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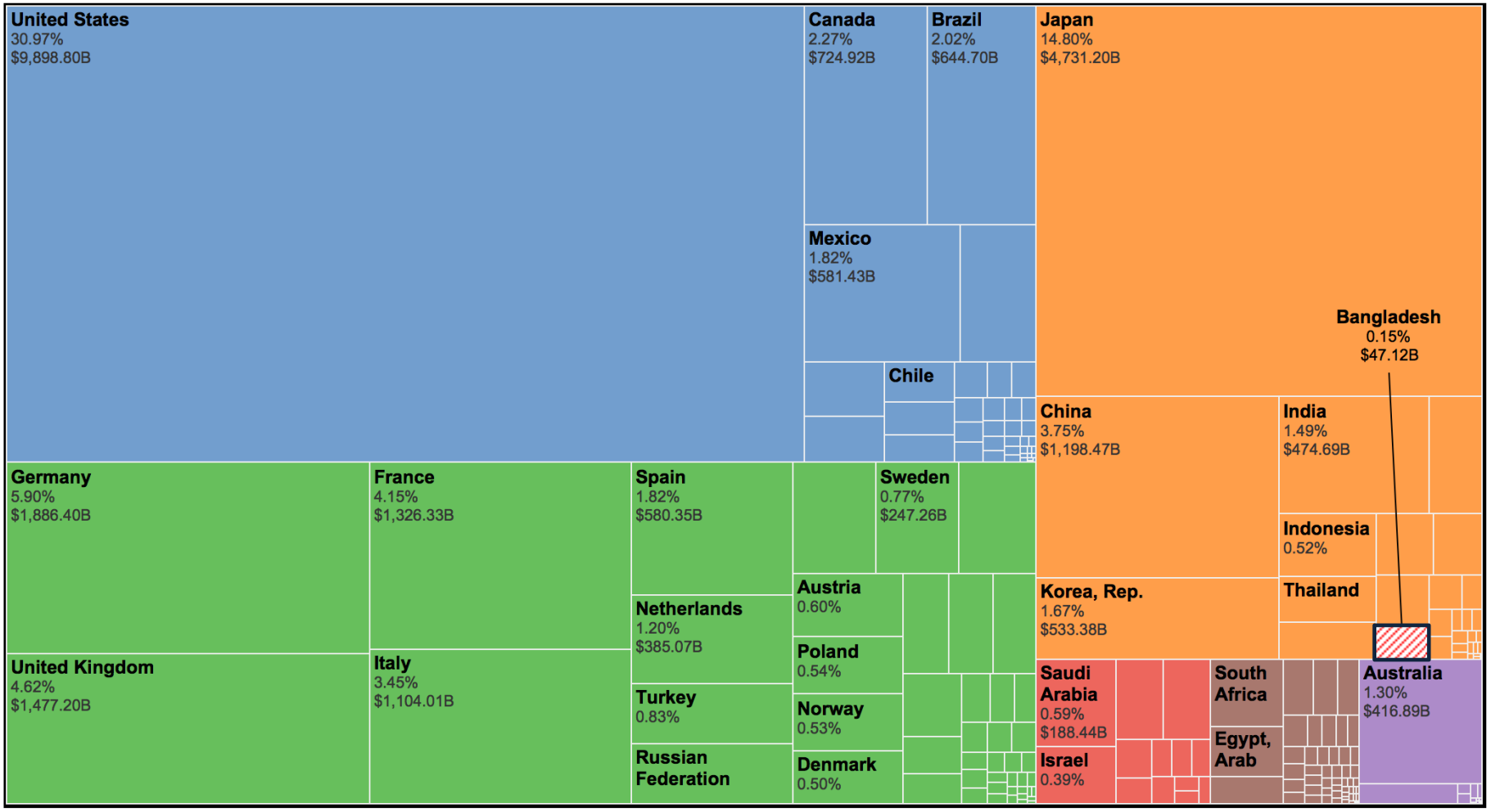
