

Household Food Expenditure on Processed Foods and Sugar-Sweetened Beverages in southwest Bangladesh

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Background

- The rapid transition in global food systems in the lower and middle-income countries (LMIC) has derived a major shift in the overall dietary patterns of urban as well as rural LMIC households. With increasing demand and reliance on ultra processed and packaged foods and beverages from the traditional staple crops and grains, most LMICs in Asia and Africa are now facing a challenge to continue its focus on reducing chronic food insecurity and undernutrition, and concurrently address the upward trends in over-nutrition and increasing prevalence of non-communicable diseases.

Objectives and Methods

- The Bangladesh Aquaculture and Horticulture Nutrition Research study is a longitudinal observation study taking place in Dhaka, Barisal, and Khulna divisions in Bangladesh. The study includes 3060 households in the 102 unions of the Feed the Future (FtF) baseline survey, and is representative of the FtF "Zone of Influence". Households who completed all three rounds were included in the pooled analysis, totaling 8,322 households.
- The objective of this analysis is to examine if household purchases of snacks and sweets (SSs) and sugar sweetened beverages (SSBs) are associated with wealth and education level of the household head.
- Seven-day household food purchasing data were collected from the female caregiver and were used to compute household food purchase and share of food purchase on SSBs and SSs.
- SSBs include prepared tea, soda, packaged juice, sugary powdered drinks, and sugarcane, palm, and date juices. SSs include packaged noodles, candy, sweets, fried foods, and packaged chips and biscuits.
- Data were analyzed in Stata[®] SE version 15 and include descriptive and bivariate statistics.

Results

Figure 1: Processed and packaged food purchases (7 days)

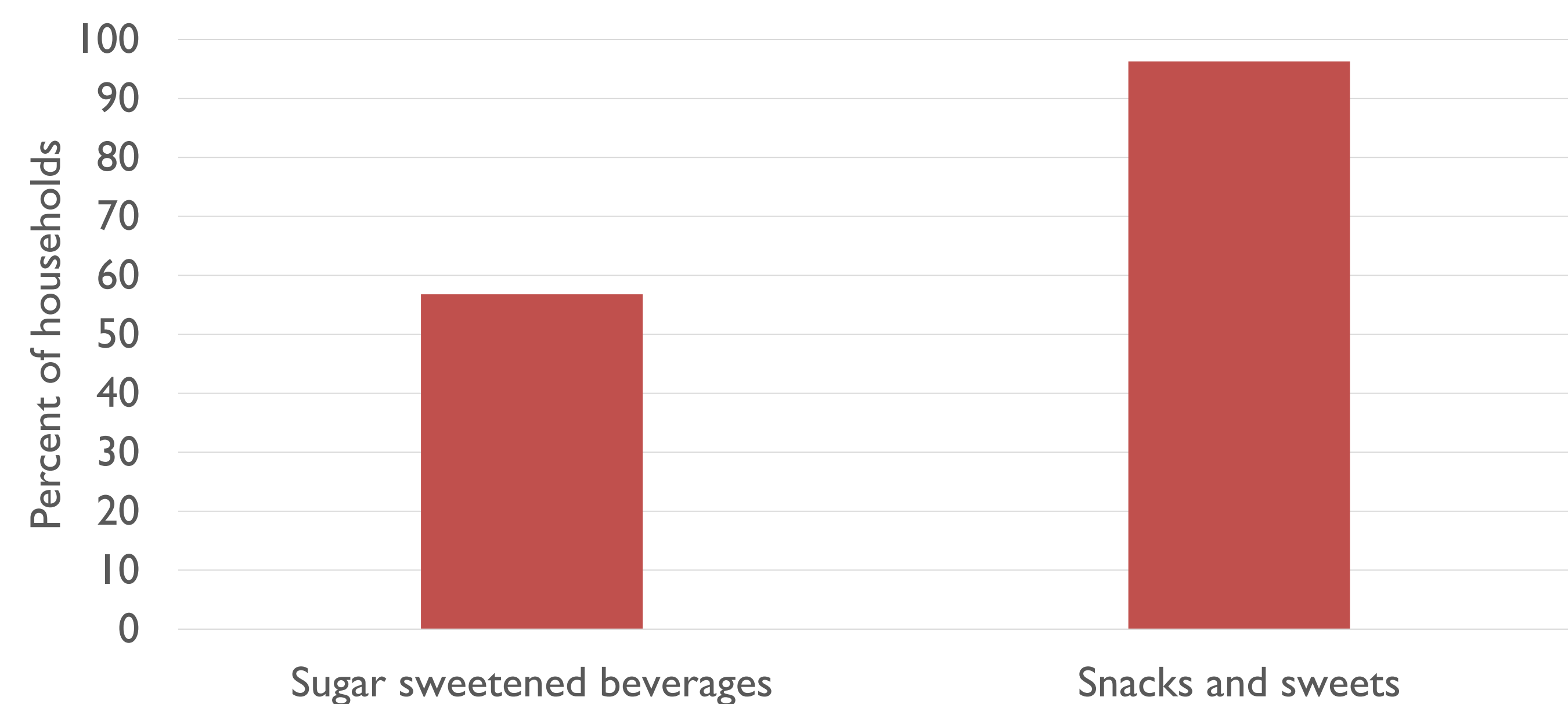
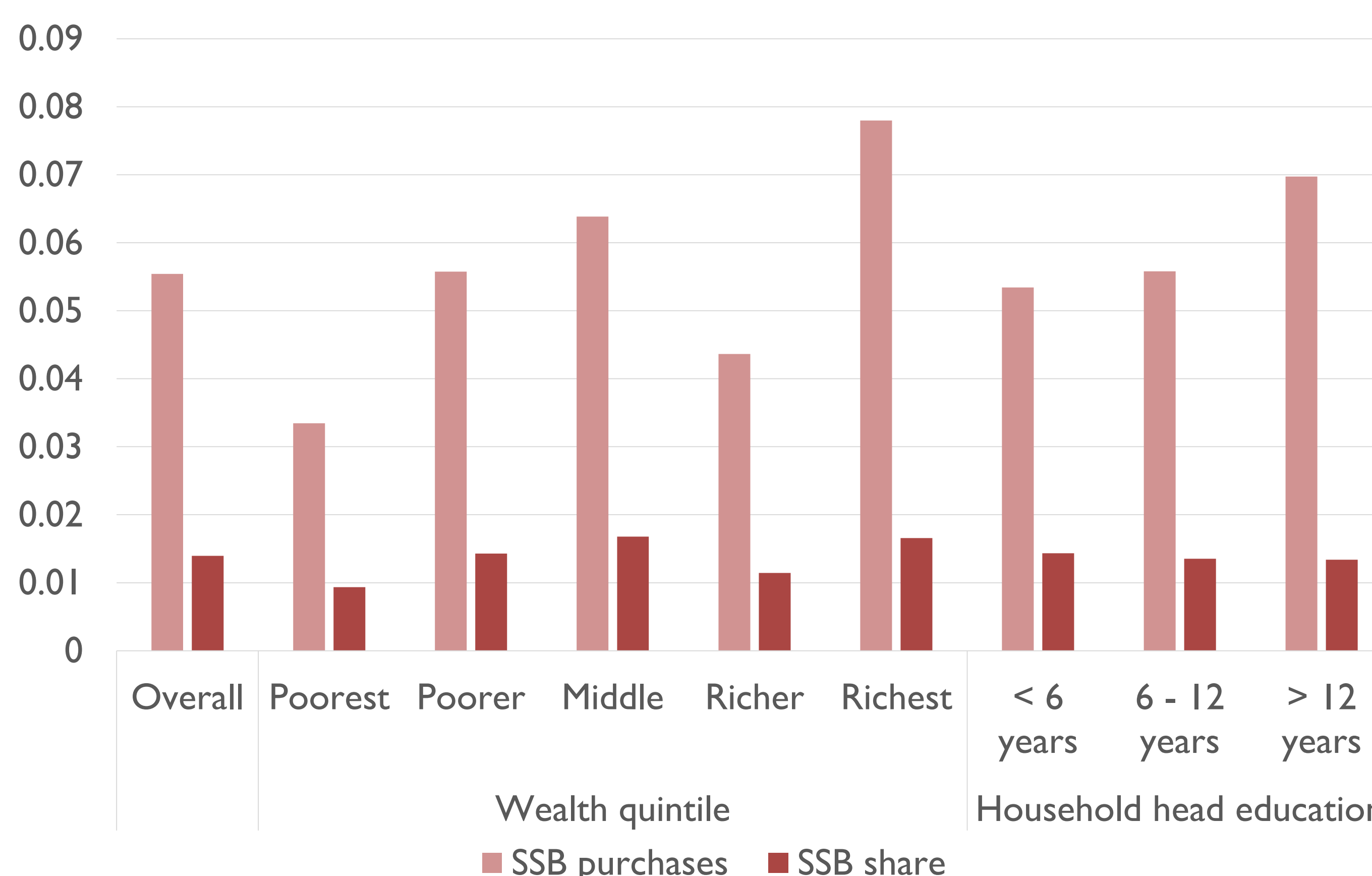


