

# The Water licenses issue in Goiás, Brazil : Inequalities, disputes and Brazilian productive model criticisms

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## INTRODUCTION AND OBJECTIVE

- Agribusiness is a model of Brazilian rural development that is constantly defended, especially by the political classes, as the base and vocational future of the State of Goiás, located in Brazilian mid-western.
- Because the state of Goiás has a significant agricultural contribution to the country's economy, since it is one of the largest producers of soy, corn and sugarcane plantations, which depend on a large volume of irrigation, it was selected as a standard case to understand the reproduction of agribusiness in the Brazilian rural environment

### Objective:

This research discusses whether the productive model of excessive water use is correlated with conflicts over water, through the analysis of licenses for irrigation and disputes over water in the state of Goiás.

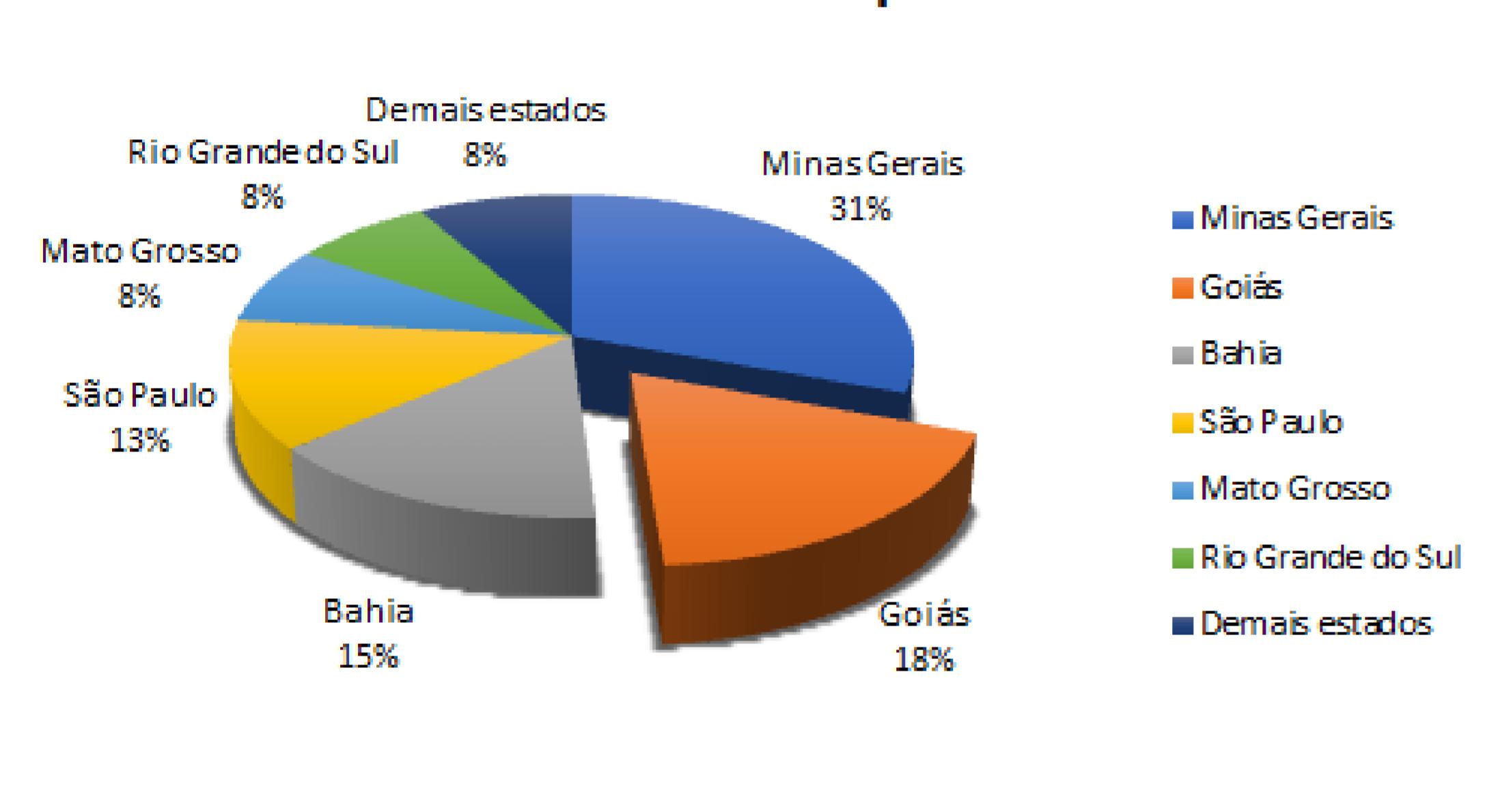
## METHODS

- Mapping of governmental and private actions, through a qualitative approach, with analysis of secondary data on the subject and literature review.
- Dialogical and hypothetical-deductive methods, through an interdisciplinarity between agrarian geography and law.