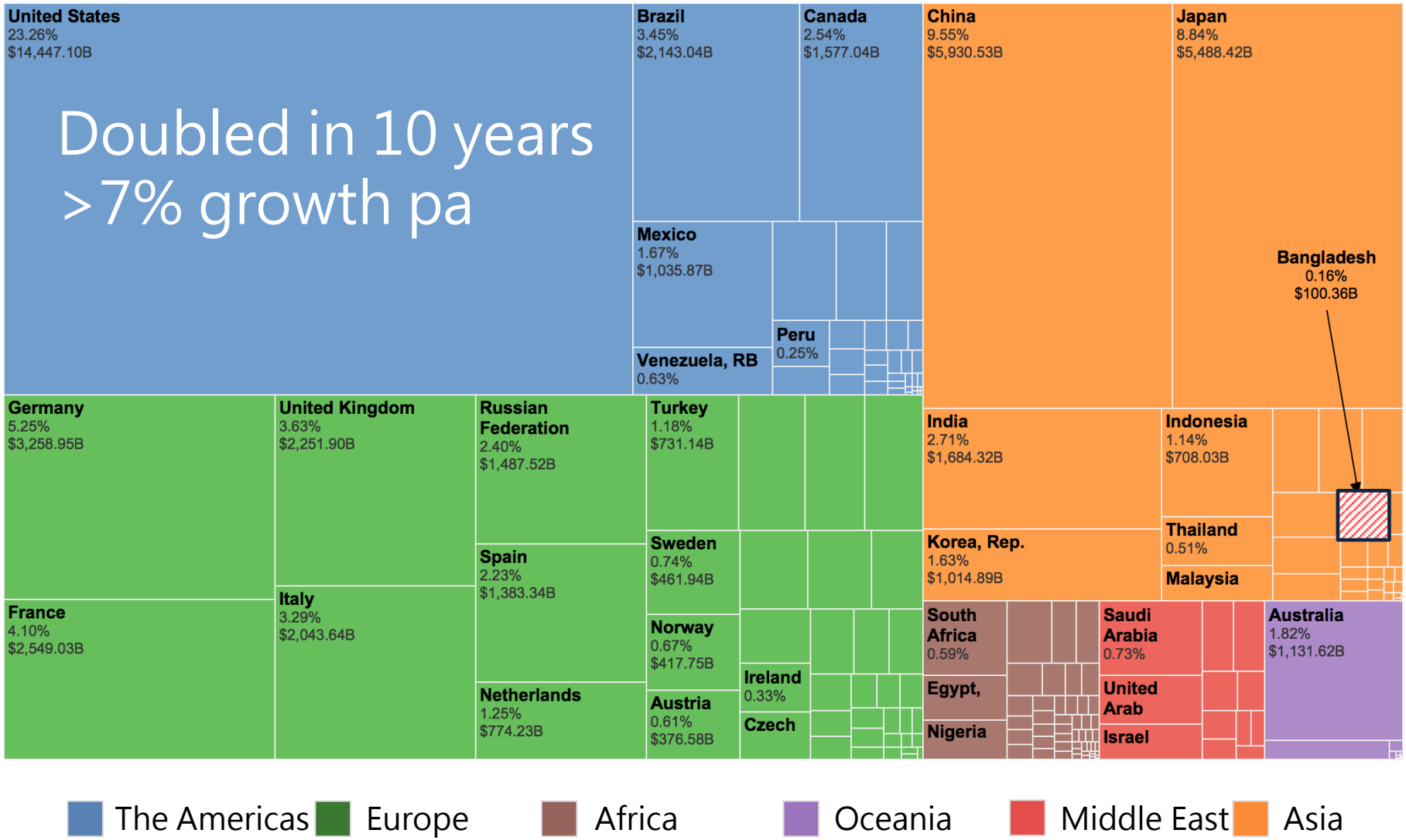
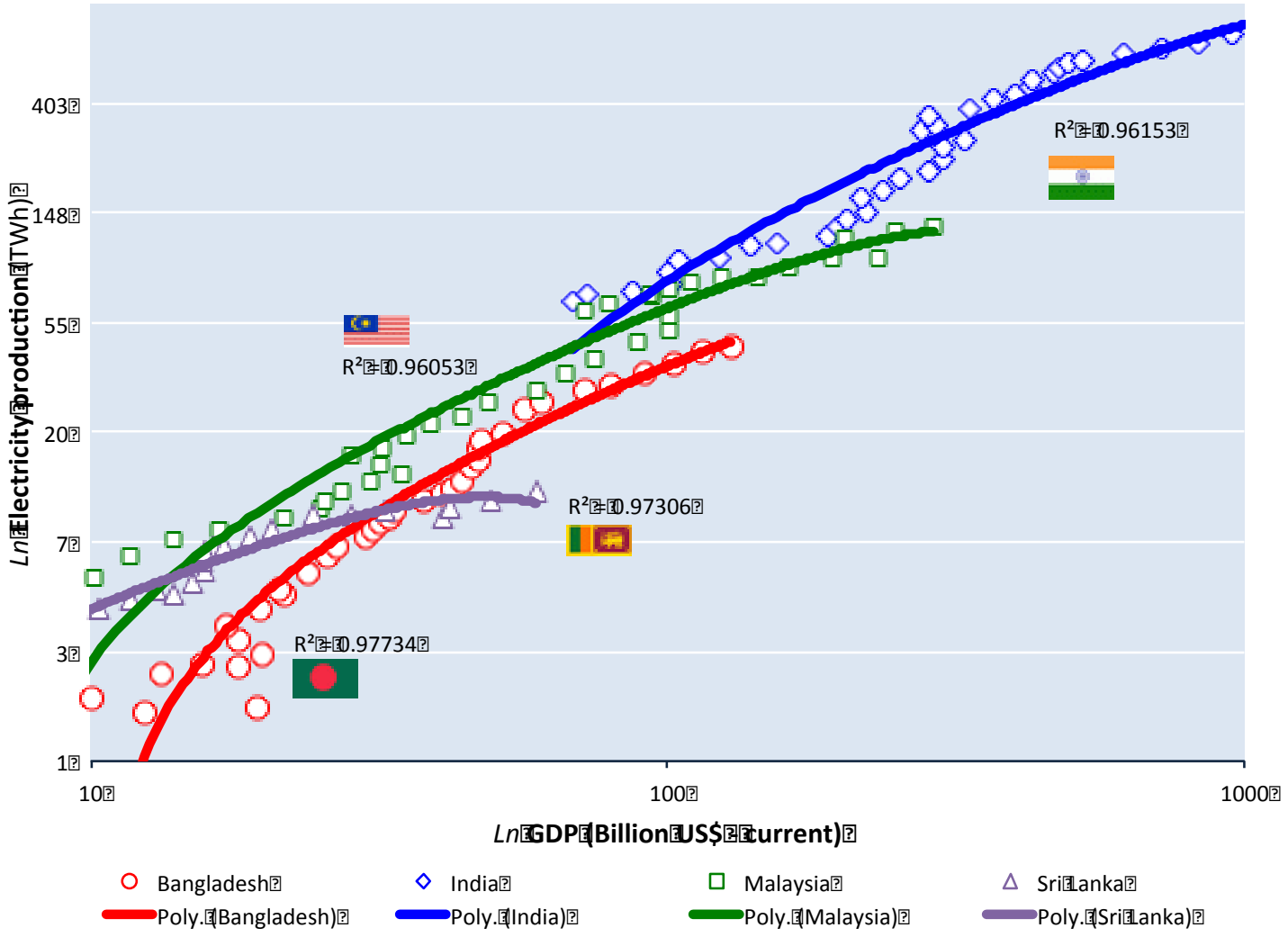
Country share of GDP in 2000



