Households With An Improved Drinking Water Source in India (NFHS-4)

Introduction

“Tough competition for limited water resources, and poor decision-making by governments and utilities on prioritising how those resources are used, are already making it hard for the world’s poorest people to access clean water. Land use alters as populations, agriculture and industry move, change and grow; if it isn’t controlled, the result may be land erosion, pollution and depletion of groundwater.

Wild water events can wipe out fragile infrastructure, dry up rivers, ponds and springs which are sometimes the main source of water for the poorest people, and contribute to the spread of waterborne diseases. Rural populations in poor and geographically isolated areas face particular challenges. Of all the people in the world without access to clean water, more than half a billion – enough to circle the world over six times – are in rural areas.

Here, help is often slow to arrive after natural disasters, infrastructure is poor to non-existent, and a continued lack of funding is most acutely felt." - [Wild Water] (http://wateraidindia.in/publication/wild-water-state-worlds-water-2017/ (http://wateraidindia.in/publication/wild-water-state-worlds-water-2017/))

In this analysis I am trying to measure how many regions in India have access to clean drinking water on a state and district level. The darker the colouring gets, the households in that region are more likely to have access to clean drinking water.

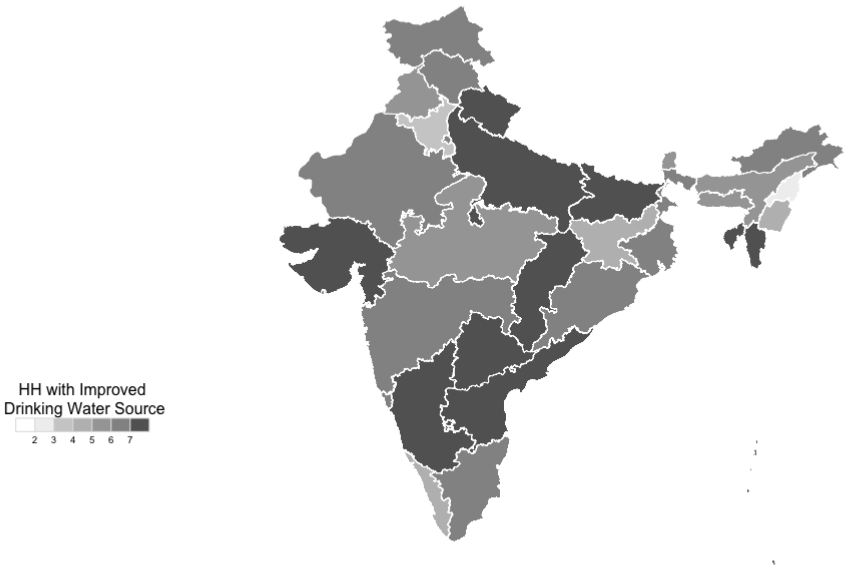
The data is sourced from National Family Health Survey (http://rchiips.org/nfhs/).

Cleaning And Importing Data

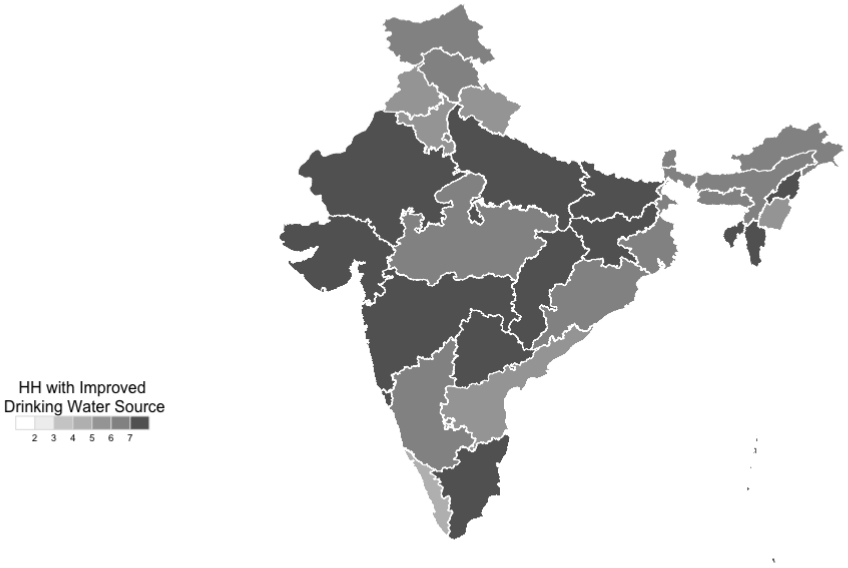
```
data <-read.csv("data.csv")
data$ImprovedDrinkingWater<-data$Households.with.an.improved.drinking.water.source1
data$ImprovedDrinkingWater<-data$ImprovedDrinkingWater/100
data1 <- aggregate(ImprovedDrinkingWater~State.1, data=data, FUN=mean)

datatime <-read.csv("states_improved_water_source_percentages.csv")
datatime$four<-datatime$Percent_with_improved_water...4
datatime$four<-datatime$four/100
datatime$three<-datatime$Percent_with_improved_water...3
datatime$three<-datatime$three/100
```

