natural and harsh landscapes into a varied countryside that, shaped by practices derived from needs, values and ambitions, documents the identity and the culture of the communities that produced it, standing as «social construct», a real cultural landscape [5,6], included among the main topics of biodiversity conservation and protected by the European Landscape Convention (2000)[1] [7], that recognized landscape

> an area or a territory as perceived by its inhabitants or by visitors, whose appearance and character derive from natural and/or cultural (i.e. anthropogenic) factors. Such definition takes into account the idea that landscapes evolve over time for the effect of natural forces as well as the actions of human beings. It also underscores the idea that landscape forms a whole, whose natural and cultural elements are considered concurrently.

Moreover, the establishment of the Osservatorio Nazionale del Paesaggio Rurale, delle pratiche agricole e conoscenze tradizionali (ONPR) [8] allowed, at national level also, the implementation of a rural landscape framework within the rural development policy. This tool, implemented by the MiPAAF (Ministry for Agricultural, Food and Forest Policies), allowed the census (based on nominations proposed by the Bodies involved, located on the whole national territory) and the registration in the *Registro Nazionale dei Paesaggi Storici* (National Register of Historic Landscapes) of 14 rural landscapes and 2 agricultural practices. Further, such establishment is based on a preliminary study of 2010 promoted by the MiPAAF in collaboration with 14 Italian universities and some international research institutes, which allowed to compile a catalogue (though non-exhaustive) of 123 rural historic landscapes [9,10].

Typical products, bearers of identity, memory, history, tradition and quality, are inextricably linked to the rural landscape. Such products cannot be easily exported and therefore are spatially limited; they are a symbol of places often unrepeatable, carrying meaning and sense, ancient values and knowledge: a priceless heritage of culture and biodiversity that, if properly promoted, could be a driver of social and economic development of the territory itself, a source of wealth, union and interest. Actually, their strong experiential power should not be underestimated, since food involves demands and values that are integrated and incorporated exactly in the same way as we assume nutrients to survive; not a mere physical nutrition, therefore, but a mental and spiritual one.

If, on the one hand, the Green Revolution and the emergence of the current global economic system initially led to the standardization of crops and markets (since not all varieties can be marketed due to contingencies related to transport and profit), afterwards they encouraged local communities to recover endemic biodiversity put at risk of extinction by those global processes. This paper is based on such efforts of recovery and protection, currently on the rise in Apulia, by the adoption of transcalar strategies involving a wide network of Bodies, institutions and local players. We will therefore consider both «top-down» projects and «bottom-up» initiatives, the latter being the result of a new awareness that gives new life to social cohesion and a new value to the territorial *milieu*. In particular, we will consider the case of the «Salento km0» network, a key symbol of a resilient territory and a population that decides to stay and make innovations in the name of economic, social, cultural and environmental sustainability [11].

This research is therefore a preliminary study, within a reflection on food and sustainability, a line of reasoning that does not end with this contribution, but will be expanded in subsequent works by monitoring the transcalar dimension of the phenomenon, analysing the effects, limits and possibilities inherent both in the local territorial system and in the initiatives implemented by local actors and policy makers.

[1] Article 9 of the Italian Constitution, implemented by the establishment of the Code of Cultural Heritage and Landscape (Italian Legislative Decree No. 42, of 22 January 2004; amended by Italian Legislative Decree No. 156, of 24 March 2006 and Italian Legislative Decree No. 157, of 24 March 2006 as well as Italian Legislative Decree No. 62, of 26 March 2008 and Italian Legislative Decree No. 63, of 26 March 2008), also enshrines the protection of landscape as well as of the historic and artistic heritage of the country. In this regard, remarkably interesting are many of the publications and presentations of the archaeologist and historian Salvatore Settis, who often and jointly addressed topics as the landscape, the cultural heritage and the environment.

2. APULIA AGRO-BIODIVERSITY AND THE INTEGRATED PROGRAMMES FOR ITS PROTECTION

Located in the middle of the Mediterranean and composed for 53.2% by lowlands, 43.5% by hilly areas and 1.5% by mountain areas[2], Apulia, due to its bio-geographic features, falls within the Apulian ecoregion[3] (Mediterranean Division, Province of the Apulian Hyblean foreland, Apulian Section [16]), being the result of a very ancient process of anthropogenic territorialization, characterized by a strong integration between man and nature.

According to the *Piano Paesaggistico Territoriale Regionale della Puglia - PPTR* (Regional Territorial Landscape Plan) [13], 1,259,000 ha (equal to 65%) out of a regional surface of 1,933,562 ha, account for the utilised agricultural area (UAA)[4], to which 213,400 ha of urban areas and infrastructure (11%) should be added, thus reaching 76% on non-wilderness areas. Though wilderness areas cover only 335,517 ha (equal to 17%, lowest figure in Italy), the regional level of biodiversity is extremely high. Actually, it should not be forgotten the role played by agricultural areas (especially those with high natural character) and their anthropogenic remains (*masserie*, dry-stone walls, *pagghiare*, etc.) in preserving many wild species (being a shelter and reproduction environment) as well as the ecological connectivity.

