

DECISION PROCESS FINAL REPORT

Summary of the outcomes of the participatory phase

PART B – SACCA DI GORO – EMILIA ROMAGNA REGION

Final Version of 31/08/2021

Deliverable Number D.5.6.1.



Project Acronym	CHANGE WE CARE
Project ID Number	10043385
Project Title	Climate cHallenges on coAstal and traNsitional chanGing arEas: WEaving a Cross-Adriatic REsponse
Priority Axis	2
Specific objective	2.1
Work Package Number	5
Work Package Title	Pilot Sites: adaptation strategies and measures for increasing resilience to climate change
Activity Number	5.6
Activity Title	Adaptation plan / design of interventions / pilot interventions on Po River Delta
Partner in Charge	Managing body for parks and biodiversity: Po Delta
Partners involved	Veneto Region
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1. Foreword

This document has been produced in the framework of the INTERREG Italy – Croatia CHANGE WE CARE Project. CHANGE WE CARE fosters concerted and coordinated climate adaptation actions at transboundary level, tested in specific and representative pilot sites, exploring climate risks faced by coastal and transitional areas contributing to a better understanding of the impact of climate variability and change on water regimes, salt intrusion, tourism, biodiversity and agro-ecosystems affecting the cooperation area. The main goal of the Project is to deliver integrated, ecosystem-based and shared planning options for different problems related to climate change (CC), together with adaptation measures for vulnerable areas, to decision makers and coastal communities. Additional information and updates on the CHANGE WE CARE can be found at <https://www.italy-croatia.eu/web/changewecare>.

2. Aims and content of the document

This document is the final report of the decision process undertaken involving stakeholders in the Po River Delta Pilot Area and corresponds to the Deliverable 5.6.1 indicated in the Application Form. Due to the interregional competences of Po River Delta Area, two different focus area are individuated to focus on: the Po delta area with a focus on the Sacca del Canarin in the Veneto regional territory (**part A**) and the Sacca di Goro in Emilia-Romagna region (**part B**).

The Deliverable 5.6.1 represents the synthesis of participatory process outcomes based on the following WP5 roadmap:

- **Design of the Participatory Process, months 09/2019 – 05/2020***: design /set up a dedicated participatory process in relation to the issues to be tackled, the nature and characteristics of the stakeholders, main local actors, citizens and associations;
- **Implementation of the Participatory Process, months 09/2020 – 02/2021***: implementation of the designed process along 6 months, including 3 Participatory Workshops in presence or via online support as Webinar, or other tools as indicated in the following page, and all other means designed/foreseen (as local coordination meetings, public meetings, online virtual squares, blogs, online consultations tools in general, etc.) following the developments of WP3 and WP4 and their specific outcomes for the Pilot Sites;

3. CHANGE WE CARE project and the objectives of WP5

CHANGE WE CARE fosters concerted and coordinated climate adaptation actions both at Pilot Sites and transboundary level. The project explores climate risks faced by coastal and transition areas contributing to a better understanding of the impact of climate variability and change on water regimes, salt intrusion, tourism, biodiversity and agro-ecosystems affecting the cooperation area.

WP5 main objective is the preparation of climate change Adaptation Plans in Pilot Site, containing the assessment of present state and of foreseen scenarios, the indication of measures and intervention priorities, monitoring strategies and jurisdictional references.

The Planning options presented are the result of participated processes involving local authorities and stakeholders. The Adaptation Plans include actions and interventions, where appropriate, indicating the timeline and the financial strategy for the implementation of the envisaged activities and Monitoring Plans (taking stock also of WP4 indications) for observing and ensuring the durability of the project outcomes and of the implementation of the Plan.

4. Description of the participatory process designed for the Sacca di Goro focus area

Title of the Participatory process

The participatory process in the Sacca di Goro

4.1 Area, themes, sectors of intervention

The Sacca of Goro is a shallow-water lagoon, with an average depth of approximately 1.5 m. It receives freshwater inputs from the Po di Goro (the Southern Po River branch), which is bordering the lagoon on the north-east and from the Po di Volano, an artificial canal laying in the ancient bed of a former Po River branch. The Po di Volano Canal is hydraulically regulated by the Local Water Authority, the Consorzio di Bonifica della Pianura di Ferrara, and is the quantitatively most important freshwater input to the western and central part of the Sacca di Goro. The Sacca di Goro suffers from many issues related to climate change such as loss of biodiversity, erosion of the barrier island systems, salinity rise in the water of lagoon and sediment deposition. Therefore, there is the urgent need to compensate sedimentation and erosion through effective plan for engineering intervention and wetland preservation, protect the lagoon ecosystem and balance it with aquaculture practices, and reduce the flood and erosional risk.

4.2 General aim of the operation

The participatory process aims to involve the stakeholders of Sacca di Goro in order to:

- improve the quality of public policies
- improve cooperation between stakeholders
- improve cooperation between stakeholders and institutions
- sharing of strategies and decision practices
- jointly address of the problems
- improve the dissemination of good practices
- decrease the conflicts and increase the transparency of decisions

4.3 Synthesis of the participatory process

The participatory process in the Sacca di Goro is planned as 3 workshops, each of them included a plenary section and 4 parallel sections based on stakeholders' target (fisherman, tourist and economic operators,

educational bodies and public bodies). The participatory process also included two phases of research and development by technical staff of the project in order to contrast/mitigate/solve the critical issues pointed out.

During the first workshop different stakeholder groups were composed in order to point out the perceived criticalities, prioritizing them and identifying the main objectives to contrast or solve them. The tools proposed to facilitate this moment included the construction of descriptive posters. The poster asked clear questions in order to collect the chair's answers.

During the second workshop the researchers and project technicians drafted some project ideas or best practices for each criticality outed in the target group.

Therefore, the presentations and the discussion towards the choice of one or two really feasible practices took place. Impressions and ideas during the debate were collected to better develop these proposals according to the perceptions.

The project proposals chosen during Workshop II and better elaborated by the partner technicians were presented to the stakeholder groups during the Workshop III. Posters and post-its will be used to collect suggestions. The way to facilitate the initial discussion on commitments will be inspired by the methodology of the European Awareness Scenario Workshop (EASW) and the elaboration of the EASW graph as a tool for visualizing the discussions. In fact, the discussion focused on identifying some aspects of the proposed project idea and the actions that they require.

A communication campaign and information actions were planned before and after each participatory workshop in order to involve stakeholders and disseminate project activities and results.

4.4 Context of the participatory process

Most of the population works directly in the pilot site involved in fishery or in the satellite activities such as in transformation of fish products. However, despite the economic values, the area of Sacca di Goro suffers from low schooling rate and tourism is not adequately developed.

Aquaculture is the main activity present in the Sacca di Goro area, it is a recent phenomenon with the development of the sector in the last 15 years, following the import and rapid spread of the Philippine clam (*Tapes philippinarum*) This diffusion has led to great opportunities of a productive, commercial and social nature: in fact, hundreds of very small companies were born in a short time.

4.5 Objectives of the participatory process

The main aims of the participatory process are:

- to inform and sensitize the stakeholders of the Sacca di Goro (and in general of the Po Delta) on the local effects of climate change and on the possible actions to contrast and mitigate their effects on ecosystems.
- to involve the stakeholders in identifying the critical issues connected to climate change and the priority objectives to contrast and mitigate them
- to involve stakeholders in the definition of concrete actions (projects) to counter and mitigate the effects of climate change.

Specifically, each workshop of participatory process intends:

- Workshop I: to list the critical issues in the Sacca di Goro area, to prioritize them and to identify the objective to solve them.
- Workshop II: to choose one or two project ideas to solve the critical issues identified previously in Workshop I.
- Workshop III: to integrate and modify the chosen project, to approve them by stakeholder groups and to collect commitments from the stakeholder groups for the realization of the project

4.6 Expected results of the participatory process

The main results expected from the participatory process are:

1) reach at least a number of 85 participants to the participatory process:

- 15 participants from fish activities (organizations, cooperatives or single),
- 30 participants from educational institution
- 10 participants from touristic operators (e.g. seaside tourism operators)
- 30 participants from public bodies and citizen;

2) to get contributes /ideas/etc. relevant for the Adaptation plan from stakeholders, each target group of stakeholders should provide ideas and proposal based on its experiences and field knowledge in the focus area

3) improve the Adaptation Plan with the feedback collected during the stakeholder involvement

4.7 Timing foreseen for the participatory process

Time schedule for the participatory process of Sacco Goro focus area started on 01st January 2020 and it is reported in the table below. Please note that due to the Covid19 Pandemic the participatory process has been delayed especially during the planning of workshop I.

	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2021	2021	2021
Phase	I	II	III	IV	V	VI	VII	VIII	IIIX	IX	X	XI	XII	I	II	III	
Mapping stakeholder	X	X	X														
Organization of Workshop I		X	X	X	X	X	X	X									
Workshop I									X								
Working phase by technicians									X	X	X						
Organization of Workshop II									X	X	X						
Workshop II													X				
Working phase by technicians													X	X	X	X	x
Organization of Workshop III																X	x
Workshop III																	X

4.8 Phases of the process

The phases of the process included:

1. The Stakeholder mapping
2. The designing phase of participatory process by Po Park technicians with the external expert which included 5 phases with 3 workshops with the stakeholders and two phases of research and development by project partners as detailed in paragraph 7.1

4.9 Description of the phases (and timing)

The participatory process was structured in five phases. The following table describes the activities and timing according to paragraph 4.16.