NFHS-3


HH with Improved
Drinking Water Source
2 3 4 5 6 7

NFHS-4


HH with Improved
Drinking Water Source
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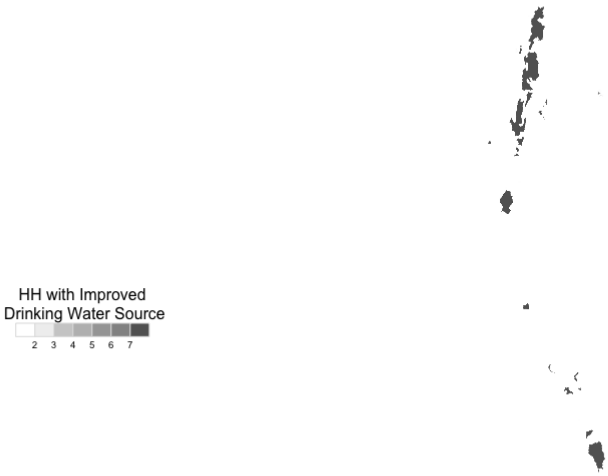
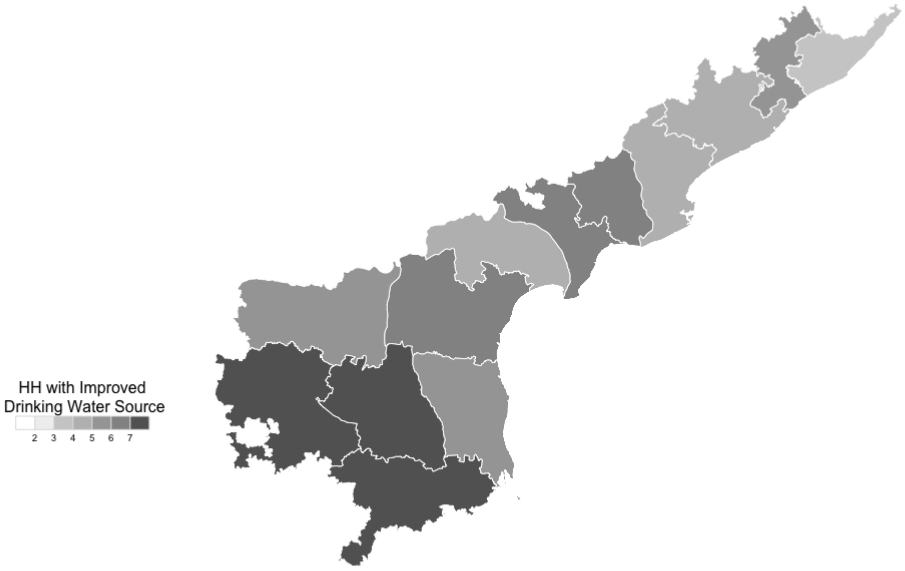
States And Districts (NFHS-4)

