

# The Forgotten War

## A Vulnerability Analysis of Women in Yemen, 2015-2019

### Introduction

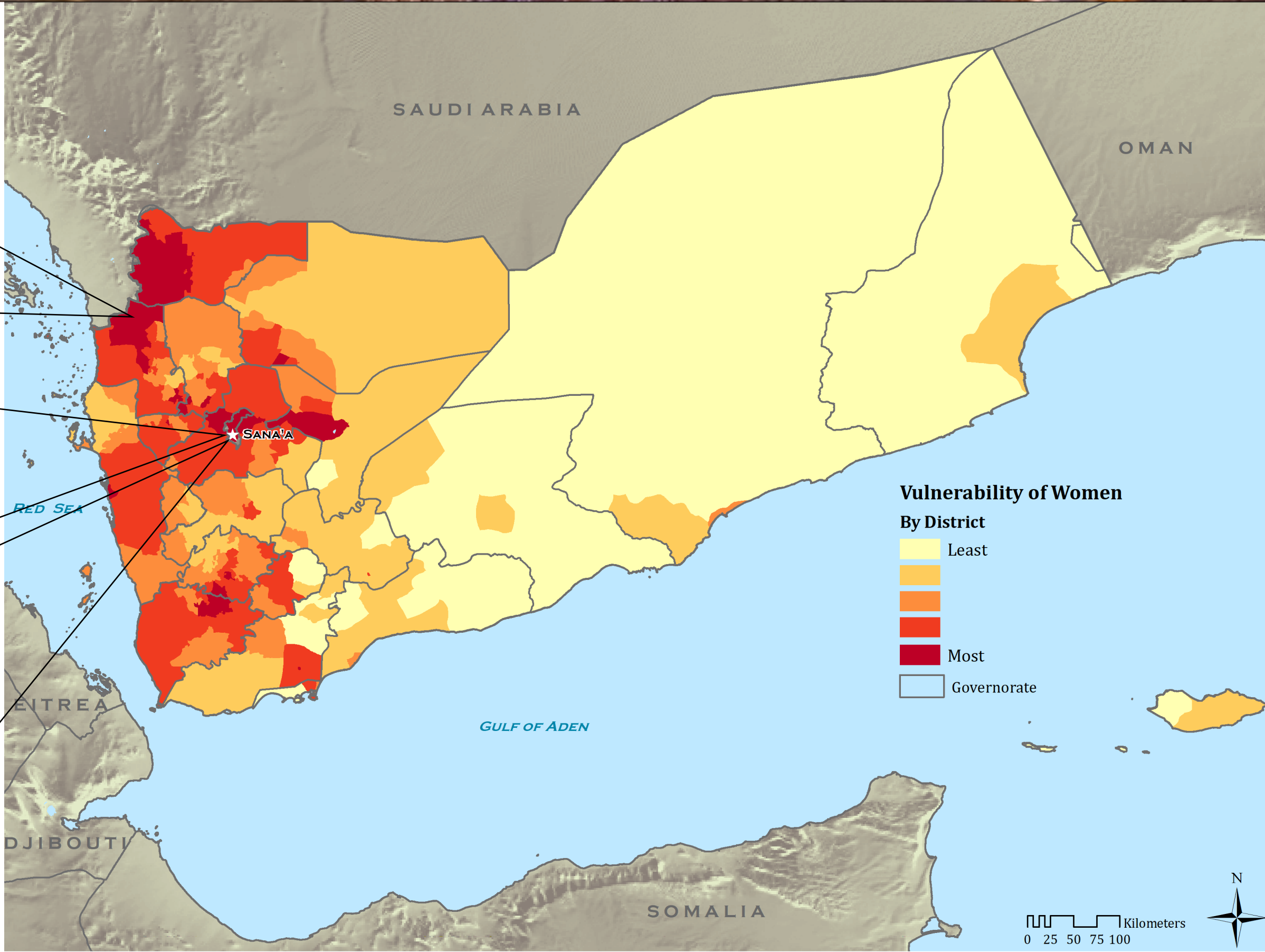
Yemen is in the midst of one of the worst man-made humanitarian crises in the world; 24.1 million people are in need of humanitarian support. The conflict in Yemen has been widely referred to as the “forgotten war” due to the lack of international attention and action. This neglect becomes exponential towards marginalized communities, even though the conflict has a disproportionate impact on groups such as women, children, persons with disabilities, the elderly, and IDPs. Using a gender lens enables us to push back against the erasure of human lives. This project will conduct a vulnerability analysis of women in Yemen by analyzing coalition airstrikes and their proximity to important civilian infrastructure, as well as an analysis of the various clusters of women’s humanitarian needs.



