UCCR Trust Fund and opportunities in the Health Sector

"The cost of making the health sector adaptive to climate change in developing countries is estimated US\$4-12 billion. The cost of not adapting however, would be much higher Parry *et a*l. 2009"

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Content and approach

- What is UCCRTF and Implementation Guidelines
- Climate Change and Health linkages
- Challenges and Barriers
- Opportunities
- Case studies and Examples
- Sum up: Integration actions

Urban Climate Change Resilience Trust Fund (UCCRTF)



Application: UIWG/UISC by circulation **Criteria: UCCR principles**

VIE: Urban Environment and Climate Change Adaptation Project

MYA: Climate Change **Resilient Urban Planning** and Community-Based Solid Waste Management **BAN: Climate Resilience** Integrated Urban Planning and Project Development

UCCRTF Implementation Guidelines

- General areas of support: Early Warning Systems, community initiatives, water, drainage, flood protection, clean energy, urban planning, SWM, education & health systems
- Health Sector specific : Building Climate Resilient Health Systems and Services projects (3 areas)
- 1. Public health surveillance and response systems for climate related illness
- 2. Improving the capacity and response capability of health providers
- 3. Health insurance products for poor & vulnerable households



Health sector- Climate & Env. risks, impacts and opportunities

- **Direct** impacts on/from health facilities, logistics and products
- **Indirect** impact- causes of morbidity/mortality- preventive measures (IAP, WATSAN, nutrition, air quality)
- **Opportunities:** Fortification of health systems; toilets, energy access, disaster free sites, water harvesting.
- **Design and location:** Green principles in siting, design, building materials of health facilities
- Asset maintenance costs: Functional equipment and supplies. Transport services and green supply chain.
- Medical Waste management supply chain: integrated in health worker training to reduce waste, infection and emissions
- Clean energy and Energy efficient- solar passive and active, hybrid minigrids - energy secure facilities

Challenges and barriers to integrating health and climate change issues

- 1. Key health determinants/solutions outside control of health sector
- 2. Preventive vs. curative (clinical dominated) cost effectiveness?
- 3. Costs and benefits of avoided/averted health risks of climate change
- 4. Finance: competing priorities, long term impacts and discounting rates
- 5. Lack of evidence on health risks and benefits for policy options
- 6. Institutional & technical barriers on collaboration





Public Health Surveillance- key challenge

- Quantify the disease burden in community/country
- Why: emerging diseases (Ebola, Zika, vector- borne, non-communicable) and climate sensitive diseases
- IHR: Shift to all hazard approach = not specific diseases
- Systems available:
 - Health facility based surveillance: Use data collected by health workers- Epidemiology To monitor the normal
 - Event based surveillance: Track information on events as they happen To find the abnormal

URGENT priority: Integrate this with Health systems strengthening

How can health sector incorporate climate and environment issues?

1. Clean energy and energy efficiency

Efficiencies in the health sector in South Korea saved \$1.7million in 2011 (Global green and healthy hospitals network, 2014)

2. Climate proofing infrastructure:

Resilience of buildings to floods/storms

Increasing green space-

for air purifying & temperature regulation (can reduce heat island mortality by 40-99% Stone et al. 2014)

- 3. Incorporate health co-benefits in budgeting and decision making
- 4. Assign budget and monitoring indicators in health plans to Climate and Env. factors



Powering community facilities significantly improves the quality of life

POWER FOR HEALTH CLINICS

- Light significantly improves night birth outcomes
- Fridges for medicines and vaccines
- Power diagnostic/treatment equipment
- Sterilisation of equipment
- Internet access to latest knowledge
- Remote diagnostics and specialist support

SCHOOL POWER

- Power computers
- Evening classes for adult education
- Science teaching
- Teacher retention
- Internet access
- Vocational training (power tools; electricians)





Integrated Climate resilient response for Urban Health in Bangladesh- \$150k

Outputs:

- Emergency response, community infrastructure & CB
- Urban health mapping for climate sensitive disease and Facility mapping
- Health emergencies risk management: preparedness
 & response plan, communication network
- Scale up "green clinics": siting, design, energy security and efficiency in health facilities
- Institutional roles and capacity development on ULB competency gaps
- Community-led public health initiatives

Additional output progress

- Renovation of health facilities, Hospital, RFC, MCH, HPs
- Solar energy installations
- Waste management improvements
- Water catchment/ supply
- Ambulances
- > Website
- Supervision budgets





HEALTH AND CLIMATE CHANGE INTEGRATION ACTIONS

- "CC will increase health risks and strain health systems struggling with non-climate risks"
- Response: CC predictions and future health impacts, integrate health in CC plans WHAT IS REQUIRED- RISK MANAGEMENT APPROACH TO PUBLIC HEALTH:
- Focus on current climate risks/shocks reduce vulnerability to droughts, floods, extreme temp. DRR and early warning systems
- Factor future climate change increase of extreme weather events
- Understand Climate impacts manifested through water and disease (heat stress)
- Address direct risk to health infrastructure and healthcare workers

OPPORTUNITIES- AVOID CARBON/ INFRASTRUCTURE LOCK IN:

- Improvements in access to health services households more resilient
- Low carbon clean energy Mobile units, transport, green supplies
- Incorporate climate impacts into health Monitoring systems
- <u>Build climate resilient households, infrastructure, institutions capable of coping</u> <u>with uncertain futures</u>