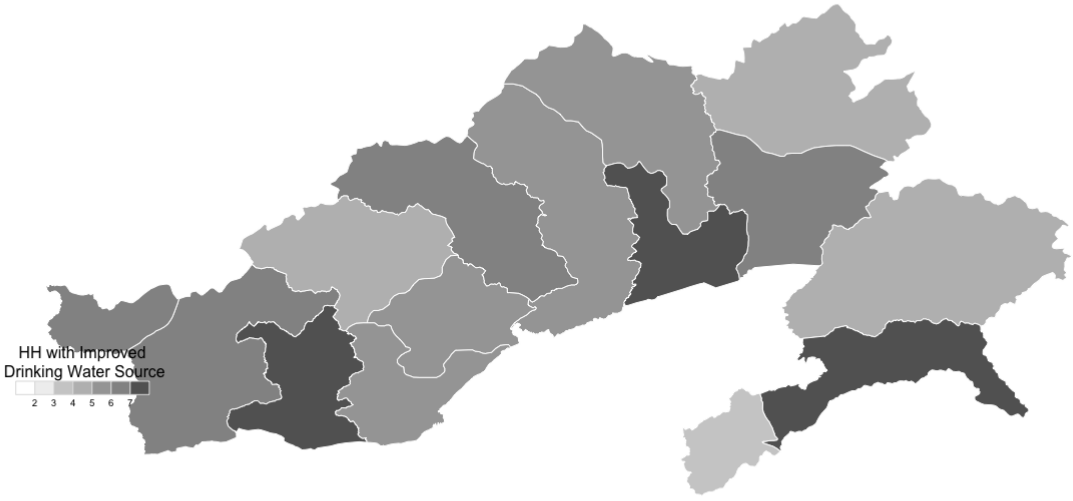
Andaman and Nicobar



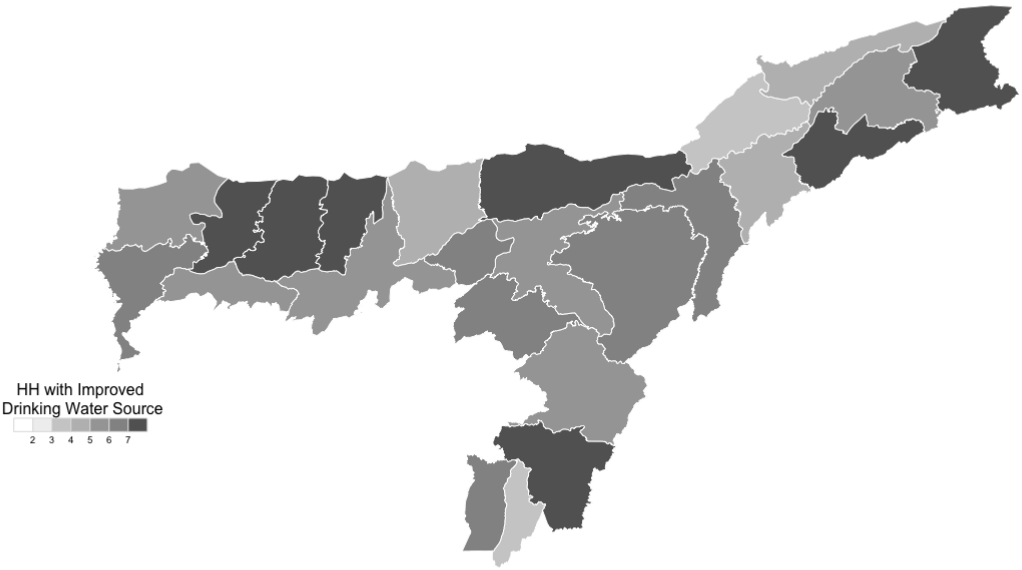
Andhra Pradesh



Arunachal Pradesh



Assam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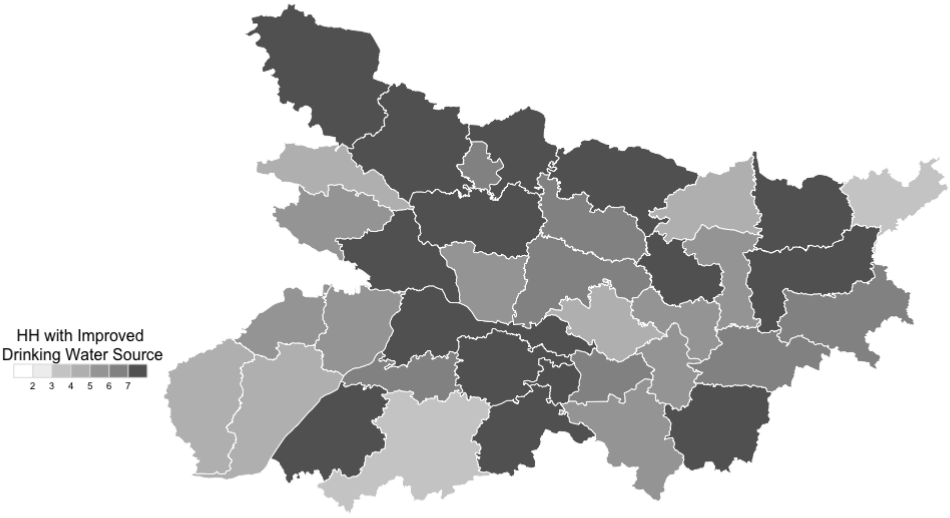
2 3 4 5 6 7

Bihar


HH with Improved
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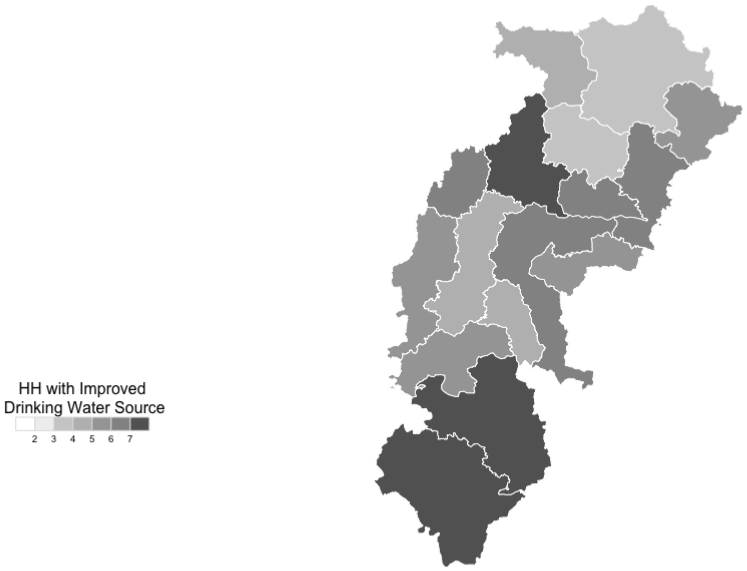
Chandigarh