### Methods

Firstly, I conducted a desk research review and collected information on the Saudi-led coalition’s air campaign strategy, as well as women’s current humanitarian needs in Yemen. In my analysis, I used a kernel density tool, with a radius of 40,000 km<sup>2</sup>, to calculate the hotspots of coalition airstrikes. I reclassified the density with a ranking of 1-5, from the lowest density to the highest density. I then applied the Euclidean distance tool to four different variables of civilian infrastructure: waterways, hospitals & clinics, humanitarian points of interest (excluding hospital & clinics), and cropland. I used the raster reclassify tool to create ranked distances from the variables from 1-5, with 5 being the closest to the infrastructure. I then applied the raster calculator to create an average of the four civilian infrastructure variables. Then, I used the raster calculator to calculate conflict proximity to civilian infrastructure. Finally, to summarize my raster composite of conflict proximity to civilian infrastructure by admin level 2 boundaries, I applied the zonal statistics as a table tool.

For women’s humanitarian needs in Yemen, I joined a number of variables that identified the number of women in need of various clusters of humanitarian assistance, including WASH (Water, Sanitation, and Hygiene), food, nutrition, shelter, protection, and health. I reclassified each of these variables and ranked them from 1 -5, with 1 being the lowest number of women of need and 5 being the highest. Finally, I took the average of these humanitarian needs, and added the ranking of proximity of conflict to civilian infrastructure to find an ultimate ranking of women’s vulnerability in Yemen by district.