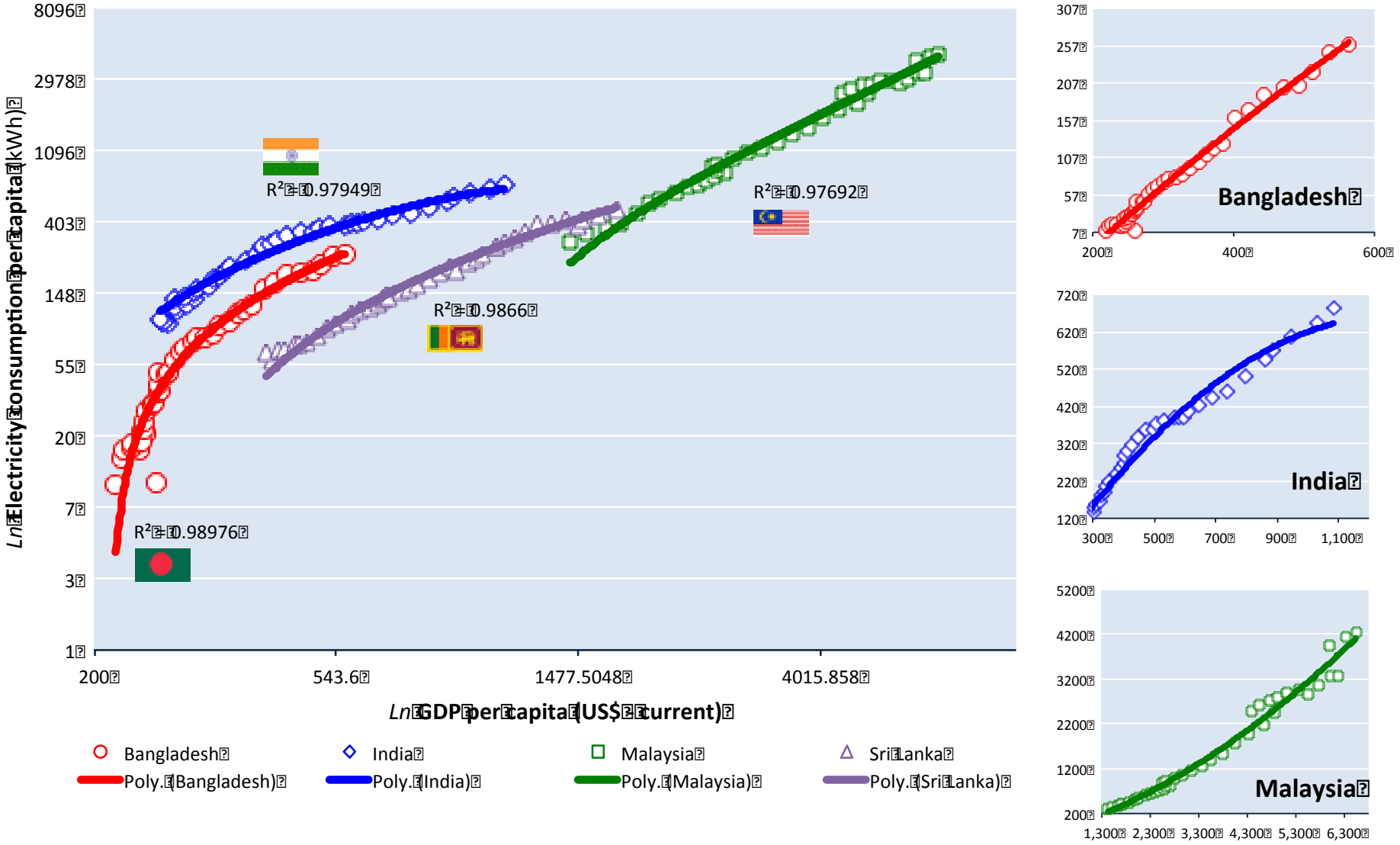
Country share of GDP in 2010



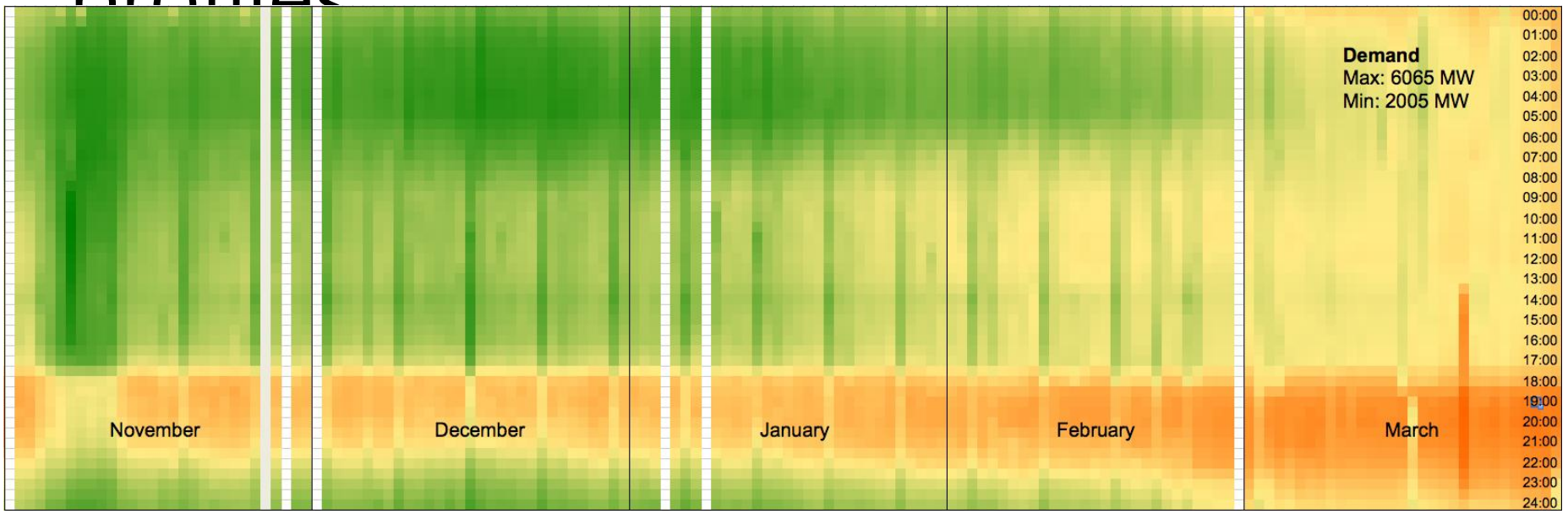
GDP vs Electricity consumption

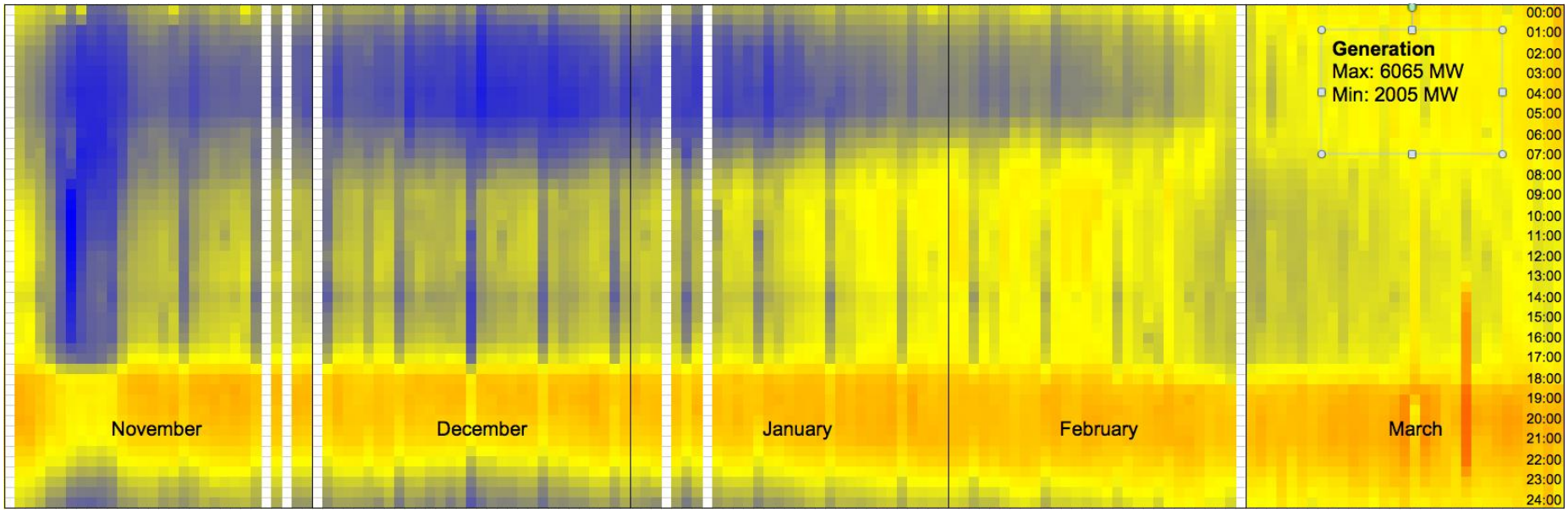


