

# DEALING WITH VARIABLE ACCESS TO WATER: AN ASSESSMENT OF CHALLENGES AND COPING STRATEGIES IN FAR-WESTERN NEPAL

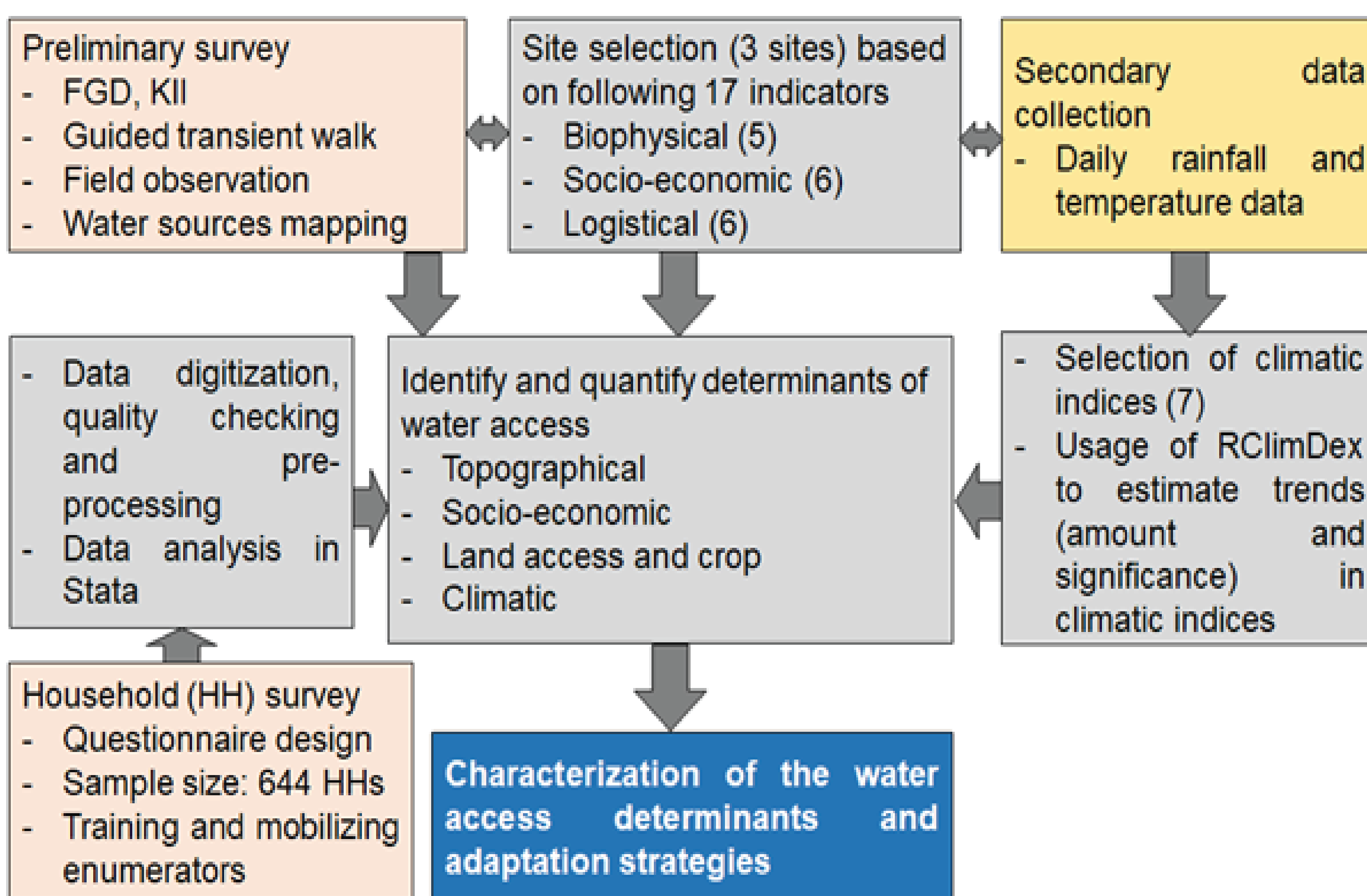
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## CHALLENGE

