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The impact of Technical Assistance on adoption of agricultural practices in Brazil

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The impact of Technical Assistance on adoption of agricultural practices in Brazil

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Introduction

- Cultivation practices, such as **Contour Farming**, **Fallowing the Soil**, and **Crop Rotation**, are decisive in increasing productivity, while helping with environmental conservation (Van den Putte et al., 2010; Fortini et al., 2020).
- A key tool for farmers looking to improve their practices is extension (also known as **technical assistance** in Brazil).
- The **objective** of this paper is to to verify the effect of access to technical assistance on the level of adoption of some agricultural cultivation practices by Brazilian rural producers.

Methods

- To estimate the impact of extension on agricultural income in Brazil, we use the **Generalized Propensity Score (GPS)** method by Imbens (1999).
- We use municipality data from the 2017 Brazilian Ag. Census.
- We account for several variables that determine Tech. Assist.:
- Ag. expenses, experience, hired work, education, access to credit, co-op. membership, land ownership, farm size and Brazilian microregion dummies.

Results & Discussion

- The Southern region is the one with the highest adoption of crop rotation (44%), followed by Southeastern region and Midwestern region. Contour farming is adopted the most in Southeastern region (25%), followed by Southern region (20%). The region with the least adoption of the three practices is Northern region.
- Our results indicate that increasing the share of producers receiving extension can result in greater adoption of agricultural practices.
- Such policy can achieve two goals – increasing productivity and farm income and incentivizing the environment conservation.
- We will soon have results obtained using farm-level data.