GDP vs. Electricity consumption

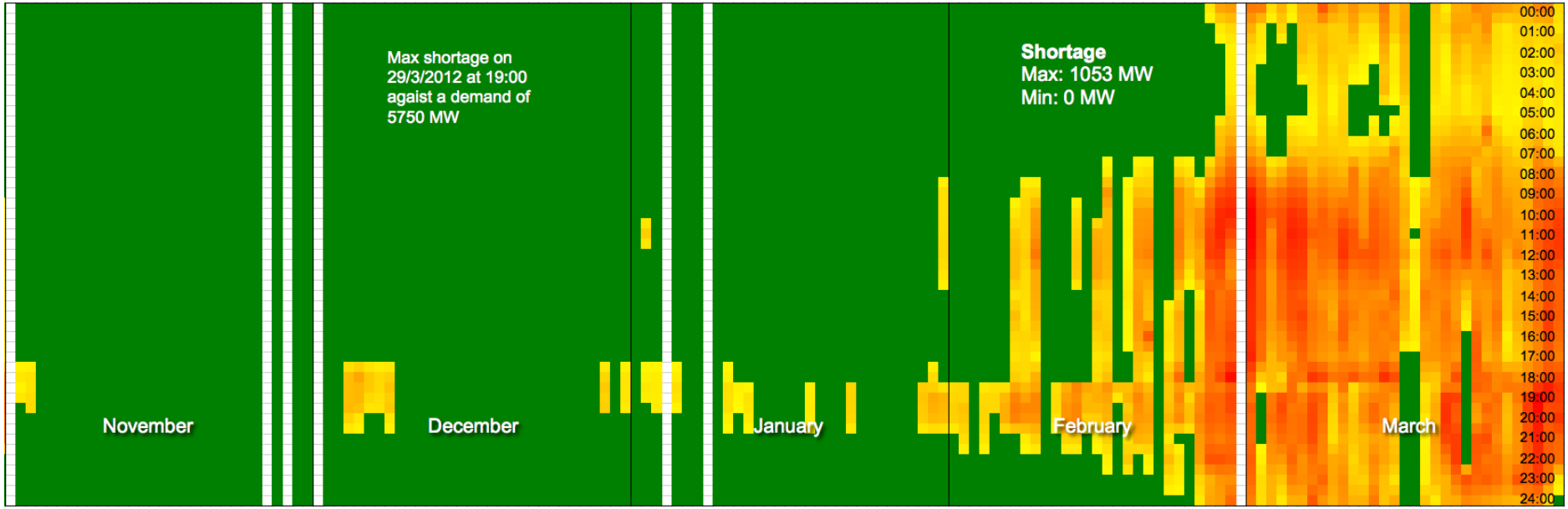


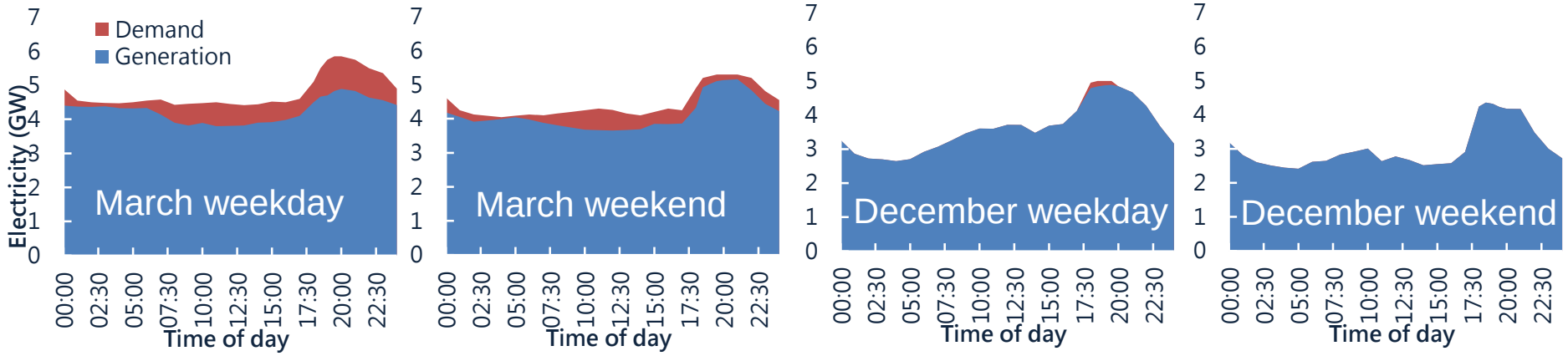
Sub-hourly demand and generation profiles