Activity	Description	Date
Stakeholder mapping	Construction of a database of stakeholders divided by 4 target groups.	January-March 2020
Workshop I	The 4 stakeholder groups were stimulated (through facilitation techniques) to list the perceived criticalities, prioritize them and identify objectives to solve them.	March-September 2020
Research and development	On the basis of what emerged in Workshop I, the technical staff of the project identify draft project ideas and best practices aimed to responding to the criticalities and the identified objectives.	September-November 2020
Workshop II	The draft project ideas will be presented to the four groups of stakeholders by the technical staff. Then, the participants in the working groups were stimulated to choose one or two project ideas.	November 2020
Research and development	The technical staff develops the most significant and concretely feasible project ideas resulted during Workshop II	November 2020-March 2021
Workshop III	The best developed project proposals of the technicians are presented to the groups of stakeholders	March 2021

5. *Elements and context of the participatory process for the Sacca di Goro focus area*

5.1 Stakeholders involved

Taking into account the main activities and issues present in the Sacca di Goro focus area, the stakeholders involved in the participatory process were grouped in: Public bodies and competent agencies (Group 1), Tour operators and other competent operators (Group 2), Educational institutions, and environmental associations (Group 3) and Fishermen and shellfish farmers (Group 4).

5.2 Participatory techniques and tools

Each workshop was planned in 4 phases as detailed below.

1. Organization phase (carried out by project staff before, during and after the Workshops). This phase included:
 - Identification of dates for each of the 3 workshops with the aim of involving the largest number of participants from all target stakeholder groups.
 - Promotion and dissemination of information on the meetings
 - Coordination with the technicians of project
 - Moderation of the workshop
 - Report writing of the meeting with signature sheets and photos
2. Introductory phase (in plenary section):
 - In this phase (especially fundamental in Workshop I) an introductory speech to the Change We Care project is foreseen. Furthermore, some technical-scientific notions were provided in a simple and clear way useful for the discussion. This moment aimed to explaining the working methodology.
 - In the subsequent workshops (Workshop II and III), the introductory phase was used to present the work done in the previous meeting, answer questions from the audience and explain the working methodology of the day.
3. Working group phase (stakeholders splitted in target group):
 - In this phase the work was developed in separate 4 working tables corresponding to the 4 stakeholder groups. A chair who conducted the discussion towards the objectives set for that day and 1-2 members of technical-scientific staff were present at each Working table.
4. Conclusive phase (plenary section)
 - In this last phase, the stakeholder groups met in plenary to briefly present (in 7-8 minutes each) the results of the discussions. At the end of the presentations there was space for a comparison of the results of the other groups and a short debate.

5.3 Accessibility to the documentation

Location of documents concerning the development and implementation of participatory process in the Sacca di Goro focus area are listed below. To see communication actions and related links concerning the Participatory process see the Communication reports.

- **Workshop I**

Report of Workshop I available at: <https://drive.google.com/file/d/1eoM60gNoNdVM0BI76nF47-vPEyNPoAoG/view>

- **Workshop II**

Report of Workshop II available at:

<https://drive.google.com/file/d/1gg9sht-4QgOBQ4PxrUliaaPWzbHFITGY/view>

- **Workshop III**

Report of Workshop III available at:

<https://drive.google.com/file/d/1lhjPTpRuzaliq7yu0yfPTk97I0SoQtGG/view?usp=sharing>

Introductory plenary section (24th march 2021): https://youtu.be/DePLc_w7D18

Conclusive plenary section (25 marzo 2021): <https://youtu.be/Q0mf70S-C6A>

All slides: <https://drive.google.com/file/d/1SWErqTG3MdmektEORPvuhaWWG-iwNLS3/view?usp=sharing>

https://drive.google.com/file/d/1uHk_e8egoEkTI6vM6-idy26qli3O9JmB/view?usp=sharing

6. *Synthesis of the preliminary document to feed the process for Sacca di Goro focus area*

6.1 *What are the conditions now?*

The Po River is the longest river in Italy and it receives most of its water supply from several watercourses, which originate from the Alps and Apennines and join the Po River after crossing the Padan plain. The Po Delta is the sub-basin subtending the entire Po River catchment which covers 1.6% of the total Po river catchment. The Po Delta is a flat region almost completely below sea level located in Northern Italy.

The focus area of Sacca di Goro is located in the southern part of territory of the Po Delta, under the jurisdiction of Emilia Romagna Region. The lagoon has a total area of 26 km² and falls within the administrative borders of the Municipality of Goro and of the Province of Ferrara (Figure 1). The Sacca di Goro is a shallow-water lagoon, with an average depth of approximately 1.5 m. It receives freshwater inputs from the Po di Goro, which is bordering the lagoon on the north-east but the lagoon is considered part of the basin of the Po di Volano, an artificial canal laying in the ancient bed of a former Po River branch, namely the Po di Volano. The Po di Volano Canal is hydraulically regulated by the Local Water Authority, the Consorzio di Bonifica della Pianura di Ferrara, and is the quantitatively most important freshwater input to the western and central part of the Sacca di Goro. The current physical structure of the Sacca di Goro is the result of both natural processes and anthropic interventions, such as land reclamation of the bordering managed lagoons, locally called “valli”, once used for extensive aquaculture. Also completed in the '60s is the realization of impressive embankments for coastal defence. Other works date back to the '90s, as canals' excavation and sectioning, for improving internal navigability, water circulation within the lagoon and strengthening the littoral structures, as the Scannone di Goro, the outer sand bank, which closes the lagoon on the south. The morphological, hydrological and ecological complexity of the lagoon is associated with the intrinsic natural variability, typical of shallow lagoons with limited interchange with the open sea, which naturally promotes the extreme variation of water circulation and therefore different sedimentary depositional patterns. In the recent, the evolution of the Sacca di Goro is characterized by excessive accretion of the outer sand bank, the Scannone (Figure 3 55), which has led to the progressive narrowing of the main lagoon mouth. To maintain tidal circulation, several interventions have been made by public authorities and anglers cooperatives, comprising both the recurrent excavation and reshaping of internal submerged canals and sediment removal for widening the lagoon mouth, particularly in the last years. Although necessary and extensive, these interventions were not sufficient to prevent summer dystrophic crises, which occurred in some of the years from 1987 to 2016. General climatic features characterize the lagoon as cold-temperate, with temperature annual minimum in January and a maximum in July. The average precipitation is less than 600 mm per year. Near the coast rainfall shows a tendency to concentrate in the winter, with little precipitation in spring. In the last 25 years, a significant increase of short-term intense meteoric events has been registered, together with an increase of summer peak temperatures. This trend has not helped the mitigation of eutrophication, dystrophy and mortality of farmed clams, which has been affecting the Sacca of Goro, since the late '80s. The blooming of the seaweed *Ulva rigida* and other species of the genera *Enteromorpha* and *Chaetomorpha* and the consequent decomposition and long lasting anoxia have threatened clam farming in the lagoon. Several actions for mitigating eutrophication related phenomena

have been promoted and set in practice in the last 40 years, with results the most variable, from almost irrelevant to very promising.



Figure 1 Po Delta Park of the Veneto Region (green) and Po Delta Park of Emilia Romagna (red). SCI-SAC and SPA are highlighted with a dashed pattern. Location of the two focus sites of Canarin and Goro.

6.2 Which future we see for the Po Delta area?

For this chapter we refer to WP4 reports activities where detailed models and projections under future climate scenarios of different abiotic and biotic features were provided. However, it is worth reporting here the main outcomes expected in 2080-2081 on manila clam, *Ruditapes philippinarum*, a species particularly relevant for the farming activities in several lagoons of the Delta, reed beds of *Phragmites australis*, a habitat whose distribution already shrunk in the past, particular relevant for the ecological role in transitional water bodies and associated with several species of conservation concern and seagrass species, protected species characterizing the good state of conservation of the prioritarian habitat 1150 * Coastal lagoons.

Manila clams resulted in a small reduction of suitability at Delta large scale, while a slightly increase of suitability is shown in the inner areas of Sacca di Goro, in the south-west area of Sacca di Scardovari, at north of Basson, and in the tidal flats close to Caleri inlets.

Reed beds showed a reduction of suitability at delta large scale, with stronger reduction at local scale, while an increase of suitability is shown in the south-west area Sacca di Scardovari.

A widespread decrease in suitability for seagrass was expected, more marked in the areas southwest of both Basson and Scardovari. A slight increase in suitability resulted for localized areas in the southern part of Barbamarco and in the northern part of Canarin.

6.5 Which objectives and strategies for the Sacca di Goro focus area?

The Sacca di Goro focus area is a constantly evolving system, and various areas change rapidly, with visible modifications even in just one year, thus varying the production potential for the Manila clam rearing. Presently, the most crucial element of the whole sector is the availability of Manila clam seed, the so called spat, which settles down preferentially in areas located on and out of the mouths of the lagoon or in a recently formed inlet, locally called "Basunsin". In recent years, this area has undergone to reduction of hydraulic circulation and consequently, macroalgal accumulation and bottom anoxia, especially in its eastern, more confined, portion. This is likely due to increased sediment deposition and has brought serious consequences, with not only the risk of hampering the productivity of clam farming in the whole lagoon, but also causing the worsening of environmental quality of this extremely important area with consequent loss of biodiversity. For these reasons, the most important interventions in the near future, other than maintaining the opening of the main mouth of the lagoon, must address actions aimed at restoring and maintaining high quality standards for the Basunsin area.

