Water quality policies in the Brantas River Basin, Indonesia

Maurits W. Ertsen

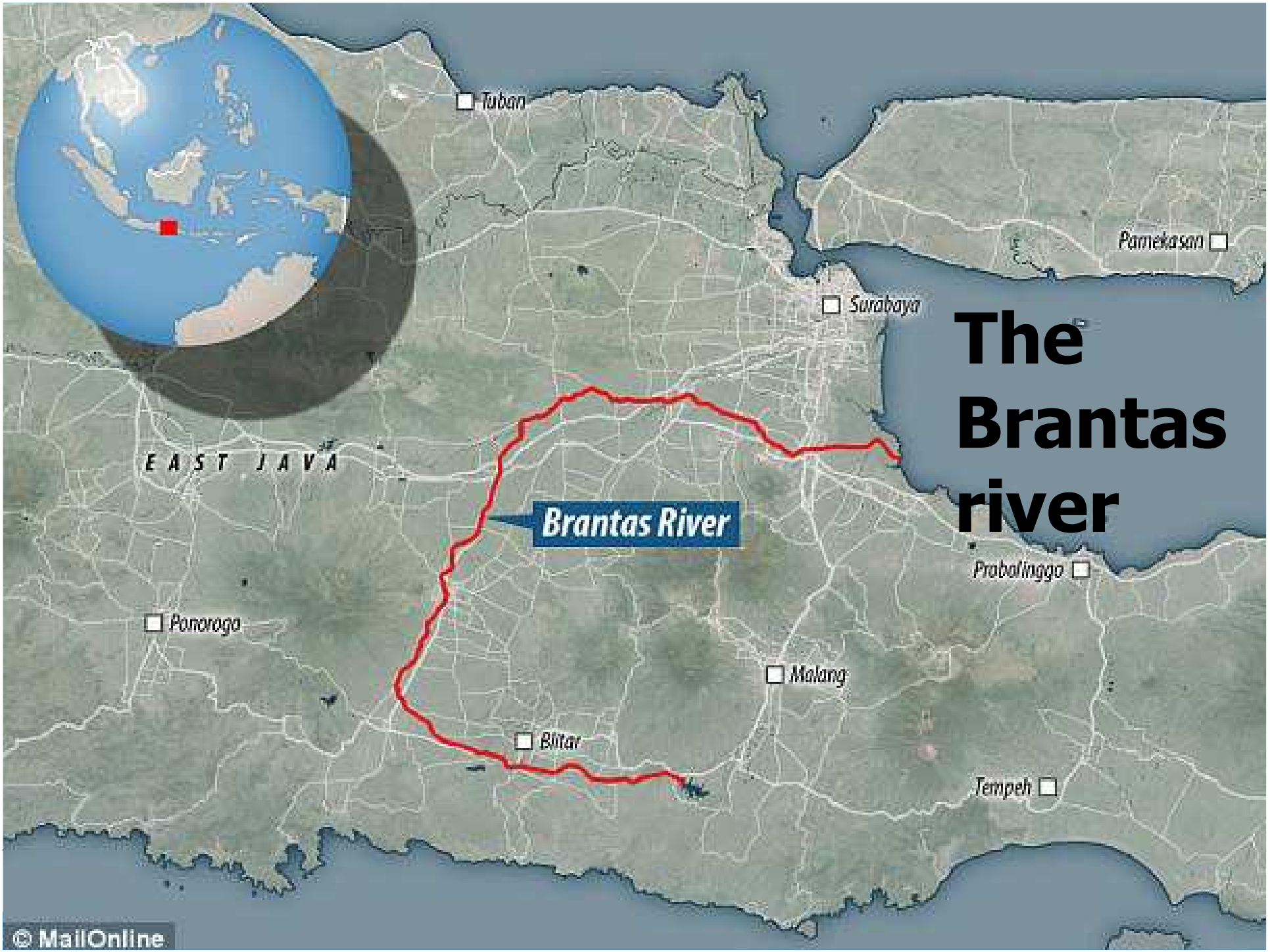
Delft University of Technology

Maurits represents the consortium working on this project.

