RUR‖TAGE

Heritage for Rural Regeneration

D4.4: Rural Regeneration Activities

Data, Results, Conclusions and Recommendations Report

Call: H2020-SC5-2016-2017
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Table of Contents

Background Information

Table 1: technical Information

Project Full title		Rural regeneration through systemic heritage-led strategies	
Project Acronym		RURITAGE	
Grant Agreement No.		776465	
Coordinator		University of Bologna (UNIBO)	
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Work Package Title		Monitoring System and Assessment Procedures	
Responsible		CARTIF	
Author(s)		Francisco Barrientos, Pedro Martín-Lerones, David Olmedo, Ana López-Vidal (CARTIF) Aitziber Egusquiza (TEC) Claudia de Luca, Hanna Elisabet Åberg (UNIBO) John Martin (UoP)	
Contributor(s)		All the Replicators and Additional Replicators	
Reviewer(s) (if applicable)		Claudia de Luca (UNIBO) Pedro Martín-Lerones (CARTIF) Aitziber Egusquiza (TEC)	
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Table 2: List of abbreviations

AR/ARs	Additional Replicator/Additional Replicators
ARM/ARMs	Additional Role Model/Models
CNH	Cultural and Natural Heritage
D	Deliverable
M	Month
PPP	Public-Private Partnership
R/Rs	Replicator
RHH	Rural Heritage Hub
RM	Role Model
RMA	Role Model Actions
SIA	Systemic Innovation Area
WP	Work Package

1.   Summary

The main objective of Work Package 4 was to provide quantifiable evidences of the potential role of CNH as a driver for sustainable growth. To do this, WP4 has been monitoring over the last 2.5 years the performance of the deployed Action Plans (or regeneration schemes) in the 6 initial Replicators (Rs), and the 9 Additional Replicators (ARs) included in the last phase of the project. Performance's monitoring has been done through selected cross-thematic and multiscale Key Performance Indicators (KPIs) and through the implementation of a holistic approach based on Systems Dynamics (SD) for properly assessing the heritage-led regeneration. Six SD models, one per SIA, have been developed and are freely accessible through the Monitoring Platform in the RURITAGE Resources Ecosystem (RRE), as explained in the deliverable D4.3. These SD models are useful for laying out different *what-if* scenarios. Last, WP4 has been contributing to create sense of ownership of CNH developing a participatory co-monitoring approach.

This deliverable is based on the work developed in the last stages of the project. The Task 4.3 has developed a comprehensive data collection procedure through the coordination and supervision of all the gathered data. According to the monitoring programme described in the deliverable D4.2, quantitative data coming from the Rs have been completed and integrated with qualitative data coming from the My Cult-Rural Toolkit (Task 4.4). This data has been used for calculating the KPIs, according to the evaluation procedure defined in Task 4.1.

The main challenges for each Replicator have been identified and the lessons learned obtained from the Role Models have served as the basis for this assessment. All the Rs have improved their level of performance, according to the selected KPIs, with improvements ranging from 37% to 67%. The complex problem of assessing the heritage-led rural regeneration Action Plans to transform rural areas into sustainable development demonstration laboratories has been analysed by means of System Dynamics (SD) models. A performance model has been defined for each SIA by establishing weights, feedback loops and delays in information to the KPI within the corresponding Replicators. All these SD models have been integrated into the RURITAGE Monitoring Platform. The user interface developed for the advanced end-users provide the necessary elements to use the model.

The Replicators were provided with My Cult-Rural Toolkit equipment box, which facilitates the physical tool workshops. The Replicator's Action Plans were updated to link actions to co-monitoring tools, if applicable. Co-Monitoring physical tools use participatory, community-based methodologies to gain a better understanding into tangible and intangible qualities and values of the landscape and associated cultural ecosystem services.

Data collection and KPI calculation started in December 2019 and has ended in June 2022, lasting for 2.5 years. Along this time, a full set of data has been collected and the data collection process has been available online through the Monitoring Platform, ensuring a proper supervision and analysis. Regular data collection campaigns have been run every 6 months and data have been uploaded to the database once reviewed and validated. After four years of RURITAGE, data collected has allowed to do a project impact assessment comparing the value of the results obtained with the targets predefined at the baseline of the monitoring process. These expected impacts were established at the beginning of the project, clustering several impact indicators and are related with the Sustainable Development Goals (SDG). Some insights after developing these tasks are that we were optimistic with the difficulties in data collection, and ambitious with some of the targets that were overestimated. We have also learned that other targets have been clearly underestimated and have been exceeded in most of the cases. The COVID-19 pandemic and lock-down situation obviously have affected somehow to the development of the Action Plans, hence to the achievement of the expected results.

2. Introduction

This report reflects the work done in collecting the data from the Replicators and applying the KPIs previously defined for RURITAGE project, jointly with some more context indicators that were used to set the Rs' baselines. Both, the definition of the indicators and their use to describe the initial state of the rural territories, have been completed in the initial months of the project, while the data collection and analysis have been developed in the second half of the project.

The work done in the frame of WP4 is based on the robust monitoring platform (see Figure 1), which is part of the RURITAGE Resources Ecosystem (RRE) [1], developed to assess the effectiveness of an innovative rural regeneration paradigm based on Cultural and Natural Heritage (CNH), consolidating the role of culture and nature as the fourth pillar of sustainable development and contributing to economic growth, social inclusion and environmental sustainability in rural territories. In this line, the Community Capitals Framework (CCF) considers that the growth of some forms of capital in a community is ready to create virtuous spirals of development [2]. This monitoring platform considers cultural (including intangible heritage), natural, built (mainly built cultural heritage), social (including political), human (people value and engagement) and financial capitals to measure the effectiveness of the actions and practices developed in a territory, acting as levers for change from the initial stock of capitals to other kinds of capital.

This document is organised as follows: Section 3 describes the evidences, SIA by SIA, on the improvement in Replicators and Additional Replicators due to the heritage-led Action Plans, based on the KPIs collected all over the monitoring time. The most detailed information is included in the tables at section 7. Section 4 explains how the System Dynamics models have been developed, including the design decision and detailed diagrams of the different models, one by SIA. The Additional Replicators have been very useful to illustrate with real use-cases the functioning of the SD models, showing how to use the models, fine-tuning the parameters and interpreting the results. Section 5 discusses the results, i.e. the data collected over 2.5 years of monitoring that reflect the global impact of the activities developed by the Rs. Finally, the main conclusions and recommendations are outlined in Section 6.
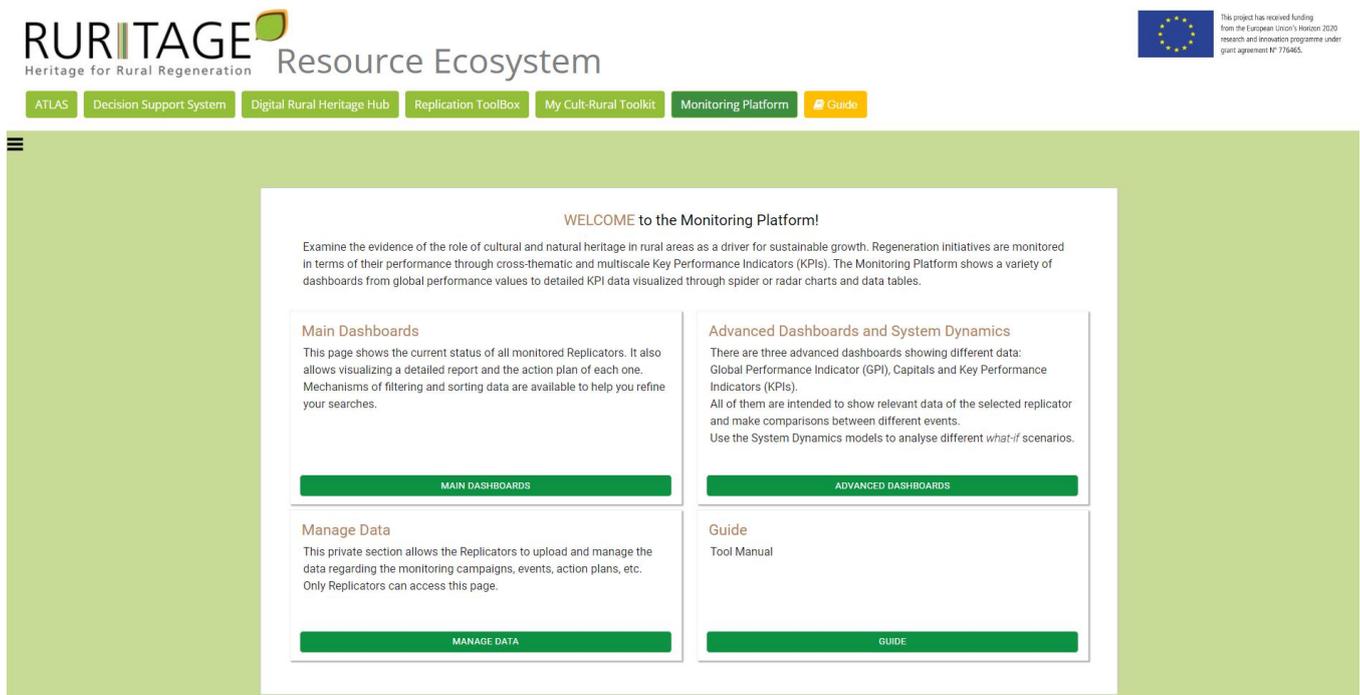

Figure 1: Monitoring platform landing page (© *RURITAGE*).

3. Evidences of the Improvement in Replicators Due to Heritage-led Action Plans

3.1 Global Performance Evaluation compared to Baseline

After defining the baseline for all the Replicators involved in RURITAGE (Task 1.4), a diagnosis was carried out by experts also involved in the project. The main challenges for each Replicator were identified and lessons learn by Role Models served as basis for them. Furthermore, Replicators and stakeholders drafted an Action Plan that was revised after a year of action plan implementation (please, see del. D3.7) which included potential actions to be implemented and, during the two and a half years of project monitoring, reviews have been made. All this process has allowed us to define the Heritage-led Action Plan, whose results are shown below.

3.1.1 Pilgrimage (R1): Old traditions and modern world along the pilgrimage route to Hemmaberg

The Geopark Karavanke/Karawanken level of accomplishment of objectives at baseline stage was 38% while in the fifth and last period it is 61%, which represents a growth of 37% of the Global Performance Indicator. This has happened due to the improvement of the capitals and KPIs values, what has been possible due to the identification of the replicator challenges, the lessons learned from the Role Models, the definition of expected impacts and the identification of potential actions to be implemented.
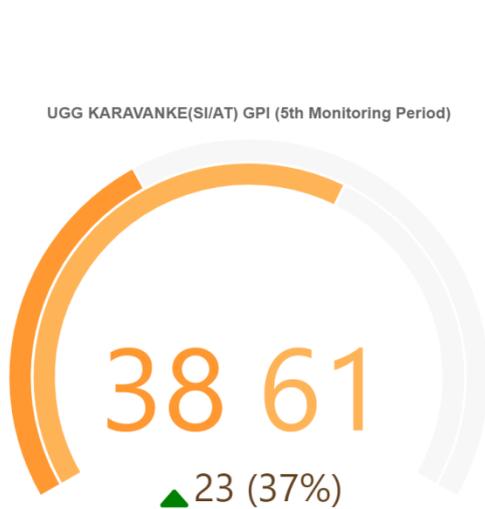
(a)
Evolution of Geopark Karavanke/Karawanken level of accomplishment of objectives.
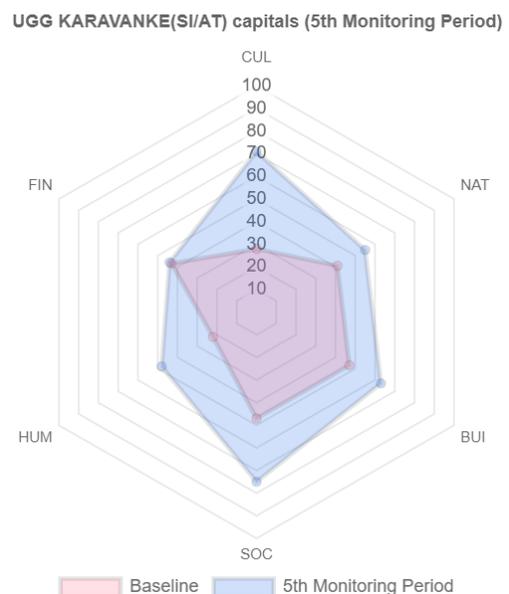
(b)
Level of development of capitals for R1 at baseline stage (red) and at last monitoring period (blue).

Figure 2: R1 global performance and Community Capitals level of development.

Ageing of population, depopulation and unemployment were identified as the main challenges for Karavanke Geopark. A considerable ageing of the population, comparable to the Slovenian average but substantially below the Austrian average was noted. Besides, the outward migration and high death rate make the geopark one of the most scarcely populated areas and the unemployment rate was 12.18%, much higher than European average (EU27 – 9.6%), almost twice as high as the Austrian average (6.9%) and somewhat higher than Slovenian average (11.6%).

Besides, the renovation of Rosalien cave was identified as other economic and societal challenge to be faced by the replicator. This renovation was supposed to have positive effect on tourism in the geopark and in the Municipality of Globasnitz/Globasnica, being a powerful tool for economic and sustainable development. Additionally, the renovation was supposed to improve Geopark inhabitant's well-being and living environment.

Figure 3: Rosalien cave. Karavanke/Karawanken Geopark (R1).

Furthermore, 44 lessons learned from Role Models were identified for Karavanke/Karawanken Geopark. For instance, the integration of vulnerable groups in local value chain (LL21) and the promotion of access to all ages and abilities and ensure fruition of cultural resources to all (LL28) were identified to mitigate the unemployment and depopulation challenge, respectively. Involve private and third sector in cultural heritage in order to optimize business model, answer to social needs and effectively manage heritage (LL23) and take advantage of National/State (and regional) investment in CNH promotion to develop increased tourism and other economic activity at local/regional level (LL26) were recognised to contribute to the economic and sustainable development. The application of IT technologies for natural and cultural heritage promotion (LL02) and the fostering and promotion of sustainable tourism (LL16) were recognized as improvers of the route digitalisation and the eco-tourism respectively.

These lessons have served to define the actions the replicator has carried out to increase the Global Performance Indicator to 61% in the fifth and last monitoring period (MP). The comparison of the KPI values between the baseline and the last MP can help understand the results (see Figure 4 and Figure 5).
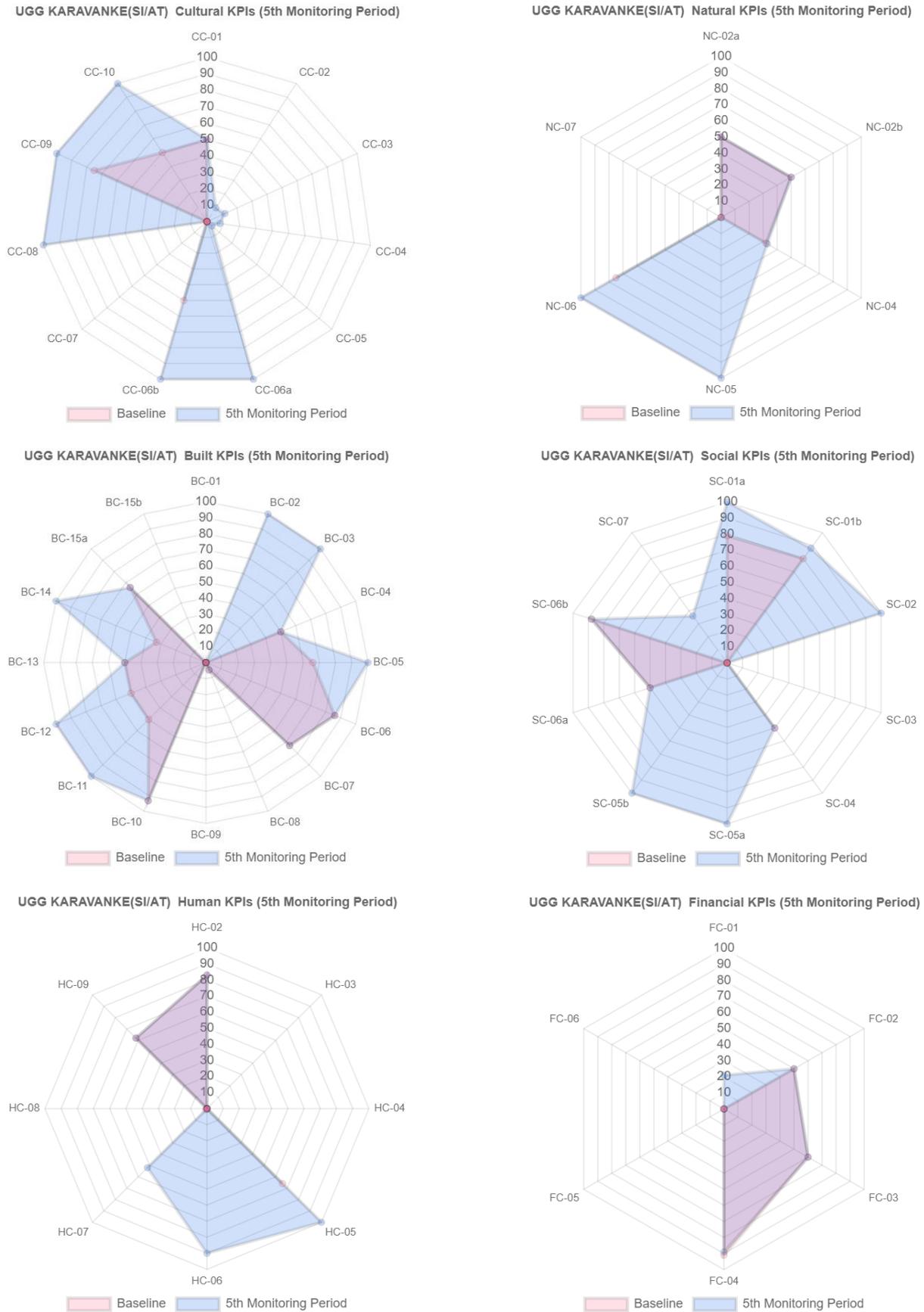
Figure 4: Level of development of KPIs, grouped by Community Capitals, for R1 at baseline stage (red) and at last MP (blue).
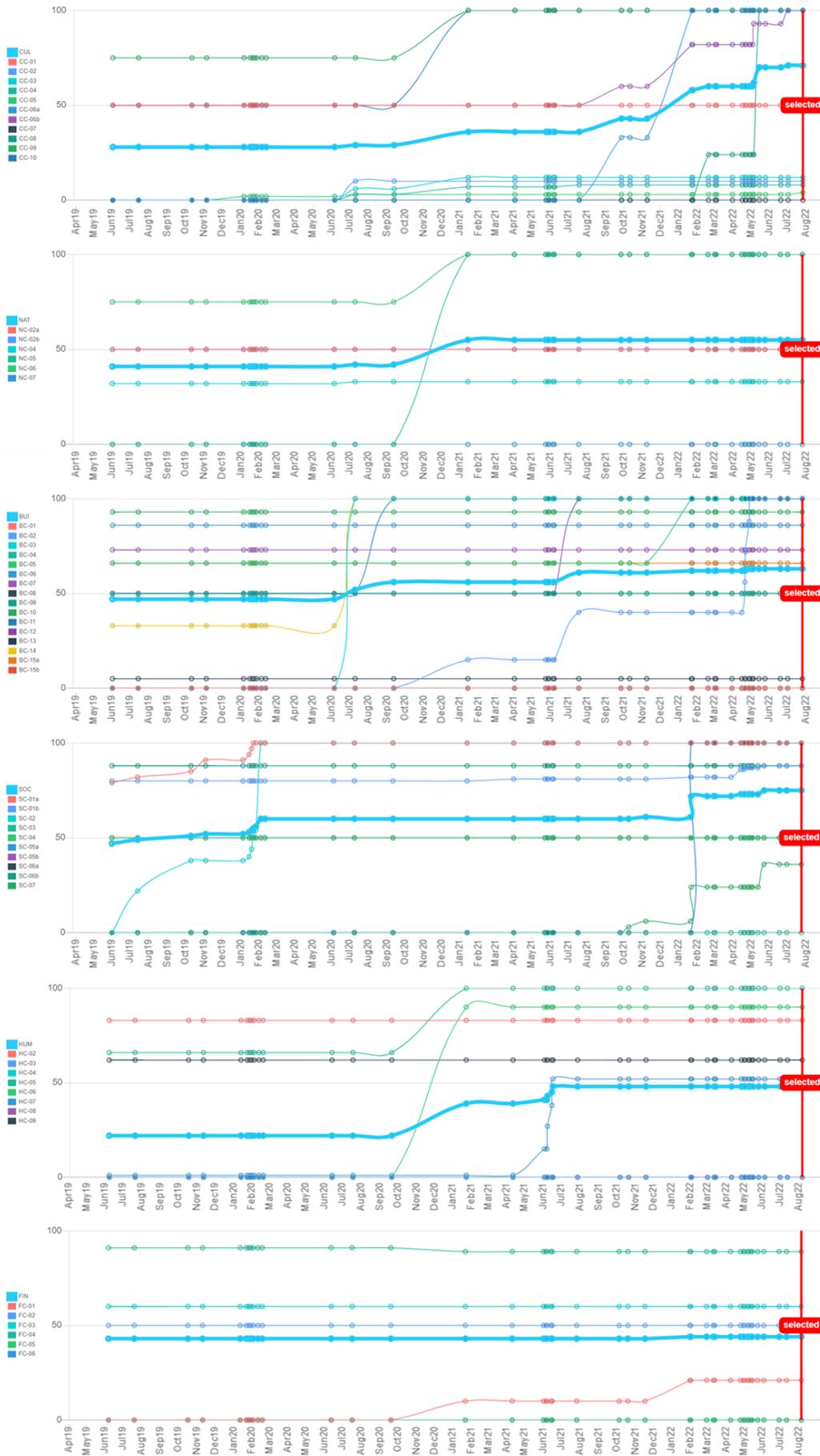
Figure 5: KPIs evolution over time for R1.

Cultural Capital (CC) had a 28% of level of development meaning that, although the number of cultural events at local level was high enough (CC-06), there was still room for improvement in the use of social media (CC-02 to CC-05), crowdfunding campaigns (CC-07) and training in traditional skills (CC-08). On the other hand, at last monitoring period, Cultural Capital has reached a 71% of level of development due to, among others, the increase of the number of arrivals of tourism (CC-10), the number of people trained in traditional skills (CC-08) and the places involved in the tourism offer (CC-09). Moreover, the restoration of St. Rosalia cave and making the site of St. Hema Mountain accessible again (Action R1.3) will not only support the conservation of ancient traditions and local intangible heritage, but it will also attract new pilgrims and tourist.

The 41% of development of the Natural Capital (NC) showed that more development was needed in areas related to the type of ecosystem services (NC-01), companies with sustainability certifications (NC-05) and green tourism packages (NC-07). On the other hand, at last monitoring period, Natural Capital has reached a 55% of level of development. Progress have been made in the number of shops, restaurants and tourism facilities selling local products (NC-06) and the number of companies with sustainability certifications (NC-05). The setting up of a network of local food producers is a remarkable example of an action that took place in R1 contributing to the development of the NC.

The progress in the level of development of the Natural Capital is also related with the ecosystem services used in this Replicator. These are composed of nine different types of activities that have allowed to improving the KPIs involved in this Capital. They include activities in the nature, with children, guided tours, etc. that have the aim of increasing the awareness of cultural and natural heritage, and are detailed in the Table 1:

Table 1: Ecosystem Services for R1.

Event	Ecosystem Services	Activity Summary	Frequency	Outcome
3rd Monitoring Period	Educational activities in the nature, children education, adults' education, guided tours with the aim of increasing awareness of local natural heritage, etc.	Walk including activities concerning cultural and natural heritage; using the walking map activity as a tool for natural awareness; 15th. and 22nd of June	just once	Awareness of culture and nature
3rd Monitoring Period	Educational activities in the nature, children education, adults' education, guided tours with the aim of increasing awareness of local natural heritage, etc.	4 educational workshops boosting local identity through nature activities; 7.5., 12.5., 19.5., 21.5.	just once	Awareness of culture and nature
4th Monitoring Period	Educational activities in the nature, children education, adults' education, guided tours with the aim of increasing awareness of local natural heritage, etc.	4 guided tours visiting local producers	weekly	Awareness of culture and nature
4th Monitoring Period	Cultural activity in the nature (concerts, theatre, dance, art installation, reading in the nature etc.)	Opening event of the Rosalia cave in September 2021	just once	Awareness of culture and nature
4th Monitoring Period	Educational activities in the nature, children education, adults' education, guided tours with the aim of increasing awareness of local natural heritage, etc.	4 workshops in July 2021 with schools and kindergarden boosting local identity through nature activity	summer season	Awareness of culture and nature
4th Monitoring Period	Educational activities in the nature, children education, adults' education, guided tours with the aim of increasing awareness of local natural heritage, etc.	2 educational camps for nature and culture in August 2021	summer season	Awareness of culture and nature
4th Monitoring Period	Educational activities in the nature, children education, adults' education, guided tours with the aim of increasing awareness of local natural heritage, etc.	1 educational workshop in August 2021 for boosting the local identity	summer season	Awareness of culture and nature

Built Capital (BC) had a level of development of 47%, which proved that its overall performance was high but that there were still room for improvement using RURITAGE digital tools (BC-01 to BC-03) and fostering public & shared transport services (BC-08 and BC-09). On the other hand, at last monitoring period, Built Capital has reached a 63% of level of development. Six indicators have reached and even surpass the target and some of them, as the number of people reached through RURITAGE digital tools (BC-02) and the number of CNH objects mapped trough ATLAS (BC-03), have risen from 0% to 100%. The restoration of St. Rosalia cave and making the site of St. Hema Mountain accessible again (Action R1.3) has been key for the development of BC.

Social Capital (SC), with a level of development of 47%, had a high number of projects involving people with disabilities (SC-06), but there was capacity of improvement involving more local associations (SC-03) and projects addressing migrants (SC-05). On the other hand, at last monitoring period, Social Capital has a 75% of level of development due to, among others, the increase of the number of stakeholders involved (SC-02) and the number of citizens engagement activities (SC-01).

The 22% development level of the Human Capital (HC) meant a low overall performance of the KPIs and that some improvements could be done in training for migrants (HC-03 and HC-04) and internships for students (HC-06). On the other hand, at last monitoring period, Human Capital has reached a 48% of level of development. Significant progresses have been made in the number of self-employees (HC-05) and the number of internships for students (HC-06) that have been activated during the implementation phase.

Financial Capital had 43% of level of development which showed that the main improvement areas were related to the number of start-ups and spin-offs (FC-05) and companies with new business models and innovative processes (FC-06). On the other hand, at last monitoring period, Financial Capital has reached a 44% of level of development. Relevant progress has been made in the nights spent at tourist accommodation establishments (FC-01).

Furthermore, some actions to boost the financial level of development of the Replicator were carried out through different funding sources, among them the RURITAGE budget. These include the design of a set of new touristic and cross border packs, the digital use of the Karavanke/Karawanken Geopark and the safeguarding and making the site of St. Hema Mountain and St. Rosalia Cave accessible again, whose funding is summarised in Table 2 and detailed in the Tables Section (from Table 35 to Table 37).

Table 2: R1 Action Plan funding details.

R1: Action Plan budget distribution and amount per capita and square kilometre				
Funding Description	**Funding Source**	**Budget**	**€/Person/km^2**	**%**
Indicative Cost	RURITAGE budget	91.000,00 €	1,48 €	46%
Additional Funding	Municipality of Globasnitz/Globasnica in the framework of the National LE 14-20 (Entwicklung für den Ländlichen Raum) project "Rosalienpforte Hemmaberg Gemeinde Globasnitz", supported by Federal Ministry Republic of Austria for Sustainability and Tourism, Land and European Union (LEADER PROGRAMME)	71.500,00 €	1,16 €	36%
Sustainability of the Action		- €	- €	0%
Other	Difference covered by the Municipality of Globasnitz/Globasnica with own resources	35.476,26 €	0,58 €	18%
TOTAL		**197.976,26 €**	**3,22 €**	**100%**

Summarizing, all the Capitals of this Replicator have progressed throughout the development of the project. In particular, the Capital that has increased more his results has been the Cultural one, with a 43% of rise. But it is not the one that has reached the highest level of development, which is the Social Capital with a 75%. Natural and Built Capitals have not risen much but they had a good level of development at the beginning, while Human Capital started from a low level of development and has increased his results in a 26%. On the other hand, even the Financial Capital started from a good level of development, this has only increased by 1%, which means that more efforts would have been necessary to improve the KPIs results.

capital	description	target	prog1	prog2	incr
CUL	Cultural	100%	28%	71%	▲43
NAT	Natural	100%	41%	55%	▲14
BUI	Built	100%	47%	63%	▲16
SOC	Social	100%	47%	75%	▲28
HUM	Human	100%	22%	48%	▲26
FIN	Financial	100%	43%	44%	▲1

Figure 6: Summary of the progress made in the level of development of R1 throughout the monitoring process (© RURITAGE).

LOCAL FOOD

3.1.2 Local Food R2): Magma UNESCO Global Geopark

The Magma Geopark level of accomplishment of objectives at baseline stage was 50% while in the fifth and last period it is 77%, which represents a growth of 54% of the Global Performance Indicator. This has happened due to the improvement of the capitals and KPIs values, what has been possible due to the identification of the replicator challenges, the lessons learned from the Role Models, the definition of expected impacts and the identification of potential actions to be implemented.

(a)

Evolution of Magma Geopark level of accomplishment of objectives.

(b)

Level of development of capitals for R2 at baseline stage (red) and at last monitoring period (blue).
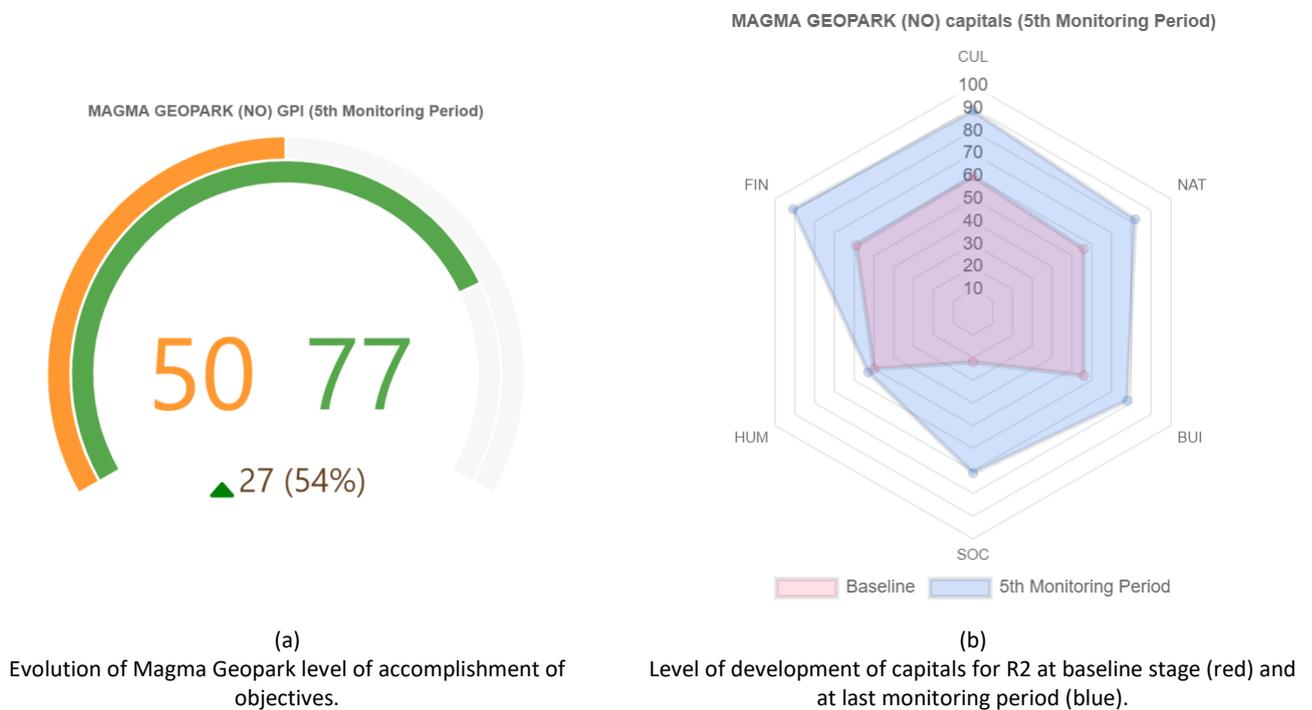
Figure 7: R2 global performance and Community Capitals level of development.

Ageing of population, depopulation and unemployment were identified as the main challenges for Magma Geopark. All municipalities were experiencing depopulation and the unemployment rate in the area was about 3%. There were several corner stone businesses in the area, so when they were struggling it affected the employment rate and also business elsewhere, like restaurants, cinema, stores, etc.

Moreover, other economic, environmental and societal challenges were identified. There was a need to provide new businesses for the inhabitants whose main employment facilitator in geopark area since the 70s' was the oil, the change in the Golf Stream will have a serious impact on a lot of biotic factors and more extreme weather conditions and it was necessary to get all layers of society more involved in local decisions in order to enable the voice of everyone to be heard.