7. Synthesis of the participatory process and outcomes for the Sacca di Goro focus area

7.1 The participatory process in the Sacca di Goro

The participatory process in the Sacca di Goro was structured in 3 workshops with the stakeholders and two phases of research and development by project partners. In the table below an illustration of the phases and objectives was reported

Phase	Title	Aims	Date
1	Workshop I	<ol style="list-style-type: none"> List the perceived criticalities to climate change in the Sacca di Goro and more generally in the Po Delta Prioritize the criticalities reported 	29th September 2020 at Municipality of Goro headquarter
2	Phase of research and development by Park technicians and project partners	1. Propose of design ideas by technicians that address the critical issues reported in Workshop I	from 29th September to 24 November 2020

3	Workshop II	<ol style="list-style-type: none"> 1. Presentation of (embryonic) projects, discussion and integration of ideas according to perceptions of the participants. 2. Choice of one or two project ideas presented 	24-25th November 2020 on online platform
4	Phase of research and development by Park technicians and project partners	1. Develop of the project ideas emerged in Workshop II by the technicians	from 25th November 2020 to 23th March 2021
	Workshop III	<ol style="list-style-type: none"> 1. Improving and integration of project proposal by stakeholders 2. Collect "commitments" to promote the realization of the project 	24-25th March 2021 on online platform

7.1.1 Structure of the workshops

The Workshops were generally structured in 3 phases: an introduction section in plenary, a working groups phase where stakeholders participated actively and a conclusive section in plenary. Next paragraphs describe in detail the structure and the matter of each workshop.

The **Workshop I** started with an introductory plenary phase where the director of the Management Body for Biodiversity and Parks - Delta del Po, Dr. Maria Pia Pagliarusco and the Mayor of Goro as well as President of the Park, Dr. Diego Viviani introducing the project and contextualizing it to the territory and its needs. Dr. Sara Stemberger, part of the Facilitators Team, finally introduced the working methodology of the meeting.

The participants were then splitted in 4 groups differentiated by type of stakeholder. At the end of the working group section, the participants returned to the plenary for the description of the critical elements and objectives found. The chairmans presented the results of their groups and finally renewed the invitation to participate in Workshop II of the Change We Care project scheduled for the end of November. The meeting ended with a brief final closing by the director Maria Pia Pagliarusco.

The **Workshop II** took place in 2 phases: the working groups session where participants had the freedom to choose the stakeholder group to participate and the plenary session (Figure X) where the chairs of each stakeholder group gave feedback on the projects presented and, on the ideas, highlighted in the interventions of the participants. At the end of the presentations, a session dedicated to in-depth analysis was held, through questions and answers. The meeting ended with a short final closing by the director and the President of the Park (Figure 2)

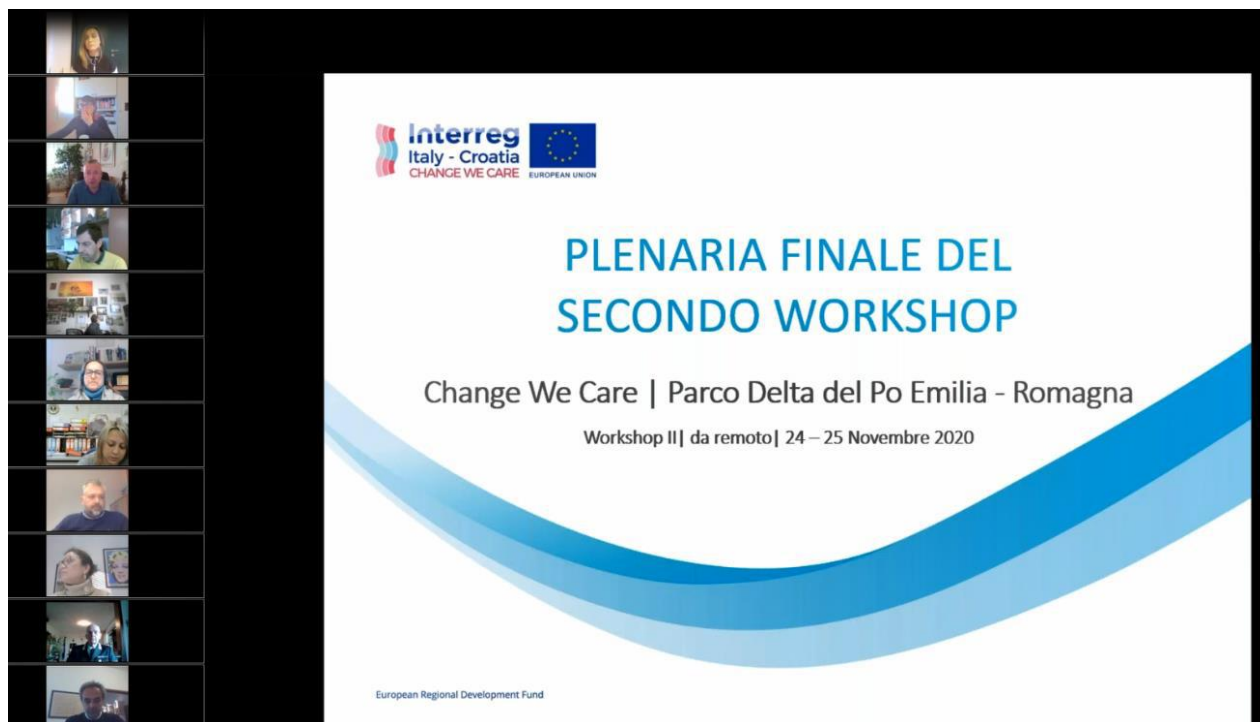


Figure 2. Screenshot of the plenary section of Workshop II.

The **Workshop III** was structured in 3 phases:

1: Initial Plenary (March 24, 2021 - 15:30 - 16:30) in which the activities and results of Workshops I and II were presented. The plenary then focused on the presentation of the climate change scenarios on hydrodynamics and specific ecological targets of the Po Delta by Dr. Davide Bonaldo.

2: Parallel sections of Working Groups (24 March 2021 - 16:30 - 17:30) divided between: Public bodies and competent agencies, Tour operators and other competent operators, Educational institutions, and environmental associations and Fishermen and shellfish farmers. In each working group, the Chair and the project technicians presented the progress of the projects chosen in Workshop II. During the discussion suggestions and ideas were collected to improve these projects. Furthermore, stakeholders' commitments were collected to favor the realization of the projects.

3: Final plenary session (25 March 2021 15:30 - 17:00) where the synthesis of the results and commitments obtained in each Working Group was presented. The meeting ended with a short final closing by Dr. Roberto Montanari of the Emilia-Romagna Region, by Dr. Vadis Paesanti and by the President of the Park, Dr. Diego Viviani.

7.1.2 Participants of the workshops

The **Workshop I** involved 26 participants in addition to the project staff. Participants were divided in 4 working groups as reported below

Group 1	Group 2	Group 3	Group 4
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Public bodies and competent agencies	Tour operators and other competent operators	Educational institutions, and environmental associations	Fishermen and shellfish farmers
1. Christian Marasmi (Regione Emilia Romagna) 2. Daniele Cazzola (Consultec Delta) 3. Giovanni Nobili (Carabinieri) 4. Valeria Vallieri (studente) 5. Francesco Gobbi (Parco Delta Po E-R) 6. Andrea Paganin (Carabinieri) 7. Gilda Gori (CADF) 8. Maira Passarella (CADF)	1. Enrico Zappaterra (CNA) 2. Marco Ricci (La Marina di Goro) 3. Stefano Casellato (Aqua) 4. Dalia Conventi (Comune di Goro) 5. Maria Pia Pagliaruso (Parco Delta Po E-R)	1. Francesca Monti (insegnante) 2. Maria Laura Mantovani (GEV) 3. Massimo Ghiraldi (GEV) 4. Lorenza Cennacchi (CSV Terre Estensi) 5. Chiara Poretta (CSV Terre Estensi)	1. Davide Marandella (La Vongola di Goro) 2. Edoardo Turolla (Istituto Delta) 3. Massimo Genari (Co.Pe.Go) 4. Pierpaolo Piva (Co.Pe.Go) 5. Stefano Beltrami (Studio Ingegneristico Beltrami) 6. Vadis Paesanti 7. Carlo Albertazzi (Regione Emilia-Romagna) 8. Sergio Caselli (Pesca Legacoop) 9. Marika Bugnoli (Comune di Goro)

The participants of **Workshop II** involved in the working group section were reported below:

Group 1 Public bodies and competent agencies	Group 2 Tour operators and other competent operators	Group 3 Educational institutions, and environmental associations	Group 4 Fishermen and shellfish farmers