Chhattisgarh



Dadra and Nagar Haveli

Daman and Diu

Delhi


HH with Improved
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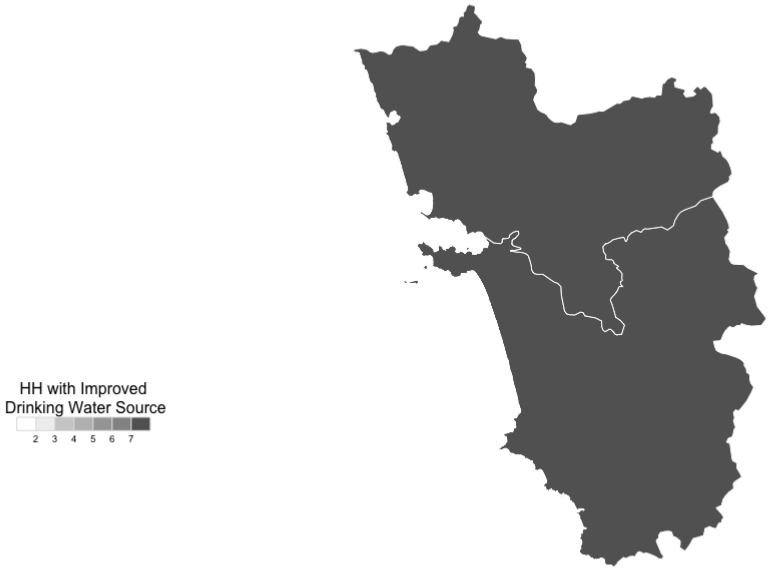
Goa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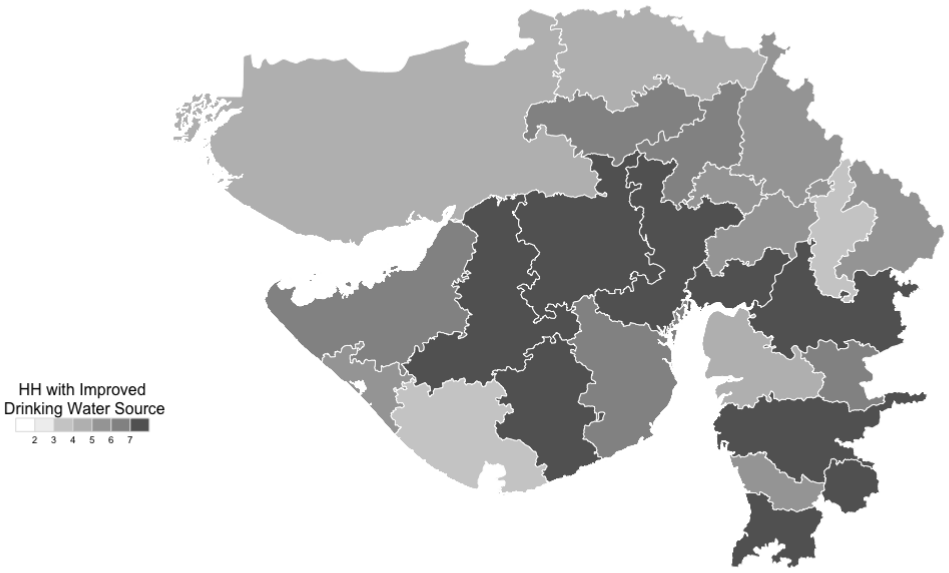
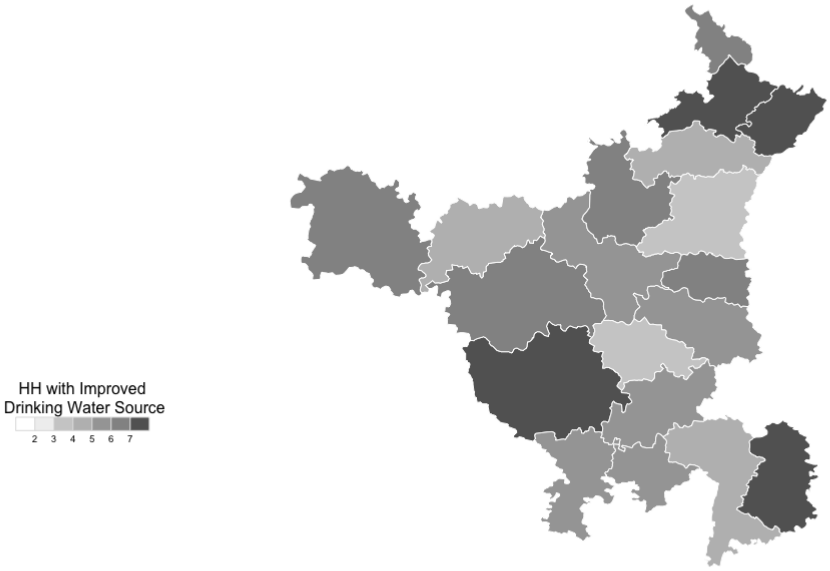
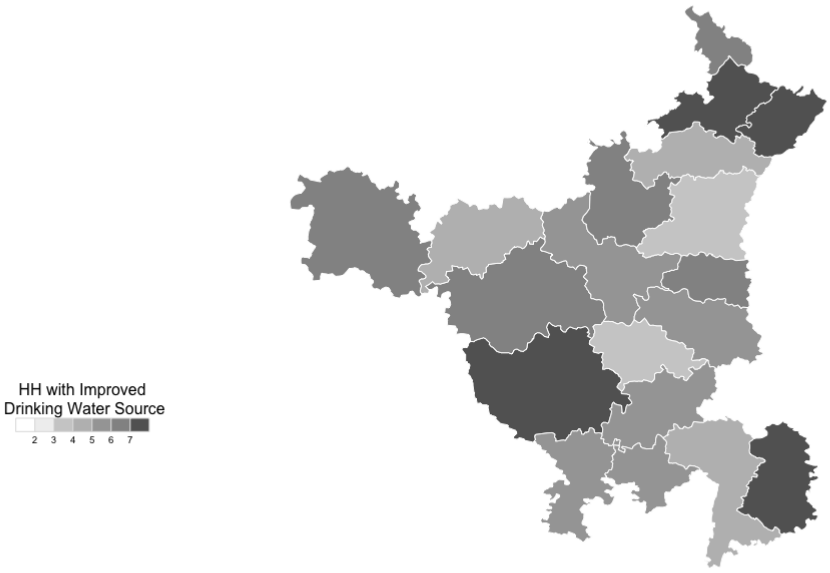
Gujarat



