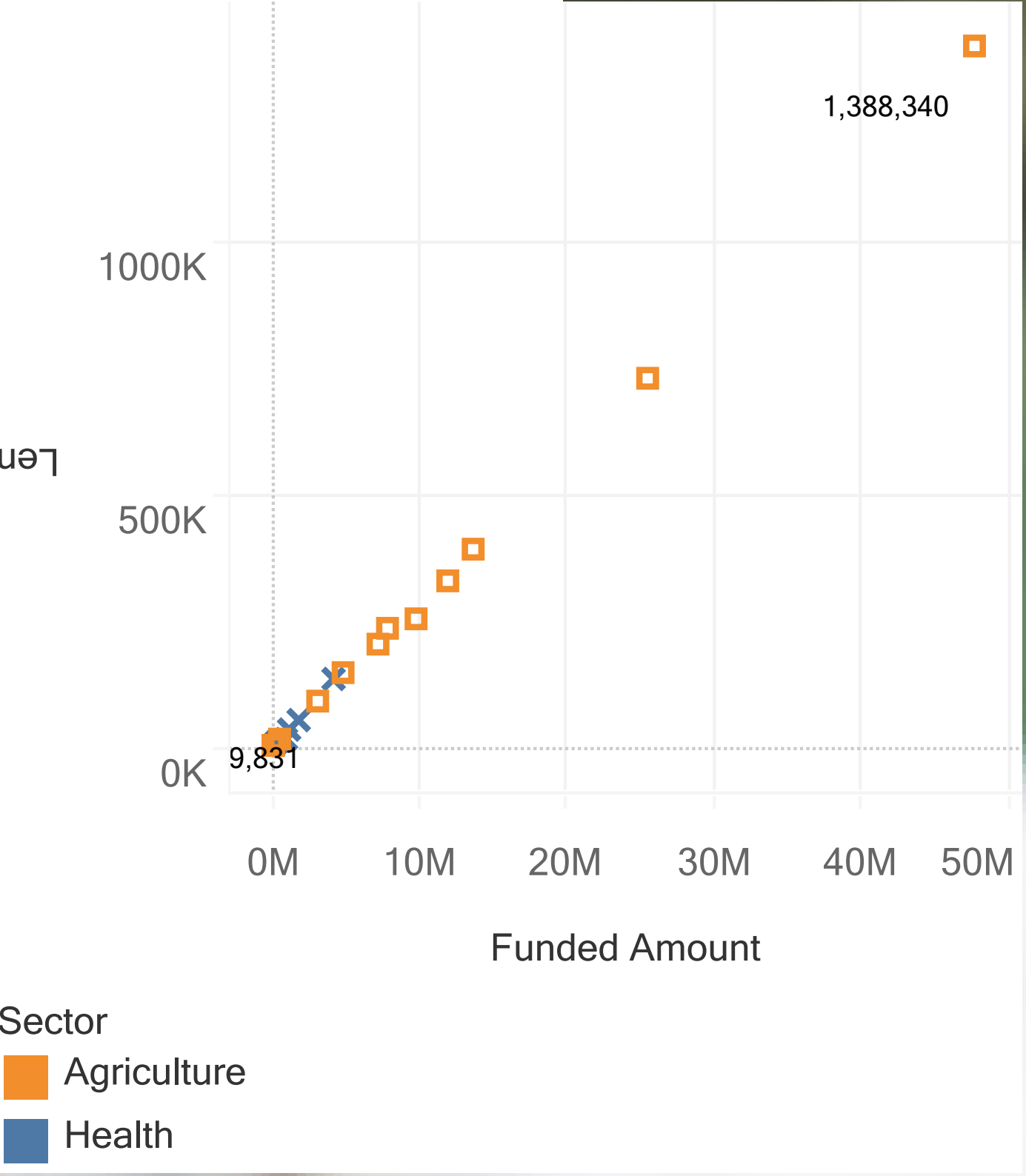