<p>1. Diego Viviani (Sindaco di Goro e Presidente del Parco Delta del Po)</p> <p>2. Stefano Beltrami (Studio Ingegneristico Beltrami)</p> <p>3. Giovanni Nobili (Carabinieri)</p> <p>4. Maira Passarella (Studio Passarella)</p> <p>5. Stefano Bellesi (Regione Emilia Romagna)</p> <p>Uditori: Flaminia Smorto (InEuropa) Luca Gattuso</p> <p>Tecnici presenti: Roberto Montanari (Regione Emilia Romagna) Christian Marasmi (Regione Emilia Romagna)</p>	<p>1. Enrico Zappaterra (CNA)</p> <p>2. Marco Ricci (La Marina di Goro)</p> <p>3. Stefano Casellato (Aqua)</p> <p>4. Maria Pia Pagliarusco (Parco Delta Po E-R)</p> <p>5. Isabella Finotti (Aqua)</p> <p>6. Ottorino Zanellati (Oasi di Cannaviè)</p> <p>7. Riccardo Rescazzi (Al Ponticello)</p> <p>Uditori: Flaminia Smorto (InEuropa) Christian Marasmi (Regione Emilia Romagna) Tommaso Rimondi (ricercatore all'Università di Bologna)</p> <p>Tecnici presenti: Maria Pia Pagliarusco (Parco Delta del Po – Emilia Romagna)</p>	<p>1. Maria Laura Mantovani (GEV)</p> <p>2. Lorenza Cennacchi (CSV Terre Estensi)</p> <p>3. Chiara Poretta (CSV Terre Estensi)</p> <p>4. Giulia Fiore (CSV Terre Estensi)</p> <p>Uditori: Flaminia Smorto (InEuropa)</p> <p>Tecnici presenti: Giuseppe Castaldelli (Comitato Tecnico Scientifico Parco Delta del Po)</p>	<p>1. Carlo Albertazzi (Regione Emilia- Romagna)</p> <p>2. Sergio Caselli (Pesca Legacoop)</p> <p>3. Stefano Beltrami (Studio Ingegneristico Beltrami)</p> <p>4. Pierpaolo Piva (Co.Pe.Go)</p> <p>5. Marco Ricci (La Marina di Goro)</p> <p>6. Alberto Alberani</p> <p>7. Pierpaolo Piva</p> <p>Uditori: Flaminia Smorto (InEuropa) Antonio Bratus (Regione Friuli Venezia Giulia) Tommaso Rimondi (ricercatore all'Università di Bologna)</p> <p>Tecnici presenti: Mattia Lanzoni (Parco Delta del Po – Emilia Romagna)</p>
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28 participants and 10 member staff were present at the plenary section of Workshop II, the complete list is reported below:

- Riccardo Rescazzi
- Anna Marchetti*
- Carlo Albertazzi
- Stefano Casellato
- Tommaso Rimondi
- Persona Non Identificata
- Ottorino Zannellati
- Laura Sinapi (ISPRA)
- Stefano Beltrami
- Daniele Cazzola
(CONSULTEC DELTA)

- Rapp. Consorzio Pescatori Di Goro
- Elena Giusta (ISPRA)
- Flaminia Smorto (InEuropa)
- Francesco Goggi
- Giulia Fiore
- Isabella Finotti
- Enrico Zappaterra
- Antonio Bratus
- Chiara Porretta
- Luisa Nicoletti (ISPRA)
- Maria Laura Mantovani
- Marco Ricci
- Lorenza Cennacchi
- Emanuela Massari
- Gilda Gori
- Sabrina Franceschini (Regione Emilia Romagna)
- Giovanni Nobili (Ten. Col.)
- Sara Dastoli (ISPRA)

The introductive plenary section of Workshop III involved 32 participants and 11 people of Project's staff:

- Alessandra Feola (Ispra)
- Daniele Cazzola (Consultec Delta)
- Dario Guidi (Po Delta Tourism)
- Davide Bonaldo (CNR Ismar)
- Davide Turri
- Debora Bellafiore (CNR Ismar)
- Elena Giusta (ISPRA)
- Enrico Zappaterra (CNA)
- Flaminia Smorto (Ineuropa)
- Francesco Paesanti (Naturedulis srl - azienda privata e istituto ricerca)
- Stefano Casellato (Aqua)
- Giovanni Nobili (Ten.Col. Carabinieri CUFA)
- Giulia Fiore (CSV Ferrara)
- Laura Grandi (Regione Emilia-Romagna)
- Laura Sinapi (ISPRA)
- Luca Alberghi (Atlantide)
- Maira Passarella (Consorzio Acque del Delta - CADF)
- Marco Ricci (La Marina Di Goro)
- Maria Letizia Vitelletti (CNR-Ismar)
- Matteo Zucchetta
- Nicoletti Luisa (ISPRA)
- Teresa Alfare (CNR)
- Ottorino Zanellati (Oasi di Canneviè)
- Piergiorgio Vasi (Regione Emilia-Romagna)
- Riccardo Rescazzi (Al Ponticello)
- Roberto Castrucci (Il Tempo Dei Sapori) Roberto Tinarelli (AsOER)
- Rossana Torricelli
- Rossella Boscolo Brusà (ISPRA)
- Sabrina Franceschini (Regione Emilia-Romagna)
- Sara Dastoli (ISPRA)
- Stefano Beltrami (Studio ingegneristico Beltrami)

The stakeholders were divided in 4 working groups as reported below:

Group 1	Group 2	Group 3	Group 4
Public bodies and competent agencies	Tour operators and other competent operators	Educational institutions, and environmental associations	Fishermen and shellfish farmers

<p>1. Piergiorgio Vasi (Regione Emilia-Romagna Servizio attività faunistico-venatorie e pesca)</p> <p>2. Maira Passarella, (Consorzio Acque del Delta (CADF))</p> <p>3. Ten.Col. Giovanni Nobili (Comando Unità Forestale dell'arma dei Carabinieri)</p> <p>4. Maria Letizia Vitelletti (CNR ISMAR)</p> <p>5. Debora Bellafiore (CNR Ismar)</p> <p>6. Laura Sinapi (ISPRA)</p> <p>7. Daniele Cazzola, (Consultec Delta)</p>	<p>1. Enrico Zappaterra (CNA)</p> <p>2. Marco Ricci (La Marina di Goro)</p> <p>3. Stefano Casellato (Aqua)</p> <p>4. Isabella Finotti (Aqua)</p> <p>5. Ottorino Zanellati (Oasi di Cannaviè)</p> <p>6. Riccardo Rescazzi (Room and Breakfast Al Ponticello)</p> <p>7. Davide Bonaldo (CNR Ismar)</p> <p>8. Dario Guidi (Po Delta Tourism)</p> <p>9. Luca Alberghi (Atlantide - Museo NatuRa)</p> <p>10. Roberto Castrucci (Il tempo dei sapori)</p>	<p>1. Lorenza Cennacchi (Liceo Carducci Ferrara)</p> <p>2. Giulia Fiore (CSV Terre Estensi)</p> <p>3. Roberto Tinarelli (AsOER)</p>	<p>1. Francesco Paesanti (Naturedulis srl - azienda privata e istituto ricerca)</p> <p>2. Davide - al posto di Alessandro Menegatti (Manifattura dei Marinati)</p> <p>3. Loredana Alfarè (ISMAR-CNR) Sara Dastoli (ISPRA)</p>
<p>Tecnici presenti:</p> <p>Roberto Montanari (Regione Emilia-Romagna Servizio difesa del suolo, della costa e bonifica)</p> <p>Christian Marasmi (Regione Emilia-Romagna Servizio difesa del suolo, della costa e bonifica)</p>	<p>Tecnici presenti:</p> <p>Maria Pia Pagliarusco (Parco Delta del Po - Emilia Romagna)</p> <p>Anna Gavioli (Parco Delta del Po - Emilia Romagna)</p>	<p>Tecnici presenti: Giuseppe Castaldelli (Comitato Tecnico Scientifico Parco Delta del Po)</p> <p>Francesco Goggi (Parco Delta del Po - Emilia Romagna)</p>	<p>Tecnici presenti:</p> <p>Mattia Lanzoni (Parco Delta del Po - Emilia Romagna)</p>

The final plenary section of **Workshop III** involved 31 participants and 11 people of Project's staff:

- Alessandra Feola (ISPRA)
 - Anna Marchetti
 - Cristina Benzi
 - Dario Guidi (Po Delta Tourism)
 - Davide Bonaldo (CNR ISMAR)
 - Davide Turri
 - Debora Bellafiore (CNR ISMAR)
 - Diego Viviani (Parco Delta Po ER)
 - Isabella Finotti (guida)
 - Laura Grandi (Regione Emilia-Romagna)
 - Laura Sinapi (ISPRA)
 - Lorenza Cennacchi (Liceo Carducci Ferrara)
 - Maira Passarella (CADF)
 - Maria Letizia Vitelletti (CNR-ISMAR)
 - Mariacristina Serboni
 - Nicoletti Luisa (ISPRA)
 - Ottorino Zanellati (Oasi di Cannaviè)
- Technicians of Po Delta Park**
- Maria Pia Pagliarusco
 - Anna Gavioli
 - Mattia Lanzoni
 - Francesco Goggi
 - Giuseppe Castaldelli (Comitato Tecnico Scientifico del Parco)
- Technicians of Emilia-Romagna region - Servizio difesa del suolo, della costa e bonifica**

- Elena Giusta (ISPRA)
- Enrico Zappaterra (CNA)
- Flaminia Smorto (InEuropa)
- Giardina Baldassarre
- Giulia Fiore (CSV Ferrara)
- Roberto Tinarelli (AsOER)
- Sabrina Franceschini (Regione Emilia - Romagna)
- Sara Dastoli (ISPRA) Sarah Crivellaro
- Partecipante non identificato
- Pierpaolo Piva (Consorzio pescatori di Goro)
- Stefano Casellato (AQUA)
- Teresa Alfare (CNR)
- Vadis Paesanti (Confcooperative FedAgriPesca ER)
- Roberto Montanari
- Christian Marasmi

Chairs

- Sara Stemberger
- Anna Agostini
- Filippo Lenzerini
- Gaia Lembo

7.1.3 Results of the participatory process in the Sacca di Goro

During the first Workshop (**Workshop I**), the working groups identified critical issues in the Sacca di Goro and defined aims to solve them. The next paragraphs reported the main outcomes of the first workshop.