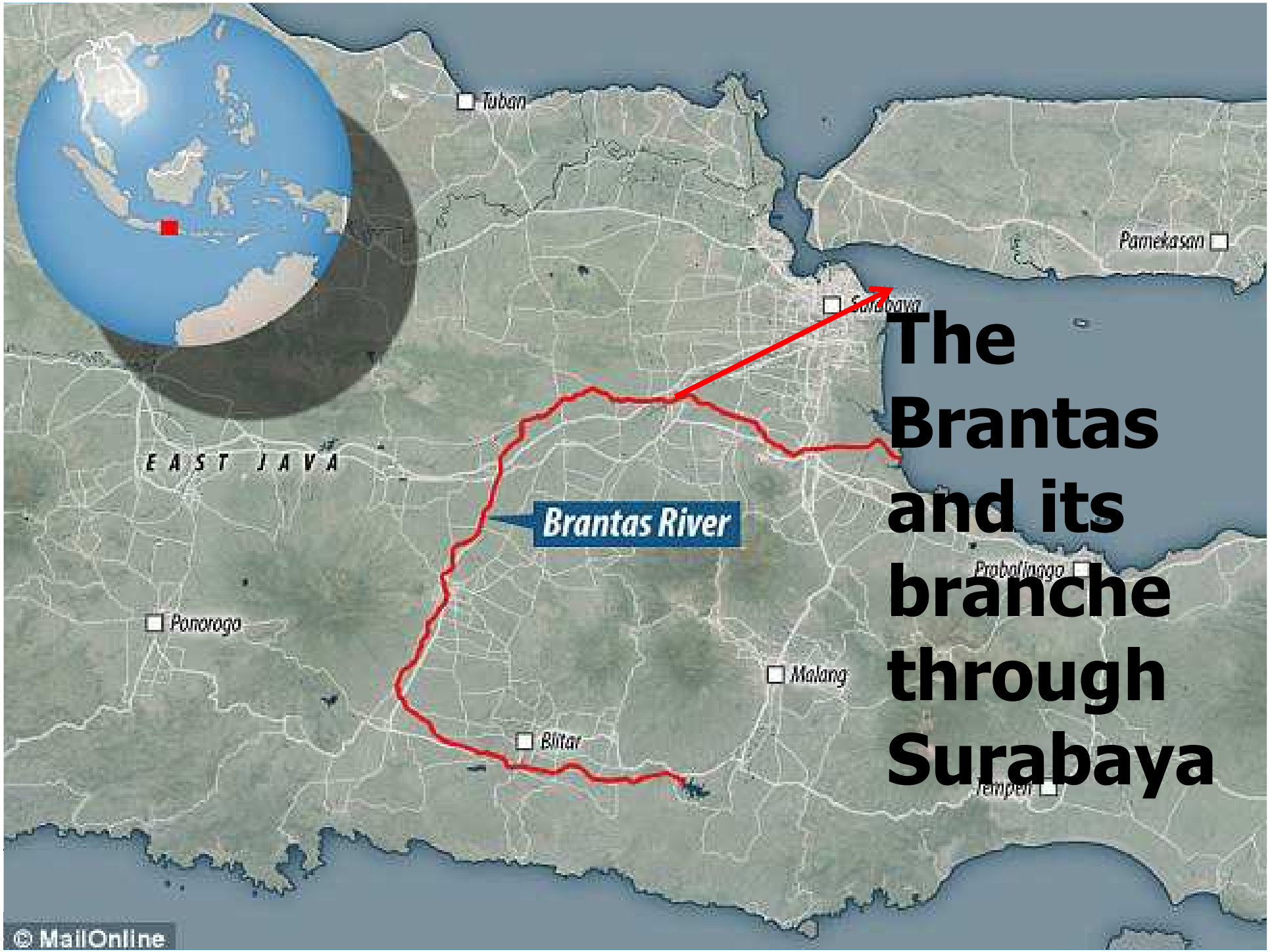
The project strengthens focus on water quality within Indonesian river basin management. A public-private capacity-building program mobilizes stakeholders to develop integrated water resources management, supported by

- innovative community conservation initiatives,
- strong cooperation among CSOs, local government and private entities,
- Dutch expertise on good governance, hydrology and water quality.

The project promotes inclusive growth, public health, and socio-economic and gender equity.