The Rural Development Programme (RDP) allowed to create integrated projects to protect the local agri-biodiversity in order to recover, protect and promote ancient cultivated or spontaneous crops undermined, confined or forgot by industrial agriculture. In this regard, are worth mentioning:

- BiodiverSO – *Biodiversità delle Specie Orticole della Puglia* (Biodiversity of Apulian horticultural species)[5], a project implemented both by scientific publications and the creation of a regional network for biodiversity that connected keeper-farmers (holders of local crops), farms, stakeholders (rural tourist facilities, restaurants), local bodies in charge of promoting environmental, cultural as well as historic and architectural resources [15]. The purpose is that of

> contributing to the achievement of a significant reduction of the current loss of biodiversity rate of Apulia vegetable crops by working on all the local crops included in Annex 8 of the RDP Apulia 2007-2013 (therefore on cauliflower, broccoli, artichoke, tomato, *batata*, carrot, chicory, melon), as well as *carosello*, *barattiere*, *cima di rapa*, Catalogna chicory, onion, S. Ippazio carrot, winter melon, Swiss chard and black-eyed pea.
> After identifying, on the Apulian territory, the crop genetic resources at risk of genetic erosion, they will be catalogued (by computer tools), stored and typified [15].

On a total of 32 crop species, 122 local varieties were identified on which the project is currently focusing.

Another positive aspect of BiodiverSO is its ongoing contribution, since 2016, to the widening of the list of traditional agricultural and food products (*Produzioni Agroalimentari Tradizionali, PAT*) with 66 new PATs (14 in the last revision), thus bringing Apulia to 299 PATs.

- *Re.Ge.Fru.P. – Recupero del germoplasma frutticolo pugliese* (Apulian fruit germplasm recovery), *Re.Ge.Vi.P. – Recupero del germoplasma viticolo pugliese* (Apulian grape germplasm recovery) and *Re.Ger.O.P. – Recupero del germoplasma olivicolo pugliese* (Apulian olive germplasm recovery), included and promoted through the website www.fruttiantichipuglia.it, three projects aiming at protecting, managing and promoting «the biodiversity of Apulia fruit, olive and viticultural heritage through the genetic, pomological, health, technological, historic, social and economic study and analysis in order to identify, characterize, collect, catalogue and store plant material at risk of extinction [16]». In particular, the first one aims at recovering the varieties of fruit of the territory and to promote their properties, thus maintaining the genetic heritage of species and ecotypes of agricultural interest characterizing the historic and traditional landscape of Apulia [16]; the second one aims at «ensuring the conservation of the intraspecies and intravarietal viticultural biodiversity, improving the knowledge of production and

[2] The above percentages make it the flattest Italian region [12].

[3] Ecosystem regions of consistent character in which natural species and communities interact fairly well with the physical characteristics of the environment [13].

[4] Apulia is the region with the highest number of farms and wider invested surface (245 thousand farms and 527 thousand hectares) [14].

[5] The partners of the project include the Dipartimento di Scienze AgroAmbientali e Territoriali (DISAAT) and the Dipartimento di Scienze del Suolo, della Pianta e degli Alimenti (DISSPA) of the University of Bari, the Istituto di Bioscienze e Biorisorse di Bari (IBBR - CNR of Bari), the Department of Scienze agrarie, degli Alimenti e dell'Ambiente (SAFE) of the University of Foggia, the Dipartimento di Scienze e Tecnologie Biologiche e Ambientali (DiSTeBA) of the University of Salento and the Consorzio Parco Naturale Regionale Costa Otranto – Santa Maria di Leuca e bosco di Tricase.

technological characteristics of Apulia vine varieties, restoring and registering in the *Registro Nazionale delle Varietà di Vite* (National Register of Vine Varieties) the propagating materials to allow their use according to laws and regulations [17]»; finally, the third one aims at making an inventory of, identify, protect and promote the extremely rich regional olive germ plasm[6].

- SaVeGraINPuglia (Recovery, characterization, preservation and valorisation of leguminous and forage grains in Puglia) was a 5-year project ended in February 2018, whose objective is expressed by its extended name. It allowed the identification, classification and conservation of 71 local plant genetic resources (RGV) at erosion risk, in particular 30 varieties of legumes (among them 8 varieties of chickpea, 9 of broad bean and 3 of pea), 15 varieties of fodder plants and 26 varieties of cereals (including 15 varieties of durum wheat and 5 of common wheat).

Out of 7 projects submitted for Measure 214, Action 4 «Programmi integrati e Sistema regionale della biodiversità» (Integrated programmes and Regional system of biodiversity), 5 projects were awarded a total financial concession amounting to EUR 11,107,800.00[7], to which were subsequently added EUR 9,000,000.00[8] (D.A.G. No. 434 of 27/11/2015; D.A.G. No. 465 of 09/12/2015), out of the RDP 2007-2013 total resources amounting to EUR 1,544,226,086.00 (of which EUR 327,181,000.00 allocated to Measure 214) [19,20].

The above projects, therefore, were implemented through the protection and enhancement of the local agri-biodiversity, recovering and giving back to the communities local stories, practices and traditions with a view to preserve gene diversity of local varieties (and therefore food safety) and a regional model of sustainable development. Further, such crops, that are not suitable or adaptable to intensive agriculture, prove to be a valuable resource not only for their genetic heritage, but for their unique taste, the ancient memories they keep, the innovation opportunities they bring and their valuable inherent properties.