The Public bodies and competent agencies group identified critical issues on physical, management and political level. In particular, the hydraulic risk, the increase of saline wedge, coastal erosion and anoxia effects were pointed out on a physical level. Channel network management, lack of habitat conservation and coastal biodiversity, Fragmentation of competences, bodies and interventions were pointed out on a management level.

The lack of a vision and of a strategy to counter the critical issues related to climate change, the lack of ecosystem resilience protection and the need to know reliable data, projections and forecasts on a scientific level were pointed out on a political level.

Tour operators and other competent operators identified two main critical issues: low water depth during low tide can obstruct potential nautical tourists, in the Santa Giustina Wood there is a greater risk of drought due to the temperatures and beach erosion.

The Educational institutions, and environmental associations group identified two main critical issues: 1. The difference in the perception of the times of climate change as well as the lack of perception of urgency 2. The lack of observation by those who are directly on the territory and being able to report these observations directly to the scientific community. In fact, there is still an important gap between the local community and research.

The Fishermen and shellfish farmers group pointed out that the Sacca di Goro is a complex and dynamic environment. The main issues highlighted included 1) the difficulties to access to monitoring data (although present) since they refer to different databases and not yet connected to each other and 2) the unpredictability and velocity of occurring changes, especially as regards the temperature and water oxygenation. Other critical issues pointed out included: the increase of water temperature in winter, high intensity weather-climatic events, decrease of wild seed, decrease in catch and spread of alien species.

During the second Workshop (**Workshop II**) technicians of project staff showed to stakeholders the projects selected to answer to the critical issues emerging within the Workshop I.

Group of stakeholders	Projects	Short description
Public bodies and competent agencies	Temporary sand duct	In 2014, 124.000 cubic meters were dredged from the Goro sandbar and brought through a temporary pipeline to the sea and to land, including the Lido di Volano beach. The operation could be repeated, also identifying, in agreement with the Po Delta Park, one or two areas on the coast for the accumulation of sands to be used for the beach's maintenance.
	Diversor brush	The brush consists of a linear structure in wood placed in two staggered and parallel rows. The brush is rooted on the emerged beach and extends towards the sea for a length overall of 300 m.
	Technical table	A coordination between public and private subjects that re-discusses management, policies and possible interventions in the field of climate change.
Tour operators and other competent operators	Payment of Ecosystem Services	The project is already in a structuring phase thanks to the synergy with the INTERREG Central Europe DELTA LADY - Floating Cultures in River Deltas Project. The project intends to intervene in local policy instruments capable of supporting the economic growth of delta regions, rich in biodiversity and with high natural capital, but with medium-low economic wealth in terms of PIL. The project therefore aims to recover a small portion of the tickets relating to services offered by the Park Visitor Centers in order to allocate it to interventions of "resilience to climate change", agreed with the tour operators.
Educational institutions, and environmental associations	Anguilla a 360°	On the occasion of the "UNESCO World Day dedicated to teachers" the Po Park proposed the training project "Pleasure, Mrs. Anguilla!". The aim of the project itself is to introduce students to the biology and ecology of the European eel, which suffer under climate change, from the Sargasso Sea to the Po Delta talking about a species, traditional fishing and valley farming.
	Sensitization of citizens and networking with associations	The project consists of a series of waste collection interventions carried out directly by the Park staff in some areas of the territory. Its primary objective is to raise awareness among citizens, both for the prevention of waste abandonment and for the activation of groups of volunteers and ecological days.
Fishermen and shellfish farmers	Coordinated database	Development of a single database for the collection of all biological, chemical-physical, geological, health, production (fishing and shellfish farming) data, which can be consulted by all certified stakeholders.
	Bassunsin's cut	This project involves the excavation of canals to maintain hydraulic circulation in the Sacca di Goro. With the cutting of the bench the sedimentary material collected will be used for the reconstitution outside the brush bench which will allow the creation of habitat areas. There will be a reconstitution of habitats of community interest but

		which maintain the reproductive necessity of the Sacca di Goro and its environmental needs.
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In the third Workshop (**Workshop III**) contributed to the awareness of the participants and stakeholders with a presentation dedicated to climate change scenarios with a focus on hydrodynamics and on some specific ecological targets of the Po Delta. Furthermore, the progress of the projects defined in workshop II to solve the critical issues emerged in workshop I, was presented. Furthermore, the commitments have been collected by stakeholder groups to favor the realization of the projects.

7.1.3.1 Participative process results for Public bodies and competent agencies group

Project 1: TEMPORARY SAND DUCT	
Objectives emerged in Workshop 1 to which this project responds: To decide on interventions capable of contrasting or mitigating the effects of climate change	
Brief description of the project:	Results expected: <ul style="list-style-type: none"> • Avoid closing the lagoon mouth due to the growth of the current bench • Nourish the eroding coast of Lido di Volano To whom the project aims: To all users of the Sacca and the beaches of Volano and its hinterland Location: Scanno di Goro – Lido di Volano Partners and collaborations: <ul style="list-style-type: none"> • Agenzia Protezione Civile, Servizio Area Reno e Po di Volano • Regione Emilia-Romagna Synergies of this project with other Park projects: The project is connected to after life project life AGREE. Problems encountered: <ol style="list-style-type: none"> 1. Compliance with D.173 / 16 with more rigid and complex parameters (e.g. granulometry) on the materials allowed for nourishment 2. The EIA is required, which extends the time for approval of the project 3. The times in which to operate are limited due to nesting 4. The thinning of the beach does not allow you to cross it with the classic means, causing an increase in costs. Possible opportunities: Promote tourist activities Possible resources: Sufficient funding is currently not available to design such an intervention Possible timing: we will proceed with the withdrawal from the Scanno which can be implemented for 2022/2023
Move a quantity of sand through the pipeline to counteract the thinning of the beach due to storm surges and at the same time remove sand from the secondary vent. Project already carried out in 2014 with the following results: 124,000 cubic meters dredged from the Goro scanno and brought through a temporary pipeline to the sea of 4.5 km and to land of 3.5 km on the 2.5 km of beach at Lido di Volano. In the implementation of the project, the contribution of CO.SA.GO and the fishermen's cooperatives was important, which since 2008 have been involved in protecting the territory that is the basis of economic activities.	
Activities for which the realization is planned	
The Territorial Security and Civil Protection Service in collaboration with the Consorzio di Bonifica di Ferrara has carried out the survey of the Scanno di Volano (from the extreme tip towards the south) and is preparing the Characterization and Monitoring Plan to move at least 100,000 cubic meters of sediment towards the southern stretch of Lido di Volano in strong sedimentary deficit. The sands affected by the movement are those in excess of the terminal part of the Scanno and those inside the Sacca where the Draga is managed by CO.SA.GO.	
Further ideas emerged in the context of Workshop III	
<ul style="list-style-type: none"> • Good shoreline management practice was reported, according to a different model. This is Porto Levante - Scanno Cavallari in the Venetian part (between the Po di Levante and Po di Maistra) where the bathing establishments are located behind the dune to facilitate its reconstruction. • It has been reported that 124,000 cubic meters are few for Sacca - almost all the concessions of the cooperative have been concluded for both reclamation and nourishment. • Above all, the Group highlighted the critical issues that its reply could encounter, which can 	

<p>be overcome with appropriate and anticipated planning</p>	
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Commitments and roles

Servizio Tecnico di Bacino Po di Volano e della costa della Regione: Implementation of the intervention in 2014

Further commitments and subjects to involve

Regione Emilia Romagna, Servizio sicurezza territoriale e Protezione Civile: funding and Characterization and Monitoring Plan

Parco Delta del Po – Emilia-Romagna: identification and availability of areas

Consorzio di Bonifica: Characterization and Monitoring Plan

Project 2: DIVERSOR BRUSH

Objectives emerged in Workshop 1 to which this project responds:

Encourage the creation of a coastal arrow that can act as a sedimentary trap for the sediment drifting along the sandbar from east to west

Slow down the deposition of sand in the secondary vent and therefore its closure.

Brief description of the project:

The work consists of a linear structure in chestnut wood poles 6m long and 25cm in diameter, arranged in two staggered and parallel rows.

The brush is rooted on the emerged beach and extends towards the sea for a total length of 300 m; the course of the structure is that of a broken one, orientation around 57 ° N with a change of direction (orientation 38 ° N) in the intermediate section.