## RESULTS

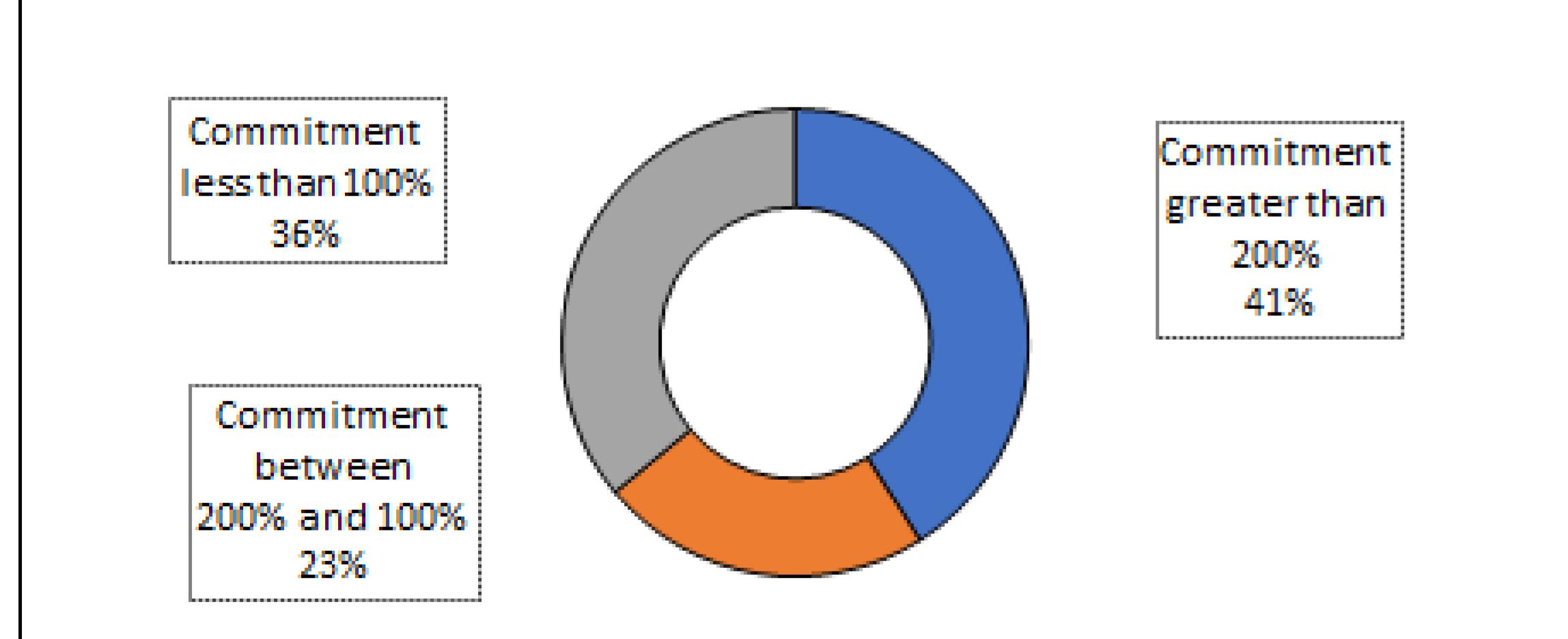
- Currently, in Brazil, about 20% removed from water sources are consumed in the process, while 70% of the removed is consumed in the irrigation process.
- Furthermore, water consumption has increased by approximately 80% in the last two decades alone, with a propensity to increase another 26% by 2030.

Concentration of center pivots in Brazil



- In the state of Goiás, it was possible to observe a large volume of water, including up to 16 times more than what is necessary for the state.
- In terms of water consumption, irrigation of plantations also leads the score, followed by animal use. Since the demand for irrigation represents almost 50% of the total in the state.
- In 2014, the state of Goiás alone had around 3110 pivots.