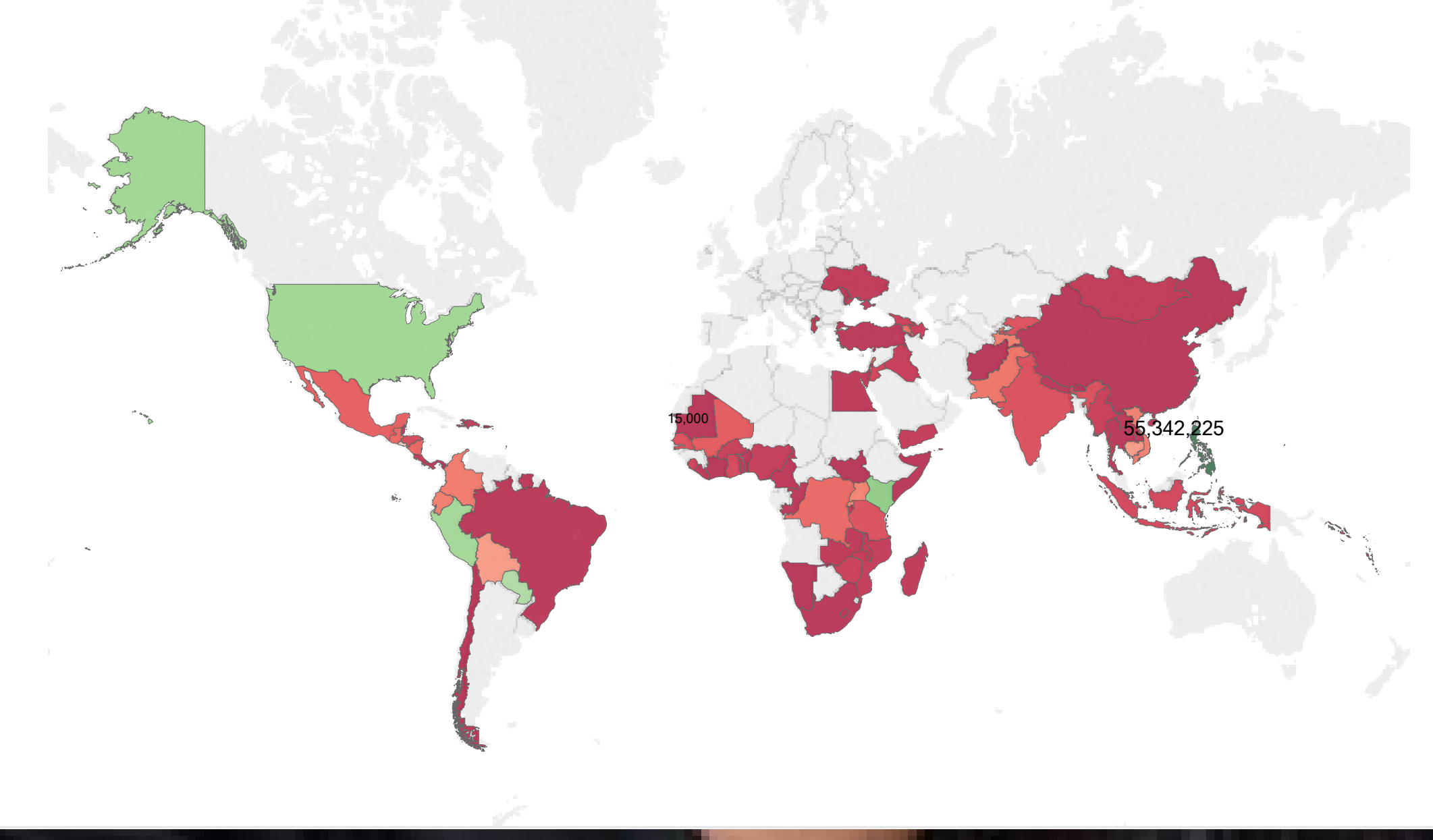
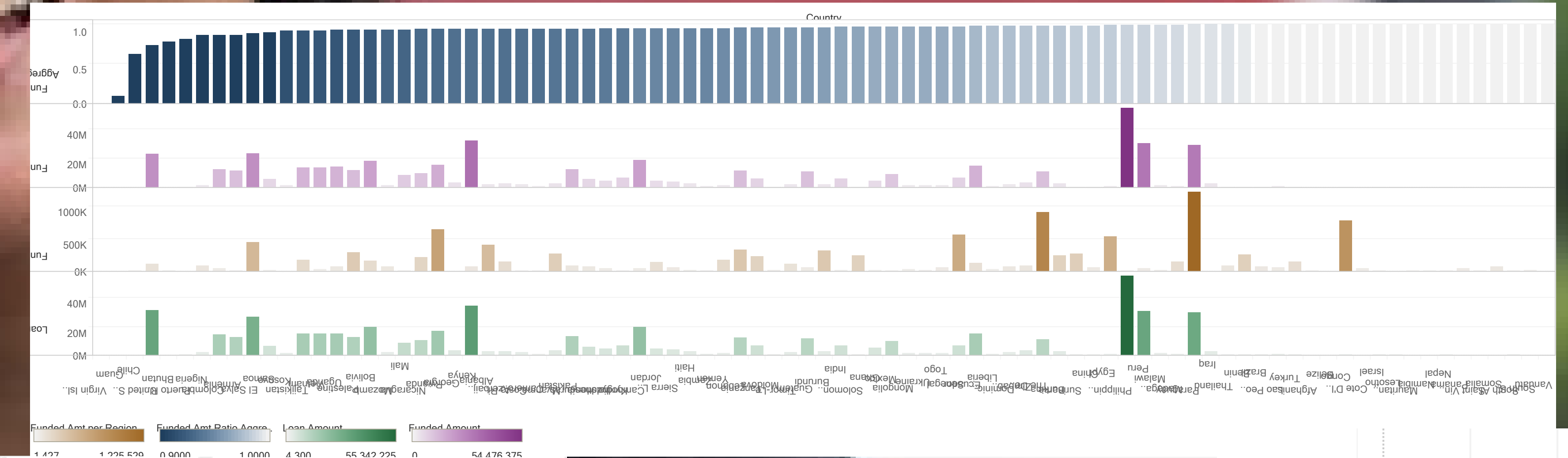
