



# Task E

Updated Adapted participatory tool

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## 1 Introduction

This report presents the participatory capacity building process for flood risk mitigation in Trebbia basin.

The participatory capacity building process includes four main steps: assessing capacities and the context; planning participatory actions; implementing pilot actions and evaluating of participatory actions.

*Table 1: Participatory capacity building program*

Steps	Objectives	Calendar
Context analysis and capacity assessment	Assess social and civic capacities of the community	June-July 2016
Planning	To validate the capacity assessment To Co-design pilot actions	January-March 2017
Implementation	To implement, at least, two pilot actions	April-June 2017
Evaluation	To evaluate the pilot actions	April-June 2017

In the following pages we present the main features of the context and the main results of the capacity assessment developed in the region<sup>1</sup>, and a description and results of the participatory capacity building process, including planning, implementation and evaluation phases.

## 2 Characteristics of the area selected for participatory actions

### 2.1 Geographical, political, administrative and social features of the selected area

#### *Geographical features*

Trebbia river is a stretch of the Po river. It covers an area of 1.072 square kilometres (corresponding to 5% of the whole surface of the Po river basin), of which 86% in the mountain area and 14% in the plain area.

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<sup>1</sup> Complete report: 'Social and civic capacity assessment in Trebbia valley (Italy)' (Vasilecu, Cristina, Melloni, Erica) is available at: [cvasilescu@irsonline.it](mailto:cvasilescu@irsonline.it)

It crosses three regions (Emilia Romagna, Lombardia and Liguria) and 36 municipalities, of which 19 are located in Emilia-Romagna<sup>2</sup>.

The environmental relevance of the river is high, due to its well preserved natural landscape, the high quality of its water and to its capacity of storing water resources. There are 8 natural sites of Natura 2000 and one River Park.

It is used for water supply, energy production, irrigation and tourism. Irrigation is mostly present in the plain part, due to a relevant agricultural economy. In the mountain part, it is mostly used for tourism and water supply for bordering Liguria region cities.

From a morphological and morphometric point of view, Trebbia can be divided into two main areas with distinctive characteristics: i) the mountain part, stretching from the source until Rivergaro, characterised by irregular meanders in rocks and a high level of curving; ii) the plain part, stretching from Rivergaro until Po river, characterised by pronged riverbeds and relevant alluvial sediments.

Rivergaro is located at the crossroad between the mountain and the plain part, while Rottofreno in the plain part.

The areas of Trebbia river from Rivergaro until its confluence in the Po constitute areas of outflows. The “Plan for the hydrogeological organization of the Po river”, distinguishes three types of areas:

- Parts of the riverbed that represent the main discharge area in case of floods (“fascia A”);
- River plains, which are parts of the riverbed (“fascia B”), external to the previous ones, flooded in case of ordinary floods and which contribute to the millwork of the overflow and eventually to the reduction of the flood water volume;
- Areas (“fascia C”) external to the previous ones that may be flooded in case of severe floods.

Furthermore, the river plains (“fascia B” areas) along Trebbia river from Rivergaro until Gossolengo coincide with the areas of the natural extension of the river and store the entire alluvial deposit. Along these areas, there are currently some small agricultural areas.

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<sup>2</sup> The case study area regards the Emilia Romagna stretch of Trebbia basin.

### ***Political, administrative and social features***

With 12.127 inhabitants, Rottofreno is the second largest city in Trebbia river basin followed by Rivergaro with 7.005 inhabitants.

Agriculture and tourism are two of the main relevant economic sectors in the two municipalities. Tourism is particularly developed in the municipality of Rivergaro, while agriculture in the municipality of Rottofreno.

From an administrative and political point of view, the two municipalities are part of the Union of Municipalities *Bassa Val Trebbia e Val Luretta*. The Union is responsible for the delivery of various associated services, among which civil protection. Civil protection has become a competence of the Union with the law n.21/2012. The Union Bassa Val Trebbia e Val Luretta has a specific civil protection department that is in charge of coordinating local policies in this area. However, it's worth noting that flood management operations at local level are coordinated by municipalities and, in particular, by mayors. Mayors are also the only legal responsible for such operations.

Public participation in the definition and implementation of flood risks management and implementation policies in the two municipalities regards mostly civil protection associations. Citizens' involvement is limited to top-down communication of flood risks, especially in the prevention phase. Citizens have a more active role in the recovery phase.

## **2.2 Flood risks in the area**

The Flood management plan of the Po river and Emilia Romagna Region classifies Trebbia as an area at risks of floods at regional level. 56% of its population and 4.2% of its surface are subject to the risks of floods.

Flood risks are due especially to:

- Flash and intense rains, registered mostly between October and November, which can produce relevant overflows that reach more than 2,500 m<sup>3</sup>/s and change its riverbed.
- The fragility of its territory that presents high risks of erosion and landslide, which can aggravate the effects of floods. There are also enterprises and houses nearby the floodplains.
- The short time for warning citizens and enterprises and salvaging them.

Despite the long return time of floods (more than 500 years for intense rains between 1 and 3 hours and 200 years for intense rains registered in 6 hours), with climate change rains have become more frequent and intense. The most relevant flood events were registered in 1953, 2000 and 2015. In 2015, water quantities reached the maximum level, amounting to over 3,000 m<sup>3</sup>/s in Rivergaro, and 3 people died while driving on roads that collapsed into the river.

Strategies for flood risks management include flood mitigation, flood response and flood recovery measures at regional, basin and local levels. In the mitigation phase, defence measures for flood mitigation are undertaken especially at regional level, while prevention and preparedness measures are implemented at all three levels. Flood response measures are implemented especially at local and basin levels. Flood recovery measures are taken especially at regional level.

At local level, including in the municipality of Rivergaro and Rottofreno, the main measures are:

- Prevention measures: Structural Municipal Plans; Local Excavation Plans;
- Preparedness measures: Local civil protection plan; citizen's information on flood risks and evacuation drills
- Flood response measures: activation of the flood risks management procedures based on the level of flood alert; mobilization of civil protection units and, in particular of civil protection volunteers at local level; organisation of safety areas
- Flood relief measures: local infrastructure works.

## 2.3 Management of flood risks in the selected area: characteristics of the network/s of actors and strategies

As shown in the table below, the main actors in the area of flood risks management in Trebbia basin are the bureaucratic ones. Political and social actors are present especially at local level.

*Table 1 Type and level of actors involved in flood risks prevention and management in the selected area*

Level	Type of actors				
	Political	Bureaucratic	Experts	Economic	Social
<b>National</b>		X			
<b>Regional</b>	X	X			
<b>Intermediate regional</b>		X			
<b>Local</b>	X	X			X

The flood risks prevention and management system includes four levels:

- A national level, where the main actor is the Civil protection Department of the Presidency of the Council of Ministers. Other actors are the Ministry of Environment and Territory defence and the Ministry of Infrastructure and transport;
- A regional level, where the main actor is the Regional Agency for Civil protection and Territory defence. Other actors are Po' River Basin authority (AdBPo), Regional Agency for Prevention, Environment and Energy of Emilia Romagna Region (ARPAE), Interregional agency of the Po' River (AIPO) and "Parchi del Ducato" – management body of the Western Emilia Romagna parks.
- A provincial level, where the main actor is the Prefecture. Other actors are: the Province of Piacenza and the Reclamation Consortium of Piacenza
- A local level where the main actor is the municipality, and in particular the mayor. Other actors involved are: local police, associations, in particular civil protection ones, foundations, enterprises and citizens.

Regional and national actors interact between and among each others, while local and provincial actors interact among them and with regional actors.

Local networks are mostly municipal or union based. Interactions between public actors in the mountain and plain part of the river are more intense during flood events than in the prevention and preparedness phases.

Local networks in the mountain part of the river are rather loose, while in the plain part interactions between public and private (social) actors are more structured. Both

in the plain and mountain part of the river, citizens are a passive actor in the ex-ante phase (before a flood occurs), while they have an active role in the recovery phase, supporting public bodies in recovery interventions.

## **2.4 Social capacities for flood risks prevention and management in the area**

The social capacity assessment in Trebbia sub-basin reveals that the basin is characterised by:

- A high level of motivation to prevent flood risks at both institutional and community level, especially after the 2015 flood event. Furthermore, both institutions and communities report an interest to collaborate with their pairs and others to prevent, manage and mitigate flood risks;
- The capacity to learn from past events and integrate that knowledge into the flood risks management system, in particular at institutional level. After the 2015 flood event, a new flood risks warning system has been implemented at both regional (WebAlert system) and local level (Arturo project). Several infrastructural measures are also ongoing. Furthermore, some of the changes undertaken at local level are meant to give a higher voice to communities in the prevention and management of flood risks, even though these have not yet been entirely internalised in the flood risks management system.
- A good level of knowledge on flood risks prevention, management and mitigation at the institutional level. Within communities, knowledge on flood risks is embedded especially within civil protection associations and, more in general, volunteers. On the contrary, the large public displays a lower level of knowledge on these issues. While citizens are aware of the emergency telephone numbers and areas at risk of floods, they know almost nothing about areas of assistance in case of floods and measures included in the Civil Protection Plan. Furthermore, most of the surveyed citizens report not feeling ready to face a flood event.
- A well developed information system on flood risks. However, 58% of the surveyed population in the basin consider it inadequate. The inadequacy of the system is mostly due to the use of a very technical language that is not accessible to the large public. Furthermore, some of the information is still not available online (i.e. Civil Protection plans). Accessibility to information on



floods may also be limited due to the modalities for its diffusion. Most of the information, especially during flood events, is diffused via web, traditional media or through telecommunication systems (sms/phone alert). However, telecommunication networks (internet, cell phones, etc) are rather weak in the mountain part of Trebbia sub-basin and at risk of stop working during floods. Furthermore, according to case study interviews and focus group, reliability of information, especially during the flooding events, is an issue in the case of social media sources (i.e. Facebook). There not seems to be any monitoring of the information diffused via Facebook/other social media on floods risks and events, which coupled with citizens' limited knowledge on the management of flood risks, may determine inadequate behaviours, especially during flood events.

