The aim of the third chapter of my PhD dissertation was to estimate the impact of a strong flood that hit Bangladesh in August-September 2014 employing georeferenced data obtained from NASA Satellite images. These data were combined with longitudinal household survey to investigate the effect of this natural shock on female labour force participation. As suggested by development economics literature, our data showed that women’s labour supply increased after the flood to prevent its consequences on households’ income.

The results from the difference-in-difference estimations revealed indeed that female labour force participation raised by around 18 percentage points after the natural disaster, and that the probability for unemployed women to enter the labour force increased by around 22 percentage points.

After correcting for selection bias due to the probability for women to be employed at baseline, we also found a significant increase in their probability to access to independent paid work and in their average monthly income as a consequence of the shock.

Finally, we employed a Two-Stage Least Squares method to show that women’s involvement in wage-earning activities - instrumented by the intensity of the flooding that women experienced - contributed to increase their decision-making power within the household, where the latter was measured using the Women’s Empowerment in Agriculture Index and through Principal Component Analysis.