Figure 8: Magma UNESCO Geopark (R2).

Furthermore, 38 lessons learned were identified from Role Models to Magma Geopark. For instance, the integration of vulnerable groups in local value chain (LL21) and the promotion of access to all ages and abilities and ensure fruition of cultural resources to all (LL28) were identified to mitigate the unemployment and depopulation challenge, respectively. The use of collaborative approaches to achieve innovative financing solutions and access to funding (LL05) was identified to improve the local producers support and networking and creation of a brand based on the cultural and natural resources and the added valued created (LL06) was recognised as a good way to define products standards, labelling and branding. Also, implementation of participatory approach and involvement of local people from early stage (LL18) and fostering and promoting sustainable tourism (LL16) were identified as improvers of society and eco-tourism respectively.

These lessons have served to define the actions the replicator has carried out to increase the Global Performance Indicator to 77% in the fifth and last monitoring period. The comparison of the KPI values of the capitals between the baseline and the last monitoring period can help understand the results and can be seen in the Figure 9 and the Figure 10.
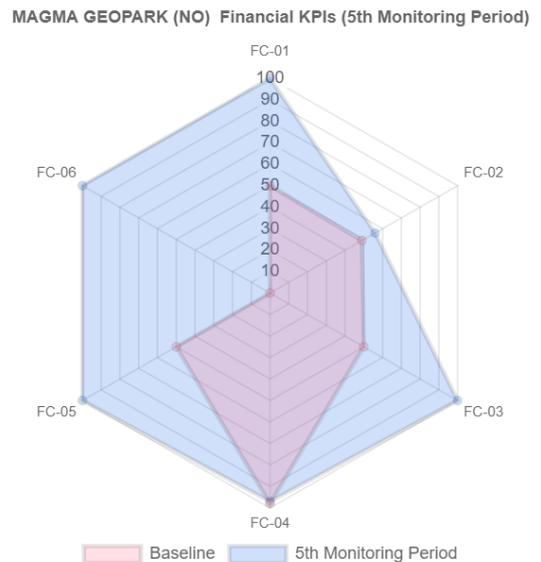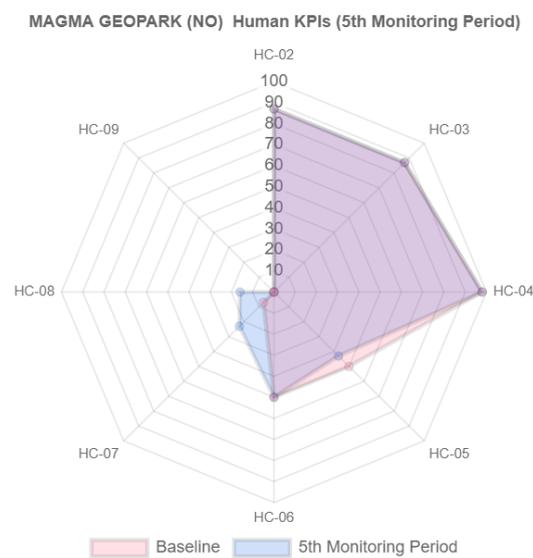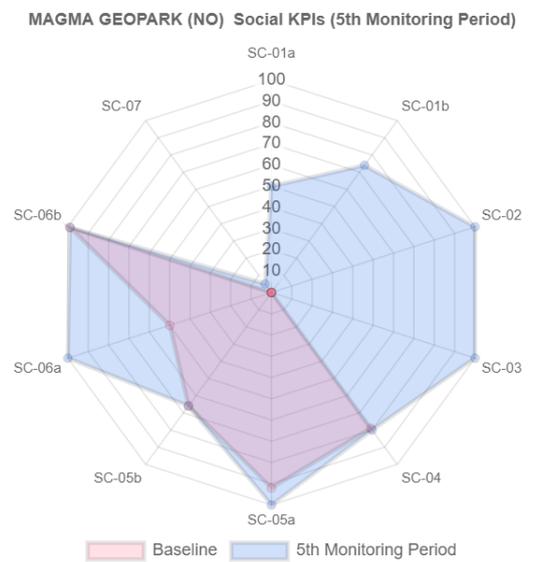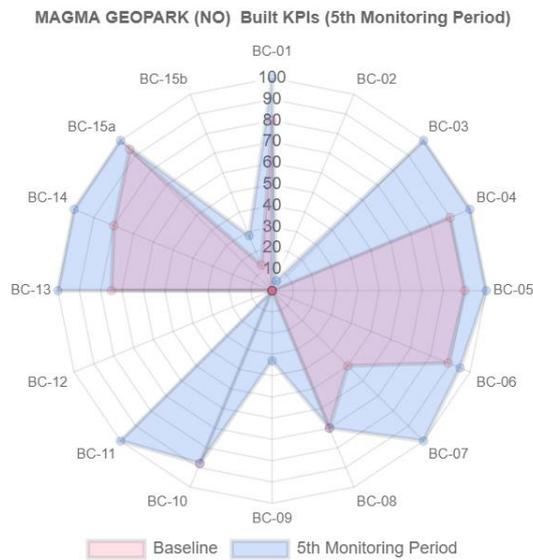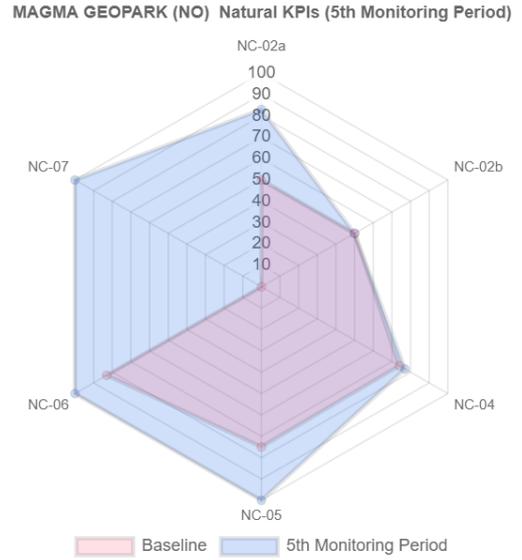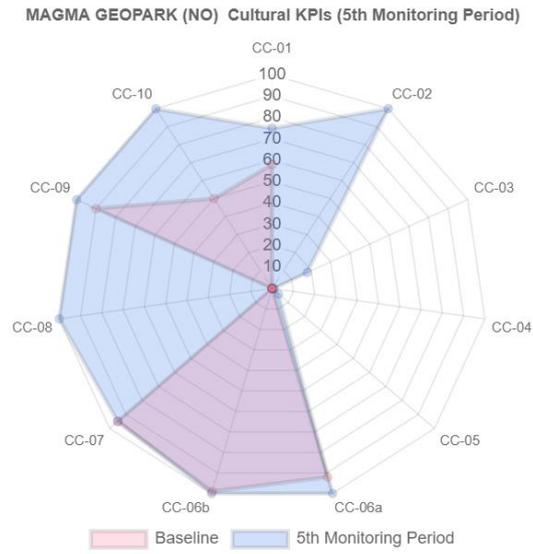
Figure 9: Level of development of KPIs, grouped by Community Capitals, for R2 at baseline stage (red) and at last MP (blue).
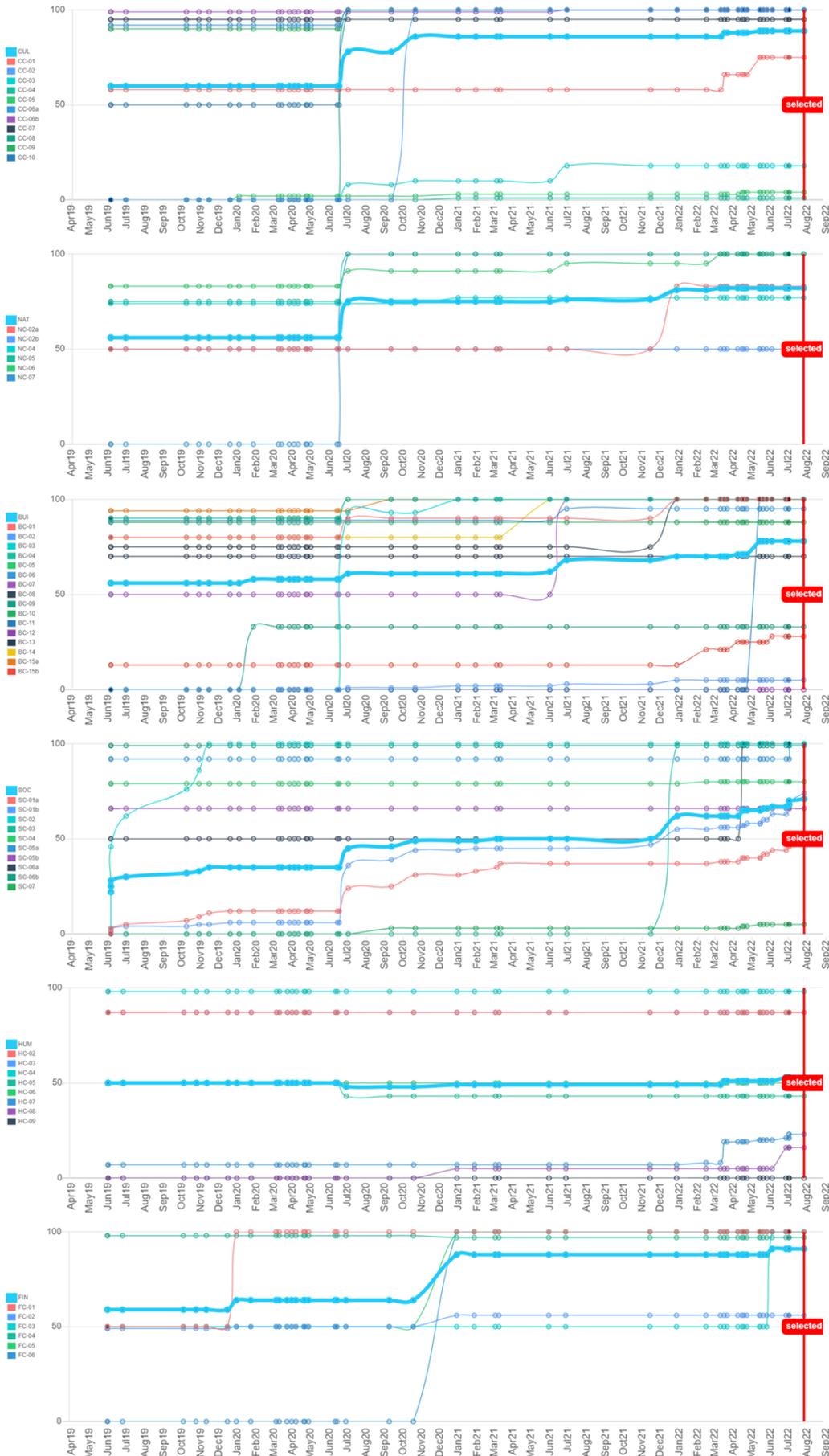
Figure 10: KPIs evolution over time for R2.

Cultural Capital (CC) had a 60% of level of development meaning that, although the number of cultural events at local level (CC-06) and crowdfunding campaigns (CC-07) was high enough, there was still room for improvement in the use of social media (CC-02 to CC-05) and training in traditional skills (CC-08). On the other hand, at last monitoring period, Cultural Capital has reached an 89% of level of development. Seven indicators have reached and even surpass the target and some of them, as the number of mentions in social media and press (CC-02) and the number of people trained in traditional skills (CC-08), have risen from 0% to 100%.

The 56% of development of the Natural Capital (NC) showed that more development was needed in areas related to the type of ecosystem services (NC-01) and green tourism packages (NC-07), while sustainable companies (NC-05) and shops selling local products were in good shape (NC-06). On the other hand, at last monitoring period, Natural Capital has an 82% of level of development due to, among others, the increase of the number of green tourism packages (NC-07), the number of areas designated as protected areas (NC-02a), and the number of companies and organizations with sustainability certifications and labelling (NC-05).

The progress in the level of development of the Natural Capital is also related with the ecosystem services used in this Replicator. These are composed of different types of activities that have allowed to improving the KPIs involved in this Capital. They include educational activities in the nature, with adults and children, which have the aim of increasing the awareness of cultural and natural heritage, and are detailed in the Table 3.

Table 3: Ecosystem Services for R2.

Event	Ecosystem Services	Summary of the Activity	Frequency	Outcome
2nd Monitoring Period	Educational activities in the nature, children education, adults education, guided tours with the aim of increasing awareness of local natural heritage, etc.	Connected with indicators: SC-01a; SC-01b; several education activities have been carried on outdoor, with kids, local population. App 50 people were involved in outdoor activities.	Monthly	-

Built Capital (BC) had a level of development of 56%, which proved that its overall performance was mid but that there were still room for improvement using Ruritage digital tools (BC-01 to BC-03), fostering shared transport services (BC-09) and retrofitting/reusing buildings (BC-11 and BC-12). On the other hand, at last monitoring period, Built Capital has a 78% of level of development. Eleven of sixteen KPIs have reached and even surpass the target, some of them are the number of CNH objects mapped trough ATLAS (BC-03), the km of pedestrian/hiking paths (BC-07) and the number of fairs and tourism events related to the promotion of the area and related products (BC-14).

Social Capital (SC), with a level of development of 22%, had a high number of projects involving people with disabilities (SC-06), projects addressing migrants (SC-05a) and participants in voluntary activities (SC-04), but there was capacity of improvement in almost all other indicators. On the other hand, at last monitoring period, Social Capital has a 71% of level of development due to, among others, the significant increase of the number of participants in citizens engagement activities (SC-01b), the number of stakeholders involved (SC-02), the number of local associations involved (SC-03) and the number of projects addressing people with disabilities (SC-06a).

The 50% development level of the Human Capital (HC) meant a mid-overall performance of the number of immigrants involved in educational-training programs and internships for them (HC-03 and HC-04), but also that some improvements could be done with people trained in IT and tourism (HC-07), involved in professional management training course (HC-08) and the number of publications as recommendation and guidelines provided (HC-09). On the other hand, at last monitoring period, Human Capital has a 53% of level of development. Progress have been made in the number of people trained in IT and tourism (HC-07) and the number of people involved in professional management training course (HC-08).

Financial Capital had 59% of level of development which showed that the main improvement areas were related to the number of PPPs (FC-03), start-ups and spin-offs (FC-05) and companies with new business models and innovative processes (FC-06). On the other hand, at last monitoring period, Financial Capital has a 91% of level of development due to, among others, the significant increase of the nights spent at tourist accommodation

establishment (FC-01), the number of start-ups and spin-off created (FC-05) and the number of companies supported in defining new business models and innovative processes of production (FC-06).

Furthermore, some actions to boost the financial level of development of the Replicator were carried out through different funding sources, among them the RURITAGE budget. These include the creation of a common calendar for all five municipalities presenting festivals and other events in the geopark, the promotion of the tourist's offer through the design of a tourist route, the promotion of joint actions to strengthen the local identity and to enhance heritage resources and the development of their local pilgrimage route, whose funding is summarised in Table 4 and detailed in the Tables Section (from Table 44 to Table 47).

Table 4: R2 Action Plan funding details.

R2: Action Plan budget distribution and amount per capita and square kilometre				
Funding Description	**Funding Source**	**Budget**	**€/Person/km^2**	**%**
Indicative Cost	RURITAGE budget and Magma Geopark budget	63.300,00 €	0,0008 €	61%
Additional Funding	Rogaland county food trail; MagmaUNESCOO2030 proj yrly budget on EUR 150.000	20.000,00 €	0,0003 €	19%
Sustainability of the Action	MagmaUNESCOO2030 proj yrly budget on EUR 150.000; MagmaUNESCOO2030 proj yrly budget on EUR 150.000	20.000,00 €	0,0003 €	19%
Other		- €	- €	0%
TOTAL		**103.300,00 €**	**0,0014 €**	**100%**

Summarizing, all the Capitals of this Replicator have progressed throughout the development of the project, getting good overall results. In particular, the Capital that has increased more his results has been the Social one, with a 49% of rise. But it is not the one that has reached the highest level of development, which is the Financial Capital with a 91%. On the other hand, the Human Capital has only increased by 3%, which is a direct consequence of the low results obtained in his KPIs.

capital	description	target	prog1	prog2	incr
CUL	Cultural	100%	60%	89%	▲29
NAT	Natural	100%	56%	82%	▲26
BUI	Built	100%	56%	78%	▲22
SOC	Social	100%	22%	71%	▲49
HUM	Human	100%	50%	53%	▲3
FIN	Financial	100%	59%	91%	▲32

Figure 11: Summary of the progress made in the level of development of R2 throughout the monitoring process (© *RURITAGE*).

MIGRATION
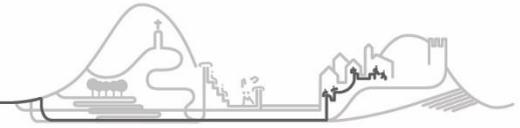
3.1.3 Migration (R3): Geo-Naturpark Bergstraße Odenwald e.V.

The Geo-Naturpark Bergstraße Odenwald level of accomplishment of objectives at baseline stage was 10% while in the fifth and last period it is 43%, which represents a growth of 37% of the Global Performance Indicator. This has happened due to the improvement of the capitals and KPIs values, what has been possible due to the identification of the replicator challenges, the lessons learned from the Role Models, the definition of expected impacts and the identification of potential actions to be implemented.

GEO-NATURPARK (DE) GPI (5th Monitoring Period)

10 43

▲33 (37%)

GEO-NATURPARK (DE) capitals (5th Monitoring Period)

| | Baseline | 5th Monitoring Period |
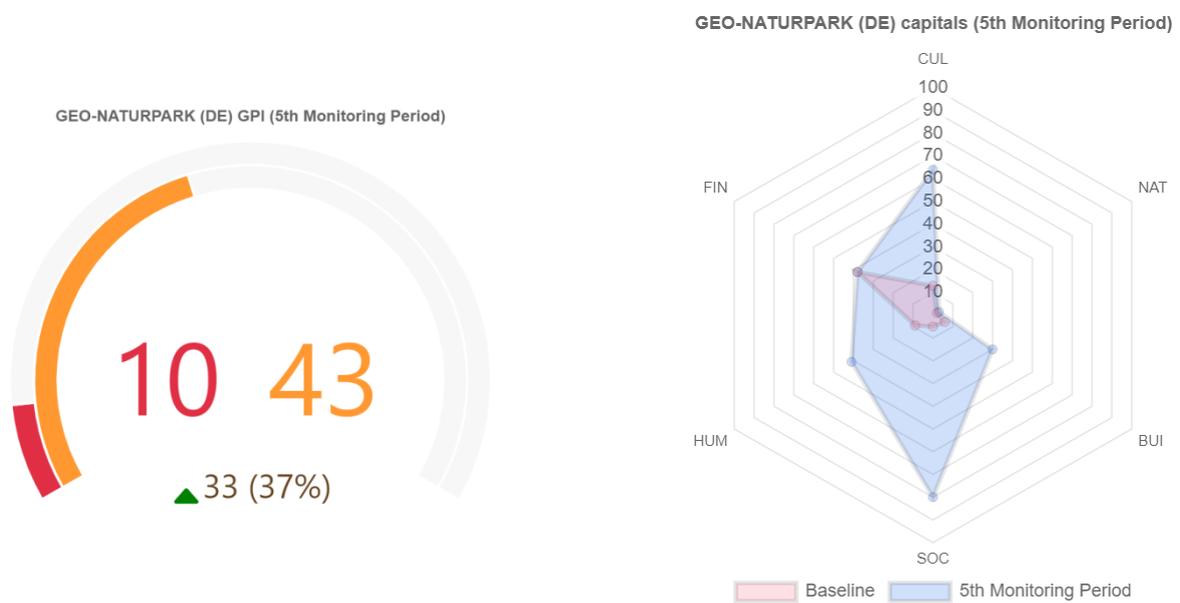
(a)
Evolution of Geo-Naturpark Bergstraße Odenwald level of accomplishment of objectives.

(b)
Level of development of capitals for R3 at baseline stage (red) and at last monitoring period (blue).

Figure 12: R3 global performance and Community Capitals level of development.

Poverty and social exclusion, access to services and infrastructure, low education and skills were recognized as the main challenges for Bergstraße Odenwald Geo-Naturpark. Besides, environmental (climate change and natural disasters), societal (migration) and economic (unemployment) challenges were also associated to the replicator.

Figure 13: Geo-Naturpark Bergstraße Odenwald (R3).

Furthermore, 16 lessons learned were identified from Role Models for Geo-Naturpark Bergstraße Odenwald. For instance, the transformation of prevention against natural calamity and negative events into tourism development opportunities, with the creation of a geologic museum, integration of migrants employing them in the tourism sector (LL36), was recognised as a way of developing a toolkit for resilient citizens. Also, taking advantage from traditional events as a tourist attraction (LL25), the creation of "tourist packs and experiences" based on the typical characteristics of the replicator and sell combined packages, including transport (LL07) were identified as a way to push the tourism in the area.

These lessons have served to define the actions the replicator has carried out to increase the Global Performance Indicator to 43% in the fifth and last monitoring period. The comparison of the KPI values of the capitals between the baseline and the last monitoring period can help understand the results and can be seen in the Figure 14 and the Figure 15.

Cultural Capital (CC) had a 13% of level of development meaning that, although the number of enterprises in the cultural sector (CC-01) and the arrivals of tourist (CC-10) were good, a significant improvement in the rest of KPIs was needed. On the other hand, at last monitoring period, Cultural Capital has reached a 64% of level of development. Four indicators have surpassed the target, rising from 0% to 100%, as the number of mentions of CNH in social media (CC-02), the number of actions and cultural events (CC-06a) and the people reached by them (CC-06b).
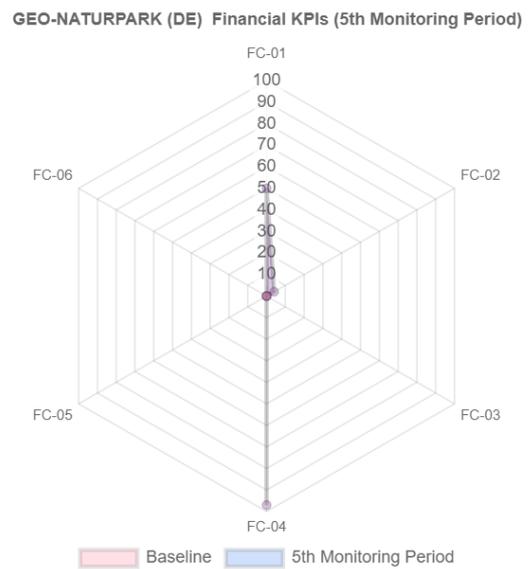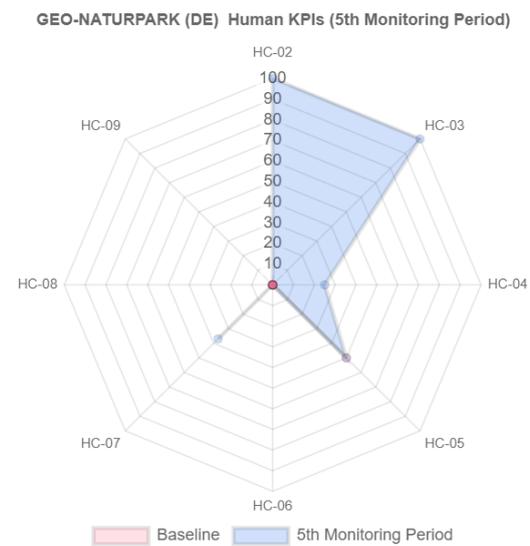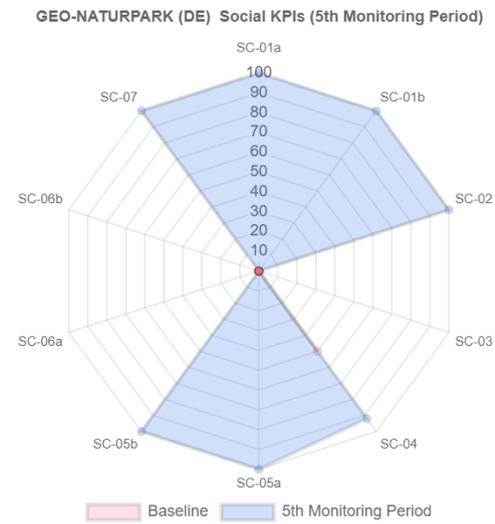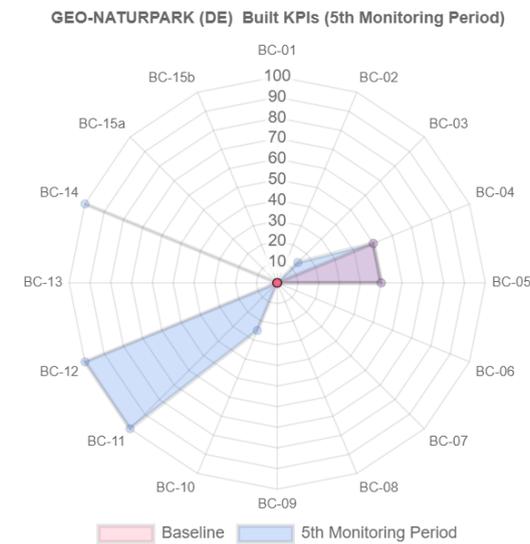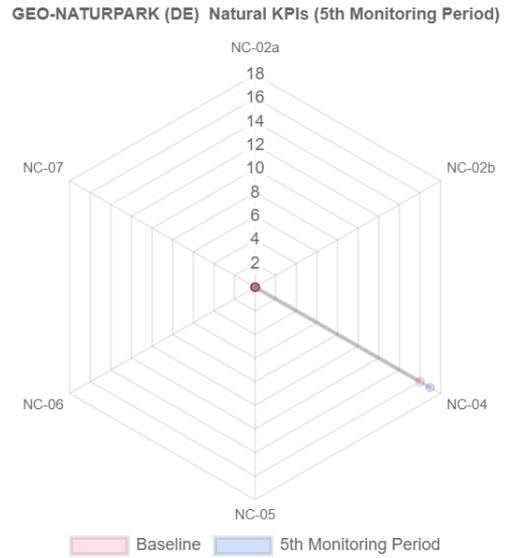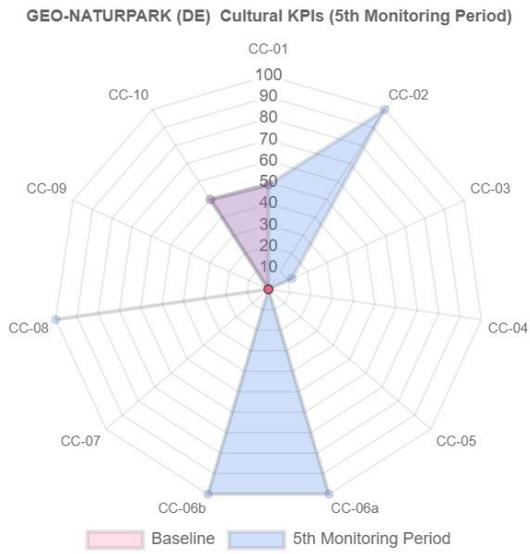
Figure 14: Level of development of KPIs, grouped by Community Capitals, for R3 at baseline stage (red) and at last MP (blue).
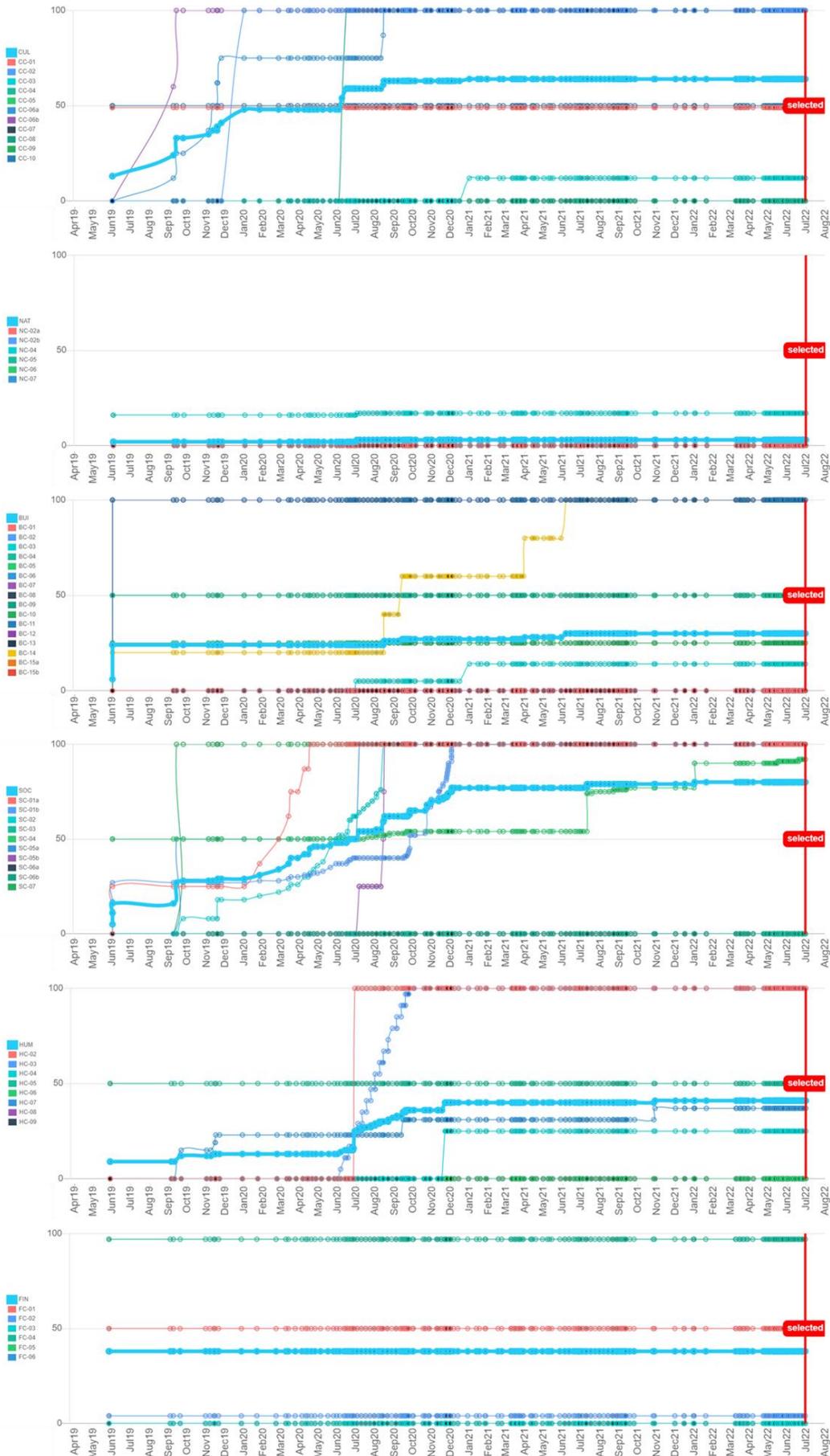
Figure 15: KPIs evolution over time for R3.

The 2% of development of the Natural Capital (NC) showed that the only KPI slightly developed was the share of renewable energy in gross final energy consumption (NC-04), all others needed to be developed. On the other hand, at last monitoring period, Natural Capital has reached an 3% of level of development, meaning that more efforts would have been necessary.

To boost the progress of the level of development of the Natural Capital, ecosystem services were used in this Replicator. These were composed of six different types of activities that have allowed to improving the KPIs involved in this Capital. They include educational activities, workshops for children, author readings, etc. that have the aim of increasing the knowledge about nature, climate change and local heritage, and are detailed in the Table 5.

Table 5: Ecosystem Services for R3.

Event	Ecosystem Services	Activity Summary	Frequency	Outcome
2nd Monitoring Period	Educational activities in the nature, children education, adults education, guided tours with the aim of increasing awareness of local natural heritage, etc.	Provide several activities such as guided ranger tours, on-site-team tours with focus on geology, environmental education, local heritage.	summer season	Participants increase their knowledge about nature, climate change, local heritage and landscape
2nd Monitoring Period	Educational activities in the nature, children education, adults education, guided tours with the aim of increasing awareness of local natural heritage, etc.	Support to organization of the Children Art Construction Trailor (conducted by the project partner "International Forest Art Association") - a series of workshops for children in and around Darmstader Forest.	summer season	Participants increase their knowledge about nature, climate change, local heritage and landscape
2nd Monitoring Period	Cultural activity in the nature (concerts, theatre, dance, art installation, reading in the nature etc.)	Support to organization of the Internation Forest Art Trail (conducted by the project partner "International Forest Art Association") with a goal to design sustainable works of art in the nature including site-specific and process-oriented installations and performances. Geo-N supports the event financially and mobilizes migrants to become an active part of the event.	Bi-annual (Just once)	Event; works of art; extension of a network; participants are acquainted with works of art in the nature.
2nd Monitoring Period	Cultural activity in the nature (concerts, theatre, dance, art installation, reading in the nature etc.)	Conduct 5 author readings at the Messel pit (annually, November-December) incl. a guided tour. The target group of the readings are children. Topics are related to geology, earth history, local heritage.	Annually (Novem summer season	Participants are acquainted with the historical significance of the Messel pit, earth history, geological development of the region.

| 2nd Monitoring Period | Outdoor recreation activity (hiking, trails, canyoning, biking, rafting) | Shooting of 4 short educational videos on MTB technology, rules and regulations for MTB trails use (2020-2021). The videos will be uploaded on Geo-N's YouTube channel and disseminated through Facebook, WhatsApp etc. An additional promotion of the action will be implemented through visiting of refugees' dormitories and direct contact with the target group. MTB vouchers will be raffled among refugees which will allow them to lend an MTB for one whole day (2021). In groups of up to 4 participants (depending on COVID situation, maybe even more) participants will be accompanied during this day by an MTB trainer (Muemlingtaradler). During an MTB-tour they will learn how to use an MTB, all the tricks and technical must-to-knows, learn more about the landscape and use "rate-my-view" app. | The 1st phase of guided tours will take place from March to June 2021. After a debriefing in June, (if required) the guided tours approach will be adjusted for a 2nd guided tours phase.

