



DELTA IN TIMES OF CLIMATE CHANGE II INTERNATIONAL CONFERENCE

OPPORTUNITIES FOR PEOPLE, SCIENCE, CITIES AND BUSINESS
ROTTERDAM THE NETHERLANDS, 24-26 SEPTEMBER 2014

Deltas in Depth scientific sessions	
Deltas in Depth 5. Urban adaptation to climate change	
DD 5.6 Lessons from cities in developing countries	
Chair	Prof. Bruce Glavovic, Massey University, New Zealand
Presentations	<ul style="list-style-type: none">• Peter Letitre, Deltares, The Netherlands• Chau Ren, The Chinese University of Hong Kong, Hong Kong

Peter Letitre starts this session with his presentation on the case of Beira in Mozambique. They made a master plan Beira 2013. Their goals are first of all to increase the possibilities for economic growth, secondly to decrease the threats of climate change and thirdly to improve the living conditions of the local population. In short their goal is to “make a safe, prosperous and more beautiful Beira”. Because of the tides, Beira is lying part of the day up till 7 meters below sea level. With low tide Beira is around 2 meter below sea level. Stakeholders are strongly involved in analysis and planning. Someone from Canada asked if they took the region outside of Beira into account. What is the impact of actions or measures taken outside the region? They did incorporate the outside region through the stakeholders. There are for example representatives from the mining industry and the agricultural sector. There is a close cooperation with the World Bank because they also have plans for this region. There was a question on the time horizon. Letitre talked about a horizon of 2035 but you need a vision for the longer term (2100). There is a vision for after 2035 but it is not detailed. For example future extensions of Beira should be planned on the higher areas. Did Peter Letitre take the poverty into account? If you would not have known that this presentation was about Beira, it could have been in any other developed city. Letitre explains that he took some local customs into account such as when building a house, incorporate options for extension. In Mozambique and many other countries around the world, it is normal that you start building your house, live in it and expand when you have saved up money again.

The second speaker, Chao Ren, tells us that the Pearl River Delta region in China has experienced fast urbanization since the late 1980s. Now it is one of the most densely populated areas in the world. In this presentation Chao Ren is focusing on two important megacities in this region: Hong Kong and Macau. The regional impacts of climate change are higher temperatures, erratic rainfall, rising sea levels and more intense typhoons. A study shows that higher temperatures will have a great negative effect: an average of 1°C increase in daily mean temperature above 28.2°C (the mean summer temperature in Hong Kong) was associated with an estimated 1.8% increase in mortality. We know there is a relationship between the climate around you and your living environment. The science department from urban climatology and the policy makers/town planners should work together. Hong Kong realized this in 2003 when there were 300 people killed by SARS disease. Research showed that it was the narrow streets and the lack of wind and air quality that allowed the disease to spread this extensive. So it was not projected climate change that stimulated collaboration between urban climatology and town planners but SARS. The Hong Kong government designed a law that says how builders and planners should incorporate cooling measures such as reducing frontage areas of buildings to improve permeability and improvement of greenery. Currently the Hong Kong Government is unfortunately being sued by various (building)companies that have more cost due to this law. Hopefully this will not prevent Hong Kong from taking measures!