3. THE "SALENTO KM0" NETWORK: A DEAL BETWEEN OLD AND NEW «KEEPER-FARMERS»

Within the regional landscape, the province of Lecce extends on a surface of 279,907 ha and has a UAA of 161,130.94 ha, covered for 60.4% by olive groves, followed by wheat (11.9%), vine (5,2%), horticultural varieties (3.1%) and citrus fruit (0,3%) [14].

A huge agricultural landscape, therefore, characterize this territory, that is the result of a deep anthropogenic transformation started from the Roman conquest, when the lush vegetation of Apulia woods and wetland was uprooted to make the conquest easier, transforming the region into a vast pasture. A rural landscape structure resulting from territorialization and capitalization phenomena that make agricultural landscape a «mirror of the evolving society» [11] (p. 21), since it is nothing more than the «shape that man [...] knowingly and consistently gives to the natural landscape» [21] (p.29).

Agriculture and landscape, therefore, are closely linked since, over the centuries, the first has been the mainstay of life for local communities, that, through this activity, shaped the territory and created the landscape[9]. A «landscape-genous» [5] characteristic deriving firstly by an ancestral push, the natural need to procure food to survive.

Endogenous *cultivar* and local varieties selected over the centuries by expert farmers allowed the creation of typical agri-food products of high quality, frequently carrying a strong identity-linked value,

[6] In this regard, it should be noted that in 2007 Apulia regional authorities enacted a law for the "Protection and Enhancement of the Monumental Olive Trees of Apulia" (Apulia Regional Law No. 14, of 4 June 2007). In particular, Art. 1 enshrines the protection and promotion of monumental olive trees (identified as territorial heritage of the landscape by Art. 6), «including lone olive trees, for their productive, ecological and hydrogeological defence function, and as peculiar and characterising elements of the regional history, culture and landscape», while Art. 8 defines the promotion of the «image of the olive landscape of Apulia, in particular of monumental olives, olive groves and their products, even for tourist purposes» (Apulia Regional Law 14/2007); while the «Paesaggio Agrario della Piana degli Oliveti Monumentali di Puglia», extending on 4 Municipalities (Monopoli, Fasano, Ostuni e Carovigno), characterized by more than 212,000 monumental olives, *masserie*, dry-stone walls and a minor network of roads is included in the National Register of Historic Landscapes.

[7] Broken down as follows: EUR 2,500,000.00 Re.Ge.Fru.P., EUR 2,499,800.00 Re.Ge.Vi.P., EUR 2,500,000,00 SaVeGraINPuglia, EUR 2,000,000.00 BiodiverSO, EUR 1,608,000.00 Re.Ger.O.P.

[8] Broken down as follows: EUR 2,200,000.00 Re.Ge.Fru.P., EUR 2,000,000.00 Re.Ge.Vi.P., EUR 1,800,000.00 SaVeGraINPuglia, EUR 1,600,000.00 BiodiverSO, EUR 1,400,000.00 Re.Ger.O.P.

[9] The relationship between agriculture and landscape, as Ferrigni underscores, is a bidirectional one: agriculture creates landscape, which in turn creates the necessary conditions for agricultural production [5].

often safeguarded by protection marks (DOC, DOCG, DOP, IGP, STG, IGT). At present, the Province of Lecce has about 34 PATs[10], as well as 8 DOCs, 2 DOPs, 2 IGPs, 1 IGTs (Puglia IGT). Such acknowledgements are totally attributable to it or shared with other provinces. Further, the Province, participates to the project "Marchi d'Area" (Area Marks) of Italia Lavoro, investing in the mark "Salento d'amare".

The typical products[11] represent today an important key for local development (thanks to experiential as well as food and wine tourism), food safety (thanks to the protection of dietary variety) and for the reduction of environmental impact in the agri-food sector, as well. Indeed, local food is often produced by innovative organic methods, resulting from the recovery of ancient techniques and knowledge (from this the choice and the possibility not to use synthetic products), distributed preferring short supply-chains and 0-kilometre (locally sourced), thus allowing to shorten the distance travelled by food and, therefore, a significant reduction of emissions.

From this point of view, we consider emblematic the experience of "Salento km0", a network of social economy born in 2011 to bring together a number of local realities, converging on the topics of natural and organic agriculture[12], by following sustainable (organic, biodynamic, synergic, regenerative, etc.) farming practice, protecting agricultural biodiversity and proposing new relationships between producers and consumers, between land and food [23].

> The goal is the creation of a social economy network based on the respect of the whole ecosystem, food self-determination, awareness about food, short supply-chain. Further, "Salento km0" promotes and spreads the knowledge of ancient agricultural varieties, locally selected by generations of farmers among the more suitable to the specific characteristics of the territory, for their stress as well as environmental and climate change resistance, therefore being the only ones able to ensure food safety for the local community [23].

The network, made of manufacturers, restaurants, associations, solidarity purchasing groups (*GAS, Gruppi di Acquisto Solidale*) and stores, currently has 61 local realities, of which 57 located in the province of Lecce: Cutrofiano and Tricase are the Municipalities with higher numbers, 4 respectively (Table 1, Figure 1).

On 2 June 2017, following several meetings and discussions, the constituent entities signed the *Manifesto* for natural agriculture of Salento, thus laying the foundations for a district of natural agriculture in Salento. A «pact between realities», according to the network website, with an environmental, social and ethical aims: safeguarding the environment (by means of natural agriculture and therefore rejecting synthetic and transgenic products); protecting and enhancing local agricultural biodiversity, landscape and local cultural identities; promoting alternative manufacturing methods; creating a mutual and aware community; implementing an ethic alternative economy.