The Brantas river



The Brantas and its branche through Surabaya

The Brantas: source

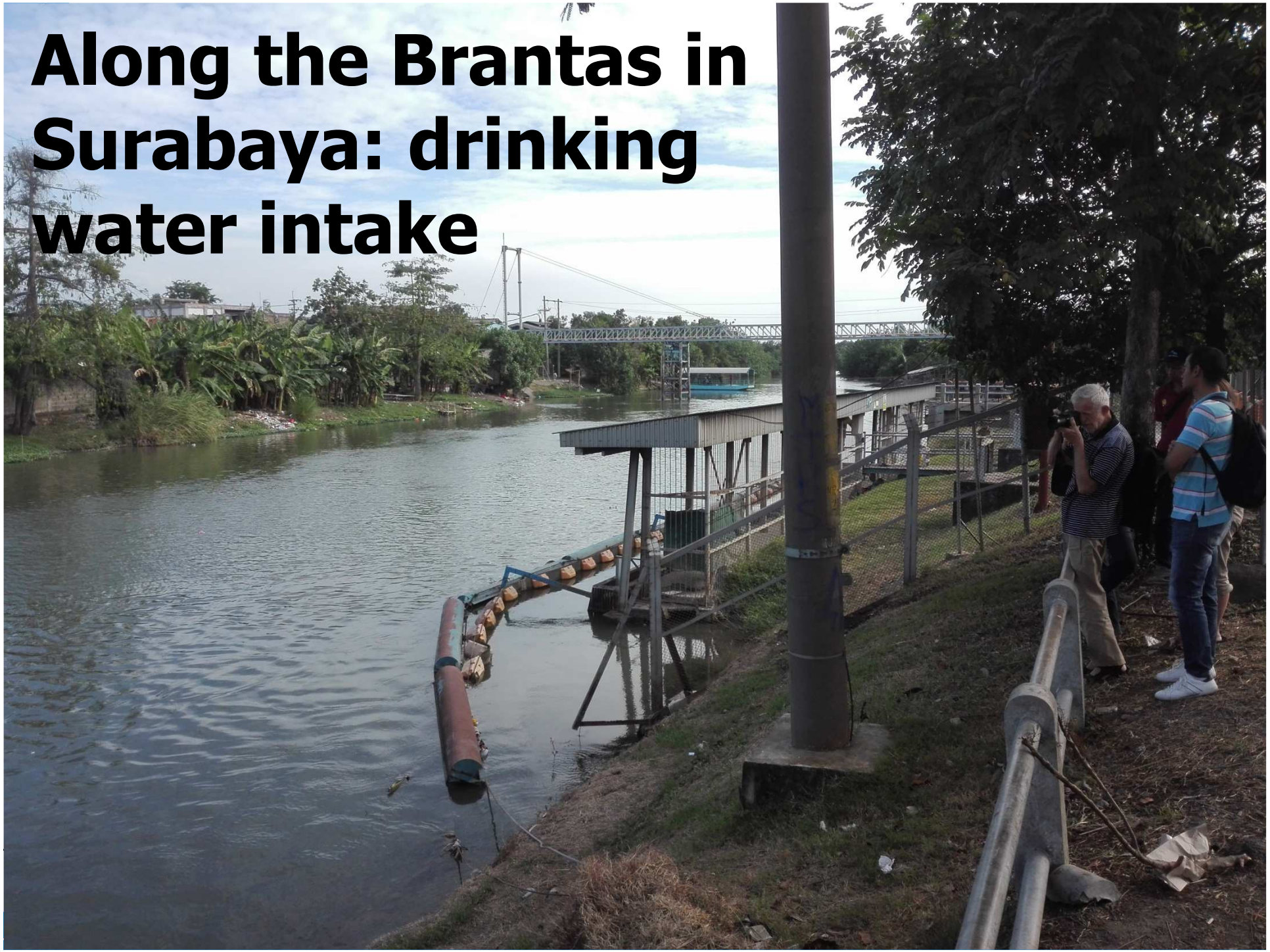
The Brantas: source

Moving downstream along the Brantas: one of many dams


Moving downstream
along the Brantas:
one of many factory
outlets

Moving downstream along the Brantas: diverting to the Surabaya area

Along the Brantas in Surabaya: drinking water intake




Living
along the
Brantas in
Surabaya


Living
along the
Brantas in
Surabaya

Waste and work along the Brantas in Surabaya

Waste and work along the Brantas in Surabaya


Vitamin Water
Sprite
SPRING WATER