Sub-hourly shortage (outage) profile



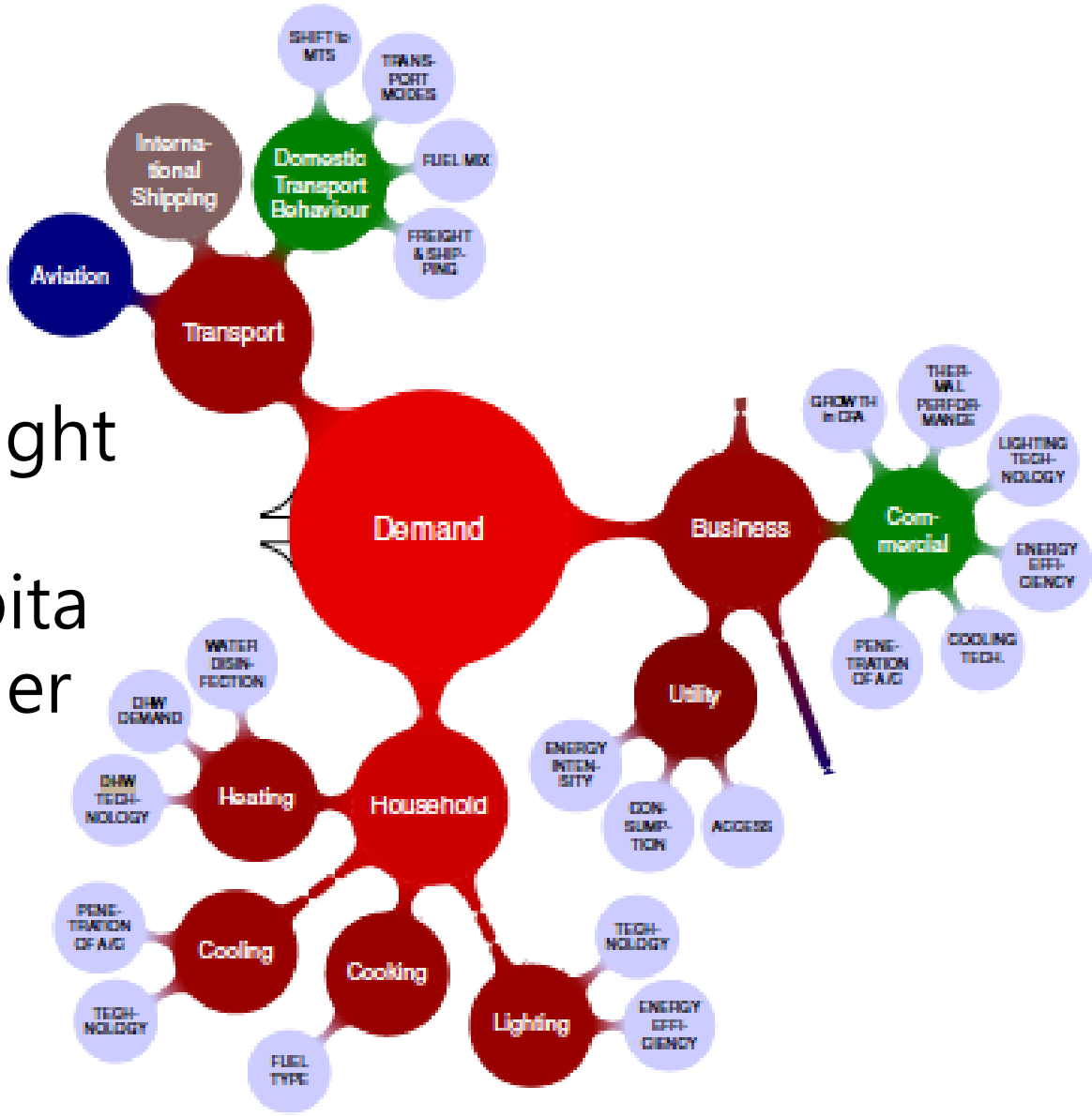


Assertions

- Bangladesh displays "suppressed demand" scenario
- Four effects were considered:
  - **Income effect**: More income ≈ increased demand
  - **Rebound effect**: Efficiency gain ≈ increased operating time
  - **Minimum service level**: Meet BHN
  - **Basic human needs**: Physical and psychological needs
- Bottom up approach:
  - Demand is built up within disaggregated demand vectors (sectors) then aggregated to compute final demand
  - **Technology penetration** (BHN and MSL) follow

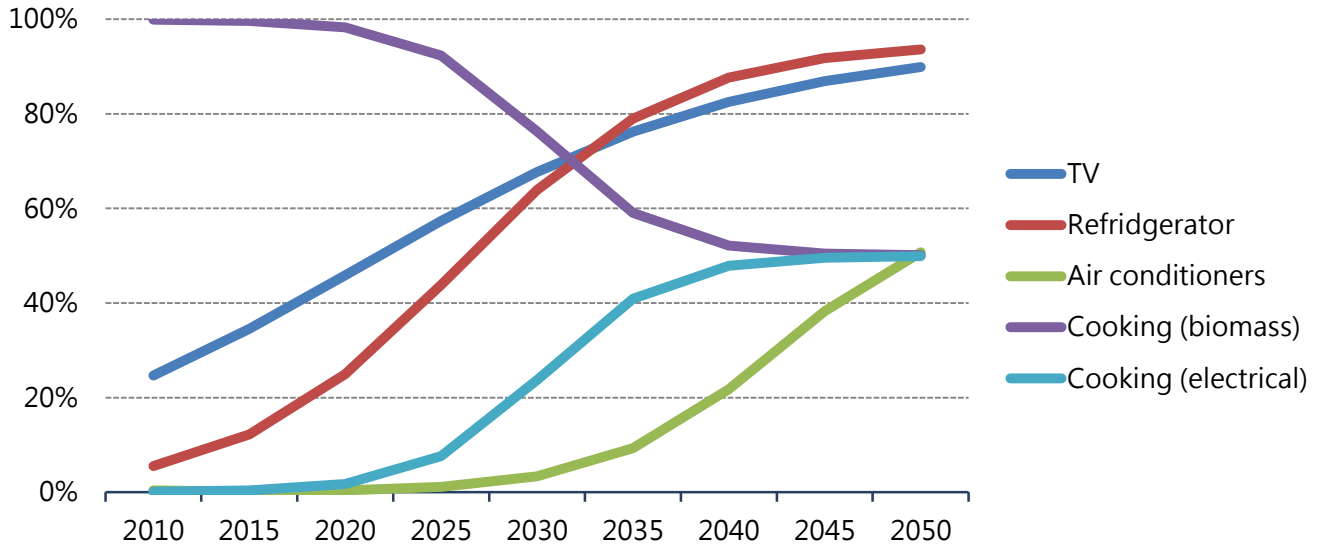
GDP considerations in the model

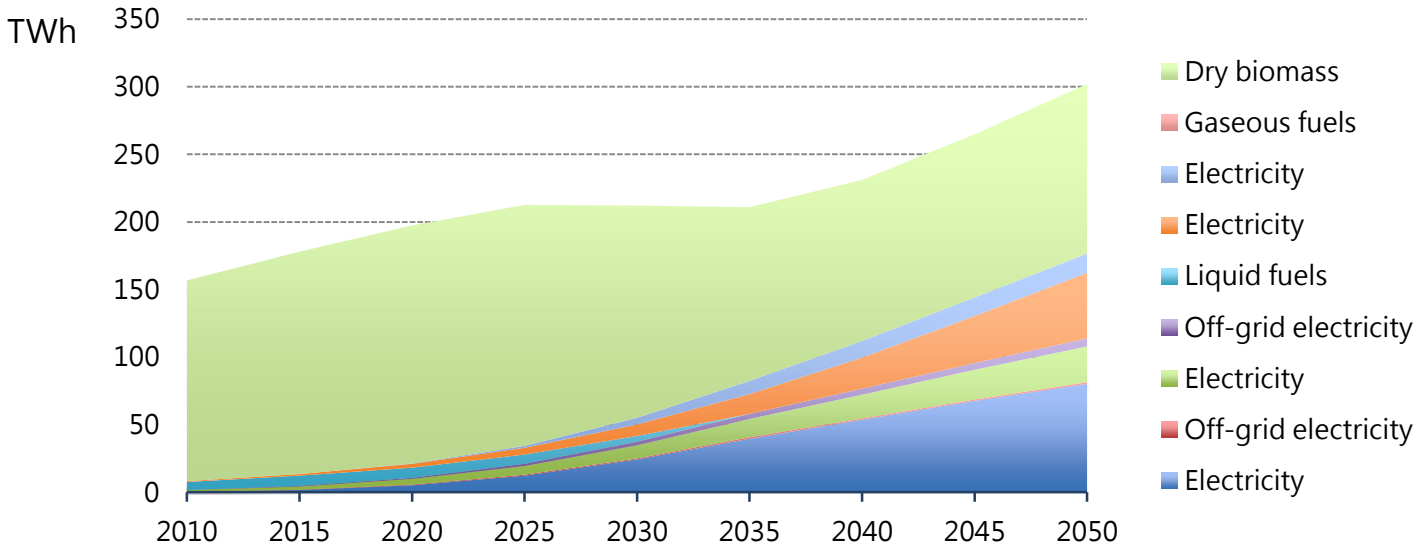
- GDP affects freight transport
- Income per capita affects passenger transport