Among the activities and projects through which the network pursues its goals, it should be mentioned the Urban Workshop "*To Kalò Fai*" (from the *griko*[13]: the good food)[14], informal collaboration with the BiodiverSO project and the coordination of the Galatina and Zollino GAS.

Most of the realities that constitute it are far from wholesale production and are oriented towards horizontal relationships between manufacturer and consumer. Therefore, products can be found directly in factories, within solidarity purchasing groups, local markets and, in limited cases, in shops that share the same philosophy: 0-kilometre, seasonality, short supply-chain and return to land.

[10] Probably a non-exhaustive count due to the difficulty to geographically locate the origin of every single PAT: 18 of them are also present in the BiodiverSO project, within which out of 122 regional varieties focused on by researchers, 36 refer to the province of Lecce.

[11] Local, since they are produced in a particular place, and typical, since they are bearers of specific identity, traditions and values of a given community in a precise territory.

[12] According to the definition of the International Federation, organic agriculture means an «agricultural system promoting a production environmentally, ecologically and socially healthy of food, fabric, wood, etc. Within this system, land fertility is considered the key to the good result of production. By working with the natural properties of plants, animals and landscape, organic farmers aim at maximizing quality in every aspect of agriculture and environment» [22] (p. 230).

[13] An ancient dialect of Greek origin.

[14] A project launched following a convention with the Municipality of Zollino (where the workshop is located), started in 2015 by Meditfilm and undertaken within the programme "BollentiSpiriti" of Regione Puglia. Through workshops, meetings, events and educational gardens, this space is a collector of educational actions, relationships and culture.

Moreover, the network can be found on various social platforms and has a WebTV[15] and a website, key showcases for the promotion and development of the project and the realities taking part in it. In this regard, a careful exploration of online media used by it and by the single entities composing it was crucial to identify, even spatially (Table 1, Figure 1) the different realities, the values that form the base for its creation and the reasons that led them to aggregation. The analysis also allowed to register their dense and diverse activity, mostly educational initiatives and various types of events, participation in external projects, protection and preservation of ancient varieties and cooperation with integrated programmes to protect biodiversity. In this regard, a dedicated section of the website allows to find out ancient varieties grown today by the network producers; among them, there are many PATs and many other are included in the Biodiverso project[16]: white chicory of Tricase, *cima di rapa* (PAT), *cucuzza genovese*, black-eyed pea (PAT), Zollino broad bean and little pea (both PATs), *mugnolo* (PAT), *batata* (PAT), Sannicola curly pea and Vitigliano dried pea (both PATs), Sant'Ippazio carrot (PAT), Morciano tomato (PAT), etc.

Table 1. Geographical and numerical distribution of network players

MUNICIPALITY/HAMLET	No.	PLAYERS
ACQUARICA DEL CAPO	1	EcoBottega and GAS of Acquarica
BOTRUGNO	2	Sciglio – Le Api Del Parco Paduli GAS Botrugno
CASTIGLIONE D'OTRANTO (Hamlet of Andrano)	2	Casa delle Agriculture Soc. Agricola Coop. Gruppo di Acquisto Popolare del Salento
CASTRIGNANO DEL CAPO	1	Agriturismo Serine
CEGLIE MESSAPICA	1	Ex Terra
COPERTINO	1	Apicoltura Saverio Alemanno
CUTROFIANO	4	Caseificio Artigianale Sciacuddri Azienda Agricola Le Lame Drogheria dell'Ignoto Frutterò – Save the fruits
FELLINE (Hamlet of Alliste)	2	Dei Agre StaiTerraTerra
GALATINA	2	GAS Galatina Terre e Valori Alimentari
GALATONE	2	Comune Agricola Lunella Azienda Agricola Dinamica Salentina di Dario Specchia
GALLIPOLI	1	Agriturismo Calamate
GROTTAGLIE	1	Azienda Agricola Blasi
LECCE	2	GAS.P – Il mercato equo solidale a San Pio GAS Lecce – Oltre Mercato Salento
LEQUILE	1	Il Giardino sotto il naso
LEVERANO	1	GAS Leverano
MAGLIE	1	GAS Maglie
MIGGIANO	1	Azienda Agricola Merico
MONTERONI	1	Azienda Agricola Ruralia
MORCIANO DI LEUCA	1	MasseriaDidattica Li Tumeddi
NARDÒ	3	Azienda Agricola Cosimo Chiriasi Agricampeggio Le Fattizze Terre Paduli
OSTUNI	1	Giardini Della Grata (Cooperativa Bio Solequo)
OTRANTO	2	Azienda Agrituristica Salos Agriturismo Le Fontanelle
PARABITA	1	Azienda Agricola Stefania Stamerra – Biocoltura
POGGIARDO	1	Mulino Maggio
PORTO CESAREO	1	La Sallentina

[15] A project by Meditfilm for online spreading of audio-visual contents focused on the network, Salento, its landscapes and its biodiversity, the "change farmers" (as these producers define themselves) and their testimonies.

[16] Out of 122 local varieties included in the BiodiverSO project, 36 belong to the province of Lecce.