Downstream in the Brantas in Surabaya

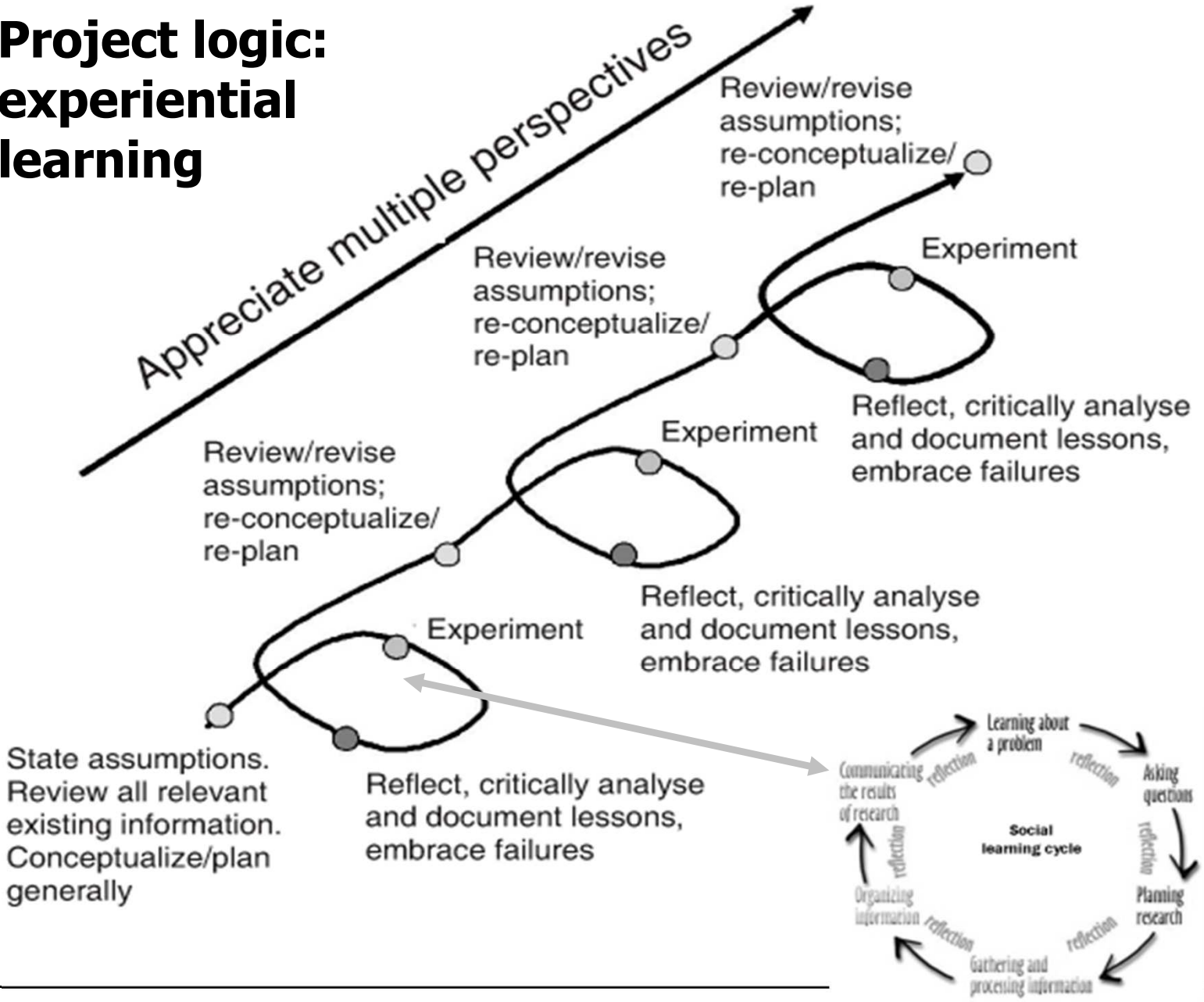
The project

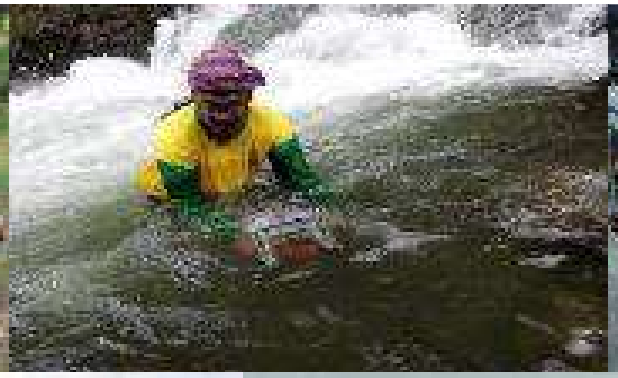
1. Project logic: experiential learning

2. Project underpinnings: some recent Delft-WRM research

3. Two issues to experience

1. Project logic: experiential learning





Example: Experiential learning by measuring together

2. Project underpinnings: some recent Delft-WRM research

4 recent publications (1 paper, 3 PhD's)

Discussing issues of:

- **Planning for interventions and surprise**
- **Social learning**
- **Supporting exchanges on desired futures**
- **Understanding processes of expertise supporting policies**