Activities for which the realization is planned:

Intervention completed within the LIFE AGREE project The University of Ferrara - Department of Physics and Earth Sciences - has published a Report on the results of the intervention whose scientific managers are Prof. Umberto Simeoni and Prof. Carmela Vaccaro.²

Further ideas emerged in the context of Workshop III

Expected results:

- Increase of an outermost bench;
- Avoid closing the lagoon mouth due to the growth of the current bench

To whom the project aims:

To all users of the Sacca di Goro

Location: from Goro to the entire regional coast

Partners and collaborations:

- Agenzia Protezione Civile, Servizio Area Reno e Po di Volano
- Life Natura 2000
- Regione Emilia-Romagna

Problems encountered:

Partial intervention of which the final results are expected

Possible opportunities:

experimentation that allows to acquire new

<p>The project already completed saw the participation of the University of Ferrara Department of Physics and Earth Sciences which in the past has already developed research on projects with a view to sustainability for the Sacca di Goro, for example on the reuse of mollusc shells, and, for the future, it can continue to be an important project partner.</p>	<p>knowledge Resources: LIFE project e cofinancer Comune di Goro Possibile timing: <u>Realized in august 2020</u></p>
Commitments and roles	
<p>Regione Emilia-Romagna: project realization Servizio sicurezza territoriale e protezione civile di Ferrara: project realization Life Natura 2000: project funding Comune di Goro: finanziamento del progetto Università di Ferrara (Dipartimento Fisica e Scienze della Terra): Post opera monitoring</p>	

Project 3: TECHNICAL TABLE	
<p>Objectives emerged in Workshop 1 to which this project responds: Discuss the available data and projections for long-term visions that also take into account changes in social and economic conditions. Begin to establish a temporal horizon for the interventions envisaged in general to find far-sighted solutions and overcome the logic of running after problems. Think about the transition zones of tomorrow.</p>	
<p>Brief description of the project: A coordination between Bodies and private subjects that re-discusses management, policies and possible interventions in the field of climate change. The Table could take up the topics and projects addressed by the Change We Care project and propose a different approach to the management activities in these areas and in general the policies for the protection of the territory, also considering the changes linked to the natural evolution of the natural system in terms of resilience.</p>	<p>Expected results: Activate a new Governance tool for the Sacca di Goro with the possibility of proposal, investigation, multidisciplinary comparison and management To whom the project aims: to public and private entities and organizations belonging to the Sacca area Localization: Sacca di Goro</p>
<p>Activities carried out: The Committee has met once a year since its establishment, with the exception of 2020 due to Covid.</p>	<p>Partners and collaborations: the Municipality of Goro also has among the objectives of its Municipal Structural Plan (PSC) the need to radically change the model of development and management of the territory. Synergies of this project with other Park projects: A 2017 Memorandum of Understanding already exists to which the Park belongs, as well as the Region, the Province of Ferrara, the Municipality of Goro, ARPAE, Legacoop, Federcoopesca, AGCI, Coldiretti, CO.SA.GO. The duration is 5 years. Possible synergies with any "Observatory on the Sacca" Possible opportunities</p> <ul style="list-style-type: none"> • projects links with Alto Adriatico lagoons; • Links with international projects that enhance the area from both a scientific and economic point of view • Synergies with ESFRI Research Infrastructures for Transition Areas Project will be operational https://www.danubius-ri.eu/ <p>Possible resources: Ministero – Funds for hydrogeological instability which also includes areas affected by coastal erosion Possible timing: First call after the health emergency</p>
<p>Activities for which the realization is planned: The Mayor of Goro who chairs the Operations Committee has planned to convene it once the health emergency is over.</p>	
<p>Further ideas emerged in the context of Workshop III</p>	
<p>The group emphasizes the objectives of the table as:</p> <ul style="list-style-type: none"> • a place to propose new management approaches and policies with longer-term time horizons. • space to discuss new design ideas, even unpublished and to be verified (such as the hypothesis of desalination of sea water in anticipation of the scarcity of fresh water). • coordinated group that encourages and directs the search for new funding for mitigation actions • adaptation to climate change <p>Possible financing channels are suggested that the Table could activate in the future:</p> <ul style="list-style-type: none"> • The Ministry of the Environment for funds aimed at hydrogeological instability which also include areas affected by coastal erosion. • Find interactions with ESFRI research infrastructures that can provide support to local initiatives and subsequently apply for funds from the Horizon Europe Programs (and others similar) in which it is possible to highlight the synergies between actions of agencies and bodies and ESFRI infrastructures. With this in mind, please note the link https://www.danubius-ri.eu/ 	
<p>Commitments and roles</p>	
<p>Participation as Members of the Table / Committee: Parco Delta del Po – Emilia-Romagna, Municipality of Goro: proponent of the thematic extension to climate change, Emilia-Romagna region, Provincia di Ferrara, ARPAE, CO.SA.GO,</p>	

The first two projects, of a technical nature, are aimed at countering a current trend and mitigating contingent problems in the territory; the third project is a new and wider governance initiative of the territory with a long-term vision and change in the management policies of the Sacca di Goro. The technical projects presented are interconnected. In the past, temporary sand duct interventions responded to the purpose of managing the excess sands in order to obtain two results: nourish the eroding beaches of the lido and prevent the closure of the secondary inlet, at the same time improving the seabed of the concession areas for the cultivation of clams. For these reasons, cooperatives of fishermen / shellfish farmers also collaborated in the first interventions. This initial double purpose connects the sand duct to the realization of the next project, the diversor brush, created to overcome the long times of a probable new temporary sand duct. The third project of the Technical Coordination Table is also potentially linked to the design ideas of the other groups, as it aspires in the future to become a reference point and collector of new and different projects aimed at combating climate change in this part of the territory. Surely it is also an initiative closely connected with that of the Observatory on the Sacca suggested by the fishermen and shellfish farmers group. Of the three projects of the Entities and Agencies Group, some notes are added at the end of the participatory meetings.

7.1.3.2 Participative process results for Tour operators and other competent operators group

Project 4: FUNDRAISING FOR CLIMATE CHANGE	
<p>Objectives emerged in Workshop 1 to which this project responds: Limit the negative effects of climate change (e.g. beach erosion, drought, etc.) Protect the sandbars from rising sea Take advantage of the positive aspects brought by climate impacts to promote the differentiation and diffusion of tourist flows in the area.</p>	
<p>Brief description of the project:</p>	<p>Expected results: Since the economic resources available through a fundraising action, however important, are likely to be extremely lower than those really necessary to support projects of resilience to climate change in the Po Delta area, it has been defined that the primary objective of the project it is to raise awareness and involve tourists and the local community on the urgent need to act to contrast and adapt to climate change. Therefore, fundraising to be allocated to targeted interventions for the resilience of the Park's habitat and biodiversity to climate change is a secondary objective, a sort of "trick" to make the awareness campaign more effective and concrete.</p>
<p>Activities for which the realization is planned:</p>	<p>Localization: Po delta with Valli di Comacchio and Sacco di Goro as pilot areas</p> <p>To whom the project aims: To the whole community and local business fabric, to tourists and more generally to people sensitive to environmental protection</p> <p>Partners and collaborations: Municipalities, economic trade associations, Park Visitor Centers, tourism businesses, local associations and media, CNR, Emilia-Romagna Region</p> <p>Synergies of this project with other Park projects: INTERREG Central Europe DELTA LADY, management of Visitor Centers, CETS</p> <p>Possible resources: the project is aimed at attracting resources and for its activation the staff of the Park and that of the other subjects involved will be considered</p> <p>Possible opportunities: ensure that the resilience projects of the Po Delta enter in national and international crowdfunding circuits</p> <p>Possible timing:</p>
<p>Different fundraising activities are identified, complementary to each other, aimed at different targets and having different activation and management methods. They are listed below in order of activation complexity, also in consideration of the commitments currently made by the various parties involved.</p> <ol style="list-style-type: none"> Web-crowdfunding campaign: addressing primarily the local community, "regular" tourists, people sensitive to environmental issues, using existing fundraising platforms specifically dedicated to sustainable development projects (for example www.ideaginger.it/) . The web-crowdfunding could be conveyed through the communication tools of the Biosphere Reserve Park and its supporters, but also promoted at the ticket offices of the Park Visitor Centers could be stimulated to join crowdfunding (a legacy of the rest). Donations from local (and non-local) companies as part of their commitment to corporate social responsibility, stimulated by the Park with ad hoc communications and issue of a "certificate / logo" for those who join Environmental Cash back to tourists from part of the tourism businesses (accommodation, services, ...) in exchange for sustainable choices that reduce the operating costs of the company (for example, if a customer chooses not to have the daily washing of the sheets, the hotel provides a small share of the economic savings generated by the crowdfunding project in the "name" of the customer) Park-Municipalities Agreement to allocate a % of: tourist tax (where established) and concessions to businesses tourism activities within protected areas to resilience interventions to climate change of habitat and biodiversity of the Park (without affecting the margins of businesses) 	

	the project is quickly activated, as soon as all those involved have chosen to start it
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Further ideas emerged in the context of Workshop III

As part of the various workshops, various indications emerged in some cases transversal to the development of the project, in others specific to a phase, which are listed below:

- Before starting fundraising activities, the purpose of the contribution must be well defined and clearly communicated. Anyone who makes a donation must know exactly what it will be destined for. The choice of the interventions to be carried out with the sums raised will be the subject of a comparison between the Park and all the subjects who support the fundraising by creating a special "project table"
- Not being sure of the amounts collected through a fundraising, there is the risk that these may not be sufficient to carry out a complete intervention from scratch, therefore, especially in the initial phase, it is advisable to direct the funds raised to the improvement / expansion of interventions that the Park has already planned.
- It is essential to communicate and make transparent the results obtained with fundraising. The communication of the results achieved could be the basis for relaunching new fundraising campaigns.
- The promotion of fundraising activities must be broad, especially in the initial phase (then the viral effect takes over). Not only the Park, but a plurality of public and private actors must be co-promoters of fundraising actions, each undertaking to strongly promote them through their own means of communication.
- In support of the fundraising campaign, it would be important to create information "panels" in places very frequented by tourists and most at risk of being affected by climate change, highlighting the scenarios for these areas if climate change is not counteracted, thus stimulating to contribute for resilience actions.

