





Department for Environment Food & Rural Affairs

#### CECAN fellowship

INVESTIGATING THE VALUE OF QUALITATIVE COMPARATIVE ANALYSIS (QCA) IN RELATION TO THE DEFRA FLOOD RESILIENCE COMMUNITY PATHFINDER (FRCP) EVALUATION

> DR CLARE TWIGGER-ROSS COLLINGWOOD ENVIRONMENTAL PLANNING





#### **OVERVIEW OF PROJECT**

- 1. To apply Qualitative Comparative Analysis (QCA) to an existing evaluation to assess its applicability and benefit in relation to the evaluation of interventions in nexus issues, specifically flooding.
- 2. To increase the ability to attribute causality in the context of community resilience to flooding by providing evidence on longer term impacts of the Flood Resilience Community Pathfinder scheme to Defra policy leads
- 3. To provide greater insight into which interventions to improve community resilience to flooding work under what configuration of resilience/community/engagement factors.
- 4.To provide a practical example of QCA in use on a nexus issue to enable learning and capacity building within CECAN and its stakeholders

## FLOOD RESILIENCE COMMUNITY PATHFINDERS

Between April 2013 - March 2015 the UK Department of Environment Food and Rural Affairs provided funding to test innovative community flood resilience interventions carried out by 13 local authorities across England.

#### The interventions were intended to:

- Quantifiably improve the community's overall resilience to flooding
- Demonstrably improve financial resilience in relation to flooding
- Deliver sustained improvements which could be applied elsewhere





#### CHARACTERISTICS

**13** Pathfinders **Across England Range of scales** All at risk Not all had seen flooding All LA led 8 with NFF



#### SO WHAT?

- Pathfinders carried out capacity building activities between 2013-2015 and were successful across resilience capacities within that timeframe (see Defra report Twigger-Ross et al, 2015)
- BUT what about the longer term? Did the pathfinder catalyse longer term processes of resilience building?
- AND if so is it possible to look at what happened during the pathfinder and show what factors lead to that longer term resilience building?

#### **RESEARCH FRAMEWORK**

- From previous research in the area of flooding and climate change we have developed framework outlining the factors needed to enable sustained community involvement in resilience building activities where community resilience to shocks and stresses is broadly defined as:
- A set of capacities or resources that can be drawn upon by communities to address shocks and stresses so as to be able to sustain an acceptable level of community functioning
- Resilience building activities mean....
  - Communities working with local resources and local expertise
  - Capacities are developed to prepare and respond to, and to recover from emergencies
  - Resilience is the product of building capacity over domains: institutional, community capital, social, economic and infrastructure (after Cutter et al, 2010)

#### **RESEARCH QUESTION**

- In addition to the definition of community resilience and resilience capacities previous research suggest four key areas relating to increased community engagement in resilience building activities:
  - Institutional embedding
  - Community capital
  - Catalyst for change
  - Consistent leadership

QCA to test "In what ways do these factors combine to "predict" sustained community involvement in flood risk management at 2017?"



# RESEARCH APPROACH: DEVELOPING THE QCA

- Developed outcomes which include sustained flood groups or wardens 2017 (community involvement in FRM) – indicated by
  - whether or not the community involvement activity i.e. flood group or flood wardens developed between 2013 – 2015 was still active in 2017
- Developed conditions need to be clear about each and to be able to indicate presence or absence:
  - Institutional embedding = stable project management through the pathfinder between 2013-2015
  - Community capital = Presence of existing flood groups in area pre-2013
  - Catalyst for change = Community engagement specialist during pathfinder 2013 - 2015
  - Consistent leadership = Presence of project champion during the pathfinder 2013-2015
- Carried out QCA

#### FINDINGS

- OUTCOME: Sustained community involvement in FRM at 2017 that was started by the pathfinder
- Conditions:
  - Presence of project champion during the pathfinder (PCHAMP, pchamp)
  - Community engagement specialist during pathfinder (COMSPEC, comspec)
  - Presence of existing flood groups in area pre-2013 (PREVFGRP, prevfgrp)
  - Project management stability through pathfinder (STABLEPM, stablepm)

With QCA we can look at which combination of conditions are associated with presence and absence of the outcome and look at the different pathways to achieving those outcomes

### **PROFILES OF PATHFINDER PROJECTS**

Combination of factors	Number	Outcom	Name of pathfinder(s)
	of cases	e?	
PCHAMP*COMSPEC*prevflodgrp*stablepm	2	Yes	Devon, Chesham
PCHAMP*comspec*PREVFLODGRP*STABLEP	1	Yes	Cornwall
M			
pchamp*COMSPEC*PREVFLODGRP*stablepm	1	Yes	Calderdale
PCHAMP*COMSPEC*PREVFLODGRP*STABLEP	2	Yes	West Sussex and
M			Warwickshire
PCHAMP*COMSPEC*prevflodgrp*STABLEPM	4	Yes	Southampton,
			Northampton, Rochdale,
			Liverpool
pchamp*COMSPEC*prevflodgroup*stablepm	2	Yes	Slough, Swindon
pchamp*comspec*prevflodgrp*STABLEPM	1	No	Blackburn

- Any combination of 2 or more of the conditions is linked to success
- For 6 of the projects three conditions together are linked with sustained community involvement in FRM: PCHAMP, COMSPEC, STABLEPM

#### **QCA FINDINGS**

- But...outliers in the 2 cases which only had the community engagement specialist key aspects:
  - Very local continuity i.e one flood group
  - One area had existing community capital in the area plus ongoing contact with NFF (community capital)
  - The other area the Flood Action Group had been embedded into Parish Council once set up and ongoing contact with NFF (institutional embedding)
- Lack of sustained community involvement in FRM at 2017 linked to not having a Project Champion, a Community Engagement Specialist during the pathfinder or a pre-existing flood group.
- Shows role of key conditions and links back to framework

#### NEXT STEPS...

- Further QCA work to get best fit for a range of outcomes
- Consider implications



- Write up and disseminate Defra seminar
- THANK YOU!
- If you want more information then do contact Clare Twigger-Ross at c.twigger-ross@cep.co.uk