Hydrol. Earth Syst. Sci., 20, 4093–4115, 2016
www.hydrol-earth-syst-sci.net/20/4093/2016/
doi:10.5194/hess-20-4093-2016

Hydrology and Earth System Sciences
EGU

Towards systematic planning of small-scale hydrological intervention-based research

Khuris Erasta Reza Pramana and Maurits Willem Ertsen
Water Resources Section, Faculty of Civil Engineering and Geosciences, Delft University of Technology, the Netherlands

Reza Pramana

Tom Raadgever

Does collaboration enhance learning?

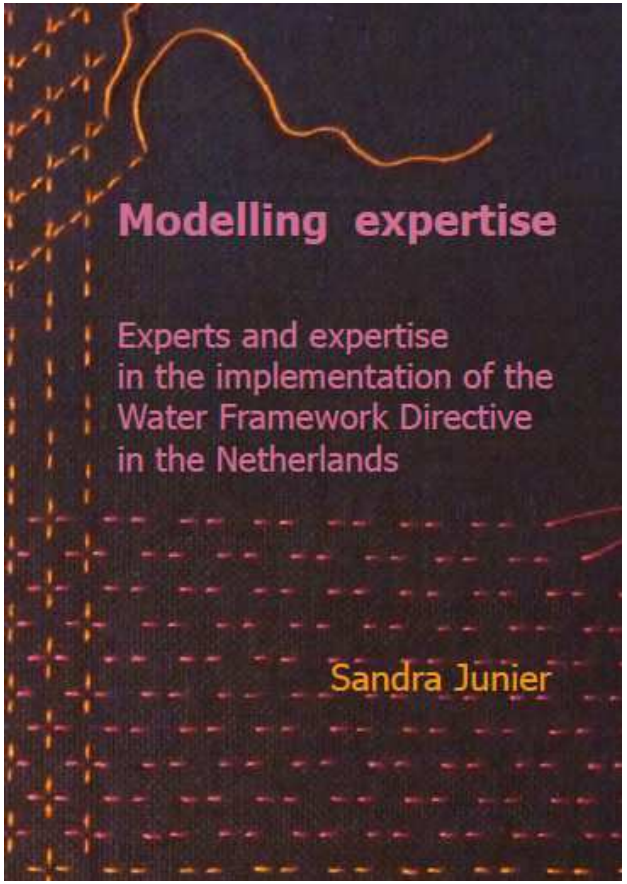
The challenge of learning from collaborative water management research

