

Background

River linking is the practice of connecting of water canals to divert water to regions that wouldn't usually receive it. Tamil Nadu, a state in southeastern India, has become the focus for new river linking projects due to its dry climate and lack of river connections. Despite its arid conditions, Tamil Nadu is a highly agricultural state with constant demand for irrigation reinforcements.

Starting in 2008 the state government implemented a plan to divert surplus floodwater from the Tamirabarani River Basin to the drought prone districts of Tirunelveli and Tuticorin. The river basin is located on the eastern side of the Western Ghats mountain range and flows down the 120km long perennial Tamirabarani River. The excess water will continue on through a stem of the Tamirabarani River called the Kannadian Channel which will be widened and extended with a 73km long canal to reach the Tirunelveli and Tuticorin districts. The surplus water is intended to be shared and used among villages within the districts for drinking and farming purposes.

Proposed flood carrier canal: Tirunelveli and Thoothukkudi districts

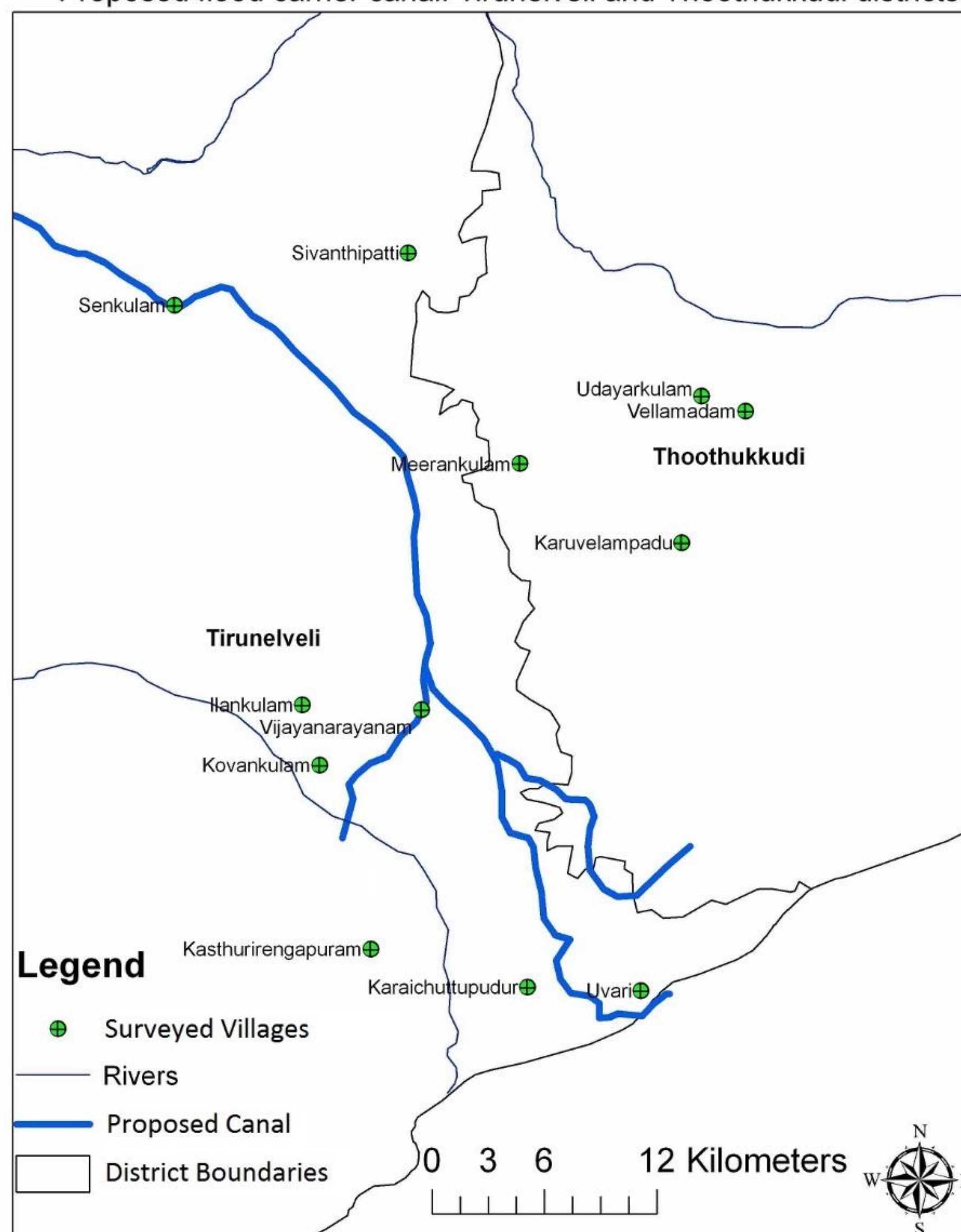


Figure 1. shows the projected path of the flood carrier channel from the Kannadian channel in the northwest extending into the southeast corner of Tamil Nadu. The green dots represent the villages that were surveyed for this research. Fig. 1

Methods and Approach

The purpose of this study was to gather local public opinions on the construction of the new flood carrier channel. My research aimed to document and understand the potential social and environmental impacts that this canal could have on surrounding agricultural villages.

The data was collected through a series of focus group discussions with farmers from 12 different villages within the Tirunelveli and Tuticorin districts. With the help of a translator groups were asked a set of questions regarding societal and environmental changes, agricultural practices, and thoughts on the old and new water distribution systems. All discussions were recorded and later translated and transcribed for further data analysis.



