

DEFENDING THE EARTH

Environmental Defender Conflicts and Resource Extraction in Peru

Evelyn Bellew
Tufts University May 2019



Since 2002, over 80 Peruvian environmental defenders have been killed in conflicts.

Who are environmental defenders?

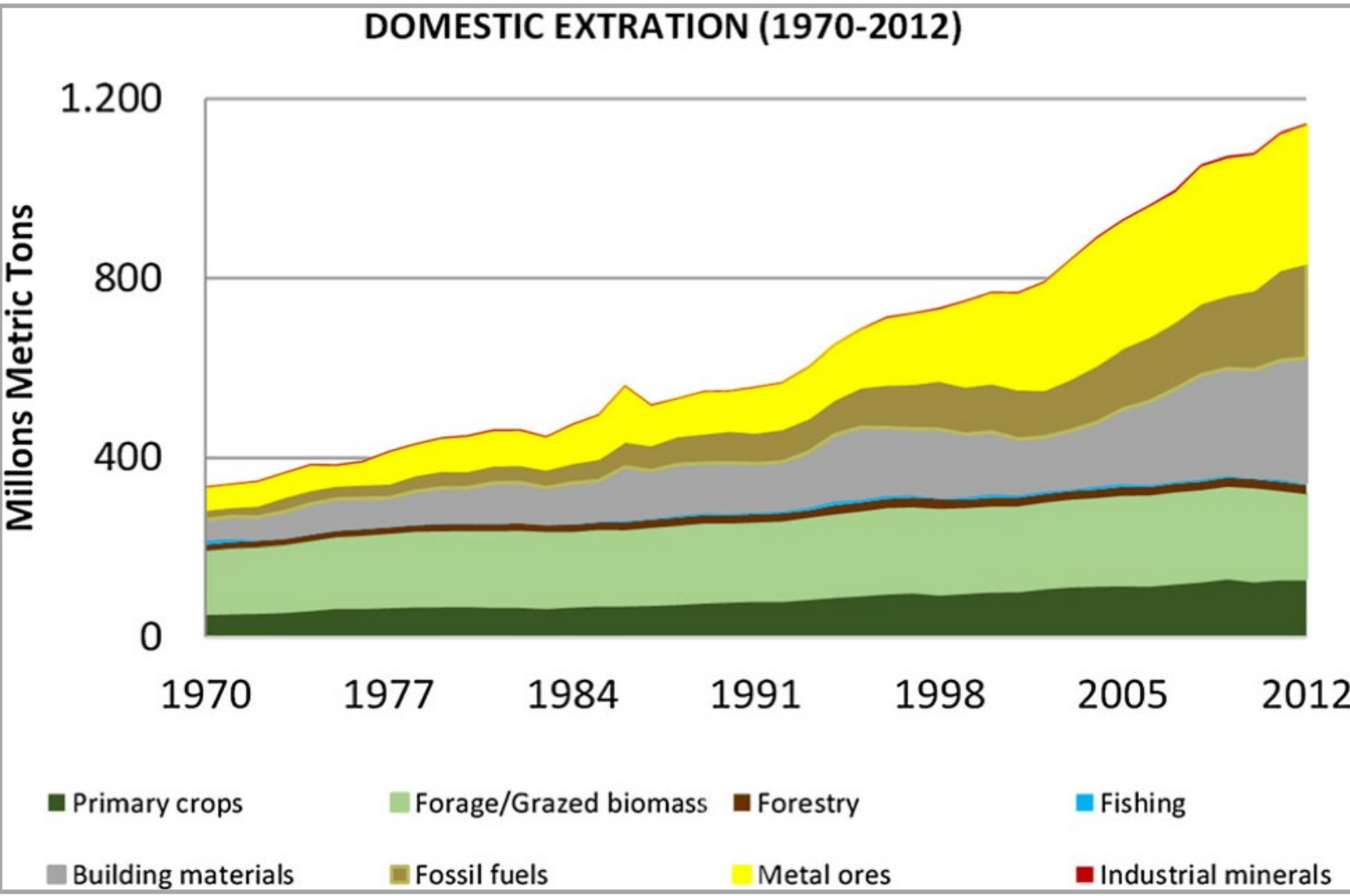
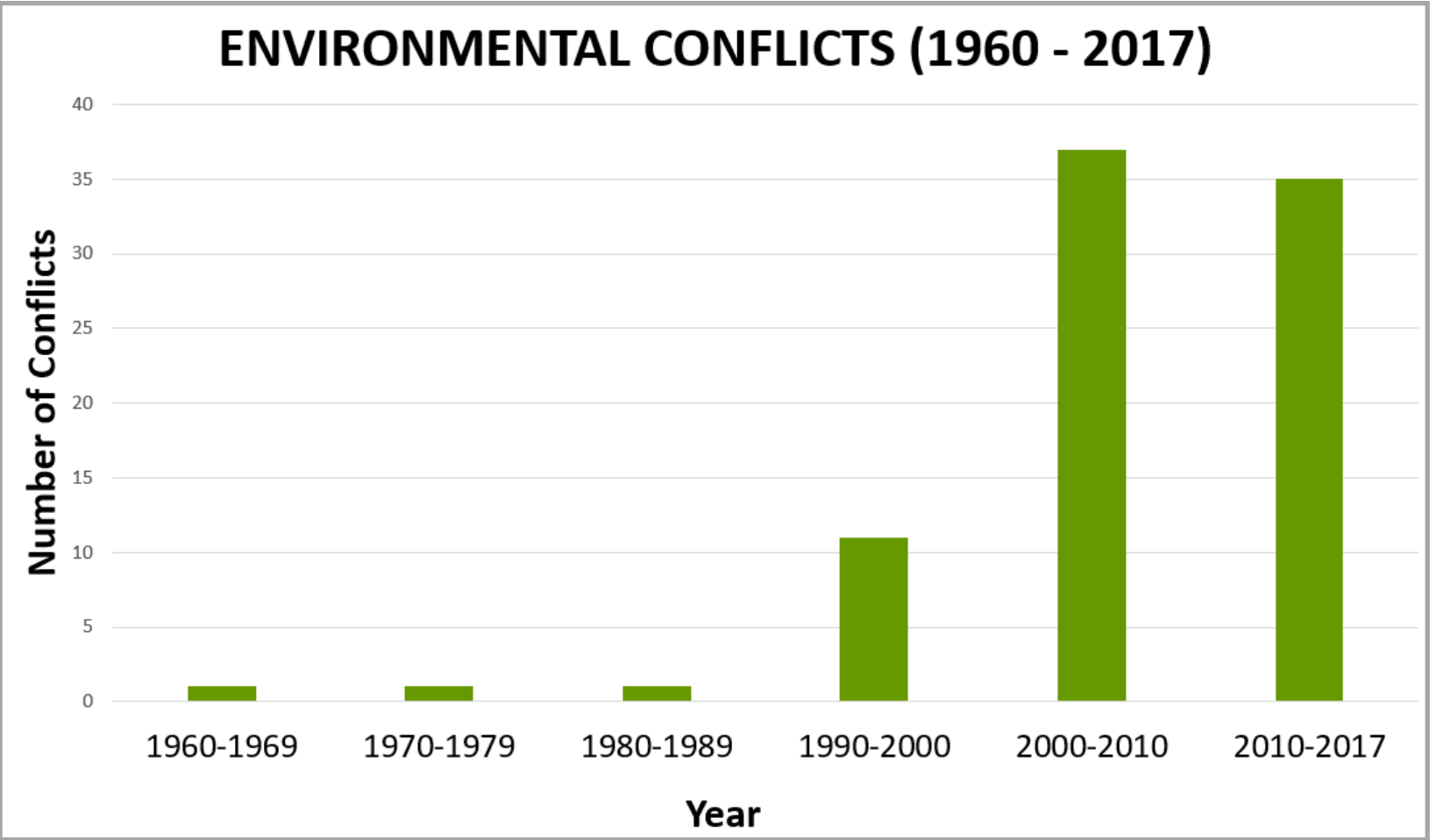
Anyone who takes action to protect environmental or land rights. Many environmental defenders are forced to take a stand to protect their livelihoods and ancestral lands.

