Water Management in the Middle East and North Africa

-The effect of signed water treaties

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Research Question

• What is the effect of signed treaties in the Middle East and North Africa (MENA) on later water specific conflict and cooperation?
Theoretical Background and Framework

• Water conflict
  - Neomalthusians
• Water management and cooperation
  - Cornucopians
  - Liberal institutionalists
• Framework: Opportunity and willingness
Previous Research

• Mostly qualitative case studies
• Focus on conflict
• Recent multivariate results: Cooperation over water more common than serious conflicts
• MENA most studied area
  - Regarded as most conflict prone
  - The effect of treaties on later water events never examined
Hypotheses

• H1: Dyads that have recently signed a treaty and where at least one of the countries is located in the Middle East or North Africa will have more water cooperation

• H2: Dyads that have recently signed a treaty and where at least one of the countries is located in the Middle East or North Africa will not have a smaller risk of experiencing water conflicts
Data and Variables

- Logistic regression analysis
- Dyad-years in MENA, 1948-1999
- N = 1,679
- Dependent variables: Conflicitive water event and cooperative water event from TFDD
- Independent variable: Treaty signing from TFDD
- Control variables: Peace history, regime type, contiguity measures, GDP, alliance, two basin specific variables
Results

- A treaty signed the previous year has a positive impact on both water cooperation and water conflict
- There are more severe water conflicts in MENA than globally
- There is less extensive water cooperation in MENA than globally
- Water cooperation does not seem to increase with time since the treaty signing

<table>
<thead>
<tr>
<th></th>
<th>Water cooperation</th>
<th>Water conflict</th>
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<tbody>
<tr>
<td>Treaty signing</td>
<td>1.989 (3.25)***</td>
<td>1.686 (2.53)***</td>
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Concluding Remarks

- The results are alarming for the MENA region
- Treaties seem to increase the risk of both more conflict and more cooperation
- Further analyses needed