Data

Recurring responses from the 12 focus group discussions were recorded and divided into social and agricultural themes.

Community and Culture

- 47% of villagers have migrated away from their homes within the 12 villages due to the lack of farming employment from water scarcity in the past 10 years.
- 37% of villagers have looked for work outside of their villages in the past 10 years.
- Many of the survey participants expressed hope for farmers returning to their villages with the increase of water.

Land Loss

- 33% of the farmers from the 12 surveyed villages have or expect to lose farmland from the construction of the new flood carrier channel.

Crop Harvests

Current Crop Harvests in Survey Villages

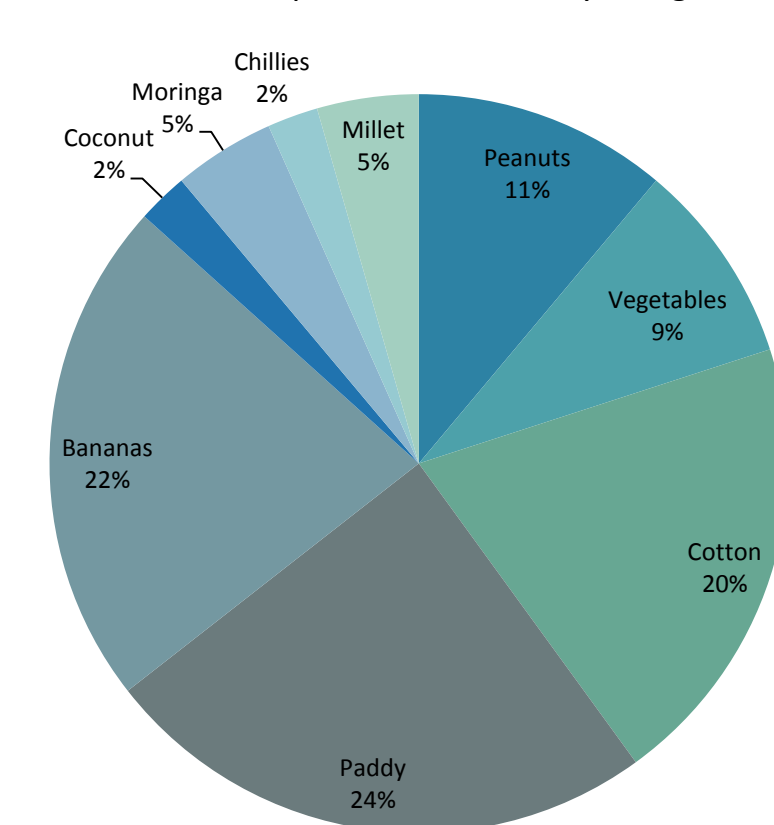


Fig. 2

Expected Crop Harvests in Survey Villages (Post canal construction)

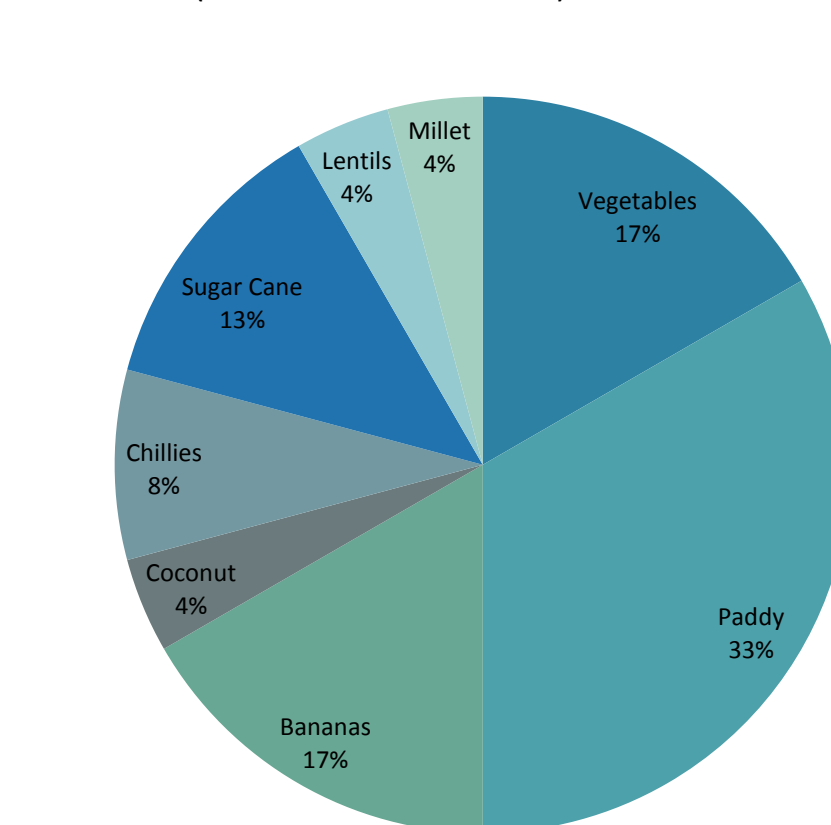


Fig. 3

Figures 2. and 3. are the results of a survey after focus group discussion participants compared current crop harvests (from the past 5 years) to the crops they hope to harvest after the increase in water.

Conclusions

- Most focus group discussion participants were enthusiastic about the construction of the new waterway and saw the increase of water as a sign of hope for restoring village populations and continuing farming traditions.
- The changes between current and expected crop harvests suggest that farmers plan on transitioning to water-intensive crops after the canal construction. This may lead to unsustainable farming practices and conflicts in water management in the future.

References

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