



Asia-Pacific Climate Change
Adaptation Forum 2014

1-3 October 2014 Kuala Lumpur, Malaysia



Adaptation Planning in Sri Lanka

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Questions

- How can National Adaptation Plans (NAPs) help advance integration of adaptation into development agenda?
- What can we learn from early stages of implementing NAPs at national and sectoral levels?

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NAPs in Sri Lanka - Challenges

- Multi-stakeholder, transparent, consultative process - **initiated**
- Designing a NAP for a varied and diversified landscape (46 agroecological regions) – **a challenge**
- Information systems, factual information on climate risks and impacts, and the partnerships between research organizations, government, civil society and the private sector - **constraints/ challenges to achieve needed outcomes**

NAPs in Sri Lanka - Needs

- Understanding the economic and financial impacts of climate change – a need
- Commitment of the Ministry of Finance and the Department of National Planning to the outcomes – a need
- Inter-ministerial coordination at national and provincial level for successful implementation – a need

Climate change in Sri Lanka – the known

- Slow & continuous rise of ambient temperature (0.01 – 0.03 °C per year)
- Frequent occurrence of extreme weather events
 - Droughts & floods : **increased**
 - High intensity rains; Land slides : **increased**
 - Tornado type winds : **increased**
 - Intense lightning strikes : **increased**
 - Total number of dry days : **increased**
 - Wet areas : **wetter**; Dry areas : **drier**
 - Number of cold nights/comfort nights : **decreased**
 - Warm days : **increased**

Marambe et al. (2012, 2013, 2014), Punyawardena et al. (2010, 2013,) , Punyawardena and Premalal (2013)

Future Impact (ADB, 2014)

- GDP Loss in 2050 approximately: 1.2%
 - Real GDP (-6%)
 - Output (-25%)
 - Export (-6%)
 - Imports (-5%)
 - Consumption (-2%)
 - CPI (4%)



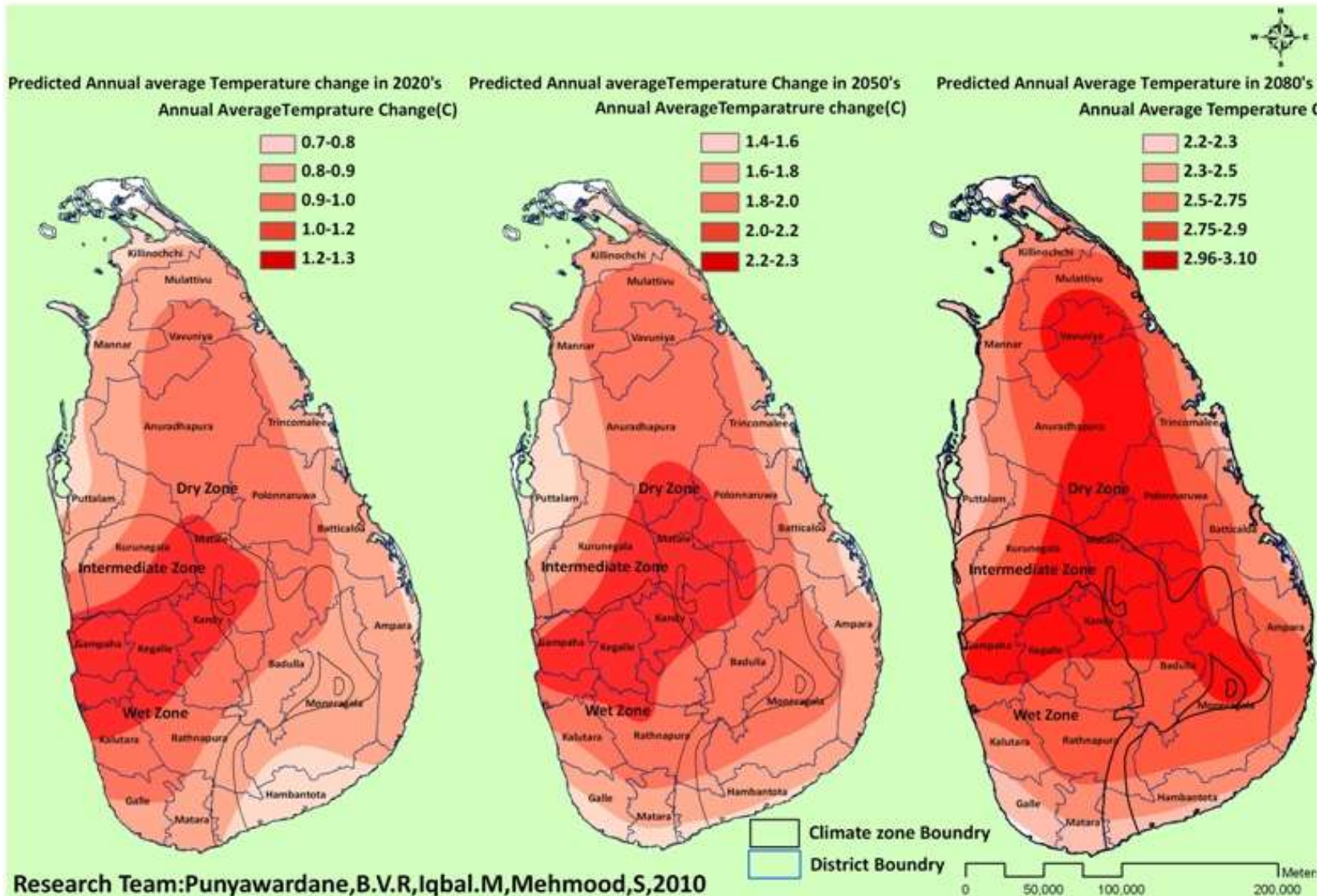
Future Impact (ADB, 2014)