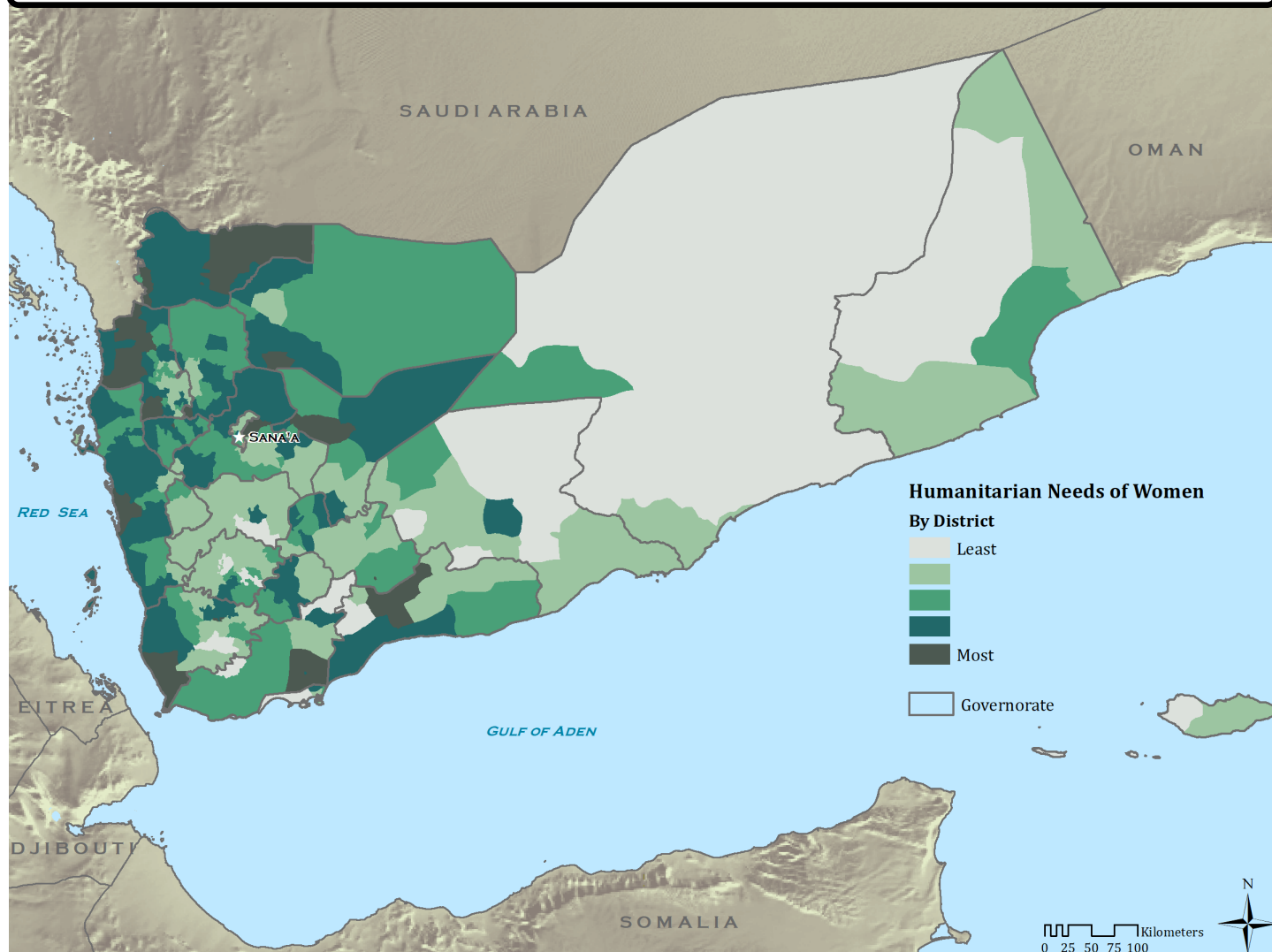
### Results & Discussion

The geospatial analysis revealed that there is a total of 960,485 women in need of food assistance, 1,202,011 women in need of health assistance, 541,062 women in need of nutrition assistance, 1,265,583 women in need of protection assistance, 1,015,692 women in need of WASH assistance and 402,975 women in need of shelter assistance in the districts ranked as most vulnerable. Governorates with at least three districts in the highest level ranking of vulnerability include Ma’rib, Ibb, Ta’iz, al Hodeidah, Sana’a City, Sa’dah, and Hajjah. These results reinforce some of the known elements of the Saudi-led coalition’s strategy, targeting: Yemeni capital Sana’a, which the Houthis