References

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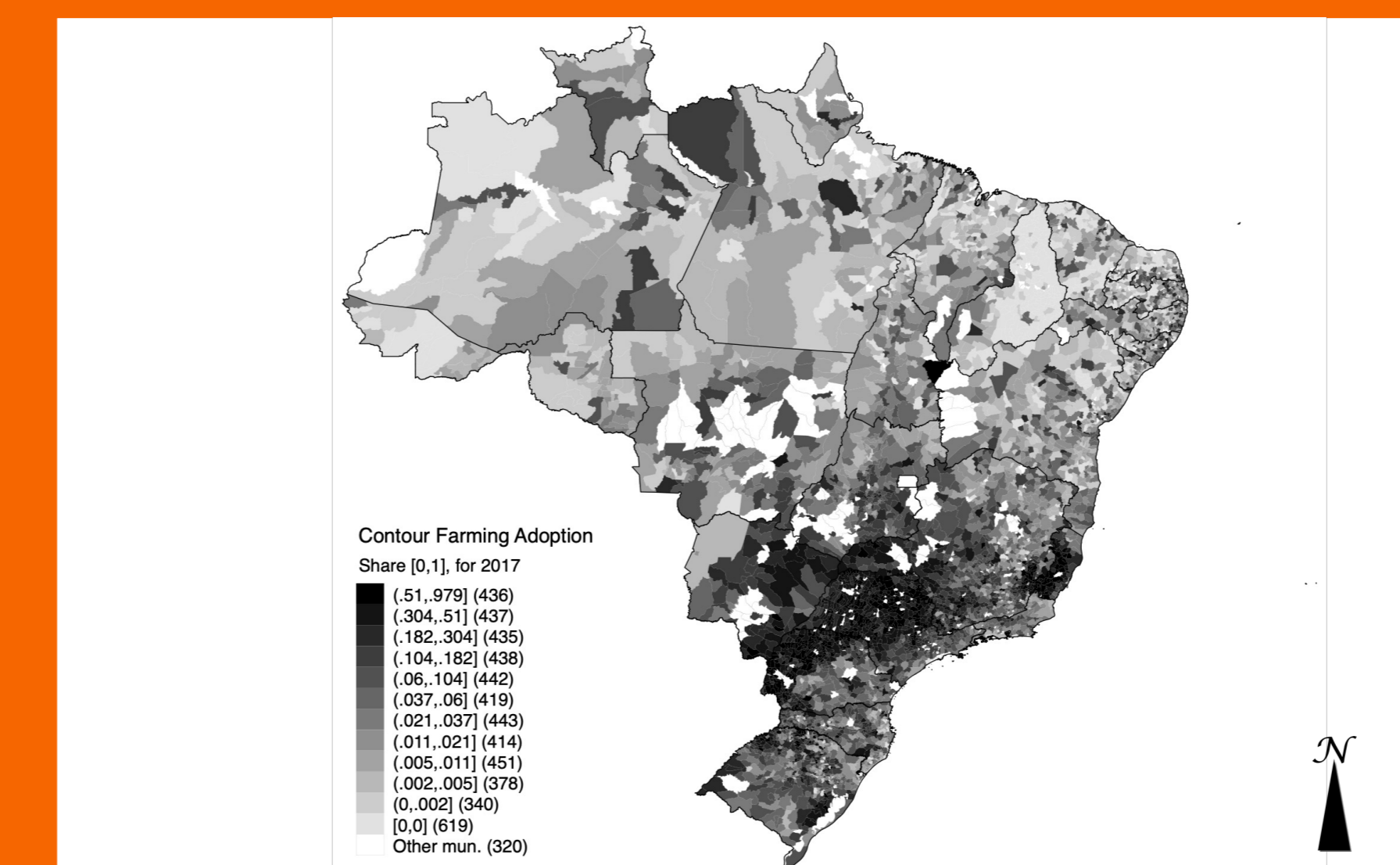
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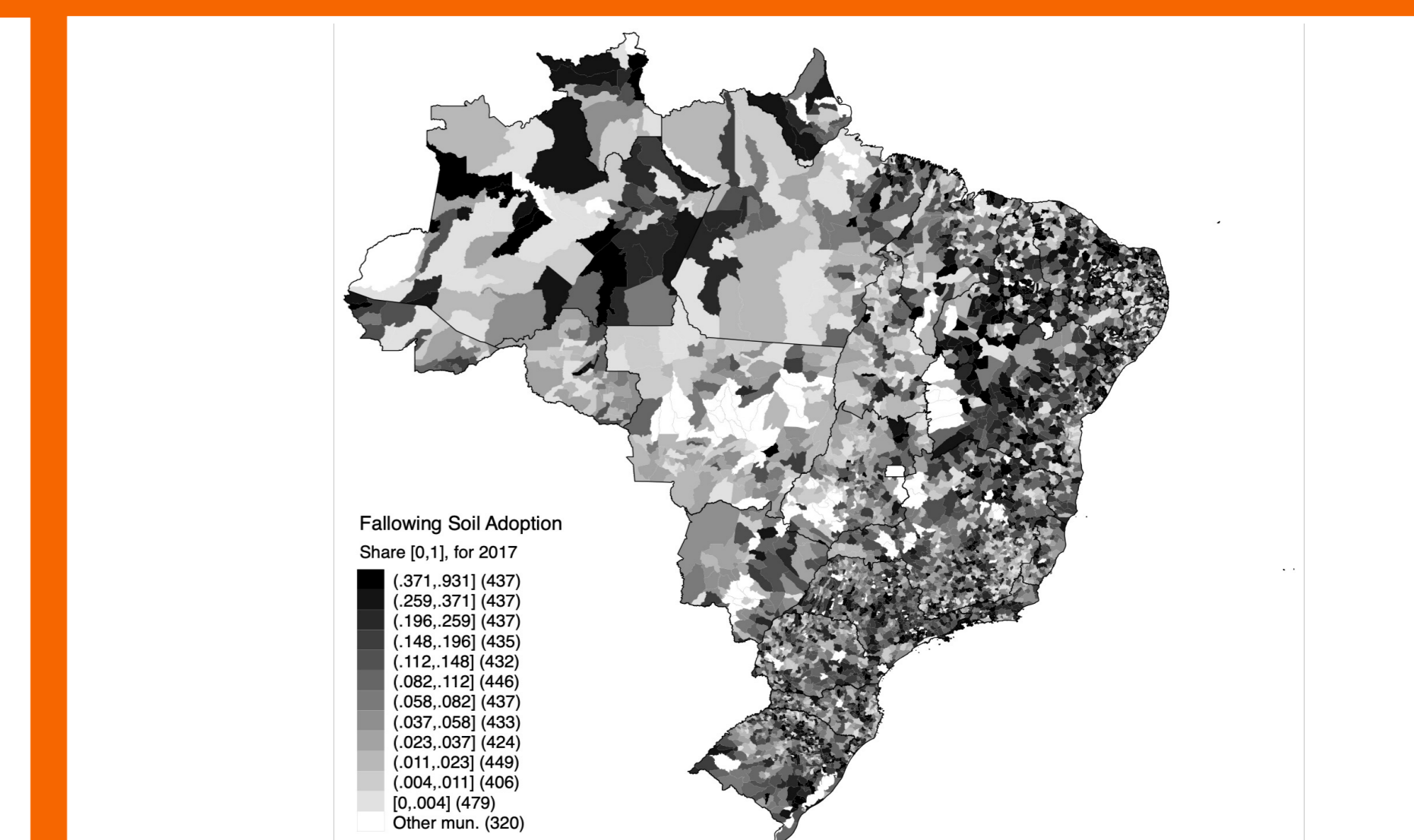
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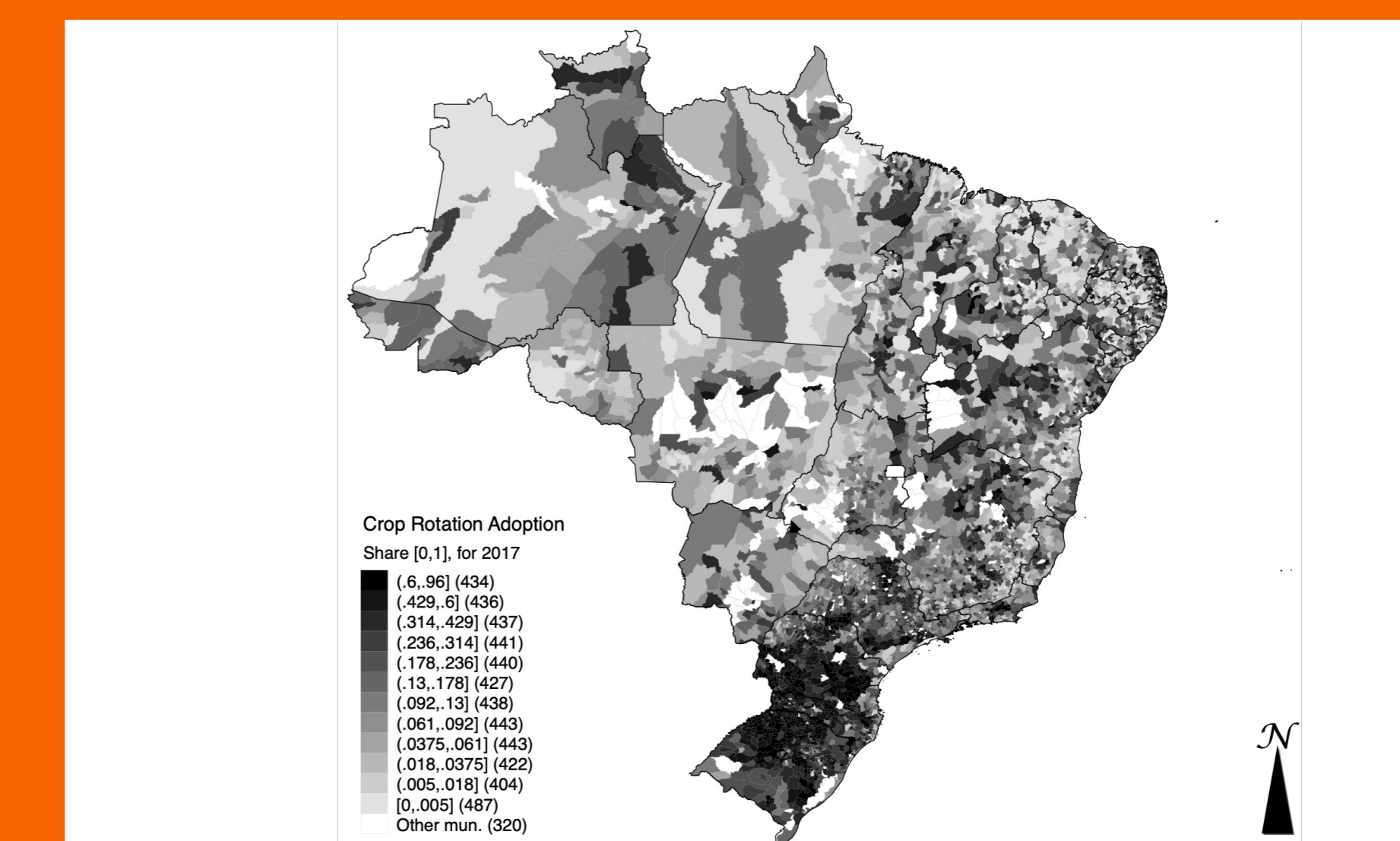
Increasing access to **technical assistance services** in rural Brazil increases the adoption of relevant **cultivation practices**.



Contour Farming Adoption, Brazil, 2017



Fallowing Soil Adoption, Brazil, 2017



Crop Rotation Adoption, Brazil, 2017

