

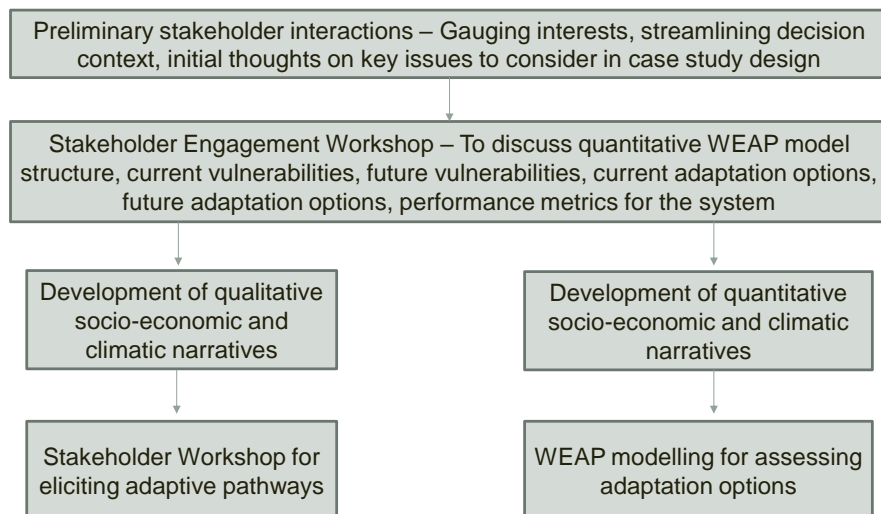
Comparing robust decision making approaches for long-term water resources in Southern India

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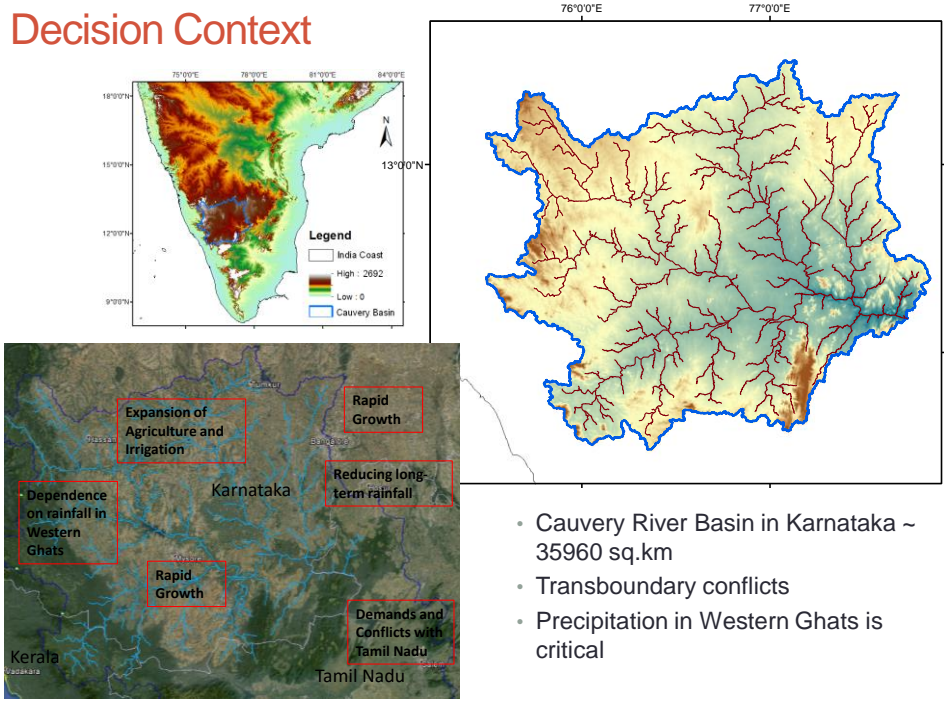
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Parallel RDM approach

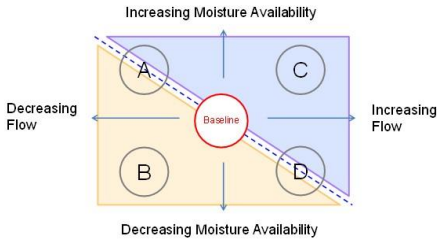


Decision Context



- Cauvery River Basin in Karnataka ~ 35960 sq.km
- Transboundary conflicts
- Precipitation in Western Ghats is critical

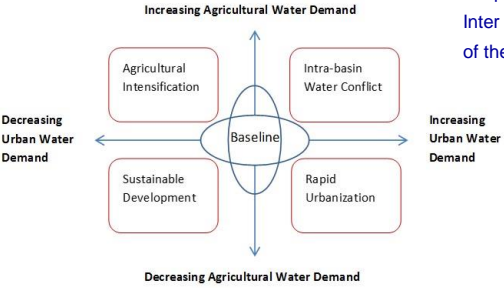
Narratives



Climate narratives A, B, C and D with respect to the two axes; moisture availability and strength of flow. Blue dashes divide the narratives into two based on expected precipitation. Blue triangle - increasing precipitation. Brown triangle - decreasing precipitation.

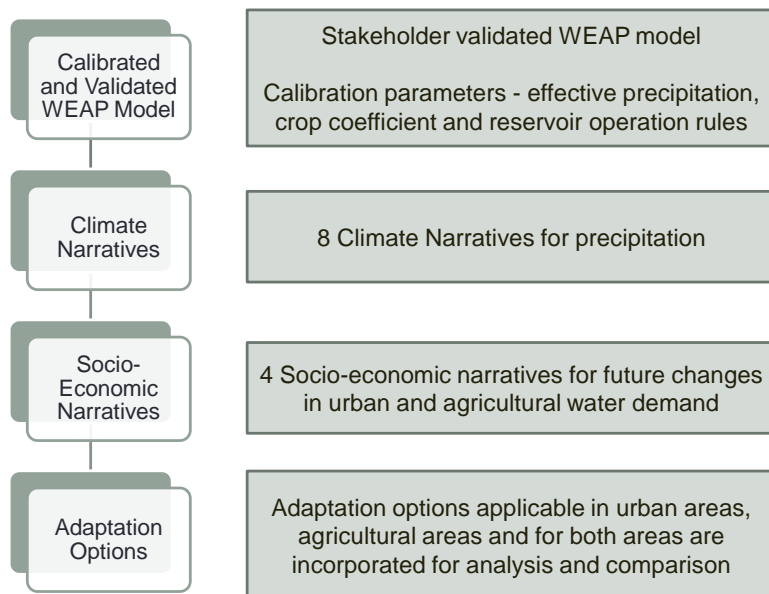
Narrative is informed by particular climate processes

For example Narrative C - Precipitation is expected to increase due to underlying plausible processes of global warming and intensification of the tropospheric temperature gradient, greater northward shift of the Inter Tropical Convergence Zone and greater influence of the La Niña teleconnection.



Socio-economic narratives based on the most important water users; agricultural and urban areas

Scenario tree



In Summary

- Combined qualitative and quantitative approach to assess robustness of adaptation options – stakeholder engagement for key factors in the decision context and strong explicit linkages with scenario modelling
- Climate Narratives – A potentially useful alternative method for constructive future climate scenarios in a qualitative manner without forsaking knowledge and climate science
- Comparative assessment of usefulness of qualitative and quantitative RDM approaches