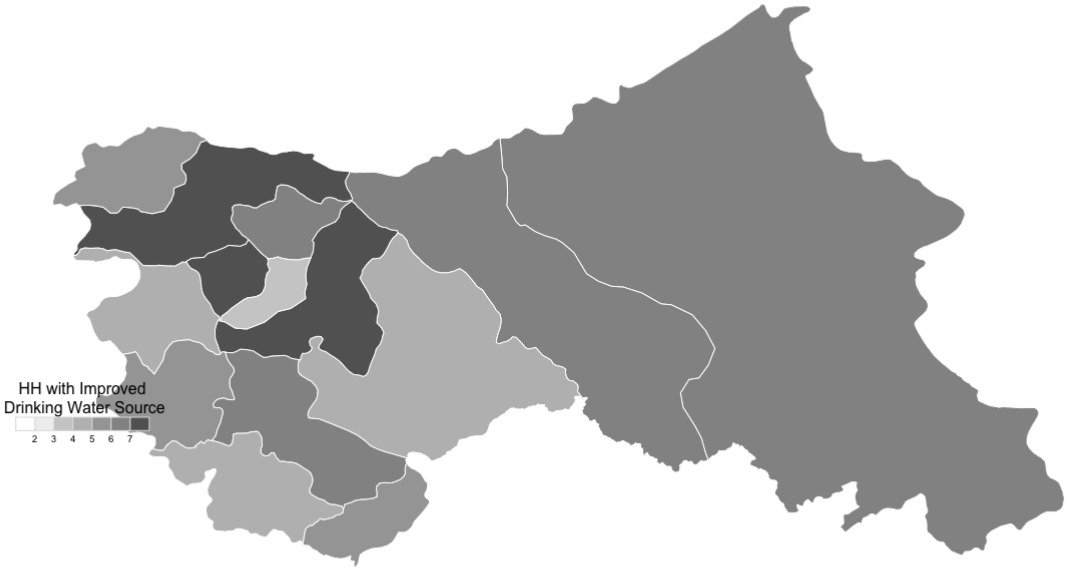
Haryana



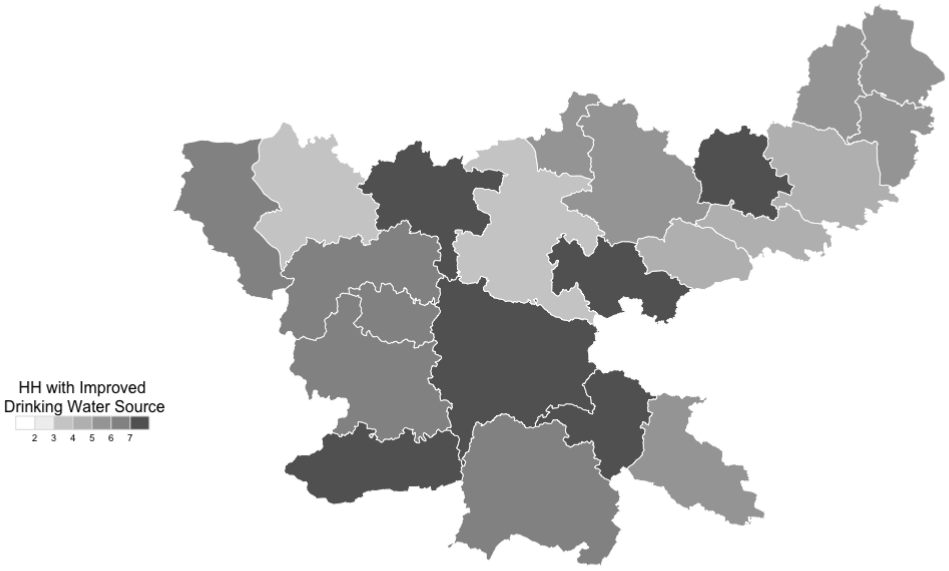
Himachal Pradesh



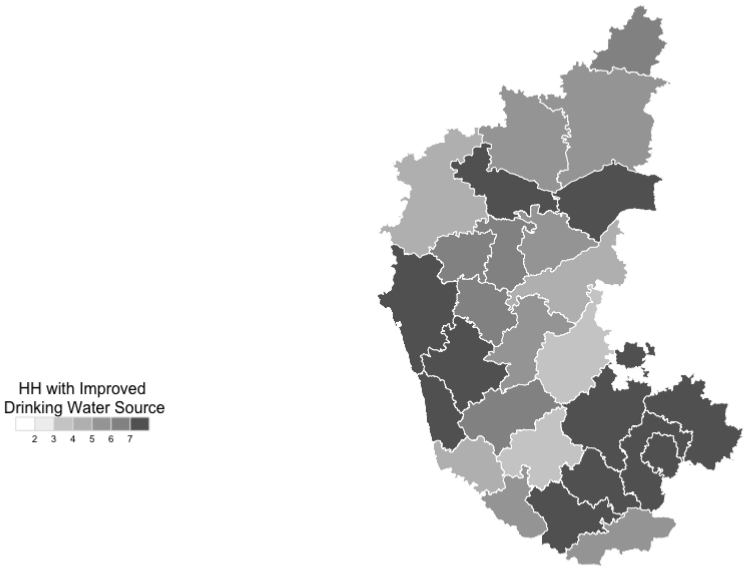
Jammu and Kashmir



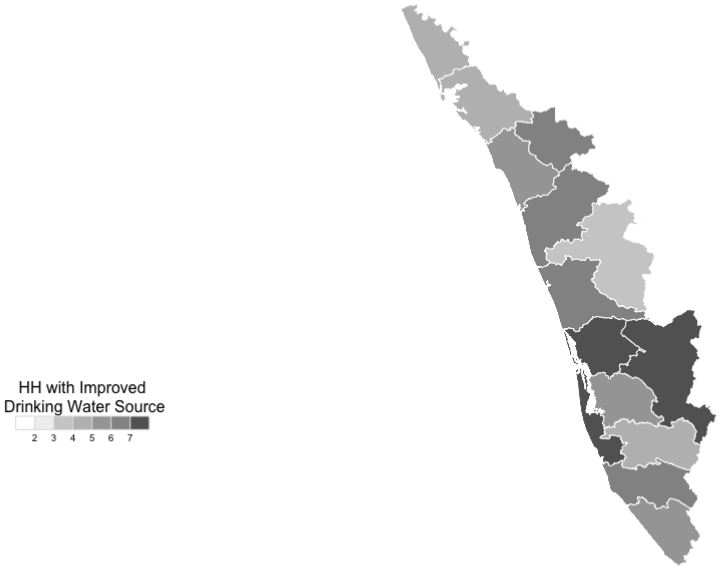
Jharkhand



