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Rural-urban diet convergence and time-space compression in Bangladesh

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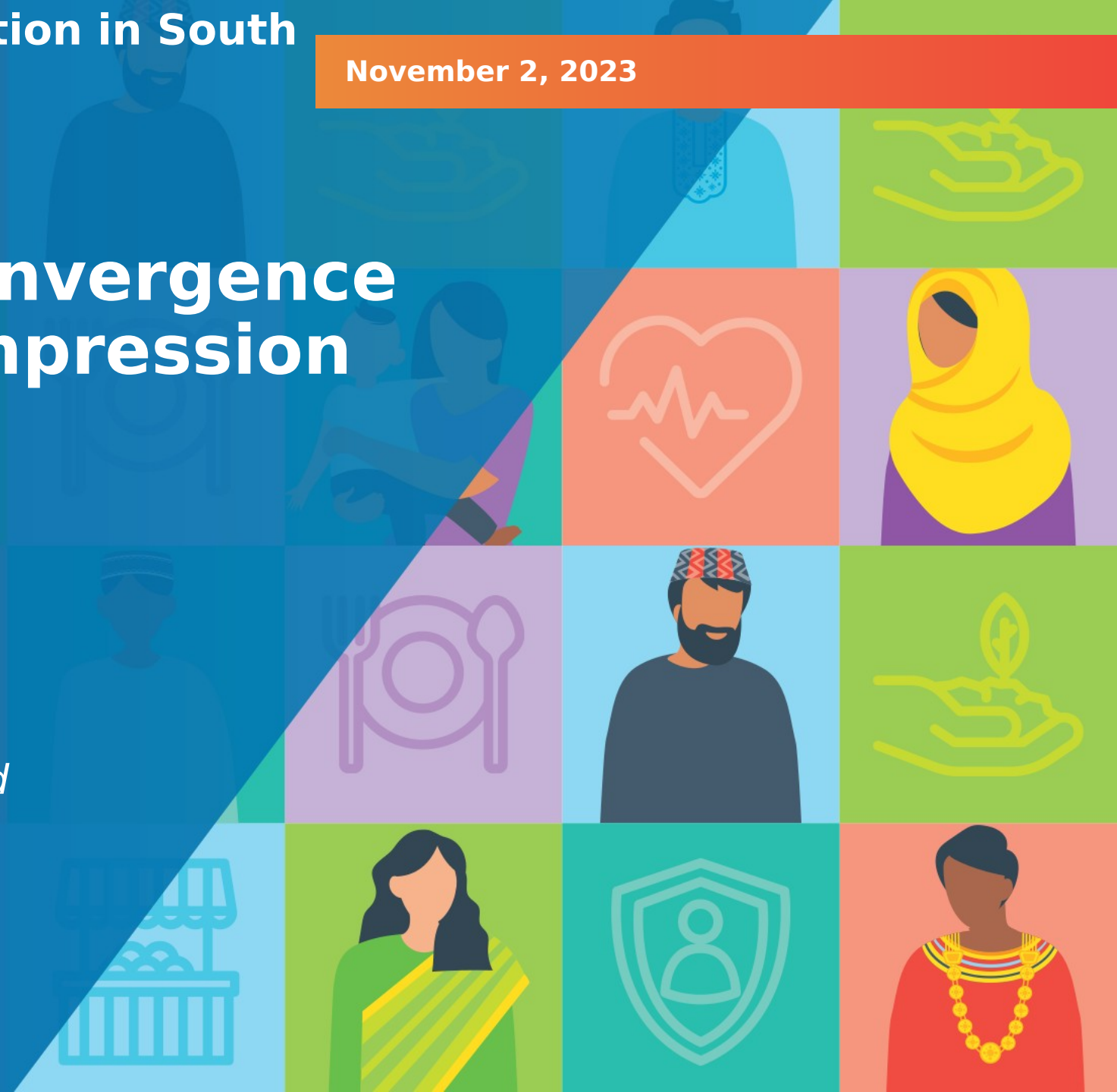


Background

Diet transformation:

- Changes in demand that influence the quantity, diversity, and nutritional quality of foods consumed

‘Time-space compression’: concept from human geography

- Increasing volume and velocity of social and economic transactions have accelerated the movement of goods, people, and information, effectively ‘shrinking’ time and space

Empirical analysis:

- Using Household Income and Expenditure Survey (HIES) 2010 & 2016 (nationally representative HH surveys)

Diet transformation triangle, and conditioning variables

Elements of diet transformation:

1) Consumption commercialization
2) Consumption diversification into non-staples
3) Consumption of processed foods