- Fragmentation of networks of actors involved in flood risks prevention, management and mitigation, especially at local level. While, there is a good level of collaboration between all actors along Trebbia sub-basin during flood crises, it is rather fragmented in the prevention and preparedness phases. Indeed, national and regional actors interact mainly between and among each other, while local actors interact mostly with the provincial and regional ones. Interactions between bureaucratic actors and social ones occur mostly at local level. However, they are mostly informal and in some parts of the basin (the mountain part) are very limited.
- Weak participation of local communities in the flood risks management system, especially in the prevention and preparedness phases. Despite the fact that Emilia Romagna region is one of the few Italian regions to have a law on participatory processes, no participatory process has been implemented on flood risks management in Trebbia basin. The only participatory process that involves the entire has been implemented in the framework of Trebbia water management contract. However, it has only limitedly tackled flood risks, as these are not its main objective. Currently, participation is limited to one-way (top-down) technical communication on flood risks prevention and management, especially in the prevention and preparedness phases. During the recovery phase, citizens become active actors, taking self-organised actions to recover from flood events. However, some improvements are taking place, especially in the plain part of the basin.

Social capacities on flood risks in the municipality of Rivergaro and Rottofreno, targeted by the capacity building process, are more developed at institutional level, that at the community one. However, the municipality of Rivergaro can rely on a good

level of social capacities also at community level, embedded in particular in civil protection associations and other local associations.

At institutional level, both municipalities are characterised by:

- A good level of knowledge on flood risks prevention and management. They can rely on a specific civil protection department of Unione Bassa Val Trebbia.
- Several tools for diffusing information on flood risks (local system Arturo, regional WebAlert site, diffusion of regional flood alerts on local newspapers, municipal websites, etc). Surveyed population from Rivergaro and Rottofreno considers more often that the information in their municipality is adequate than survey respondents from other Trebbia municipalities.
- The capacity to learn from past events. The flood risk management system in both municipalities has shown the capacity to learn from past flood events. For instance, the mayor of Rottofreno started the creation of a local flood warning system (Arturo system) that involves also the municipality of Rivergaro. Both municipalities have taken action to open the flood risks management system to local communities, increasing the collaboration with civil protection associations also in the prevention and preparedness phases. Together with Unione Bassa Val Trebbia, they have organised information sessions to give citizens more information on floods risk prevention and management. In the municipality of Rivergaro drills on flood have also been organized.
- A high level of motivation to better prevent, manage and mitigate flood events, especially after the 2015 floods;
- A good level of collaboration with local actors within their municipality and Union of municipalities on flood risks. Both municipalities have a strong interaction with civil protection associations and other local association on flood risks. However, interactions are mostly informal and they are not entirely internalised in the decision-making system on flood risks.
- In the last years, there have been some changes in the flood risks management system of the two municipalities for community's involvement. Nevertheless, public participation is mostly limited to one-way technical communication on flood risks.
- As in the rest of the basin, funds provided to the flood risks management system are extremely limited.

At community level, according to the survey results, the community of Rivergaro displays a higher level of social capacity on flood risks than those in the rest of the basin.

In both municipalities there is a good level of knowledge on emergency numbers and areas at risk of floods at community level. However, knowledge on areas of assistance, on behaviours to adapt in case of floods and on measures included in the Civil Protection Plan are limited to less than 50% of the surveyed population. In fact only a limited part of the population in the two municipalities feels prepared to face a flood event: 35.3% in Rivergaro and 21.9% in Rottofreno.

In both areas, communities are more motivated than in the past to participate in flood risks prevention and management. In fact in both municipalities, surveyed population considers that floods are a natural event to whose prevention, management and mitigation should contribute all citizens. Nevertheless, most of the surveyed citizens (65% in Rivergaro and 48% in Rottofreno) feel that their knowledge and experience on flood risks is not at all or weakly integrated in the institutional flood risks management system.

In both municipalities citizens' participation in the flood risks management system occurs especially during the recovery phase. In the municipality of Rivergaro, All River local Committee was created after the 2015 with the purpose to raise funds for supporting the recovery process and to take community action on flood risks.

We can conclude that both at the basin level and in the two municipalities some social capacities are well developed (i.e. knowledge on floods at institutional level; motivation to prevent, manage and mitigate flood risks and to work with pairs and other actors on these issues; learning from past events and integrating knowledge in the flood risks management system, especially at institutional level), while others are limited (i.e. knowledge at community level; community participation in the flood risks management system; funding).

Therefore, the CAPFLO participatory capacity building process in the municipality of Rivergaro and Rottofreno is going to focus, in particular, on improving citizens' knowledge on flood risks prevention, management and mitigation and their participation in the flood risks management system in the prevention and preparedness phases.

### 3 Participatory capacity building process: Planning

#### 3.1 Validation and co-design of pilot actions

This phase aims to contribute to increasing knowledge of policymakers, stakeholders and citizens of Rivergaro and Rottofreno on the strengths and weaknesses of the flood risk management system in Trebbia basin and, in particular, on the level of social capacities for flood risks management at institutional and community level at the basin level and in their municipalities.

Furthermore, it also aims to increase community's participation in the flood risks management system, by actively engaging the local communities in the two municipalities in the planning and implementation of the participatory capacity building process. In addition, it will favour a learning process on citizens' role in the FRM system, through an exchange of ideas between policymakers, stakeholders and citizens on this issue.

The participatory planning of the capacity building process contributes to the objective of the FRM Plan of Emilia Romagna Region of establishing/improving the institutional planning of flood risks management in order to deal better with flood events.

It is implemented in one step: validation, identification, selection and organisation of pilot actions. Furthermore, it is delivered through one participatory mechanism: deliberative workshop (brainstorming). The paragraph below provides a description of the activities and results.

##### 3.1.1 Validation of the capacity assessment and selection of pilot actions

###### 3.1.1.1 Description

<b>Step</b>	Validation of the capacity assessment and selection of potential pilot actions
<b>Participatory mechanism</b>	Deliberative workshop
<b>Participatory Activity</b>	Brainstorming
<b>Description of the action</b>	The action consisted in 1 workshop with: <ul style="list-style-type: none"><li>• Local institutional actors: Municipality of Rivergaro, Municipality of Rottofreno, Unione Bassa Val Trebbia e Val Luretta</li><li>• Local politicians: mayors of Rottofreno and Rivergaro and president of Unione Bassa Val Trebbia e Val Luretta</li><li>• Local social actors: representatives of civil protection associations and other local associations from Rivergaro and Rottofreno;</li></ul>

	<p>citizens.</p> <p>The workshop, held on the 14<sup>th</sup> of March, included two sessions:</p> <ul style="list-style-type: none"> <li>• Validation of the findings of the social capacity assessment in Trebbia basin and, in particular, in Rivergaro and Rottofreno</li> </ul> <p>The first session consisted in the presentation and discussion with participants of the main findings of the assessment.</p> <ul style="list-style-type: none"> <li>• Identification and selection of the pilot actions to be implemented within the participatory capacity building process</li> </ul> <p>Based on the CAPFLO Participatory tool drafted in the previous task, we defined a potential list of types of participatory actions. The purpose of the list was to introduce participants to participatory mechanisms and to stimulate their active participation in the selection of pilot actions.</p>
<b>Target group</b>	Local policymakers and stakeholders; citizens
<b>Duration</b>	2h30/workshop
<b>Information needs</b>	<p>Presentation of the capacity assessment</p> <p>Presentation of the list of actions</p>

### 3.1.1.2 Results

23 policy makers, experts and stakeholders, including citizens, participated in the workshop.

#### Validation of the capacity assessment

With regards to the validation of the capacity assessment, participants generally agreed with the findings presented. No doubts on the results of the capacity assessment were raised. On the contrary, discussions with participants reinforced the findings of the capacity assessment.

Some participants raised additional issues not taken into consideration by the capacity assessment, such as the respect of laws. In fact, some of the participants pointed out that the Italian legislation foresaw a series of rules and actions aimed to prevent flood risks that enterprises and citizens did not always respect, worsening flood risks. As this aspect was not investigated by the capacity assessment, further research should be conducted to analyse its extent and causes.

Participants specified that warning people living in areas at risk of flood on time constituted one of the main aspects to work on. According to them, there are people and enterprises that are continuously flooded. As underlined both by the capacity assessment and the two mayors attending the workshop, the improvement of the warning system is currently ongoing. Several tools have been already implemented, such as, for instance: the development of the Arturo app, which will be soon released also to citizens; the WebAlert system, including also a warning system through sms. At the moment, both municipalities work on the creation of a registry of citizens and enterprises in areas at risk of floods. Both municipalities aim, in fact, to warn firstly people and enterprises subject at higher risks of floods. In addition, the two mayors underlined that informative and formative actions targeting citizens and enterprises would accompany the release of the sms warning system and Arturo app.

Some participants also questioned the equity of bearing the costs at community level for enterprises flooded, located in the flooding areas of the floods. They pointed out that the presence of these enterprises in such areas was not in line with the Italian legislation, according to which natural flooding areas of rivers should be freed of buildings. The capacity assessment also revealed that conflicting views existed in Trebbia basin on this issue.

### **Identification and selection of pilot actions**

Participants positively welcomed the proposed list of actions. They underlined the importance of targeting old people that have a good knowledge of both the river and past flood events and that can pass it to both institutions and other participants involved. Furthermore, they also pointed out that it is relevant that participatory actions involve both citizens and technical staff of local authorities so that to reduce the gap in this area between institutions and citizens.

The table below presents the pilot actions selected together with participants in the workshop.