Just once | 4 short educational videos on MTB; participants become familiar with MTB technology, rules and landscape of the region. |
| --- | --- | --- | --- | --- |
| 2nd Monitoring Period | Researching Nature (scientific studies or activities focused on natural or geological heritage, biodiversity or similar topics) | A collection app Survey123 from Esri with focus on climate change impact on communities will be developed. 4 workshops introducing the app as well as climate change related topics will be conducted in one local community (test run). Data will be collected by participating local citizens. Based on this a report / interactive weblication will be compiled / produced, sharing the data with the Climate Change Manager of the municipality involved in the 1st test run | just once | 4 workshops; collected data; report / weblication; long term: it is intended to offer the services including the app use to other communities of Geo-N after the test run. |

Built Capital (BC) had a level of development of 6%, which proved that although the number of beds and restaurants (BC-04 and BC-05) was good, there were still room for improvement for the rest of KPIs. On the other hand, at last monitoring period, Built Capital has an 30% of level of development due to the increase of the number of buildings restored/retrofitted (BC-11), the number of reused buildings (BC-12) and the number of fairs and tourism events related to the promotion of the areas and related products (BC-14).

Social Capital (SC), with a level of development of 5%, had a medium number of participants in formal or informal voluntary activities or active citizenship (SC-04), but there was capacity of improvement for almost other KPIs. On the other hand, at last monitoring period, Social Capital has reached an 80% of level of development. Six indicators have highly surpassed the target and risen from 0% to 100%, some of them are the number of citizens engagement activities (SC-01a) and the number of participants in them (SC-01b), the number of stakeholders (SC-02) and the number of projects addressing migrants (SC-05a).

The 9% development level of the Human Capital (HC) meant a low overall performance of the KPIs, except for the number of self-employees (HC-05) of the replicator. On the other hand, at last monitoring period, Human Capital has reached an 41% of level of development. Significant progresses have been made in the number of recreational facilities/events (HC-02) and the number of immigrants involved in educational-training programs (HC-01).

Financial Capital had 38% of level of development which showed that the main improvement areas were related to the number of PPPs set and signed (FC-03), start-ups and spin-offs (FC-05) and companies with new business models and innovative processes (FC-06). On the other hand, at last monitoring period, Financial Capital has not improved his level of development, meaning that more efforts would have been necessary.

Furthermore, some actions to boost the financial level of development of the Replicator were carried out through different funding sources, among them the RURITAGE budget. These include connecting to landscape through sports, welcoming booths at Geopark events, educational material for language skills, increasing the awareness of cultural and natural heritage by cultural landscape interpretation and strengthening the bonds between migrants and residents through creative land art and forest artwork, whose funding is summarised in Table 6 and detailed in the Tables Section (from Table 54 to Table 61).

Table 6: R3 Action Plan funding details.

R3: Action Plan budget distribution and amount per capita and square kilometre				
Funding Description	**Funding Source**	**Budget**	**€/Person/km^2**	**%**
Indicative Cost	RURITAGE	97.790,00 €	0,00003 €	46%
Additional Funding	Geo-N yearly budget; In-kind contributions partners (shooting of videos); Supplementary logistic facilities by sponsors (transport, logistics); Supplementary logistic facilities (transport, booth material); Additional co-financing by Geopark budget (e.g. rangers during parking lots activities); UNESCO WHS Messel Pit; Supplementary logistic facilities by sponsors (transport, logistics); Supplementary logistic facilities (transport, booth material); Charcoal burning, financial support geopark budget; Additional co-financing by Geopark budget, financial capacities of the stakeholders; Geo-N: additional co-financing. supplementary logistic facilities by sponsors (transport, logistics); Streuobstwiesenretter: personal capacity of experts in tree maintenance; Geo-N: Supplementary logistic facilities; Additional co-financing by Geo-N budget and partner (International Forest Art Association) as well as sponsors	55.000,00 €	0,00002 €	26%
Sustainability of the Action	To be continued by Geo-N; Included into a Geo-N's offer of services for member communities; 3D Tour (Messel Pit takes over 3D tour hosting platform licence, €120 per year); In-kind contribution Geo-N to continue activities after RURITAGE; To be continued by Geo-N; To be continued by International Forest Art Association; Contribution by Geo-N to continue the action	37.620,00 €	0,00001 €	18%
Other	In-kind contribution local community of Mömlingen (staff costs, infrastructure, room rent); In-kind contribution Messel Pit (staff costs, infrastructure); In-kind contribution Messel Pit (staff costs); In-kind contribution International Forest Art Association (Exhibition with Samira Jamali); In-kind contribution On-Site-Team Fischbachtal (Exhibition with Samira Jamali); In-kind contribution 3D Tour (Messel Pit);	23.000,00 €	0,00001 €	11%
TOTAL		**213.410,00 €**	**0,00007 €**	**100%**

Summarizing, five of six of the Capitals of this Replicator have progressed throughout the development of the project. In particular, the Capital that has increased more his results has been the Social one, with a 75% of rise, which is also the one that has reached the highest level of development, an 80%. Cultural Capital has had also a good rise, a 51%, and Built and Human Capitals started from a low level of development that has had a good improvement. On the other hand, the Natural Capital has only increased in a 1% and the Financial Capital has not increased at all his results, even when it had a good initial level of development.

capital	description	target	prog1	prog2	incr
CUL	Cultural	100%	13%	64%	▲51
NAT	Natural	100%	2%	3%	▲1
BUI	Built	100%	6%	30%	▲24
SOC	Social	100%	5%	80%	▲75
HUM	Human	100%	9%	41%	▲32
FIN	Financial	100%	38%	38%	0

Figure 16: Summary of the progress made in the level of development of R3 throughout the monitoring process (*© RURITAGE*).

ART & FESTIVAL

3.1.4 Arts & Festivals (R4): Grad Negova

R4 level of accomplishment of objectives at baseline stage was 55% while in the fifth and last period it is 77%, which represents a growth of 49% of the Global Performance Indicator. This has happened due to the improvement of the capitals and KPIs values, what has been possible due to the identification of the replicator challenges, the lessons learned from the Role Models, the definition of expected impacts and the identification of potential actions to be implemented.
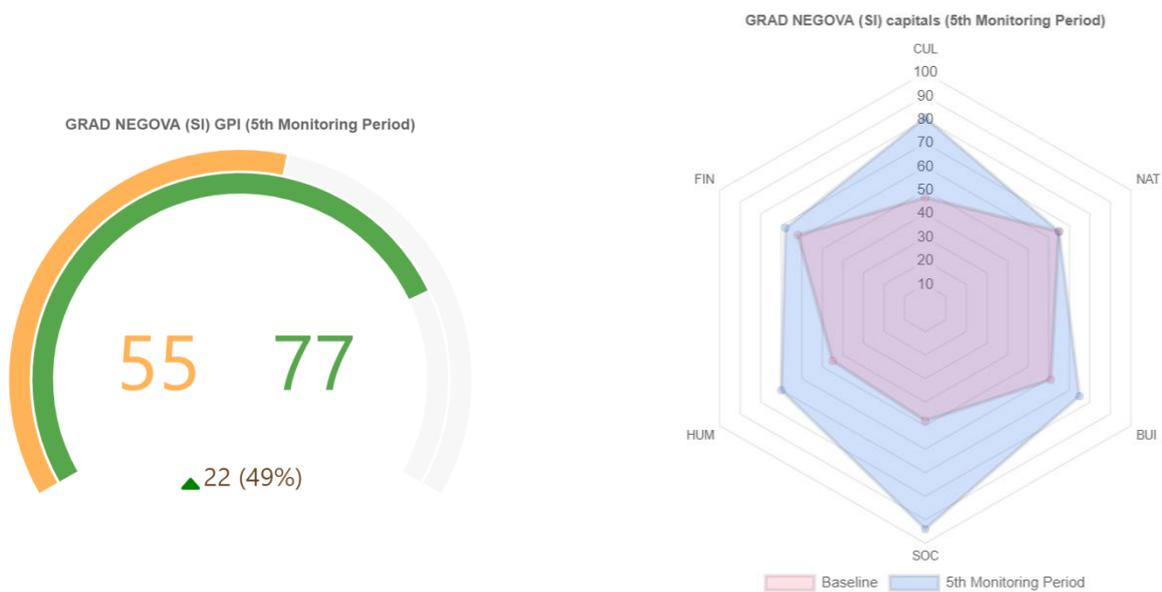
(a)
Evolution of Grad Negova level of accomplishment of objectives.

(b)
Level of development of capitals for R4 at baseline stage (red) and at last monitoring period (blue).

Figure 17: R4 global performance and Community Capitals level of development.

Depopulation, unemployment and poverty were identified as the main challenges for R4. The region is not among richest in Slovenia and it is mainly rural and the less potentially active population the less partners for them.

Besides, technological, economic, environmental and societal challenges were associated to Negova Castle. It had all basic infrastructures but renovation work on the oldest part of the castle, which was historically most valuable, was needed to put it into function and enable to integrate wider region to recognise the castle as one of the most precious cultural heritage sights in the area.

Figure 18: Negova Castle. KIBLA-KULTprotur (R4).

Furthermore, 37 lessons learned were identified from Role Models for this Replicator. For instance, taking advantage from traditional events and make the typical characteristics of the area (a site, food and wine, handcraft, traditions) a tourist attraction (LL25) was identified to develop the economy. Regional investment in redevelopment/upgrading of disused buildings in CNH areas for relevant economic, tourism or social innovation uses (LL30) was recognise as a technological improvement. Also, identification of heritage resources (formal and informal), fostering a better understanding of the tangible and intangible values of natural and cultural heritage and creation of recognized value as a driver for local development (LL15) was described as a territory discovering promoting tool such as the creation of "tourist pack and experiences" based on the different clusters and sell combined packages (LL07).

These lessons have served to define the actions the replicator has carried out to increase the Global Performance Indicator to 77% in the fifth and last monitoring period. The comparison of the KPI values of the capitals between the baseline and the last monitoring period can help understand the results and can be seen in the Figure 19 and the Figure 20.

RURITAGE
Heritage for Rural Regeneration
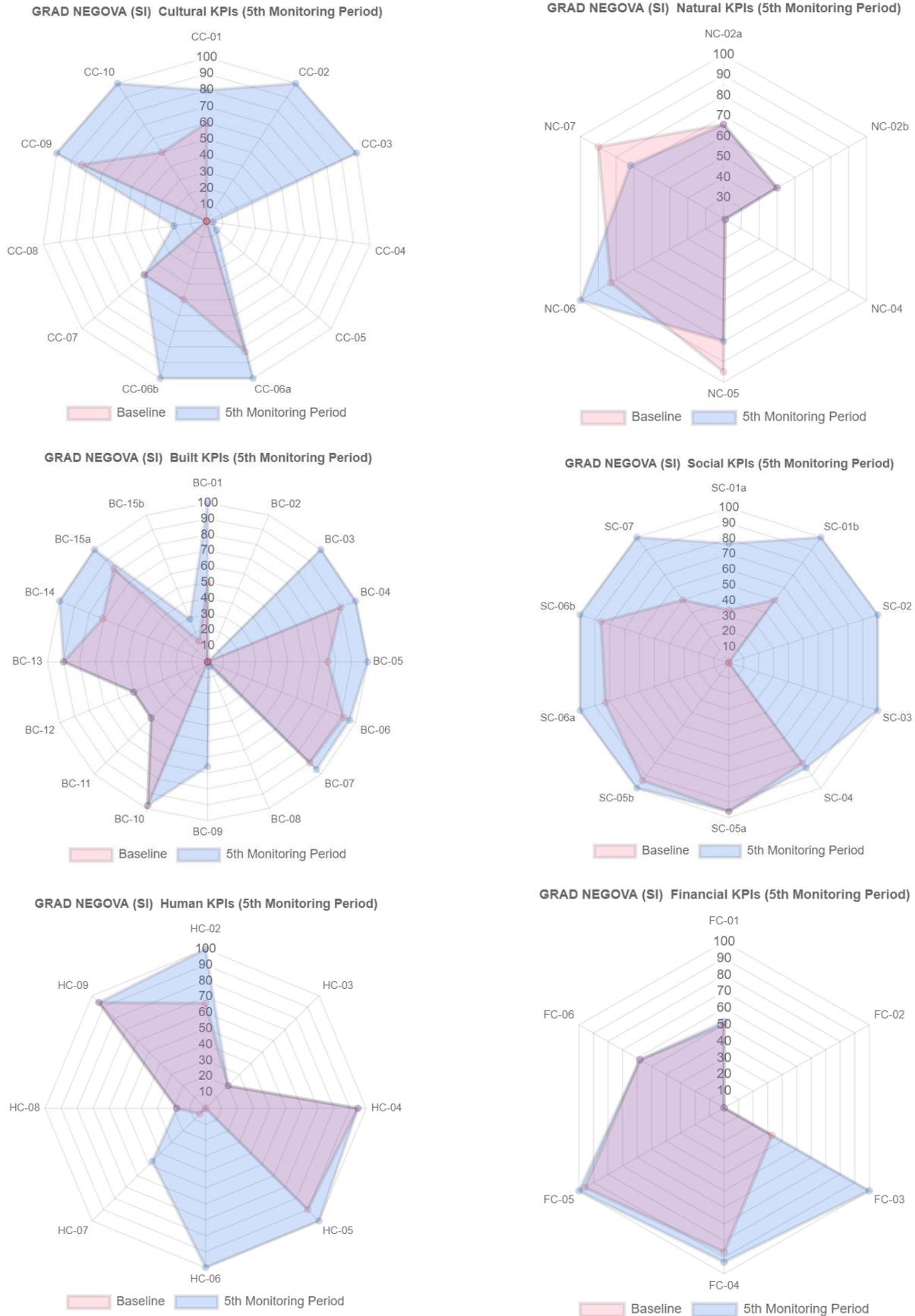
Figure 19: Level of development of KPIs, grouped by Community Capitals, for R4 at baseline stage (red) and at last MP (blue).
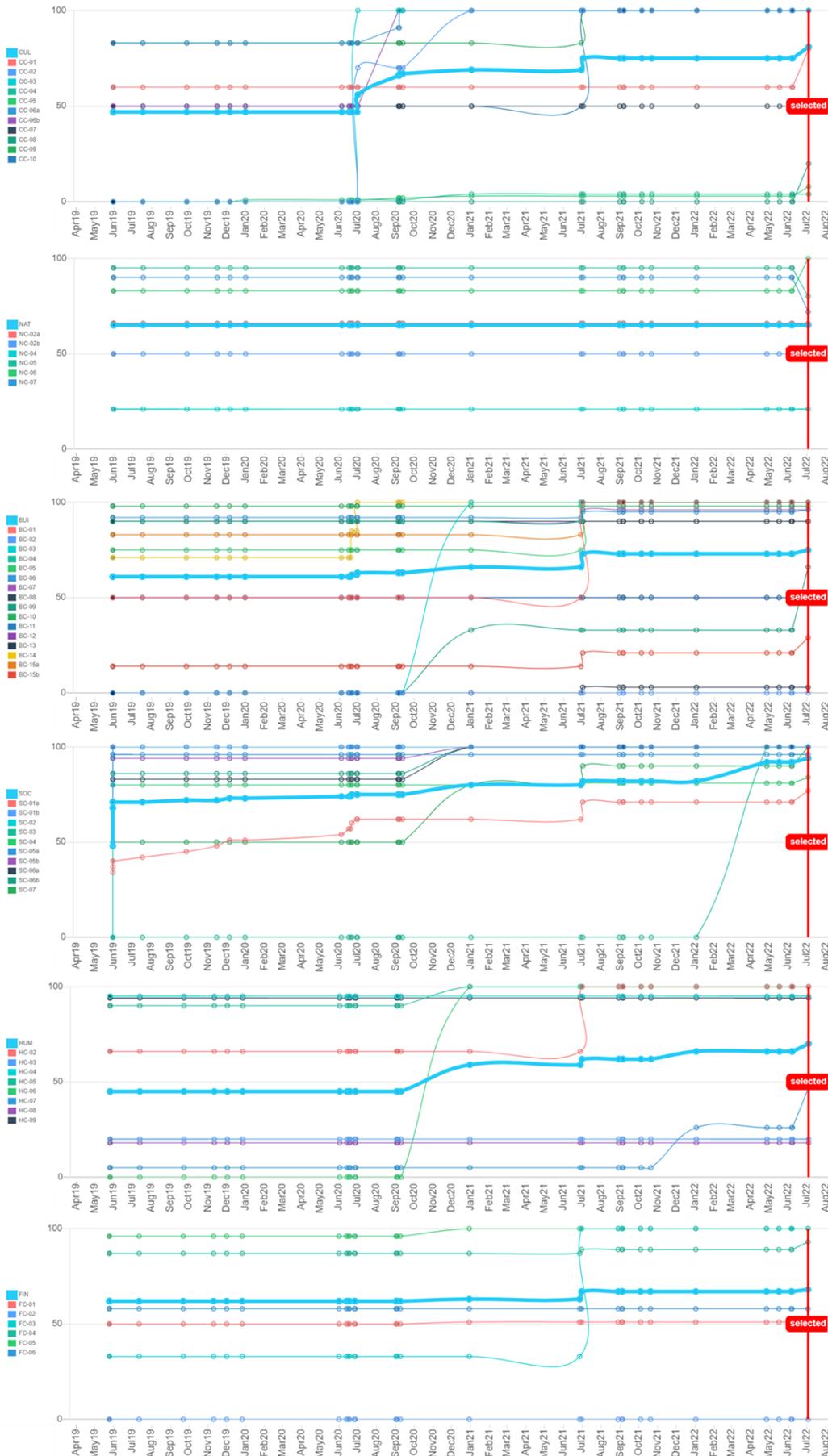
Figure 20: KPIs evolution over time for R4.

Cultural Capital (CC) had a 47% of level of development meaning that, although the number of cultural events at local level (CC-06) and the number of places in the tourist offer (CC-09) was high enough, there was still some room for improvement in using social media (CC-02 to CC-05) and training in traditional skills (CC-08). On the other hand, at last monitoring period, Cultural Capital has reached an 81% of level of development. Six indicators have reached and even surpass the target, some of them are the number of mentions in social media and press (CC-02), the number of people reached by actions and cultural events produced by citizens at local level (CC-06b), the number of places involved in the tourism offer (CC-09) and the number of arrivals of tourist (CC-10).

The 65% of development of the Natural Capital (NC) showed that its overall performance was high more development was needed in the share of renewable energy in gross final energy consumption (NC-04) and areas covered by "protected areas and other effective conservation areas" or with high environmental value (NC-02b). On the other hand, at last monitoring period, Natural Capital has maintained the 65% of level of development because, even though the number of shops, restaurants and tourist facilities selling local products (NC-06) has increased, the number of companies and organizations with sustainability certifications and labelling (NC-05) and the number of green tourism packages (NC-07) have decreased, meaning that more efforts would have been necessary.

Built Capital (BC) had a level of development of 61%, which proved that its overall performance was high but that there were still room for improvement using RURITAGE digital tools (BC-01 to BC-03) and fostering public & shared transport services (BC-08 and BC-09). On the other hand, at last monitoring period, Built Capital has reached a 75% of level of development. Six indicators have reached and even surpass the target and two indicators have stayed very close, some of them are the number of hotspots provided (BC-01), the number of beds (BC-04), the km of cycle, pedestrian and hiking paths (BC-06 and BC-07) and the number of fairs and tourism events related to the promotion of the area (BC-14).

Social Capital (SC), with a level of development of 48%, had a high number of projects involving disadvantaged people (SC-05 to SC-07), but there was capacity of improvement involving more local associations and stakeholders (SC-02 and SC-03). On the other hand, at last monitoring period, Social Capital has reached a 94% of level of development due to significant progress made on some indicators as, for instance, the number of participants in citizens engagement activities (SC-01b), the number of local associations involved (SC-03) and the number of disadvantaged people engaged (SC-07).

The 45% development level of the Human Capital (HC) meant a mid-overall performance of the KPIs, but also that some improvements could be done in training for migrants (HC-03) and internships for students, training in IT and tourism and professional management (HC-06 to HC-08). On the other hand, at last monitoring period, Human Capital has reached a 70% of level of development due to, among others, the increase of the number of recreational facilities and events (HC-02), the number of self-employees (HC-05) and the number of internships for students (HC-06).

Financial Capital had 62% of level of development which showed that the main improvement areas were related to year revenues per sector (FC-02), while other indicators showed a good performance for the baseline stage. On the other hand, at last monitoring period, Financial Capital has reached a 68% of level of development due to the increase of the number of PPPs set and signed (FC-03) and the number of start- ups and spin-off created (FC-05).

Furthermore, some actions to boost the financial level of development of the Rs were carried out through different funding sources, among them the RURITAGE budget. These include making Negova Castle accessible and connectable, different festival editions and building new skills and knowledge about rural creativity, whose funding is summarised in Table 7 and detailed in the Tables Section (from Table 68 to Table 72).

Table 7: R4 Action Plan funding details.

R4: Action Plan budget distribution and amount per capita and square kilometre				
Funding Description	**Funding Source**	**Budget**	**€/Person/km^2**	**%**
Indicative Cost	RURITAGE – Launch event of the implementation phase - Kultprotur; Kultprotur; RURITAGE - Kibla; RURITAGE - Kultprotur; In 2021, as an independent event; Kibla	89.082,09 €	0,14 €	86%
Additional Funding	Rastišče; Municipality of Gornja Radgona; Pora - razvojna agencija Gornja Radgona; 2020, 2021, 2022 Kultprotur	13.919,10 €	0,02 €	14%
Sustainability of the Action	Kibla	- €	- €	0%
Other		- €	- €	0%
TOTAL		**103.001,19 €**	**0,17 €**	**100%**

Summarizing, five out of six of the Capitals of this Replicator have progressed throughout the development of the project. In particular, the Capital that has increased more his results has been the Social one, with a 46% of rise, which is also the one that has reached the highest level of development, a 94%, and Built and Human Capitals started from good level of development and have improved it. On the other hand, Natural Capital has not improved his results, even when it had a good initial level of development, and Financial Capital has only improved in a 6%.

capital	description	target	prog1	prog2	incr
CUL	Cultural	100%	47%	81%	▲34
NAT	Natural	100%	65%	65%	0
BUI	Built	100%	61%	75%	▲14
SOC	Social	100%	48%	88%	▲40
HUM	Human	100%	45%	65%	▲20
FIN	Financial	100%	62%	68%	▲6

Figure 21: Summary of the progress made in the level of development of R4 throughout the monitoring process (*© RURITAGE*).

RESILIENCE

3.1.5 Resilience (R5): Comune di Appignano del Tronto (CoApp)

The Appignano del Tronto level of accomplishment of objectives at baseline stage was 32% while in the fifth and last period it is 72%, which represents a growth of 59% of the Global Performance Indicator. This has happened due to the improvement of the capitals and KPIs values, what has been possible due to the identification of the replicator challenges, the lessons learned from the Role Models, the definition of expected impacts and the identification of potential actions to be implemented.
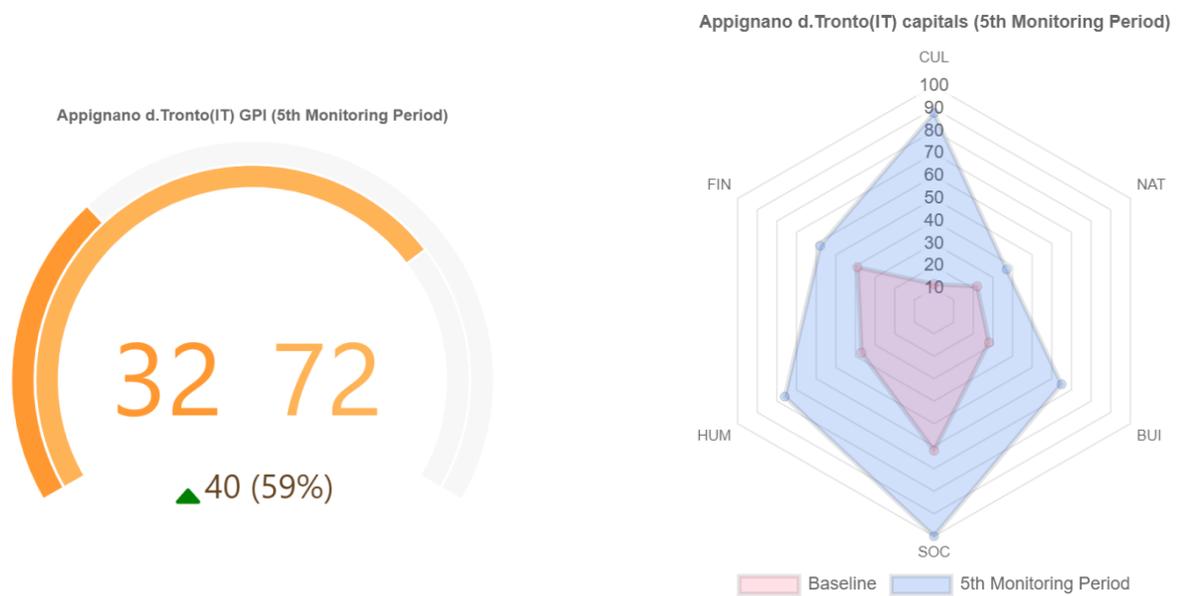
(a)

Evolution of Appignano del Tronto level of accomplishment of objectives.

(b)

Level of development of capitals for R5 at baseline stage (red) and at last monitoring period (blue).

Figure 22: R5 global performance and Community Capitals level of development.

Ageing of population, depopulation, unemployment and poverty were described as the main challenges for Appignano del Tronto. Almost 30% of the population in the region was over 65 years old, in the last 15 years the village had lost about 12% of the population, 15% of the population are unemployed and about 10% of the population are in poverty condition.

Moreover, to improve the average level of information technology and computer skills of the population, entrepreneurial skills, foster competitiveness, increase tourism, adapt to climate change, foster social cohesion, improve resilience, increase the quality and level of cultural activities were identified as other technological, economic, environmental and societal challenges.

Figure 23: Grey-blue Badlands (Calanchi grigio-azzurri) at Appignano del Tronto.

Furthermore, 33 lessons learned from Role Models were identified for Appignano del Tronto. For instance, the improvement of resilience of natural and cultural environment against natural hazards (LL31), a long-term vision to build confidence among stakeholders and continuous communication to create long-lasting relationships (LL24) and application of IT technologies for natural and cultural heritage promotion (LL02) were recognised as responses to the environmental, societal and technological challenges respectively. Also, to build a sense of belonging, individual and community self-confidence and increased autonomy through CNH (LL04) was identified as a way of creation of a new symbolic public space for the replicator.

These lessons have served to define the actions the replicator has carried out to increase the Global Performance Indicator to 72% in the fifth and last monitoring period. The comparison of the KPI values of the capitals between the baseline and the last monitoring period can help understand the results and can be seen in the Figure 24 and the Figure 25.

Cultural Capital (CC) had a 12% of level of development meaning that, although the number of enterprises in the cultural sector (CC-01) and crowdfunding campaigns (CC-07) was good, serious improvements were needed in almost all other KPIs. On the other hand, at last monitoring period, Cultural Capital has reached an 88% of level of development. Nine indicators have reached and even surpass the target and some of them, as the number of mentions in social media and press (CC-02), the number of people trained in traditional skills (CC-08) and the number of people reached by actions and cultural events produced by citizens have risen from 0% to 100%, managing to develop 25 cultural event and reaching out around 20.000 people. This was mainly due thanks to Action R5.7 (RURITAGE Art Festival) and R5.3 (Capacity building and training activities for local companies through enchantment of cultural and natural heritage) that successfully implemented two Rural Art festivals, involving young associations, theatre association and tourism operators.
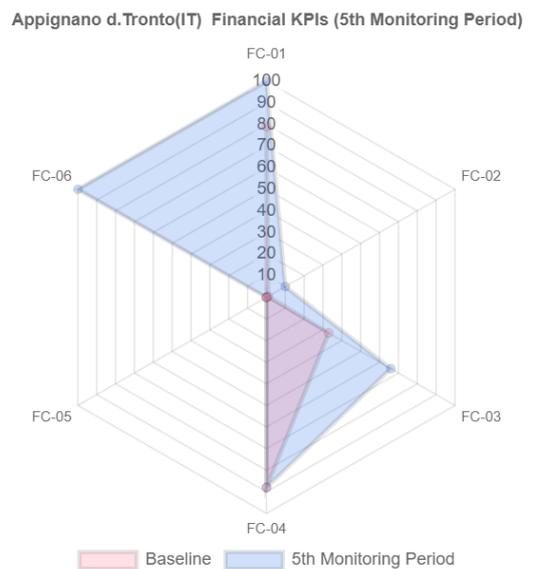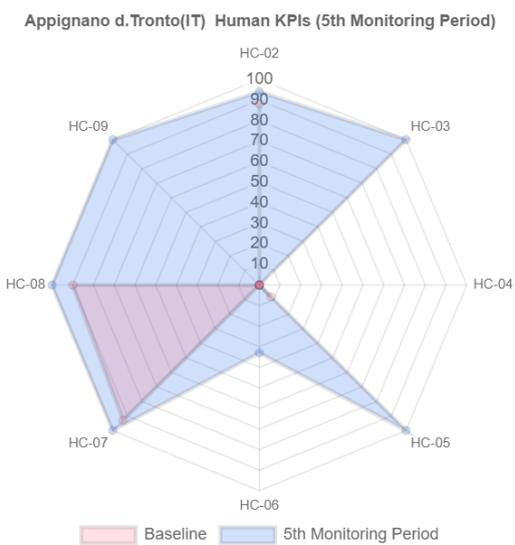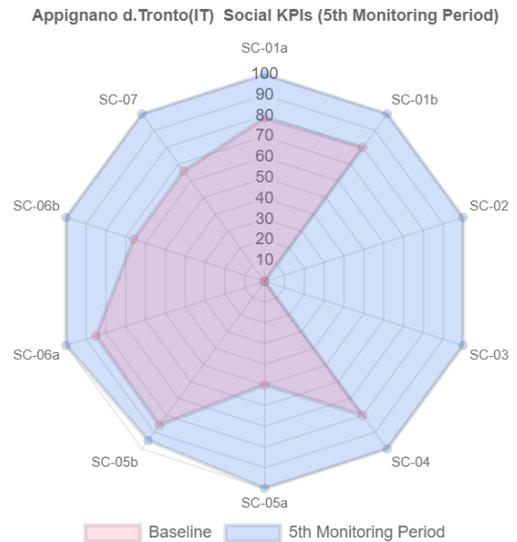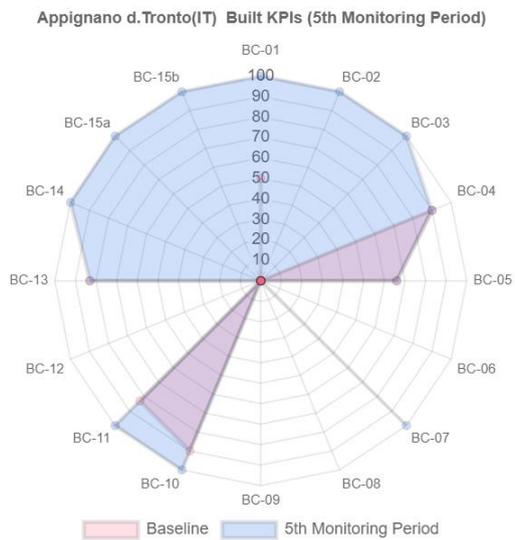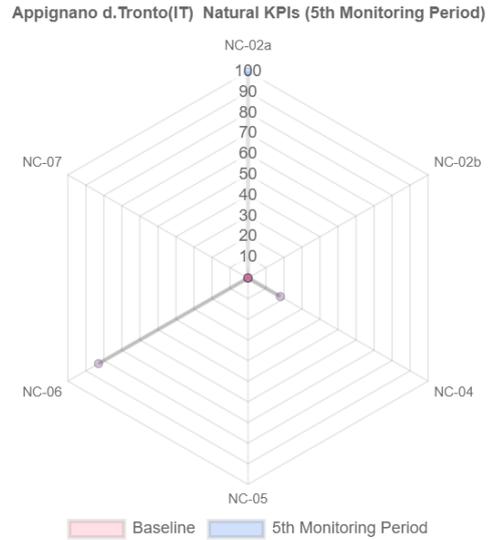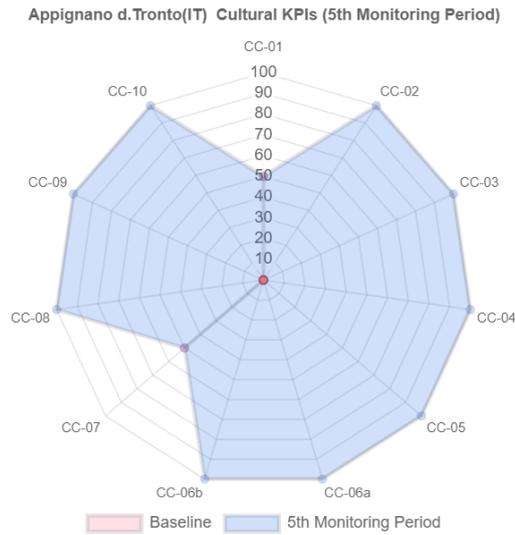
Figure 24: Level of development of KPIs, grouped by Community Capitals, for R5 at baseline stage (red) and at last MP (blue).
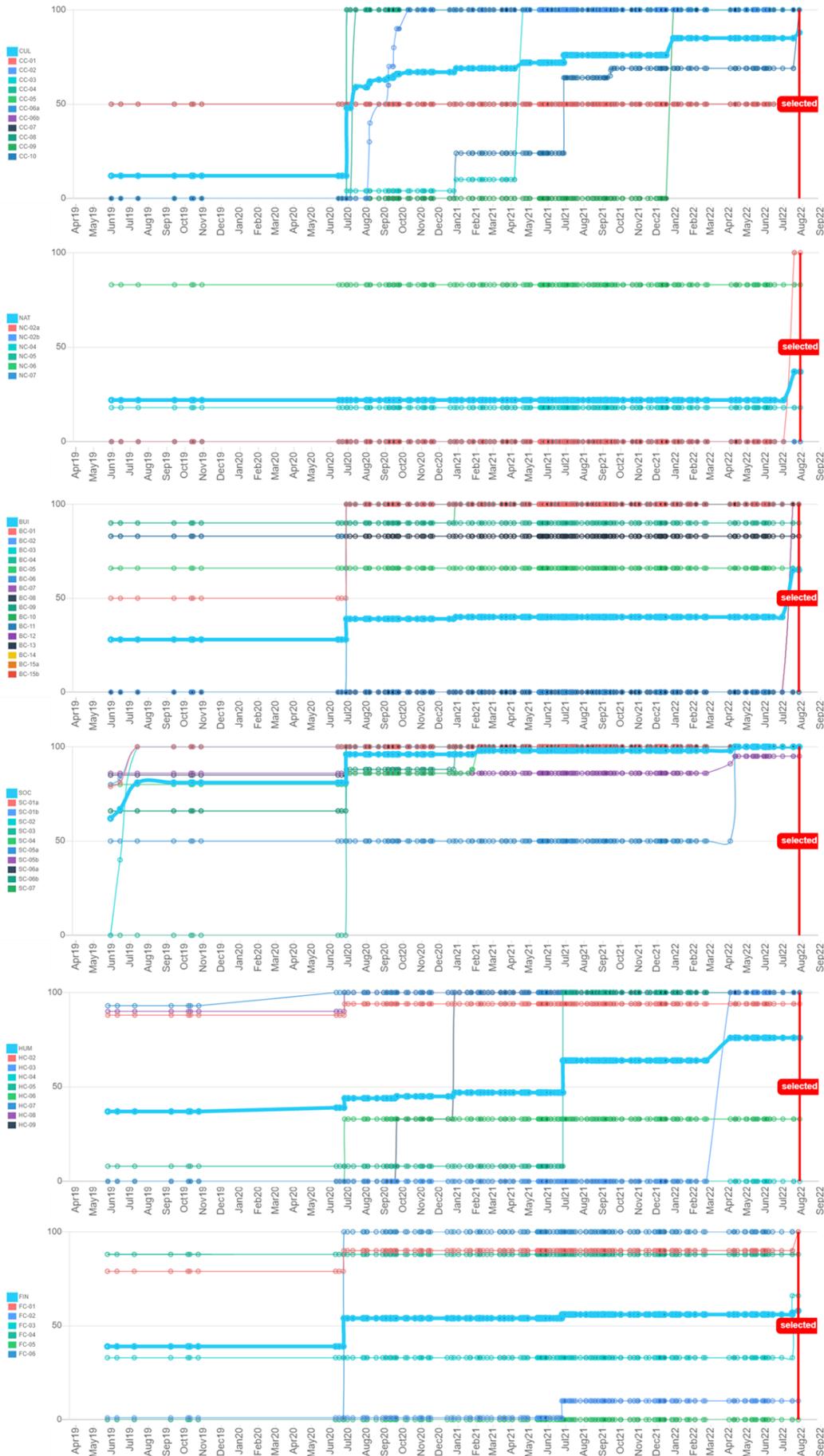
Figure 25: KPIs evolution over time for R5.

