

Core Idea

I entered the project thinking water governance was mainly about producing better data. I left understanding that water policy depends on how data, institutions, economic incentives, and political priorities are translated into decisions.

1. Project Aim

To explore how Türkiye approaches water scarcity, irrigation, and sustainable water governance through research, policy analysis, and institutional coordination. This connects directly to your approved objectives around literature review, water-use/agricultural analysis, policy-oriented output, and knowledge-sharing.

2. What I Expected

A simple path:

- Water data → analysis → policy recommendations

3. What I Actually Learned

A more complicated path:

- Measurement → interpretation → stakeholder priorities → institutional coordination → policy

4. Four Dimensions of Water Governance

Technical: GIS, remote sensing, groundwater monitoring, hydrological models

Economic: irrigation, crop choices, farmer incentives, water productivity

Institutional: coordination across ministries, engineers, policymakers, researchers

Political/Global: transboundary rivers, sovereignty, water security, global commons

5. Analytical Extension

Konya is one of Türkiye's most important agricultural regions, but it is also highly water-stressed. This makes the relationship between crop choice, irrigation, and water use especially important. My analytical extension looks at how Konya's agricultural landscape changed between 2010 and 2025, with a particular focus on wheat, grain maize, and sugar beet.

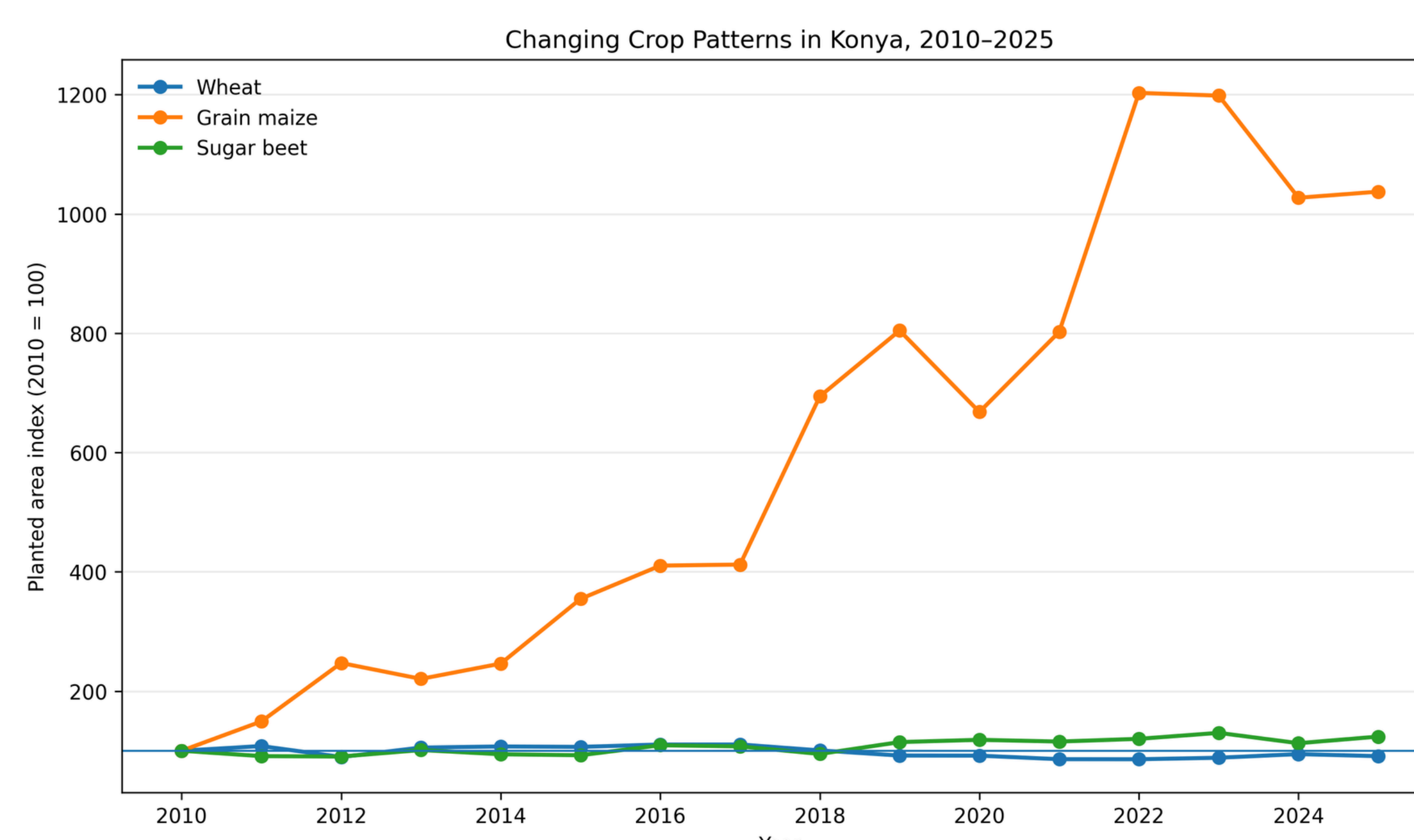
I found a changing crop landscape: Between 2010 and 2025, grain-maize acreage in Konya increased by more than tenfold, while wheat acreage declined by about 9%. The shift raises an important water-policy question: can improvements in irrigation efficiency produce basin-wide conservation if crop patterns and total demand are changing?



6. Key Takeaways

- Water scarcity is not only a natural-resource problem; it is also a governance problem.
- Better data matters, but data only becomes useful when institutions can interpret and act on it.
- Irrigation efficiency should be evaluated at the basin level, not only at the farm level.
- Ethical leadership in environmental policy requires balancing science, livelihoods, national interests, and long-term sustainability.

Changing Crop Patterns in Konya, 2010-2025



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