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# A climate change adaptation measure through education and citizen science. The FLOODUP Project

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<http://gamariesgos.wordpress.com> [www.floodup.ub.edu](http://www.floodup.ub.edu)

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Fondo Europeo  
de Desarrollo  
Regional (FEDER)



Annual Meeting 2021

FLOODUP is a strategy that combines a participatory methodology (citizen science) with educational activities → adaptation measure (based on knowledge)

**OBJECTIVES FLOODUP:**

- (a) to collect information about the impact and management of natural hazards through citizen science.
- (b) to improve the knowledge, capacitation and empowerment of the population in regards to natural hazards and climatic change

**KEY QUESTIONS**

Can citizen science be considered an adaptation measure?

How to improve risk awareness of the population in the face of extreme events? (not only when they occur but also before and after)



# The FLOODUP Project

## FLOODUP Mobile Application



Floodup Web version

## Web, surveys, Twitter



[www.floodup.ub.edu](http://www.floodup.ub.edu)



Qüestionari sobre episodis d'inundacions

Aquest qüestionari ho estàs realitzant per membres del Grup d'Anàlisi de Situacions Meteorològiques Adverses del GRC de Meteorologia del Departament de Física Aplicada de la Universitat de Barcelona. Se't demana a objectes recollir informació per a la realització d'avaluats post-event en relació a l'impacte social i percepció de les inundacions. Aquest treball es realitza en el marc del projecte europeu internacional PRAGUA Interreg POCTEFA FEDER, el projecte finançat pel Ministeri de Ciència, Innovació i Universitats: MCI/2017-83305-C2-2-R, <https://mci.ub.edu/pragua> i el projecte AQUILLO (FCYT/ Ministerio de Ciencia, Innovación y Universidades). Agraïm per avançar la seva participació. Si està interessat/da en rebre més informació pot visitar [www.floodup.ub.edu](http://www.floodup.ub.edu) o [info@floodup.ub.edu](mailto:info@floodup.ub.edu) a Twitter: @GAMA -Riesgos Naturales - UB a Facebook) o contactar amb nosaltres per correu electrònic: [floodup@gmail.com](mailto:floodup@gmail.com)

Survey after-event



Twitter profile

## Educational materials



Flood model used in workshops and activities



Exhibition



Dossiers and materials for activities

## School projects



+Improve the education of children and young people (and teachers).  
 +To know the students perception of natural hazards.

-The challenge is to give it more scientific value, more work needs to be done.

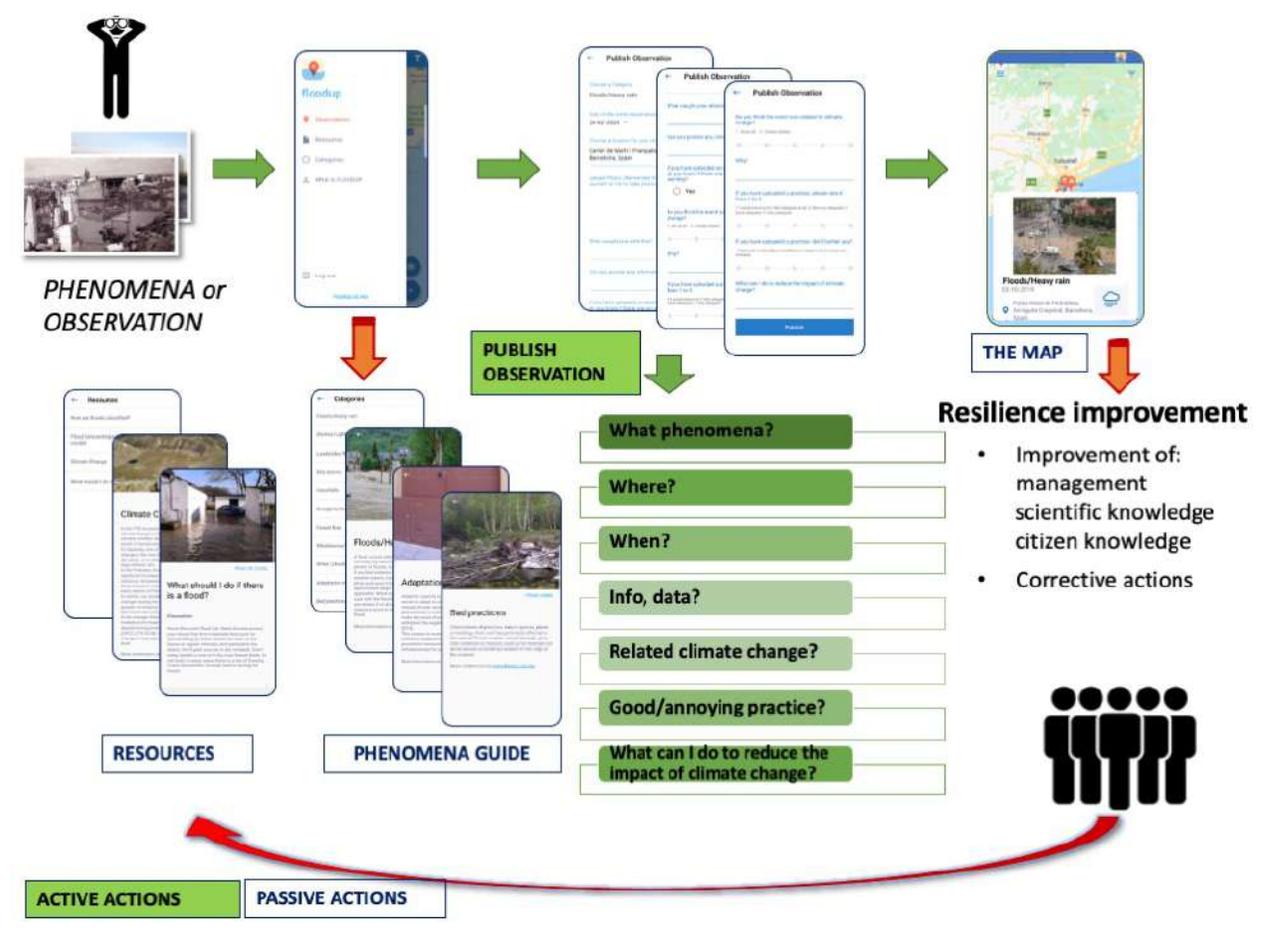
- +Collect information
- +Improve awareness
- +Educate
- +Awake historical memory
- +Stimulate new ideas