seized in 2014; rural Sa’dah, which contains a significant amount of agricultural infrastructure; the economic and cultural center of Ta’iz, which became a hotspot of violence; and the water infrastructure, as well as the Red Sea fishing industry, in the costal Tihama region, which contains Hajjah, al Hodeidah, and Ta’iz.

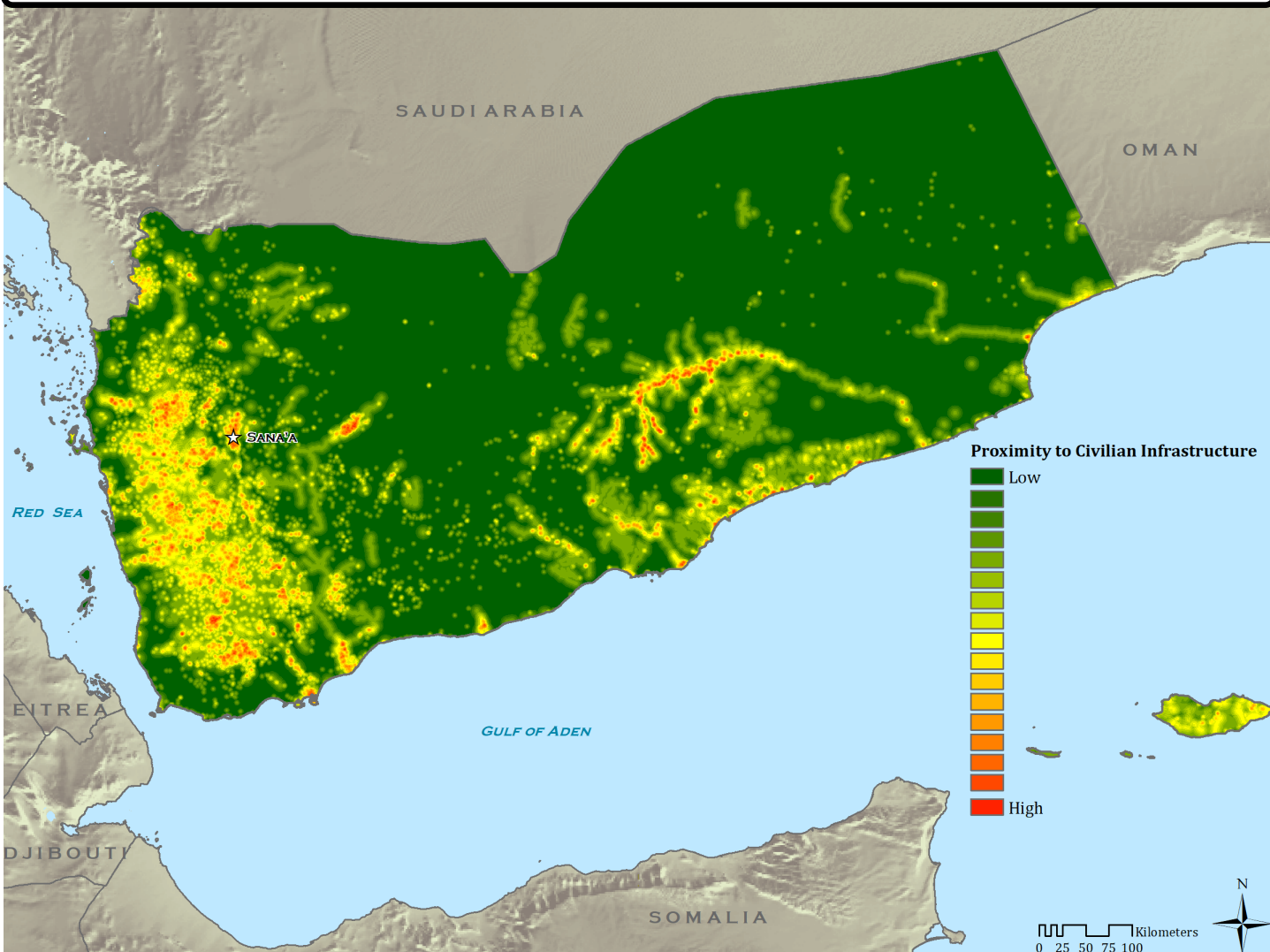
Of all the clusters of humanitarian needs, protection was the only variable in the “Most” ranked category in which the number of women in need was greater than the number of women in need in the other rankings of district vulnerability. When ranking proximity of conflict to civilian infrastructure, the number of women in need of protection assistance in the “High” proximate category is