MUNICIPALITY/HAMLET	No.	PLAYERS
SALVE	2	Agriturismo Sante Le Muse Azienda Agricola La Pezza
SAN CASSIANO	1	Parco Paludi – Laboratorio Urbano Aperto Lua
SAN DONACI	1	Azienda Agricola Melusina
SAN DONATO	1	Azienda Agricola Lagorosso
SANNICOLA	1	I Colori Della Terra – Spazi Popolari
SERRANO (Hamlet of Carpignano Salentino)	2	Contrada Serulla Agriturismo Lu Schiau
SPECCHIA	1	Gas Matine
SPONGANO	1	Azienda Agricola Piedi Grandi
SQUINZANO	1	GAS MalaChianta - Squinzano
SUPERSANO	1	Cantina Supersanum
TRICASE	4	Gli Orti di Peppe Cooperativa Sociale Terrarossa
MARINA SERRA (Hamlet of Tricase)		Agriturismo Gli Ulivi Associazione Marina Serra
TUGLIE	1	Azienda Agricola Corrado Losavio
UGENTO	2	Agriturismo Masseria Gianferrante Tenuta Bianco
VASTE (Hamlet of Poggiardo)	2	Vivere la Canapa Apicoltura Impresa Agricola Dott. Luca Circhetta
VITIGLIANO (Hamlet of Santa Cesarea Terme)	1	Giuseppe Bene Azienda Siliqua – Pisello Secco Di Vitigliano
ZOLLINO	2	Cooperativa di Comunità Jemma GAS Zollino

Source: Author's processing of website www.salentokm0.com data

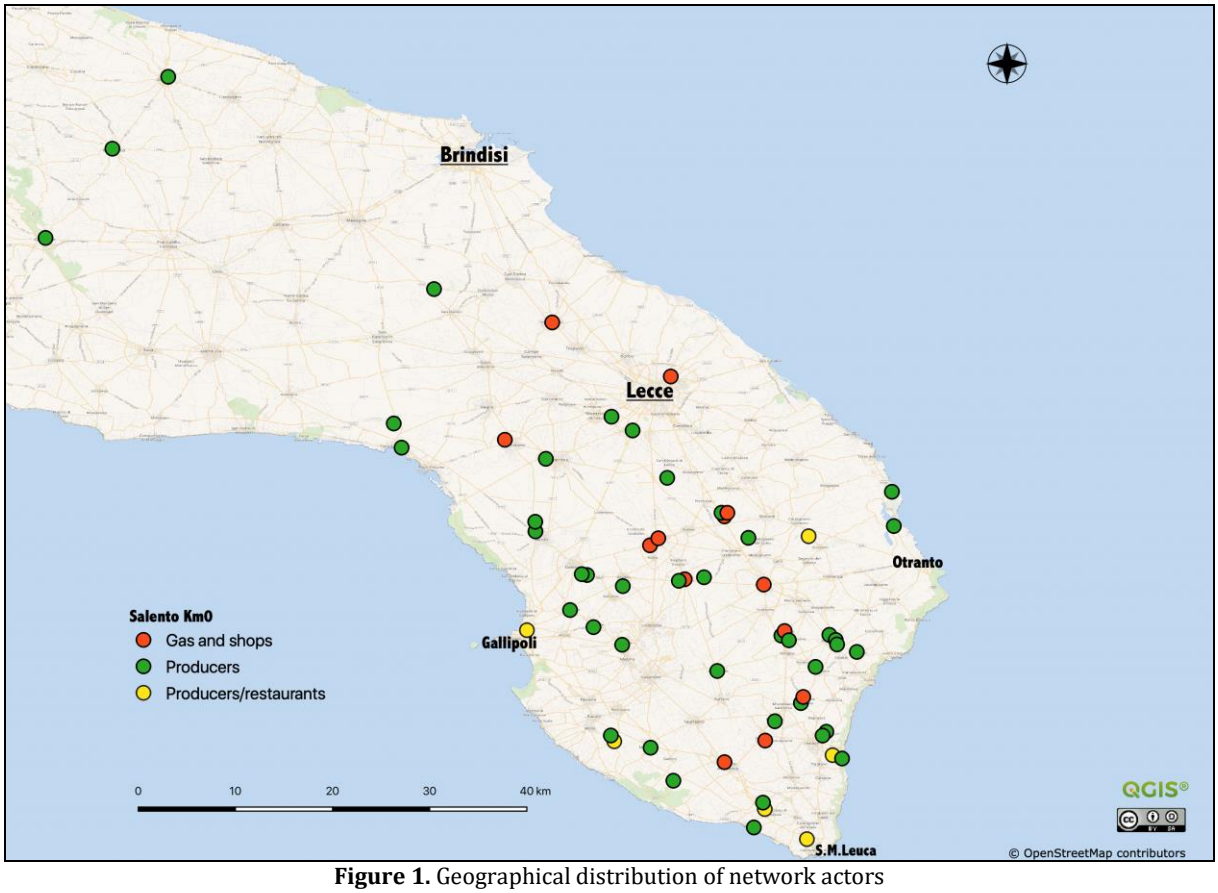

Figure 1. Geographical distribution of network actors
Source: Geocartographic Laboratory of the University of Salento. Dr A. Magurano

