

# Adaptation on the ground in Denmark and abroad

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# Which options do we have?

- **Mitigation** – reduce CO<sub>2</sub>-emissions in 10-15 years
- **Adaptation** – reduce vulnerability to impacts soon
- **Win-Win** – M&A go hand in hand – e.g.
  - Wave energy plants offers coastal protection
  - Wind mills on dikes drive energy efficient pumps
  - Solar panels drive desalinization plants, A/C and ice plants
  - Geothermal cooling and heating - summer and winter
  - Hydropower plants provide water for drinking and irrigation
  - Forest biomass on slopes provide energy and reduce soil erosion
  - Dying forests provide biomass for biofuel production
- **Win-Win-Win** – M&A is turned into a good business case
- **”4WD”** – solutions are sustainable as well



# The Danish strategy for adaptation to a changing climate

Provide information on:

- impacts and vulnerability
- adaptation measures
- benefits of action in the short and long term perspectives

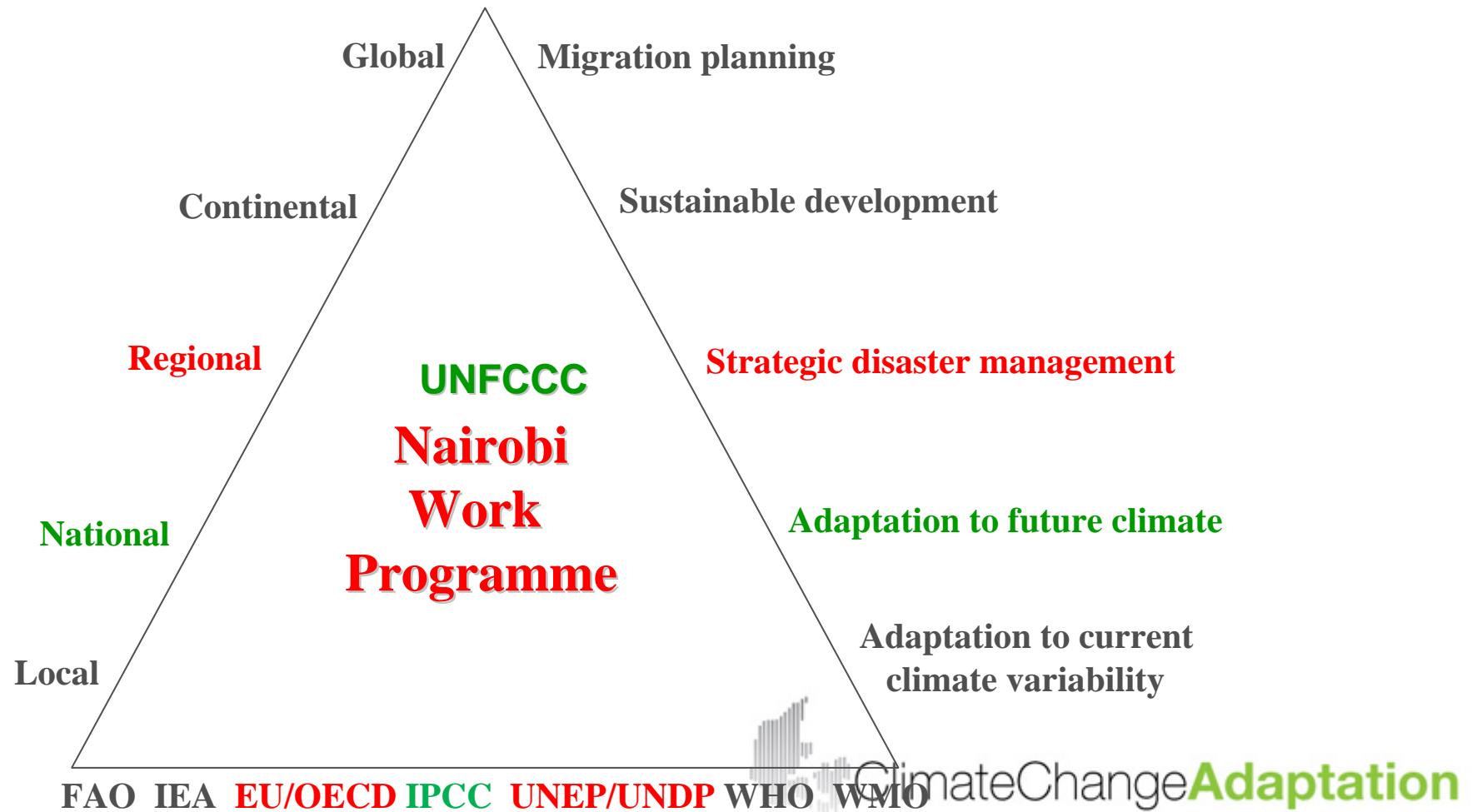


# Focus areas in the strategy

- Coastal management, dikes, ports etc.
- Building and infrastructure
- Water supply
- Energy supply
- Agriculture and forestry
- Fisheries
- Nature management
- Health
- Land use planning
- Contingency planning
- Insurance



# One view at the Global Framework



# Adaptation abroad - Danish perspectives

- Alleviate poverty
- Increase resilience
- Facilitate negotiations
- Guide adaptation

# Key objectives

- Monitor climate change – use models to project trends
- Develop robust indicators – including measures of adaptation efficiency
- Promote good adaptation practise – avoid maladaptation
- Focus on adaptation deficit – use traditional development assistance if available
- Avoid future residual damage – use planning to limit asset growth in vulnerable areas
- Address adaptation to climate change – in a longterm, coherent and strategic approach

# Regional collaboration - Strategic options

- "Homegrown" partnerships – e.g. 5C, OSS, PACC
- Rio Conv. – "Regional Development Centres"
- SBSTA/NWP – "Regional Adaptation Centres"
- WMO – "Regional Climate Service Centres"
- IPCC AR5 – "Regional chapters – WG II"
- ISDR/HF – "Regional Info Centres - Hazards"
- Private Sector – "Regional Entry Points"

# RICH – Regional Information Centres on Hazards

- Objectives are to observe, project and adapt to current and future natural hazards
- Means and measures
  - High resolution digital terrain models
  - Ensemble of regionally downscaled scenarios
  - Storm surge (Tsunami) simulations - maps
  - Flash flood simulations - maps
  - Sector analysis (droughts, storms, thresholds etc.)
  - Socio-economic assessments
  - Action plans

# Summary

- Governor Arnold Schwarzenegger addressing the UN in september 2009: "... but one responsibility we all have - and that is action. Action, ACTION, **ACTION!**"
- COP-President Lars Løkke Rasmussen – final plenary: **"PROCEDURE, PROCEDURE, Procedure!"**
- One way forward after the Copenhagen Accord: **"Observe, Project & Adapt!"**

# Thank you!



## ■ Further Information

*Current coastal defence at high tide – Apia, Samoa*

- <http://www.klimatilpasning.dk/en-us/Sider/ClimateChangeAdaptation.aspx>
- [http://unfccc.int/adaptation/nairobi\\_workprogramme/workshops\\_and\\_meetings/items/5258.php](http://unfccc.int/adaptation/nairobi_workprogramme/workshops_and_meetings/items/5258.php)