*Table 2 Pilot action 1*

<b>Pilot action 1 Participatory walk along Trebbia river in Rivergaro</b>	
Type of action	Citizens' engagement initiatives
Target group	Citizens from Rivergaro
Objectives	<ul style="list-style-type: none"> <li>Gather knowledge on citizens' relation with the river and on their perception about flood risks prevention, management and mitigation in the two municipalities that will feed the process of co-designing the addendum on Arturo to the Civil protection plans and the communication messages on flood risks of the Arturo app</li> </ul>

	<ul style="list-style-type: none"> <li>• Build citizens' awareness on their role in the prevention, management and mitigation of floods</li> <li>• Engage participants in the other steps of the participatory capacity building process in Rivergaro</li> </ul>
Description of the action	<p>The action consists in a walk along a stretch of Trebbia river in the municipality of Rivergaro. The stretch selected together with participants in the workshop includes areas flooded in the past.</p> <p>The walk will be guided by four local stakeholders with a good knowledge of Trebbia river: representative of the Civil protection association "Pubblica Assistenza"; representative of the civil protection association "Placentia" and president of the camping from Rivergaro; representative of the local association "Pro loco" and the representative of the No tube association.</p> <p>The walk will open with an introductory session on the CAPFLO project and on its objectives. The walk will end with a discussion with participants, to structure knowledge gathered during the walk on their relation with the river and on flood risks prevention, management and mitigation. Furthermore, this session will also include team building activities aimed to engaged participants in the next steps of the participatory process and to create a cohesive group.</p> <p>Furthermore, a survey will be carried out during the walk to assess the contribution of the action to improving social capacities on flood risks.</p>

Table 3 Pilot action 2

Pilot action 2	
Round table on flood risks prevention, management and mitigation in Rottofreno	
Type of action	Deliberative workshop
Target group	Citizens, stakeholders and institutions from Rottofreno
Objectives	<ul style="list-style-type: none"> <li>• Create and share knowledge on Trebbia river in Rottofreno and on flood risks prevention, management and mitigation in this area in order for all participants to learn from each other. The knowledge gathered in this phase will feed the process of co-designing the addendum on Arturo to the Civil protection plans and the communication messages on flood risks of the Arturo app</li> <li>• Engage participants, in particular citizens, in the participation in the capacity building process in Rottofreno and build a cohesive group</li> </ul>
Description of the action	<p>The action consists in a round table on flood risks in Rottofreno. The discussion will focus on gathering and sharing knowledge on Trebbia river in Rottofreno and on participants' perception of flood risks in Rottofreno as well as their opinion on how flood risks in this area could be better prevented, managed and mitigated. Furthermore, the session will also include team-building activities to create a cohesive group and to engage participants in the next steps of the participatory process in Rottofreno.</p>

Table 4 Pilot action 3

<b>Pilot action 3</b> <b>Workshop with professionals of the Flood risks management system</b>	
Type of action	Deliberative workshop
Target group	Regional and local institutions in the area of flood risks management; civil protection associations; associations of fishermen/farmers; experts in the field, etc)
Objectives	<ul style="list-style-type: none"> <li>• Improve the information system in the two municipalities, in particular by increasing its accessibility to the general public, its reliability and quality</li> <li>• Integrate stakeholders' knowledge in the flood risks management system</li> <li>• Improve collaboration between stakeholders and institutions in this area</li> </ul>
Description of the action	<p>The workshop will consist in the co-design of measures on flood risks of the Arturo app for its implementation in the municipalities of Rivergaro and Rottofreno. A particular focus will be paid to designing messages for communicating flood risks to citizens using the Arturo app.</p> <p>Furthermore, the workshop will also produce measures for improving the Civil protection plans of the two municipalities.</p>

Table 5 Pilot action 4

<b>Pilot action 4</b> <b>Workshops with citizens from Rivergaro and Rottofreno</b>	
Type of action	Deliberative workshop
Target group	Citizens from Rivergaro and Rottofreno
Objectives	<ul style="list-style-type: none"> <li>• Improve the information system in the two municipalities, in particular by increasing its accessibility to the general public, its reliability and quality</li> <li>• Integrate citizens' knowledge in the flood risks management system</li> <li>• Engage citizens' in flood risks prevention, management and mitigation</li> </ul>
Description of the action	<p>The workshop will consist in debating with participants on the draft measures defined during the workshop with professionals, in order to improve their contents and communication potential. The analysis of measures and the debate will focus on the one hand on the perceived utility of the actions proposed and on the other hand on their accessibility to non-professional users.</p>



Besides the pilot actions, the participatory capacity building process also includes the dissemination of all findings.

The dissemination phase aims to spread knowledge acquired in the previous phases in order to raise awareness of local communities on flood risks, with a particular focus on measures to be taken by citizens to prevent, manage and mitigate flood risks. Two actions are foreseen to ensure a wide dissemination of knowledge gathered during the participatory process:

- Diffusion of the reports produced during the participatory process;
- Diffusion of postcards with the main messages elaborated during the process in the schools and public bodies from Rottofreno and Rivergaro.

### **3.1.2 Organisation of the pilot actions**

Based on the final proposal of participatory capacity building actions, we develop a detailed proposal of actions, including: type of action, target group, duration, information needs and level of feasibility in terms of resources, and calendar for the implementation of actions (Table 6). Moreover, we have identified potential risks of participatory actions and strategies for their mitigation (Table 7).

Table 6 Description of Pilot actions

PILOT ACTIONS					
Type of action	Participatory action: title	Target group	Duration	Information needs	Calendar
Citizens' engagement initiative	1. Participatory walk along Trebbia river in Rivergaro	Citizens of Rivergaro	5h	Map with the walk path Analysis of past flood events in Rivergaro and in particular in the walk area Identification of local guides to conduct the walk Printed synthesis of the social capacity assessment findings in Trebbia basin An adequate room for allowing participants to sit in circle; an empty wall where to hang paper to allow people to draw and write	29 <sup>th</sup> of April, 14.00-19.00
Deliberative workshop	2. Round table on flood risks prevention, management and mitigation in Rottofreno	Citizens, stakeholders and institutions from Rottofreno	2h and 30 minutes	Introductory presentation Printed synthesis of the social capacity assessment findings in Trebbia basin Maps with Trebbia river in Rottofreno Analysis of past flood events in Rottofreno	4 <sup>th</sup> or 5 <sup>th</sup> of May
Deliberative workshop	3. Workshop with professionals of the Flood risks management system	Regional and local institutions, civil protection associations, fishermen's/farmers' associations	2h and 30 minutes	Introductory presentation: objectives of the participatory process and action, rules, knowledge gathered in the previous phases Printed synthesis of the social capacity assessment findings in Trebbia basin Copies of the Civil Protection Plans of the two municipalities Presentation of the Arturo app and access to the app Maps of Trebbia river in Rottofreno and Rivergaro and of Trebbia basin Review of the Civil Protection Plans of	11 <sup>th</sup> of May

PILOT ACTIONS					
Type of action	Participatory action: title	Target group	Duration	Information needs	Calendar
				Rivergaro and Rottofreno Review of the Arturo app	
Deliberative workshop	4. Workshops with citizens from Rivergaro and Rottofreno	Citizens of Rivergaro and Rottofreno	2h and 30 minutes	Introductory presentation Review and synthesis of the knowledge collected previously Maps of Trebbia river Presentation of and access to the Arturo app	19 <sup>th</sup> of May (Rivergaro) 20 <sup>th</sup> of May (Rottofreno)

Table 6 Risks of participatory actions and strategies foreseen for their mitigation

Risks foreseen	Level of the probability that risks occur (low/medium/high)	Impact of expected risks on the effectiveness of the action (low/medium/high)	Strategies for mitigating identified risks
Low participation in the actions	Medium	High	Broad dissemination through social networks and municipalities, posters, mailing Involvement of the two mayors, local associations, civil protection associations and citizens in the organisation of the actions (i.e. walk along Trebbia)
Low dissemination of the results	Low	Medium	The participatory process includes a dissemination phase. All documents produced during the participatory process will be published on the websites of IRS and municipalities and will be diffused through social media. Furthermore, the dissemination phase also includes an information campaign through the diffusion of postcards, with the main messages on flood risks developed within the three workshops, in the schools and public bodies of Rivergaro and Rottofreno.

Risks foreseen	Level of the probability that risks occur (low/medium/high)	Impact of expected risks on the effectiveness of the action (low/medium/high)	Strategies for mitigating identified risks
Lack of involvement of public authorities	Low	Medium	<p>The mayors of the municipalities of Rivergaro and Rottofreno have been involved in the project since the very beginning. They have also been actively involved in the definition and organisation of pilot actions.</p> <p>The mayors have a good relation of provincial and regional authorities and can support us in the involvement of other public authorities.</p> <p>Other measures include: a continuous update of public authorities on the participatory process; an invitation long before the actions take place.</p>
Weather events (rain, etc.)	Medium	High	<p>This risk is relevant only for the walk along Trebbia. It cannot be mitigated. In case of rain, we will reschedule the walk.</p>



### **3.2 Planning the evaluation of the capacity building process**

The participatory capacity building process includes an evaluation of the contribution of the actions to the expected changes, in terms of improvement of local social capacities on flood risks prevention, management and mitigation. Considering the short time between the implementation process and the evaluation process, the expected change consists mainly in an improvement of social capacities on flood risks of actors involved in pilot actions.

The evaluation will focus on:

- The outputs of pilot actions
- The results obtained by pilot actions and their contribution to the expected change
- The main mechanisms that favoured or blocked the achievement of results
- Lessons for the future.

From a methodological point of view, the evaluation process will include interviews with the main actors involved in the planning and implementation of pilot actions and a pre-post survey with participants in the actions. The pre-post survey aims to collect data on the contribution of pilot actions to changes in participants' level of social capacities on flood risks prevention, management and mitigation. A pre-post questionnaire will be prepared before pilot actions. At the beginning of each pilot action, participants will fill in the pre questionnaire. At the end of each pilot action, they will fill in the post questionnaire.

The analysis of data collected will be an integral part of the present report.

### **3.3 Expected change and link to the FRMP**

As discussed in the previous chapter 2.4, the capacity building process will tackle two main social capacities: knowledge on flood risks prevention, management and mitigation and community's participation in flood risks management. The participatory process capacity building process is expected to contribute to:

- The improvement of local knowledge on flood risks prevention, management and mitigation and, in particular, of: the knowledge resources on flood risks of people involved in the process; the integration of community's knowledge in the flood risks management system; the accessibility and quality of the information system, and in particular of the Arturo app;

- Improving community’s involvement in the flood risks management system, in particular in the prevention and preparedness phases.

The table below details the expected changes for each pilot action and their relation to the regional Flood risks management plan.

*Table 7 Expected change on social capacities and link with FRMP*

Title of the action	Expected change	Relation with the FRMP (coherence with FRMP objectives)
Participatory walk along Trebbia river in Rivergaro	Improved local knowledge Improved citizens’ participation in the prevention/preparedness phase	Prevention and preparedness objectives: <ul style="list-style-type: none"> <li>• Improve the floods forecasting and warning system</li> <li>• Establish or improve the institutional planning of flood risks management in order to deal better with flood events</li> </ul>
Round table on flood risks prevention, management and mitigation in Rottofreno		
Workshop with professionals of the Flood risks management system		
Workshops with citizens from Rivergaro and Rottofreno		

## 4 Participatory capacity building process: Implementation

The participatory capacity building process started on the 29<sup>th</sup> of April 2017 and will end in September 2017.