Use of S curve distribution: Rural household

Upper limits of technology penetration moderated by GDP and Income per capita





Population

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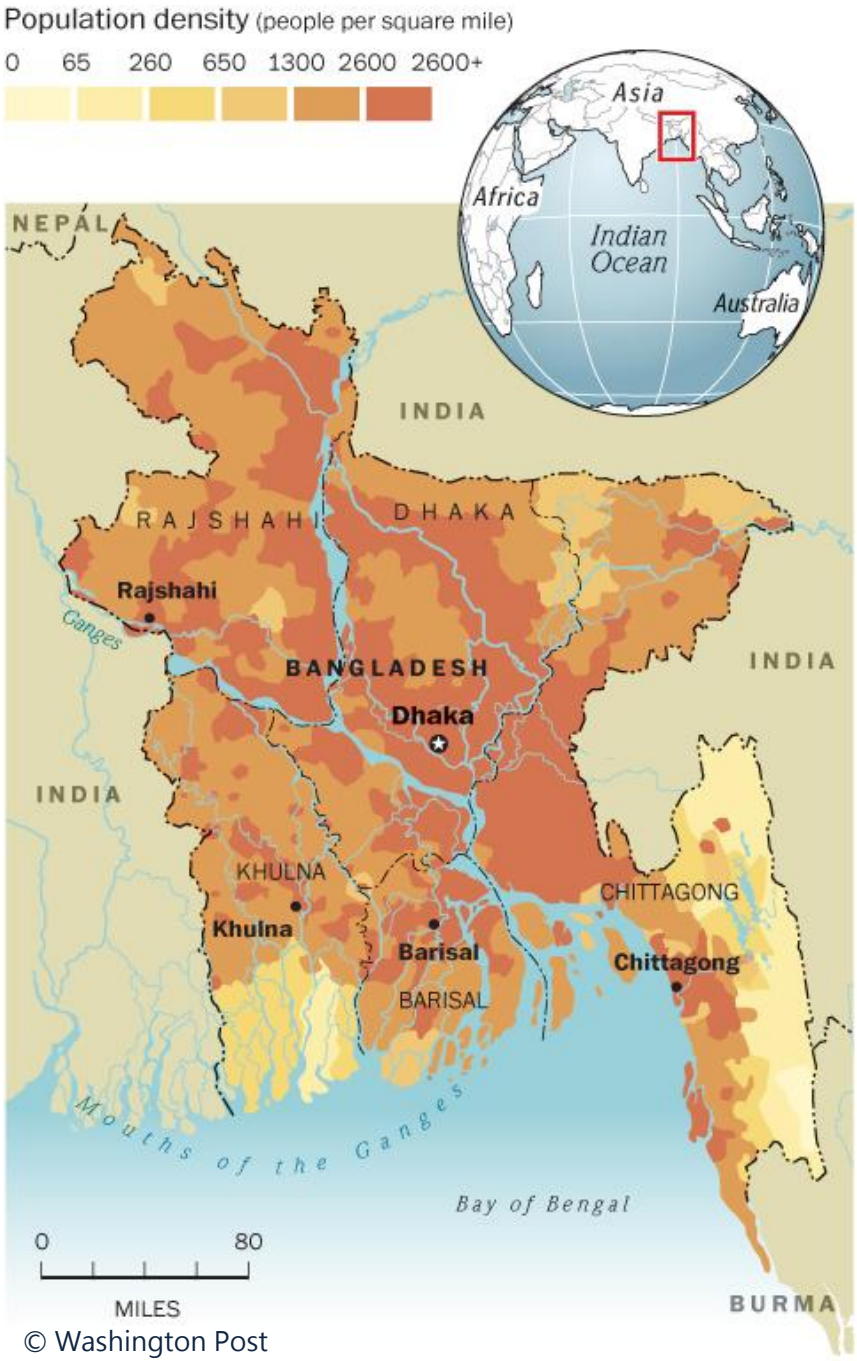
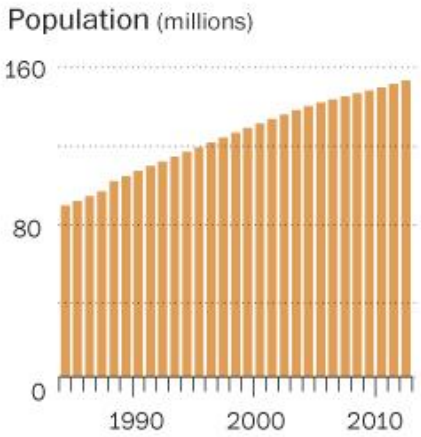
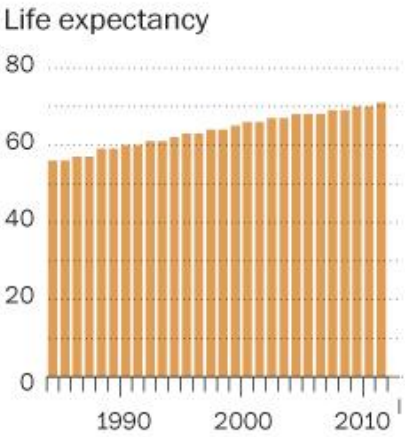
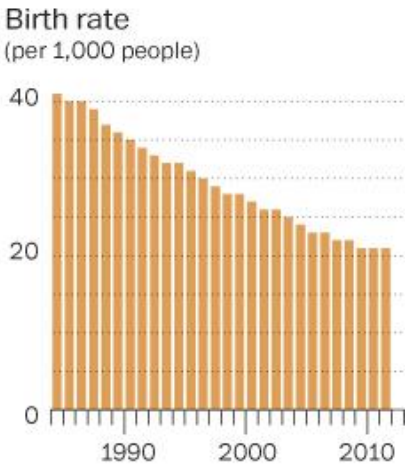
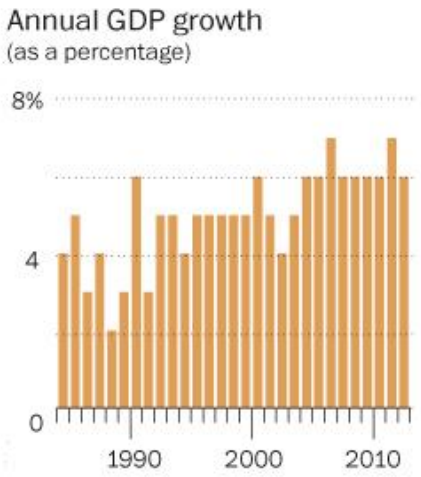
THE LIFE AND ECONOMY OF BANGLADESH