Who is threatening them?

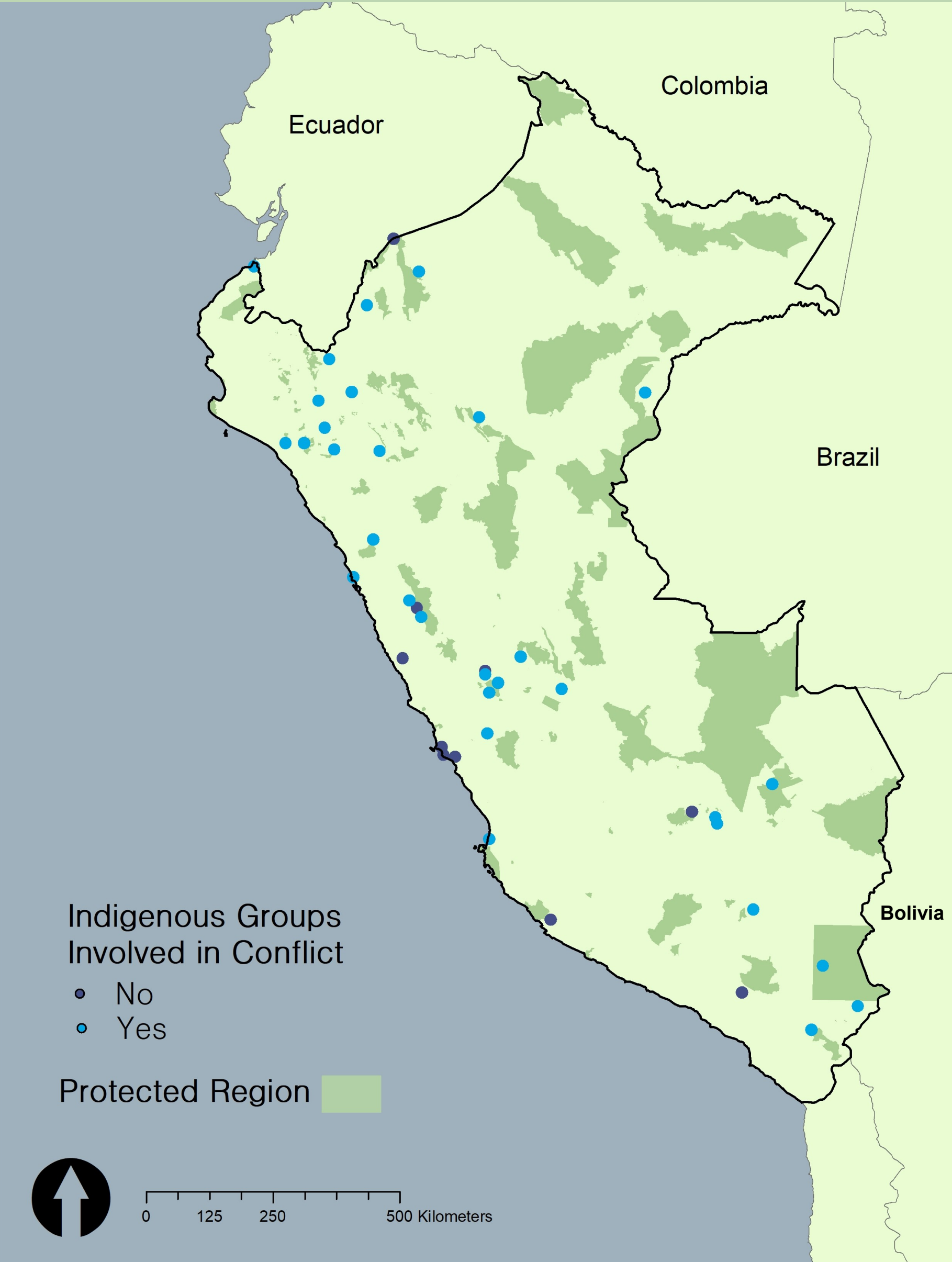
The industries driving the attacks include mining operations, agribusiness, logging projects, and water dam construction. While a culture of impunity has made it difficult to identify those responsible for the violence, criminal gangs, soldiers, local police, and paramilitary forces are typically behind the most violent threats to environmental defenders.

Why have threats to environmental defenders been increasing in Peru?

In the last few decades, Peru has become one of the worlds largest producers of silver, zinc, cooper, tin, and gold. While extraction practices have increased, most of the benefits have gone to transnational corporations leaving local peoples to deal with the externalities of pollution, contaminated water, destroyed agriculture land, and deforestation. Pro-extractive policies have only exacerbated the situation by protecting and promoting the transnational mining industry through favorable tax conditions and concession irrevocability. As environmental defenders protest the dispossessions of their land, extractive industries have increasingly exercised force to protect their profits.



Conflicts Near Protected Areas (since 1980)



Results and Conclusion

As evidenced by the side-by-side maps, the regions in Peru that experienced the greatest levels of conflict in the last 30 years mirror the areas with the most mining concessions. Among the environmental conflicts that were violent, the vast majority (68%) were related to mining operations, reflecting the particular damage caused by these operations.