The following participatory actions were implemented in the period April-May 2017, with the active collaboration of the mayors of the Municipality of Rottofreno and Rivergaro:

- Participatory walk along Trebbia river in Rivergaro
- Exploratory workshop on Trebbia River in Rottofreno
- Workshop with experts in flood risks prevention and management
- “We are speaking of...” – final workshop on flood risks communication with citizens and professionals from Rottofreno and Rivergaro.

The participatory capacity building process also includes a dissemination phase, which consists in the diffusion of all reports and postcards/ mini-guide with the main messages on flood risks derived from the participatory process. The postcards/mini-guide will be complemented and diffused in public institutions, and in particular in schools, from Rottofreno and Rivergaro.

### 4.1 Participatory walk along Trebbia river in Rivergaro

The table below presents the main features of this participatory action.

*Table 8 Participatory walk along Trebbia river in Rivergaro*

Planned action (yes/no)	Changes (in the participatory mechanism or activity, duration, target group, etc.) to the originally foreseen action	Participatory mechanism used for its delivery	Description of participatory activities carried out	Supportive features	Duration	Target group	Contribution to the expected change
Yes	Yes – reduction in the walk duration in order to facilitate the participation of old age people, families, shop owners, etc.	Citizen engagement initiatives	Participatory walk along a stretch of Trebbia river in the municipality of Rivergaro	Participated design  Politicians involved in direct interactions with participants;  Processes facilitated by experts and	3h and 30 min.	Citizens	Increasing participants' knowledge on flood risks prevention and management in Rivergaro  Unveiling participants' information needs and their proposals for improving

Planned action (yes/no)	Changes (in the participatory mechanism or activity, duration, target group, etc.) to the originally foreseen action	Participatory mechanism used for its delivery	Description of participatory activities carried out	Supportive features	Duration	Target group	Contribution to the expected change
				community  Use of communication tools			the system  Enhancing participants' participation in flood risks prevention and management system

### *Actors involved and activities implemented*

The walk took place on a stretch of Trebbia river in the municipality of Rivergaro. While initially a similar walk was foreseen for the municipality of Rottofreno, after discussions with local institutions, it was replaced with an exploratory workshop. The walk was abandoned due to the fact that Trebbia stretch in the municipality of Rottofreno is mainly an industrial area, not very suitable for a citizens' walk.



The walk was organised with the support of the mayors of Rivergaro and Rottofreno, in charge of participating to the identification of local guides and river stretch for the walk and of promoting the walk.

The Participatory walk included the following activities:

- *Identification of the local guides*

The selection of the local guides was opened to everyone active in the field of flood risks. During the deliberative workshop for the planning of participatory actions, participants were invited to candidate themselves as guides for the walk. 3 persons proposed themselves as guides: a citizen and two representatives of local civil protection associations.

- *Identification of the Trebbia stretch for the walk and definition of the walk contents together with local guides and the mayors of Rottofreno and Rivergaro*



Following the identification of the local guides, the subcontractor, in charge of the implementation of this action, explained the purpose of the walk to the three guides and defined with them the organisation of the walk and the Trebbia stretch.

- *Promotion of the walk on social media and on site*

The onsite promotion was mainly carried out by the Municipality of Rivergaro, while the consultant and the subcontractor promoted the action on social media.

- *Realisation of the walk*

Sixteen persons participated to the walk.

The walk started with a brief introduction of its context and purpose. Afterwards, the local



guides accompanied the participants along the selected Trebbia stretch. One of the guides, a citizen of Rivergaro, oriented participants towards the rediscovery of the relation between Trebbia river in Rivergaro and its inhabitants. The two civil protection guides accompanied the participants in the places hit by the last floods, explaining to them the main difficulties faced during the management of the flood event.

The walk closed with a debate on the main issues unveiled during the walk and on the main issues to be dealt with in the other participatory actions.

At the end of the debate, participants were asked to fill in an evaluation questionnaire. The results of the evaluation will be discussed in chapter 5.

### *Issues unveiled by the walk*

The main issues revealed during the walk focus on:

- *The relation between the river and its inhabitants*

Participants' testimonies narrated during the walk showed a strong bond between the local community of Rivergaro and Trebbia river.

Trebbia river is known for the quality of its waters and the beauty of its landscape. In fact, it has always been used as a leisure place. However, in the last twenty years the river has undergone numerous changes that alter its natural quality and make it less

resilient to floods. Despite these changes, inhabitants still acknowledge it as part of the identity of their community.

- *The management of flood crises*

According to participants to the walk, the flood management system is characterised by several challenges:

- Improving the upstream overflow forecast

Currently it is not precise, as it is impossible to measure the overflow level of Perino, a tributary of Trebbia, due to the lack of specific measurement tools. In the absence of this forecast, it is not possible to foresee all risks and the potential damages in Rivergaro. Participants emphasised that in the absence of specific tools, the mayor has to send a technician to measure the water level on the spot during flood crises.

- Adopting an automatic bulkhead system

At the moment bulkheads, used to stop the river from flooding the city, are assembled manually, which takes a lot of time. Some participants suggested using an automatic structure in order to speed up the assembling process.

- Improving the functionality of the non-return valves system

According to participants, this mechanism could work only if the water entering the system comes from the river. However, if it rains heavily there is the risk that the drainage system does not manage to contain the entire water, causing the flooding of the city.

- Adapting the information system on flood risks to citizens' needs

Information on flood risk is diffused mainly through official channels (certified mail, ARPAE website, website of the municipality, website of the Civil protection Agency) that citizens do not consult often. Furthermore, the language used is too technical for common citizens. To overcome this problem, a message (SMS) system has been introduced at regional level. However, in participants' view its diffusion without a proper information campaign on the concepts used might have the opposite effects, creating panic even in the presence of reduced flood risks.

- Creating a system that should support the mayor in deciding when to launch a flood alert

The current information system on hydraulic risks is designed for vast territories and their potential to occur is characterised by high uncertainty. Therefore, it may risk

creating false alarms and making citizens lose their confidence in it. Participants emphasised the need to create a system including more timely real information on flood risks in order to allow mayors to know when to launch the flood alarm and to whom.

- Identifying the proper channels for diffusing flood risks alerts

While participants recognized the potential of the Arturo local flood risks warning system to effectively inform citizens on flood risks, they also suggested some improvements to the app (i.e. using geolocation to warn also people in the area at risk and not only residents). Furthermore, all participants agreed on the need to accompany the app release with a targeted information campaign, as, for instance, the diffusion of postcards/mini-guide planned for September, and a social solidarity and mobilization campaign on flood risks (i.e. creation of a Participatory Neighbourhood Civil protection Plan). Participants also emphasized the need to use also a traditional alert system (i.e. ringing the bells, door to door information, etc) in order to ensure that people at risk of technological exclusion can also have access to information on flood risks.

### *Critical issues faced during the implementation of the action*

The main critical issue consists in the low number of participants. As mentioned previously, only 16 persons took place to the walk, most of which are already active in this field (i.e. experts, civil protection volunteers, politicians in charge of flood risks, citizens active in this area, etc). There are several potential reasons explaining the low participation:

- A part of the population still perceives flood risks prevention and management as a technical issue to be dealt with by professionals in this area (i.e. municipal staff, civil protection volunteers, politicians, etc), as shown also by the case study interviews;
- Lack of a brand identity adapted to the context and insufficient communication of the participatory action. The action was promoted through posters in public areas and in the City Hall and through social media (i.e. Facebook). However, the lack of a place-based logo and targeted communication message made the posters too generic and anonymous, reducing their visibility. In small contexts, as Rivergaro, general communication should be accompanied by direct (i.e. diffusion of postcards/ mini-guide in schools, local markets, etc) and adapted to specific target groups. This requires longer implementation times than the ones foreseen by the CAPFLO project.

- Reputation of some of the local guides. Despite the selection of active and acknowledged local guides in the flood risks field, local rivalries/small conflicts involving one of the guide made some citizens give up participating in the action, as revealed by some of the participants to the other participatory actions.
- Lack of incentives to participation (i.e. gadgets, organisation of a happy hour/lunch/etc, course credits, etc).

#### 4.2 Exploratory workshop on Trebbia River in Rottofreno

Planned action (yes/no)	Changes (in the participatory mechanism or activity, duration, target group, etc.) to the originally foreseen action	Participatory mechanism used for its delivery	Supportive features	Duration	Target group	Contribution to the expected change
Yes	Yes - the action replaced the participatory walk planned initially.	Deliberative workshop	<p>Politicians involved in direct interactions with participants;</p> <p>Processes facilitated by experts</p> <p>Use of communication tools</p>	3h	Citizens	<p>Increasing participants' knowledge on flood risks prevention and management in Rivergaro</p> <p>Unveiling participants' information needs and their proposals for improving the system</p> <p>Enhancing participants' participation in flood risks prevention and management system</p>

### *Actors involved and activities implemented*

The laboratory was organized with the active support of the mayor of the Municipality of Rottofreno. The mayor was involved in the promotion of the event and identification of the speakers on flood risks in Trebbia Valley.

The organisation of the laboratory included the following activities:

- Definition of the laboratory programme together with the mayor of Rottofreno;
- Identification of the speakers on floods and flood risks;
- Promotion of the workshop on site and through social media;
- Realisation of the laboratory

The laboratory took place on the 5<sup>th</sup> of May.

**25 people participated in the laboratory.** It started with two lectures on the characteristics of Trebbia river in Rottofreno and the related flood risks and on the characteristics of rains and floods in Rottofreno held by two university professors. Afterwards participants were divided in two groups to share their knowledge on critical aspects of Trebbia river and on the communication and management of floods in Rottofreno. At the end of the workshop, a satisfaction questionnaire was submitted to all participants.

### *Issues emerged from the workshop*

The main issues emerged from the workshop focus on:

- *The characteristics of Trebbia river*

According to participants, major attention should be paid to the management of Trebbia riverbed also through cleaning and maintenance campaigns. They underlined that farmers next to the riverbanks used to carry out spontaneously such activities in the past. However, nowadays the law forbids it. Therefore, participants proposed to



the representatives of local authorities, participating in the laboratory, to organise specific cleaning campaigns involving citizens.

- *The management of flood crises*

According to participants to the workshop, flood risks in Rottofreno are more reduced than in other areas of Trebbia Valley as there is a flood plain that allows the river to follow its natural course also during floods. In addition, as Rottofreno is located in the plain part of the river disposes of more time (around two hours) to prepare for facing the Trebbia overflow.