significantly greater than the number of women in the “Moderately High” proximate category, increasing by 162% —a greater percent change in number of women than any other humanitarian cluster. The presence of conflict significantly increases the risks of gender -based violence, which disproportionately affects women and girls. With higher levels of conflict, services and access also decrease due to the present insecurity.

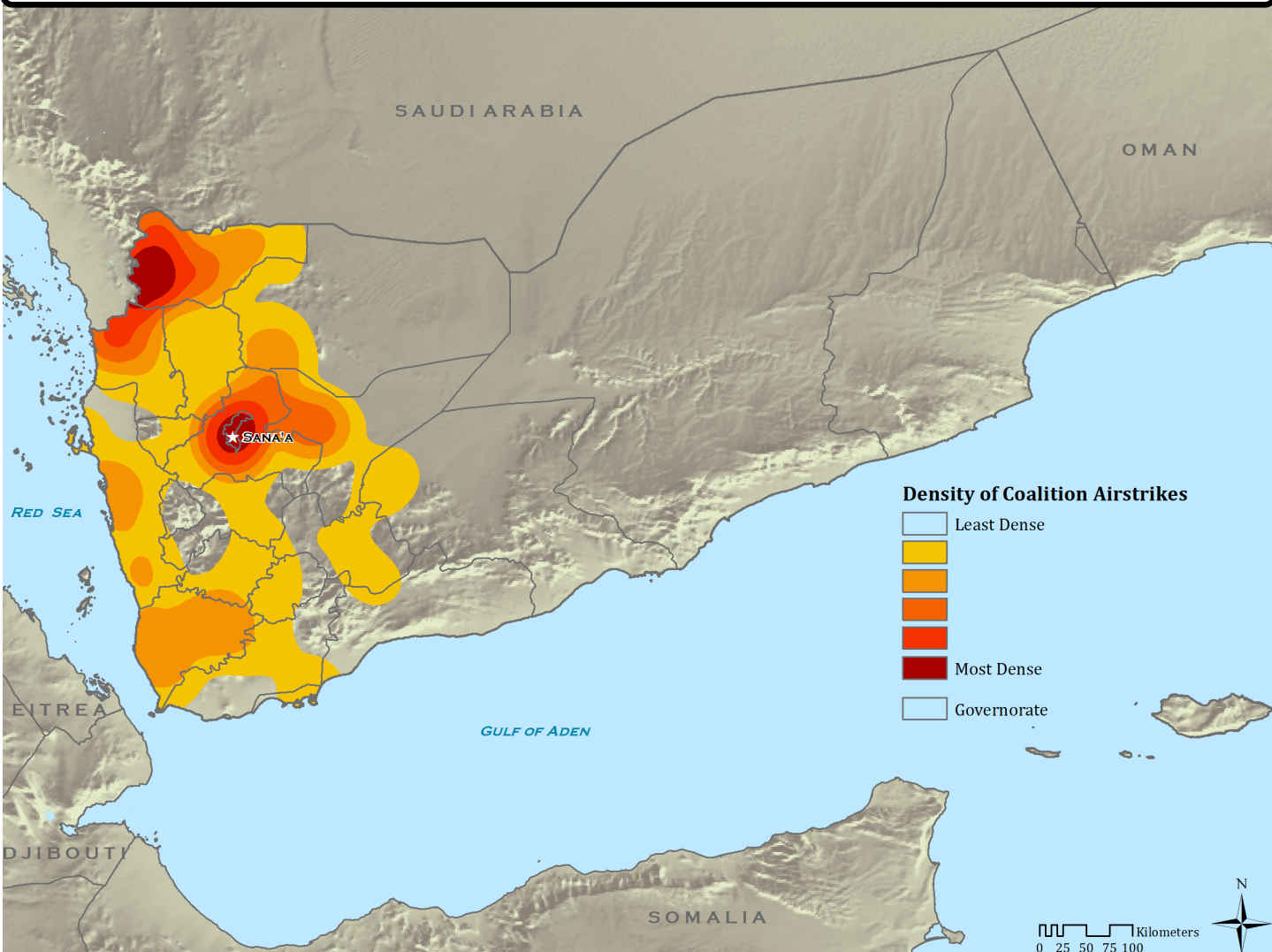
Humanitarian Needs of Women in Yemen



Civilian Infrastructure in Yemen



Coalition Airstrike Density in Yemen

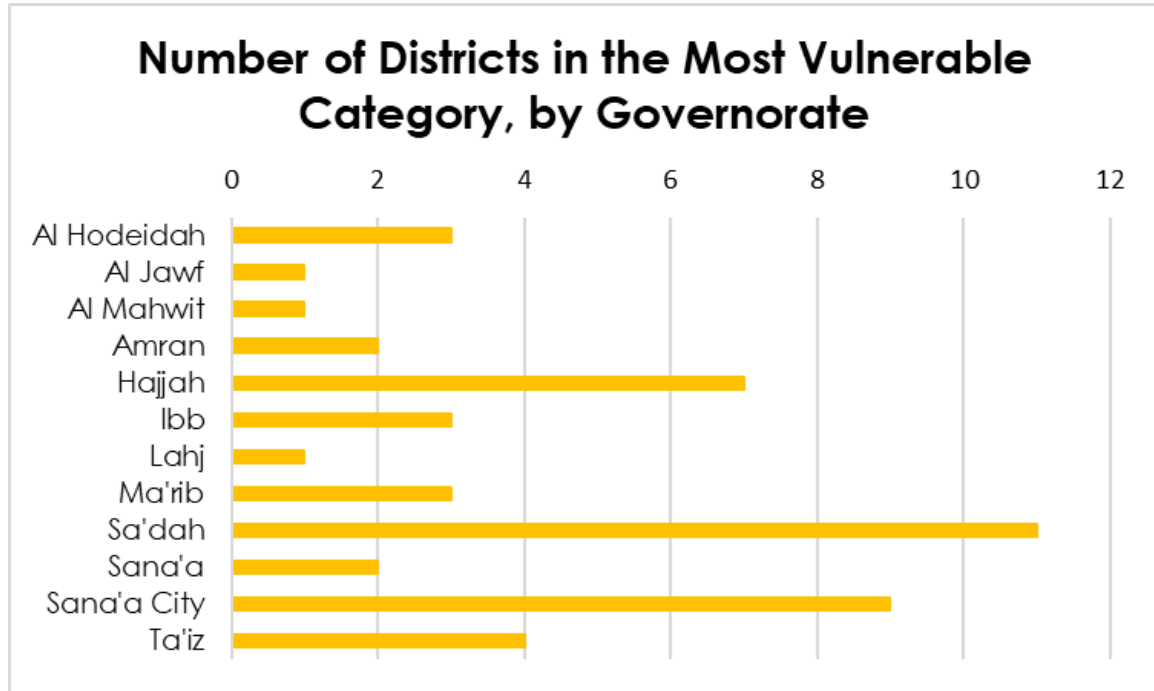


Number of Women in Need of Humanitarian Assistance by District Vulnerability Ranking

Vulnerability	Food Assistance	Health Assistance	Nutrition Assistance	Protection Assistance	WASH Assistance	Shelter Assistance
Least	346,681	86,512	188,823	147,914	289,252	110,039
Moderate	742,082	668,256	368,365	332,921	639,226	253,274
Most	1,146,843	1,107,586	534,550	575,394	929,599	350,238
	1,672,764	1,785,818	770,543	1,236,478	1,491,408	549,842
	960,485	1,102,011	541,062	1,265,583	1,015,692	402,975

Number of Women in Need of Humanitarian Assistance by District Proximity of Conflict to Civilian Infrastructure Ranking