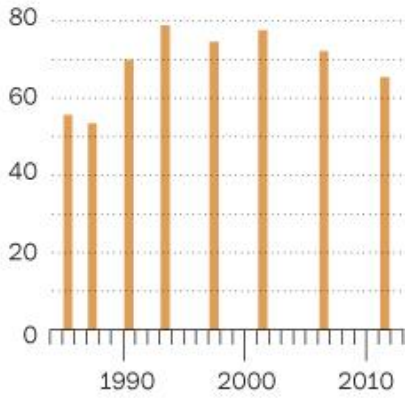












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Population projection

Total population

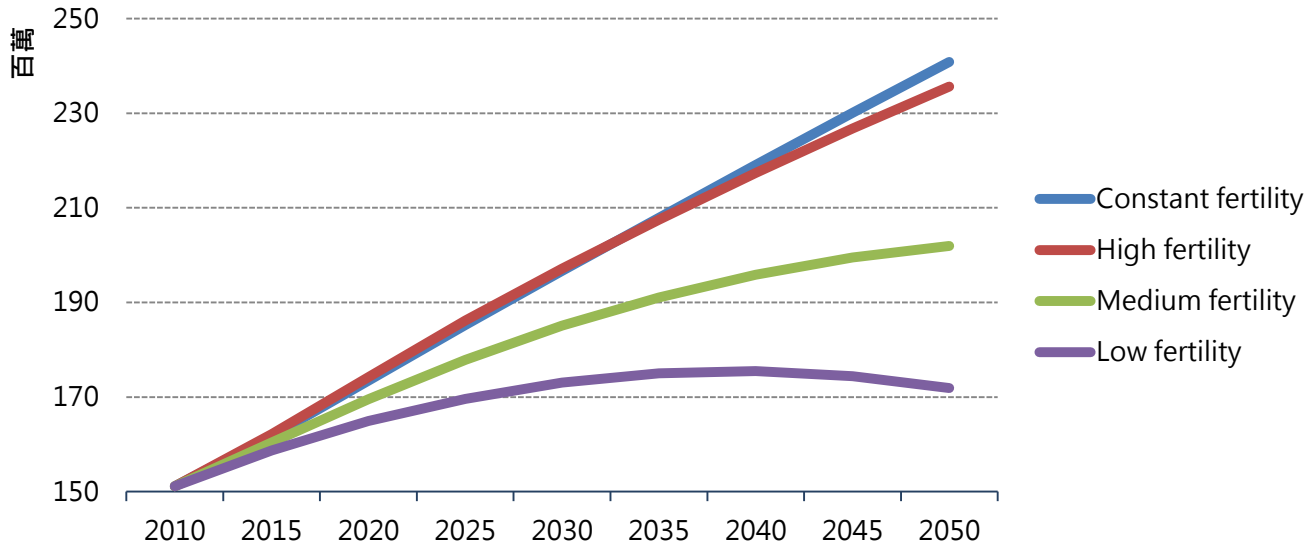
Urbanization rate

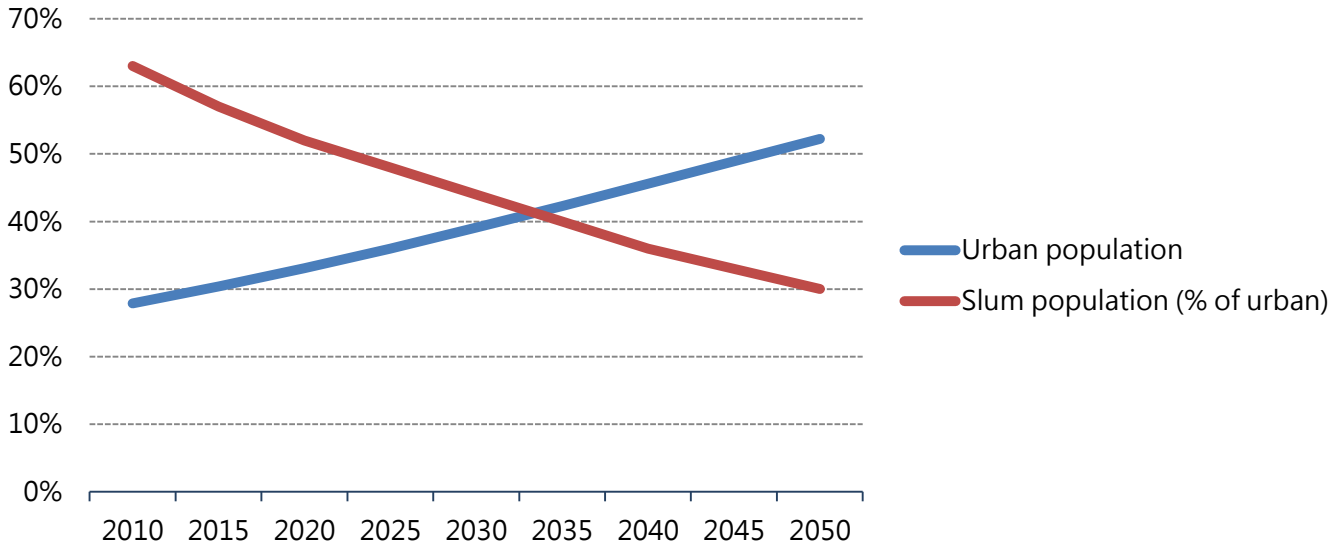
Slum population rate

Household size

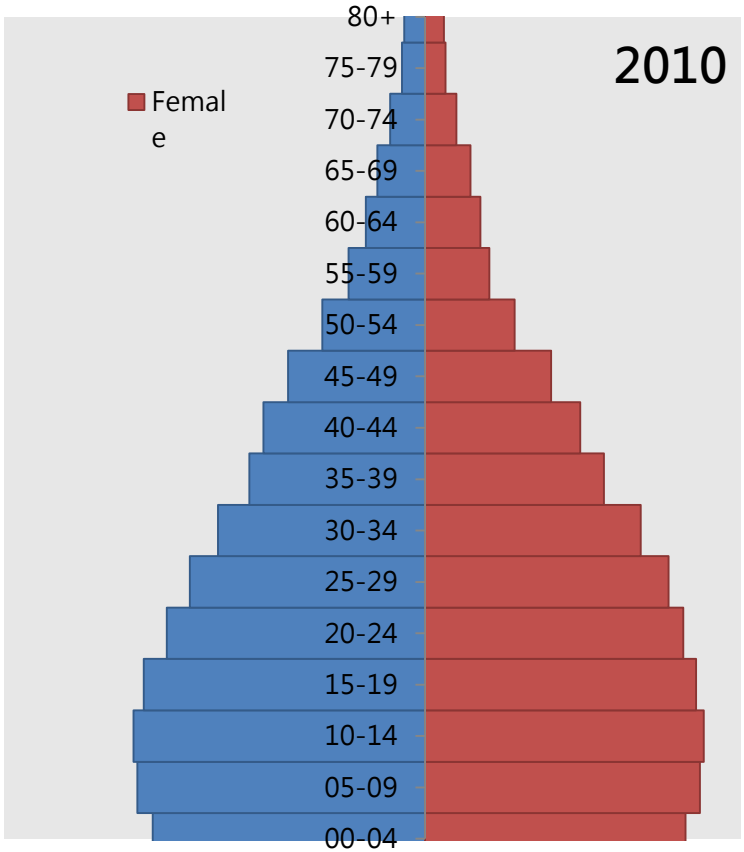
Household nos

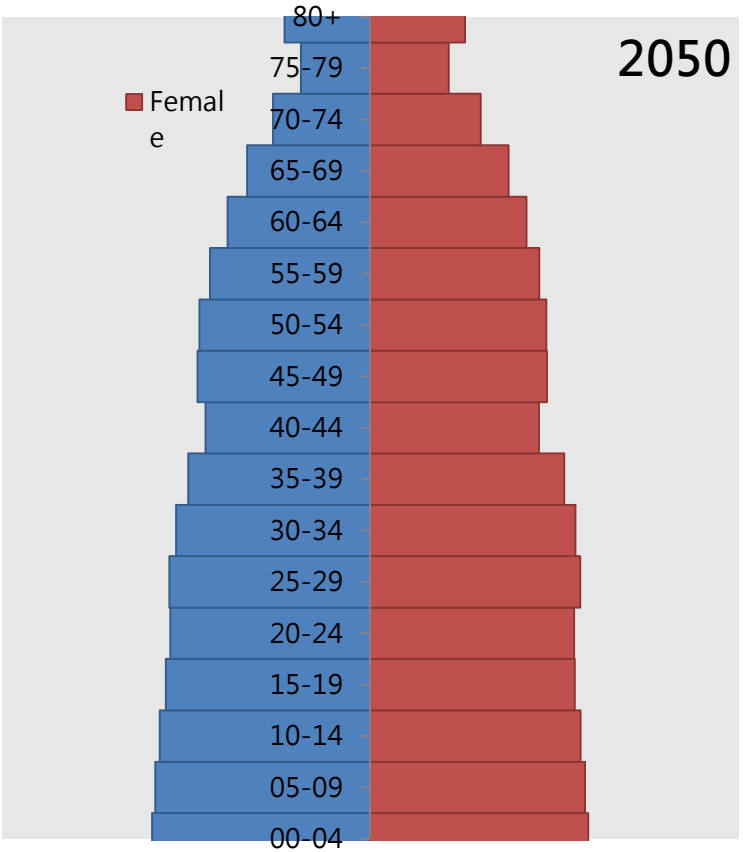
Demand





Age distribution