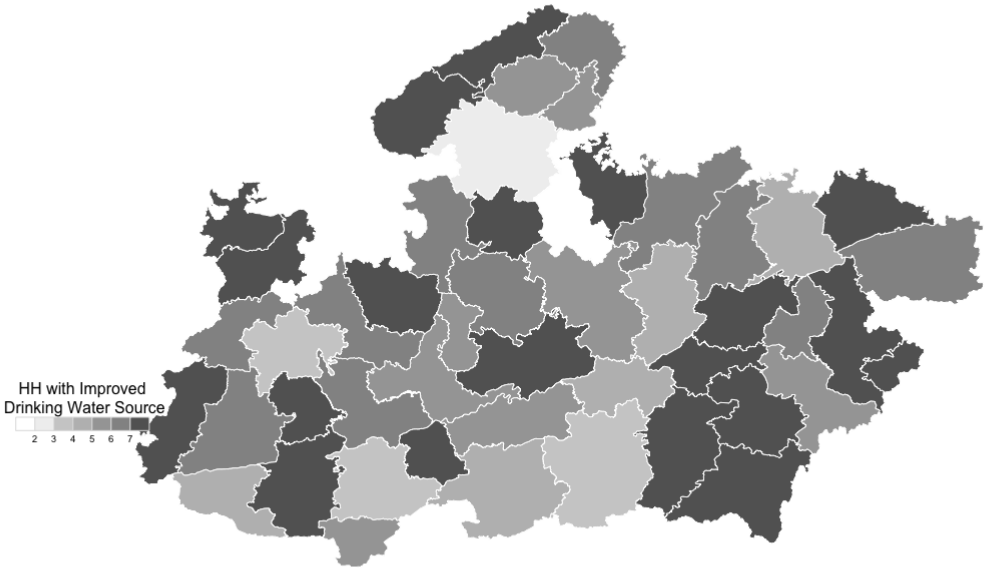
Karnataka



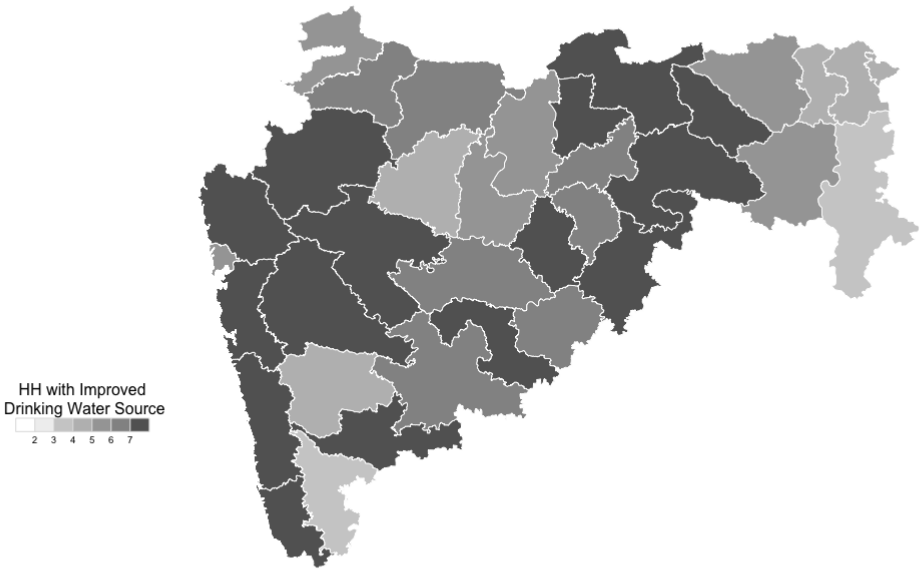
Kerala



Madhya Pradesh



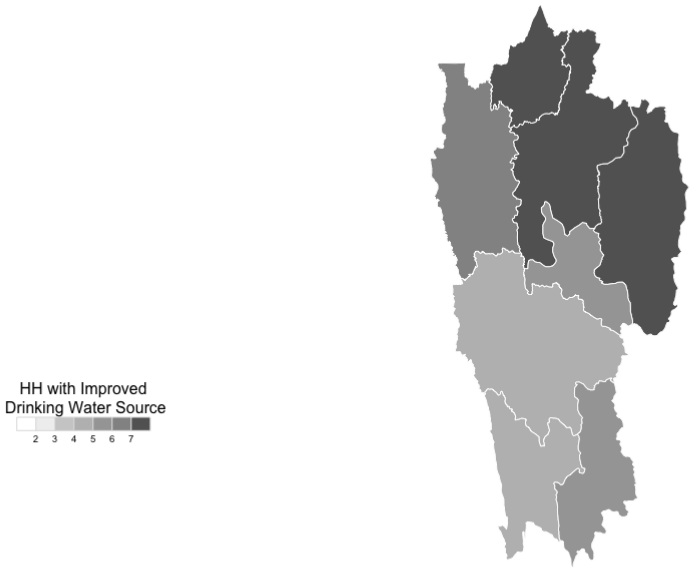
Maharashtra



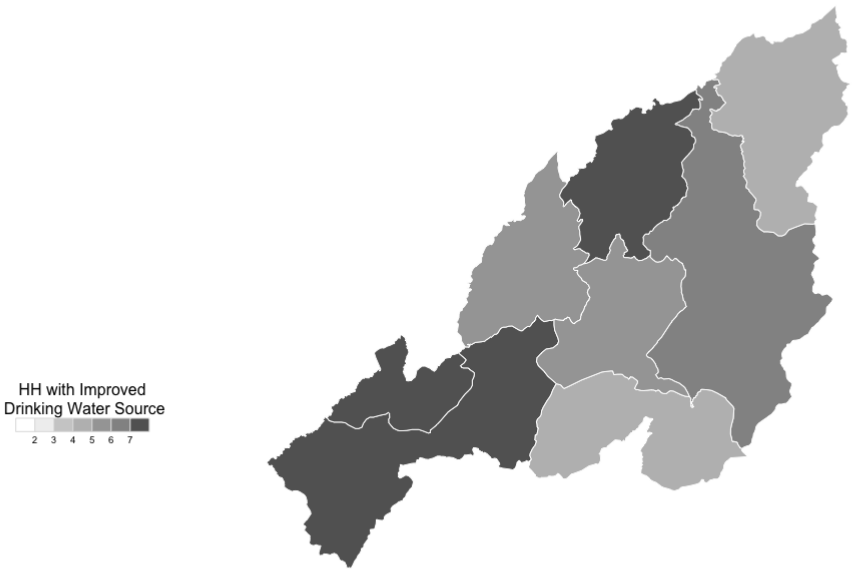
Manipur

Meghalaya

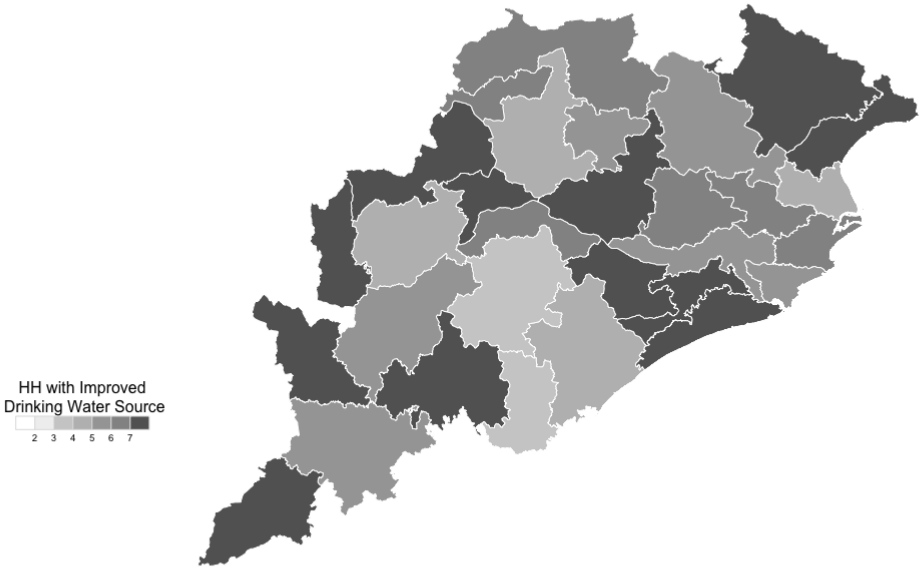