A remarkable example is the association «Casa delle Agriculture - Tullia e Gino - Castiglione d'Otranto», established in 2011 in the hamlet of Andrano by some young people who wished to stay in their land and give it new vitality, after many years of population ageing, abandonment and depopulation. Their aim is the creation of a new kind of social and sustainable economy. Against this background, in 2012 was held the first edition of the «Notte Verde», that since then takes place every 31 August. An event rich in workshops, conferences and meetings among producers, inhabitants and agricultural experts that every year brings to this hamlet about 30,000 people. In 2013, the association started to take over and regenerate some abandoned lands (also located in neighbouring municipalities), for a total surface of 15 ha, that were given on free loan to the association by elderly people or people who migrated to other places. Currently, ancient cereals are recovered and cultivated and, since March 2019, they are ground on-site thanks to the creation of the first community mill with the collaboration of the *Gruppo di Acquisto Popolare del Salento* for the direct sale[17]. In 2014, in cooperation with Free Home University, Ammirato Cultur House and the Regional Natural Park Otranto-Leuca, in order to promote and regenerate natural paths around Castiglione, frequently used as landfills[18], the «Parco dei frutti minori» was established. Within the park there is the «Vivaio della biodiversità», changed into the «Vivaio dell'inclusione»[19] thanks to the tender PugliaCapitaleSociale 2.0 of Regione Puglia, currently a BiodiverSO site for the *in-situ* protection of some local varieties at risk of erosion. The production range is completed with the common apiary for the community honey. Overall, the actions of this innovative project, which led to the establishment of a cooperative of the same name, are focused on the protection of biodiversity, lawfulness, accessibility, food democracy and right to food. From such topics the educational activities of the association are also originated, among them the community Agriludoteca located in the premises of the former elementary school of the hamlet.

Young keepers, therefore, that come back or stay, reweaving space and social fabric, exchanging seeds and knowledge not only with other local realities, but with old farmers, thus creating a bridge between generations that links present and past, now not so distant from each other; surely a repeatable model, a real social and environmental regeneration engine to give new life to inland areas.

Figure 2. Community mill
Source: Author's photograph, 2020

[17] The current demand of flour made of ancient grains is so high that the association decided to undertake «supply-chain agreements» with small local producers, whose cereals, cultivated according to standards recorded in a dedicated product specification, will be purchased at twice the market price.
[18] 100 tons of waste are removed and «replaced» by ancient varieties of fruit trees.
[19] A project aiming at involving the weakest groups of population, such as the elderly, migrant and disabled population, to help their inclusion and prevent isolation.

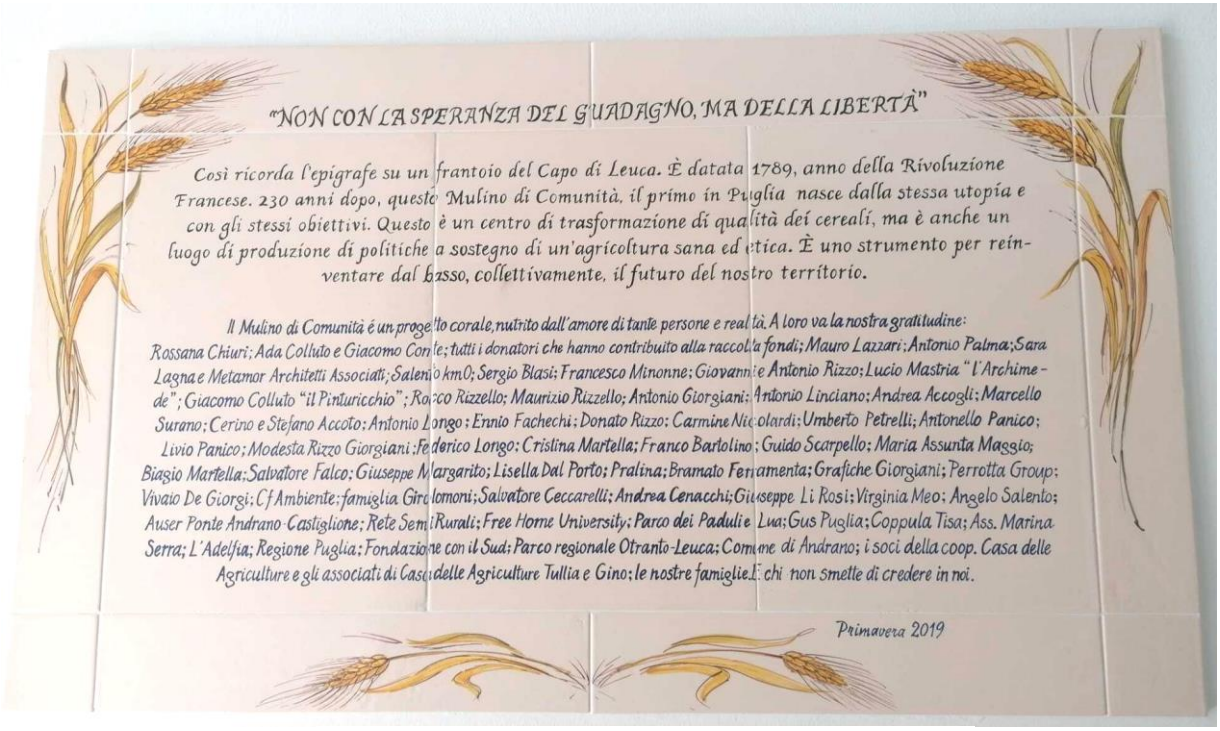

Figure 3. Community mill
Plate at the entrance to the mill
Source: Author's photograph, 2020

