Welcome to the presentation on

Health Ecology and its Potential Challenges in Bangladesh by 2050



Md. Shafiqur Rahman, PhD

Deputy Program Manager (Planning, Monitoring & Research)

Directorate General of Health Services
Dhaka 1212, Bangladesh

E-mail: rahmans.shaheenr@gmail.com

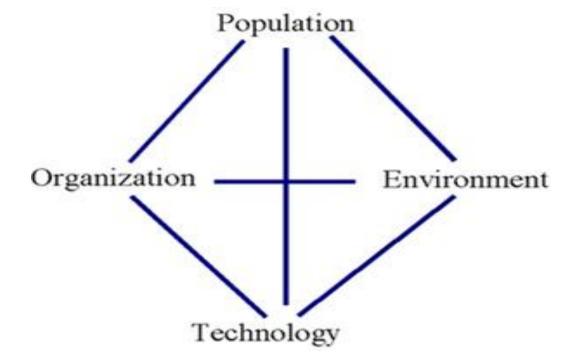
Cellphone: 01199141884





Introduction

- Health ecology is one of the many dynamic systems in nature that requires nurture
- It is the interplay of POET (Population, Organization, Environment and Technology)
 Complex¹





Introduction

(contd.)

- Assuming continued current trend in some of the sub-components of POET Complex as
 - climate change
 - urbanization
 - human life expectancy
 - -fertility in Bangladesh a projection into 2050 is reflected in the article



Objective

Alerting the

- -state parties
- —non-state parties
- -civil societies

on their responsibilities towards positive changes by averting perceived challenges in health ecology



Method

Consultation of electronic recorded communication for conceptual analysis and etic interpretation



Results

- Effects of temperature rise by 2050 may lead to sea level rise
 - inundating 10% of the 147,570 square kilometers of land mass of Bangladesh, including 84% of Sundarbans^{2,3}
 - making 40 million people environmental refugees⁴
- Storm surge with 10% increase in wind speed are expected⁴
- Increase in flooding may lead to agricultural loss by 2%⁴



Result

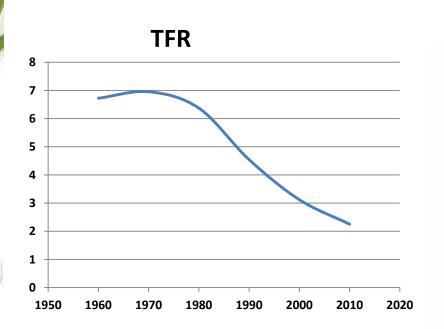
(contd.)

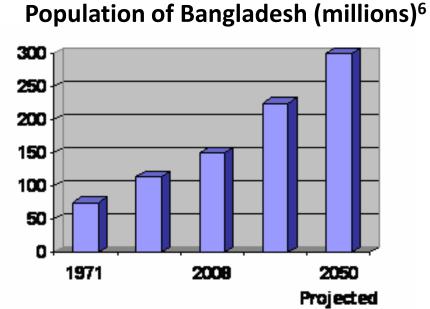
- Increased salinity may create
 - an environment that nurtures cholera microorganism⁴
 - increasing diarrheal diseases and loss of productive hours⁴
- Bangladesh has been experiencing rapid urbanization in recent decades compared to rate of growth of rural population⁵

Result

(contd.)

- Uptrend in life expectancy may lead to an estimated population of 300 million by 2050 in spite of declining fertility rate⁶
- Numbers of older people may increase several folds by 2050 (10-fold in this century), creating a large burden on the health system, especially for chronic illnesses.⁷







Discussion

- It is speculated that ecological changes will bring in its wake modifications in
 - biodiversity
 - agriculture
 - infrastructure...
- Issues of health may emerge as the leading challenge to survival
- Other challenges may take the form of
 - providing accommodation for the swollen population in limited space
 - producing crops in diminished land area
 - tackling the burden of aging population
 - sustaining forests as nature's lung



Conclusion

- Meeting the potential health challenges on a global scale will call for concerted rigorous efforts of people from all disciplines among
 - -governments
 - non-governmental organizations
 - -groups
 - —individuals upholding the need of 'one for all and all for one'

Sources Consulted

- 1. Jeong, Dai-Yeun. A Sociological Implication of Environment in Social Development. *Korean Journal of Population and Development*, vol. 26, no. 2 (1997), p 5-7. Available at < http://isdpr.org/isdpr/publication/journal/26-2/Dai-Yeun%20Jeong.pdf>
- 2. Khan, MAH and Awal, MA. Global Warming and Sea Level Rising: Impact on Bangladesh Agriculture and Food Security, Bangladesh Agricultural University (2009), p-17 & 27. Available at < http://www.nfpcsp.org/agridrupal/sites/default/files/Final_Technical_Report_CF_10_Appr oved.pdf>
- 3. Government of Bangladesh. Health Bulletin 2012. p-13. Available at < http://dghs.gov.bd/bn/licts_file/images/Health_Bulletin/HB2012_CH/HB2012_CH1_BD-at-a-glance.pdf>
- 4. Sarwar, GM and Khan, MH. Sea Level Rise: A Threat to the Coast of Bangladesh. *Internationales Asienforum*, Vol. 38 (2007), No. 3–4, p. 377, 385, 390. Available at < http://www.undp.org.bd/library/policypapers/Asienforum_Sarwar_Khan.pdf>
- 5. Laskar, SI. Urbanization in Bangladesh: Some Contemporary Observations. *The Bangladesh Development Studies*, Vol. 24, No. 1/2 (1996), p. 207. Available at http://www.jstor.org/discover/10.2307/40795552?uid=3737584&uid=2129&uid=2&uid=70&uid=4&sid=21101493796093
- 6. Chowdhury, MR. The Population Challenge Facing Bangladesh. *Public Journal of Social Sciences*. Vol. 11 (2011), p-2. Available at <sites.google.com/site/openjournals/journal-of-social-sciences/jss-mahfuz/JSS-Mahfuz.pdf?attredirects=1&d=1>
- 7. Streatfield, PK, and Karar, ZA. Population Challenges for Bangladesh in the Coming Decades. *J Health Popul Nutr.* (2008), 26(3): 261–72. Available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2740702/



THANKS