Commitments and roles

Po Delta Park– E-R:

- It coordinates the project and defines a memorandum of understanding to be signed by the adhering subjects
- Identifies a range of resilience interventions to climate change of habitat and biodiversity that could be supported through fundraising and agrees with the project members on which ones to take action
- Activate the web-crowdfunding platform and promote it

Municipalities :

- Evaluate the possibility of donating part of the tourist tax and / or concessions for tourist use of the protected areas to the interventions identified
- They widely promote web crowdfunding

Economic category associations:

- promote the possibility of supporting the crowdfunding campaign through "significant" donations in local companies in exchange for visibility (to be defined) in terms of corporate social responsibility

Visitor centers:

- They widely promote web-crowdfunding, also stimulating the "legacy of the rest"

tourist operators:

- They activate forms of environmental cash back for their customers, in support of resilience interventions

Local associations and local media:

- They widely promote web crowdfunding, starting with their subscribers / readers

CNR-Regione:

- Create informative material that makes it easy and impactful to understand what will happen to the main tourist destinations of the Po Delta if climate change is not fought

7.1.3.3 Participative process results for Educational institutions, and environmental associations group

Project 5: NICE TO MEET YOU, MRS ANGUILLA! >>> ANGUILLA A 360°	
Objectives emerged in Workshop 1 to which this project responds: Give people an ever stronger perception of the times and of the urgency of climate change	
Brief description of the project:	Expected results:
<p>On the occasion of the "UNESCO World Day dedicated to teachers", on 4 October 2020, in Ostellato, the Po Delta Park of Emilia Romagna presented some proposals for environmental education including the training project "Pleasure, Mrs. Anguilla!". This initiative was followed by the approval of the LIFEEL project (2020-23). In addition, the Po Delta Park and partner is a partner of the recently approved LIFEEL project for the protection of the species and which has numerous actions to combat the effects of climate change. The objectives and modalities of the LIFEEL project will be disclosed in the meetings with schools and laboratories will allow to observe live specimens, recognizing some stages of development.</p> <p>The aim of the project itself is to introduce students and the community to the biology and ecology of the European eel, from the Sargasso Sea to the Po Delta (presenting live and in the classroom) by speaking in a romantic way and "everything tondo" of a species to be protected but which protects traditional methods of fishing and valley farming still used today and recognized internationally as sustainable, memory and inseparable link between man-culture-territory and the environment. In addition, the release of eels is already shared annually online. Here are the links of the eel release in 2019 and 2020:</p> <ul style="list-style-type: none"> - YT: https://youtu.be/ds4IJRzMrxs - YT: https://youtu.be/900k0wzTIF4 	<p>Communicate the peculiarities of a species to students and the community by addressing in a romantic and "all-round" way the biology and ecology of the European eel, of a species to be protected but which also protects traditional methods of fishing and valley growing and is linked to the history of the territory.</p> <p>To whom the project aims: Students of all classes of all levels, teachers and communities</p> <p>Localization: Delta Po, the whole Emilia- Romagna Region.</p> <p>Partner e collaborations: Local associations Teachers of the territory Partner of the LIFEEL project.</p> <p>Synergies of this project with other Park projects: Piano di educazione ambientale – progetto «Piacere, Signora Anguilla!» Progetto di conservazione dell'anguilla e liberazione dei riproduttori</p> <p>Possible opportunities:</p> <ul style="list-style-type: none"> ● Using the web to reach wider citizenship ● Use of webinars even from the school thanks to registration <p>Possible timing: Realization of the webinar in late autumn 2021</p>
Activities for which the realization is planned:	
<ul style="list-style-type: none"> ● Creation of a cycle of webinars dedicated to eel as a flag species (shared both in streaming and thanks to its registration). The target of the webinar will be teachers in particular but this will be open to all citizens. Thanks to the webinar, the species will be told in a romantic way to the audience so that the peculiarities of its life remain etched in the viewer and so that the spectator respects and better understands its value and its conservation. The webinar registration will be shared with local schools ● Creation of a small pamphlet dedicated to eel (5-6 pages) for the dissemination of the peculiarities of the species 	
Further ideas emerged in the context of Workshop III	

- Eel as the lowest common denominator
- For the development of the webinar, teachers can be asked to make a list of questions or needs by sending a questionnaire to specific teachers, who have sensitivity and interest in the topic, who can then disseminate it to interested colleagues.
- In the future it would be possible to propose a portal on which the materials produced will be available
- Combining the UNESCO recognition and narrating the eel from a historical and cultural point of view in this way it is possible to present the species from the point of view of the history of the area and address various issues, not only of a biological nature but also of a social and cultural nature. There emerges the need to tell the whole process and extended value of the eel.
- Start each year with an environmental education program to be extended with all associations and schools
- Look for the link between the Dunes of Massenzatica and anguilla
- Activate collaboration with other cultural bodies in the area

Commitments and roles

Po Delta Park – Emilia-Romagna: conception and coordination

Università di Ferrara: Technical-scientific collaboration

Comunicatore scientifico (biologo): who knows how to narrate the species in a romantic way about the species

CSV Ferrara: source of information and the staff of the University of Volunteering dedicated to training can give their support to understand how the webinar should be developed

Local and regional associations such as ASOER: Participants in the webinar as well as availability of materials already collected - also contribute further by sharing the material collected in the monitoring of their volunteers

Further commitments and subjects to involve

Teachers:

- Involvement with a questionnaire to understand the issues to be addressed and contribute with details on how the webinar could be developed.
- Identification of questions and issues to be addressed in the webinar
- Disclosure of the peculiarities of the species

Tourist operators, citizenship:

- Dissemination of the peculiarities of the species to visitors to the Po Delta

Istituto di Storia di Ferrara: for the creation of a flywheel between history and eel

Other Organizations of the Territory: Museo di Spina and with Museo del Delta Antico, Consorzio Uomini di Massenzatica, etc

Project 6: TESTIMONIALS FOR THE AWARENESS OF CITIZENS AND NETWORK WITH ASSOCIATIONS

Objectives emerged in Workshop 1 to which this project responds:

- Shorten the distance between observation by locals and the scientific community
- React from apathy and make the issue again urgent and essential in discussions at school, in civic organizations and in institutions.
- Citizen awareness

Brief description of the project:

The "Testimonials for Citizen Awareness and Network with Associations" project was born from a series of waste collection interventions carried out directly by the Park staff in some areas of the territory with the primary objective of raising awareness among citizens, both for the prevention of waste abandonment both for the activation of groups of volunteers and ecological days. For example, waste collection awareness projects were carried out in the Park areas, implemented by employees in Goro (02 July 2020), Comacchio (20 July 2020), Ravenna and Cervia (scheduled for autumn but suspended for the Covid-19 emergency).

These activities led to the activation of the register of the Friends of the Po Delta Park with the aim of involving the citizens and associations of the Park area to create a spirit of participation and awareness of environmental situations.

Activities carried out:

The register of volunteers Friends of the Po Delta Park has been established, pursuant to Article 27 of Regional Law 24/2011 which includes 37 free citizens and 8 associations. The Association was founded with the intention of involving the citizens and associations of the park to create a spirit of participation and awareness of environmental situations and offers various voluntary activities such as: Let's clean the park, Hunting mushrooms,

Activities for which the realization is planned:

In the next year, various awareness and action activities are planned such as Clean the Park (April 13, May 19, September 15, October 13 2021), Mushroom hunting, protecting beaches, Exotic species, Social park, Natural distance, Fishing and fish species of the Po Delta park, Monitoring and protection of the breeding Kentish plover population, National census of flamingo individuals, etc.

Expected results:

The primary objective is to raise awareness among citizens, both for the prevention of waste abandonment and for the activation of groups of volunteers and ecological days for the reclamation of the areas of the Po Delta Park - E-R. A contextual monitoring of the environmental status is developed for management planning in the areas affected by the interventions. The project therefore aims at planning upcoming activities within the Friends of the Po Delta Park Association to raise awareness among citizens and strengthen the network with local associations.