Mizoram



Nagaland

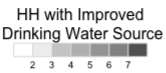


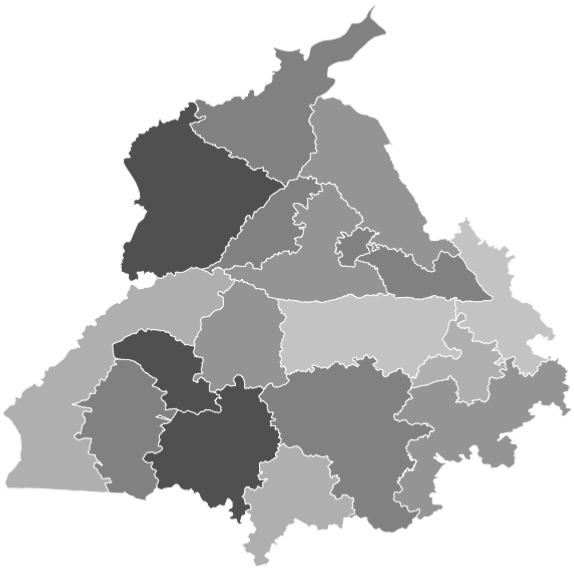
Orissa



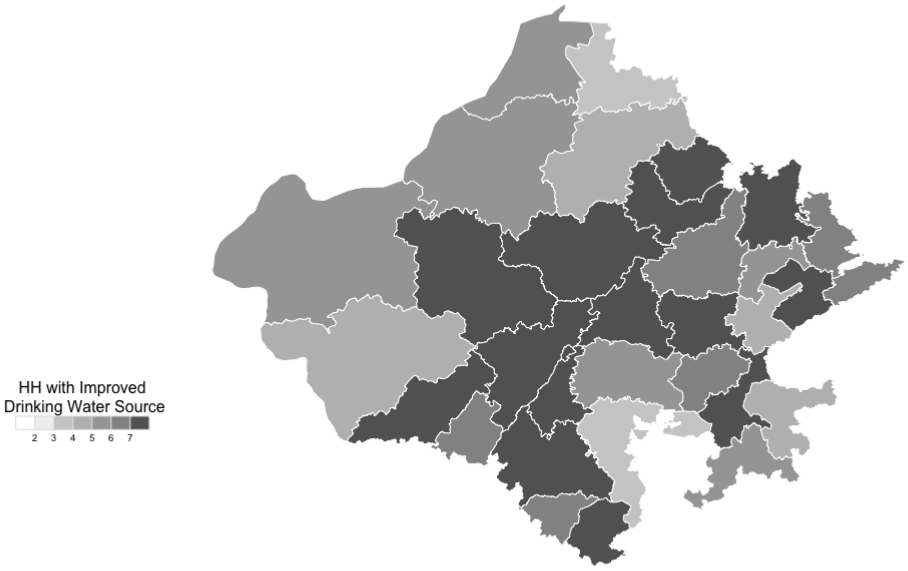
Puducherry

Punjab

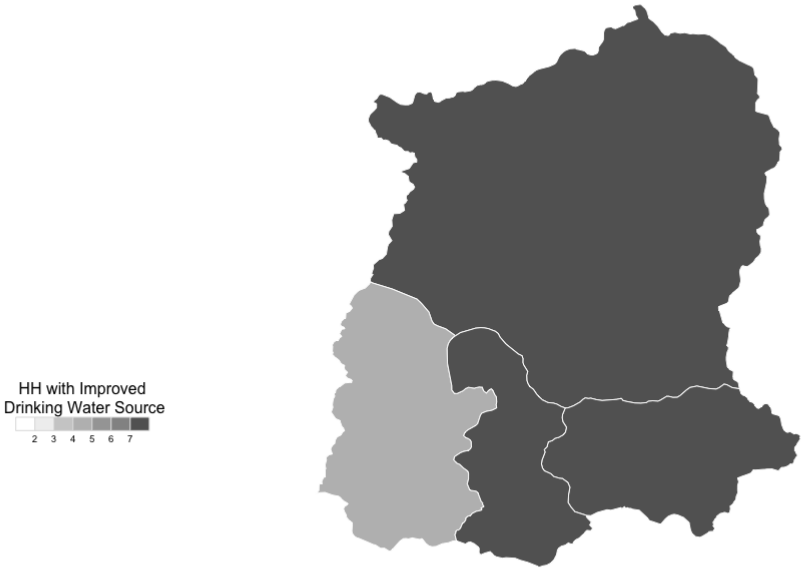