The 22% of development of the Natural Capital (NC) showed that a significant development was needed in areas related to the type of ecosystem services (NC-01), number and area of designations (NC-02), companies with sustainability certifications (NC-05) and green tourism packages (NC-07). On the other hand, at last monitoring period, Natural Capital has reached a 37% of level of development. Progress have been made in the number of areas designated as "protected areas and other effective conservation areas" or with high environmental value (NC-02a) , thanks to the implementation of the new path of Grey and Blue Badlands (Actions R5.9). Moreover, the co-development of an integrated green pack based on Nature and Cultural Heritage products (Action R5.8) with local stakeholders will not only support conservation and valorisation of natural capital, but its implementation will also attract new tourists and possibly create new jobs in the long run.

The progress in the level of development of the Natural Capital is also related with the ecosystem services used in this Replicator. These are composed of four different types of activities that have allowed to improve the KPIs involved in this Capital. They include activities in the nature and cultural events with children that have the aim of increasing the awareness of cultural and natural heritage, and are detailed in the Table 8.

Table 8: Ecosystem Services for R5.

Event	Ecosystem Services	Activity Summary	Frequency	Outcome
2nd Monitoring Period	Outdoor recreation activity (hiking, trails, canyoning, biking, rafting)	EcoPasseggiata fra i Calanchi grigio Azzurri (Ecowalk among the grey-blue Calanchi)	just once	
3rd Monitoring Period	Researching Nature (scientific studies or activities focused on natural or geological heritage, biodiversity or similar topics)	Scientific monthly report about weather data and forecast based on data collected from local digital wheater stations	weekly	
3rd Monitoring Period	Educational activities in the nature, children education, adults education, guided tours with the aim of increasing awareness of local natural heritage, etc.	"Maskfree questione natura" is an educational activity to make people aware do not discharge covid masks in the environment https://www.farodiroma.it/appignano-del-tronto-e-temporaneamente-mask-free-trovate-45-mascherine-da-questione-natura/	just once	Activity in the nature to make people aware of environmental impact of covid masks
3rd Monitoring Period	Cultural activity in the nature (concerts, theatre, dance, art installation, reading in the nature etc.)	Il bosco incantato. Cultural event that involved children in discovering nature and woods	just once	

Built Capital (BC) had a level of development of 28%, which proved that its overall performance was mid-low and there were still room for improvement using RURITAGE digital tools (BC-01 to BC-03), fostering cycle and hiking paths (BC-06 and BC-07) and fostering public & shared transport services (BC-08 and BC-09). On the other hand, at last monitoring period, Built Capital has reached a 65% of level of development. Eight indicators have reached and even surpass the target, as the number of people reached through RURITAGE digital tools (BC-02), the number of buildings restored/retrofitted (BC-11) and the number of sites provided with signals and explanation panels to help describing the sites and orienteering visitors (BC-15a). The fulfilment of this target was mainly due to the development and implementation of the path of Grey and Blue Badlands that developed a path of 22km, properly equipped with signals and explanation panels fulfilled with local stories (in collaboration with action 5.6) and an incredible range of CNH related materials (archive pictures, recordings of old stories, etc.).

Social Capital (SC), with a level of development of 62%, had a high number of projects involving people with disabilities (SC-05 and SC-06), but there was capacity of improvement involving more local associations (SC-02 and SC-03). On the other hand, at last monitoring period, Social Capital has an 100% of level of development due to, among others, the increase of the citizens engagement activities (SC-01a) and participants in them (SC-01b), the number of stakeholders (SC-02) and the projects addressing people with disabilities (SC-06a) and the people involved in them (SC-06b). R5 has been incredibly successful in implementing activities around citizens

engagement such as Art festivals (R5.7) that attracted more than 10.000 people in 2 editions, collecting stories from the local community (R5.6), particularly looking at including elderly people, organizing hiking paths to involve the communities in the co-definition of the path of the Grey and Blue Badlands (Action R5.9).

The 37% development level of the Human Capital (HC) meant a high performance for the number of recreational facilities/events (HC-02), people trained in IT and tourism (HC-07) and people involved in professional management training course (HC-08) but significative need of improvement in training for migrants (HC-03 and HC-04), self-employees (HC-05) and publications as recommendation and guidelines provided (HC-09). On the other hand, at last monitoring period, Human Capital has reached a 76% level of development. Progress have been made, among others, in the number of immigrants involved in educational programs (HC-03), the number of self-employees (HC-05) and the number of people trained in IT and tourism (HC-07). Specifically, a) training course around Entrepreneurial skills; b) English skills; c) Social media and e-commerce skills; d) EU funds opportunities for SME; e) Service Design skills have been implemented (Action 5.3) and around resilience capacity building (Action 5.1 and 5.2) involving around 400 people.

Financial Capital had 39% of level of development which showed that the main improvement areas were related to the number of PPPs set and signed (FC-03) and companies with new business models and innovative processes (FC-06). On the other hand, at last monitoring period, Financial Capital has a 58% of level of development due to, among others, the increase of the nights spent at tourist accommodation establishments (FC-01) and the number of companies supported in defining new business models and innovative processes of production (FC-06). It is worth to noting here the impact of the Action 5.9 and the "Accordi agro-ambientali".

Furthermore, some actions to boost the financial level of development of the Replicator were carried out through different funding sources, among them the RURITAGE budget. These include awareness raising, capacity building and training activities for resilience and sustainable local food production, the development of toolkit for resilient citizens and the creation of Appignano HUB, whose funding is summarised in Table 9 and detailed in the Tables Section (from Table 79 to Table 89).

Table 9: R5 Action Plan funding details.

R5: Action Plan budget distribution and amount per capita and square kilometre				
Funding Description	**Funding Source**	**Budget**	**€/Person/km^2**	**%**
Indicative Cost	RURITAGE budget	90.000,00 €	2,26 €	7%
Additional Funding	Private sponsors [local companies]; Local crowdfunding campaign	4.500,00 €	0,11 €	0%
Sustainability of the Action	Next Generation Recovery Plan (PNC fondo complementare PNRR); GAL funds for the co-implementation of the signals and explanation panels for Cammino dei Calanchi	1.235.000,00 €	31,07 €	93%
Other		- €	- €	0%
TOTAL		**1.329.500,00 €**	**33,45 €**	**100%**

Summarizing, all the Capitals of this Replicator have progressed throughout the development of the project, getting good overall results. In particular, the Capital that has increased more his results has been the Cultural one, with a 76% of rise, and that had the worst initial level of development. But it is not the one that has reached the highest level of development, which is the Social Capital with a 100%. On the other hand, Natural Capital is the one with worst rise, a 15%, due to the low improve of his KPIs, but it is not a bad result.

capital	description	target	prog1	prog2	incr
CUL	Cultural	100%	12%	88%	▲76
NAT	Natural	100%	22%	37%	▲15
BUI	Built	100%	28%	65%	▲37
SOC	Social	100%	62%	100%	▲38
HUM	Human	100%	37%	77%	▲40
FIN	Financial	100%	39%	58%	▲19

Figure 26: Summary of the progress made in the level of development of R5 throughout the monitoring process (*© RURITAGE*).

3.1.6 Landscape (R6): Integrated Management of Izmir Geopark

The Izmir Geopark level of accomplishment of objectives at baseline stage was 31% while in the fifth and last period it is 77%, which represents a growth of 67% of the Global Performance Indicator. This has happened due to the improvement of the capitals and KPIs values, what has been possible due to the identification of the replicator challenges, the lessons learned from the Role Models, the definition of expected impacts and the identification of potential actions to be implemented.

Ageing of population, depopulation, unemployment and poverty were described as the main challenges for Izmir Geopark. The median age value was higher than İzmir average values and rural impoverishment due to the decline in agricultural productivity, such as the declining incomes from pine fruit for the last years which was a major source of income in the villages, induced the unemployment and the migration tendency from rural to urban areas, especially of young people.

Moreover, other technological, economic, environmental and societal challenges were identified. There was a insufficient utilization of modern agricultural production techniques, negative effects of climate change was diminishing the sustainability of livelihoods in this hinterland region, agricultural activities and mining industry were polluting natural and cultural resources and there was no specific action or strategy to make historical area as innovation/entrepreneurship and social and cultural integration area.
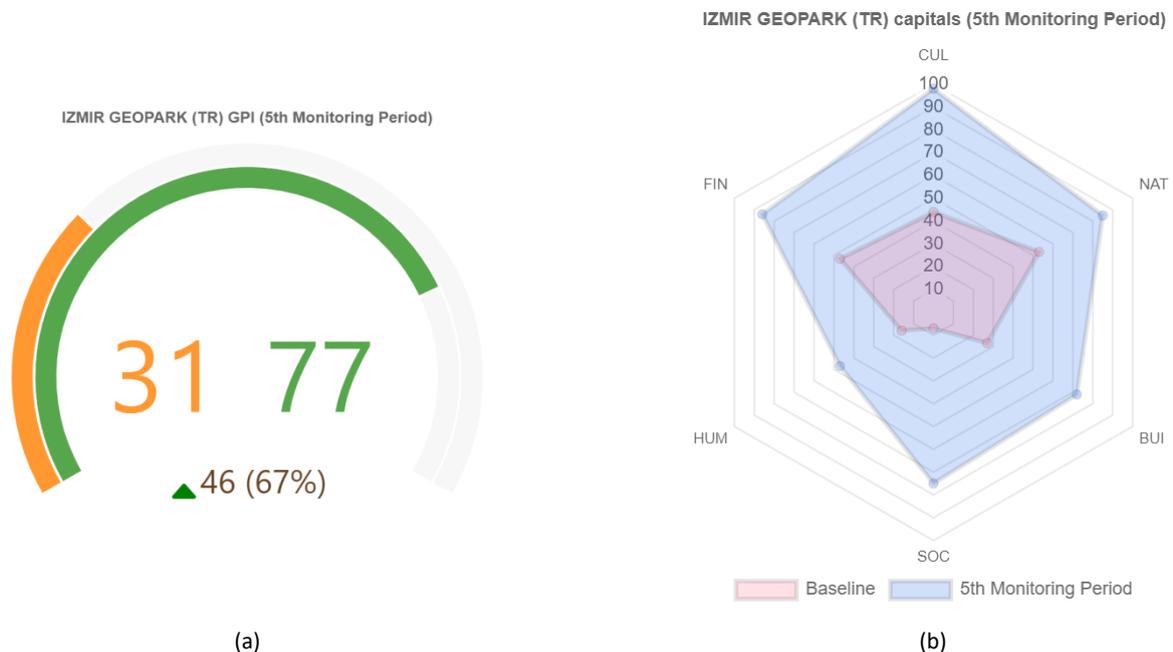
(a)
Evolution of Izmir Geopark level of accomplishment of objectives.

(b)
Level of development of capitals for R6 at baseline stage (red) and at last monitoring period (blue).

Figure 27: R6 global performance and Community Capitals level of development.

Furthermore, 34 lessons learned were identified from Role Models to Izmir Geopark. For instance, discovering economic values of traditional food and use it as a way to protect historical landscapes (LL12) and defining an action plan (LL34) were described as a way of economic and societal development respectively. Also, the creation of a "brand" or "tourist pack experiences" based on the natural resources and the added valued created and synergies with other local activities (LL06) was identified as an enabler for local food festival-hub as a training and social centre for cooperatives of farmers and the creation of a visitor centre and research centre was described as a way to engage knowledge partners in the process (LL37).

Figure 28: Izmir Geopark (R6).

These lessons have served to define the actions the replicator has carried out to increase the Global Performance Indicator to 77% in the fifth and last monitoring period. The comparison of the KPI values of the capitals between the baseline and the last monitoring period can help understand the results and can be seen in the Figure 29 and the Figure 30.

Cultural Capital (CC) had a 44% of level of development meaning that, although the number of cultural events, crowdfunding campaigns and training in traditional skills was high enough (CC-07 and CC-08), there was still room for improvement in the use of social media (CC-02 to CC-05) and people reached at local level (CC-06). On the other hand, at last monitoring period, Cultural Capital has reached a 98% of level of development. Nine indicators have reached and even surpass the target and some of them, as the number of mentions in social media and press (CC-02) and the number of people reached by actions and cultural events produced by citizens at local level (CC-06b), have risen from 0% to 100%.

The 53% of development of the Natural Capital (NC) showed that more development was needed in area of designations (NC-02b), share of renewable energy (NC-04) and green tourism packages (NC-07). On the other hand, at last monitoring period, Natural Capital has an 85% of level of development due to, among others, the increase of the number of companies and organizations with sustainability certifications (NC-05), the number of shops, restaurants and tourism facilities selling local products (NC-06) and the number of "green tourism packages" (NC-07).

Built Capital (BC) had a level of development of 27%, which proved that its overall performance was mid-low and that there were still room for improvement using RURITAGE digital tools (BC-01 to BC-03), fostering cycle and hiking paths (BC-06 and BC-07), fostering public & shared transport services (BC-08 and BC-09) and building restoration (BC-11). On the other hand, at last monitoring period, Built Capital has reached a 72% of level of development. Ten indicators have reached and even surpass the target and some of them, as the km of cycle path (BC-06) and the number of buildings restored/retrofitted (BC-11), have risen from 0% to 100%.
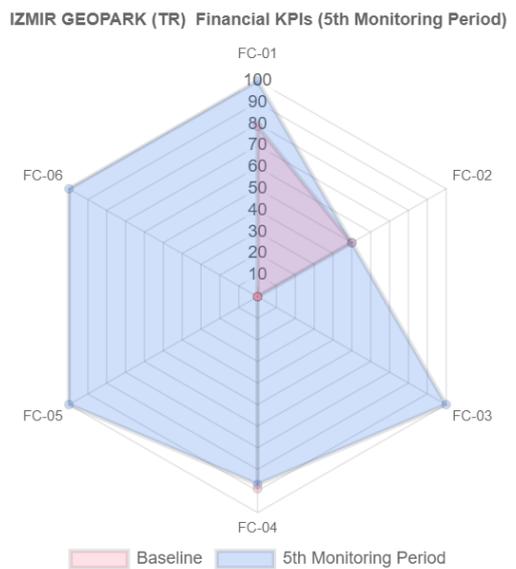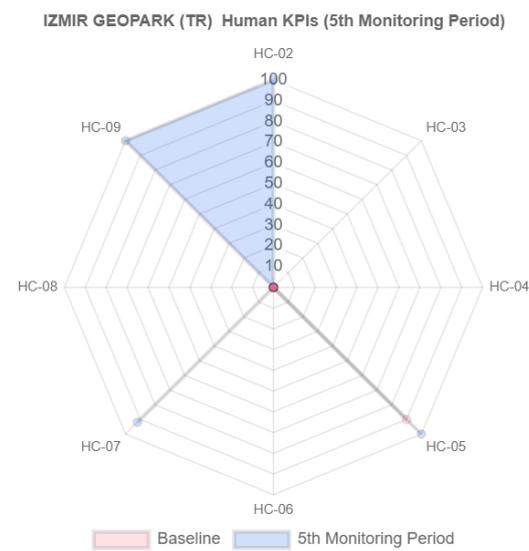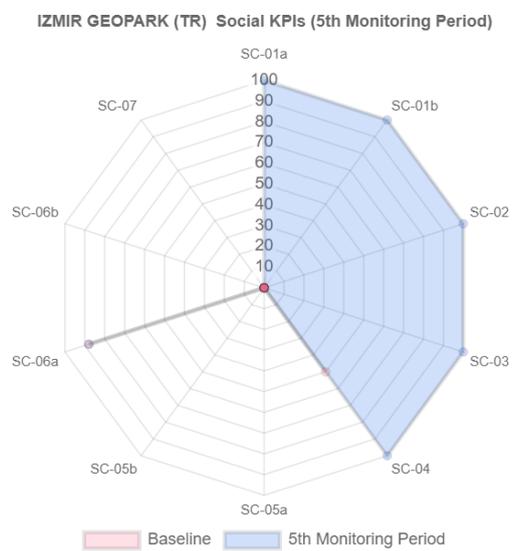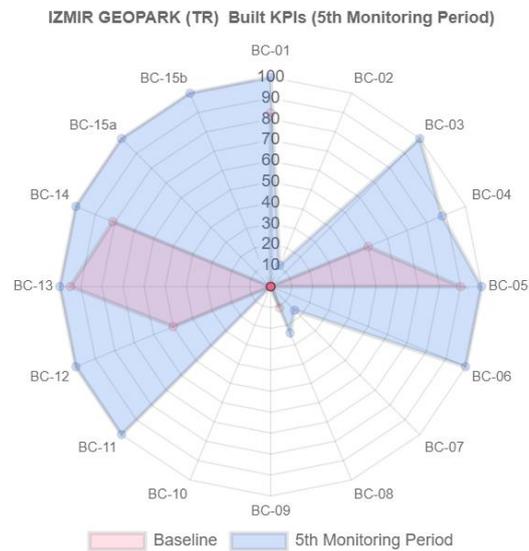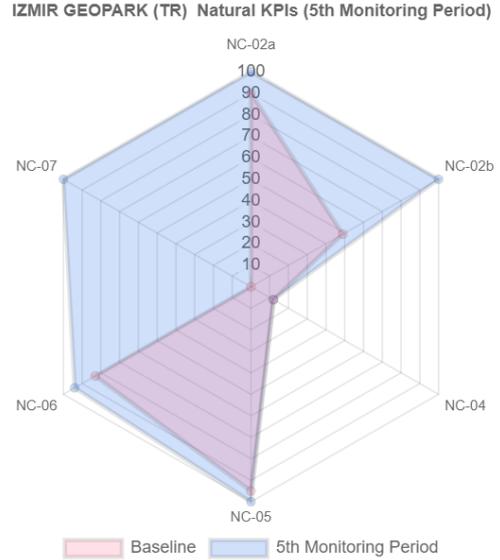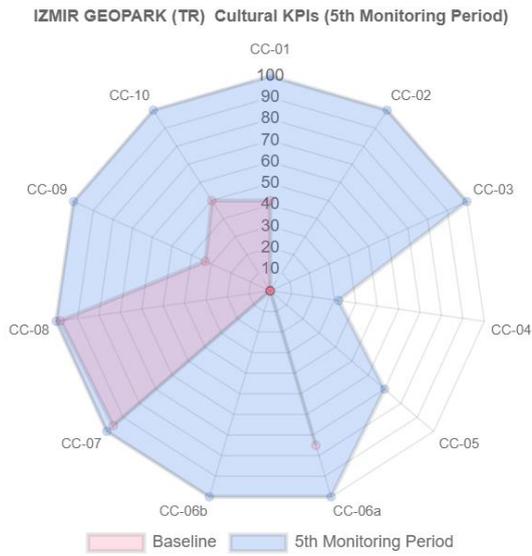
Figure 29: Level of development of KPIs, grouped by Community Capitals, for R6 at baseline stage (red) and at last MP (blue).
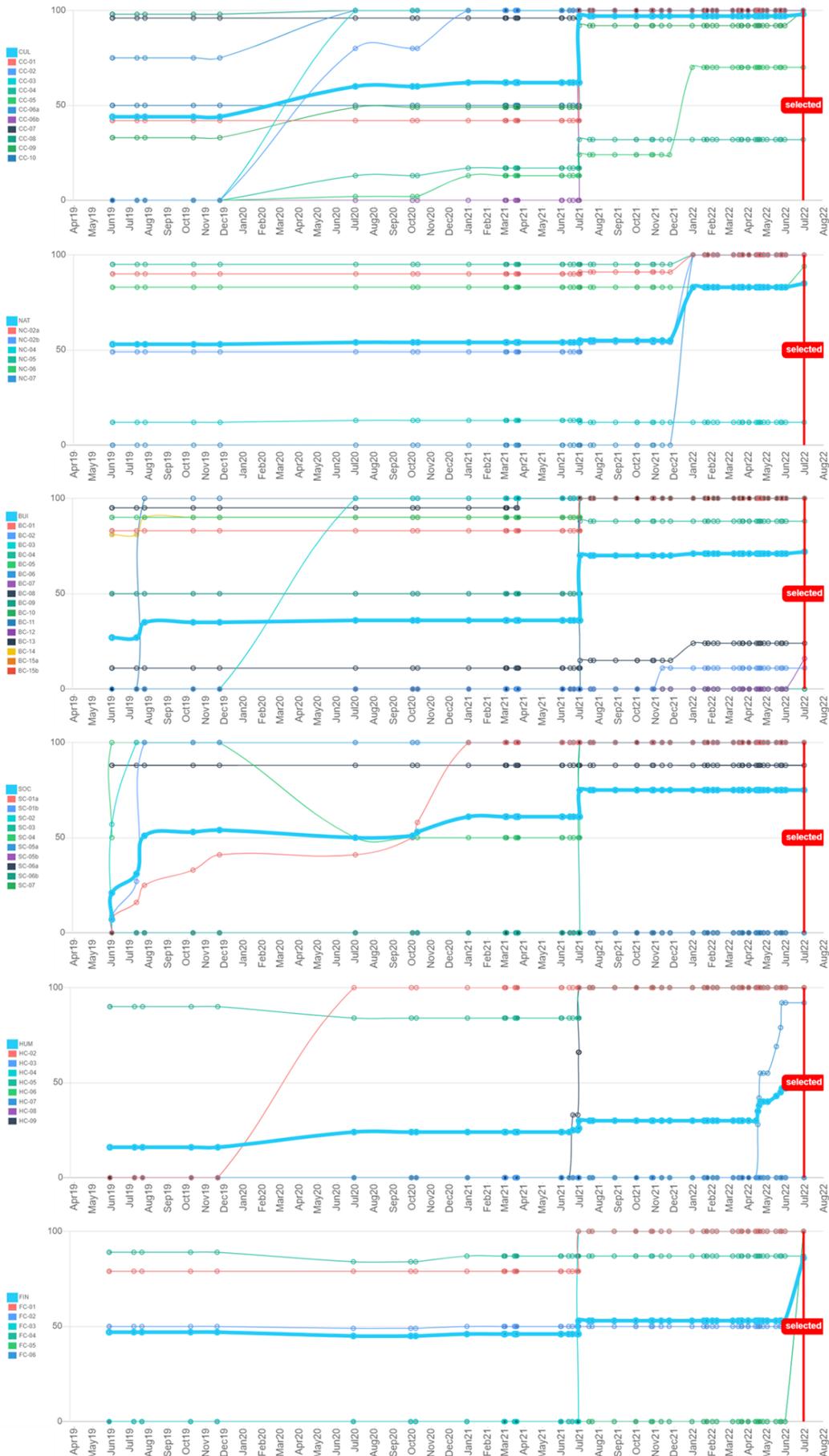
Figure 30: KPIs evolution over time for R6.

Social Capital (SC), with a level of development of 7%, showed that although participants in projects involving people with disabilities was high (SC-06a), significant improvement was needed in most of the other indicators. On the other hand, at last monitoring period, Social Capital has a 75% of level of development due to, among others, the increase of the number of participants in citizens engagement activities (SC-01b), the number of stakeholders (SC-02) and the number of local associations involved (SC-03).

The 16% development level of the Human Capital (HC) meant a low overall performance of most of the KPIs, except for the number of self-employees (HC-05). On the other hand, at last monitoring period, Human Capital has reached a 47% of level of development. Progress have been made in the number of recreational facilities/events (HC-02), the number of people trained in IT and tourism (HC-07) and the number of publication as recommendation and guidelines provided (HC-09).

Financial Capital had 47% of level of development which showed that the main improvement areas were related to the number of start-ups and spin-offs (FC-05) and companies with new business models and innovative processes (FC-06). On the other hand, at last monitoring period, Financial Capital has reached an 86% of level of development. Four of six indicators have reached and even surpass the target and some of them, as the number of PPPs set and signed (FC-03) and the number of companies supported in defining new business models (FC-06), have risen from 0% to 100%.

Furthermore, some actions to boost the financial level of development of the Replicator were carried out through different funding sources, among them the RURITAGE budget. These include building a geology road map through citizen science, researching agroforestry to improve economic resilience in forest villages, developing ethnobotanic activities in Bergama region and increasing rural tourism capacity in Kozak Plateau, whose funding is summarised in Table 10 and detailed in the Tables Section (from Table 96 to Table 104).

Summarizing, all the Capitals of this Replicator have progressed throughout the development of the project, getting good overall results. In particular, the Capital that has increased more his results has been the Social one, with a 68% of rise, and that had the worst initial level of development, a 7%. But it is not the one that has reached the highest level of development, which is the Cultural Capital with a 98%. Natural and Financial Capitals have also reached very good levels of development and Built Capital has had a good rise.

Table 10: R6 Action Plan funding details.

R6: Action Plan budget distribution and amount per capita and square kilometre				
Funding Description	**Funding Source**	**Budget**	**€/Person/km^2**	**%**
Indicative Cost	RURITAGE budget	77.750,00 €	0,0002 €	32%
Additional Funding	Bergama Chamber of Commerce, Bergama and Dikili Municipalities (district), UNIBEL also want to contribute to the studies; Co-funding by Izmir; Co-funding budget; Support from other district municipalities; Izmir Metropolitan Municipality (co-financing); Vocation Factory; Public Education Center; Co-funding budget, the NGO will also fund the game activities with human resources	54.600,00 €	0,0001 €	23%
Sustain. of the Action	Izmir Metropolitan Municipality	91.000,00 €	0,0002 €	38%
Other	Local associations and institutions; ; Local funding facilitators; Other local associations and institutions	19.000,00 €	0,0000 €	8%
TOTAL		**242.350,00 €**	**0,0005 €**	**100%**

capital	description	target	prog1	prog2	incr
CUL	Cultural	100%	44%	98%	▲54
NAT	Natural	100%	53%	85%	▲32
BUI	Built	100%	27%	72%	▲45
SOC	Social	100%	7%	75%	▲68
HUM	Human	100%	16%	47%	▲31
FIN	Financial	100%	47%	86%	▲39

Figure 31: Summary of the progress made in the level of development of R6 throughout the monitoring process (© RURITAGE).

3.1.7 Summary of Funding Details for the Action Plans

In the previous sections, every SIA included a table with the details about the budget for the development of the Action Plans. In order to use this information, e.g. with the System Dynamics models, Table 11 summarises the data coming from previous tables into global values that can be used for estimations.

Table 11: Global budget details.

Action Plans global budget distribution and amount per capita and square kilometre				
Funding Description	**Funding Source**	**Budget**	**€/Person/km^2**	**%**
Indicative Cost	RURITAGE budget	508.922,09 €	1,36 €	12,4%
Additional Funding	Budget leveraged from additional sources	219.519,10 €	0,56 €	5,1%
Sustainability of the Action	Long-term sustainability of the Actions	1.383.620,00 €	8,78 €	80,1%
Other		77.476,26 €	0,26 €	2,4%
TOTAL		**2.189.537,45 €**	**10,96 €**	**100%**

3.1.8 Additional Replicators

In 2019 a call for ARs was made to expand the number of pilots of the project. 87 applications from 37 countries (3 from ENP countries) were received and, after a selection process, 9 Additional Replicators were chosen:

- **St. Olav Waterway (AR08)** - The only pilgrims' path with sauna and sea views every day! A Nordic Heritage Route (Finland).
- **Mariñas Coruñesas (AR09)** – Local Food Plan of "Mariñas Coruñesas e Terras do Mandeo" Biosphere Reserve (Spain).
- **Styrian Eisenwurzen (AR11)** - Orchard meadows: Cultivation and preservation of an endangered cultural landscape (Austria).
- **Borgofuturo (AR14)** – Sustainability and regeneration at the hamlet scale (Italy).
- **Ifugao Houses (AR17)** – A Springboard for Re-energizing Culture, Preserving Landscape, and Support for Household Resiliency (Philippines).
- **Ecomuseum Zagori (AR19)** – Community-led regeneration of Zagori through the development of a sustainable transhumance tourism product (Greece).
- **Polevaya Village (AR20)** – Rural Heritage Center "Slobozhanshchyna" (Ukraine).
- **Mysia Ways (AR21)** – Nature, History and Culture Routes (Turkey).
- **Kvarken Archipelago (AR23)** - Coastal People-Coastal Life: Using Local Empowerment for Transmission into Smart Development (Finland).

Figure 32: Ifugao Traditional House (*Credits: Consuelo Habito*)/Ifugao Traditional Houses (AR17).