To whom the project aims:

Students of all classes of all levels and levels
Volunteers of value associations
Citizenship

Location:

Po Delta, the whole Emilia-Romagna Region

Partner e collaborations:

Local Associations

Synergies of this project with other Park projects:

Environmental education plan

Possible opportunities

- Collaboration between various associations in the area
- Improvement of knowledge in the naturalistic field and better understanding of the territory and its delicate balance also in view of the impacts of climate change
- Contributions from the different knowledge that each volunteer and each association has in its reality

Possible timing:

From spring 2021 due to the slowdown due to the pandemic

Further ideas emerged in the context of Workshop III

- Launch a questionnaire dedicated to teachers asking them if they are willing to participate and contribute to planned activities;
- Each school has a role depending on its focus, it is possible to create a network between associations and schools for the creation of a joint project
- Teachers must not remain alone, but they need the support of associations, volunteers and organizations
- Create a network project starting from design thinking by creating a video, book, e-book on the subject

- Students must be protagonists and creators of a product

Commitments and roles

Po Delta Park – Emilia-Romagna:

- Ideation and coordination of activities as well as activities of technicians such as ornithologists

Friends of the park::

- Collection of different contributions from the various knowledge that each volunteer possesses (communication, nature etc.) and support in future awareness activities
- Creation of a list of schools to interface with (subject to approval)

Several environmental associations and not affiliated with the Park through the friends of the park (Legambiente, Touring Club ecc.):

- Dissemination, proposal of new activities related to the territory to raise public awareness

7.1.3.4 Participative process results for Fishermen and shellfish farmers group

Project 7: ESTABLISHMENT OF THE SACCA OBSERVATORY STARTING FROM A COORDINATED AND INTERRELATED DATABASE	
<p>Objectives emerged in Workshop 1 to which this project responds: Promoting the access to collected data in order to improve the efficacy of monitoring</p>	
<p>Brief description of the project:</p> <p>The "Observatory of the Sacca" as a tool for "Interrelation of the various databases" or the development of a unitary database for the collection of all biological, chemical-physical, geological, health and productive data (fishing and shellfish farming), which can be consulted by all certified stakeholders. The Emilia-Romagna Region (Fish Economy Service) will be the institution and institution of the management body of the unitary database. The Park cannot be the management and coordination body but proposes itself as the promoter through the activities of the Change We Care project, for example through the establishment of the "Observatory of the Sacca".</p> <p>A tool, which necessarily encounters difficulties in its realization precisely because it is an innovative and interdisciplinary tool, but becomes fundamental for the future management of the pocket and delta environments) to give a rapid and effective response to the problems of climate change.</p>	<p>Expected results: The goal is to make monitoring more effective by making the collected data public and usable and by starting an interrelation activity of the various databases in order to cross-reference environmental and sanitary data (temperature, pH, salinity, precipitation quantity, oxygen etc.) with production data.</p> <p>Beneficiaries of the project: Fishermen, shellfish farmers, associations, management bodies.</p> <p>Location: Online platform developed at the headquarters of the Emilia Romagna Region in collaboration with a branch located in the Municipality of Goro</p> <p>Partners and collaboration: Emilia-Romagna region, involving: ASL, ARPA, ISPRA, Delta Po Park, University, Fishing Consortiums, Fishing Associations</p> <p>Problems identified: Limitations on the possibility of organizing technical meetings in person, given the current pandemic</p> <p>Opportunities and founding: Linked to some regional and European projects (such as Flag; Feamp Emilia Romagna) to which one could link up for the development of the instrument</p> <p>Possible timeline: End of the year 2021</p>
<p>Activities carried out:</p> <ul style="list-style-type: none"> • Preliminary information of the regional and territorial Bodies involved and that can be involved (Emilia Romagna Region, parks and fish economy service, ARPA, various territorial agencies such as the Delta Institute, representatives of associations representing the fishing sector) • Promotion of the activity also within the participation meetings held for the definition of the fisheries regulation 	
<p>Activities for which the realization is planned:</p> <ul style="list-style-type: none"> • Deepen the comparison with the Bodies and carry out dedicated comparisons to establish operational methods for activating the tools and define the respective roles for the construction of the observatory structure 	
Further ideas emerged in the context of Workshop III	
<ul style="list-style-type: none"> • It was highlighted by several participants that the action on which to put more pressure is mainly the constitution of the observatory: a tool that has been in demand for a long time, which necessarily faces difficulties in its implementation precisely because it is an innovative tool, but becomes a fundamental tool for the future management of the pocket and delta environments) to give a rapid and effective response to the problems of climate change • One of the problems of the Lesina Lagoon is the Blue Crab (allochthonous and highly invasive species, which appeared about 20 years ago, but now - also due to climate change it has had an explosion in recent years). A parallelism was therefore asked with the Sacca di Goro: here too the species has increased a lot and the impact on fishing is present (both on fishing with fixed gill nets - on the catch and on the nets themselves - and on mollusc farming and juveniles benthic), but it is a species that can be consumed and this is one of the few safe methods to put constant pressure on the species and therefore also management and control. 	

Commitments and roles
<p>Po Delta Park – Emilia-Romagna region: promoting body through the activities of Change We Care</p> <p>Emilia Romagna region: builder of the unitary database management tool, which can be consulted by certified stakeholders</p> <p>ARPA: may contribute to providing the data that will make up the database</p>
Further commitments and subjects to involve
<p>University of Ferrara: web/GIS platform</p> <p>Fish market of Goro and project manager of Life Agree: may contribute to providing the data that will make up the database</p>

Project 8: BASSUNSIN'S CUT	
<p>Objectives emerged in Workshop 1 to which this project responds:</p> <ul style="list-style-type: none"> • Weather-climatic events are more and more frequent, unpredictable and strongly impacting on production (for example: the nursery area). • Loss of production potential and difficulty in finding wild semen. • Programming of continuous maintenance of the Sacca di Goro. From the analysis of the state of conservation of habitats and species, the project proposal for the renaturalization of the area between the new and old Scanno in the "Bassunsin" area was articulated. 	
<p>Brief description of the project:</p> <p>Excavation of canals to maintain hydraulic circulation in the Sacca di Goro. The proposed lines of action are consistent with the cards defined in the Sacca di Goro Management Plan (January 2018) defining interventions aimed at an efficient hydraulic circulation within the Bassunsin.</p> <p>Cutting the bench the collected sedimentary material will promote the reconstitution outside the brush bench which will allow the creation of habitat areas. There will be a reconstitution of habitats of community interest but which maintain the reproductive necessity of the sac and its environmental needs.</p>	<p>Expected results:</p> <ul style="list-style-type: none"> • Reduce the production loss and the difficulty in finding wild seed, mainly due to increasingly frequent, unpredictable and highly impacting weather-climatic events on production • renaturalization of the area • Restoration of environmental conditions both from an ecological, biodiversity and production point of view <p>Beneficiaries of the project: Fishermen, Shellfish farmers, Associations, Management Bodies, Municipality. Effects on: stakeholders linked to tourism, forest police</p> <p>Location: Sacca di Goro, Scanno di Goro</p> <p>Partners and collaborations: Fishing consortia and associations, CO.SA.GO., Po Delta Park, University, ISPRA, ARPAE, private</p>
<p>Activities carried out:</p> <p>Coordination with the Municipality of Goro in agreement with the representatives of the cooperatives and the Sacca committee.</p>	<p>Synergies of this project with other Po Park projects: Life Agree LIFE13 NAT/IT/000115 Management plan of the Sacca di Goro</p>
<p>Activities for which the realization is planned:</p> <p>Calling of the Services Conference for the start of the project</p>	<p>Problems identified: Limitations in the possibility of organizing the necessary interlocutory activities in person, given the current pandemic</p> <p>Opportunities: Excavation of part of the main channel relative to the project</p> <p>Possible resources: Possibility of participation in FLAG-Feamp funds</p> <p>Possible timeline: Within 2021</p>
<p>Commitments and roles</p>	

Emilia-Romagna region: Call of Services Conference

Goro Municipality: Project developer

Po Delta Park– Emilia-Romagna region: Environmental impact assessments, evaluation of requests

ISPRA: Elaboration and implementation of models and development of environmental modification scenarios

CUFAA (Carabinieri Forestali): Environmental impact assessments, evaluation of requests

Further commitments and subjects to involve

Stakeholders: Support to the project

University, Research Institution: Development of monitoring tools and methods

Project 9: CONTRAST OF THE LOSS OF WILD SEED

Objectives emerged in Workshop 1 to which this project responds:

- Contrast to the loss of clam production, difficulty in finding wild seed and shortage in finding juvenile clams.

Brief description of the project:

Construction of hatchery for clam juveniles, which are planned to be built in the embankment area included in the northwestern part of the Sacca di Goro up to the town of Gorino. This activity could contribute to the problem of the loss of wild seed for a percentage between 10-20%. The plants which are planned to be built are made up of mobile and remodeling systems, with a low environmental impact, the possible loss of which has also been calculated as a result of adverse climatic events.

Activities carried out:

- Interlocution with all stakeholders
- Evaluation of the possibility of intervention
- Estimation of the feasibility, applicability of the project to the area and the availability of resources

Activities for which the realization is planned:

- In-depth study of the feasibility of the project
- Resource sourcing

Further ideas emerged in the context of Workshop III

- Fishing consortium groups and organizations such as: the AMA group with Giuseppe Prioli, the reference group in the dialogue with the Ministry

Expected results:

aumento della potenzialità di produzione e maggiore possibilità di reperimento del novellame.

Beneficiaries of the project:

Local shellfish farmers

Location: Sacca di Goro

Partners and collaborations:

- Municipality of Goro
- Cooperatives
- Governance agencies of the Sacca
- Po Delta Park

Synergies of this project with other Po Park projects:

the project is closely linked to project 7 of the Observatory of the Sacca and to project 8 of the Taglio del Bassunsin

Problems identified:

Coordination and planning for the drafting and presentation of the project

Opportunities:

Possibility of participation in FLAG-Feamp funds

Possible resources:

The project will be able to draw on some resources of the Emilia Romagna FLAG

Possible timing:

The technical times of presentation and impact assessment of the project and of obtaining the clearance and impact assessment

Commitments and roles

Po Delta Park – Emilia-Romagna region: Environmental impact assessments, evaluation of requests

Emilia-Romagna region: evaluation of requests, promotion

Management agencies of Sacca di Goro: Project promoter

Goro Municipality: activator of the project

Further commitments and subjects to involve

Fishing consortia: are promoting the project and having a direct line with the Region - will renew interest in this initiative

Fishing association: Monitoring

University, Research Institution: Development of monitoring tools and methods