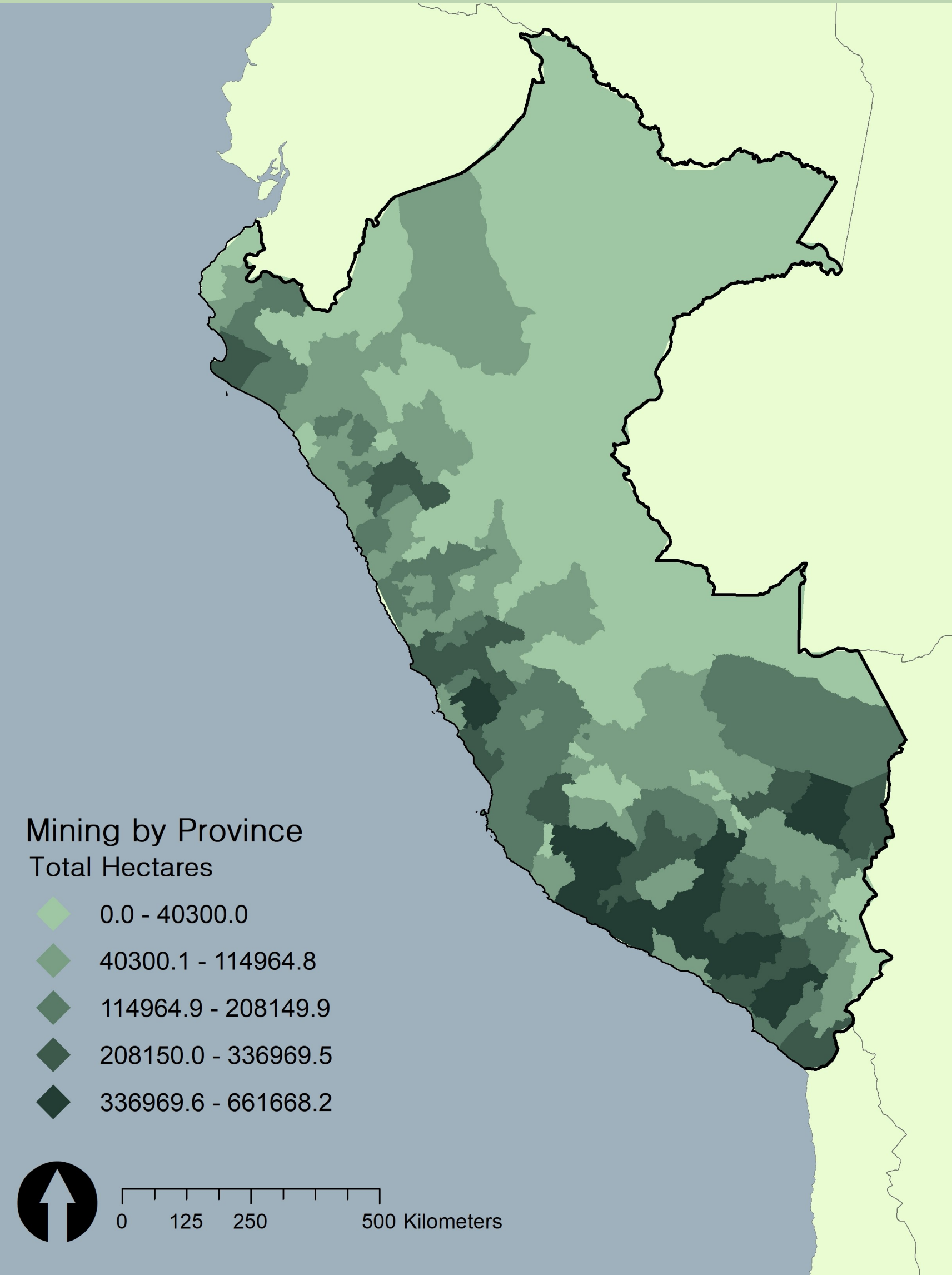
I also found that among conflicts near protected areas, over 75% involved indigenous groups. In Peru, over 10% of mining concessions exist on lands deemed protected by the government, over 70% of Peru's indigenous communities still have no way of demonstrating their land tenure rights, and over 20 million hectares indigenous land claims remained unprocessed. The lack of truly protected lands exacerbates environmental conflicts.

All of these results tell a story of tremendous power imbalance between those who benefit from the wealth of the extractive industries and those who depend on the land for their livelihoods.