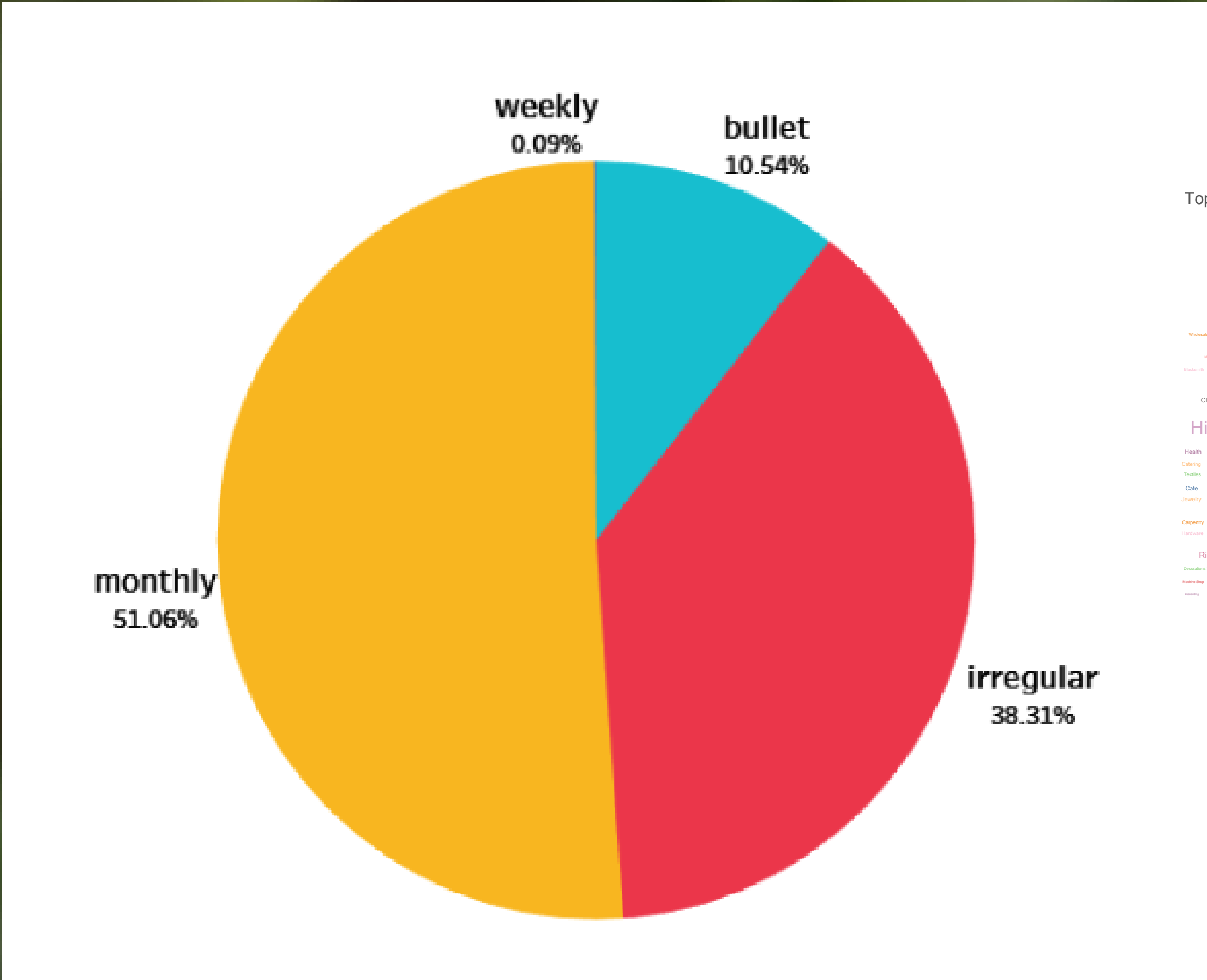