Participants underlined that the main problem regarding flood management in their municipality consisted in the large number of people that usually go near Trebbia to watch the overflow. Thus, they suggested the closure of the road near Trebbia to avoid the presence of people during a flood event.

Another issue surfaced by participants regards the presence of industrial plants and economic activities near the floodplain areas. Several participants noted that the activities flooded in the past should have been moved in areas that are less subject to floods.

- *The need to increase citizens' information and training on flood risks*

Citizens reported a limited knowledge on flood risks and underlined the need for continuative information and training on flood risks targeting citizens. According to participants information/training actions should be aimed at: planning flood management; training citizens on adequate behaviours during flood events; increasing awareness on flood risks in Rottofreno; training “contact citizens” that should act as a link between Civil Protection volunteers and the common citizens and help those in need during floods. Participants emphasized that postcards and informative documents, as those foreseen by the CAPFLO project, had to be diffused regularly to increase people’s understanding of flood risks in Rottofreno and to enhance them to take preventive measures. Furthermore, they urged authorities to organise regularly awareness raising and training sessions in schools, following the Japanese model on earthquakes training in schools.

As to the communication of flood alerts, the participants pointed out that digital tools, such as the Arturo app, had to be accompanied by off line communication tools (i.e. word of mouth) that can reach also people at risk of technological exclusion (i.e. elderly, disabled, etc). According to participants, off line communication tools are

extremely important considering the risk of dysfunctionality of broadband and telephone connection networks.

***Critical issues faced during the implementation of the action***

Following the difficulty faced in the previous action, communication activities were strengthened in order to reach a higher number of common citizens. 25 people participated in the action, half of which were common citizens. The strengthening of communication activities (i.e. direct communication carried out by the Mayor) and a high interest of people from Rottofreno in floods issues favoured a higher participation of ordinary citizens. The reputation of the Mayor of Rottofreno added to this, acting as a catalyser for people’s interests in the event and mobilisation.

Even though higher than in the previous action, the number of participants remains rather limited. In order to increase participation in small contexts, as Rottofreno, targeted and direct communication should be strengthened, incentives to participation should be offered and online and offline participation actions should be combined. Furthermore, the involvement of schools could trigger parents’, students’ and teachers’ higher interest in participatory activities in this field.

**4.3 Workshop with professionals in the flood risks field**

Planned action (yes/no)	Changes (in the participatory mechanism or activity, duration, target group, etc.) to the originally foreseen action	Participatory mechanism used for its delivery	Supportive features	Duration	Target group	Contribution to the expected change
Yes	Yes - the action was completed with a focus group	Deliberative workshop	Politicians involved in direct interactions with participants; Processes facilitated by experts	2h30 minutes	Professionals in flood risks prevention and management	Increasing participants’ knowledge on the functioning of the Arturo app  Unveiling participants’ views on ways to improve Arturo app and, more in general, the information system on flood risks

### *Actors involved and activities implemented*

The workshop was organised with the active support of the mayor of Rottofreno and Rivergaro.

The implementation of the workshop included the following activities:

- Definition of the workshop programme together with the two mayors;
- Promotion of the workshop with the support of the two mayors;
- Realisation of the workshop



The workshop took place on the 11<sup>th</sup> of May. **15 professionals** participated in the workshop. Most of the professionals represented local institutions and civil protection organisations.

The workshop started with a presentation of the Arturo app and its functioning, potentialities and limits. Afterwards, participants debated on its limits and potential improvements.

At the end of the workshop a satisfaction questionnaire was submitted to all participants.

### *Issues emerged from the workshop*

Participants' views on the information and prevention potential of the Arturo app were split. Some participants were rather sceptical on the use of the app as an information and prevention tool on flood risks, due to the high risk of dysfunctionality of broadband and telephone networks during flood events. On the contrary, others underlined the great potential of the Arturo app to speed the flood management operations and to better and continuously inform people on flood risks and on correct behaviours in case of floods.

Some participants expressed doubts about giving citizens an active role in the flood management operations, as foreseen by the Arturo app, due to their unexpected behaviour (i.e. panic, curiosity to see the overflow, etc) that could put them at higher risks. Conversely, other participants sustained that only "a diffused" civil protection system in which all actors (citizens, institutions, volunteers) have a specific and well defined role could ensure an effective prevention and management of flood risks.



According to them, the diffusion of the app should stimulate a part of the citizens to participate in the training courses allowing full access to it. In turn, they should act as promoters of correct behaviours for flood prevention and management and of community protection actions in case of floods. In a “diffused” civil protection system, these citizens are the link between civil protection volunteers and common citizens, facilitating flood protection operations during flood events.

***Critical issues faced during the implementation of the action***

The main critical issue regards the absence of the professionals representing provincial and regional institutions in charge of flood risks prevention and management. This was mainly due to the organisation of the workshop outside office hours and to the fact that it took place outside the city where most of the institutions are located.

In order to overcome this problem, a focus group was organised with 11 provincial and regional actors.

**4.4 Workshop with citizens of Rivergaro**

Planned action (yes/no)	Changes (in the participatory mechanism or activity, duration, target group, etc.) to the originally foreseen action	Participatory mechanism used for its delivery	Supportive features	Duration	Target group	Contribution to the expected change
Yes	Yes - the action focused on the municipality of Rivergaro, which is subject to higher risks of flooding than Rottofreno	Deliberative workshop	Politicians involved in direct interactions with participants;  Processes facilitated by experts  Use of communication tools	2h30 minutes	Citizens, and in particular in areas at high risk of flooding in the municipality of Rivergaro	Increasing participants’ knowledge on flood risks prevention and management in Rivergaro  Unveiling participants’ information needs and their proposals for improving the system

### *Actors involved and activities implemented*

The workshop was organised with the support of the mayor of Rivergaro and Rottofreno.

The workshop targeted citizens of the municipality of Rivergaro, and in particular citizens flooded in the past and subject to high risks of flooding.

The organisation of the workshop included the following activities:



- Definition of the workshop programme jointly with the two mayors;
- Promotion of the workshop through on site communication and social media. On site communication included the diffusion of posters and telephone contacts with citizens subject to high risks of flood in the municipality of Rivergaro.
- Realisation of the workshop on the 27<sup>th</sup> of May

The workshop opened with a sum-up of the issues emerged from previous activities and went on with a presentation of a video of floods in Nice, where a number of people died due to incorrect behaviour during the flood event, and of the Arturo app that aims to improve information on flood risks and behaviours to adopt during flood events. Afterwards participants were asked to debate on the following issues:

- Information they want to receive during flood events;
- Information they would have liked to receive during the 2015 flood event;
- Actions that public authorities can take to increase citizens' information and formation on flood risks;
- Actions that citizens' can take to improve flood prevention and management.

### *Issues emerged from the workshop*

Most of the citizens attending the meeting stated that they did not feel prepared to face a flood event. In fact, from discussions emerged a lack of knowledge on the basic behaviours to be adopted during flood events. For instance, the request to receive timely information on flood alerts addressed by part of the citizens to local authorities

was motivated mainly by the need to have more time to save goods stored in cellars or garages. These affirmations made the civil protection authorities and better informed citizens to underline the need for strengthening participatory actions by undertaking a long-lasting information and formation campaign on flood risks and correct behaviours before and during flood events.

As to the means to use for communicating flood alerts, citizens made several proposals: digital tools (i.e. Arturo app, WebAlert website, etc), sms warning, ringing the bells, etc. As to sms warning, participants had different opinions on the target group: some of them sustained the need to inform all inhabitants, while others asked authorities to inform firstly residents at high risks of floods and secondly the other residents.

Irrespective of the communication channel, all participants agreed on the fact that an effective flood prevention and management system had to be founded on a “diffused” civil protection system, which, in turn, is based on a tacit social pact between citizens and institutions. Citizens informed on flood risks are at its centre, since they will be in charge of informing/saving their neighbours in case of floods. Participants expressed different opinions on the citizens to have this role. According to a part of the participants, they should be people in the areas at risk of floods. On the contrary, according to other participants, they should be citizens in areas not at risk of floods, since the former would be involved in saving themselves and at best their neighbours. All participants agreed on the fact that these citizens had to be persons well known in the community and legitimised by public authorities to intervene in case of flood events.

### *Critical issues faced during the implementation of the action*

The main critical issue consists in citizens’ limited participation. Despite direct communication (phone calls with people at risk of flood risks in Rivergaro by the municipality and by the consultant) and communication on site and through social media, around **10 people** participated in the workshop.

One of the reasons consists in citizens’ view on the flood prevention and management system. As shown also by case study interviews, some people still consider floods a technical issue to be dealt with by public authorities and civil protection volunteers.

Another reason regards the workshop date and time. The workshop was held on Saturday from 10.00 to 12.30. Even though many of the contacted business owners (i.e. shop sellers, beauticians, barmen, etc), present in the areas at risk of floods,

expressed interest in the workshop, they emphasised that they were working at that hour and would not be able to participate.

#### 4.5 Dissemination phase

Planned action (yes/no)	Changes (in the participatory mechanism or activity, duration, target group, etc.) to the originally foreseen action	Participatory mechanism used for its delivery	Duration	Target group	Contribution to the expected change
Yes	No	Broadcast/distribution	June-September 2017	Citizens from Rivergaro and Rottofreno	Increasing participants' knowledge on behaviours to be adopted during floods

This phase focuses on the dissemination of the participatory capacity building findings on the one hand through the online publication of all reports and on the other hand through a specific communication campaign. This latter action consists in the diffusion of a mini-guide/postcard including specific messages on flood risks. Mini-guides/postcards will be diffused to schools and public authorities with the support of the mayors of Rottofreno and Rivergaro.

The main activities implemented within this action are: drafting of a report after each participatory action; online diffusion of the report; drafting and diffusion of the mini-guides/postcards (ongoing).

At the moment, there are no relevant critical issues.

## 5 Participatory capacity building process: Evaluation

The evaluation of the capacity building process is based on a satisfaction survey conducted after each pilot action and phone interviews with the main stakeholders involved (i.e. mayors). Satisfaction surveys were conducted for all actions, but for the focus group that involved 11 stakeholders.

Overall, 47 persons out of the 66 questioned people answered to the survey.

### 5.1 Outputs, results and sustainability of participatory actions

#### *Outputs of participatory actions*

**4 participatory actions** were implemented between April and June 2017. As mentioned previously, for each action a **report was drafted and diffused**.

