



# **A QUALITATIVE COMPARATIVE ANALYSIS OF THE COLLABORATIVE PONDS MANAGEMENT IN CHINA**

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# OUTLINE

- Introduction
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- Research Design and Methodology
- QCA Analysis
- Concluding Remarks



# INTRODUCTION

- China has made great efforts to build and modernize its public service system. More governance space given to civil society actors; policy practitioners are experimenting innovative approaches.
- Benefits: greater responsiveness to complex situations (Leach 2006); more effective, efficient, and flexible policies with greater public acceptability (Sousa and Klyza, 2007).
- Limitations: constrained financial resources (Gerlak and Heikkala, 2005); biophysical, institutional and community factors (Ostrom, 1990).
- Different forms; different outcomes. This study is a general assessment of the conditions under which village communities would engage in collaborative governance.



# HUBEI'S POND RENOVATION AND MANAGEMENT PROGRAM (PRMP)

- Initiated by the Hubei provincial government in December 2011.
- A program office, namely “Ezhou Ponds Renovation Office” (EPRO), was immediately established in December 2011. A guideline for PRMP was issued by the EPRO.
- At the county level, there are several local EPROs subordinated to the city-level EPRO, who is responsible for identifying which ponds are involved in the PRMP, and designed specific plans for the program ponds.
- Implemented in a government-directed, top-down, and hierarchical manner. Still, the program is organized in a way that needs to coopt local farmers into collaborative governance. (funding collection; pond contractors; program design accordingly)



# RESEARCH DESIGN AND METHODOLOGY

- The case of Hubei's Pond Renovation and Management Program and 16 village communities are selected for this purpose.
- Ezhou is one of the pilot cities, which practiced the PRMP; topography includes hills and plains; major grain producing bases. Four township are chosen randomly; Within each, four villages are selected according to some criteria.
- Ansell and Gash (2008), argued that merely top-down consultative does not count; civil society actors should actively be involved.
- In this paper, successful collaborative governance is defined as a situation wherein local farmers actively engage in the ponds renovation and maintenance of ponds and channels.



**Table 1** Extent of government funding – identification and QCA scores

Village	Support from local government agencies	QCA score
YSONG	7 ponds got government funding/17	0
YBA	7 ponds got government funding/13	1
YBAI	14 ponds got government funding/24	1
TSHI	6 ponds got government funding/11	1
TNIU	13 ponds got government funding/14	1
THUA	4 ponds got government funding/8	1
TXIE	9 ponds got government funding/24	0
TJIN	6 ponds got government funding/10	1
TGUAN	2 ponds got government funding/11	0
TWAN	4 ponds got government funding/7	1
TXIA	2 ponds got government funding/11	0
TXU	7 ponds got government funding/11	1
PGUA	9 ponds got government funding/18	1
PXIAO	9 ponds got government funding/18	1
PGUO	0 ponds got government funding/18	0
PHEN	6 ponds got government funding/12	1



**Table 2** Overview of villagers' per capita annual income (yuan ) and QCA scores

Village	Farmers' income per capita annual income (2012)	QCA score
YSONG	7856	1
YBA	5708	0
YBAI	4980*	0
TSHI	5865	1
TNIU	6990	1
THUA	7364	1
TXIE	7365	1
TJIN	7375	1
TGUAN	4260	0
TWAN	5010	0
TXIA	5100	0
TXU	5110	0
PGUA	7567	1
PXIAO	7570	1
PGUO	7579	1
PHEN	7588	1



**Table 3** Solidary groups and QCA score

Village	Solidary groups	QCA score
YSONG	Non-exist	0
YBA	Exist	1
YBAI	Non-Exist	0
TSHI	Exist	1
TNIU	Exist	1
THUA	Exist	1
TXIE	Exist	1
TJIN	Non-exist	0
TGUAN	Exist	1
TWAN	Exist	1
TXIA	Non-Exist	0
TXU	Exist	1
PGUA	Non-exist	0
PXIAO	Exist	1
PGUO	Exist	1
PHEN	Non-exist	0





**Table 4** Water scarcity situations – QCA score

Village	Alternative water resources	QCA score
YSONG	Near Changjiang River	0
YBA	Hilly; near Huama lake, but pump station are out of use	1
YBAI	Hilly; water reservoir is out of use	1
TSHI	Hilly; upstream of water reservoir	0
TNIU	Hilly, tailend of water reservoir	1
THUA	Hilly, tailend of water reservoir	1
TXIE	Mixed terrain, near Taiwo River, upstream of water reservoir	0
TJIN	Mixed terrain, near Taiwo River, upstream of water reservoir	0
TGUAN	Hilly	1
TWAN	Near Liangzi Lake,	0
TXIA	Near Liangzi Lake	0
TXU	Hilly	1
PGUA	Plain area, near Gua Lake and Five Lake	0
PXIAO	Plain area, near Stone Lake and Gua Lake	0
PGUO	Plain area, near Hong River	0
PHEN	Plain area, near Ten Lake	0



**Table 5** Truth table for village communities engaging in the PRMP

Row	Four causal conditions				Number of village communities	
	Agency	Income level	Solidarity groups	Resources	E	e
1	ABSENT	PRESENT	ABSENT	ABSENT	0	1
2	PRESENT	ABSENT	PRESENT	PRESENT	0	2
3	PRESNT	ABSENT	ABSENT	PRESENT	1	0
4	PRSENT	PRESENT	PRESENT	ABSENT	2	0
5	PRESENT	PRESENT	PRESENT	PRESENT	0	2
6	ABSENT	PRESENT	PRESENT	ABSENT	2	0
7	PRESENT	PRESENT	ABSENT	ABSENT	0	3
8	ABSENT	ABSENT	PRESENT	PRESENT	0	1
9	PRESENT	ABSENT	PRESNET	ABSENT	1	0
10	ABSENT	ABSENT	ABSENT	ABSENT	0	1

○ *Engagement (in the PRMP) = Agency + Income + Solidary groups + Resources*

○ *f(1):*

$$E = AGENCY * SOLIDA * resour + INCOME * SOLIDA * resour + AGENCY * income * solida * RESOUR$$

○ *f(2):*

$$E = SOLIDA * resour (AGENCY + INCOME) + AGENCY * income * solida * RESOUR$$

- Both demonstrated that the existence of solidary groups must be present; The existence of solidary groups can bring about E only if water resources are not too scarce;
- The second group concerns situations in which villages have serious water scarcity problems. Agency government funding becomes a very important factor affecting the outcome.