Proximity	Food Assistance	Health Assistance	Nutrition Assistance	Protection Assistance	WASH Assistance	Shelter Assistance
Low	387,182	225,011	201,968	225,609	357,321	158,140
Moderate	586,005	447,553	302,359	323,924	524,340	216,052
High	1,208,557	1,244,338	566,566	742,208	1,111,803	389,510
	1,378,852	1,457,886	628,386	863,678	1,161,441	421,423
	1,308,259	1,375,395	704,064	1,402,871	1,210,272	481,243

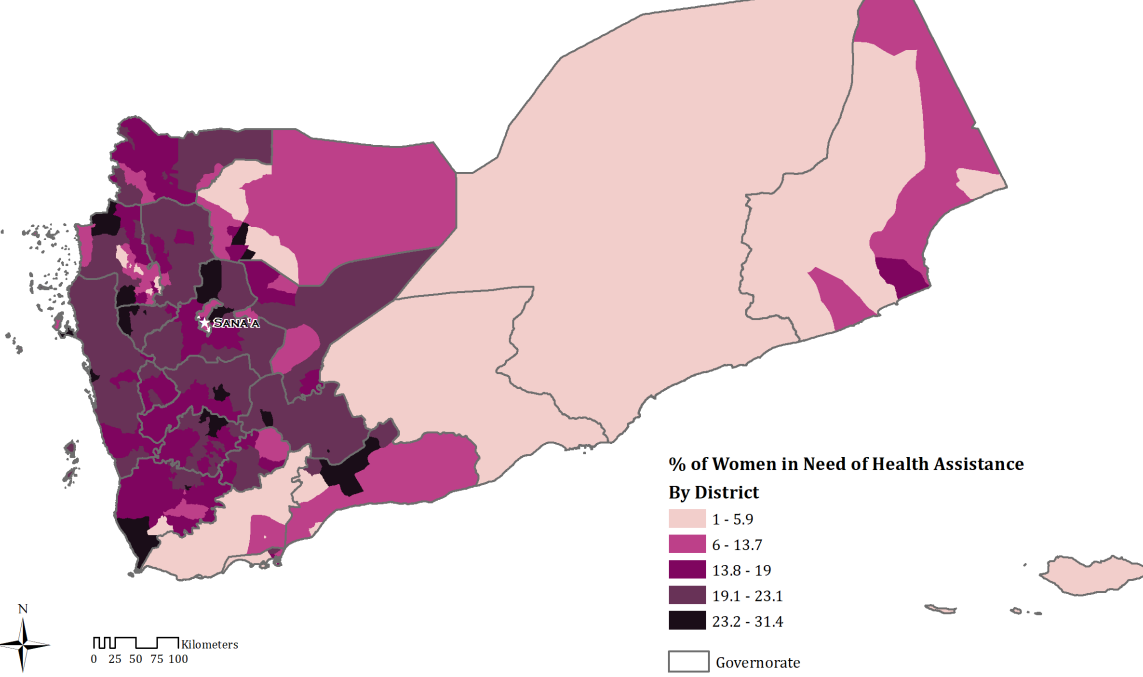


### Reference

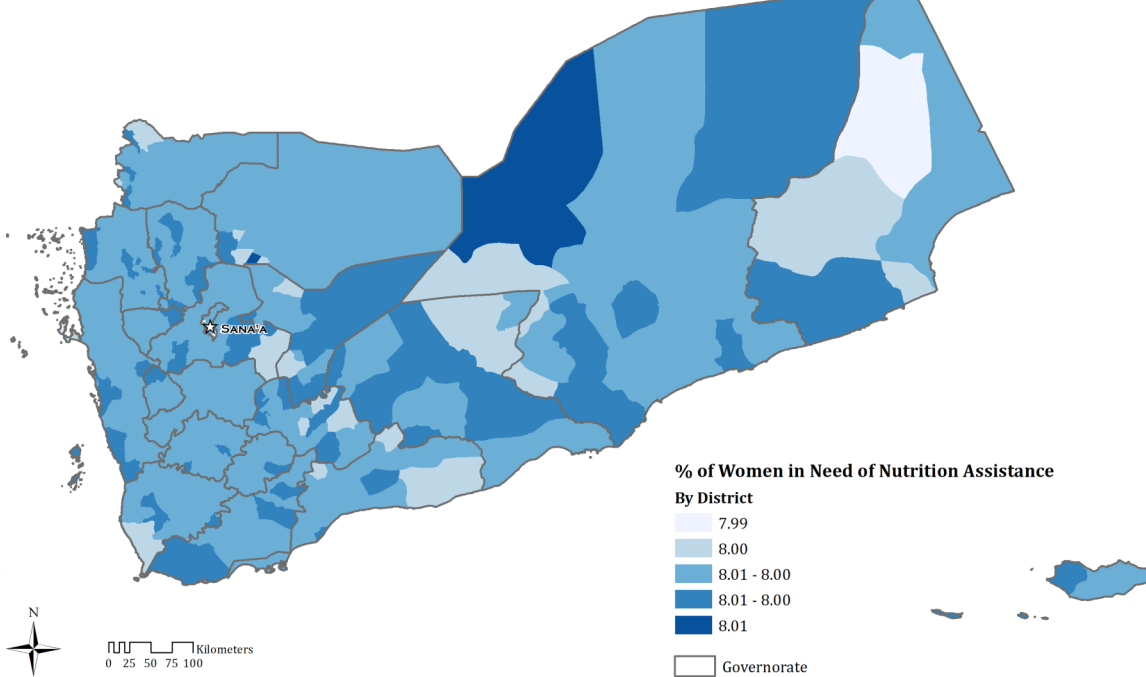
Mundy, Martha. “Strategies of the Coalition in the Yemen War: Aerial bombardment and food war.” *World Peace Foundation*. 9 October, 2018. <https://sites.tufts.edu/wp/strategies-of-the-coalition-in-the-yemen-war/>.

