CLIMATE CHANGE AND HEALTH: REGIONAL PERSPECTIVE FROM ASIA

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OBJECTIVES

1. To analyze the respective situation on Climate Change
2. To produce science-based recommendations for the region
3. To highlight the similarities and differences, providing advice on CC&H for implementation at global, regional and national levels
AASSA COUNTRY REPORTS ON CLIMATE CHANGE AND HEALTH

• Country reports prepared for: Armenia, Azerbaijan, China, India, Indonesia, Japan, Korea, Malaysia, Nepal, New Zealand, Pakistan, Russia (Far East) and Turkey.

• Valuable resource for national discussions and to provide evidence for synthesis of AASSA regional report: in progress

• Focus on vulnerable groups: elderly, children, migrants, indigenous groups (e.g. Maori in New Zealand), megacities.

• Individual reports exemplify heterogeneity within countries across the region: in aggregate show increasing impacts of climate change on health, with need to take a systems approach to develop solutions for mitigation and adaptation and to identify barriers to implementation.

• Implications of COVID-19.
AASSA COUNTRY REPORTS ON CLIMATE CHANGE AND HEALTH

• Asia is a disparate continent with extremes of Climate (from high elevations and below sea level as extreme cold to desert conditions) and therefore a variety of health effects from Climate Change

• Almost all reports have shown links to previous published policy and scientific reports on health effects from Climate change from each country

• Some countries are relatively less affected to those those which are severely impacted
Preparing the Regional Synthesis Report

- Introduction
- Starting points for this project
- What are the major health effects
- What are the main adaptation and mitigation policy options
- Conclusions and recommendations
CLIMATE CHANGE AND HEALTH IN THE AASSA REGION: MULTIPLE PATHWAYS AND EFFECTS

• Direct heat effects e.g. cardiovascular
• Indirect heat effects e.g. labour productivity
• Flooding infectious diseases, Leptospirosis, Dengue, diarrheal disease
• Air pollution due to burning of forest, pollution
• Infectious diseases e.g. dengue; tick-borne diseases; (re-emerging pathogens (Russian Arctic); migration of vectors/pathogens from neighbouring countries (e.g. Korea)
• Mental health
• Allergy
• Food and nutrition security e.g. childhood stunting
AIR POLLUTION IS MAJOR PUBLIC HEALTH BURDEN IN MANY AASSA COUNTRIES

• Sources of air pollution – including from elsewhere in the region – fossil fuels for energy; biomass use indoors for cooking; wildfires; agricultural practices
• Health co-benefits of mitigation: reduction in greenhouse gas emissions accompanied by reduction in pollutants e.g. particulate matter
• Examples of solutions/case studies in country reports:
  • Increasing public transport e.g. Kuala Lumpur, Delhi
  • Prevention of forest fires (Armenia, but may be reaching limit of adaptation)
  • Ethanol production from sugar as substitute for fossil fuels (Nepal)?
  • Pavagoda solar park (India)
AUSTRALIA BUSH FIRE 2019-2020 CASE STUDY

• Bushfires have adverse effects on people’s physical and mental health
• Individuals are affected by direct exposure to the flames
• Prolonged and widespread nature bushfires resulting in more people being affected
• The scale and intensity of the 2019-2020 fire season presents an opportunity to address the knowledge gap
FLOODING IS ALSO AN INCREASING PROBLEM THROUGHOUT THE AASSA REGION

• Sources include: sea level rise, extreme weather events; excess precipitation and river flooding; melting glaciers

• Multiple consequences:
  • Short-term e.g. water-borne and vector-borne diseases, drinking water quality
  • Longer-term e.g. degraded ecosystems; mental health impacts
  • Economic impacts (e.g. Turkey)

• Examples of solutions/case studies in country reports:
  • Cross-sectoral approaches to planning for built environment (Japan)
  • Sindh barrage across River Indus (Pakistan)
  • Restructuring health facilities affected by flooding (Malaysia)
MALAYSIA FLOODING CASE STUDY

• A series of extreme weather events in the Asia Pacific region is a result of Ocean Warming and heavy rainfalls that has occurred in recent decades

• The unprecedented Yellow’ flood of late 2014 and 2015 is a recent example of extreme weather event that had occurred in Malaysia and in 2018 in Indonesia.

• Future rainfall trend over the next 50-100 years will only increase
PRIORITY FOR PREPARING AASSA REGIONAL REPORT:
CONTINUING ANALYSIS OF CROSS-SECTORAL SOLUTIONS
AND SHARING GOOD PRACTICE ACROSS THE REGION

• Mitigation co-benefits for health e.g. by increasing renewable energy, urban planning, reforestation and green space provision, changing agricultural practices

• Adaptation in health sector:
  • Integrating local-national actions
  • Strengthening health services and other infrastructure
  • Public awareness and education
  • Early warning and surveillance systems and control of infectious diseases

• Ensuring linkage of climate change and health issues:
  • At national level, e.g. in NDCs, national adaptation plans for health
  • At regional level and with SDGs e.g. through UN activities
TOTAL FERTILITY RATE

TFR: children born per woman (aged 15-49 years)

70.9% decline in TFR since 1957 till 2018
THANK YOU