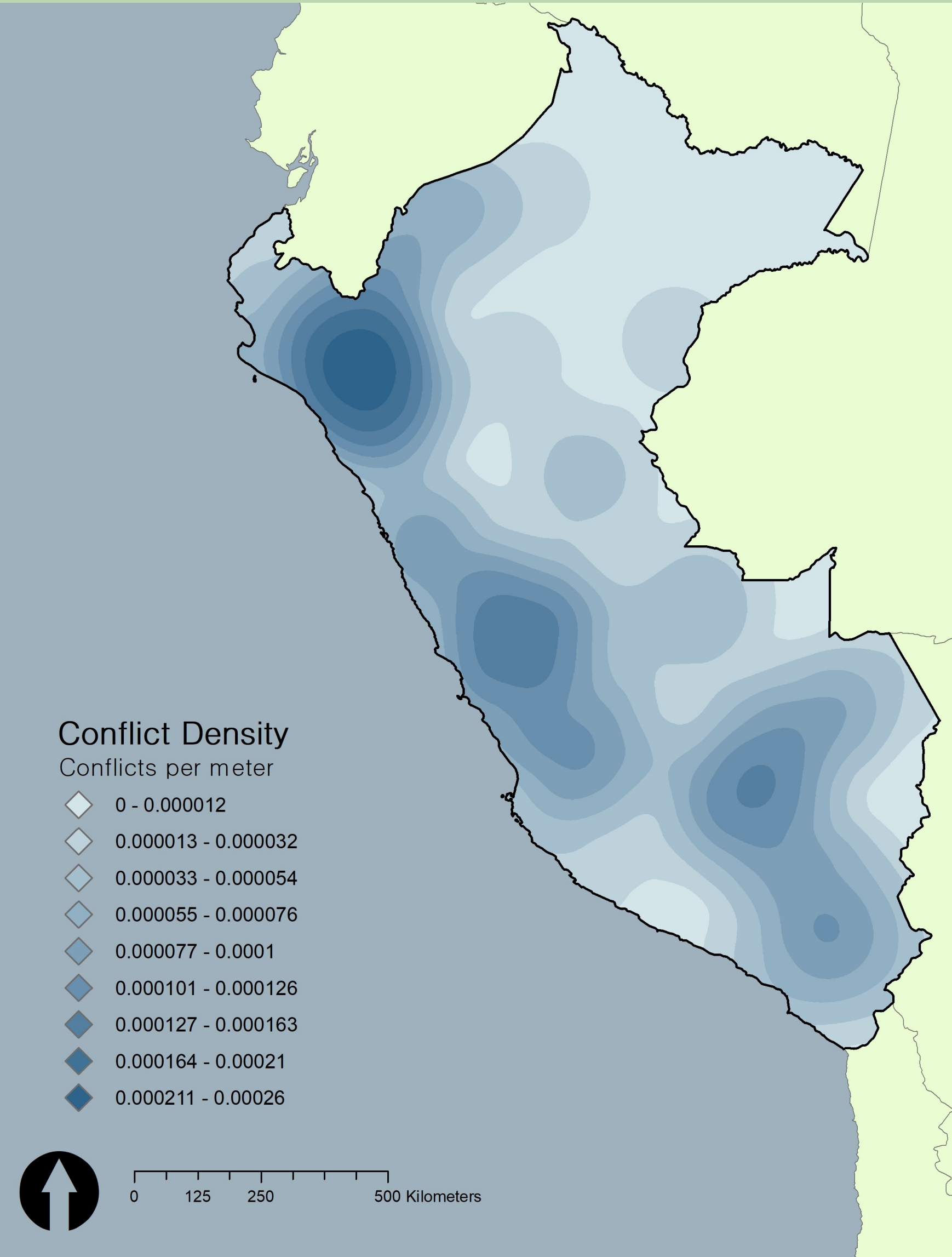
Sources

Created by: Evelyn Bellew, Tufts University, UEP232-Intro to GIS, May 6, 2019.
Sources: Environmental Justice Atlas, Open Witness, Instituto Geológico Minero y Metalúrgico, World Database on Protected Areas, Tufts M Drive, and Wikipedia Commons (for images)
Projection and Coordinate System: Peru96/WGS UTM zone 18S.
Special thanks to Sumeeta Srinivasan and Emma Homstad.