Overall, **77 persons** were involved in the capacity building process.

Survey results show that **most of the participants are men. Half of them are experts and volunteers**, while 32% are common citizens. As noted previously, one of the main difficulties in the implementation of the participatory capacity consisted in the involvement of common citizens not active already in the area of flood prevention and management.

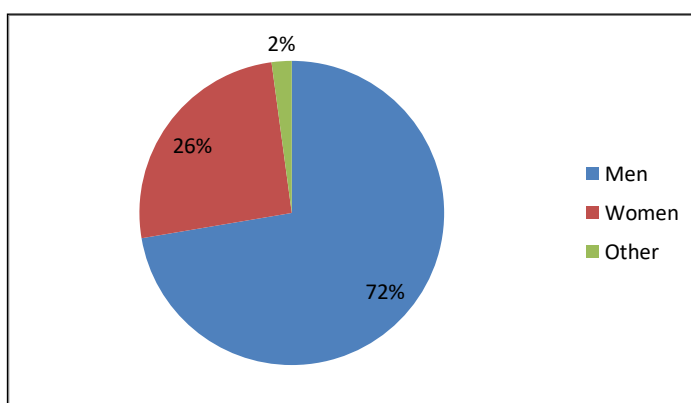


Figure 2 Survey respondents by gender

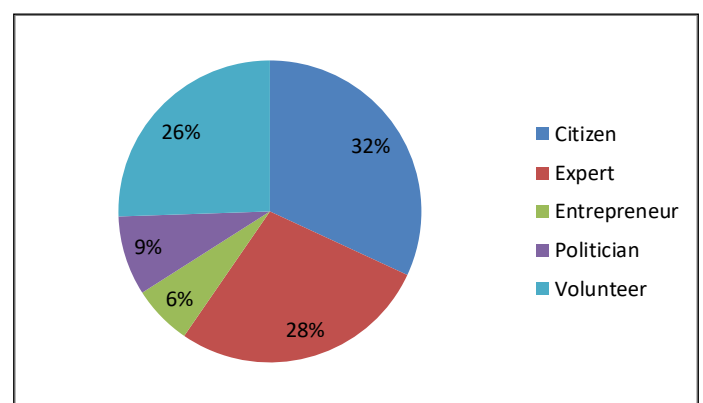


Figure 1 Survey respondents by role

## 5.2 Results and sustainability of participatory actions

### Results of participatory actions

#### Contribution to the expected change

The main expected changes consist in improving local knowledge on flood risks in the municipality of Rottofreno and Rivergaro and citizens' participation in the prevention and preparedness phase. As to knowledge, the expected changes refer to the improvement in both the participants' knowledge on flood risks and the information/communication system on flood risks in the two municipalities.

The discussion of the survey results focuses only on the former aspect, as the deployment of the effects of participatory actions on the latter aspect is a long-time process. The messages on correct behaviours and actions to be taken during flood events are to be included in the official version of the Arturo app. As the mayor of Rottofreno develops the app voluntarily with his own financial resources and since its full release to citizens is foreseen only after a specific training course, the deployment of the effects of the participatory process will probably occur after the end of the CAPFLO project. Therefore, a future evaluation is needed to fully assess the contribution of implemented actions to the improvement of the information/communication system on flood risks in the two municipalities.

As to knowledge on flood risks, **65%** of the survey **respondents** report **fairly sufficient/sufficient levels of previous knowledge on flood risks** and their prevention and management. Knowledge is higher among experts and volunteers<sup>3</sup> than among citizens, as shown also by the case study analysis.

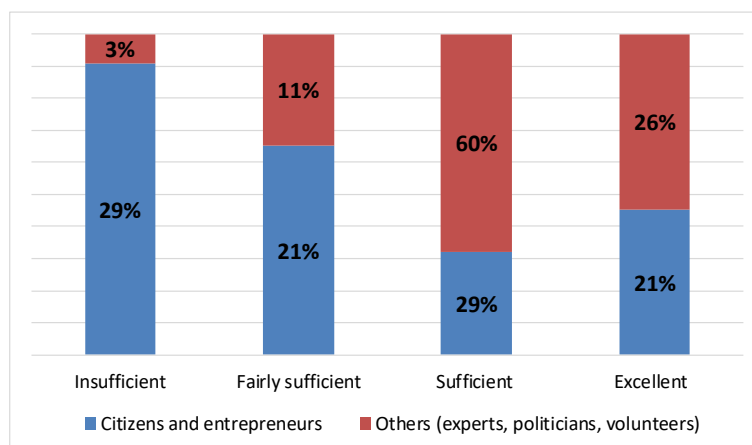
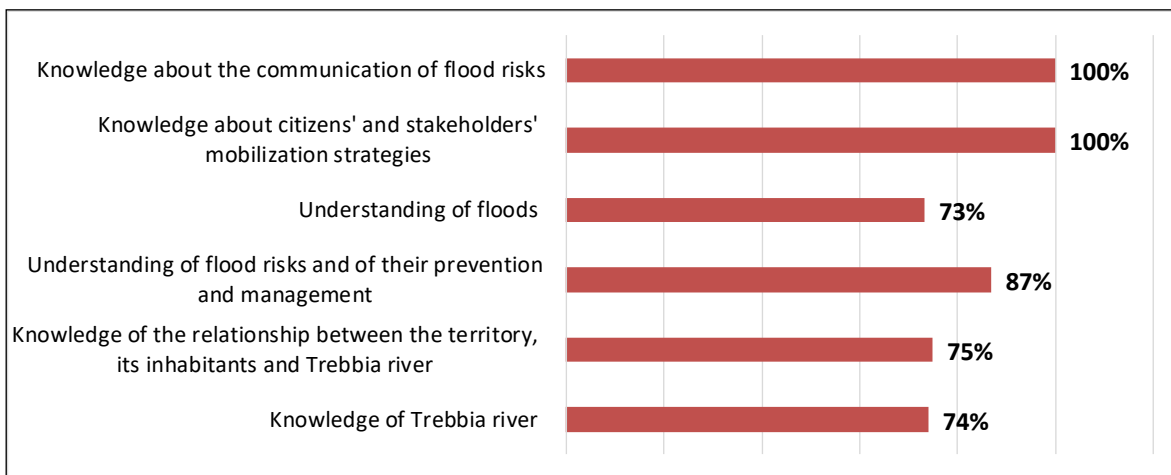


Figure 3 Previous knowledge on flood risks

<sup>3</sup> Almost all volunteers participating in pilot actions are civil protection volunteers who are trained on flood risks prevention and management.

Overall, survey results show a **high level of knowledge improvement on all flood risks related aspects** dealt with during participatory actions. In fact, **more than half of the participants** report a **sufficient/high level of knowledge improvement**. It is worth noting that **all participants** declare **sufficient/high knowledge development on communicating flood risks and participatory strategies**. These aspects are less known than the flood risks related general issues (i.e. types of flood risks, areas at risk, prevention and management measures, etc) among both citizens and experts/volunteers/local bodies, as underlined also by the case study analysis. Furthermore, they are also less tackled by training/information campaigns on flood risks than the general issues.



*Figure 4 Surveyed participants reporting sufficient/high knowledge improvement on flood risks related issues*

Survey results show that generally **participatory actions have contributed more to the improvement of citizens' knowledge than to that of experts and volunteers**. This is due to the fact that actions focused on basic knowledge on Trebbia river, floods and flood risks in the two municipalities and not on advanced information. This combined with experts', volunteers', politicians' already good knowledge on flood risks issues in the area, made participatory actions generally less effective in their case. Differences in the reported knowledge improvement level are null when it comes to communication of flood risks.

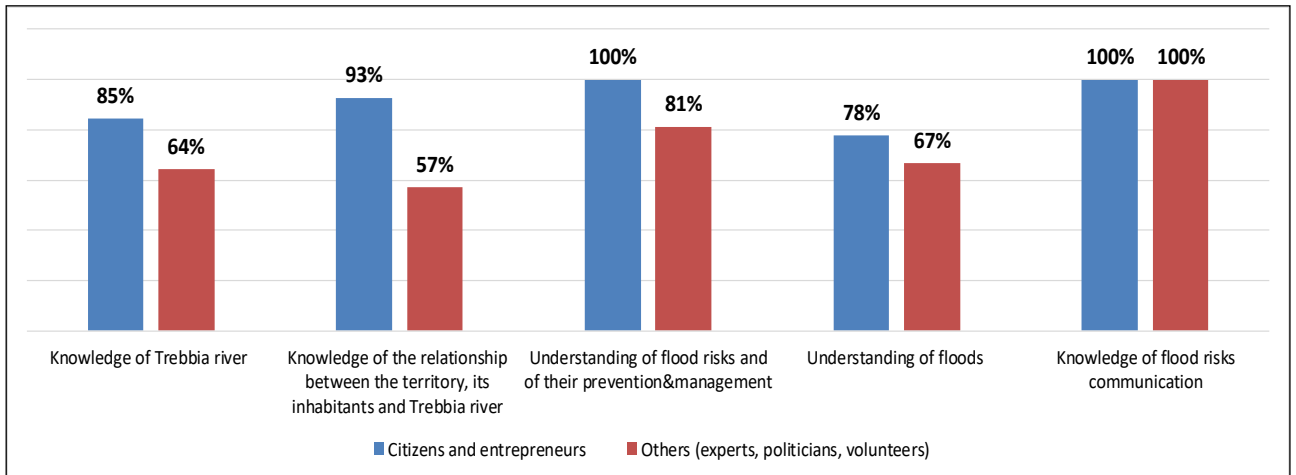


Figure 5 Citizens, entrepreneurs, experts, volunteers and politicians reporting sufficient/high level of knowledge on flood risks related issues

While the walk seems more effective in improving knowledge on Trebbia river, the workshop contributes more to increasing knowledge on flood risks and their prevention and management: 82% of the walk survey respondents declare a sufficient/high knowledge improvement compared to 71% of the workshop participants; on the contrary, 94% of the workshop survey respondents report a sufficient/high level of improvement in knowledge on flood risks compared to 73% of the walk survey respondents.

Besides improvement in knowledge, **participatory actions also contribute to increase motivation in preparing for facing flood risks.** All participatory mechanisms seem to contribute in the same measure to improving participants' motivation on flood risks.

