

# Stakeholders' perceptions of climate change and its impact on the urban water system of Makassar, Indonesia

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Successful governance of natural resources should involve all concerned. An important aspect of this involvement is understanding what views are shared and where there is potential for conflict between different interests. We undertook a survey to learn about the different views of water resources and climate change amongst stakeholders in Makassar concerned with managing water resources.

## Perceptions of climate change

- Our survey, undertaken at institutional level, suggest that 100 percent of respondents believe climate change is happening<sup>1</sup>. Furthermore, 14 percent of respondents think that this is a natural fluctuation, while others think that it is caused by human activity (Figure 1)
- Majority of concerns are shown in Figure 2

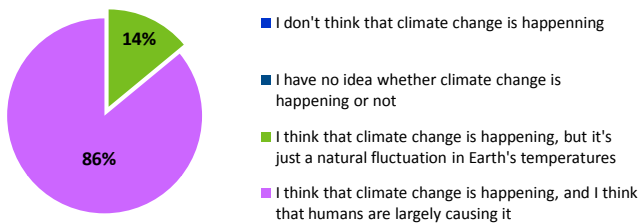
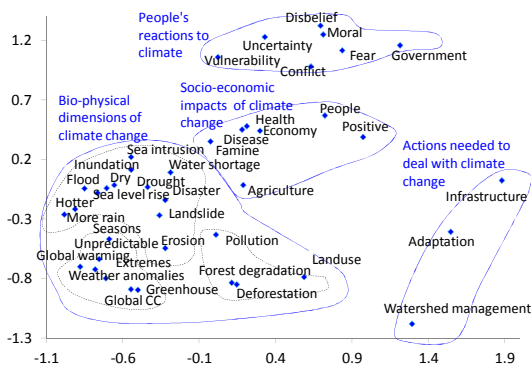


Figure 1. Views about Climate Change

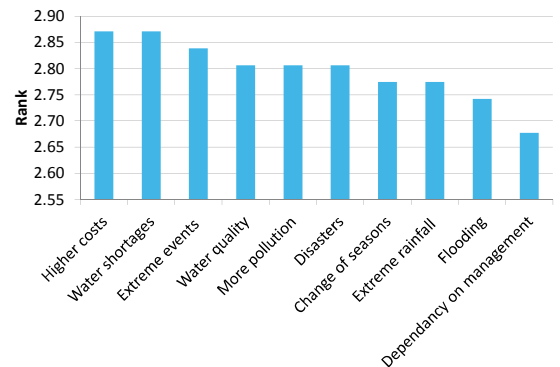
Figure 2. Concerns related to Climate Change



## What we have learnt?

- Amongst water stakeholders in Makassar there is a good awareness of issues related to climate change and the local water system.
- Overall stakeholders hold a shared view of issues around water resources.
- This strong alignment of views, combined with good collaboration between water-related stakeholders, presents a picture of a very robust governance system with solid potential for adaptation to future change.
- Therefore in Makassar there is a good basis for developing adaptive thinking and practices which could lead to an improved and well adapted water management system.

## Perceptions of climate change impacts on the urban water system of Makassar City



## How do we investigate the consensus?

The research was based on 96 surveys conducted with stakeholders at various occasions. The data was then analysed using standard statistics as well as specialised methods such as social network analysis (UCINET computer software) and consensus analysis (AntroPac)<sup>2</sup>.

## Stakeholders' network<sup>1</sup>

Social network among stakeholders relevant to water management processes in Makassar already exist.

The informal social network is much more extensive than is formally required, creating a potentially more robust and adaptive water management system than one required by formal institutional arrangements.

Of particular importance in the informal networks were the roles of UNHAS and the national and international non-governmental organisations (NGOs) and aid agencies.

### FURTHER INFORMATION

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<sup>1</sup>Larson S. et al. 2012. Stakeholder engagement within the Climate Adaptation Through Sustainable Urban Development in Makassar-Indonesia Project, the First year report. January 2012. A Report.

<sup>2</sup>Stone-Jovicich S. et al. 2012. Climate Adaptation Through Sustainable Urban Water Development in Makassar, Indonesia: In Search of Common Ground. In prep.

### ACKNOWLEDGEMENTS

This work is part of the *Climate Adaptation through Sustainable Urban Development Research Project (SUD)*, funded by the CSIRO-AusAID Research for Development Alliance ([www.rfdalliance.com.au](http://www.rfdalliance.com.au)). We acknowledge significant contribution from all stakeholders involved in all the project activities.