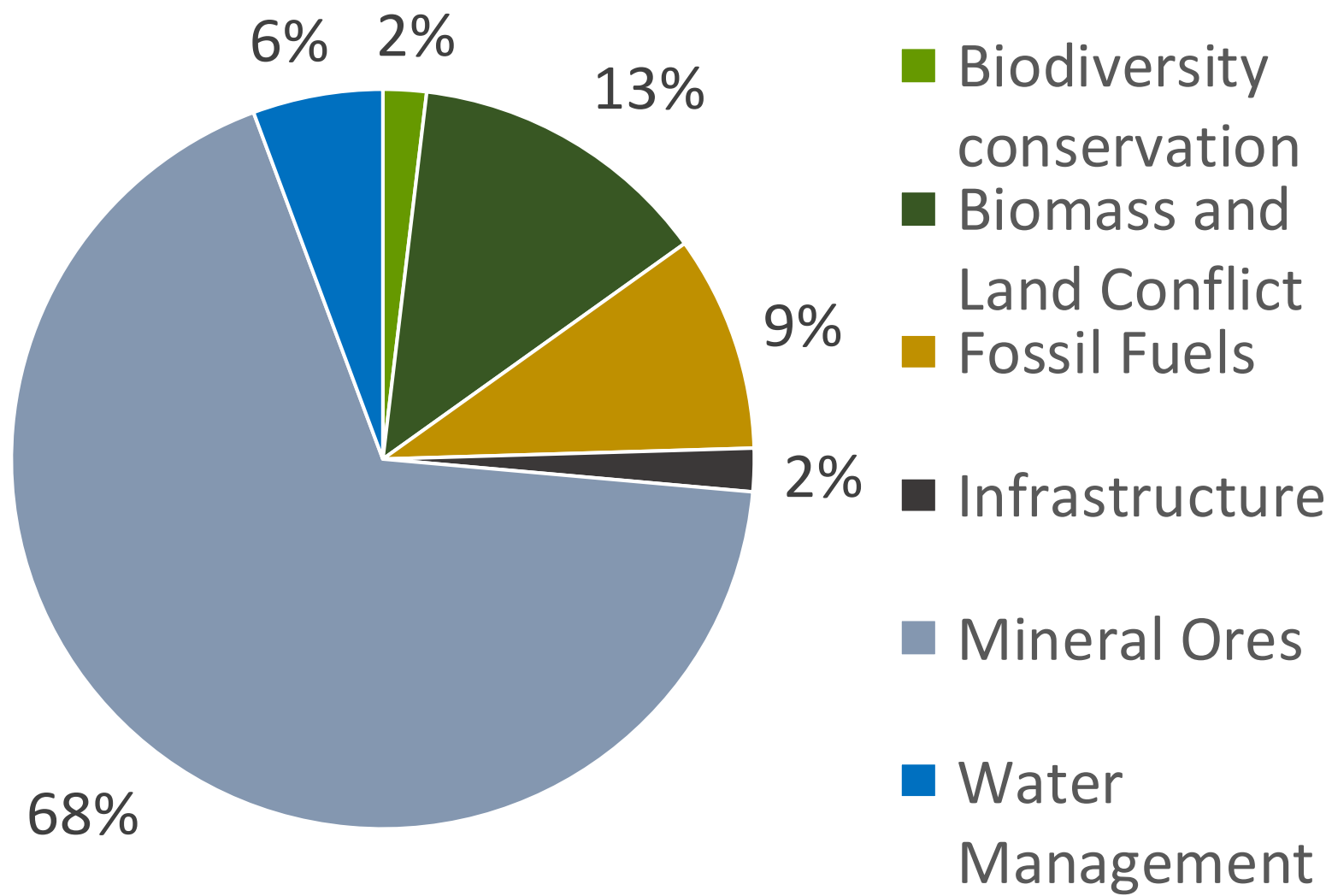
Mining Concessions (since 1980)



Conflict Density (since 1980)



Among violent conflicts, 68% were mining-related.



Methodology

Conflicts: Using data from Environmental Justice Atlas, I geocoded conflicts points from the last 30 years with data on the type of conflict, the level of violence, and the involvement of indigenous groups. I used Kernel Density analysis to visually represent the regions with the most environmental conflict.

Mining Concessions: Using data from Peruvians Instituto Geológico Minero y Metalúrgico (INGEMMET) I used a spatial join to sum the total concession hectares of each province. A concession is a legal claim to a land area and its natural resources.

Protected Areas: Using data from the World Database on Protected Areas (WDPA) I used a spatial query to select conflict points within 20 km of protected areas.