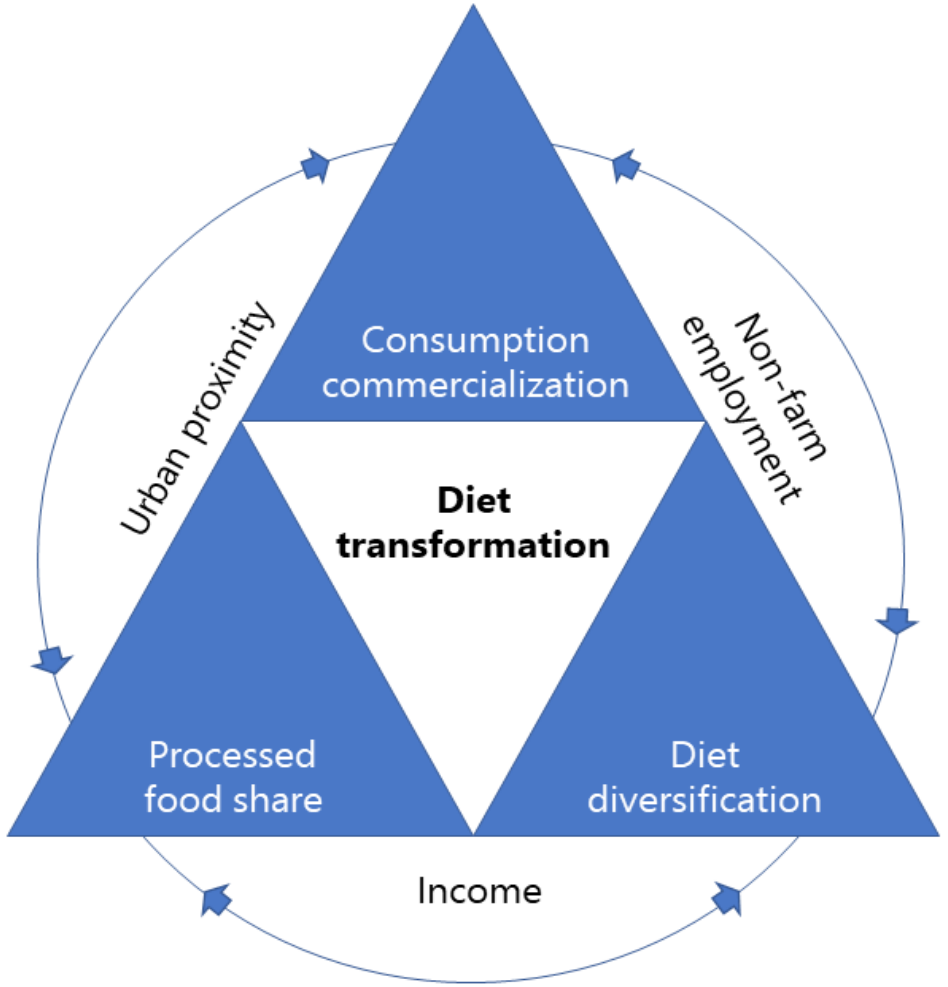
- Descriptive analysis

Conditioned by:

1) Non-farm employment
2) Income
3) Urban proximity

- Regressions

- **Distinguished 6 types of HH:**
- Primary cities, Secondary cities,
- Rural landed, Rural landless,
- Rural periphery, Rural non-periphery



Diet transformation: selected results

- **Consumption commercialization** was high in both years (national average 88% in 2016).
- Even landed rural households had high consumption commercialization (75%)
- Consumption expenditure by landed and landless rural households is converging over time (both $4.42/AE/day in 2016).
- **Diet diversification** increased: Non-grains = 59% of value of national diet in 2010; 71% in 2016.
- Fish and meat increased from 22% of consumption value in 2010 to 29% in 2016
- Share of FAFH in total is low (3.6% in 2016) but increasing slightly over time; surprisingly, only slightly higher in urban areas.
- Diets of urban consumers are more diverse than rural.
- **Processed food consumption**, excluding rice, increased slightly for all categories of consumer, from 20% in 2010 to 22% in 2016 nationally
- Minimal differences in consumption shares of rural households in peripheral and non-peripheral areas: even the remotest areas of are experiencing diet transformation.

Conditioners of diet transformation:

Income

- Little correlation with consumption commercialization
- Positively correlated with diet diversification into non-grains for all zones and all household types
- Marginal effects on non-rice processed food consumption are positive and highly significant for rural and urban HH
- Positive and strongly significant effect on consumption of FAFH and beverages such as soft drinks
- Marginal effects on consumption of highly processed food positive and highly significant in all zones and both years
- Controlling for income, rural landless households and households in urban areas have very similar diets

Conditioners of diet transformation

Non-farm employment

- Significant positive, marginal effects on consumption commercialization and processed food consumption, but not diet diversification.
- Positive effects on consumption of beverages and meals away from, regardless of location (likely related to convenience)
- Similar effects in processed food consumption for both landed and landless rural households

Urban Proximity

- Consumption commercialization does not decrease significantly with travel time to the nearest urban area with a population >100,000 (rural households purchase a high share of their food)
- Weak/ambiguous temporal and spatial relationship with diet diversification and processed food consumption
- Rural-urban diet convergence

Policy implications

- **(1)** Except rice, farmers buy most of their food, sell most of their produce, and are deeply integrated into markets. Landed and landless rural households have similar consumption patterns.
  - Counter to common perceptions, such as tendency to consider rural people to be “farmers”, or the need to “link farmers to markets”.
- **(2)** Infrastructure, transport, mobile communications, extremely high population contribute to time-space compression, leaving few truly peripheral rural areas, and a “quiet revolution” in agrifood value chains
  - Policymakers should understand non-farm chain actors as critical agents in economic development and diet transformation.
- **(3)** Diets have diversified away from staples, but the quantities of nutrient-rich foods consumed are insufficient to support nutritionally adequate diets
  - Need for policy support for nutrition-sensitive agriculture and food systems
- **(4)** Processed foods are integral to diets, but highly processed food and FAFH account for only 10% of food budget: Bangladesh’s nutrition transition is in its early stages.
  - Opportunity to plan for and seek to preemptively address probable deepening of the triple burden of malnutrition associated with growing consumption of highly processed foods

Thank you