



Water Economics and Financing

Water Markets in Integrated Water Management

**Scarcity and Competition:
The Challenges for Institutions to Promote Cooperation,
Conflict Prevention and Resolution**

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***Scarcity and Competition:
The Challenges for Institutions to Promote Cooperation, Conflict
Prevention and Resolution***

- Conflict Resolution and Institutions
 - Two Challenges
 - Two-way Linkages
 - Mechanism Perspective
 - Process Perspective
- Objectives and Scope
 - Two Empirical Models
 - One Theoretical Model

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•Models of CRM Performance

$$\text{EFFCRM} = f(\text{FMTCRM}, \text{EFFACP}, \text{EFFWLA}, \text{EFFUSP}, \text{AQWINF}, \text{SPSWOR}, \text{CENTEN}, \text{EFFREG}) \dots [1]$$

$$\text{EFFCRM} = f(\text{WATDEP}, \text{GNPPPC}, \text{POPDEN}, \text{PROTAR}, \text{CONFLT}, \text{LAWORD}, \text{BURQLT}, \text{EFFGIN}) \dots [2]$$

•Empirical Context and Data

- Cross-sectional Analysis
- Qualitative & Quantitative Data
- Sample: 127 Experts; 39 Countries

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Results for Model 1

Model Variables	Estimated Coefficients	T-Ratios	Level of Significance
FMTCRM	0.197*	3.596	0.000
EFFACP	0.354*	3.244	0.002
EFFWLA	0.348*	3.461	0.001
EXTUSP	0.100#	1.266	0.208
AQWINF	0.119#	1.402	0.164
SPSWOR	0.159	1.232	0.220
CENTEN	-0.105*	-1.738	0.085
EXTREG	-0.092	-0.914	0.362
<i>Adjusted R2</i>	<i>0.865</i>	<i>-</i>	<i>-</i>
<i>F-Test Value</i>	<i>109.936</i>	<i>-</i>	<i>0.000</i>
<i>Sample Size</i>	<i>127</i>	<i>-</i>	<i>-</i>

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Results for Model 2

Model Variables	Estimated Coefficients	T-Ratios	Level of Significance
WATDEP	-0.018*	-1.988	0.056
POPDEN	-0.002#	-1.480	0.149
GNPPPC	-0.128*	-2.076	0.046
PROTAR	-0.066#	-1.323	0.195
CONFLT	0.075	0.437	0.665
LAWORD	0.192	0.617	0.542
BURQLT	1.097*	2.241	0.032
EFFGIN	0.615*	3.082	0.004
<i>Adjusted R2</i>	<i>0.868</i>	<i>-</i>	<i>-</i>
<i>F-Test Value</i>	<i>49.959</i>	<i>-</i>	<i>0.000</i>
<i>Sample Size</i>	<i>39</i>	<i>-</i>	<i>-</i>

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- CR in Institutional Change
- CR in a Larger Sense
- Subjective Theory
 - Stakeholders as Change Agents
 - Convergence and Consensus
 - Stage-based Perspective
 - Mechanics and Drivers

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- **Embeddedness of CRMs**
 - **Water Institutional Structure**
 - **Water Institutional Environment**
- **CR in Institutional Change**
 - **Necessary Condition**
 - **Varying Forms**
 - **Different Mechanics and Drivers**
- **Further Research and Policy**

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THANK YOU!

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