

Comparative Case Study Lombardy Region, Italy – Panju Island, Mumbai, India: **Increasing Children’s Awareness of Flood Risk**

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The capacity building project “Hey kids, are we prepared against environmental disasters?” was initiated first in the Lombardy Region in Italy in 2016 by The Others and Disasters NGO (www.gliatriedidisastri.org). In the Lombardy region in Varese, Como, Lecco and Milano, a total of 8 workshops were conducted in collaboration with 6 adults and around 100 children (age groups between 4-16 years) as co-researchers.

As a result of these workshops a flood education kit was prepared, including a book that is about how to behave before, during and after a flood event, rug-dolls and several educative games, together with an information leaflet from the municipality about emergency preparation for children’s families. The motivation of the flood education kit is that the current disaster risk-related informative children books, prepared by adults, do not correspond to children’s mindsets. Children use different words and draw reality based on metaphorical representations.

During the workshop, we used the mosaic approach, and we let children choose the tools to present their ideas in a format that they feel comfortable with. The ‘heroes’ in the educational kit are inspired by those in the children’s drawings and the story of the book is written by a 9-year-old girl, who had expressed that she felt more comfortable in writing.

In the workshops, first, children watched cartoons about flood disaster prepared by the Italian Umbria Region Civil Protection Authorities. Then they were asked to create a character, and draw a disaster scene by involving the character that they created.

The results of the “Hey kids are you aware of the flood risk?” capacity building project were presented at the October 2016 Habitat III conference in Quito, Ecuador. Habitat conferences are organized by the UN every 20 years. The focus of Habitat III was urban transformation and improving the quality of



Figure 1 and 2: Some drawings made by the children



Figure 3 and 4: One of the characters in the book was created by a 4 year old girl; The cover of the book



Figure 5: Map of the flooded Panju Island from the workshop in December 2019

life through a more equitable distribution of development benefits, planning and regulating land use, protecting the environment, as well as integrating women, children, youth, and leaving no one behind. With our flood education kit, we

attended an exhibition in Quito, Ecuador and several exhibitions and meetings in Milan, Italy.

As part of the BReUCom project the same methods were applied to increase the awareness

of children living in Panju Island, north of Mumbai, India. Panju is an estuarine island with more than a few thousand inhabitants. Climate adaptation challenges are most acutely felt in the most vulnerable locations like estuarine Islands. The topography of Panju is such that it is highly susceptible to flooding as well sea level rise. The workshop with 40 children in the Municipal School on Panju Island was jointly conducted by ITC (University of Twente), Kamla Raheja Vidyavidyalaya Institute for Architecture and Environmental Studies (KRVIA), Mumbai and the NGO partner- Society for Promotion of Area Resource Centers (SPARC) in the month of December in 2019.

The workshop started with the theatrical representation of a flood situation with puppets by the Masters Students (Departments of Urban Design and Urban Conversation) from KRVIA. Then, the children were divided into two groups based on whether they follow the primary (Age group: 5-9 years) or the secondary school (age group: 9 years -12 years) curriculum. The children

who were in the primary school were asked to create a character and draw a disaster scene by involving the character that they created, as was done in the workshops in Italy. The children in secondary school were asked to draw a map of the Island. At the end of the drawing session, the children were given copies of the book, which was based on the one prepared as a result of the workshops in Italy, translated into Marathi.

The workshop encouraged children to express themselves through the medium of drawing regarding their perceptions of flood risk. Different from the workshops in Italy, the children at Panju were not afraid of the water, as they live in an Island. They know the island very well, and they described the school, the temple and their home as the safest places on the island. The outcomes of the workshop are to be converted into a map with the support of children's drawings to increase awareness. It is going to be the first map drawn by children for an inhabited estuarine island which is highly prone to sea level rise.