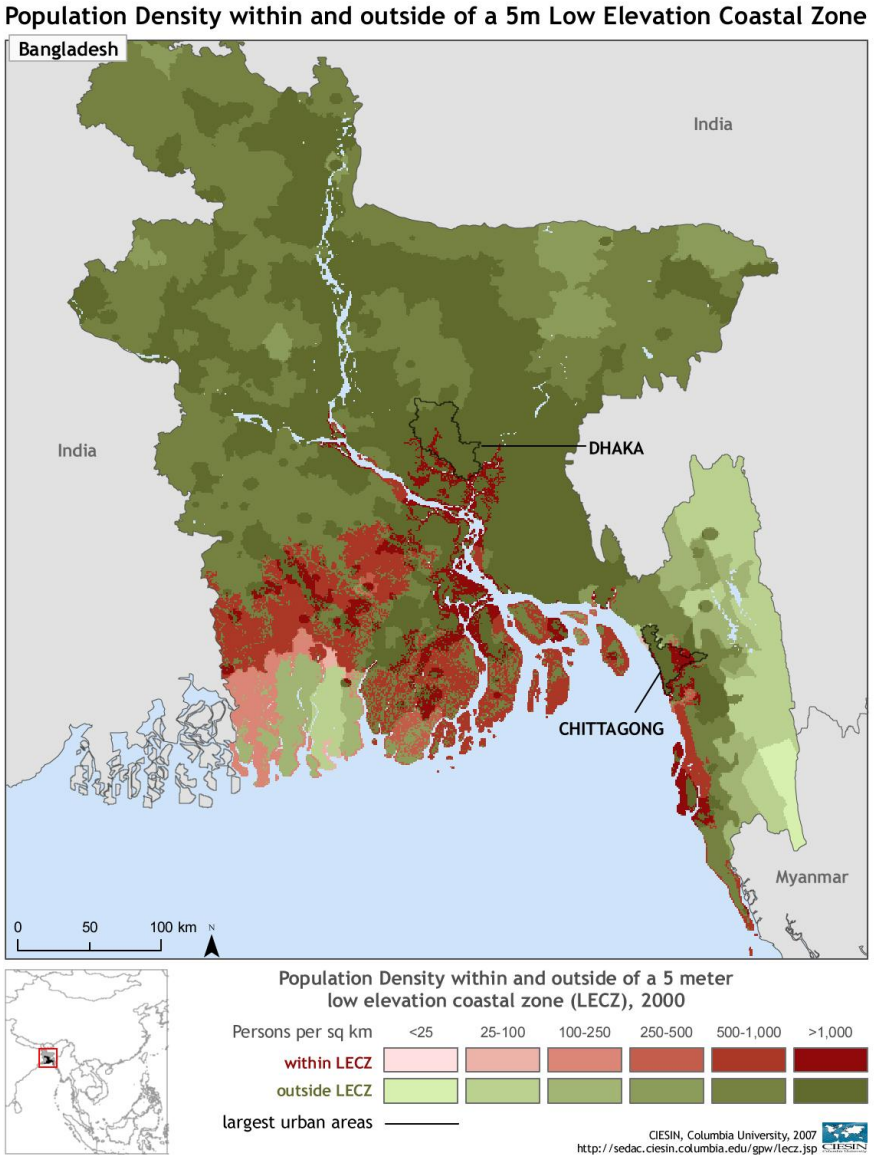


- Ageing is not as big a concern as in developed countries
- The shape of the distribution may have tangible effect on demand; e.g. trans

Future considerations

Climate change effects on
- Economy
- Migration and displacement

Demand and GDP
- Bi-directional causality
- Income effects



Thank you
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