- Temperature increase ($^{\circ}\text{C}$):
 - 1.0 - 1.1 (2030)
 - 1.3 - 1.8 (2050)
 - 2.3 - 3.6 (2080)
- Precipitation increase
 - 3.6 - 11% (2030)
 - 15.8 - 25% (2050)
 - 31.3 - 39.6% (2080)



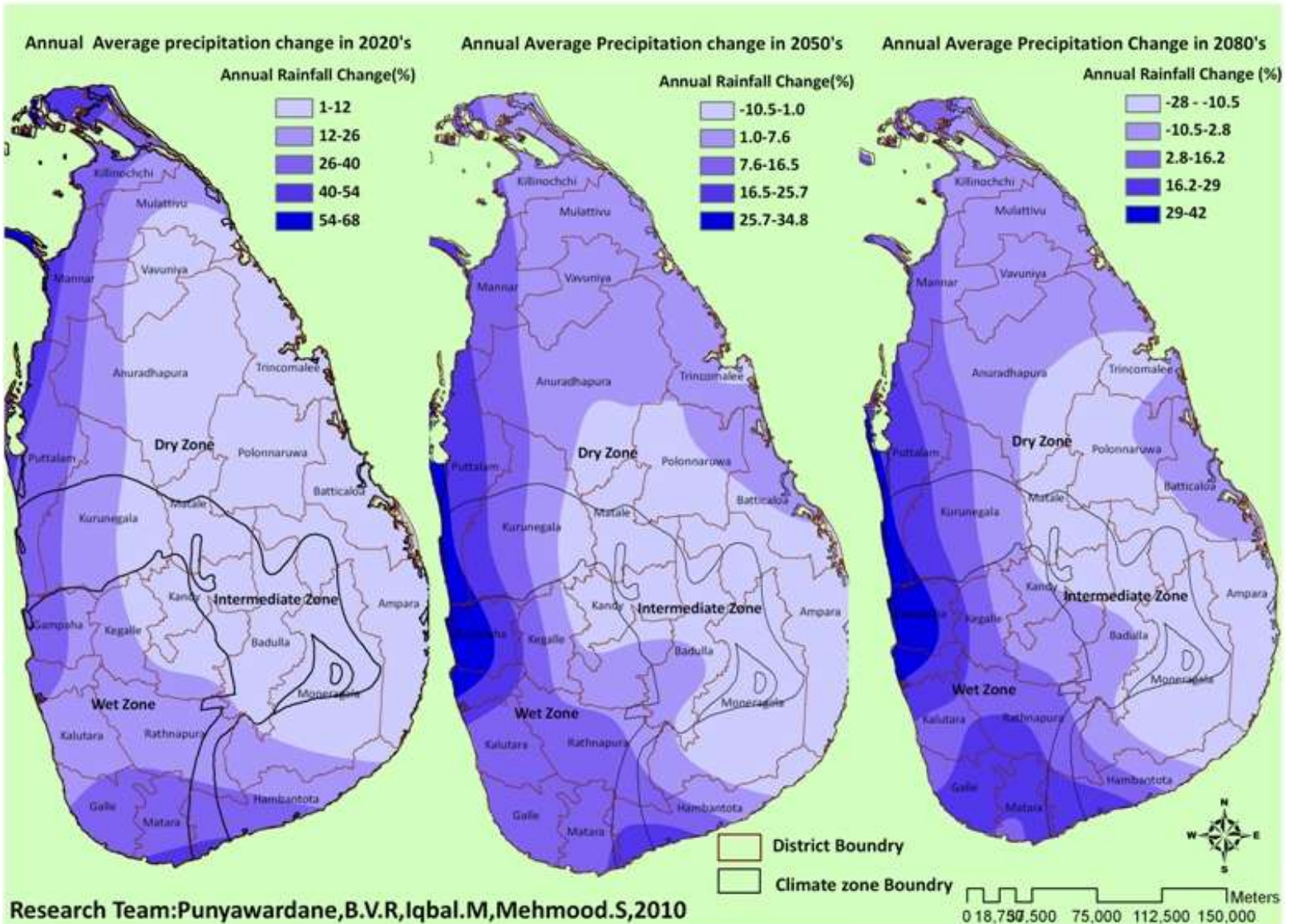


Predicted Temperature change over Sri Lanka by PRECIS RCM in combination with ECHAM4 GCM for B2 Scenario





Projected Precipitation Changes over Sri Lanka by PRECIS RCM in combination with ECHAM4 GCM for B2 Scenario



Future Impact

- Agricultural Production affected by **17.9%** (2050)
Crops (-1.9%), Water (-4.3%), Land (-6.1%),
Energy price escalation (20.4%)
- Rice yields would **decline by 23%** in 2080 (due to
increase in temperature and CO₂ levels)
- Reduction in monthly rainfall by 100 mm would
reduce tea yield by 30-80 kg/ha



Finances – at present

- Difficult to estimate: cross-cutting nature
- In the worst affected segments (agriculture, water management and coastal protection) around 20% of the sectoral budgets is allocated for research and adaptation measures



Actions to ensure integration of NAPs to Development Agenda

- A solid foundation with greater awareness
 - (a) Two National Communications
 - (b) Sector Vulnerability Profiles
 - (c) Technology Needs Assessments
- Training on NAPs conducted – Ministry of Environment and Renewable Energy, Climate Action Network South Asia (CANSA) Southern Voice on Climate Change, Janathakshan and Sri Lanka Youth Climate Action network

Actions to ensure integration of NAPs to Development Agenda

- National Climate Change Policy (2012)
- National Climate Change Adaptation Strategy (2011-2016) – Strategic priority areas identified
- National Green Lanka Action Plan (Climate Change as one of the 10 thrust areas) – Presidential Secretariat
- Climate Change Secretariat - Ministry of Environment and Renewable Energy (ME&RE)
- National Experts' Committee in Climate Change Adaptation (NECCCA) – ME&RE
- Private sector involvement – initiated by NECCCA
- Inter-ministerial Coordinating Committee on Climate Change – ME&RE

Recommendations

- Institutional arrangement
- Sub-national planning
- Capacity building – knowledge sharing, institutional building



Thank you