**Almost all surveyed participants** report a **sufficient/high increase in the interest to find out more about flood risks and to participate more in events on flood risks.** Furthermore, **85% of the survey respondents** declare being interested in collaborating with the CAPFLO team to diffuse knowledge on flood risks.



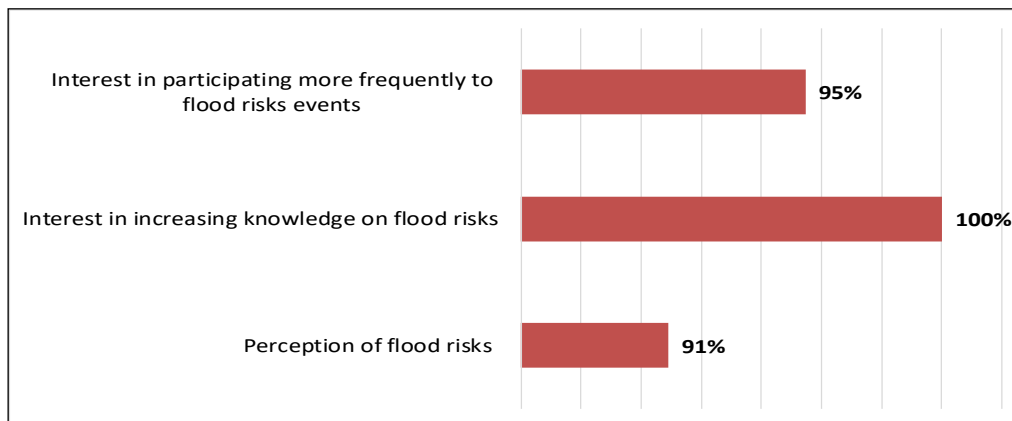


Figure 6 Survey respondents reporting a sufficient/high increase in perception of flood risks and interest in finding out more on them

**Participatory actions seem to contribute less to improving participants' awareness on citizens' role in the flood risks prevention and management system:** only 58% of the survey respondents declare a sufficient/high increase in their level of awareness. **Increased awareness is more common among citizens and entrepreneurs** (63% of the respondents) **than among experts, volunteers and politicians** (56% of the respondents). As stated previously, a part of the participants, in particular experts and volunteers, are still rather sceptical about increasing common citizen's role in flood prevention and management. This requires a mindset change, which takes more than one participatory action.

#### *Quality of the implementation of the participatory process*

According to **96% of the survey respondents, issues discussed during the actions are relevant for their territories.**

98% of the survey respondents declare themselves enough/very satisfied with participatory actions. 100% of the survey respondents declare being enough/very satisfied with explanations on the purpose of participatory actions, while for the other issues satisfaction levels vary between 91% and 98% of the surveyed people, as shown in the figure below.

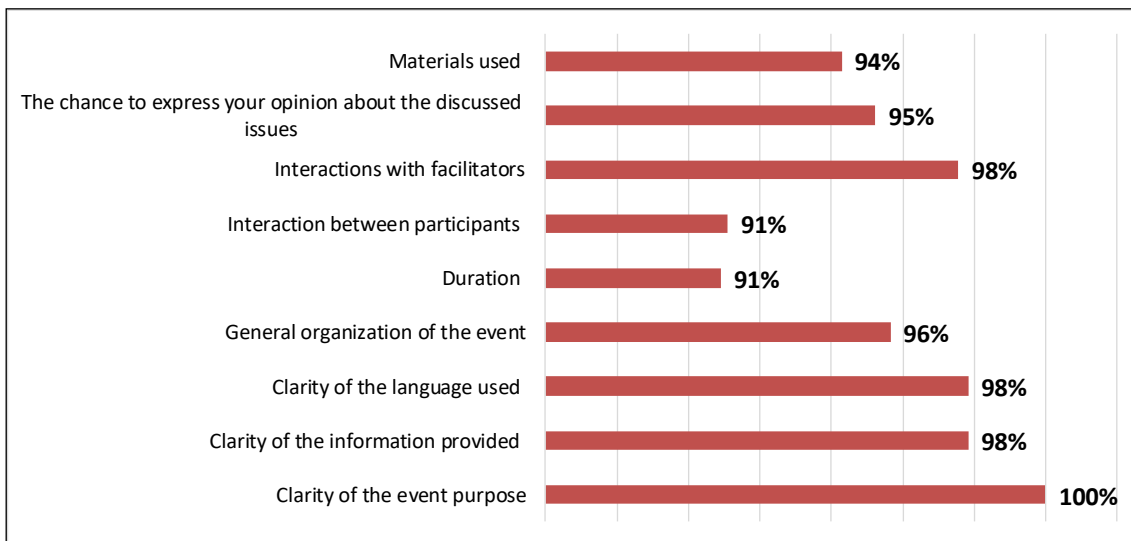


Figure 7 Satisfaction level: participants declaring themselves enough/very satisfied with the implementation process

### Sustainability of pilot actions

The sustainability of pilot actions is ensured on the one hand by the inclusion of knowledge learnt from the participatory process in the design of the Arturo App. The Arturo app has already undergone some changes during the participatory process (i.e. extending the target group of the warning system; creating a multi-functional app so that it is used even when there are no floods as a tool of prevention information, designing an interactive app, etc). Furthermore, information on flood behaviours and flood risks communication emerged from the participatory process will become an integral part of the Arturo app recommendations.

On the other hand, stakeholders underline that the participatory process and, more in general, the CAPFLO project has allowed them to know the flood risks prevention and management capacity level of their community and to understand better what are the gaps that need to be improved. According to stakeholders, participatory actions will continue through specific information campaigns on flood risks, the full release of the Arturo app and training courses for citizens interested in downloading it. In addition, a new project was proposed to the last call for proposals within the Civil Protection Union Mechanism. In the proposed project, Unione Bassa Val Trebbia e Val Luretta, to which the municipalities of Rivergaro and Rottofreno belong, is a project partner in charge of implementing by the participatory guidelines designed within CAPFLO.

### **5.3 Conclusions and lessons learnt for future participatory capacity building processes**

The participatory capacity building process on flood risks started in April 2017 and will end in September 2017.

The participatory process targets two municipalities in Val Trebbia Valley (Rivergaro and Rottofreno) and citizens, professionals and volunteers in these municipalities.

The participatory process aims to contribute on the one hand to improving local knowledge on flood risks, through increasing citizens' knowledge on flood risks prevention and management and by improving the local information/communication system. On the other hand, the process aims to improve citizens' involvement in flood risks prevention and management in the municipality of Rottofreno and Rivergaro.

The process is coherent with the following objectives of Civil Protection Plan of Emilia Romagna region: strengthening local knowledge on flood risks, especially in the plain part of the river and improving the floods forecasting and warning systems through the development of digital tools and citizens' active involvement in the system.

The capacity building process implemented in Rottofreno and Rivergaro includes 4 participatory actions:

- Walk on Trebbia river in the municipality of Rivergaro (organised on the 29<sup>th</sup> of April);
- Exploratory laboratory on floods in Rottofreno (organised on the 5<sup>th</sup> of May);
- Workshop with professionals in flood risks prevention and management from Rottofreno and Rivergaro (organised on the 11<sup>th</sup> of May), integrated with a focus group with provincial and regional actors (organised on the 26<sup>th</sup> of May);
- Workshop with citizens from Rivergaro (organised on the 27<sup>th</sup> of May).

In addition, the participatory process includes a dissemination phase, which consists in the diffusion of the participatory actions reports and of mini-guides/postcards with the correct behaviours to be adopted during flood events. From April to June 2017, 4 reports were drafted and published on the website of the participatory process.

The participatory process also foresees an evaluation of its outcomes and sustainability. The evaluation is based on questionnaires carried out after each participatory action and interviews with stakeholders involved in the implementation of the actions.

Overall, 77 persons participated in the actions implemented.

The main results achieved by the participatory process consist in:

- *Increase in participants' knowledge on flood risks related issues*, such as: characteristics of floods and flood risks; characteristics of Trebbia river in the two municipalities; relation between Trebbia, the territory and the inhabitants of the two municipalities; actions for the prevention and management of flood risks in the two municipalities; communication of flood risks and strategies for stakeholders' and citizens' mobilisation in this area. Over 70% of respondents to the survey questionnaires declare an improvement in their knowledge on them. *Citizens and entrepreneurs declare a higher level of knowledge increase than experts, volunteers and politicians do.*
- *Increase in participants' motivation to prepare for flood risks*. Despite the fact that increase in motivation was not a primary aim of the participatory process, almost all survey respondents report a sufficient/high increase in the interest to understand better flood risks and to participate in flood risks events. In addition, almost all participants (85%) show interest in sharing information on flood risks.
- *Increase in participants' awareness of citizens' role in the flood risks prevention and management system*. However, only 58% of participants report such an increase. Common citizens declare more often an increase in their awareness of citizens' role in the system than volunteers and experts.

As to the improvement of the information system, it is not possible to assess the effects of the participatory process, as actions are ongoing. A future evaluation is necessary to fully understand the contribution of the participatory process from this point of view.

Interviews with stakeholders emphasize that participatory actions on flood risks will continue in the framework of the Arturo app. Indeed, the Arturo app foresees citizens' training on flood risks for citizens interested in downloading it. Furthermore, citizens' messages on flood risks behaviours will be included in the Arturo app.

The main challenge faced during the process regards citizens' involvement. The participation of common citizens was rather limited. There are several reasons explaining it: perception of flood risks as a technical issue of which public institutions and civil protection volunteers are responsible; limited targeted and

direct communication; limited time for the implementation of the participatory process; logistic issues (i.e. location and duration); reputation of some of the local representative involved in the actions.

The main lessons learnt for future implementation refer to:

*1. Strengthening and targeting communication of participatory processes*

One of the main challenge of participatory processes consists in actively involving citizens in face-to-face activities. This is even higher for participatory processes dealing with issues considered technical, as floods are.

In this context, communication is an essential tool in favouring participation. The main lessons deriving from the CAPFLO project consist in:

- Contextualised communication: realisation of communication materials that are related to the context where the participatory process takes place, which inhabitants can easily note.
- Diversified communication channels. In small contexts, as Rivergaro and Rottofreno are, direct communication (i.e. distribution of fliers to the local market, schools; sms or phone contact; word of mouth; announcements in public events; etc) remains an important channel for reaching people, especially those far from the digital world. Direct communication has to be complemented by online communication and media communication.
- Targeted communication. Different communication channels have to be selected in order to reach various target groups. For instance, youth people are more sensitive to specific social media channels (i.e. Instagram, Snapchat, Youtube channels, Musca.Ly, etc), while adults use more others (i.e. Facebook, Twitter, etc). In order to reach old people, especially in small contexts as Rottofreno and Rivergaro, distribution of fliers to the local market, word of mouth and announcements during the mass can prove to be useful tools. In order to reach children and parents, communication in schools is essential.
- Long-time and continuous communication. Communication has to start long before the participatory process and be continuous and consistent throughout the participatory process.

