



1. Introduction

The Civic Adaptation Plan (Civic-AAP) is a tool developed under the LIFE Primes project aimed at increasing the resilience and adaptation of the community with respect to flood risk and support the preparation of civil protection plans according to a bottom –up approach.

The CAAP format has been developed as a structured, not user-editable, but user-friendly **online game**. It is mandatory to fill in all the questions: it takes a maximum of 10 minutes and can be filled in only once.

The CAAP game is intended to:

- Evaluate citizens' knowledge on the flood risk issue through a quiz, which ultimately outlines Your Resilience Profile
 - Training citizens with short user-friendly awareness-raising tutorials
 - Involve citizens in the definition of adaptation actions

Once the questionnaire has been filled out, you can download your own Civic Adaptation Plan.

This guide (Friendly Dynamic Tutorial) therefore allows users to fill the questionnaire by themselves and, step by step, this online format allows users to design their own resilience profile and guide them in the definition of their own personal adaptation plan, choosing between possible sets of adaptation actions aimed at mitigating the flood risk. The guide also includes a **glossary** dedicated to the key words used in relation to the flood and early warning systems issues.

This tool will allow to collect information in a standard format for the development of Civic Adaptation Plans in the framework of the Community Plan.

2. The format

The CAAP is subdivided into four sections. The first one relates to user features; the second one to the user resilience profile, namely the level of knowledge on the flood risk related issues; the third one is dedicated to training through short videos designed to enable users to bridge their knowledge gaps; finally, the fourth one is aimed at the definition of adaptation actions.

At the end of this process, users will be able to Download their Own Adaptation Plan.

The first section is intended to learn more about the person who is participating in the CAAP. Users are invited to provide the following information: email, age, gender, education level, profession, Province and Municipality, distance of one's house and of workplace from rivers and from the coast.

The second section is structured as a series of Single-Choice questions regarding: risk awareness of the local community, adaptation to climate change, early warning system, behaviors and civil protection plan.

A score is assigned to the right replies given by users. The final score obtained by the user will be, in turn, associated with a resilience profile, which will be returned to the user together with the right reply rate reached. 5 profiles can be identified and they range from Profile 5 – if the user has correctly answered 100% of the questions asked -, to Profile 1 -if the user has correctly answered up to a maximum of 20% of the questions asked. Each profile is associated with an evocative image of the level reached (Figure 1).



Figure 1

1. The Individual - User's characteristics
2. Resilience profile assessment of users' knowledge in relation to the flood /surge storm issue – QUIZ -
3. Training – Mini-tutorial intended to train interviewees based on their resilience profile – TUTORIAL
4. Involvement – ADAPTATION ACTIONS

According to the resilience profile obtained, users will be given the opportunity to deepen their knowledge about the flood risk related issues through short videos, presented by Ada, which reflect the ideas outlined in the previous section.

After viewing all the necessary tutorials, we move to the fourth and final section where a set of possible adaptation actions to be implement on a daily basis will be prioritized, in order to increase the community resilience and to prevent the flood risk.

The proposed actions are soft adaptation actions classified according to three main areas:

- **collecting information;**
- **submitting proposals to the local authorities;**
- **actions (within one's household)**
- **actions (within the local community)**
- **actions (at the workplace)**

Additionally, users will be given the opportunity to put forward new adaptation actions.

Once this step is completed, users can view all LIFE PRIMES tutorials, download one's own Civic Adaptation Plan that summarizes the entire CAAP process and/or send it by mail to the address indicated in the first section, by pressing the END pushbutton.

CAAP

CAAP is the so-called Civic Adaptation Plan, which every citizen can develop to increase one's capacity to adapt to the flood and storm surge risks. To make this process easy and fun, CAAP is structured as an **online game** that is intended to:

Evaluate citizens' knowledge on the flood and storm surge risks through a quiz, which ultimately outlines Your Resilience Profile

Train citizens with short user-friendly awareness-raising tutorials

Involve citizens in the definition of adaptation actions

When the quiz is completed, users can download their own Civic Adaptation Plan.

Dear citizens,

You are now ready to enter the CAAP!

You will need to register via email and answer all the questions.

Please, provide honest answers, since the goal of the CAAP is also to inform you on the aspects you do not know. It will only take ten minutes.

Remember that the CAAP can be filled in only once, but it can be shared with all the people you want.

Have fun!

Knowledge of the area and risk awareness

What are floods and storm surges?

- 1) Flooding is the result of floods caused by lakes and rivers. Storm surges are floods caused by the sea flooding a coastal area
- 2) A flood or storm surge is an increase in the level of a river or the sea
- 3) A flood or storm surge is the result of heavy rain for many consecutive days

Do you know what flood risk is?

- 1) Flood risk is a very heavy rain that causes road flooding
- 2) Flood risk is the potential adverse consequence of flooding for human health, for a certain region and for the environment
- 3) Flood risk is the fear of occurrence of a potentially damaging event.

What is the flood risk management plan?

- 1) It is the tool to effectively address and manage a flood
- 2) It is the document listing the areas at risk
- 3) It is the municipal emergency plan

What is climate change?

- Weather conditions changing over seasons
- The increase in extreme weather events
- The change in the average physical and chemical characteristics of the planet

What are greenhouse gases?

- 1) Gases that are able to absorb and re-emit terrestrial radiation
- 2) Chlorofluorocarbon gases
- 3) Gases that are contained in greenhouses

What are the mitigation and adaptation actions to address climate change?

