## DESIGNING FOR CITIES THAT LIVE

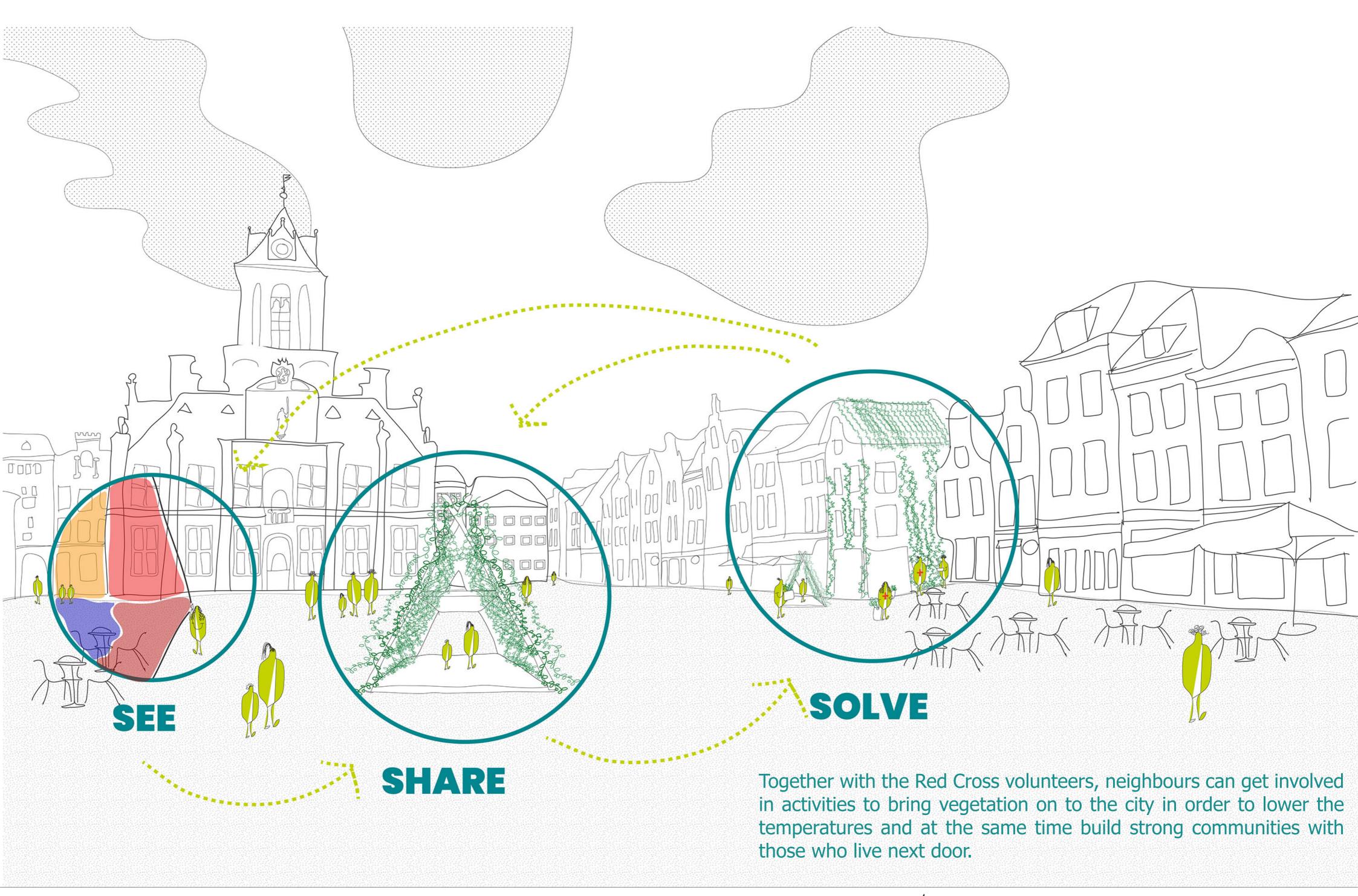
## A design strategy on urban heatwaves for the Red Cross

Temperatures in the planet are rising, our cities are not designed for extreme weather and that makes urban heatwaves a deathly hazard. The Red Cross, an organisation who's vision prevents and alleviates human suffering partnered with the TU Delft for a strategic design approach to find solutions for this wicked problem. This project explores the collaboration of the humanitarian sector in the urban environment. Cities are alive and they can offer space for innovation and experimentation. This master thesis is the result of a highly collaborative process, in which experts from different disciplines were interviewed, a thermal image study was performed in the cities of Delft, Amsterdam and Utrecht and literature review was executed. After collecting data, design directions began to arise. Heatwaves are invisible, people are not aware of the risks, the vulnerable groups are varied and vegetation can help bring the temperatures down. The result of this twenty weeks of work is a three step strategy to be followed by the Netherlands Red Cross. See, Share and Solve.

- 1. See the heat. Urban heatwaves are dangerous because they are invisible
- 2. Share the data. Show people how hot it can really get, also share solutions
- 3. Solve the problem. A call to action, connect citizens and volunteers with organisations that are working with vegetation in the city.



To share the data, structures across the city are proposed, cooling stations. By placing cooling stations in the city, the Red Cross can offer a temporary solution by providing shadow to the citizens but can also share information with citizens on how to cool down themselves, their homes and their neighbourhoods.



Author: Noemi Fabiola Fuentes Flores Project: Master Graduation Project

Date: September 2020

Programme: MSc Strategic Product Design

Chair: Dr. Rebecca Anne Price Mentor: Prof. ir. Jeroen Van Erp Company mentor: Michel Becks Organisation: Rode Kruis