- Costs of development and maintenance
- Risk of low level of participation



THE APP FLOODUP

Philosophy and process of the project

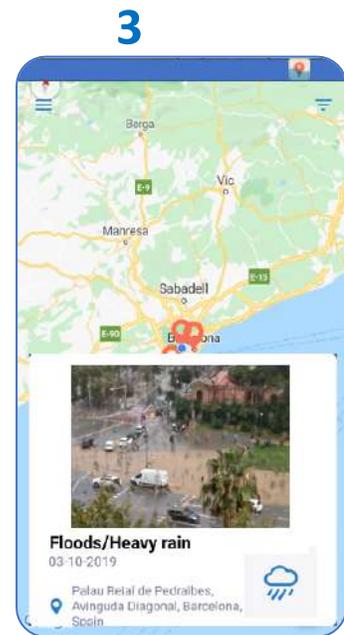
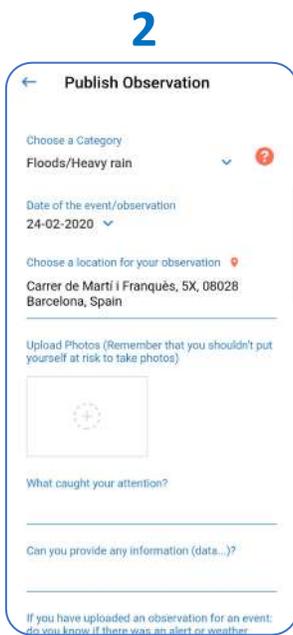


## The FLOODUP Project

### THE APP FLOODUP

- 1: Download the Floodup APP
- 2: Share: Send pictures and information about floods or other natural hazards
- 3: Discover: Explore the APP map and the observations near your home
- 4: Learn with the guide and resources of the APP

**FLOODUP** is a citizen science project that aims to explore the main impacts of natural hazards and climate change, aspects for improvement and how communities adapt.



**FLOOD UP to the APP = Upload the flood observation to the APP!**

[www.floodup.ub.edu](http://www.floodup.ub.edu)

And via mail:  
[floodup2@gmail.com](mailto:floodup2@gmail.com)  
You can also send stories, experiences, videos, audios...



## CONCLUSIONS

Citizen science can be a **good adaptation measure** in front of floods and climate change because:

- +Increase the population **awareness** and **empowerment** and promotes an engagement and active participation in **early warning systems**
- +More data to know local **impacts** of natural hazards and identify **differences** between communities → these data can contribute to the development of more **effective** adaptation strategies
- +Contribution to increase the impact of the research, the innovation and enrichment of research process (aligned with RRI)
- It is necessary to consider: the risk of a low level of **participation** and costs and complexity of **development** and maintenance.
- +The activities and materials shown are very useful as an educative strategy. These put the natural hazards in the agenda, beyond the time of occurrence of disasters (before and after) for example when we organise after-event campaigns or event anniversaries.
- + A good contribution to SDG: The spaces for dialogue and exchange that take place during the project generate proposals/suggestions/thoughts on natural disaster reduction that are closely linked to sustainable development.



# THANKS FOR YOUR ATTENTION

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