- 1) Mitigation is intended to reduce greenhouse gases, adaptation is intended to reduce the damage caused by climate change
- 2) Mitigation and adaptation actions reduce the planet's stress
- 3) Mitigation and adaptation refer to actions aimed at changing the rain cycle and decreasing drought

What is meant by structural adaptation measures to climate change?

- 1) All those actions that citizens perform to address climate change
- 2) Construction of active defense works, such as retention basins and embankments
- 3) Municipal public building works.

What is meant by non structural adaptation measures to climate change?

- 1) Local governance rules and regulations, emergency plans, and early warning systems
- 2) The construction of breakwater piers and cliffs
- 3) The reduction of greenhouse gas emissions

What are the civil protection Early Warning System colour codes?

- 1) Green, blue, purple
- 2) Green, yellow, orange, red
- 3) White, green, yellow, red

The civil protection Early Warning System colour codes are ...

- 1) The same throughout the Italian national territory
- 2) Each region decides on its own
- 3) They are differentiated by land categories

How do you define these actions / behaviors to be put in place DURING a flood, are they right or wrong?

	Right	Wrong
You decide to go down to your cellar, basement or garage to secure your goods		X
You decide to go out to secure your car		X
You decide to go up to the upper floors if you are in a basement or ground floor	X	
You decide to take the elevator to reach the upper floors faster		X
You decide to turn off the gas and electricity	X	
You decide to drink water from the tap		X
You decide to limit cell phone use only to emergency calls	X	
You keep updated on how the situation evolves and follow the instructions provided by the authorities	X	
You decide to quickly reach the highest nearby area	X	
You decide to use the car		X
You decide to use two-wheeled vehicles to run faster		X
You walk away from the flooded area if you are out in the street	X	
You decide to use underpasses and bridges		X
You decide to stand on the embankment to monitor the flood in real time		X

How do you define these actions / behaviors to be put in place AFTER a flood, are they right or wrong?

	Right	Wrong
You decide to avoid passing by flooded roads	X	
You decide to move cautiously also in the areas where the flood has receded	X	
You turn on your gas and electrical system again, without having asked for the opinion of an expert		X
You use runoff systems even if you do not know the status of sewerage systems		X
You keep updated about critical issues still in place in your area and about the measures taken by your Municipality	X	
You decide to sleep in your basement		X
You decide to drink water from the tap, only if an ordinance is issued stating that drinking water is available again	X	
You decide to dispose of any special or bulky waste in accordance with the rulings issued by your Municipality	X	

Do you know what a municipal civil protection plan is?

- 1) It is a set of shared rules that civil society agrees upon for protection purposes
- 2) It is a document that sets out the good conduct rules to address climate change issues
- 3) It is the set of operating procedures that the Municipality lays down to cope up with natural disasters within its territory

Do you know who the target audience of the civil protection plan is?

- 1) Only operators and local authority officials
- 2) Operators, local authority officials and citizens
- 3) Only citizens

How is a municipal civil protection plan supposed to be?

- 1) It is supposed to change as little as possible to last over time
- 2) It must be written in a technical language
- 3) It must be a continuously updated and dynamic tool

Adaptation Actions

COLLECTING INFORMATION ON:

- 1) Weather forecasts, the weather situation and the evolution of the event
- 2) The safe areas of my area (waiting areas and key assistance areas for the population)
- 3) Any local critical issues, risks, early warning issues and proper conduct to be held.
- 4) Safety procedures to be adopted in case of flooding (workplace, school or recreational venues)
- 5) The municipalemergencyplan

SUBMITTING A PROPOSAL (to the local authorities) for:

- 1) The drafting of a guidebook providing suggestions to citizens on how to be useful (community work, waste disposal, mowing and cutoff branches cleaning and disposal etc.).
- 2) The provision of a readily available civil protection plan and identification of local safe areas by scheduling regular public meetings involving citizens and guided tours at the operational civil protection premises
- 3) Information activities for tourists on local risks
- 4) extracurricular activities (eg emergency drills, education / training activities, etc.) in collaboration with the civil protection officials
- 5) the organization of a joint cleaning and maintenance action of embankments, river beds / rivers / beaches

ACTIONS (within one's household)

- 1) Checking the safety conditions of one's house and functionally adapting one's house in relation to any possible flooding scenarios
- 2) Gearing up with one's family for a possible evacuation plan by doing a check list of the key actions to put in place
- 3) Drafting and promoting a family emergency plan (handy useful numbers to call, even in the workplace / school / recreational places, information on home systems to turn off, etc.); keeping an emergency kit (copy of documents, a first aid kit, a flashlight, a battery-powered radio, for example.) available in the house
- 4) Cleaning / non-blocking drains next to one's home
- 5) Participating in the initiatives proposed by the local government on these issues

ACTIONS (within the local community)

- 1) Volunteering as a reference person for flood/sea storm risk related issues within one's neighborhood
- 2) Devoting oneself to voluntary work in the environmental and civil protection area of one's town
- 3) Contributing to the dissemination of the civil protection plan of one's town
- 4) Providing a condo contingency plan, by identifying appropriate communication strategies (eg. a condo whatsapp group)
- 5) Keeping one's neighborhood clean

ACTIONS (At the workplace)

- 1) Checking that one's company has envisaged a contingency plan for flood risks.
- 2) Checking that one's company has envisaged an early warning system in case of a flood event
- 3) Making sure that adequate communication and information is provided to all workers
- 4) Checking that all the information needed to deal with the flood risk is available on one's company website
- 5) Making or soliciting investments for commissioning building safety actions to reduce flood risks.