

Climate Change and health systems preparedness

Forging an inter-disciplinary research agenda for 2017 & beyond

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Why do we need a research agenda?

- Climate mitigation and adaptation are core to the Sustainable Development Goals.
- Health impacts of climate change and climate-related shocks have become increasingly evident.
- The impact is disproportionately disruptive in LMICs.
- Health systems are complex anthropogenic systems ... and need to adapt to monitor, plan for and respond to health impacts of climate.
- Climate change must change the way we think about health systems “resilience”
- Yet health systems and climate change are neglected as a focus for research.



SYSTEM BUILDING BLOCKS



ACCESS
COVERAGE
QUALITY
SAFETY

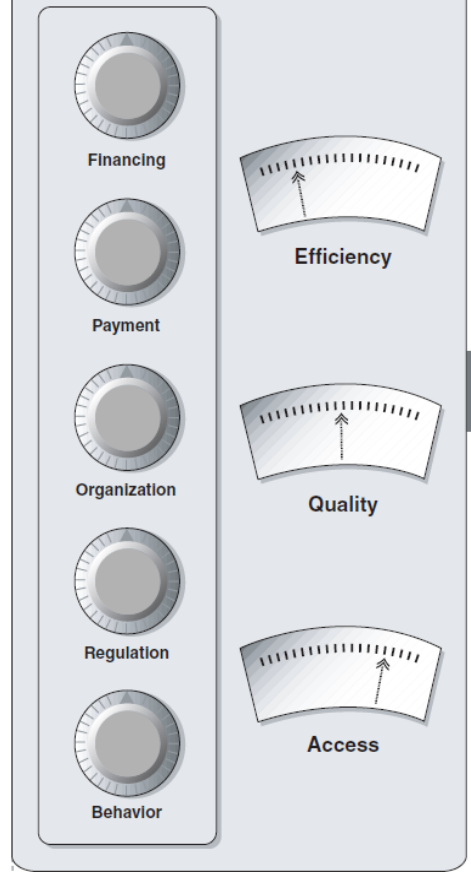


OVERALL GOALS / OUTCOMES



WHO Health Systems' Building Blocks Framework

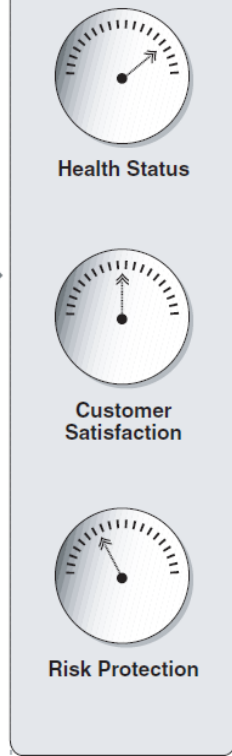
THE HEALTH SYSTEM



Control Knobs

Intermediate Performance Measures

TARGET POPULATION



Performance Goals

World Bank Health Systems 'Control Knob' Framework

SYSTEM BUILDING BLOCKS



ACCESS
COVERAGE

QUALITY
SAFETY



OVERALL GOALS / OUTCOMES



- HMIS
- Infrastructure
- Human Resources
- Governance

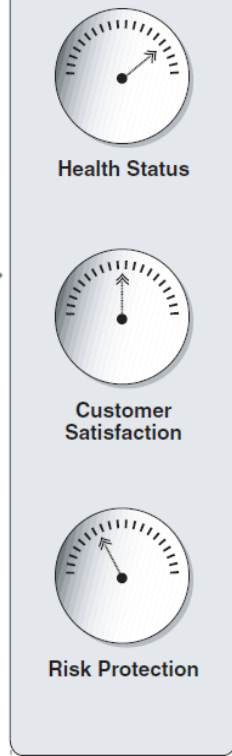
THE HEALTH SYSTEM



Control Knobs

Intermediate
Performance
Measures

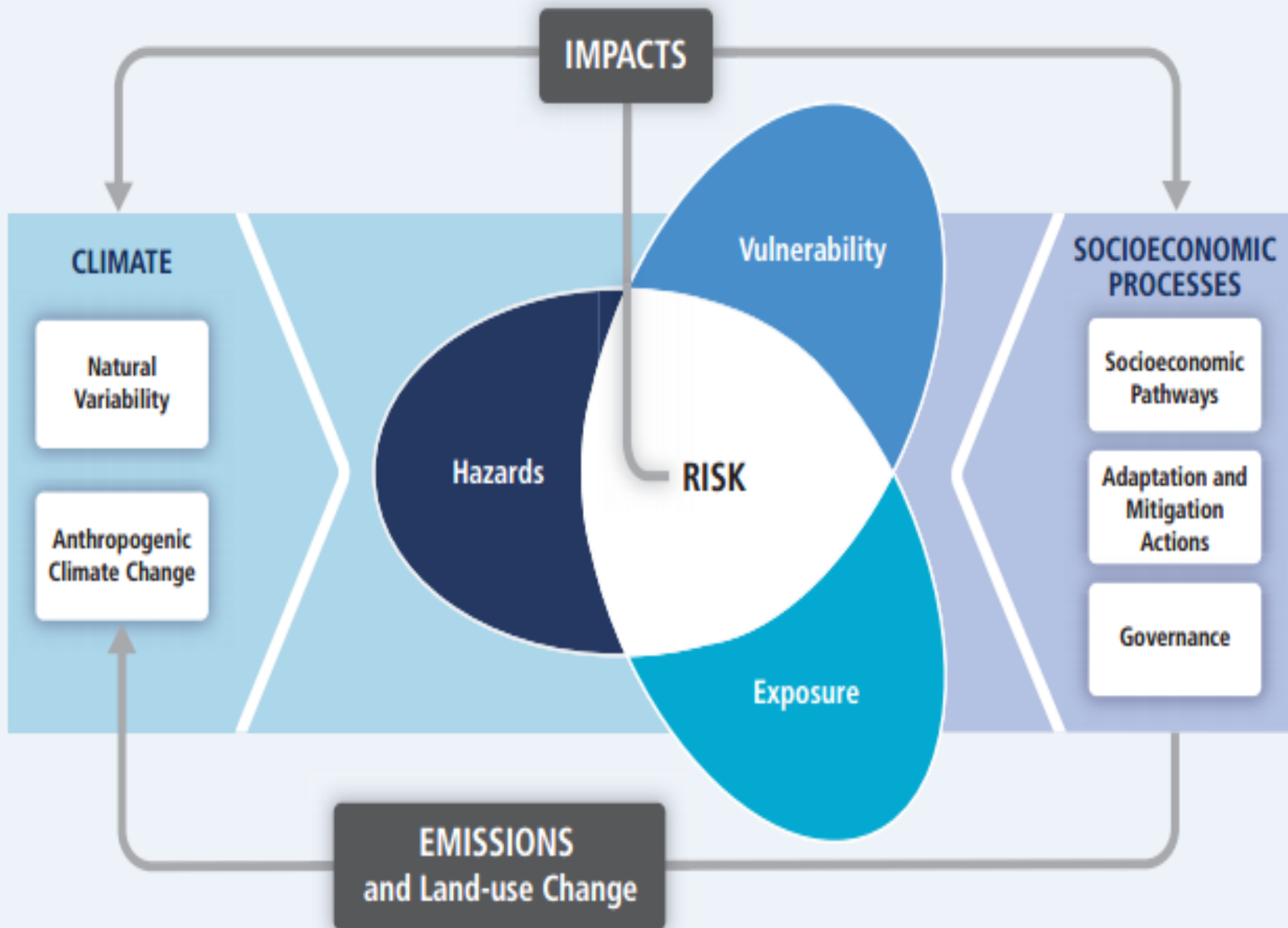
TARGET POPULATION

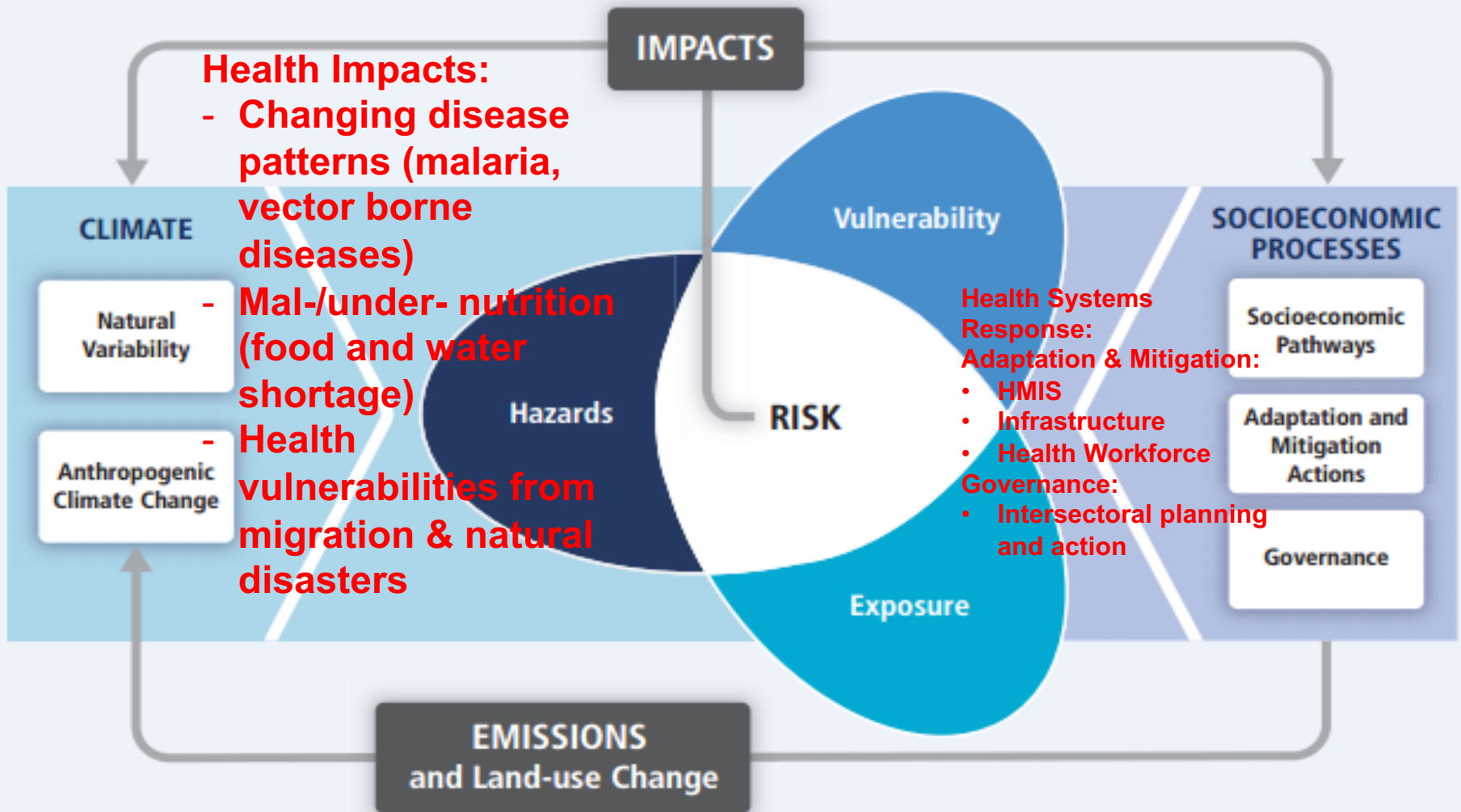


Performance
Goals

WHO Health Systems' Building Blocks Framework

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Health Management Information Systems

Key functions:

- Disease surveillance and early-warning systems
- Projections of burden of disease
- Planning and HMIS staff must work closely together; planning mechanisms must incorporate HMIS data