# DATA SCIENCE FOR A SOCIAL CAUSE:

# kiva CROWDFUNDING



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**LOAN REPAYMENT BEHAVIOUR**  
 MONTHLY 51.06%  
 IRREGULAR 38.31%  
 BULLET 10.54%  
 WEEKLY 0.09%

**TOP LOAN ACTIVITIES**  
 TOP 1 FARMING (72,955)  
 TOP 2 GENERAL STORE (64,729)  
 TOP 3 PERSONAL HOUSING EXPENSES (32,448)

**COUNTRY-WISE LOAN DISTRIBUTION**  
 TOP - PHILIPPINES (\$55M)  
 BOTTOM - MAURITANA (\$15K)

**SECTOR-WISE LOAN DISTRIBUTION**  
 TOP - AGRICULTURE  
 BOTTOM - HEALTH

## INTRODUCTION

For our project on data visualization, we chose **Kiva.org**, which is an online crowdfunding platform extending financial services to the financially excluded people around the world. In order to set their investment priorities, help inform lenders, and understand their target communities, knowing the level of poverty of each borrower is critical. To this end, our project deduces inferences by analyzing Kiva's loan data to estimate the welfare level of the borrowers in specific regions, based on shared economic and demographic characteristics. We have used the software, Tableau to produce all the visualizations.

## METHODS

We dis-aggregated the regional averages based on gender, sector, borrowing behavior and the countries given the higher loan amounts and funded amounts, to estimate a Kiva borrower's level of welfare. Some of the topics we addressed were:

- The distribution of **borrowers' payback loan interval behavior**.
- Most popular activities** for which the amount was lent.
- Country-wise** loan distribution.
- Distribution of the loan amount as well as number of loans funded based on the **theme category**.
- The funded amount versus the loan amount, indicating the **funded amount ratio** based on each country and its respective regions.

## FINDINGS

- One of our initial findings was that the highest lender count was towards the Agricultural sector. However, we would **recommend** Kiva to increase its funding in the "Health" sector, which appears to be poorly funded.
- Additionally, only 20.4% of the borrowers are female, while there are 79.6% are male borrowers, with no female borrowers in some areas like Turkey, Solomon Islands.
- Our **recommendation** to Kiva is to launch some "Loaning Offer" targeted at the women borrowers, in order to encourage more women from different regions to raise their own businesses.



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