As well as the Replicators, each Additional Replicator is related to several SIAs and has had to identify his territorial context, strengths, assets and challenges. Thereafter, following RURITAGE guidelines and Role Models and Replicators experience, they have identified stakeholders, established a hub, celebrated meetings and workshops and developed Action Plans, which have KPIs associated and distributed in the six Capitals defined in RURITAGE. They have access to the tools developed in the project and his data has been collected and monitored in the Monitoring Platform, where the progress made can be seen.
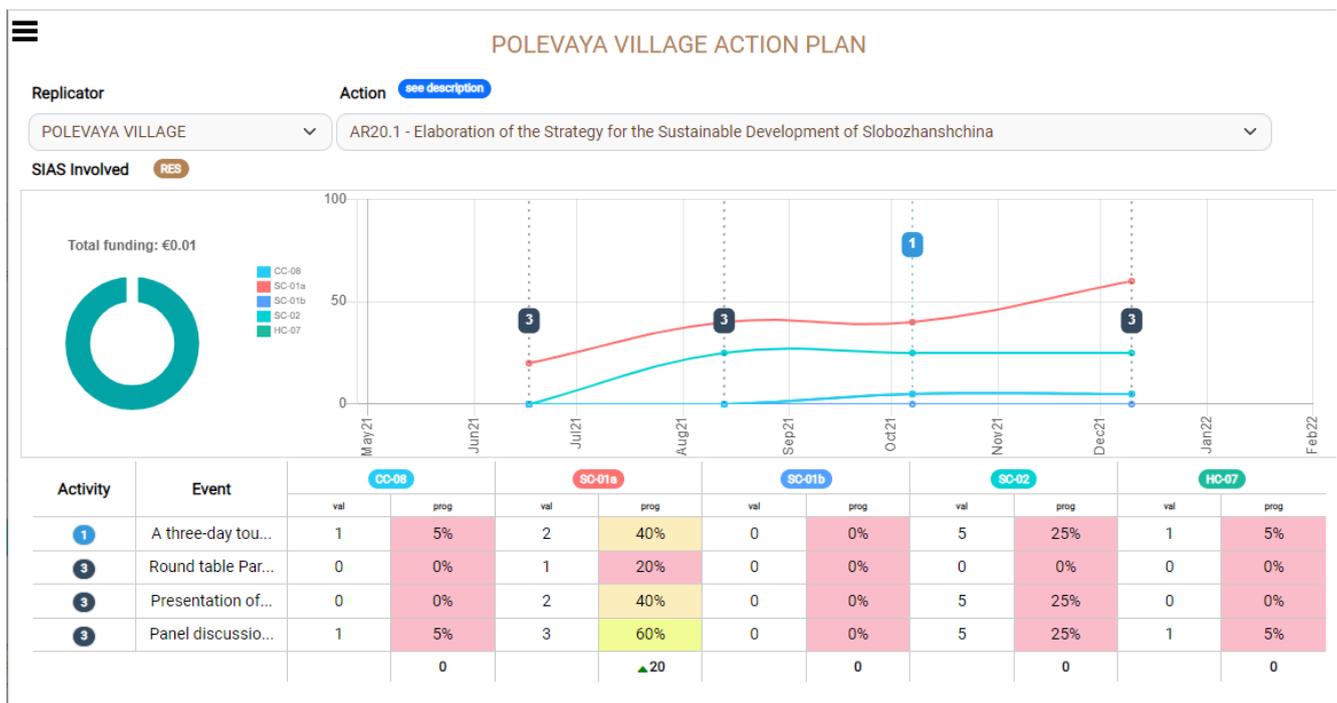
Figure 33: Polevaya Village Action Plan dashboard, summarising KPIs related with events of an Action (*© RURITAGE*).

Thus, Additional Replicators have already achieved significant results, for instance, new cooperation partners in multiple European countries and sectors leading to potential new future collaborations, learning about best practices and local engagement activities, identification of new markets, long-term planning the actions and defining achievable targets, knowledge enriched and shared to ensure his preservation and conservation, creation of spaces for collaboration and discussion and raising public awareness about the preservation and promotion of rural heritage.

Figure 34: St. Olav Waterway (AR08) (*Credits: Stefan Bremer***).**

Regarding the progress already made by the Additional Replicators, which is represented in the GPIs, St. Olav Waterway (AR08) has registered results in Cultural and Social Capitals, surpassing the number of actions and cultural events produced by citizen at local level (CC-06a) defined in the target and reaching the number of citizens engagement activities (SC-01a) and participants in them (SC-01b).

On his part, Styrian Eisenwurzen (AR11) has achieved results in the Social Capital, increasing the number of citizens engagement activities (SC-01a), the participants in them (SC-01b) and the stakeholders involved (SC-02).

Borgofuturo (AR14) has registered progress in Cultural, Built, Social and Human Capitals, increasing the number of actions and cultural events produced by citizens at local level (CC-06a), fairs and tourism events related to the promotion of the area (BC-14), citizens engagement activities (SC-01a) and publications as recommendation and guidelines provided (HC-09).

Ecomuseum Zagori (AR19) has achieved results in Cultural, Built, Social, Human and Financial Capitals, increasing the number of actions and cultural events produced by citizens at local level (CC-06a), CNH objects mapped trough ATLAS (BC-03), citizens engagement activities (SC-01a) and participants in them (SC-01b), stakeholders involved (SC-02), companies supported in defining new business models (FC-06) and surpassing the targeted number of people trained in IT and tourism (HC-07).

Figure 35: Styrian Eisenwurzen (AR11). Alpine meadow - The Styrian Eisenwurzen is marked by its beautiful forest, romantic river valleys and idyllic farms (*Credits: Oliver Gulas/Geopark Styrian Eisenwurzen***).**

Polevaya Village (AR20) has made progress in Cultural, Social and Human Capitals, increasing the number of people trained in traditional skills (CC-08), citizen engagement activities (SC-01a), stakeholders (SC-02) and people trained in IT and tourism (HC-07).

Mysia Ways (AR21) has achieved results in Built and Social Capitals, increasing the number of restaurants (BC-05), building restored or retrofitted (BC-11), reused buildings (BC-12), citizens engagement activities (SC-01a), participants in them (SC-01b) and stakeholders (SC-02).

Figure 36: Polevaya Village (AR20). Museum estate peasant's house (*Credits: Polevaya Village***).**

Kvarken Archipelago (AR23) has made progress in the Social Capital, increasing the number of citizens engagement activities (SC-01a), participants in them (SC-01b) and stakeholders (SC-02). Mariñas Coruñesas (AR09) and Ifugao Houses (AR17) have not registered results yet.

Figure 37: Mariñas Coruñesas (AR09). Viticulture of local varieties in the Mariñas Coruñesas Biosphere Reserve (*Credits: Mariñas Coruñesas Biosphere Reserve photographic archive***).**

4.   System Dynamics Model Description

The complex problem of assessing the heritage-led rural regeneration Action Plans to transform rural areas into sustainable development demonstration laboratories has been fully analysed by means of SD. A performance model is defined for each Replicator by establishing weights, feedback loops and delays in information to the KPI within the corresponding SIA. This information may depend on local aspects defined and agreed among the KFP and the participants of the RHHs, and also on the qualitative information coming from the co-monitoring phase.

Each Replicator obtains a global impact evaluation based on the corresponding SD model after its heritage-led strategy implementation is completed. The results have been compared with the Replicator diagnosis (WP1), to highlight the main improvement for each of the KPIs identified. This analysis results in a comprehensive impact assessment, providing quantitative and qualitative evidences of the success/failure of the heritage-led plans implemented regarding socioeconomic, environmental and cultural related impacts. From this assessment, an overall conclusion of replication exercises is provided and recommendations for potential new replicators are formulated. The results of the impact assessment will feed and expand the Inventory of Lesson Learned (continuously updated within WP5), providing valuable solutions experienced in the Rs.

4.1   System Dynamics Utilisation

There is no 'a correct way' or 'the best way' to observe reality, since it is impossible to point to a single direction as 'the best' or 'the most correct one'. One of these directions is just to consider models addressing the analysis of heritage-led in rural areas as a whole, i.e. as a global system. That is the approach proposed by the SD. A 'system' is understood as a set of independent elements with stable interactions with each other. Another important characteristic is its long-term focus to be able to observe all the significant aspects comprising the evolution of the system. Only on a long enough time scale fundamental behavioural trends will be noticed.

Humans think in terms of one-way cause-effect relationships, forgetting the existing interrelation structure. The behaviour of the system must be expressed in computationally ready language, generating a mathematical model stated explicitly and whose description does not leaves room for ambiguity. Within this context it is important to note the difference between two classes of models: (1) predictive models, oriented to provide accurate data about the future situation of the modelled system; (2) management models, oriented to establish that 'alternative x is better than alternative y'. SD develops models of this second class, helping to determine the performance of the system by getting to know its internal mechanisms.
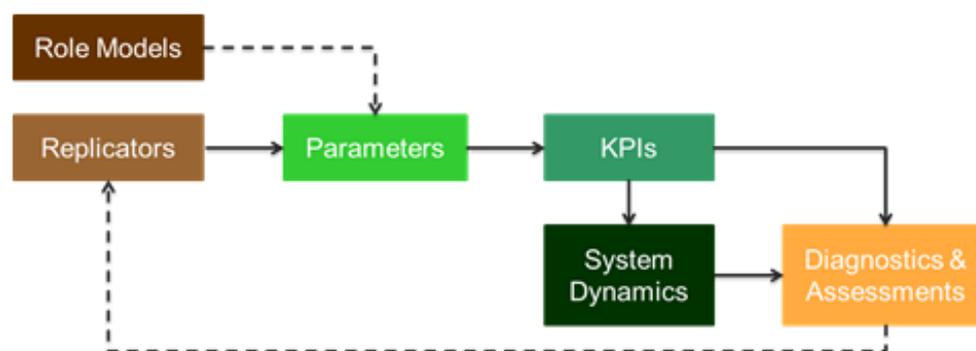
Figure 38: Rs modelling approaches (© *RURITAGE*).

Statistics and numerical methods are the commonly used means to build models, as long as: (a) there are profuse historical data; (b) it can be assumed that reality will remain stable. Neither of these two options can be guaranteed to address the behaviour of the Rs. This is an added reason to use SD to model them.

Thus, the first step to understand the behaviour of a system will logically be to identify the intervening elements and the possible interrelationships existing among them. These elements are defined by the KPIs used in the monitoring of the Rs throughout task 4.3. The point is to observe the evolution of related KPIs over time and how they are modified as variables put in relation to others, involving feedbacks and delays as appropriate intrinsic variables to study these processes. Therefore, Rs are not considered as persistent 'objects' that accumulate data through time, but as evolutionary processes in a context of mutual influence with those issues to which they interfere.

4.1.1 A High-Level Model

This model is meant to be a very intuitive construction relating concepts. It can be built up of small pieces or just in bigger ones, containing more than one relation. In this case, the same approach as in D4.1 has been followed by developing a Concept Map that shows the relationships among concepts, and helps to identify key elements.

Figure 39: High level model (*© RURITAGE*).

The 'causal diagram' is a diagram that collects the key elements (KPIs) for each Replicator under study (as representative of a concrete SIA) and the possible relationships between them. The ranges of KPI and relationships have to allow reproducing the historical reference available (5 monitoring campaigns) to shape the basic structure of the Rs as complex systems. These relationships can have a positive effect, which means that a change will produce a change in the same direction, or negative, which means the effect produced will be in the opposite direction.

Figure 40: Feedback loops (*Source: http://pcp.vub.ac.be/macroscope/chap2.html*).

A closed chain of causal relationships is called 'loop' or 'feedback'. Loops are 'positive' when the number of negative relationships is even, and 'negative' if it is odd. Negative cycles lead the model to a stable situation and positive cycles make it unstable, regardless of the starting situation (see Figure 40). This approach helps to understand how the structure of the Rs causes their dynamic behaviour.

Systems such as Rs must contain as few elements as possible, allowing carrying out a simulation to explain what the effects of the actions being studied are, attending to a specific situation. Models are usually created similar to an accordion: firstly with few elements, which could be expanded and refined. Then, at a later stage, those elements that do not decisively intervene are eliminated.

Levels, flows, variables-constants and delays are the four basic elements that intervene in any SD model. In the context of RURITAGE, each Replicator is defined by the concatenation of effects through the different Capitals ('levels') as elements showing the situation of the model at any time. They receive the pertinent accumulations of data from related KPIs ('flows'), which can be defined as temporary functions that collect the actions taken in each Replicator as a system, determining the variations in the Capitals.
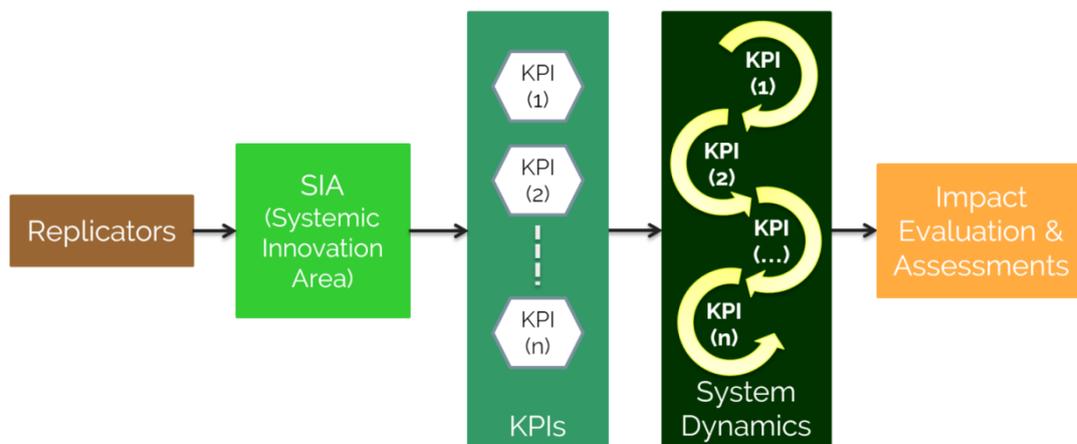
Figure 41: Model building schema (*© RURITAGE*).

The auxiliary variables and the constants are factors that allow a better visualization of the aspects that condition the behaviour of the flows, that is, the intrinsic components that allow the formulation of the KPIs. The 'delays' reproduce the time retardations involved. In socioeconomic systems (such as the Rs), delays in the transmission of information and resources are frequent.

4.2   Weights, Feedbacks and Information Loops

Recent past history (the 5 monitoring campaigns) is only a point of reference, since the Rs are continuously evolving systems. Thus, the complete set of KPIs to each capital are taken as the proper values in order to get a first idea of the Global Performance Index (GPI) as appropriate comprehensive approach and clear link between levels, flows and Rs performance, in particular embedding real data and delays into the KPIs. Thus, GPI is the right tool for a flexible integrated evaluation of Rs, starting from the selection of the adequate KPIs to take a picture of their functioning over a '*what happen if*' (or '*what-if*') attempt to evaluate the possible impacts.

The relatively small set of KPIs whose values significantly alter the behaviour of each Rs will be selected. They are those KPIs that really define the behaviour for each Capital due to their great influence where others converge in a given period of action. (holistic criteria: global variation greater than 50% by registration throughout the 5 monitoring campaigns on a mutual interaction time-lapse: Figure 42). The advantages of saving effort and time this method provides are obvious for the modelling of the Rs' behaviour.
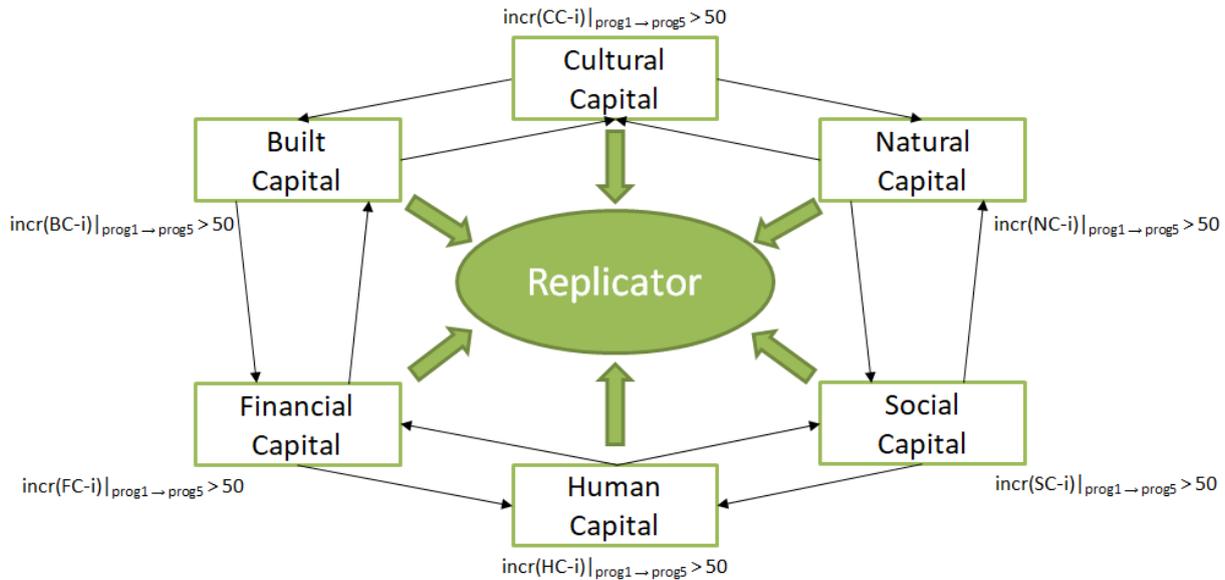
Figure 42: Variation criteria for KPI selection (© RURITAGE).

Hence the GPI is recalculated using only the KPIs that meet the selection criteria (so called ReKPI[1]). If the value obtained this time for the GPI (renamed ReGPI) is at least ¾ of the initial value (considering all the possible KPIs), then it can be reasonably inferred that the aspects represented by the ReKPIs are the levers on which to carry out the actions corresponding to the SIA in question (Figure 43). Otherwise, all KPIs should be considered as 'levers' (alternatively, it could be played with different KPI to meet the ¾ criterion -finding all possible / most suitable combinations-). KPIs meaning serves to accordingly feedback the actions that are being deployed in the rural area. The effect time is the one that corresponds to the delay in its appearance.

This way, the systemic modelling can then be deployed on the R2MP[2] platform itself without the need of specific alternative programs that may give rise to format interoperability problems[3]. Thus, SD modelling can help to understand how issues evolve. It provides a basis for exploring alternative futures based on scenarios, but taking into account that there is not one single approach to get results.

The matrix of KPIs and SIAs assignment relates these two concepts in a series of tables, as explained in deliverable D4.3. Those tables are the basis for building the SD models as they show the relations among the SIAs, the KPIs and the quality and quantity of information available from the monitoring campaigns.

---

[1] Relevant KPI

[2] Rural Regeneration Monitoring Platform

[3] There are different software packages on the market, usable on PC's, to write concise instructions so that the computer interprets the system to study [Comparison of system dynamics software - Wikipedia]. They all have a great deal in common: the available functions and default graphical presentations are similar. VENSIM is very strong in terms of capacity, performance and functionality. It provides a PLE (Personal Learning Edition) license quite flexible in the appearance of the model diagram, and contains a set of analysis tools that use the structure of the model to present information to quickly find problems and investigate sources of behaviour.

Figure 43: Foundations considered for SD modelling (example with Cultural Capital - Geopark Karavanke/Karawanken) (*© RURITAGE*).

For the RURITAGE project it was decided to build independent SD models, one by SIA, due to the particularities of each case. This way, it is also possible to fine-tune the models, when additional information from new Replicators would be available. The flows (wide blue arrows) contain the information obtained from the data provided by the pilots through the 2 years and a half of monitoring, which are properly combined into the stocks (blue boxes). Other auxiliary elements (orange ovals) serve to set the targets or the weights, and the relations between those elements are drawn with thin dashed arrows. Modifying all these parameters and the formulas into the flows is it possible to adjust the behaviour of the model, as explained in D4.3. The series of figures, from Figure 44 to Figure 49, show the SD models for every SIA that have been designed using Insight Maker software [3]. Then, the development has been done with sd.js, a javascript library that allows integrating the dynamic model into a web page, thus making possible the user interaction with the model. There are slightly differences among the SD models here described and the ones finally deployed at the RURITAGE Resources Ecosystem, mainly due to limitations with the sd.js library capabilities.

The Pilgrimage SD model (see Figure 44) focuses on cultural events and number of tourists for the cultural capital, according to the information collected from Rs and the sensitivity analysis performed in D4.3. Similarly, sustainable certifications and labelling, and local products are relevant for the natural capital calculation; and the points of interest, restored & reused buildings and the fairs and tourism events for the promotion of the local territory are key for the built capital. The engagement of the stakeholders is the only factor that affects the social capital according to gathered data, while self-employment and fostering the learning capabilities of the population are the contributing factors for the human capital. No relevant information was collected regarding financial capital, so this part was not included in the model.
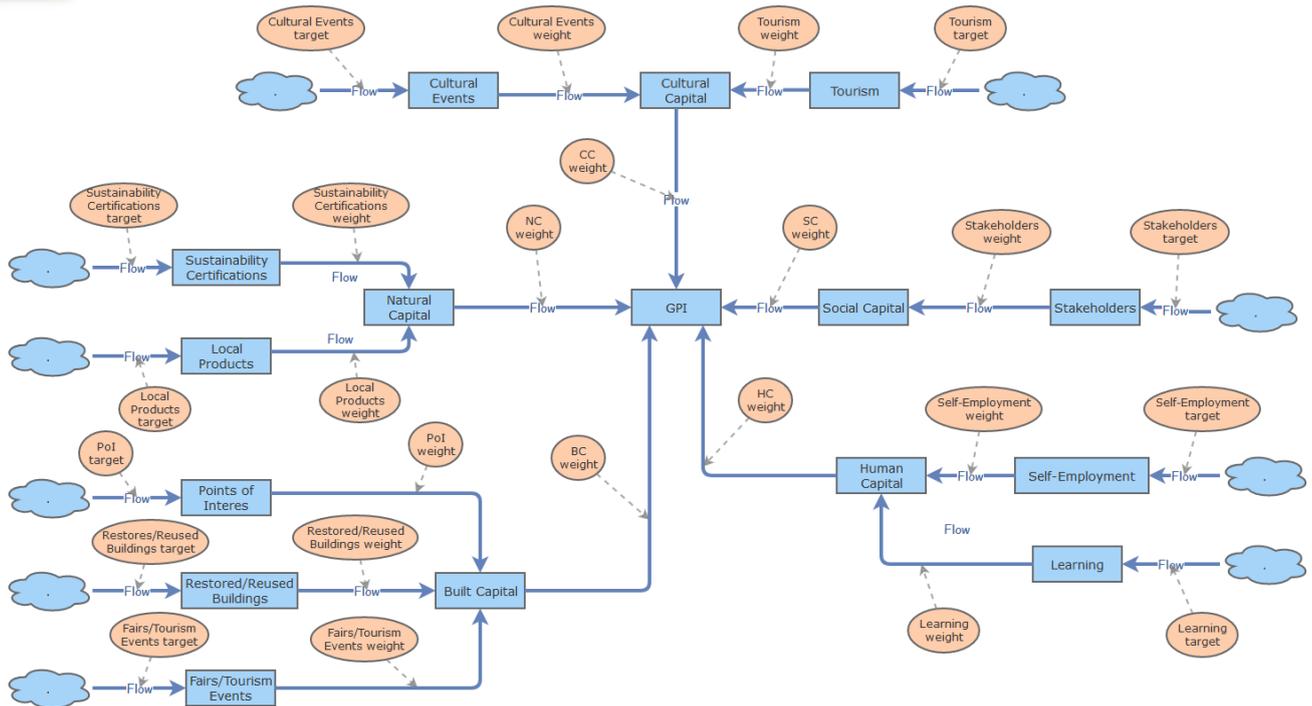
Figure 44: Pilgrimage SD model (© *RURITAGE, developed with Insight Maker*).

The Local Food SD model (see Figure 45) focuses on training on traditional skills and number of tourists for the cultural capital. Natural capital collects the inputs from green tourism packages and local products. Several indicators would be included in the calculations for the built capital, but finally, and with the aim of keeping the models as simple as possible, the number of restaurants and food services together with the number of fairs for the promotion of the rural territory seems to be the more relevant indicators. The engagement of the stakeholders and the number of local associations are the factors influencing the social capital according to the gathered data, while promoting the learning capabilities of the population is the only indicator that contributes to the human capital. The number of start-ups created in the rural territory is the factor that influences the financial capital for this model.
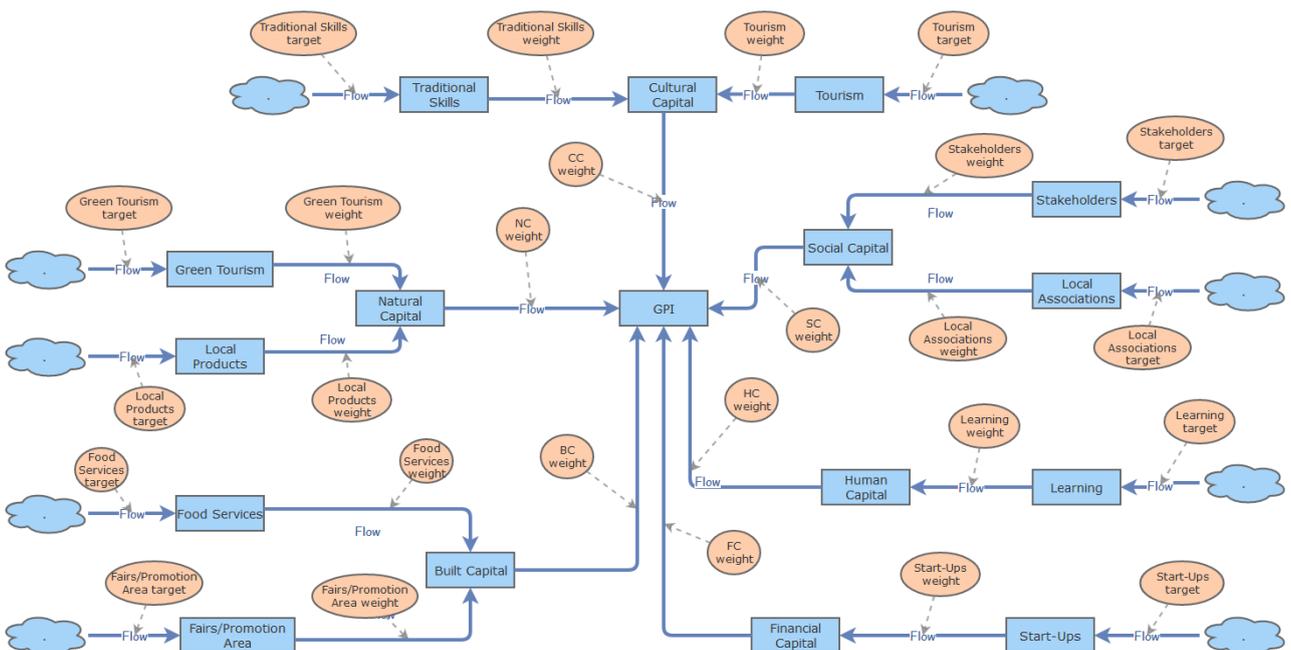
Figure 45: Local Food SD model (© RURITAGE, developed with Insight Maker).

The Migration SD model (see Figure 46) combines cultural events and training in traditional skills for the cultural capital, according to the available information provided by Rs. The number of buildings that have been restored or reused is the only factor affecting the built capital. Regarding the social and human capitals, the indicators that have been included in the model are the citizen engagement activities, the engagement of the stakeholders and the projects addressing migrants on one side, and the leisure facilities or recreational events and the educational or training programs for migrants, on the other side. No relevant information was collected regarding natural and financial capitals, so those parts were not included in the model.
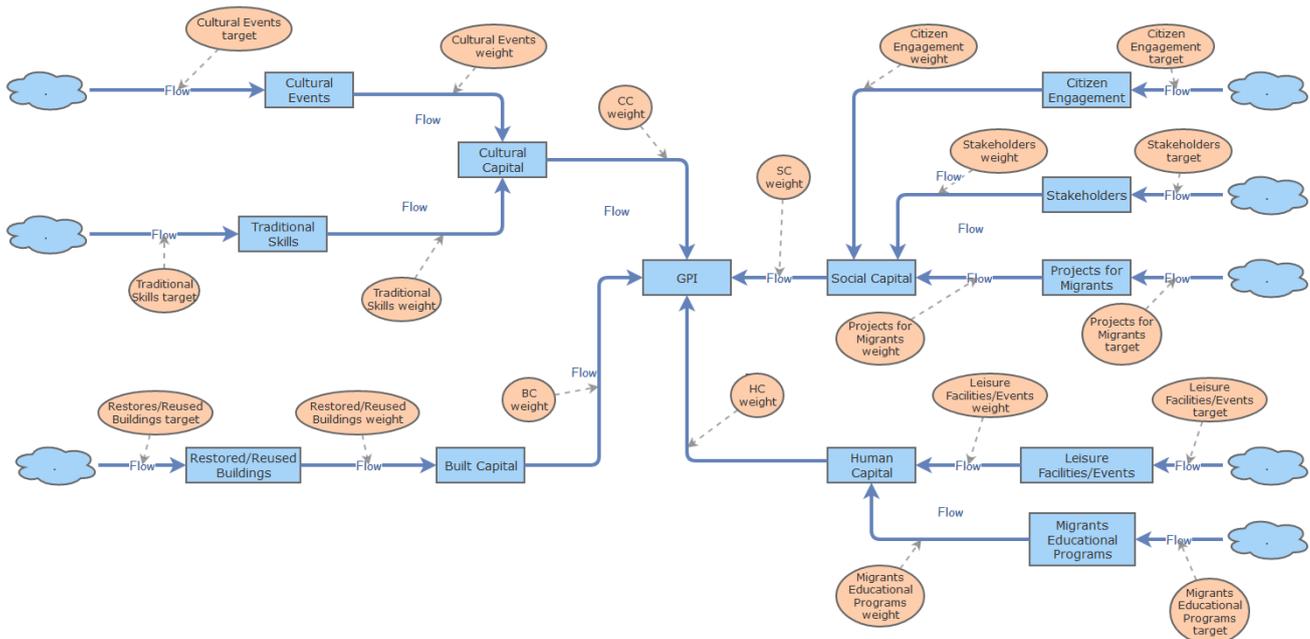
Figure 46: Migration SD model (© RURITAGE, developed with Insight Maker).

The Art & Festivals SD model (see Figure 47) includes indicators from all the community capitals except for natural capital. Cultural capital focuses on cultural events, the use of the social media and the number of tourists, according to the information collected from Rs and the sensitivity analysis performed in D4.3. Similarly, the sites provided with signals and explanation panels for visitors and the number of fairs for the promotion of the rural territory are relevant for the built capital calculation. The engagements of the citizens and the stakeholders, jointly with the participation of disadvantaged people, are the main factors affecting the social capital according to gathered data, while leisure facilities or events and the internship of students are the contributing factors for the human capital. The number of Public-Private Partnerships (PPPs) set and signed is the only factor selected for estimating the financial capital in this case.
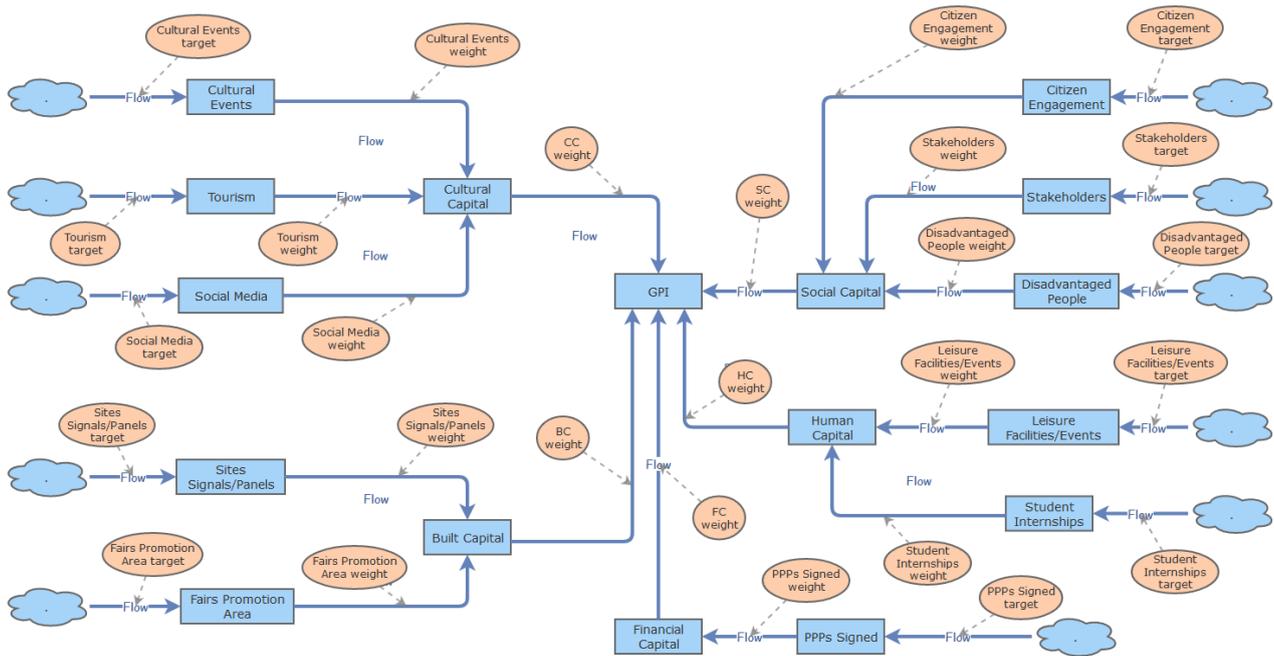
Figure 47: Arts & Festivals SD model (© RURITAGE, developed with Insight Maker).