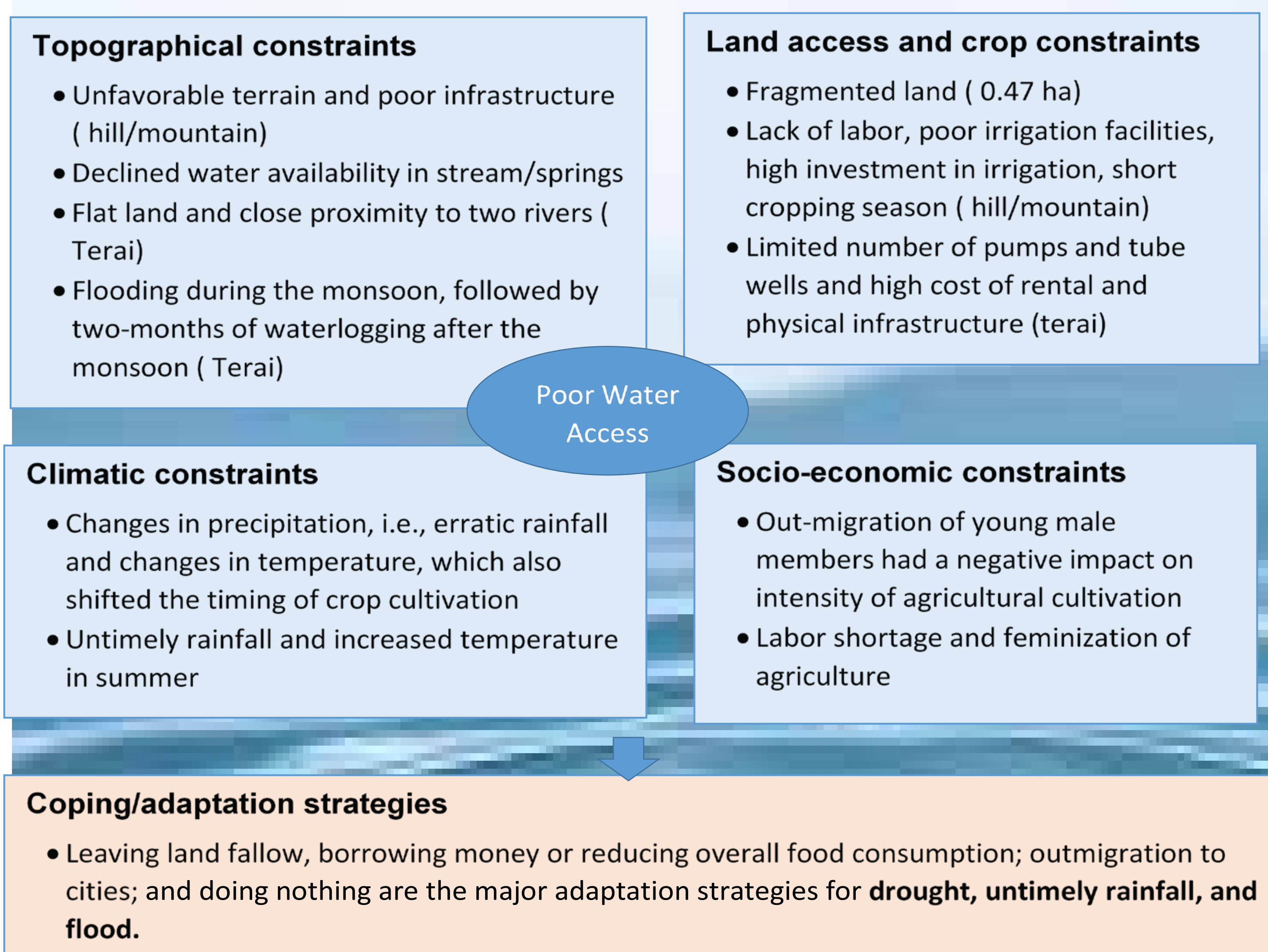
- Extremes, such as flooding and long dry spells, which affect water availability and access to water in the study site, including three villages in different physiographic zones: Mellekh (mountain), Punebata (hill), and Kuti (terai).
- Irrigation sources vary, from a stream/spring as the primary source in the hills/mountains to groundwater in terai villages.
- This research tried to answer several questions.
  - How do biophysical and other environment factors affect water availability and access in different agro-ecological regions?
  - Which type of socio-technology uptake is best suited to improve water productivity, crop productivity, and livelihoods?
  - What kind of climatic and non-climatic coping strategies are farmers using?

## RESEARCH APPROACH



## INSIGHTS & INNOVATIONS

The following determinates were identified for poor water access:



## NEXT STEPS

- Landscape management through bio-engineering, springshed water retention, infiltration improvement and soil cover to conserve soil moisture are some of the measures to enhance water yield in the hills/mountains.
- Building community capacity for rainwater harvesting and flood control through recharge ponds in the mid-hills should be a key priority.
- In the terai, environmentally friendly irrigation systems operated with electric or solar pumps could be a viable option in the long run for groundwater pumping.
- Climatic anomalies can be addressed through introduction of new agro-technology, improved climate-resilient seeds, better crop management practices, shifting of crop planting times (proper crop planning) and use of fertilizer.
- It is imperative to ensure that suggested technologies are user friendly for easy uptake.
- Promoting and implementing water-efficient irrigation methods and practices, and improving on-farm water management would help lower pumping requirements, consequently improving water productivity and hence farmers' profit margins.



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