PRESENT & FUTURE

Visualising ideas of water infrastructure design

Martine Poolman

Sandra Junier



3. Two issues to experience

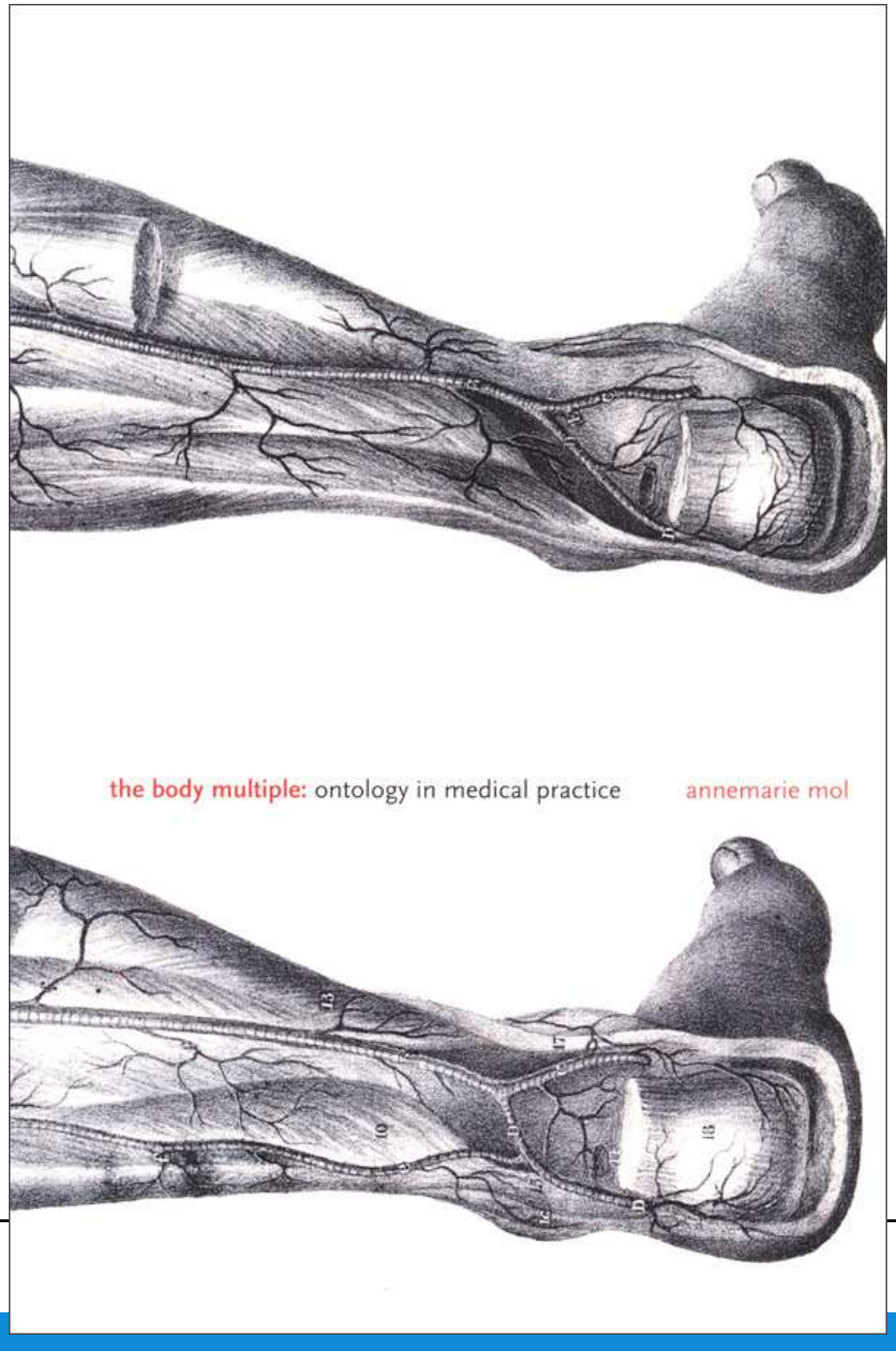
The project logic is to connect practical experiences to start discussions, designs for change and actions

Two experiences from all:

1. **Monitoring the river: three project partners measure, but not necessarily the same in terms of locations, procedures, planning, etcetera**

2. **Overlapping responsibilities: three project partners have shared, but not necessarily the same items to deal with, to act upon and to be accountable for**

Please note: it is not necessarily wrong that ontological differences in terms of observing societal settings exist (compare with Mol 2002), but it might be useful to know, to see whether changes are indeed needed.



Supporting policies for water quality management: issues of connected agents

1. The river connects different (communities of) users.
2. This may be noticed or not by those communities or others.
3. Different institutions may not measure the same Brantas river.
4. What type(s) of measurement(s) produce(s) which Brantas river?
5. What to select: point pollution from industries or distributed pollution from households?
6. What to prefer: small-scale or large-scale re-use industries?
7. How does environmental policy elsewhere produce pollution in (other parts of) the Brantas region?

Thank you