The Resilience SD model (see Figure 48) focuses on cultural events and training on traditional skills for the cultural capital, according to the information collected from Rs. Similarly, protected areas is a relevant indicator for the natural capital calculation; and the points of interest, restored & reused buildings and the sites provided with signals and panels are key for the built capital. The engagements of citizens, stakeholders and the participation in voluntary activities are the main factors that affect the social capital according to gathered data, while self-employment and fostering the learning capabilities of the population are the contributing factors for the human capital. Financial capital takes into account the tourist accommodations and the number of companies supported in dealing with new business models.
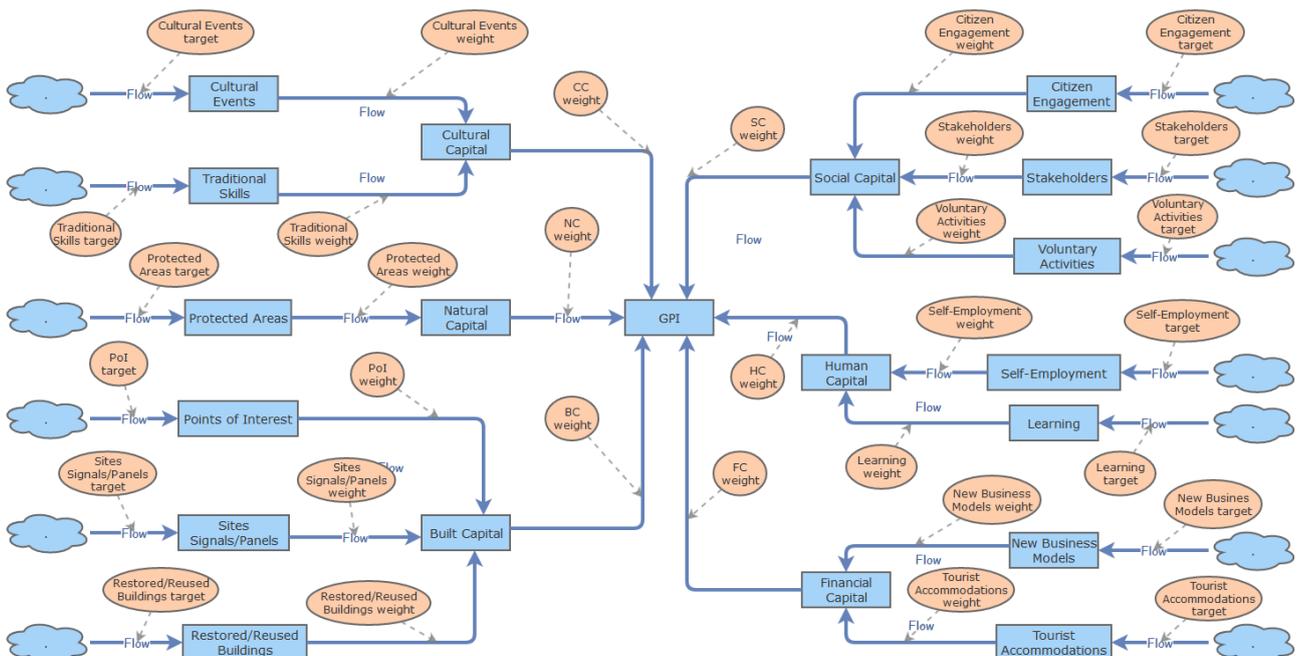
Figure 48: Resilience SD model (© RURITAGE, developed with Insight Maker).

The Landscape SD model (see Figure 49) focuses on cultural events, the training on traditional skills and number of tourists for the cultural capital, according to the information collected from Rs and the sensitivity analysis performed in D4.3. Similarly, protected areas and green tourism packages are relevant for the natural capital calculation; and the points of interest, sites with information panels or signals for visitors and the fairs & tourism events for the promotion of the local territory are key for the built capital. The engagement of citizens, the close collaboration with stakeholders and the local associations created are the factors that affect the social capital according to gathered data, while fostering the learning capabilities of the population and he available leisure facilities or recreational events are the contributing factors for the human capital. The number of PPPs set and signed and the tourist accommodations are the selected indicators to estimate the financial capital.
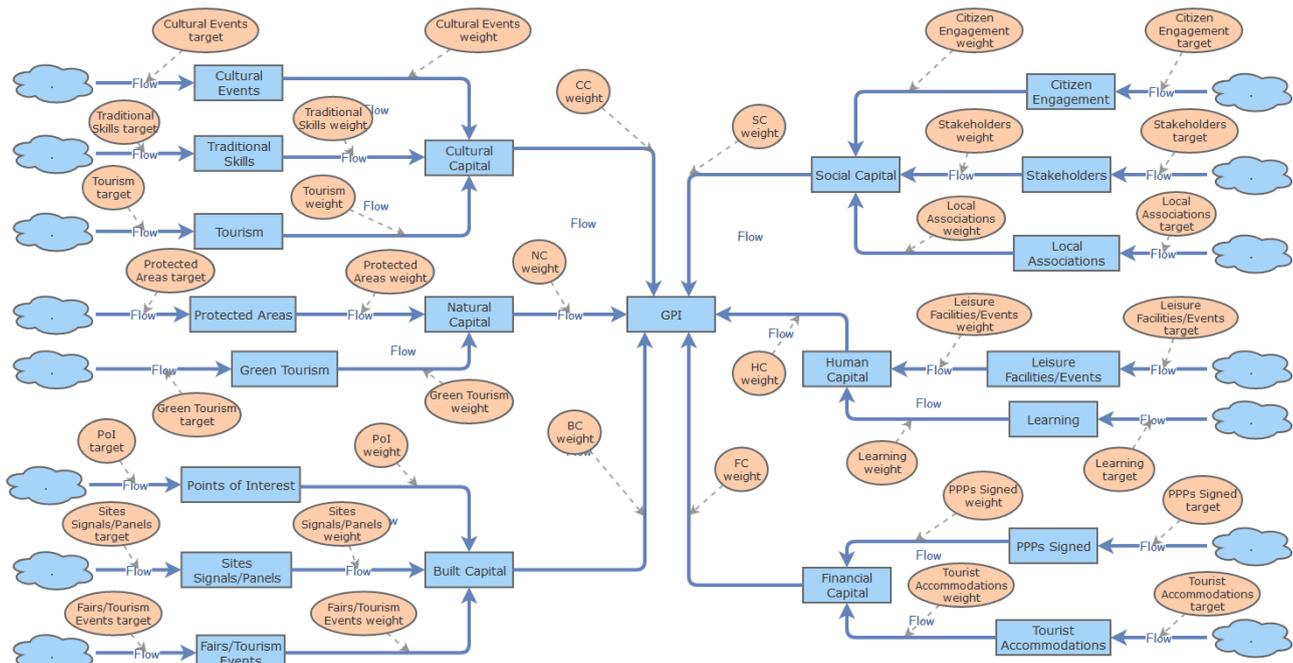
Figure 49: Landscape SD model (© RURITAGE, developed with Insight Maker).

4.3 Additional Replicators Assessment using System Dynamics Models

The data collected from the Replicators is the basis for building the SD models described in the previous section. In order to show how these models can be applied, we are going to use the data from the Additional Replicators to get some insights. This is a common practice when building models: to use different datasets for training and for testing the models. This way, model building process reduces the effect of the overfitting problem, i.e. the model fits perfectly with the data used for its design, but fails when new unseen data are used as inputs for the model.

When using the SD models, in all the cases the first step is the selection of the proper SIA by clicking in the right icon. Then, the SD model for that SIA is loaded. Next, it is necessary to set the size of the rural territory where the Action Plan is going to be deployed, by introducing the population and the area in square kilometres. The last step is to fine-tune the model by modifying the gears, or knobs, linked to the KPIs that are going to be taken into account, according to the RM actions, Lessons Learned and specific activities considered in the corresponding Action Plan.

For instance, the SD model for 'AR08 - St. Olav Waterway' is shown in Figure 50, as an illustrative case for Pilgrimage SIA. Once introduced the necessary data, the budget chart shows the total amount that would be necessary to achieve the desired level of development, distributed in the budget that it is required for developing the Activities within the Action Plan, the additional budget that other partners or stakeholders should contribute with and the sustainability budget to support in the long-term the developed actions. The Capitals/KPIs chart shows the expected development of the Capitals/KPIs over the following months. These charts are just rough estimations that should be adapted by modifying the knobs, either to set the desired performance level or to adjust to the available budget.
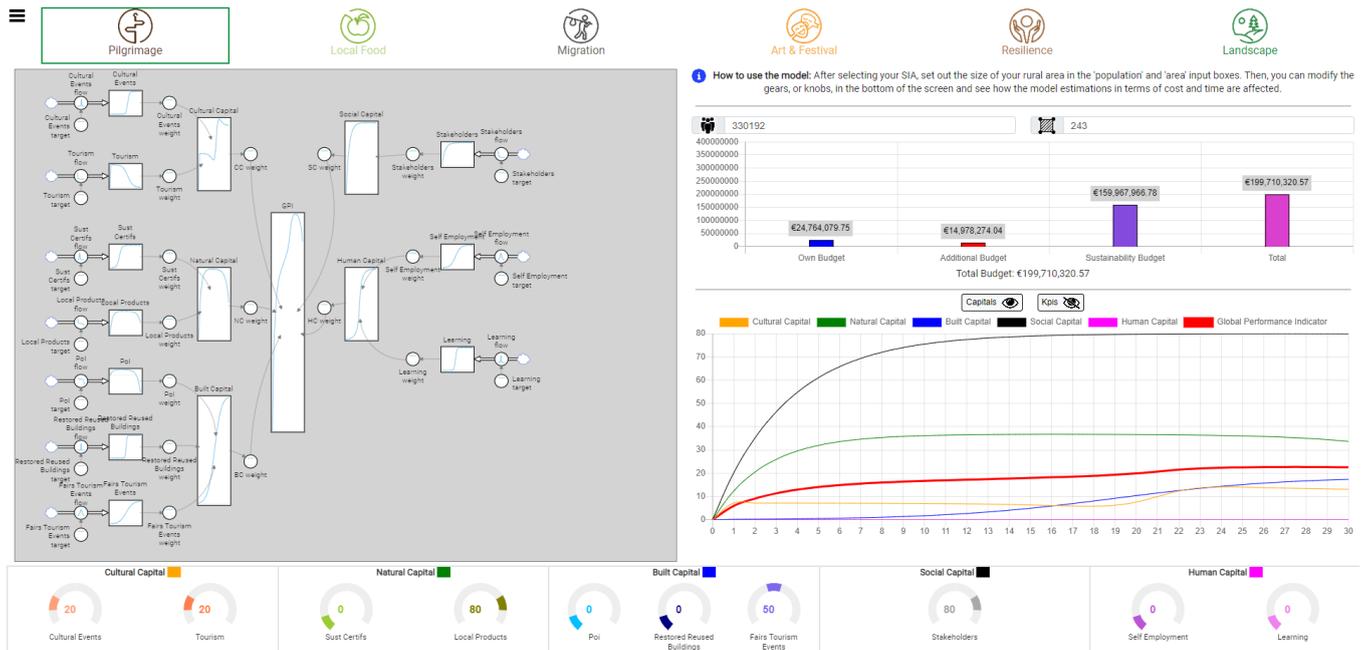
Figure 50: SD model simulation for Pilgrimage (AR08 - St. Olav Waterway).

The following figures, from Figure 51 to Figure 54, show similar examples for other ARs in different SIAs, except for Migration where no AR is available. It is worth to noting the influence of the area and population in the budget estimation and how this can be modified by adjusting properly the rural territory to the area where the Action Plan is going to be deployed and the level of performance set by the knobs. For instance, in the AR14 – Borgofuturo replicator, the Action Plan includes sustainability, participation and resilience among the objectives, for that reason the social media, the sites provided with signals & panels, the engagement of stakeholders and the PPPs signed knobs are set to high values while the other are kept in low values to restrain the budget.
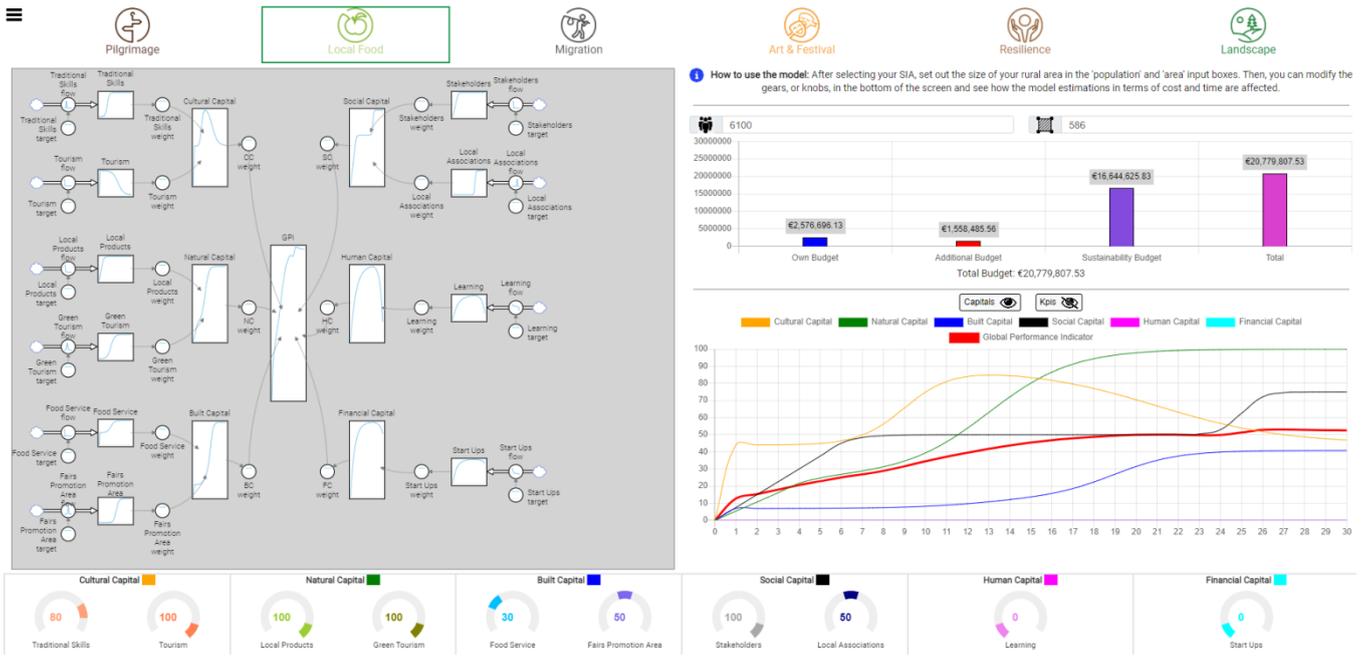
Figure 51: SD model simulation for Local Food (AR11 - Styrian Eisenwurzen).

Figure 52: SD model simulation for Arts & Festivals (AR14 - Borgofuturo).
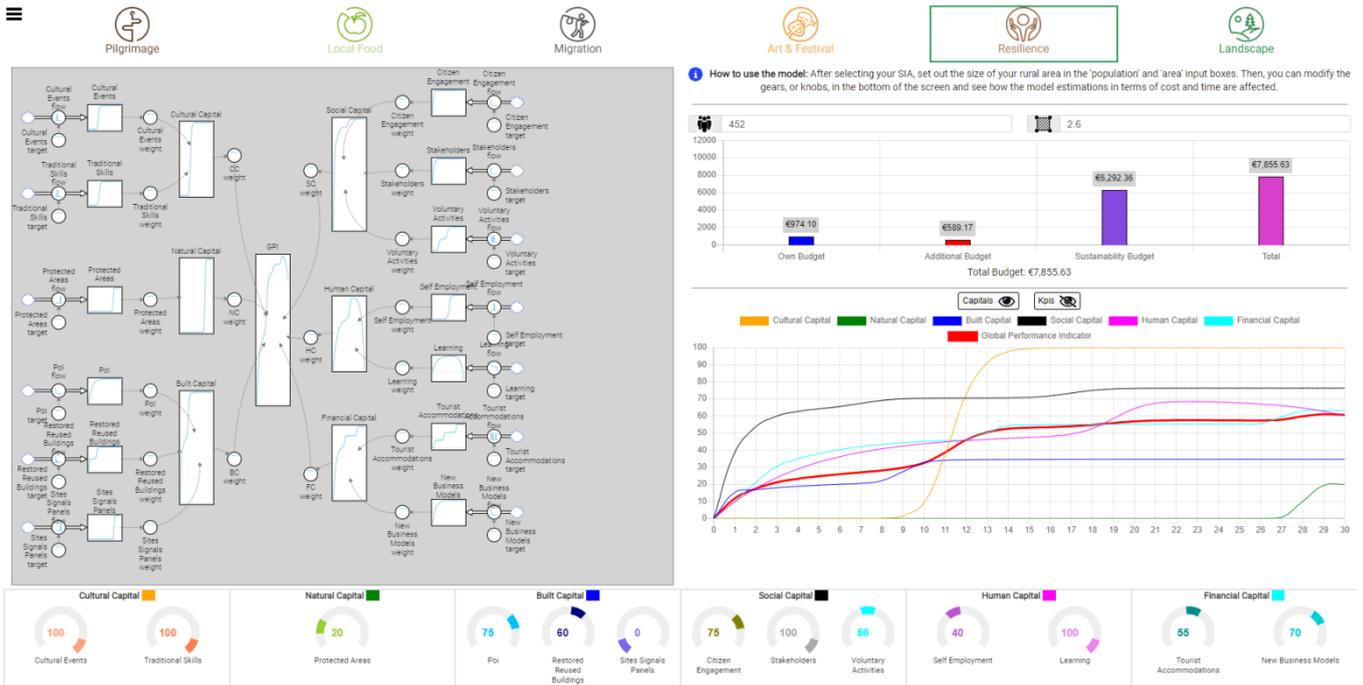
Figure 53: SD model simulation for Resilience (AR20 - Polevaya Village).
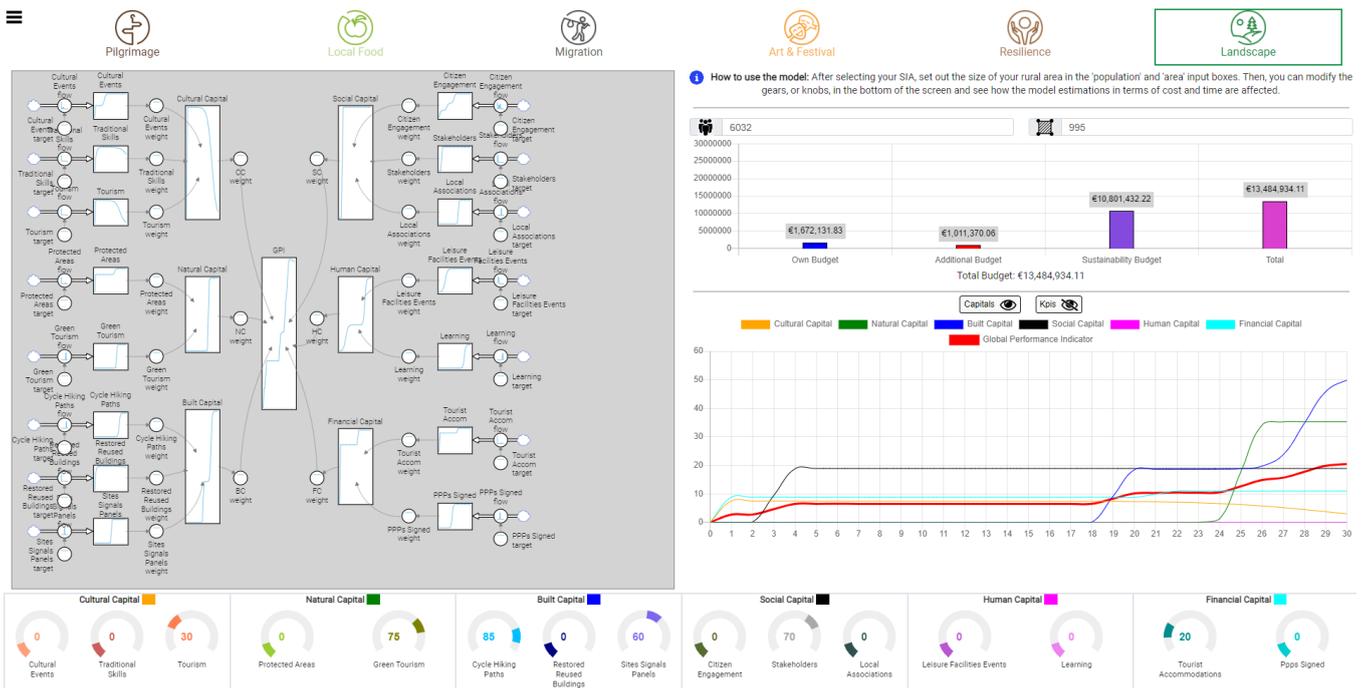
Figure 54: SD model simulation for Landscape (AR19 - Ecomuseum Zagori).

As a general rule, it is possible to observe that for every euro invested in the heritage-led regeneration of a rural territory, it would be necessary to invest 0.60€ of additional funding for the direct development of the Action Plan, provided by other partners or stakeholders, and 6.46€ of investment for keeping the effects of the Actions over time, once the development has finished, totalling a leveraged investment of 8.06€ in the rural territory.

5.   Monitoring Data Campaigns and Co-Monitoring

Data collection and KPI calculation started in December 2019 and has ended in June 2022, lasting for 2.5 years. Along this time, a full set of data has been collected and the data collection process has been available online through the Monitoring Platform, ensuring a proper supervision and analysis. Regular data collection campaigns have been run every 6 months (the Monitoring Period, as illustrated by Figure 55) and data have been uploaded to the database once reviewed and validated.
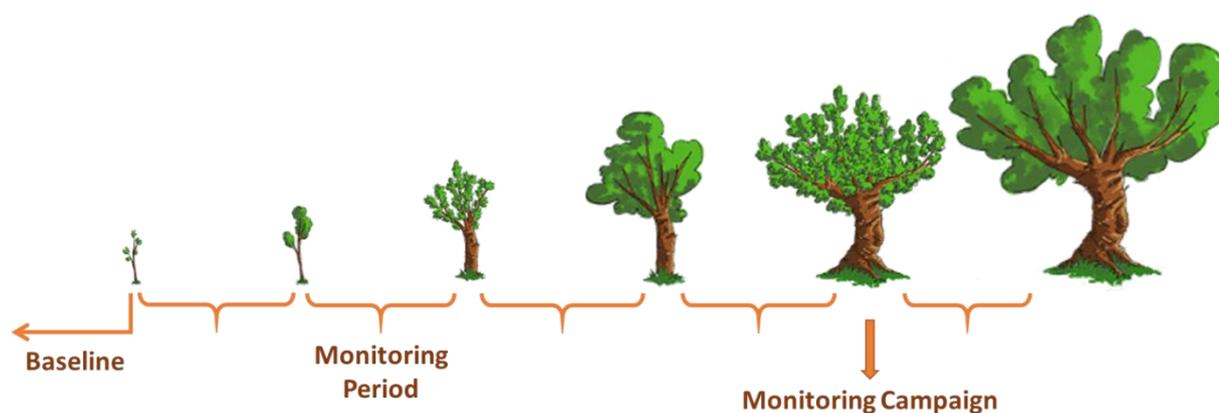
Figure 55: RURITAGE data monitoring campaigns (*© RURITAGE*).

5.1   Co-Monitoring and the Qualitative Information

The two key objectives of the RURITAGE Co-Monitoring Programme (Task 4.4) are: (1) to document the impact of actions designed to enhance the cultural heritage values investigated by the project; and (2) to give the communities within the different Replicator sites the ability to monitor and evaluate such actions beyond the life of the project (see deliverable D5.2 "*My Cult-Rural Toolkit: Research tools description*" for more information).

To analyse collected data, a "pretest-posttest"[4] comparison strategy has been used. The combination of rich qualitative data, GIS and survey-based quantitative data, and finally, a data-mining approach have made possible to evaluate the impact of RURITAGE actions on varied levels: individual perception, community and change, and broader social views of the targeted rural territories; benefiting in development of a comprehensive understanding of the impact of heritage-based interventions. Moreover, the triangulation of research methods has served as a validity test for qualitative evidence collected during the project, as explained in D5.2 § 7.4.

The activities run out by Rs through the use of *My Cult-Rural Toolkit* and through a Survey developed within task 3.5 have been used to study community perceptions around CNH during the implementation of the heritage-led regeneration plans, as explained in the deliverable D3.6 "*Report on the Involvement of Communities in Cultural Heritage*".

Finally say that co-monitoring, through its different methods and tools, do not really provide new or alternative data on heritage-led rural regeneration, but insights built on a common vision and objectives about it in the Replicators where they are carried out. These objectives will be more easily implemented with the support of all the stakeholders involved. This is proved as the true value of *My Cult-Rural toolkit*, which is very useful in complementary or later phases such as the definition of the Action Plans and concrete activities, not only by the RMs and Rs but also ARMs and ARs.

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[4] It is an experiment in which measurements are taken both before and after they're involved in the corresponding strategy.

5.2 Impact of the Information Collected over 2.5 Years of Monitoring

The data collected over the 2.5 years of monitoring, from January 2020 to June 2022, is composed of information related to events celebrated, or activities developed, by the Replicators. These events are part of the Action Plans drafted to improve the KPIs, which are distributed inside the six types of Capitals defined by the Communities Capital Framework (CCF). Thus, every 6 months, once reviewed the data collected during the Monitoring Period was uploaded to the Monitoring Platform, where all available information was summarized and could be consulted to obtain the progress report (see Figure 56).
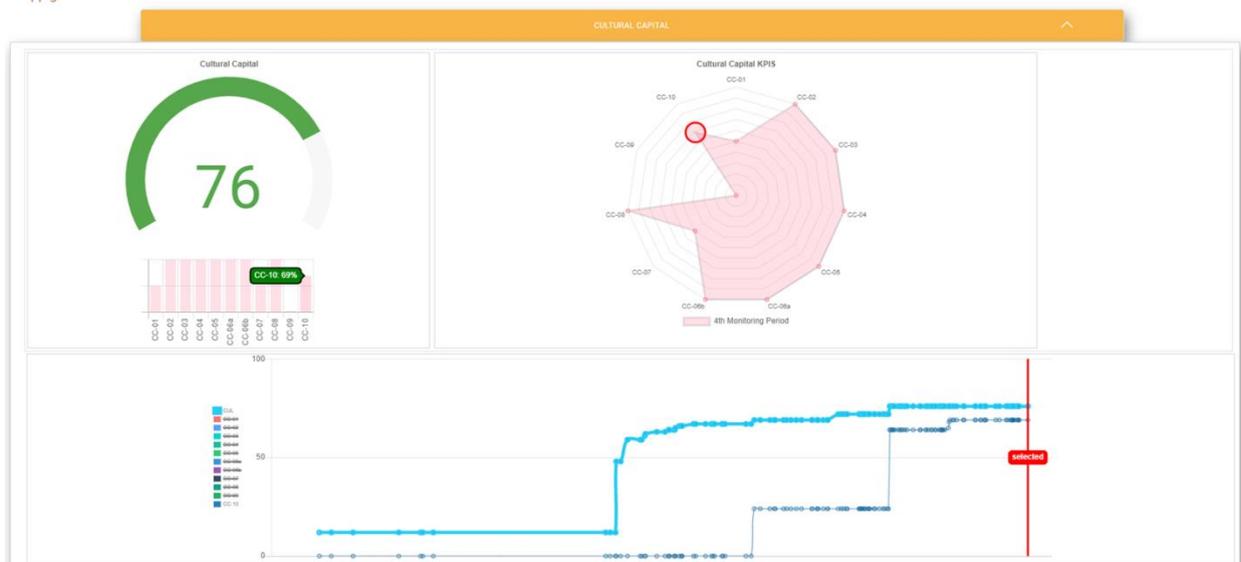
Figure 56: Example of Progress Report, summarising all the available information (© *RURITAGE*).

Furthermore, the Monitoring Platform allows the Replicators to visualize all the events that have been celebrated inside an action of their Action Plan, showing the SIAs involved, the funding and the KPIs that are related to the action and their progress over time represented in a graph (see Figure 57).
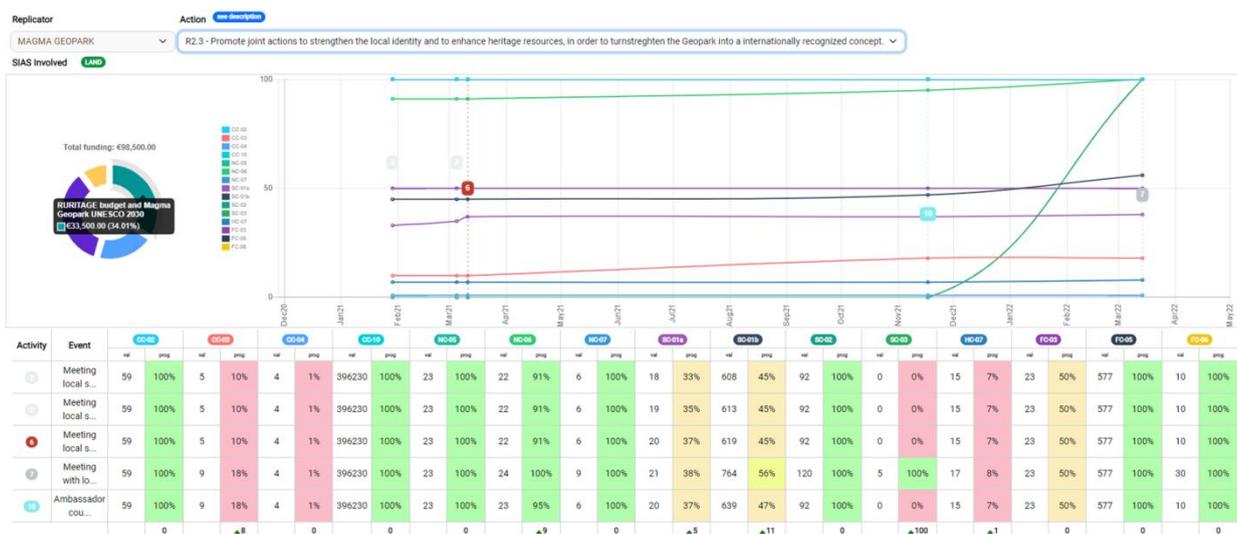
Figure 57: Action Plan dashboard, summarising only KPIs of an Action (© *RURITAGE*).

After four years of RURITAGE, data collected has allowed to do a project impact assessment comparing the value of the results obtained with the targets predefined at the baseline of the monitoring process. These expected impacts were established at the beginning of the project, clustering several impact indicators and are related

with the Sustainable Development Goals (SDG). Thus, regarding the *Heritage-led rural regeneration paradigm* impact, which is related to SDGs 10, 11 and 16, 613.3 km of cycling/walking routes have been improved (surpassing the target by more than 100%), 6 buildings accessibility has been improved, 66 new hot-spots have been set and 6 documents and reports influencing policy makers have been made.

Table 12: *Heritage-led rural regeneration paradigm* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
At least 10 buildings [sites] with improved accessibility	10	BC-10	6	60%
At least 3 cycling/walking routes improved (ca. 100 Km)	3	BC-15a	218	>100%
At least 3 cycling/walking routes improved (ca. 100 Km)	100	BC-06 + BC-07	613	>100%
WIFI coverage extension (at least 2 RHHs with WIFI connection) (3 RHHs with WIFI connection)	3	BC-01	66	>>100%
Publication of 3 documents/report influencing policy makers	3	HC-09	6	200%

With regard to the *Innovative governance, promoting citizens' engagement and new local skills and jobs* impact, which is related to SDGs 8, 3, 4, 9 and 1, 4656 citizens have been involved in RHH activities, 91 participants have been mentored and have assisted to the learning visits, 328 people have participated to the knowledge transfer workshops, at least 2931 interactions with the RURITAGE Resources Ecosystem have been made (considering only some limited RRE statistics, such as the interactions with the DRHH and the Monitoring users, because no other data are available due to the absence of cookies or other techniques for counting visitors; Atlas and DSS do not count visits nor manage registered users), 2685 people have attended webinars published within the platform (870) or in YouTube (1815 at the moment of writing this report) and 7834 people have increased their skills thanks to knowledge transfer within local RHHs. This includes the training in traditional skills but also the training in more general-purpose matters, for instance IT, tourism, innovation for SMEs, English, etc. More than 700 registered attendees, from various regions including far beyond EU, received knowledge during 26 delivered webinars (including the six dedicated to the ENP group). In some cases, e.g. the indicator related to people employability, 2.5 years could be not enough to capture the full impact of the developed measured, that are more effective in the medium-long term.

