

CLIMATE CHANGE AND HEALTH: REGIONAL PERSPECTIVE FROM ASIA

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**ACADEMICIAN PROFESSOR DATO'
DR KHAIRUL ANUAR ABDULLAH FASC
PROJECT LEADER OF AASSA WORKING GROUP ON CC&H
PRESIDENT-ELECT OF AASSA**



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



Southeast Asia
Indonesia & Malaysia



Prof. Khairul Anuar Abdullah



Prof. Ismail Koyuncu

South West Asia
Turkey



Prof. Ismayil S Zulfugarov

West Asia
Armenia & Azerbaijan



Prof. Shabana Khan

South Asia
India, Nepal & Pakistan



Prof. Meghna Dhimel

Asia Report

Northern Asia
Russia
(Far East)



Prof. Sofia Muberrika Haryana

East Asia
China, Japan & South Korea



Prof. Victor Bogdanov



Prof. Kim Ho

Oceania
Australia & New Zealand



Prof. Anthony (Tony) Capon



Prof. Alistair Woodward



Prof. Peng Gong

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
- Thee 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

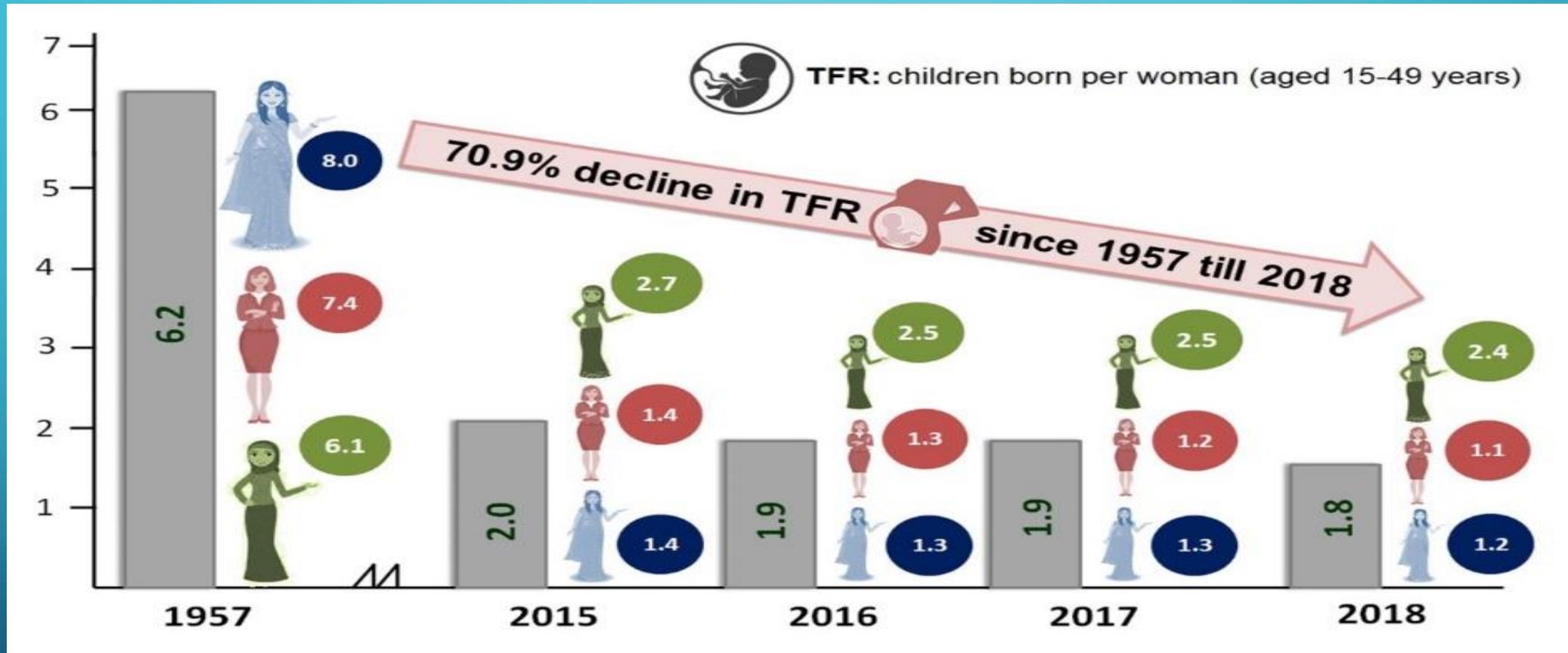
- A series of extreme weather events in the Asia Pacific region is a result of Ocean Warming and heavy rainfalls that has occurred in recent decades
- The unprecedented Yellow' flood of late 2014 and 2015 is a recent example of extreme weather event that had occurred in Malaysia and in 2018 in Indonesia.
- 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



THANK YOU