Figure 4. Community mill
Stone mill with sifter
Source: Author's photograph, 2020

Figure 5. Community mill
Display of products
Source: Author's photograph, 2020

4. CONCLUSIONS

The advent of the industrial agriculture and of new technologies allowed man to untie food production from climate, seasons and place of origin. It led, through monoculture, to a standardization of landscape and, by reducing its complexity, to its simplification, the consequent abandonment of ancient low-yield varieties and a subsequent serious loss of biodiversity, as well as the abandonment of agriculture especially in mountain areas, with a subsequent increase of disruptions (landslides, environmental deterioration, fire, etc.) due to the neglect of those elements that had characterized it as a rural landscape. The landscape simplification was followed by the simplification of words, therefore the place itself becomes a «space» or a «site», it loses its meanings, memories and becomes an object, a «beast of burden» to exploit with the only objective being the maximization of production [24]. Nevertheless, such de-territorializing process is reversed by the projects of local farmers and communities, that could be defined «virtuous» precisely for their opposition to such systems. The place, the territory, the landscape itself are restored to their condition since, through the community, they regain their value by the recovery of stories, techniques, traditions and social relations. A real regeneration, taking back the territory to its subjectivity, its stolen identity, and restoring consumers to their condition of inhabitants.

Phenomena as the «re-farmization» and «return to land», the recovery and protection of ancient local varieties and the rediscovery of a local identity awareness move together within a sustainable cycle originated by the crisis of a standardized and global food system, source of anxieties, fears and uncertainty. Marginal territories, villages and small towns, which have been long characterized by de-anthropization, population ageing and social drainage, acquire new vitality.

Against this backdrop emerges a new kind of farmers, young and culturally engaged. By «taking the baton» from old generations of farmers (that often give ancient seeds and lands on free loan) they assume

the role of keepers[20], frequently together with the local communities to which they belong and that, in this way, become communities of practice[21].

New models of social cohesion, therefore, guided by a stronger local awareness able to give back the territory to its inhabitants, ensure the protection of local biodiversity and food safety, regain the right to food sovereignty, which, even more so today, in the light of the current pandemic events and their close links with human practices related to habitat destruction, wildlife trafficking, certain livestock farming practices and the consequent loss of biodiversity, can become the key to a paradigm shift towards sustainability (understood in its many forms), aimed at protecting both the environment and the tangible and intangible heritage of the territory and its populations, and becoming drivers of local development.

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[20] Interesting, in this regard, Art. 12 of Law 39/2013 of Regione Puglia, concerning the protection of the genetic and local resources of agricultural, forestry and livestock interest, that institutionalises and defines the role of the keeper-farmer.

[21] A group of persons having the same interests that develop shared practices and create and share knowledge, whose belonging is based on participation and interactions [25].

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BOOK REVIEW

REPRESENTING PLACE AND TERRITORIAL IDENTITIES IN EUROPE. Discourses, Images and Practices

TIZIANA BANINI, OANA-RAMONA ILOVAN
Springer Nature, Cham, Switzerland, 2021, 265 pp.
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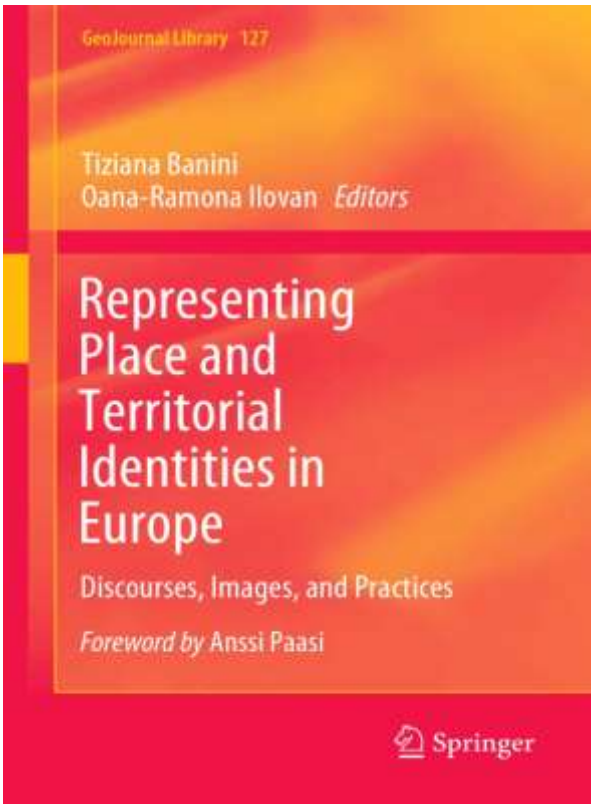
Reviewed by CRISTINA-GEORGIANA VOICU
Romanian Geographical Society



Interdisciplinary bridging place-identity discourses with territorial images and social practices, the current volume tackles a critical approach focusing on Europe and its internal cultural borders as well as the key role of capitalizing on territorial identity.