Table 13: *Innovative governance, promoting citizens' engagement and new local skills and jobs* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
2 Public/private partnership in each Replicator (tot. 12)	12	FC-03	43	358%
At least 50 citizens involved in each RHH, for a total of at least 1000 -> Rs only: 6 Rs x 50 = 300	300	CC-03	4656	>>100%
At least 120 participants to the knowledge transfer workshops (project partners and additional RMs and Rs)	120		328	273%
At least 60 participants to mentoring and learning visits	60		91	152%
10,000 interactions with the RURITAGE resources ecosystem	10000	BC-02	2931	29%
At least 1000 people attending webinars published within the platform	1000	D2.5 + YouTube	2685	269%
100 participants to the summer schools and the Professional master courses	100	HC-08	41	41%
Additional 1000 people with increased skills thanks to knowledge transfer within local RHHs	1000	CC-08 + HC-07	7834	>100%
25% increasing in the employability of people who have developed technology based skills to cultural heritage in rural areas	25%		0	0%

65

Furthermore, 87 applications from 37 countries were received to the "Call for Additional Replicators", 3 of them located in ENP countries (Palestine, Moldavia, Georgia). One book, one white paper, one vision paper and more than 14 peer-review publications have been written regarding the *European world-leadership in use of CHN for rural regeneration in EU and beyond* impact. Additionally, in relation with *Europe as a leading force in the use of heritage* impact, which is associated to SDGs 3, 8, 11 and 17, 1 RURITAGE Resources Ecosystem (RRE) has been created, 380 experts on RHH and Digital RHH have been involved, 40 solutions are included in the Inventory of Lessons Learned and 97 good practices have been identified by the RURITAGE Practices Repository.

Table 14: *European world-leadership in use of CHN for rural regeneration in EU and beyond* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
At least 3 organizations from 3 ENP Countries will be involved through the call for additional Replicators	3		3	100%
More than 195 countries worldwide will be connected, through ICLEI and UNESCO Networks	195		34	17%
White Paper on 'CNH as a driver for sustainable development in EU and beyond	1		1	100%
1 European Vision Paper for urban and rural regeneration through CHN signed by at least 250 rural communities and cities	1		1	100%
More than 50 EU companies deploying CNH related products or services	50	NC-05 + NC-06 + FC-06	116	232%

Table 15: *Europe as a leading force in the use of heritage* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
RURITAGE resources Ecosystem containing RURITAGE Atlas, RURITAGE Replication ToolBox (RURITAGE Practices Repository, Inventory of Lessons Learned, Serious Game Kit, Step by Step regeneration guidelines and RURITAGE DSS)	1		1	100%
At least 20 capacity building actions	20	CC-06a	669	>>100%
More than 25 persons involved in capacity building actions	500	CC-06b	144411	>>100%
More than 70 solutions in the Inventory of Lessons Learned	70		40	57%
More than 45 experts on RHH and Digital RHH	45		380	>100%
At least 40 Good Practices identified by the RURITAGE Practices Repository	40		97	243%

Regarding *Securing heritage conservation and sustainability establishing a "community of practice"* impact, which is related to SDGs 5, 11 and 9, 6 Rural Heritage Hubs (RHH) have been established in the Rs and other 13 Hubs in the RMs, with more than 1600 stakeholders participating in them and about 382 Digital Rural Heritage Hub (DRHH) registered users.

Table 16: *Securing heritage conservation and sustainability establishing a "community of practice"* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
19 Rural Heritage Hubs (RHH), one in each RM and R	6		6	100%
At least 50 stakeholders participating in each RHH for a total of at least 1000 -> Rs only: 6 Rs x 50 = 300	300	SC-02	1612	>100%
1500 Digital Rural Heritage Hub users	1500	CC-04	382	25%

Moreover, 60 KPIs were defined, 286 km of cultural routes have been improved and made accessible in 4 Rs (R2, R4, R5 and R6, based on BC-15a), 69 festivals and art exhibitions have been made and 1 photo contest with 168 participants and 545 submitted photographs has been celebrated regarding the *Quantifiable evidence of the cultural, social, environmental and economic benefits* impact, which is related to SDGs 1, 6, 7, 9, 11, 12 and 13. It is worth to noting that the effects of the Action Plans on job creation probably would take more than the 2.5 years of monitoring. The initially planned "Itinerant exhibition" or "Trobadour" was finally changed by the publication of the book "*Travelling Voices*" due to the COVID-19 lock-down. This book explains how storytelling can be used to tell about rural regeneration. More than 6 no-profit associations were created, but only in 4 out of 6 Replicators. In order to measure the local food production, the NC-06 indicator was used, so in fact what was measured is the number of shops, restaurants and tourism facilities selling local products.

Table 17: *Quantifiable evidence of the cultural, social, environmental and economic benefits* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
More than 14 KPIs based on successful practices	14		35	250%
More than 5 KPIs related to social aspects	5		10	200%
3 KPIs related to cultural aspects	3		11	367%
3 KPIs related to economic development	3		6	200%
3 KPI related to environmental aspects	3		8	267%
1 My Cult-Rural Toolkit for co-monitoring	1		1	100%
1 System Dynamics based model	1		1	100%
At least 5 new jobs related with sustainable tourism in each R (tot. 30 new jobs)	30		2	7%
At least 20 new jobs for the activities related with RHHs renovation and other CNH restoration or maintenance	20		12	60%
At least 1 creative start-up/companies in each R	6	CC-01	56	>100%
At least 4 new or enlargement of existing start-up/companies on slow food	4	NC-05	24	>100%
At least 2 new or enlargement of existing start-up/companies on slow tourism	2	NC-07	23	>>100%
At least 3 new jobs for specific professionals connected with migration in each relevant R and pathway for introducing migrants within the job market (3 Rs, tot. at least 9 new jobs)	9	SC-05b	75	>100%
At least 1 new not-for profit association of residents will be created in each Rs	6	SC-03	4	67%
Improved infrastructure and accessibility to cultural routes and pilgrimage in 3 Replicators, covering a total length of 100 km	3		4	133%
Improved infrastructure and accessibility to cultural routes and pilgrimage in 3 Replicators, covering a total length of 100 km	100	BC-15b	286	286%
At least 10 festivals and 3 art exhibitions	13	BC-14	69	>100%
1 photo contest	1		1	100%
1 itinerant exhibition	1		1	100%
At least 2 buildings reused and made alive through the RHH activities	2	BC-12	11	>100%
Local food production: Food produced at km0	69	NC-06	26	38%
Landscape restored and increased biodiversity in at least 3 Replicators	3	NC-02a	3	100%

Regarding to the *Mobilise investment and open up of new market opportunities* impact, which is related to SDGs 11, 8, 16 and 17, €219,519.10€ of additional funding for the Action Plans in Replicators have been collected, €1,383,620 for the sustainability of the Actions in Replicators beyond project end have been raised and about the 80% of the network are positive to signing an exploitation commitment up to 18 months. During the cross-national workshop in Crete, organized within WP2, a full session was dedicated to training on business models' development and crowdfunding, inviting international experts of the Board of investors.

Table 18: *Mobilise investment and open up of new market opportunities* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
No. of PPP established: 6, 1 by SIA	6	FC-03	43	>100%
At least 60 regional policy makers directly involved (30 coming from the Board of Regions plus 30 involved within Brussels workshop)	60		20	33%
At least 100 additional regional policy makers through dissemination	100		0	0%
1 Crowdfunding training workshop during the Development workshop (M12)	1		1	100%
At least 6 crowdfunding campaigns launched, 1 per each Replicator	6	CC-07	1	17%

Additionally, contributing to the *Effort for increasing migrants' integration* impact, which is related to SDGs 1, 5 and 16, 3 Replicators and Additional Replicators (R3, R13 and R14) have implemented actions on migrants' integration, 53 events have been celebrated by Role Models and Replicators aiming at supporting the inclusion of migrants and other vulnerable groups within the RHHs and 1 migrant have been involved in training and internships, in R3, whose continuity over time with additional participants has been affected by the COVID-19.

Table 19: *Effort for increasing migrants' integration* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
At least 100 migrants will be involved in training and internships -> 90% for training	90	HC-03	115	128%
At least 100 migrants will be involved in training and internships -> 10% for internships	10	HC-04	1	10%
At least 1 event in each RMs and Rs will take place aiming at supporting the inclusion of migrants and other vulnerable groups within the RHHs -> Rs only: 6 Rs	6	SC-05a + SC-06a	53	>100%
At least 3 Rs implementing actions on migrants' integration	3		3	100%

Regarding the *Effort for the improvement in territorial resilience and sustainable agriculture* impact, which is related to SDGs 2, 11 and 13, 423 people have been trained on resilience by Role Models and Replicators and 7 Replicators (R5, R17, R18, R19, DigR18, DigR19 and DigR20) have implemented actions of resilience improvement in RHHs. Finally, with regard to the *Effort for promoting sustainable agriculture and slow food* impact, which is related to SDGs 2 and 11, 376 people have been trained on sustainable agriculture and slow food and 3 Replicators (R1, R2 and R6, based on NC-05 and BC-13) have implemented actions of sustainable agriculture.

Table 20: *Effort for the improvement in territorial resilience* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
At least 100 people trained on resilience in RMs and Rs	100	CC-08	423	>100%
At least 2 Rs implementing actions of resilience improvement	2		7	>100%

Table 21: *Effort for promoting sustainable agriculture and slow food* impacts

Impact Indicator	Rs Target	KPI	Value	% Rs TARGET
At least 150 people trained on sustainable agriculture and slow food in RMs and Rs	150	CC-08	376	>100%
At least 4 Rs implementing actions of sustainable agriculture	4		3	75%
At least 4 start-ups in food sector	4			0%

The main challenges the collection of information has faced are the effects of the pandemic of COVID-19, arisen difficulties while collecting the data and that some goals were overestimated while other were clearly exceeded. Luckily, the development of the Action Plans, the mentoring and learning visits and many workshops were developed, or at least started, before the lock-down, so people had the opportunity to meet face-to-face and stablish strong links, making easier the transition to online events instead of the in-presence ones.

6.   Conclusions and Recommendations

This report provides quantifiable evidences of the role of CNH as a driver for sustainable growth. It has been done through the monitoring process over the last 2.5 years, measuring the performance of the deployed Action Plans in the Rs. The results included in this deliverable show a highly positive effect of the developed Action Plans in the Rs territories, with Global Performance Index (GPI) improvements ranging from 37% to 67%, which means and average GPI improvement of 49%.

At the beginning of the project, within the first tasks of WP4, a set of KPIs was defined, but it is right now at the ending stages of the project, with the analysis of gathered data, when it is possible to know which are the most and the least informative indicators. For instance, an outcome that arose after the first monitoring campaigns is that some indicators that were introduced to get context information about the Rs, such as CC-01 (Number of enterprises in the cultural sector), NC-03 (Emission of greenhouse gases), or HC-01 (Level of education) have no information or data are very difficult to obtain, so they could be discarded safely with a low or negligible effect on the global results.

Replicators have been very successful in leveraging additional funds for the development of the Action Plans and assuring the sustainability budget for keeping the effects of the deployed actions in the long-term. The results show that for every euro invested in the heritage-led regeneration of a rural territory, it would be necessary to invest 0.60€ of additional funding for the direct development of the Action Plan, provided by other partners or stakeholders, and 6.46€ of investment for keeping the effects of the Actions over time, once the development has finished, totalling a leveraged investment of 8.06€ in the rural territory. These figures have been the basis for the estimations provided by the System Dynamics models. Six SD models, one per SIA, have been developed and are freely accessible through the Monitoring Platform in the RURITAGE Resources Ecosystem (RRE). These SD models are useful for laying out different *what-if* scenarios, and have been tested with the data from the Additional Replicators. The replication capability of the proposed heritage-led measures have been analysed thanks to the ARs.

After four years of RURITAGE project, the data that have been gathered allow to do a project impact assessment, comparing the value of the results obtained with the targets defined at the baseline of the monitoring process. These expected impacts were established at the beginning of the project, clustering several impact indicators and are related with the Sustainable Development Goals (SDG) and in most of the cases the indicators show significative improvements.

The collected data and the study and interpretation of the corresponding KPIs with the Monitoring platform along the project development, yield the previous analysis on the impact of the Action Plans and foresee some recommendations for the Rs (see tables from to) according to the 6 SIAs, highlighting the difficulty, estimated cost and replicability of the measures.

Table 22. Measures and recommendations for Pilgrimage.

Measures and Recommendations	Difficulty	Cost	Replicability
Promoting domestic and family tourism, rediscovering local heritage. Pilgrimage routes among the safest destinations, social distance, open spaces.		€€€€	★★★★☆
Diversification. Synergies with other open air activities. Engagement of local creative sectors to ensure offer sustainability.		€€€€€	★★★☆☆
Small events distributed along the pilgrimage route. Stakeholders' coordination.		€€€€€	★☆☆☆☆

Table 23. Measures and recommendations for Local Food.

Measures and Recommendations	Difficulty	Cost	Replicability
Public-private partnerships providing services to local communities. Awareness rising on local food production and increase trustworthiness among local producers and inhabitants. Development of digital skills for online marketing, logistics and new e-products.		€€€€€	★★★☆☆
Re-think and adapt local business to distribute directly to consumers. Door-to-door food delivery business model sustainability. Highlight the relevance of rural territories and not only the peri-urban environments.		€€€€€	★★☆☆☆
Strengthen the role of local producers and farmers to improve the link between local communities and their territories, thus modernising the local microeconomy.		€€€€€	★★★☆☆

Table 24. Measures and recommendations for Migration.

Measures and Recommendations	Difficulty	Cost	Replicability
Continue with online training. Resume, in online format, language courses, field work and social services.		€€€€€	★☆☆☆☆
Speed up the processing of work permits for seasonal workers, since they have been shown to be essential workers for local economies.		€€€€€	★★★★☆
Agreements with farmers' organizations to reduce the illegal exploitation of workers. Identify and disseminate good practices, strengthen dialogue and coordination between employees and employers, and stimulate business action to effectively protect the health, well-being and rights of migrant workers.		€€€€€	★★★☆☆
Improve the commitment and capacity of employers to protect seasonal workers. Some of the safety measures during the pandemic have improved health conditions and should be maintained even after the end of the emergency.		€€€€€	★★☆☆☆

Table 25. Measures and recommendations for Art & Festivals.

Measures and Recommendations	Difficulty	Cost	Replicability
Using structural funds to help SMEs. Develop more flexible measures for specific SMEs in the field of art and festivals, adapting to local needs, conditions and practices.		€€€€€	★★★★☆
Virtual access to resources such as libraries, festivals or other artistic manifestations. Online activities should be addressed mainly as complementary means, so as not to leave anyone behind due to the limitations of digitalisation in rural areas, with poorer Internet access and lower usability among the older population, who are an important part of the rural inhabitants.		€€€€€	★★★☆☆
Open air events. Support other types of events and meetings: spread the offer of outdoor events. Increased opportunities for local artists.		€€€€€	★★★★☆

Table 26. Measures and recommendations for Resilience.

Measures and Recommendations	Difficulty	Cost	Replicability
Promote among possible teleworkers moving from densely populated cities to more natural environments, facilitating the access to open public green areas. Improve services and infrastructures, both for mobility and internet connection for rural inhabitants, to create lasting communities of people who decide to stay, live and work in rural areas.		€€€€€	★★☆☆☆
Implement control measures for a possible gentrification problem in rural areas. Local administrations must carefully plan and manage the process to avoid gentrification.		€€€€€	★★★★☆
Try to ensure that the new economic activities linked to the crisis can become permanent. The COVID-19 emergency has shown, even more clearly than before, that boosting digital skills in the local community is a real priority.		€€€€€	★★★★☆

Table 27. Measures and recommendations for Landscape management.

Measures and Recommendations	Difficulty	Cost	Replicability
Offer an attractive tourist and work destination, based on the cultural and natural heritage of the rural territory. Raising awareness of the links between our own health and the health of ecosystems, making the need to protect and restore nature even more urgent.		€€€€€	★★★★☆
Promote the tourism in a more sustainable way and work on the peculiarities of the territories. Investing in green infrastructure, natural corridors and slow mobility systems can improve and restore the natural ecosystem, while creating options for sustainable tourism.		€€€€€	★★★☆☆
Work on integrated landscape and heritage management to help rural territories in protecting their local identity. According to the EU's Green New Deal, local authorities and stakeholders could seize this moment to shape a more sustainable future and rethink how to protect, conserve and enhance natural capital, and protect the health and well-being of citizens against environmental risks and impacts.		€€€€€	★★☆☆☆

6.1 Update of the Lessons Learned Inventory

In the first year of RURITAGE, the Task 1.2 built the RURITAGE Inventory of Lessons Learned. The innovative practices (Role Model Actions-RMA) identified in Task 1.1 were analysed from a transversal perspective (according to 11 cross cutting issues including: business models and investment strategies, governance and regulatory framework, legal aspects and land tenure, technological innovation, social innovation, energy and climate change mitigation and adaptation, Cultural Ecosystem Services perspective, mental wellbeing , tourism and Marketing strategies, cultural and natural heritage preservation and mobility and accessibility issues).

The Role Model Actions (RMA) were "distilled" to extract replicable Lesson Learnt (LL) and to build the Inventory of Lesson Learnt, where these replicable strategies have been characterised establishing their capital transference strategy similarly to the analysis realised in the RMA, establishing the achievement and the required initial and replicability conditions. The Inventory of Lesson Learnt aimed to be a rational and ordered organization of all the identified heritage-led rural regeneration solutions. The information and knowledge generated was structured in spreadsheets format to allow and easy implementation in the RURITAGE DSS.

In this last phase of the project, the Rs Action Plans have been analysed to connect them with the identified Lesson Learnt. The following table (Table 28) shows this connection:

Table 28: Update of the Lessons Learned inventory.

LL CODE	LESSONS LEARNT	CODE R ACTION	RELATED RM ACTION		MAIN RELATED CROSSCUTTING	OTHER RELATED CROSSCUTTING	REPLICABILITY	KEYWORDS
LL02	Apply IT technologies for natural and cultural heritage promotion	R3.2 R3.3	RM1-2 RM1-6 RM2-1 RM14-1 RM3-6 RM4-2	RM16-2 RM17-3 RM17-4 RM9-2 RM9-3	Technological innovation assessment Tourism and Marketing strategies	Cultural and natural heritage	MEDIUM-HIGH	Information Technologies Education/training New skills
LL04	Build sense of belonging, individual and community self-confidence and increased autonomy through CNH	R1.5 R3.3 R3.5 R3.6 R5.11 R6.1 R6.6 R6.8 R6.9	RM1-1 RM1-4 RM14-1 RM14-2 RM3-6 RM4-6 RM15-1 RM15-5 RM15-6 RM16-1 RM5-1 RM7-1 RM7-2	RM8-1 RM8-2 RM17-3 RM9-1 RM10-2 RM19-1 RM19-2 RM19-5 RM11-1 RM12-2 RM12-3 RM13-3	Social innovation Cultural and natural heritage (both tangible and intangible) safeguarding, appreciation and interpretation	Governance and regulatory framework Cultural Ecosystem Services Mental wellbeing Tourism and Marketing strategies	MEDIUM-HIGH	Sense of belonging Local community Promotion Participatory approach Decision-making Social cohesion
LL05	Collaborative approaches to achieve innovative financing solutions and access to funding	R5.10	RM3-1 RM5-1 RM9-1 RM10-2 RM12-3	RM12-5 RM13-1 RM13-5 RM18-2	Business models and investment strategies	Governance and regulatory framework Social innovation	MEDIUM-HIGH	Integration Social cohesion Economic growth Migrants
LL06	Create a 'brand' based on one	R2.3	RM3-3	RM12-1	Cultural	Business models	HIGH	Destination Brand

LL	Description	R	RM	RM			Priority	Keywords
	of the cultural and natural resources and the added valued created		RM3-4 RM8-2 RM13-1	RM13-1 RM14-1 RM17-2	Ecosystem Services Cultural and natural heritage	and investment strategies Mobility and accessibility of the areas		Marketing strategy Diversified offer
LL07	Create 'tourist pack and experiences' based on the different clusters (culture, food & wine, nature, religion, etc.) and sell combined packages, including transport	R1.1 R2.2 R5.8	RM1-3 RM1-6 RM2-1 RM2-2 RM2-3 RM14-2 RM3-5 RM4-3 RM4-7 RM4-9	RM4-10 RM6-1 RM7-1 RM8-1 RM8-2 RM8-4 RM19-2 RM11-2 RM2-4 RM12-5	Tourism and Marketing strategies	Business models and investment strategies Mobility and accessibility of the areas	MEDIUM-HIGH	Marketing strategy Sustainable tourism Diversified offer Touristic packages Sustainable mobility Cooperation/ collaboration Network Local characteristics Identity
LL08	Create synergies and foster a collaborative approach with other organizations, programmes or local activities and attractors of the territory to increase impact of the actions	R1.4 R2.1 R3.5 R5.10	RM2-1 RM2-2 RM2-3 RM14-2 RM3-5 RM4-1 RM4-3 RM15-7 RM5-1 RM7-1 RM7-7	RM8-1 RM8-2 RM8-3 RM8-4 RM19-2 RM12-1 RM12-5 RM2-4 RM15-2 RM13-3	Business models and investment strategies Cultural Ecosystem Services Tourism and Marketing strategies	Social innovation Cultural and natural heritage	MEDIUM-HIGH	Synergies Cooperation/ collaboration Network Touristic packages
LL09	Create companies and start-ups in cultural services and products (hotels, restaurants, museums, handcraft, etc.)	R6.6	RM1-4 RM2-1 RM2-3 RM14-2 RM4-9 RM16-3 RM5-1	RM17-2 RM17-3 RM19-3 RM11-1 RM13-5 RM2-4 RM18-5	Business models and investment strategies Tourism and Marketing strategies	Cultural Ecosystem Services	MEDIUM	Economic growth Sustainable tourism
LL11	Develop and improve transportation to make places accessible and to facilitate the launch of new touristic destinations	R1.3 R4.1 R6.5	RM1-3 RM1-6 RM2-1 RM2-3 RM14-1	RM14-2 RM4-7 RM4-9 RM8-1 RM11-1	Mobility and accessibility of the areas	Tourism and Marketing strategies Environment and climate change mitigation and adaptation	MEDIUM-HIGH	Temporary cultural events Sustainable mobility Cooperation/ collaboration Public investments Accessibility
LL12	Discover economic values of traditional food (e.g. traditional fish processing, historical	R6.9	RM11-1		Business models and investment strategies	Tourism and Marketing strategies	HIGH	

	orchards and fruit production) and use it as a way to protect historical landscapes				Cultural and natural heritage (both tangible and intangible) safeguarding, appreciation and interpretation			
LL15	Identify heritage resources (formal and informal), foster a better understanding of the tangible and intangible values of natural and cultural heritage and create a recognized value as a driver for local development	R1.2 R3.6 R4.2 R4.3 R4.4 R4.5 R6.2 R6.3 R6.4 R6.7	RM1-5 RM2-2 RM3-2 RM4-4 RM4-5 RM15-4 RM15-8 RM5-2 RM8-2 RM8-4 RM9-4 RM10-1 RM10-2	RM10-3 RM10-4 RM19-2 RM19-3 RM19-5 RM20-1 RM20-2 RM11-1 RM12-1 RM12-2 RM12-3 RM13-5	Cultural Ecosystem Services	Social innovation Cultural and natural heritage	MEDIUM-HIGH	Mapping Values recognition Awareness raising Sense of belonging Social cohesion Sustainable development Resilience
LL16	Foster and promote sustainable tourism	R4.2 R4.3 R4.4	RM1-3 RM1-4 RM2-1 RM2-2 RM14-2 RM4-3 RM4-7 RM4-9 RM4-10	RM5-5 RM8-1 RM8-4 RM17-2 RM13-2 RM13-5	Tourism and Marketing strategies Environment and climate change mitigation and adaptation	Cultural and natural heritage Mobility and accessibility of the areas	HIGH	Sustainable tourism Natural routes and trails
LL18	Implementation of participatory approach and involvement of local people, including private owners, from early stage	R3.3 R3.7 R6.1	RM1-1 RM1-7 RM4-1 RM15-1 RM15-3 RM15-6 RM16-1 RM9-1 RM9-4	RM10-2 RM19-1 RM11-1 RM12-1 RM15-2 RM18-6 RM18-4 RM13-3 RM13-4	Social innovation Legal aspects and land tenure	Governance and regulatory framework Cultural and natural heritage	HIGH	Participatory approach Cooperation/ collaboration Social cohesion Social empowerment Decision-making Citizens engagement New skills Ownership
LL21	Integration of vulnerable groups in local value chain	R3.4 R3.7 R3.8 R3.9	RM5-2 RM5-3 RM5-4 RM5-5		Social innovation	Business models and investment strategies Governance and regulatory framework Mental wellbeing	HIGH	Migrants Vulnerable groups Integration Value chain

RURITAGE — Heritage for Rural Regeneration

LL	Description	R	RM	RM	Category	Category	Priority	Keyword
		R5.11	RM6-1					
			RM6-2					
LL22	Invest in safety to make safe for tourists even the places less accessible	R4.1	RM9-5	RM20-1	Mobility and accessibility of the areas	Mental wellbeing	MEDIUM	Safety
			RM10-3	RM20-2		Tourism and Marketing strategies Environment and climate change mitigation and adaptation		Risks prevention
LL23	Involvement of private and third sector in cultural heritage in order to optimize business model, answer to social needs and effectively manage heritage	R5.10	RM1-1	RM7-3	Business models and investment strategies		MEDIUM-HIGH	Public-private investments
			RM1-2	RM8-3	Governance and regulatory framework			Governance model
			RM1-3	RM17-1	Social innovation			Social enterprise
			RM2-1	RM17-2				Integration
			RM14-2	RM19-1				Vulnerable groups
			RM3-1	RM12-1				Social needs
			RM4-1	RM12-3				Synergies
			RM4-3	RM13-1				Public investments
			RM4-9	RM13-3				
			RM16-1	RM13-4				
			RM5-1	RM18-1				
			RM5-3	RM18-2				
			RM7-1					
LL24	Long-term vision to build confidence among stakeholders and continuous communication to create long-lasting relationships	R4.2	RM3-1	RM7-6	Governance and regulatory framework	Business models and investment strategies	HIGH	Communication
		R4.3	RM5-1	RM11-1		Social innovation		Cooperation/ collaboration
		R4.4	RM7-1	RM18-1		Cultural Ecosystem Services		
			RM7-5	RM12-1				
LL25	Take advantage from traditional events and make the typical characteristics of the area (a site, food & wine, handcraft, traditions) a tourist attraction	R4.2	RM1-8	RM7-1	Cultural Ecosystem Services	Business models and investment strategies	MEDIUM-HIGH	
		R4.3	RM2-2	RM7-4	Tourism and Marketing strategies	Cultural and natural heritage		
		R4.4	RM2-3	RM8-1				Local characteristics
			RM14-2	RM8-3				Identity
			RM3-3	RM10-1				Touristic attractors
			RM3-5	RM19-2				
			RM4-10	RM12-5				
			RM16-2					
LL28	Promote access to all ages and abilities and ensure fruition of cultural resources to all, including transport and online information provision	R3.2	RM1-3	RM6-1	Mobility and accessibility of the areas	Social innovation	HIGH	Accessibility
		R4.1	RM1-6	RM8-1		Cultural Ecosystem Services		Cooperation/ collaboration
			RM2-1	RM8-4		Mental wellbeing		Travel planner
			RM4-7	RM11-2		Tourism and Marketing strategies		Sustainable mobility
			RM4-9			Cultural and natural heritage		Social cohesion

LL29	Recover and put in value the traditional skills and agricultural and farming methods	**R4.5**	RM1-8	RM15-8	Environment and climate change mitigation and adaptation	Social innovation	HIGH	Traditional skills and techniques
		R5.2	RM3-1	RM16-2		Cultural Ecosystem Services		Food
		R5.3	RM3-2	RM5-2		Cultural and natural heritage		
			RM3-4	RM8-2				
			RM4-6	RM9-3				
			RM4-7	RM10-1				
			RM15-1	RM18-6				
			RM15-4	RM19-4				
LL31	Improve resilience of natural and cultural environments against natural hazards	**R5.1**	RM9-3	RM10-3	Environment and climate change mitigation and adaptation	Cultural and natural heritage	MEDIUM	Natural hazards
		R5.4	RM9-4	RM10-4				Resilience
		R5.5	RM9-5	RM19-3				Participatory approach
		R6.2	RM10-2	RM20-2				Local experiences
LL35	Training on digital technologies	**R3.1**	RM1-1	RM9-2	Technological innovation assessment	Social innovation	MEDIUM	Traditional skills and techniques
			RM9-1	RM11-1		Tourism and Marketing strategies		Social cohesion
						Cultural and natural heritage		New skills
LL36	Transform prevention against natural calamity and integration process into local development opportunities (creation of a geologic museum, companies, integration of migrants in the agro-food and tourism sector)	**R5.1**	RM5-4	RM9-4	Business models and investment strategies	Social innovation	HIGH	Touristic attractors
			RM5-5	RM10-4	Tourism and Marketing strategies	Cultural and natural heritage		Safety
			RM6-2	RM20-1				Education/training
			RM9-2	RM20-2				

7. Tables

PILGRIMAGE

7.1 R1 - KPIs Data by Monitoring Periods (MP)

Table 29: Cultural Capital KPIs for R1.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
CC-01	3	3	3	3	3	3	**3**
CC-02	0	1	1	1	1	1	**1**
CC-03	0	3	6	6	6	6	**6**
CC-04	0	5	12	14	14	14	**14**
CC-05	0	35	36	36	39	44	**44**
CC-06a	27	27	27	27	32	40	**40**
CC-06b	270	270	270	270	319	351	**351**
CC-07	0	0	0	0	0	0	**0**
CC-08	0	0	0	0	0	115	**115**
CC-09	3	3	4	5	6	6	**6**
CC-10	151	151	385	411	441	441	**441**

Table 30: Natural Capital KPIs for R1.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
NC-01	0	0	0	0	0	0	**0**
NC-02a	1	1	1	1	1	1	**1**
NC-02b	2,89	2,89	2,89	2,89	2,89	2,89	**2,89**
NC-03	5185	5523	4773	4773	4773	4773	**4773**
NC-04	33,63%	33,63%	33,63%	33,63%	33,63%	33,63%	**33,63%**
NC-05	0	0	2	2	2	2	**2**
NC-06	6	6	8	8	9	9	**9**
NC-07	0	0	0	0	0	0	**0**

Table 31: Built Capital KPIs for R1.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
BC-01	0	0	0	0	0	0	**0**
BC-02	0	0	24	64	64	164	**164**
BC-03	0	13	174	174	174	174	**174**
BC-04	17	17	17	17	17	17	**17**
BC-05	2	2	2	2	3	3	**3**
BC-06	64	64	64	64	64	64	**64**
BC-07	85	85	85	85	85	85	**85**
BC-08	5%	5%	5%	5%	5%	5%	**5%**
BC-09	0	0	0	0	0	0	**0**
BC-10	30	30	30	30	30	30	**30**
BC-11	1	1	2	2	2	2	**2**
BC-12	1	1	2	2	2	2	**2**
BC-13	1	1	1	1	1	1	**1**
BC-14	1	3	3	3	3	4	**4**
BC-15a	2	2	2	2	2	2	**2**
BC-15b	0	0	0	0	0	0	**0**

Table 32: Social Capital KPIs for R1.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
SC-01a	27	38	38	40	52	63	**63**
SC-01b	10000	10124	10124	10142	10313	11043	**11043**
SC-02	0	71	71	74	76	84	**84**
SC-03	0	0	0	0	0	0	**0**
SC-04	120	120	120	120	120	120	**120**
SC-05a	0	0	0	0	0	1	**1**
SC-05b	0	0	0	0	0	5	**5**
SC-06a	1	1	1	1	1	1	**1**
SC-06b	24	24	24	24	24	24	**24**
SC-07	0	0	0	0	16	91	**91**

Table 33: Human Capital KPIs for R1.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
HC-01	18%	18%	18%	18%	18%	18%	**18%**
HC-02	5	5	5	5	5	5	**5**
HC-03	0	0	0	0	0	0	**0**
HC-04	0	0	0	0	0	0	**0**
HC-05	2	2	5	5	5	5	**5**
HC-06	0	0	10	10	10	10	**10**
HC-07	2	2	2	56	56	56	**56**
HC-08	0	0	0	0	0	0	**0**
HC-09	5	5	5	5	5	5	**5**

Table 34: Financial Capital KPIs for R1.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
FC-01	1	1	195	195	416	416	**416**
FC-02	144.461,00 €	144.461,00 €	144.461,00 €	144.461,00 €	144.461,00 €	144.461,00 €	**144.461,00 €**
FC-03	3	3	3	3	3	3	**3**
FC-04	9,00%	9,00%	10,80%	10,80%	10,80%	10,80%	**10,80%**
FC-05	0	0	0	0	0	0	**0**
FC-06	0	0	0	0	0	0	**0**

7.2   R1 – Action Plan funding details

Table 35: Action R1.1 funding details.

R1.1: Design a set of new touristic and cross border packs, integrating different cultural experiences		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	1.000,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**1.000,00 €**

Table 36: Action R1.2 funding details.

