BALTIC PATHWAY
TOWARDS LOW CARBON AND
CLIMATE RESILIENT DEVELOPMENT

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Climate change - opportunities for agriculture

Dina Popluga, Dr.oec., asoc.prof.

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Foto: http://www.greenpacks.org/wp-content/uploads/2008/09/hailstorm-kenya-1.jpg

Foto: https://cbsdetroit.files.wordpress.com/2014/01/winter-rain-and-snowman.jpg?w=640&h=360&crop=1

Climate change

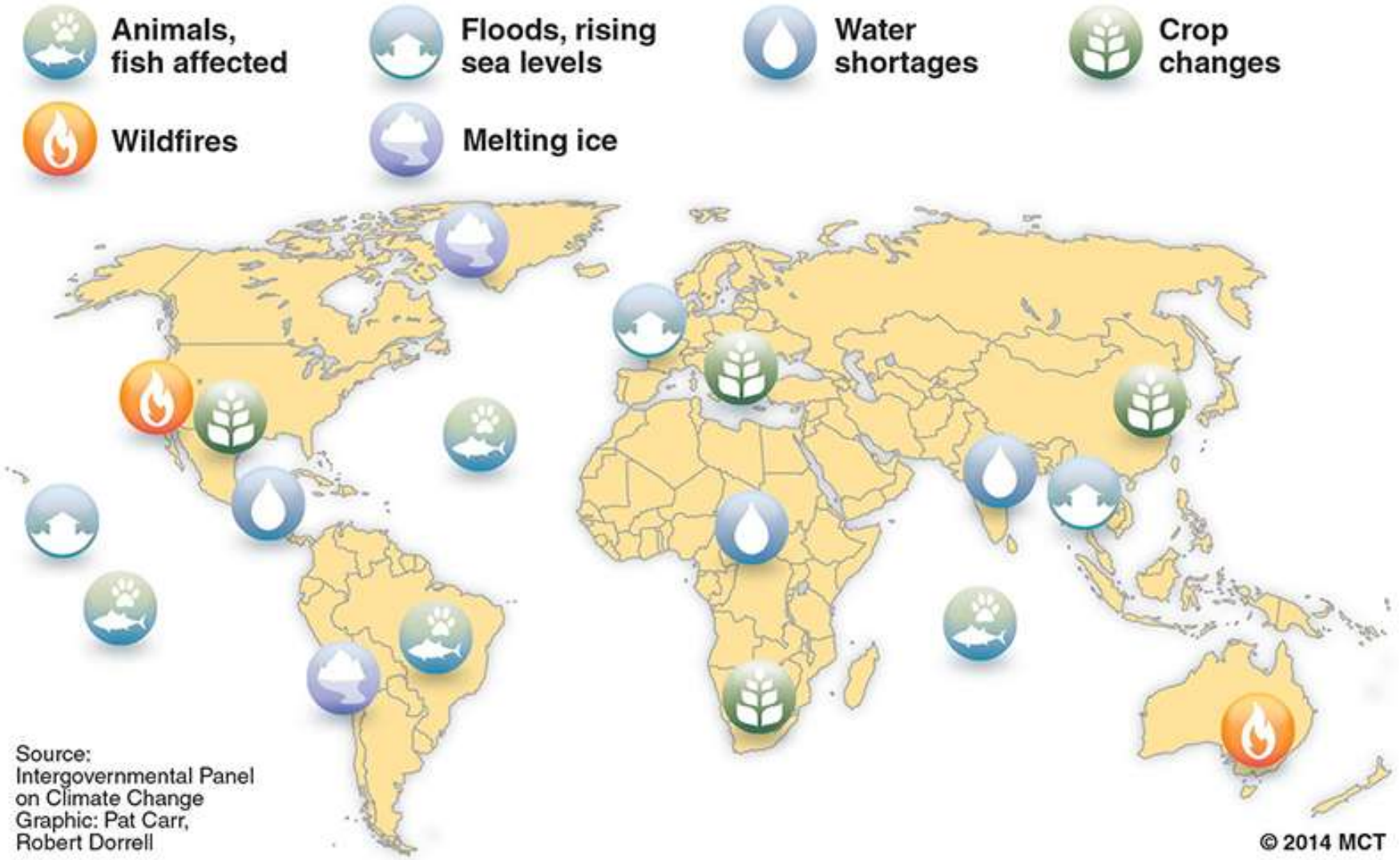
Foto: Julie G via Flickr

Climate change effects around the world

More flooding and wildfires, decline in crop yields and fish catches and water shortages are among the risks from rising temperatures, according to a new U.N. report.

Significant impacts of global warming

Higher temperatures pose risks to health and economy worldwide, and especially in poorer areas



Source: Intergovernmental Panel on Climate Change
Graphic: Pat Carr, Robert Dorrell

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Climate change risks for agriculture

Risks of extreme events

- Frost in late spring and summer
- Excessive precipitation during harvest
- Heat waves
- Strong wind

Risks of warmer annual average temperature

- Plant disease prevalence
- Plant pest prevalence
- Weed prevalence
- Infectious animal diseases prevalence
- Animal pest prevalence

Large heavy machinery is not suitable for harvesting in adverse weather conditions...

Farmers need to increase resilience

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Climate change

Adaptation and new opportunities for agriculture

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Adaptation measures

- Maintenance and restoration of the drainage system.

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Adaptation measures

- Diversification:
  - Crop diversification (annual + perennial crops);
  - Introduction of crop variaties tolerant to climate change.


Foto: http://www.ceko.lv/wp-content/uploads/2012/08/darzs9876-1024x768.jpg


Foto: http://garsaugi.lv/darza_dienasgramata/wp-content/uploads/2015/09/20150904_132135.jpg


Foto: http://www.stendeselekcija.lv

Intercropping

Foto: Dina Popluga

Smart and thoughtful combination of crops in narrow strips, which serves as natural barrier for pests and extreme weather events.

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Main ideas of intercropping

- Alternative to monocultures.
- Foster development of sustainable agriculture.
- Improve biodiversity.
- Form attractive rural landscape.
- Decrease usage of herbicides and pesticides.
- Improve soil fertility.
- Usage of advanced technologies – GPS, precision technologies and sensors to combine various crop care and harvesting operations.

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Conclusions

- Climate change – new technologies and practices in agriculture.
- Adoptation to climate change - diverse solutions taking into account different local conditions.
- Climate smart farming – attractive concept for the “front-runners” among farmers.

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Thank you!