- Integrated and inter-sector planning needs to be fostered

Key questions and research:

- Challenges of inter-sectoral data and cooperation:
 - How will it be shared and combined?
 - Whose responsibility to coordinate and collate?
 - How are complex inter-sectoral data translated into planning priorities; are there lessons from other sectors?
- **Evaluation of joint/integrated initiatives**
- **Knowledge transfer (lessons/experiences from other sectors)**



Infrastructure

Key Issues:

- Climate resilient buildings and products
- Climate-safe siting of new infrastructure
- Adaptive/flexible health services to address emerging needs
- Planning for, and financing of, changing supply chains for drugs and test-kits and additional training for medical staff.

Key questions and research:

- What infrastructural changes are needed?
- What inter-sector linkages need to be made?
- Who is responsible for liaising with climate actors & making decisions on mitigation & adaptation planning (energy sources, sites for new facilities, health impacts of climatic events)?
- **Mapping of changes needed; analysis of new financing models**
- **Policy & systems research to understanding responsiveness (and barriers to responsiveness) of decision making to climate issues**

Human resources

Key issues:

- Understanding of adaptation needs and new skill sets required for health workers at front line, and for planners and policymakers in:
 - New/emerging diseases
 - Rapid/emergency response
 - Leadership, management and supervision
- Ability to flexibly respond to, manage & supervise changing needs.
- Ability to liaise with actors from other key sectors

Key questions & Research:

- How are flexible, integrated workforces achieved?
- Who is responsible at what level for inter-sector partnerships?
- What type of human resource skills are needed?