Although territorial and identity-related issues are frequent topics for the entire European space, territorial and urban planning, regional-continental identity, increasing spatial cohesion, developing competitiveness, and standard representation of internal migrations within the discursive methodology of this current volume, the dynamics of socio-territorial belonging is valued as an identity argument and criterion of a joint spatial system seen as a challenge rather than an intersection of geographic topics. This challenge emerges from the main research objective of the editors, namely, to generate innovative, cognitive and meta-cognitive territorial architectures ('spatial consciousness') up to a real-life collective memory ('sense of place') equivalent of the place identity (re-territorial modeling and re-bordering processes at different local and regional levels).

In supporting the above mentioned key concepts, the contributors encourage a broader understanding of these unifying challenges and try to decode a new 'explanatory gap', closely connected with the one that dissociates both the identity-related factors (cultural) and the territorial

ones (deconstructing places) according to place theory. For this both scholarly and new cutting edge research provide a strong emphasis on theoretical and empirical studies particularly concerning the relations of border and territoriality which necessarily appeared to link not just mental ('identity') and physical ('territory') phenomena, but conceptual analyses of heritage theory and integrated landscape within the theory of place (i.e. group identities, spatial consciousness, cyberspace, cultural territories) on one side, and the advances in representational geography (i.e. territorialization, cultural stereotypes, etc.) and experimental territorial studies (i.e. interviews, monuments, eco museums, cultural and environmental heritage, photo essay, sentiment analysis, participatory photographs and collages, etc.) on the other.

The book begins with a foreword by Anssi Paasi, a human geographer from the University of Oulu, Finland with a high expertise in conceptual and empirical work related to nationalism, territoriality, borders, the production of space and the theory and practice of the region.

This Springer edited collection covers sixteen case study chapters structured in four extended interconnected sections (I. *Constructing Identities: Re-Building Place-Based Relations*; II. *Representations of Nations and Cities: Ever-Changing Territorial Identities*; III. *Negotiating Identities and Belonging: State Borders and Internal Migrations,* IV. *Challenges and Stereotypes: Representing Rural Areas*) which set the stage for subsequent experimental and theoretical research in Territorial Studies. One of the most striking meta-features of this highly engaged volume is that it launches a profound scholarly analysis of all the relevant issues mentioned above. The authors display in depth and with clarity what is at stake in the current territorial development debates on the nature of these relations as an exceptional contribution to territorial studies, as an interdisciplinary effort to our understanding as readers. To reach these goals, multi-disciplinary interactions were performed. The variety of perspectives the place could be approached from is evident (geography, ecology, social sciences, psychology, philosophy, literature, cultural/border studies, computer science, etc.) and is well exhibited in the debates of the present volume. The volume is marked by cutting-edge debates in these research fields, largely, although not exclusively, stemming from innovative recent work on place theory.

This synthesis turns on a considerable development of the concept of *connecting places* "incorporated in written texts, visual materials and social practices, and which are detectable through textual analysis, visual analysis and direct surveys" as a new paradigm, so as to include many, if not all, of the factors of conscious reasoning neglected from a narrower version of the European territorial paradigm, which stresses unconscious or non-reflective *place attachment* patterns and foregrounds these as the causes of religious 'beliefs' or 'spiritual enrichment' as a form of "profound insights in the various everyday life territorial identities".

The basic philosophy of this volume stands in the identification of needs for specific territorial support to human actions and place manifestations and cultural practices (i.e. rural representations as narratives of village space, idyllic representations of rural spaces and its impoverishment mechanisms) or core-periphery deficits (i.e. the 'sense of place as spatial control'). A special interest is given to the urban renewal phenomena linked with a more extensive vision of using sustainable, participatory approaches to explain more and more detailed features of particular cases (i.e. self-representations in people's attachment to places, the "touristification" and the gentrification process in the inner city of Palermo; or local music identity

within the Romanian urban landscape, eco-museums for landscape education and inhabitants' territorial identity; respectively hegemonic representations of place identity within the Romanian context, idyllic representations of poverty in French rural areas, Transylvanian bordering practices of space representations; the ideological representations of civil architecture and industrial production of the Romanian territorial value together with the industrial heritage and cultural landscape; self-representations of territorial identities in Romania and in the Republic of Moldova, migrating women's self-representations of places; or Polish rural representations of village space. The recent efforts to incorporate all these findings from social sciences ('imagined communities') into territorial theorizing ('settled communities'), or, alternatively seen, to change extraterritoriality by subsuming its aspects under the *cultural turn*, must be understood as the latest expressions of the dynamic and productive challenge between the urge to share other disciplinary approaches or to draw a boundary around the social – constructivist perspective as such, which is nowadays considered to be decisive.

As readers, at the end of such an analysis, we might find that one of the distinguishing features of today's approach of place theory in action is precisely the impossibility to entirely separate these factors that contribute to determining a complex and continuously changing reality from a theoretical perspective.

Discussing the mutual exchange between physical places and 'hyper-places' within the globalization process, one must acknowledge the difficulty and the challenge of such studies. The authors investigated – often in a social-constructivist manner – the participatory processes, clearly expressing their fundamental hypotheses.

Taken as a whole, this volume, given its entire trend to focus on relevant issues of *place* and *identity*, should be seen as a constructive attempt to integrate different works into a new paradigm that harnesses interpretive approaches to an explanatory project. These and other debates need to be noticed by readers, so that they can further acknowledge them and make up their own minds as they go along.