R1.2: The digital use of the Karavanke/Karawanken Geopark		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	20.000,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**20.000,00 €**

Table 37: Action R1.3 funding details.

R1.3: Safeguarding and making the site of St. Hema mountain - St. Rosalia cave accessible again		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	70.000,00 €
Additional Funding	Municipality of Globasnitz/Globasnica in the framework of the National LE 14-20 (Entwicklung für den Ländlichen Raum) project „Rosalienpforte Hemmaberg Gemeinde Globasnitz", supported by Federal Ministry Republic of Austria for Sustainability and Tourism, Land and European Union (LEADER PROGRAMME)	71.500,00 €
Sustainability of the Action		- €
Other	Difference covered by the Municipality of Globasnitz/Globasnica with own resources	35.976,26 €
TOTAL		**176.976,26 €**

7.3 R2 - KPIs Data by Monitoring Period (MP)

Table 38: Cultural Capital KPIs for R2.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
CC-01	110	110	110	110	110	112	**112**
CC-02	0	0	59	59	59	68	**68**
CC-03	0	4	5	9	9	9	**9**
CC-04	0	2	4	4	4	4	**4**
CC-05	0	51	56	62	65	89	**89**
CC-06a	50	307	307	372	372	376	**376**
CC-06b	30000	30000	30000	30800	30800	31034	**31034**
CC-07	20	20	20	20	20	20	**20**
CC-08	0	377	377	482	502	506	**506**
CC-09	10	26	26	32	32	43	**43**
CC-10	300000	396230	396230	396230	396230	396230	**396230**

Table 39: Natural Capital KPIs for R2.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
NC-01	0	0	0	0	0	0	**0**
NC-02a	23	23	23	23	25	25	**25**
NC-02b	752	752	752	752	752	752	**752**
NC-03	10093	9954	9954	9954	9954	10305,8	**10306**
NC-04	74,41%	74,00%	77,00%	77,00%	77,00%	77,36%	**77,36%**
NC-05	6	23	23	23	23	25	**25**
NC-06	20	22	22	23	23	25	**25**
NC-07	0	6	6	6	6	13	**13**

Table 40: Built Capital KPIs for R2.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
BC-01	8	9	9	9	34	35	**35**
BC-02	0	4	6	10	10	15	**15**
BC-03	0	83	108	108	108	108	**108**
BC-04	1000	1360	1360	1360	1360	1360	**1360**
BC-05	10	31	31	35	35	37	**37**
BC-06	150	150	150	160	160	160	**160**
BC-07	2100	2100	2100	2550	2550	2550	**2550**
BC-08	70,00%	70,00%	70,00%	70,00%	70,00%	70,00%	**70,00%**
BC-09	0	1	1	1	1	1	**1**
BC-10	15	15	15	15	15	15	**15**
BC-11	0	0	0	0	0	1	**1**
BC-12	0	0	0	0	0	0	**0**
BC-13	3	3	3	3	3	4	**4**
BC-14	4	4	4	5	5	7	**7**
BC-15a	17	17	18	24	27	47	**47**
BC-15b	2100	2100	2100	2100	2100	2135	**2135**

Table 41: Social Capital KPIs for R2.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
SC-01a	0	13	17	20	20	27	**27**
SC-01b	0	491	600	619	639	1007	**1007**
SC-02	0	55	92	92	92	113	**113**
SC-03	6	0	0	0	1	9	**9**
SC-04	6270	6270	6270	6270	6270	6310	**6310**
SC-05a	12	12	12	12	12	13	**13**
SC-05b	6	6	6	6	6	6	**6**
SC-06a	1	1	1	1	1	3	**3**
SC-06b	350	350	350	350	350	351	**351**
SC-07	0	0	5	5	5	8	**8**

Table 42: Human Capital KPIs for R2.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
HC-01	25,80%	25,80%	25,80%	25,80%	25,80%	25,80%	**25,80%**
HC-02	7	7	7	7	7	7	**7**
HC-03	118	118	118	118	118	118	**118**
HC-04	114	114	114	114	114	114	**114**
HC-05	2050	2023	2023	2023	2023	2023	**2023**
HC-06	416	416	416	416	416	416	**416**
HC-07	15	15	15	15	15	45	**45**
HC-08	0	0	1	1	1	3	**3**
HC-09	0	0	0	0	0	0	**0**

Table 43: Financial Capital KPIs for R2.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
FC-01	119275	250537	365892	365892	365892	365892	**365892**
FC-02	300.886.000 €	301.685.000 €	310.886.000 €	310.886.000 €	310.886.000 €	310.886.000 €	**310.886.000 €**
FC-03	23	23	23	23	23	50	**50**
FC-04	1,74%	1,44%	2,44%	2,44%	2,44%	2,00%	**2,00%**
FC-05	276	276	577	577	577	578	**578**
FC-06	0	0	10	10	30	34	**34**

7.4 R2 – Action Plan funding details

Table 44: Action R2.1 funding details.

R2.1: Create a common calendar for all 5 municipalities presenting festivals and other events in the geopark		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget and Magma Geopark budget	1.300,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**1.300,00 €**

Table 45: Action R2.2 funding details.

R2.2: Promote the tourist offer in all 5 municipalities through the design of a tourist route that specifies restaurants, hotels, activity providers and producers		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget and Magma Geopark yearly budget	9.300,00 €
Additional Funding		- €
Sustainability of the Action 23/24	MagmaUNESCOO2030 proj yrly budget on EUR 150.000	10.000,00 €
Other		- €
TOTAL		**19.300,00 €**

Table 46: Action R2.3 funding details.

R2.3: Promote joint actions to strengthen the local identity and to enhance heritage resources, in order to turnstreghten the Geopark into a internationally recognized concept		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget and Magma Geopark UNESCO 2030	33.500,00 €
Additional Funding 21/22	Rogaland county food trail	20.000,00 €
Additional Funding 21/22	MagmaUNESCOO2030 proj yrly budget on EUR 150.000	35.000,00 €
Sustainab. of the Action 23/24	MagmaUNESCOO2030 proj yrly budget on EUR 150.000	10.000,00 €
Other		- €
TOTAL		**98.500,00 €**

Table 47: Action R2.4 funding details.

R2.4: Develop our local pilgrimage route, Kystpilgrimsleden, to attract tourism		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE and Magma financial budget	19.200,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**19.200,00 €**

MIGRATION

7.5   R3 - KPIs Data Monitoring Campaigns

Table 48: Cultural Capital KPIs for R3.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
CC-01	1460	1460	1460	1460	1460	1460	**1460**
CC-02	114	206	333	333	333	333	**333**
CC-03	0	0	6	6	6	6	**6**
CC-04	0	0	0	0	0	0	**0**
CC-05	0	22	22	22	22	22	**22**
CC-06a	0	6	13	13	14	14	**14**
CC-06b	0	2771	3307	3307	3507	3507	**3507**
CC-07	0	0	0	0	0	0	**0**
CC-08	0	150	695	1016	1595	3481	**3481**
CC-09	0	0	0	0	0	0	**0**
CC-10	4446339	4446339	4446339	4446339	4446339	4446339	**4446339**

Table 49: Natural Capital KPIs for R3.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
NC-01	0	0	0	0	0	0	**0**
NC-02a	0	0	0	0	0	0	**0**
NC-02b	0	0	0	0	0	0	**0**
NC-03	7739	7739	7739	7739	7739	7739	**7739**
NC-04	17,35%	17,35%	17,35%	17,35%	17,35%	17,35%	**17,35%**
NC-05	0	0	0	0	0	0	**0**
NC-06	0	0	0	0	0	0	**0**
NC-07	0	0	0	0	0	0	**0**

Table 50: Built Capital KPIs for R3.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
BC-01	0	0	0	0	0	0	**0**
BC-02	0	0	0	0	5	17	**17**
BC-03	0	21	53	53	53	53	**53**
BC-04	44980	44980	44980	44980	44980	44980	**44980**
BC-05	184449	184449	184449	184449	184449	184449	**184449**
BC-06	0	0	0	0	0	0	**0**
BC-07	0	0	0	0	0	0	**0**
BC-08	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	**0,00%**
BC-09	0	0	0	0	0	0	**0**
BC-10	0	1	1	1	1	1	**1**
BC-11	0	1	1	1	1	1	**1**
BC-12	0	1	1	1	1	1	**1**
BC-13	0	0	0	0	0	0	**0**
BC-14	0	1	3	5	7	7	**7**
BC-15a	0	0	0	0	0	0	**0**
BC-15b	0	0	0	0	0	0	**0**

Table 51: Social Capital KPIs for R3.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
SC-01a	0	17	54	79	82	85	**85**
SC-01b	0	81	248	448	603	642	**642**
SC-02	0	31	433	502	548	548	**548**
SC-03	0	0	0	0	0	0	**0**
SC-04	109206	109245	111588	111768	124048	132560	**132560**
SC-05a	0	1	14	15	15	15	**15**
SC-05b	0	0	60	65	65	65	**65**
SC-06a	0	0	0	0	0	0	**0**
SC-06b	0	0	0	0	0	0	**0**
SC-07	0	33	110	124	147	75	**75**

Table 52: Human Capital KPIs for R3.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
HC-01	20,20%	20,20%	20,20%	20,20%	20,20%	20,17%	**20,17%**
HC-02	0	5	5	5	5	5	**5**
HC-03	0	0	0	0	0	95	**95**
HC-04	0	0	1	1	1	1	**1**
HC-05	26800	26800	26800	26800	26800	26800	**26800**
HC-06	0	0	0	0	0	0	**0**
HC-07	0	88	118	118	143	143	**143**
HC-08	0	0	0	0	0	0	**0**
HC-09	0	0	0	0	0	0	**0**

Table 53: Financial Capital KPIs for R3.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
FC-01	4446339	4446339	4446339	4446339	4446339	4446339	**4446339**
FC-02	- €	- €	- €	- €	- €	- €	**- €**
FC-03	0	0	0	0	0	0	**0**
FC-04	2,40%	2,40%	2,40%	2,40%	2,40%	2,40%	**2,40%**
FC-05	0	0	0	0	0	0	**0**
FC-06	0	0	0	0	0	0	**0**

7.6   R3 – Action Plan funding details

Table 54: Action R3.1 funding details.

R3.1: Connecting to landscape through sports. An introduction to MTB		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE	3.540,00 €
Additional Funding	Geo-N yearly budget	- €
	In-kind contributions partners (shooting of videos)	500,00 €
	Supplementary logistic facilities by sponsors (transport, logistics)	- €
Sustainability of the Action		- €
Other		- €
TOTAL		**4.040,00 €**

Table 55: Action R3.2 funding details.

R3.2: Welcoming booths at Geopark events		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE	2.500,00 €
Additional Funding	Supplementary logistic facilities (transport, booth material)	- €
	Additional co-financing by Geopark budget (e.g. rangers during parking lots activities)	10.000,00 €
Sustainability of the Action	To be continued by Geo-N	- €
Other		2.000,00 €
TOTAL		**14.500,00 €**

Table 56: Action R3.3 funding details.

R3.3: Climate Heroes - Citizen Science for Climate Protection		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE	7.500,00 €
Additional Funding	Geo-N additional co-financing	- €
Sustainability of the Action	Included into a Geo-N's offer of services for member communities	7.500,00 €
Other	In-kind contribution local community of Mömlingen (staff costs, infrastructure, room rent)	4.000,00 €
	In-kind contribution Messel Pit (staff costs, infrastructure)	4.000,00 €
TOTAL		**23.000,00 €**

Table 57: Action R3.4 funding details.

R3.4: Educat. material for language skills supporting migrants' understanding of natural and cultural heritage		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE	19.500,00 €
Additional Funding	UNESCO WHS Messel Pit	- €
	Geo-N: additional co-financing	- €
	Supplementary logistic facilities by sponsors (transport, logistics)	- €
Sustainability of the Action		- €
Other	In-kind contribution Messel Pit (staff costs)	6.000,00 €
TOTAL		**25.500,00 €**

Table 58: Action R3.6 funding details.

R3.6: Increasing the awareness of cultural and natural heritage by cultural landscape interpretation		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE	22.500,00 €
Additional Funding	Supplementary logistic facilities (transport, booth material)	- €
	Charcoal burning, financial support geopark budget	- €
	Additional co-financing by Geopark budget, financial capacities of the stakeholders	- €
Sustainability of the Action	3D Tour (Messel Pit takes over 3D tour hosting platform licence, €120 per year)	120,00 €
	In-kind contribution Geo-N to continue activities after RURITAGE	3.000,00 €
Other	In-kind contribution International Forest Art Association (Exhibition with Samira Jamali)	2.000,00 €
	In-kind contribution On-Site-Team Fischbachtal (Exhibition with Samira Jamali)	2.000,00 €
	In-kind contribution 3D Tour (Messel Pit)	3.000,00 €
TOTAL		**32.620,00 €**

Table 59: Action R3.7 funding details.

R3.7: Local and new inhabitants are an active part in preserving Orchard meadows and old Fruit varieties		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE	14.250,00 €
Additional Funding	Geo-N: additional co-financing. supplementary logistic facilities by sponsors (transport, logistics)	500,00 €
	Streuobstwiesenretter: personal capacity of experts in tree maintenance	- €
Sustainability of the Action	To be continued by Geo-N	4.000,00 €
Other		- €
TOTAL		**18.750,00 €**

Table 60: Action R3.8 funding details.

R3.8: Strengthening the bonds between migrants and residents through creative land art and forest artwork		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE	25.500,00 €
Additional Funding	Geo-N: Supplementary logistic facilities	10.000,00 €
	Additional co-financing by Geo-N budget and partner (International Forest Art Association) as well as sponsors	20.000,00 €
Sustainability of the Action	To be continued by International Forest Art Association	20.000,00 €
Other		- €
TOTAL		**75.500,00 €**

Table 61: Action R3.9 funding details.

R3.9: Migrant internships with International Forest Art Centre and international artists		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE	2.500,00 €
Additional Funding	Geo-N: Supplementary logistic facilities	- €
	Additional co-financing by Geo-N budget and partner (International Forest Art Association) as well as sponsors	14.000,00 €
Sustainability of the Action	Contribution by Geo-N to continue the action	3.000,00 €
Other		- €
TOTAL		**19.500,00 €**

7.1   R4 - KPIs Data Monitoring Campaigns

Table 62: Cultural Capital KPIs for R4.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
CC-01	40	40	40	40	40	41	**41**
CC-02	3	7	11	15	15	33	**33**
CC-03	1825	1825	1978	2131	2131	2457	**2457**
CC-04	0	2	6	6	6	6	**6**
CC-05	0	16	26	27	31	67	**67**
CC-06a	10	10	19	20	21	41	**41**
CC-06b	7000	7000	10000	15900	15900	18176	**18176**
CC-07	1	1	1	1	1	1	**1**
CC-08	0	0	0	0	0	17	**17**
CC-09	5	5	5	11	11	12	**12**
CC-10	3000	3000	3000	5424	5424	8164	**8164**

Table 63: Natural Capital KPIs for R4.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
NC-01	0	0	0	0	0	0	0
NC-02a	2	2	2	2	2	2	**2**
NC-02b	0,20	0,20	0,20	0,20	0,20	0,20	**0**
NC-03	5865	5865	5865	5865	5865	5865	**5865**
NC-04	21,97%	22,00%	22,00%	22,00%	22,00%	22,00%	**22,00%**
NC-05	20	20	20	20	20	17	**17**
NC-06	5	5	5	5	5	6	**6**
NC-07	10	10	10	10	10	8	**8**

Table 64: Built Capital KPIs for R4.

KPI Code	Baseline	1st Monitoring Period	2nd Monitoring Period	3rd Monitoring Period	4th Monitoring Period	5th Monitoring Period	Total
BC-01	1	1	1	7	7	8	**8**
BC-02	0	0	0	0	0	1	**1**
BC-03	0	0	65	65	65	65	**65**
BC-04	30	30	30	84	84	95	**95**
BC-05	3	3	3	16	16	17	**17**
BC-06	100	100	100	103	103	104	**104**
BC-07	30	30	30	32	32	32	**32**
BC-08	0,00%	0,00%	0,00%	3,00%	3,00%	3,00%	**3,00%**
BC-09	0	0	25	1	1	2	**2**
BC-10	100	100	100	100	100	100	**100**
BC-11	1	1	1	1	1	1	**1**
BC-12	1	1	1	1	1	1	**1**
BC-13	10	10	10	10	10	10	**10**
BC-14	5	7	8	21	22	23	**23**
BC-15a	5	5	5	9	9	16	**16**
BC-15b	20	20	20	31	31	41	**41**

Table 65: Social Capital KPIs for R4.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
SC-01a	12	22	22	25	25	52	**52**
SC-01b	2000	6251	6251	11802	11802	12658	**12658**
SC-02	0	98	134	155	155	186	**186**
SC-03	0	0	0	0	0	5	**5**
SC-04	100	100	100	102	102	106	**106**
SC-05a	24	24	24	24	24	24	**24**
SC-05b	50	50	53	53	53	53	**53**
SC-06a	5	5	8	9	9	9	**9**
SC-06b	20	20	23	24	24	24	**24**
SC-07	1000	1000	1060	1081	1081	1911	**1911**

Table 66: Human Capital KPIs for R4.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
HC-01	17,50%	17,50%	17,50%	17,50%	17,50%	17,50%	**17,50%**
HC-02	2	2	2	4	4	9	**9**
HC-03	2	2	2	2	2	2	**2**
HC-04	20	20	20	20	20	20	**20**
HC-05	50	50	545	448	448	436	**436**
HC-06	0	0	20	22	22	45	**45**
HC-07	5	5	5	18	18	41	**41**
HC-08	2	2	2	2	2	2	**2**
HC-09	50	50	50	50	50	50	**50**

Table 67: Financial Capital KPIs for R4.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
FC-01	350000	350000	351963	352312	352312	353578	**353578**
FC-02	- €	- €	- €	- €	- €	- €	**- €**
FC-03	1	1	1	5	5	5	**5**
FC-04	13,00%	13,00%	13,00%	10,30%	10,00%	6,70%	**6,70%**
FC-05	50	50	55	55	55	55	**55**
FC-06	7	7	7	7	7	7	**7**

7.2 R4 – Action Plan funding details

Table 68: Action R4.1 funding details.

R4.1: Making Negova Castle accessible and connectable		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE – Launch event of the implementation phase - Kultprotur	600,00 €
	Kultprotur	5.000,00 €
Additional Funding	Rastišče	6.000,00 €
	Municipality of Gornja Radgona	250,00 €
	Pora - razvojna agencija Gornja Radgona	3.150,00 €
Sustainability of the Action		- €
Other		- €
TOTAL		**15.000,00 €**

Table 69: Action R4.2 funding details.

R4.2: Festival of Love: Days of Summer		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE - Kibla	13.020,81 €
	RURITAGE - Kultprotur	29.541,80 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**42.562,61 €**

Table 70: Action R4.3 funding details.

R4.3: Festival of Love: Spring and Autumn Day / The Herb Day		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE - Training related with the interested SIA (food) - Kibla	11.979,49 €
	RURITAGE - Kultprotur	4.523,29 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**16.502,78 €**

Table 71: Action R4.4 funding details.

R4.4: Festival of Love: Autumn day / Medieval day		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE - Kibla	21.924,17 €
	In 2021, as an independent event	- €
Additional Funding	2020, 2021, 2022 Kultprotur	4.519,10 €
Sustainability of the Action	Kibla	- €
Other		- €
TOTAL		**26.443,27 €**

Table 72: Action R4.5 funding details.

R4.5: Building new skills and knowledge about rural creativity		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	Kultprotur	466,72 €
	Kibla	2.025,81 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**2.492,53 €**

RESILIENCE

7.1   R5 - KPIs Data Monitoring Campaigns

Table 73: Cultural Capital KPIs for R5.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
CC-01	5	5	5	5	5	5	**5**
CC-02	0	0	12	48	129	147	**147**
CC-03	0	2	5	141	30	1463	**1463**
CC-04	0	6	12	13	13	12	**12**
CC-05	0	82	95	134	179	180	**180**
CC-06a	25	50	69	103	117	121	**121**
CC-06b	4000	4590	13092	16582	21858	18938	**18938**
CC-07	1	1	1	1	1	1	**1**
CC-08	0	0	18	318	363	423	**423**
CC-09	40	40	45	45	46	46	**46**
CC-10	10000	10000	10600	11600	11735	12935	**12935**

Table 74: Natural Capital KPIs for R5.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
NC-01	0	0	0	0	0	0	**0**
NC-02a	0	0	0	0	0	2	**2**
NC-02b	0	0	0	0	0	0	**0**
NC-03	5401	5401	5401	8499	8499	8499	**8499**
NC-04	18,16%	18,16%	18,00%	18,00%	18,00%	18,00%	**18,00%**
NC-05	0	0	0	0	0	0	**0**
NC-06	10	10	10	10	10	10	**10**
NC-07	0	0	0	0	0	0	**0**

Table 75: Built Capital KPIs for R5.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
BC-01	1	2	5	6	6	6	**6**
BC-02	0	15	15	15	15	15	**15**
BC-03	0	24	88	88	88	88	**88**
BC-04	50	50	50	50	50	50	**50**
BC-05	2	2	2	2	2	2	**2**
BC-06	0	0	0	0	0	0	**0**
BC-07	0	0	0	0	0	22	**22**
BC-08	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	**0,00%**
BC-09	0	0	0	0	0	0	**0**
BC-10	90%	90,00%	100%	100%	100%	100%	**100%**
BC-11	5	20	20	24	24	24	**24**
BC-12	0	0	0	0	0	0	**0**
BC-13	5	5	5	5	5	5	**5**
BC-14	0	1	1	1	6	6	**6**
BC-15a	0	0	0	0	0	169	**169**
BC-15b	0	0	0	0	0	25	**25**

Table 76: Social Capital KPIs for R5.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
SC-01a	35	71	71	78	91	90	**90**
SC-01b	4000	5656	5656	5771	6301	6323	**6323**
SC-02	0	94	94	105	105	105	**105**
SC-03	0	1	1	1	1	1	**1**
SC-04	200	215	296	466	756	821	**821**
SC-05a	1	1	1	1	1	2	**2**
SC-05b	20	20	20	20	20	22	**22**
SC-06a	6	7	14	35	35	35	**35**
SC-06b	6	8	15	57	57	57	**57**
SC-07	2	104	106	127	127	157	**157**

Table 77: Human Capital KPIs for R5.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
HC-01	17,80%	17,80%	17,80%	17,80%	17,80%	17,80%	**17,80%**
HC-02	15	16	16	18	18	16	**16**
HC-03	0	0	0	0	0	20	**20**
HC-04	0	0	0	0	0	0	**0**
HC-05	8,00%	8,00%	8,00%	8,00%	8,00%	8,00%	**8%**
HC-06	0	2	2	2	2	2	**2**
HC-07	30	82	92	306	377	391	**391**
HC-08	10	14	14	14	14	14	**14**
HC-09	0	0	3	3	3	3	**3**

Table 78: Financial Capital KPIs for R5.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
FC-01	70	80	80	80	80	1880	**1880**
FC-02	- €	- €	- €	- €	- €	- €	**- €**
FC-03	1	1	1	1	1	2	**2**
FC-04	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%	**12,00%**
FC-05	0	0	0	0	0	0	**0**
FC-06	0	4	4	6	6	0	**0**

7.2 R5 – Action Plan funding details

Table 79: Action R5.1 funding details.

R5.1: Natural Heritage: awareness raising, Capacity building and training activities for resilience		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	5.000,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**5.000,00 €**

Table 80: Action R5.2 funding details.

R5.2: Natural Heritage: awareness raising, capacity building and training activities for sustainable local food production		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	5.000,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**5.000,00 €**

Table 81: Action R5.3 funding details.

R5.3: Capacity building and training activities for local companies' through enchantment of CNH		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	7.000,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**7.000,00 €**

Table 82: Action R5.4 funding details.

R5.4: Development of toolkit for resilient citizens		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	7.000,00 €
Additional Funding	Private sponsors [local companies]	1.500,00 €
Sustainability of the Action		- €
Other		- €
TOTAL		**8.500,00 €**

Table 83: Action R5.5 funding details.

R5.5: Appignano HUB for Community Resilience, Training and Education		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	3.500,00 €
Additional Funding		- €
Sustainability of the Action	Next Generation Recovery Plan (PNC fondo complementare PNRR)	1.200.000,00 €
Other		- €
TOTAL		**1.203.500,00 €**

Table 84: Action R5.6 funding details.

R5.6: RURITAGE Stories		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	7.000,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**7.000,00 €**

Table 85: Action R5.7 funding details.

R5.7: RURITAGE Art Festival		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	27.000,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**27.000,00 €**

Table 86: Action R5.8 funding details.

R5.8: Creation of an integrated green pack based on Natural and Cultural Heritage products, paths and sites		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	2.000,00 €
Additional Funding	Local crowdfunding campaign	3.000,00 €
Sustainability of the Action		- €
Other		- €
TOTAL		**5.000,00 €**

Table 87: Action R5.9 funding details.

R5.9: Natural Heritage: The path of the Grey-Blue Badlands		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	23.000,00 €
Additional Funding		- €
Sustainability of the Action	GAL funds for the co-implementation of the signals and explanations panels for Cammino dei Calanchi	35.000,00 €
Other		- €
TOTAL		**58.000,00 €**

Table 88: Action R5.10 funding details.

R5.10: Definition of measures to increase private investments at Appignano del Tronto related with resilience and Cultural and Natural Heritage		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	2.000,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**2.000,00 €**

Table 89: Action R5.11 funding details.

R5.11: Preserving old traditions integrating local migrants		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	1.500,00 €
Additional Funding		- €
Sustainability of the Action		- €
Other		- €
TOTAL		**1.500,00 €**

7.1 R6 - KPIs Data Monitoring Campaigns

Table 90: Cultural Capital KPIs for R6.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
CC-01	140	140	140	171	171	192	**192**
CC-02	3	8	12	223	529	1666	**1666**
CC-03	0	597	1380	1880	3086	2540	**2540**
CC-04	0	30	40	72	72	72	**72**
CC-05	0	35	197	362	837	1052	**1052**
CC-06a	9	26	30	85	195	198	**198**
CC-06b	0	0	0	1325	44825	113675	**113675**
CC-07	31	31	31	72	76	78	**78**
CC-08	8000	8180	8430	9045	9820	10570	**10570**
CC-09	67	101	101	187	187	215	**215**
CC-10	64510	64510	64510	87180	334180	334180	**334180**

Table 91: Natural Capital KPIs for R6.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
NC-01	0	0	0	0	0	0	**0**
NC-02a	145	145	145	146	161	161	**161**
NC-02b	0,0612	0,0612	0,0612	0,06174	14,743674	14,743674	**15**
NC-03	4099	4213	4213	4213	4213	4213	**4213**
NC-04	12,70%	13,00%	12,70%	12,70%	12,70%	12,70%	**12,70%**
NC-05	19	19	19	19	25	25	**25**
NC-06	124	124	124	124	124	141	**141**
NC-07	0	0	0	0	8	12	**12**

Table 92: Built Capital KPIs for R6.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
BC-01	5	5	5	32	32	32	**32**
BC-02	0	0	0	0	25	25	**25**
BC-03	0	61	126	126	126	126	**126**
BC-04	3148	3148	3148	3392	3392	3392	**3392**
BC-05	55	55	55	78	71	83	**83**
BC-06	0	0	0	85	85	120	**120**
BC-07	0	0	0	0	0	5	**5**
BC-08	11,00%	11,00%	11,00%	15,00%	24,00%	24,00%	**24,00%**
BC-09	0	0	0	0	0	0	**0**
BC-10	0	0	0	0	0	0	**0**
BC-11	0	6	13	13	18	18	**18**
BC-12	38	38	38	43	47	47	**47**
BC-13	19	19	19	41	45	45	**45**
BC-14	9	10	10	33	41	41	**41**
BC-15a	0	0	0	4	8	8	**8**
BC-15b	0	0	0	85	170	205	**205**

Table 93: Social Capital KPIs for R6.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
SC-01a	0	5	14	63	141	85	**85**
SC-01b	0	613	762	1104	2488	1755	**1755**
SC-02	0	91	111	384	429	576	**576**
SC-03	0	0	0	5	26	26	**26**
SC-04	12756	12756	12755,52	25980,52	25980,52	25980,52	**25981**
SC-05a	0	0	0	0	0	0	**0**
SC-05b	0	0	0	0	0	0	**0**
SC-06a	8	8	8	8	8	8	**8**
SC-06b	0	0	0	0	0	0	**0**
SC-07	0	0	0	0	0	0	**0**

Table 94: Human Capital KPIs for R6.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
HC-01	22,50%	22,50%	22,50%	22,50%	22,50%	22,50%	**22,50%**
HC-02	0	2	2	10	10	10	**10**
HC-03	0	0	0	0	0	0	**0**
HC-04	0	0	0	0	0	0	**0**
HC-05	26489	24637	24900,9755	31852	31852	31852	**31852**
HC-06	0	0	0	0	0	0	**0**
HC-07	0	0	0	0	0	138	**138**
HC-08	0	0	0	0	0	0	**0**
HC-09	0	0	0	3	3	3	**3**

Table 95: Financial Capital KPIs for R6.

KPI Code	Baseline	1st MP	2nd MP	3rd MP	4th MP	5th MP	Total
FC-01	141922	141922	141922	191796	735196	735196	**735196**
FC-02	21.712.740 €	21.712.740 €	21.712.740 €	21.712.740 €	21.712.740 €	21.712.740 €	**21.712.740 €**
FC-03	0	0	0	11	11	11	**11**
FC-04	11,00%	16,00%	12,90%	13,00%	13,00%	13,00%	**13,00%**
FC-05	0	0	0	0	0	18	**18**
FC-06	0	0	0	0	0	32	**32**

7.2 R6 – Action Plan funding details

Table 96: Action R6.1 funding details.

R6.1: Building of a Geology road map through Citizen science		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE and Izmir Metropolitan Municipality	13.500,00 €
Additional Funding	Bergama Chamber of Commerce, Bergama and Dikili Municipalities (district), UNIBEL also want to contribute to the studies	5.600,00 €
Sustainability of the Action		- €
Other		- €
TOTAL		**19.100,00 €**

Table 97: Action R6.2 funding details.

R6.2: Researching agroforestry to improve economic resilience in forest villages		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	8.000,00 €
Additional Funding	Co-funding by Izmir	2.000,00 €
Sustainability of the Action	Izmir Metropolitan Municipality	25.000,00 €
Other	Local associations and institutions	5.000,00 €
TOTAL		**40.000,00 €**

Table 98: Action R6.3 funding details.

R6.3: Developing ethnobotanic activities in Bergama region		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	9.000,00 €
Additional Funding	Co-funding budget	4.000,00 €
Sustainability of the Action		7.000,00 €
Other	Local associations and institutions	2.000,00 €
TOTAL		**22.000,00 €**

Table 99: Action R6.4 funding details.

R6.4: Creating cultural musical heritage map in Bakircay Basin		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	11.000,00 €
Additional Funding	Co-funding by Izmir	5.000,00 €
Sustainability of the Action		4.000,00 €
Other		- €
TOTAL		**20.000,00 €**

Table 100: Action R6.5 funding details.

R6.5: Improve and promote the connection routes between cultural and natural assets in Bakircay Basin		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	8.500,00 €
Additional Funding	Co-funding by Izmir	12.500,00 €
	Support from other district municipalities	1.000,00 €
Sustainability of the Action		12.000,00 €
Other	Local funding facilitators	3.000,00 €
TOTAL		**37.000,00 €**

Table 101: Action R6.6 funding details.

R6.6: Increasing rural tourism capacity in Kozak Plateau: feasibility study and capacity building		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	7.250,00 €
Additional Funding	İzmir Metropolitan Municipality - co financing	1.500,00 €
Sustainability of the Action		20.000,00 €
Other		- €
TOTAL		**28.750,00 €**

Table 102: Action R6.7 funding details.

R6.7: Promotion of basket weaving in Bakircay Basin		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	5.000,00 €
Additional Funding	Izmir Metropolitan Municipality (co-financing)	750,00 €
	Vocation Factory	- €
	Public Education Center	2.000,00 €
Sustainability of the Action		12.500,00 €
Other	Other associations and institutions	5.000,00 €
TOTAL		**25.250,00 €**

Table 103: Action R6.8 funding details.

R6.8: Promote ownership of cultural and natural heritage of Bakircay Basin via Forest School		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	2.000,00 €
Additional Funding	Co-funding budget, the NGO will also fund the game activities with human resources	750,00 €
Sustainability of the Action	İzmir Metropolitan Municipality	500,00 €
Other		- €
TOTAL		**3.250,00 €**

Table 104: Action R6.9 funding details.

R6.9: Valorisation of local food production and selling via creation of Kozak brand		
Funding Description	**Funding Source**	**Budget**
Indicative Cost	RURITAGE budget	13.500,00 €
Additional Funding	İzmir Metropolitan Municipality (co-financing)	19.500,00 €
Sustainability of the Action	İzmir Metropolitan Municipality	10.000,00 €
Other	Other local associations and institutions	4.000,00 €
TOTAL		**47.000,00 €**

8.   Annex I

8.1   List of Tables

8.2   List of Figures

9.   List of references

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