Commitment of Pivots in Goiás - 2014

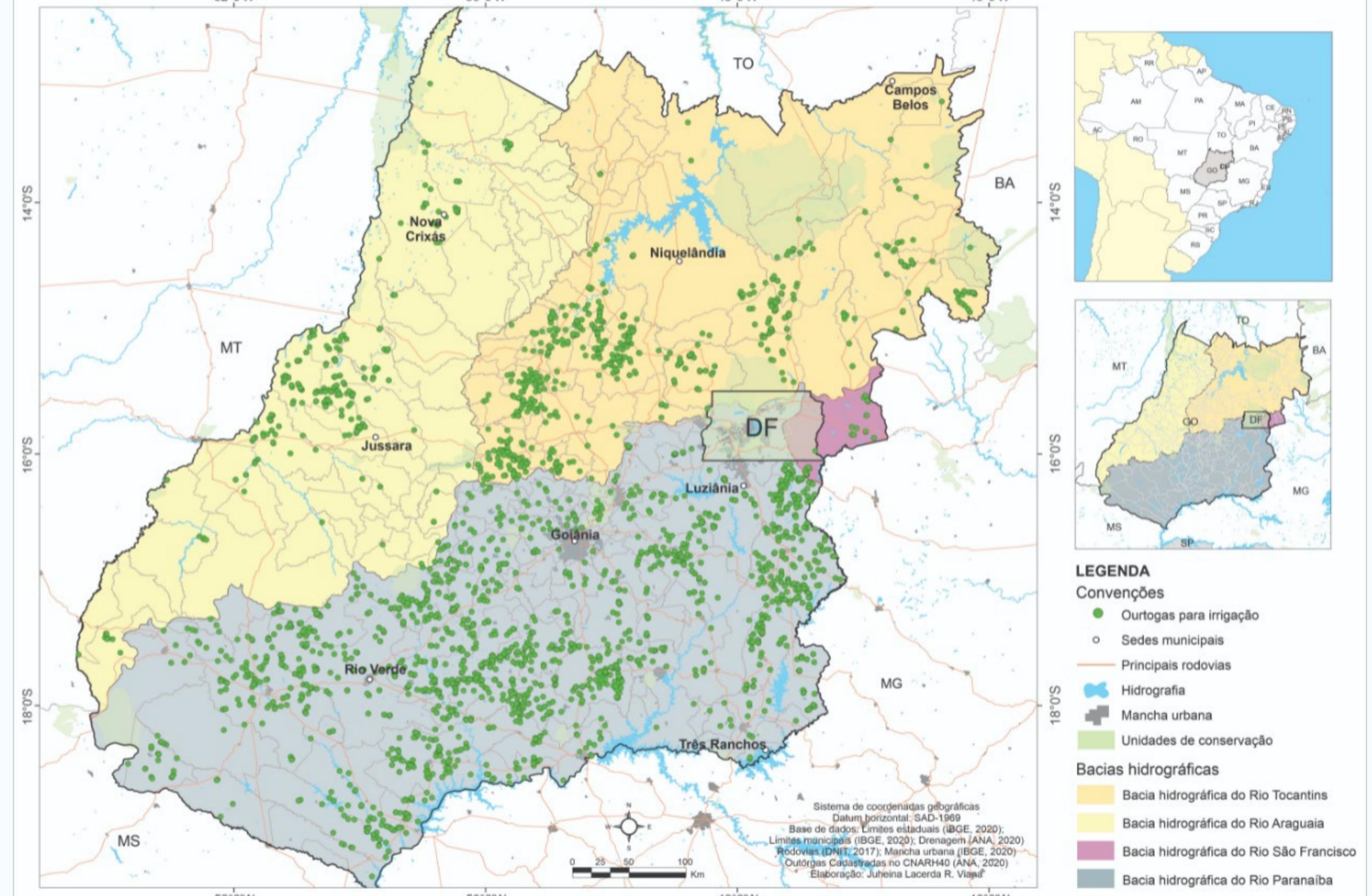


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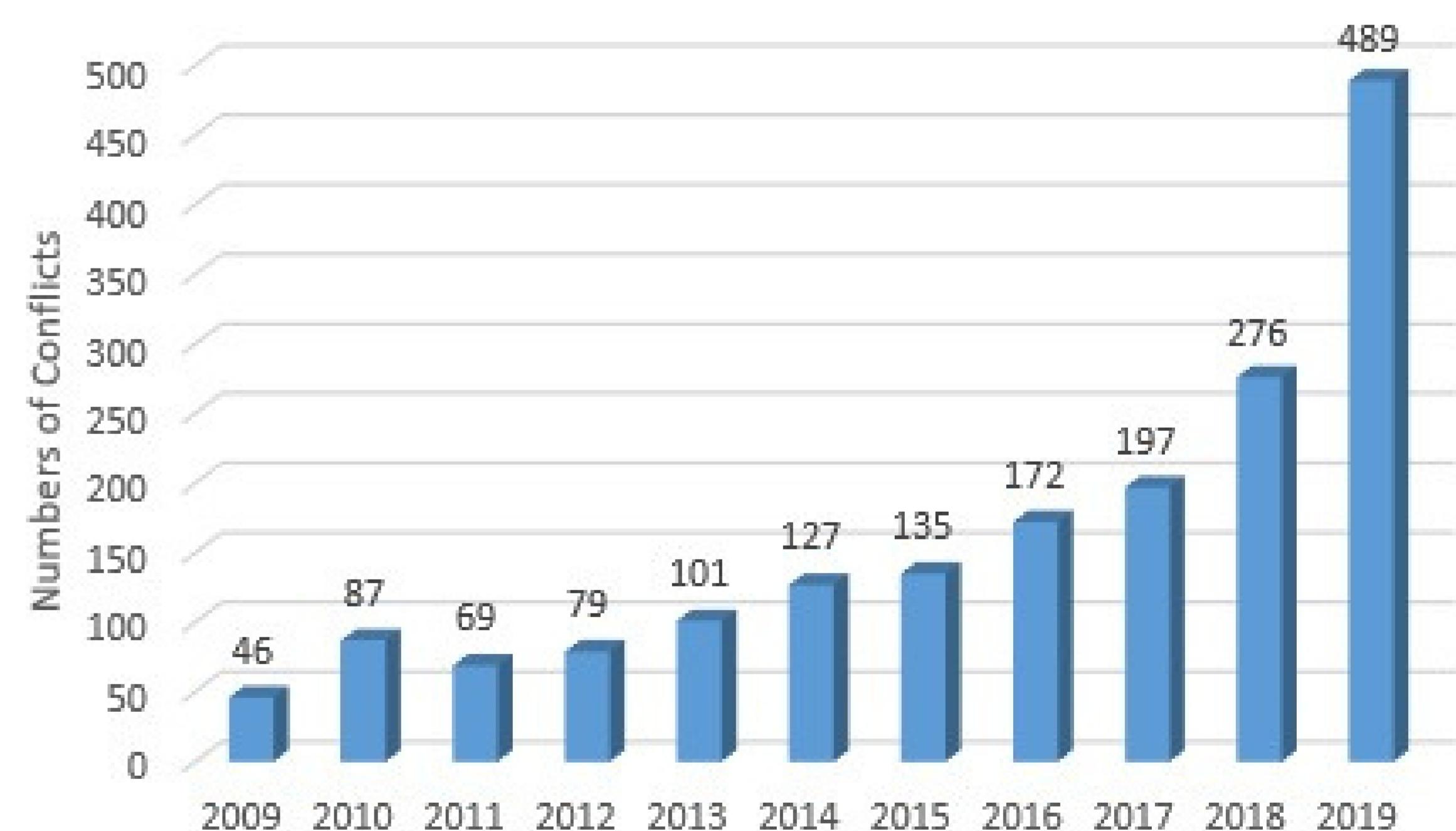
- According to the report, any commitment above 50% is already considered moderately critical.
- Data on water grants in the state of Goiás, in 2020, were active 1,853 grants for irrigation by center pivots. Since each grant can supply several pivots, depending on their size.

STATE OF GOIÁS: GRANTS FOR IRRIGATION - 2020



- Parallel to this number of grants for irrigation by pivots, there is also an increase in WATER CONFLICTS involving water.

## CONFLICTS PER YEAR



- According to the Pastoral Land Commission and the National Water Agency, only from 2018 to 2019 was it possible to observe that the number of conflicts almost doubled.
- In 2019 alone, around 69.8 thousand families were affected by these disputes.
- Specifically in the state of Goiás, between 2016 and 2020, there were 16 conflicts in Goiás that affected 1,752 families.

## CONCLUSION

- That it is not possible to understand water without considering the right to life, since it is necessary to establish a purposeful agenda between the various sectors of society and the public administration for the best use of water resources, so abundant, but, due to economic power, so uneven in accessibility.