“Situation of human rights in Yemen, including violations and abuses since 2014.” United Nations Office of the High Commissioner of Human Rights. 9 August, 2019.

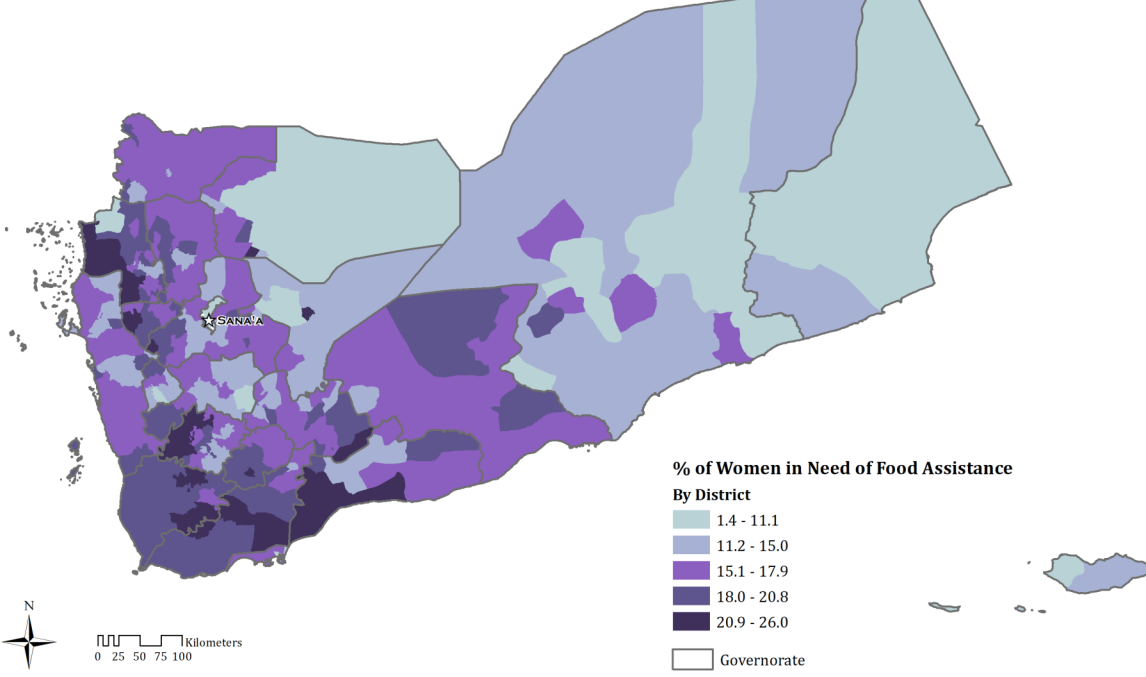
Health



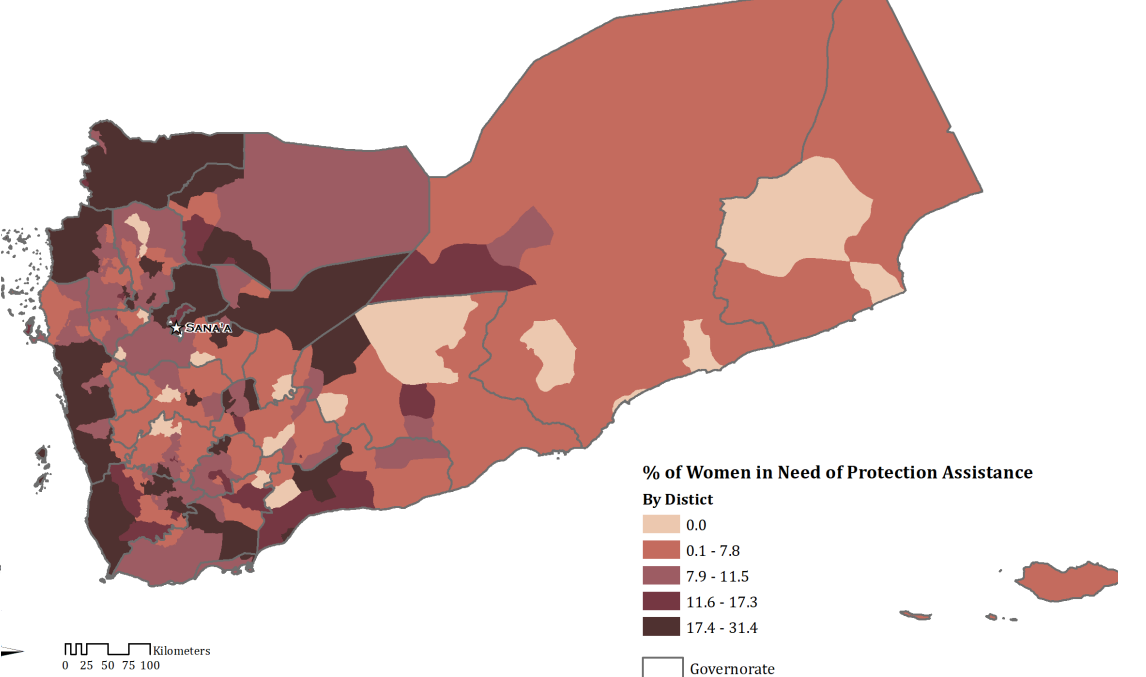
Nutrition



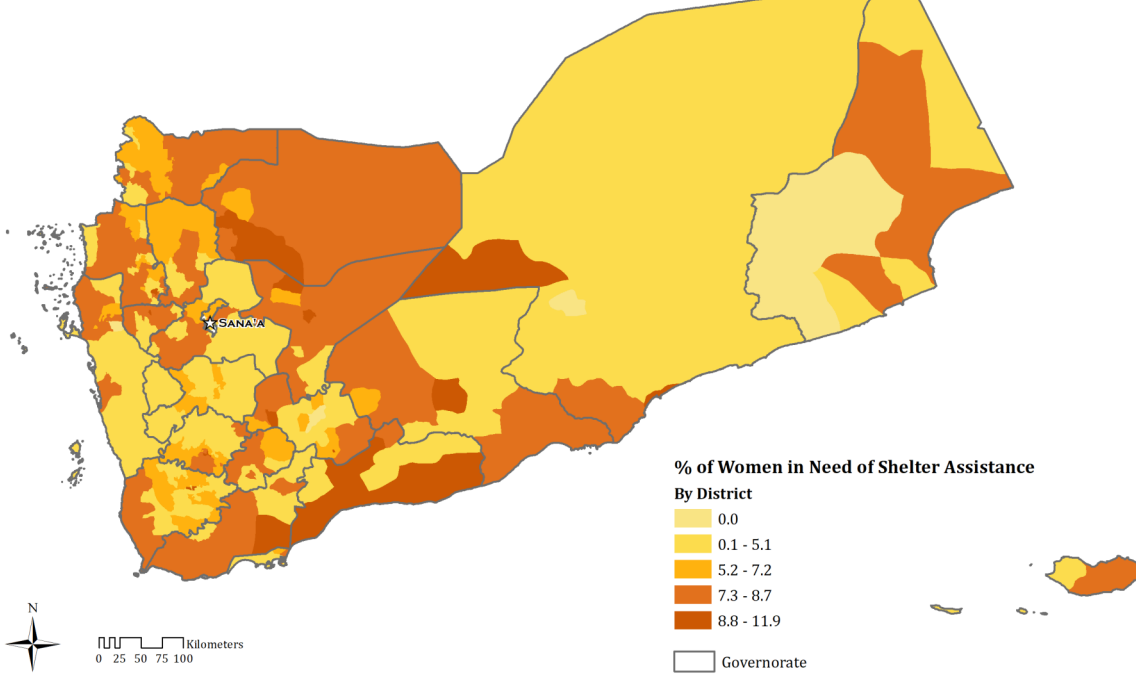
Food



Protection



Shelter



WASH