- Do we need a new type of health worker?
- **Reviews and evaluations on interventions to foster workforce flexibility and responsiveness (including cross-sector)**
- **Evaluation of models of inter-sector coordination for common goals**
- **Policy & systems research to understanding responsiveness (and barriers to responsiveness) of decision making dynamics and processes to climate issues**

Governance (the crux)

Key issues:

- New forms of governance needed within and across sectors.
- New types of joint planning and intersectoral action will be needed.
- Cross-cutting; macro and micro

Key Questions:

- What are we trying to govern?
 - What sort of inter-sectoral governance mechanisms should there be at different levels (global, national, sub-national)?
 - What regulations are needed for supporting adaptation and ensuring mitigation within health-systems?
- **Test models of stewardship of collaborative action**
- **Document & analyse representation & accountability of systems adaptation/ mitigation decision making, implementation, monitoring and regulation at all levels**

Some conclusions

- Adapting health systems to GEC is primarily a challenge of people-centred governance.
- GEC poses challenges that link health systems with other sectors within and beyond national jurisdictions.
- Protection of health and equity therefore lies in involving health systems in new constellations of multi-level intersectoral governance structures:
 - from global protection of public goods to locally responsive decision-making, learning from existing models from the UN's humanitarian cluster approach and disaster risk-reduction.
- Implementation and policy research is urgently needed to determine how health system adaptive-mitigative capacities can be best strengthened through such governance structures.