Figure 2: Median weekly SSB purchases and share of food expenditure by wealth quintile and household head education (USD)



Conclusions

- Over half of the households reported SSB purchases and virtually all households reported SS purchases.
- About 10% of food expenditure was expended on SS while 1-2% on SSB
- Household purchases of SSBs and SSs was positively correlated with household wealth and education of the household head.
- This indicates as households become wealthier, more of their wealth goes towards ultra-processed foods such as SSBs and SSs.
- Nuanced policies to address this increase in processed food consumption are crucial to maintain dietary improvements as households gain wealth.

Figure 3: Median weekly SS purchases and share of food expenditure by wealth quintile and household head education (USD)



Table 1: Weekly per capita SSB and SS purchases (USD), and share of total food purchases (%)

	SSB purchases (USD) Median (IQR)	SSB share of total food purchases (%) Median (IQR)	SS purchases (USD) Median (IQR)	SS share of total food purchases (%) Median (IQR)
Overall	0.055 (0.160)	1.837% (5.597%)	0.234 (0.271)	9.358% (9.957%)
By wealth quintile				
Poorest	0.033 (0.143)	1.203% (5.680%)	0.208 (0.250)	9.639% (11.512%)
Poor	0.058 (0.162)	1.871% (5.542%)	0.217 (0.246)	9.171% (9.658%)
Middle	0.064 (0.154)	2.120% (5.829%)	0.223 (0.266)	8.840% (9.734%)
Richer	0.044 (0.150)	1.449% (5.412%)	0.234 (0.270)	9.643% (9.840%)
Richest	0.078 (0.192)	2.325% (5.556%)	0.291 (0.322)	9.463% (9.179%)
By household head's education level				
Under 6 years	0.053 (0.150)	1.843% (5.689%)	0.208 (0.234)	9.061% (9.640%)
6 - 11 years	0.056 (0.170)	1.807% (5.605%)	0.249 (0.301)	9.524% (10.278%)
More than 11 years	0.070 (0.192)	1.859% (5.155%)	0.312 (0.348)	9.967% (10.370%)



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