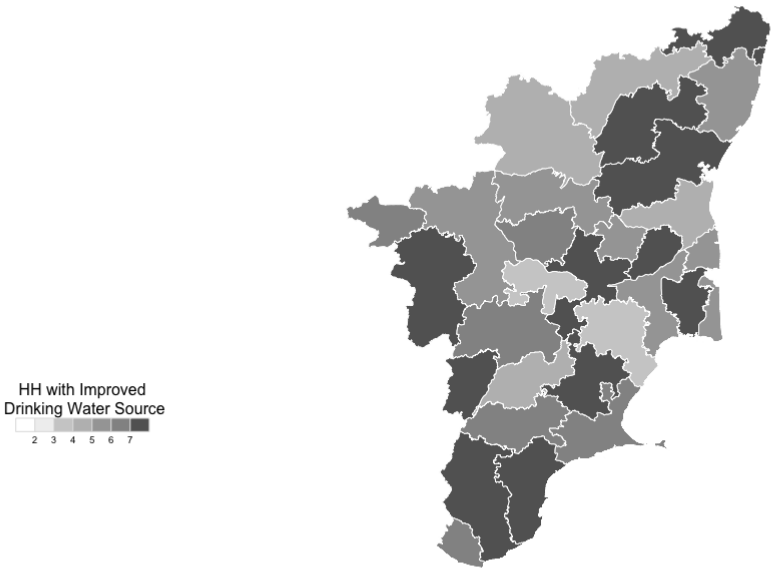
Rajasthan



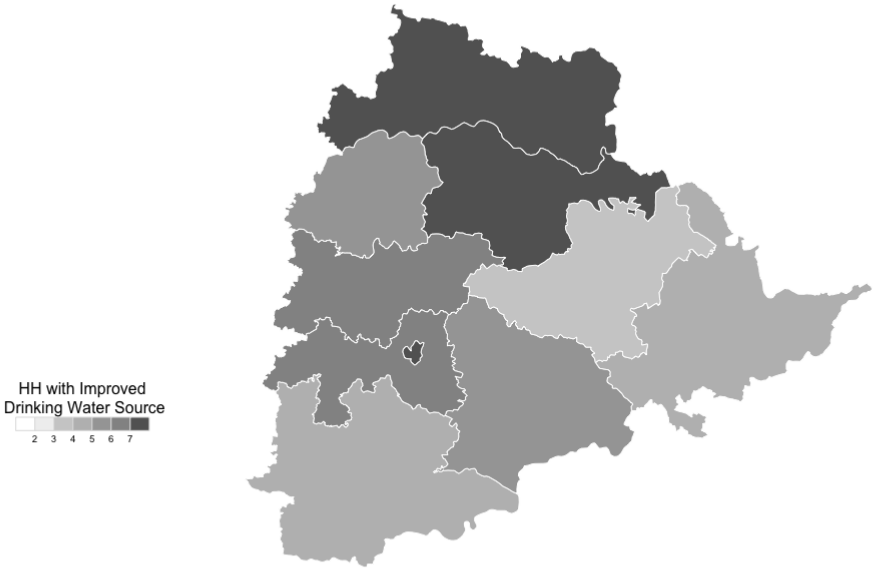
Sikkim



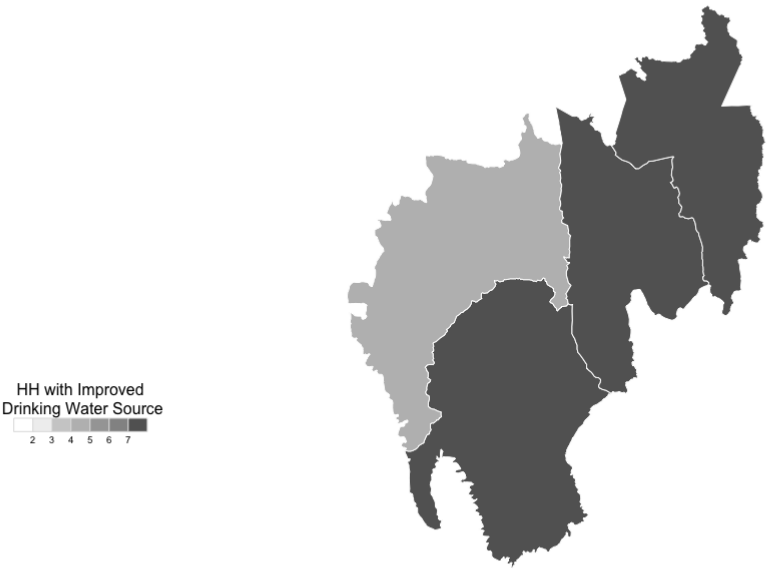
Tamil Nadu



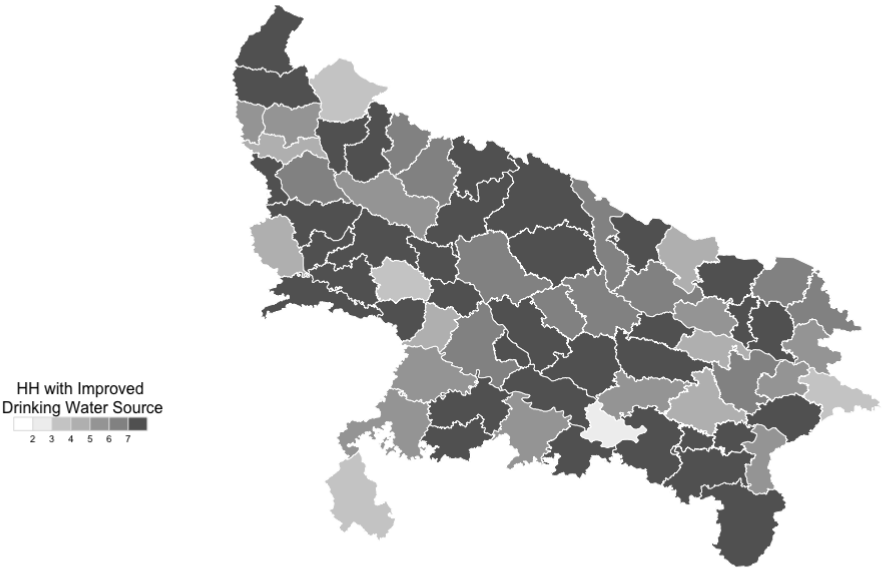
Telangana



Tripura



Uttar Pradesh



Uttaranchal

West Bengal