

WP7

Adaptation to Climate Change in Latvia: Challenges for Society and Researchers

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Challenge for society: focus to adaptation, too

The climate in Latvia is changing

The climate will continue to change

Adaptation is needed

To minimise negative effects on society, environment and economy

To benefit more fully from climate change

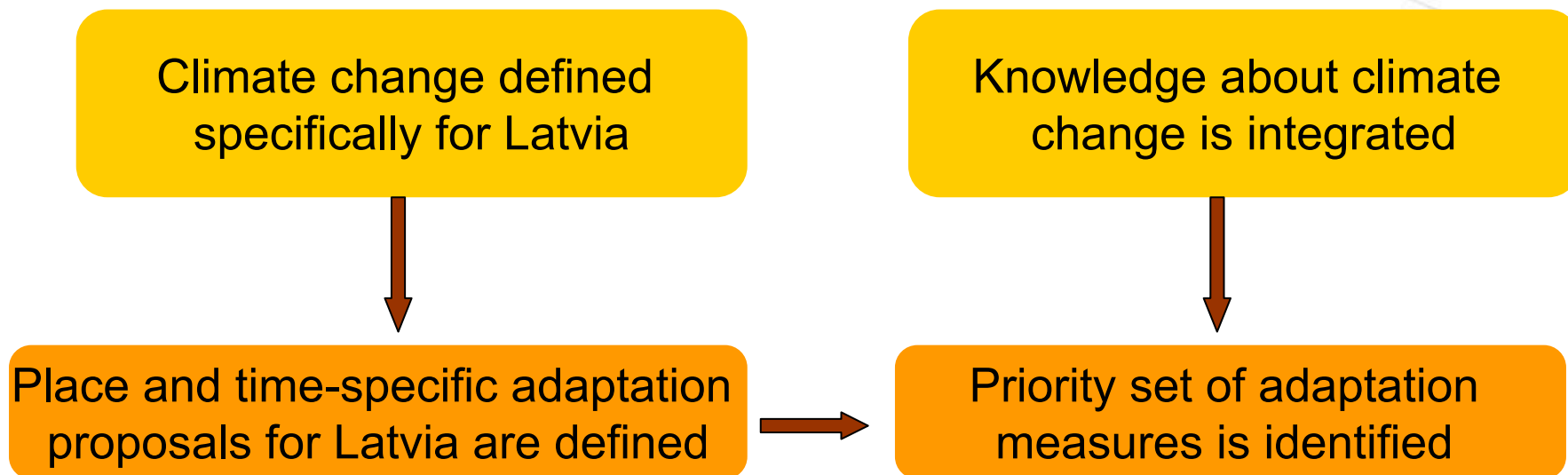


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KALME project research results – the basis for adaptation proposals

For the 1st time:



Success factors for KALME: specialisation, communication and interdisciplinarity



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Issues for adaptation in Latvia

Short list of CC effects:

More frequent storm events

More intensive and frequent storm-surges

Coastal erosion (more than 50% of the coastline in Latvia)

Extreme precipitation events

Additional nutrient load because of warm winters and dry summers

Salinity reduction in the Baltic Sea

Agriculture

Forestry

Fishery

Spatial planning

Building

Energetics

Science and education

...

Examples for adaptation proposals

Spatial planning:

Managing high temperatures and water pollution:

- Establish setback zone(10m) along waterways with variable (mozaic-type) vegetation cover

Managing flooding:

- In spatial plans consider the combination of storm-surge case with extreme precipitation case
- Strategic flood risk assessment and sequential approach to development in the floodplain.

Managing extreme precipitation:

- Understanding and planning flooding pathways in urban environments
- Manage and slow down surface water run-off and release it to the natural water cycle
- Widening drains to increase capacity

Managing storm-surges, coastal erosion and extreme precipitation:

- Large use of GIS and risk maps in development planning
- Direct development, particularly for vulnerable uses, away from flood risk areas

Using extreme precipitation and dry summer events:

- Rainwater harvesting and using for domestic purposes (garden watering, car washing)

3 groups of climate change effects:

Adaptation
measures
known:

Additional
nutrient load to
inland waters

Adaptation
measures not
clear:

Additional
nutrient load to
inland waters

Agriculture

For fundamental
science:

Processes in the
Baltic Sea

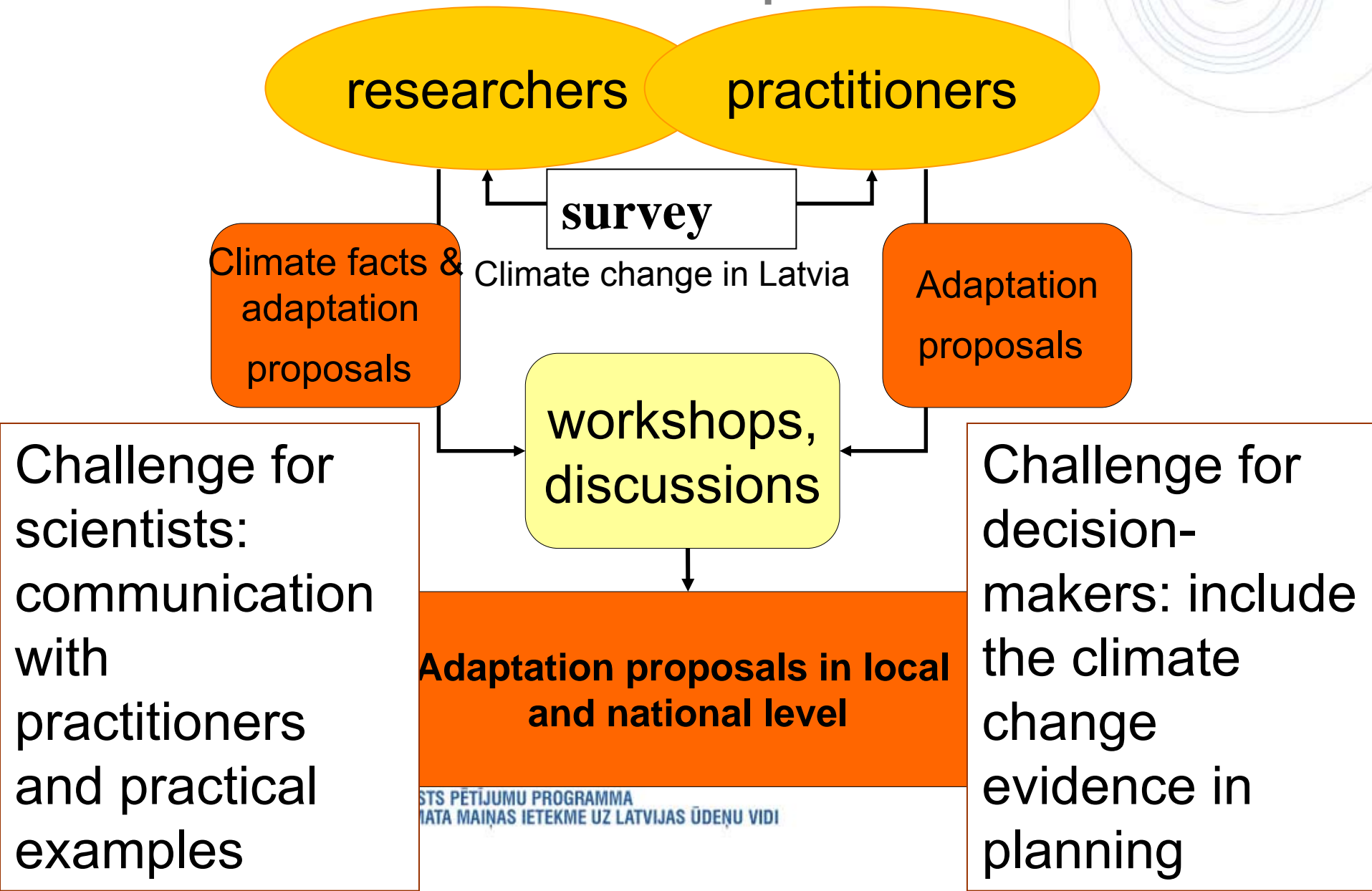
**Challenge for scientists: Keep close to
problems' causes**



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Climate change adaptation dialogue between researchers and practitioners



Discussion about river basin management plans





Proposals for legislation

Success factors:

Good knowledge regarding existence of climate change

Direct discussion researchers – policy-makers

Convergence in time with development/revision of laws
and planning documents

Obstacles:

Divergence in time with development/revision of laws
and planning documents

Other interests

Proposal lost in wider context



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Post-KALME process



Specialized work group on
Adaptation established by the
Minister of the Environment
– forum for ongoing dialogue
between researchers,
policy-makers and society
regarding planning and
implementation of
adaptation measures into
law and practice



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Thank you for your attention!