Furthermore, communication messages should deconstruct preconceptions related to the technical nature of flood risks.

## *2. Offering incentives to/rewards for participation*

Offering incentives to/rewards for, such as, for instance, gadgets, cocktails/lunch, formative credits, participation certificates, etc are important for stimulating people in participating in events on floods.

## *3. Reputation of promoters/organisers of the participatory process*

The involvement of well-acknowledged people at local level (i.e. community leaders, etc) and/or legitimised in the flood area (i.e. civil protection volunteers, mayors, etc) can trigger a higher mobilisation of citizens. Specific attention should be paid to mayors' involvement. While mayor's involvement legitimises the process, favouring citizens' mobilisation, at the same time it can create a specific connotation of the participatory process. This may hinder the participation of a part of the population that does not recognize itself with the mayor's view. It is, thus, important that the participatory process involve all parties at stake, even though this might generate conflicts in some occasions.

In small contexts, as Rivergaro and Rottofreno, paying attention to involved people's reputation is even more important. In fact, in these communities, where people know each other, small rivalries associated to those directly involved in organisation/promotion of the process may hinder people's participation.

## *4. Logistic issues*

When participatory actions target citizens, these should be organised outside working hours and working days. Specific attention should be paid to working days of some categories, such as, for instance, workers in tourism, food services, beauticians, parents; etc.

On the contrary, when targeting public staff, participatory actions should be organised during normal working hours.

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### **Interviews**

Andrea Albasi, Mayor of Rivergaro, June, 9, 2017

Raffaele Veneziani, Mayor of Rottofreno, July, 4, 2017

### **Survey**

Evaluation questionnaire submitted at the end of each participatory action; 47 questionnaires received, corresponding to 71% of the surveyed persons



## Annex: evaluation questionnaires and interview template

### Participatory river walk, Rivergaro, 29 April 2017

Dear citizen, with these questions we would like to ask you to evaluate the “river walk” in which you have just participated in order to improve next meetings.

*To begin with, we would like to ask you some information about yourself*

1. You are:

Man  Woman

- Volunteer   
Politician   
Public servant in the environmental / civil protection / city planning sector   
Expert in risk/water/environment/city planning management   
Entrepreneur   
Citizen (not belonging to any of the above mentioned categories)

2. How would you rate your knowledge about the river, flood risks and your contribution to risks management and prevention before the walk?

*Insufficient*  *Sufficient enough*  *Sufficient*  *Excellent*

3. How satisfied are you with the walk?

*Not at all*  *Little*  *Enough*  *Very*

4. Were the issues discussed relevant for your territory?

*Not at all*  *Little*  *Enough*  *Very*

5. Has this walk improved/increased?

	Not at all	Little	Enough	Very
Your knowledge of Trebbia river	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your knowledge of the relationship between this territory, its inhabitants and Trebbia river	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your perception of flood risks in this territory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your understanding of flood risks in this territory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your awareness of citizens' role in being prepared to face flood risks in this territory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your interest in increasing your knowledge on flood risks and their prevention/management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your interest in participating more frequently to flood risks events organized in this territory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other aspects (specify):..... ..... ..... ..... .....				

6. Are you going to take active measures to get prepared to face flood risks in the upcoming weeks/months?

- Yes
- No
- I don't know

7. How satisfied are you with the organization of the meeting with regards to?

	Not at all	Little	Enough	Very
Clarity of the walk purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of the information provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of the language used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General organization of the meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Duration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interaction between participants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interactions with guides and experts (facilitators)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The chance to express your opinion about the discussed issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tools used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Are you interested in receiving information about the project and to collaborate with us to share information about flood risks to other citizens?

Yes

No

9. Can you leave us your contacts (mobile/telephone number, address, etc.)?

.....  
 .....

10. Do you have any suggestion or hint to improve next activities in Rivergaro about the flood risk matter?

.....  
 .....  
 .....  
 .....

**Thank you for participating and evaluating the river walk!**

**Explorative Laboratory on Trebbia river, Rottofreno, 5 May 2017**

Dear citizen, with these questions we would like to ask you to evaluate the “explorative laboratory” in which you have just participated in order to improve next meetings.

*To begin with, we would like to ask you some information about yourself*

1. You are:

Man  Woman  Other

- Volunteer
- Politician
- Public servant in the environmental / civil protection / city planning sector
- Expert in the risk/environment/city planning management
- Representative of environmental/civil protection/agricultural/other local associations
- Entrepreneur
- Citizen (not belonging to any of the above mentioned categories)

2. Have you suffered flood damages by previous floods?

Yes  No

3. Are you satisfied, in general terms, with the laboratory?

*Not at all*  *Little*  *Enough*  *Very*

4. Were the issues discussed relevant for your territory?

*Not at all*  *Little*  *Enough*  *Very*

5. How satisfied are you with the organization of the meeting with regards to?

	<i>Not at all</i>	<i>Little</i>	<i>Enough</i>	<i>Very</i>
--	-------------------	---------------	---------------	-------------

Clarity of the laboratory purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of the information provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of the language used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General organization of the meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Duration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interaction between participants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interactions with guides and experts (facilitators)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chance to express your opinion about the discussed issues				
Tools used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. How would you rate your knowledge about Trebbia river and flood risks before the laboratory?

*Insufficient*

*Sufficient enough*

*Sufficient*

*Excellent*

7. Has the explorative laboratory increased/improved?

	<i>Not at all</i>	<i>Little</i>	<i>Enough</i>	<i>Very</i>
Your knowledge of Trebbia river	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your knowledge of the relationship between this territory, its inhabitants and Trebbia river	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your understanding of floods (e.g. causes, types, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your understanding of food risks in this territory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your interest in getting more informed about flood risks on your territory				
Your interest in participating to flood risks events organized in this territory				
Other aspects (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Do you think that participating to this laboratory has changed your perception about flood risks in this territory?

*Not at all*

*Little*

*Enough*

*A lot*

9. Are you going to take active measures (e.g. read civil protection alerts, get informed on civil protection measures about flood risks in your territory, participating in events on the subject, becoming a civil protection volunteer, etc.) to get prepared to face flood risks in the upcoming weeks/months?

Yes

No

I don't know

10. Are you interested in receiving information about the project and to collaborate with us to share information about flood risks to other citizens?

Yes

No

11. Do you have any suggestion or hint to improve next activities in Rivergaro about the flood risk matter?

.....  
.....  
.....  
.....

**Thank you for participating and evaluating the explorative laboratory!**

Dear expert, with these questions we would like to ask you to evaluate the “Workshop” in which you have just participated in order to improve next meetings.

*To begin with, we would like to ask you some information about yourself*

1. You are:

Man  Woman  Other

2. Are you satisfied, in general terms, with the workshop?

*Not at all*  *Little*  *Enough*  *Very*

3. Were the issues discussed relevant for Val Trebbia territory and especially for Rottofreno and Rivergaro?

*Not at all*  *Little*  *Enough*  *Very*

4. How satisfied are you with the organization of the meeting with regards to?

	<i>Not at all</i>	<i>Little</i>	<i>Enough</i>	<i>Very</i>
Clarity of the workshop purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of the information provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of the language used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General organization of the meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Duration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interaction between participants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interactions with facilitators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chance to express your opinion about the discussed issues				
Tools used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. How would you rate your knowledge about Trebbia river and flood risks before the laboratory?

*Insufficient*  *Sufficient enough*  *Sufficient*  *Excellent*

6. Has this workshop improved/increased?

	<i>Not at all</i>	<i>Little</i>	<i>Enough</i>	<i>A lot</i>
Your understanding of food risks on this territory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your knowledge about strategies (e.g. Arturo app, etc.) to mitigate flood risks on this territory				
Your knowledge about citizens and stakeholders activation strategies on the flood risks subject				
Your understanding about the relevance of actively involving citizens to mitigate flood risks				
Other aspects (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Are you interested in receiving information about the project and to collaborate with us to share information on flood risks?

Yes

No

8. Do you have any suggestion or hint to improve next activities in Rivergaro about the flood risk matter?

.....  
 .....  
 .....  
 .....

**Thank you for participating and evaluating the workshop!**



**“Let’s talk about...” Meeting, Rivergaro, 27 May 2017**

Dear citizen, with these questions we would like to ask you to evaluate the “Workshop” in which you have just participated in order to improve next meetings.

*To begin with, we would like to ask you some information about yourself*

1. You are:

Man                Woman                Other           

- Volunteer
- Politician
- Public servant in the environmental / civil protection / city planning sector
- Expert in the risk/environment/city planning management
- Representative of environmental/civil protection/agricultural/other local associations
- Entrepreneur
- Citizen (not belonging to any of the above mentioned categories)

2. Have you suffered flood damages by previous floods?

Yes No

3. Are you satisfied, in general terms, with the meeting?

*Not at all*                      *Little*                      *Enough*                      *Very*

4. Were the issues discussed relevant for your territory?

*Not at all*                      *Little*                      *Enough*                      *Very*

5. How satisfied are you with the organization of the meeting with regards to?

	<i>Not at all</i>	<i>Little</i>	<i>Enough</i>	<i>Very</i>
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Clarity of the laboratory purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of the information provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of the language used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General organization of the meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Duration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interaction between participants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interactions with facilitators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chance to express your opinion about the discussed issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Has the meeting improved your knowledge about the communication of flood risks?

*Not at all*

*Little*

*Enough*

*A lot*





7. Has the meeting improved your understanding of the citizens active participation to the system of prevention and management of flood risks?

*Not at all*

*Little*

*Enough*

*A lot*





8. Are you interested in collaborating with us to share information about flood risks to other citizens?

Yes

No

**Thank you for participating and evaluating the workshop!**

### **Interview questions**

What have you learned from the participatory activities?

What aspect of the activities did you appreciate the most?

What could have been done differently? Do you have any suggestions?

Do you plan to continue the participatory process? How?