Author: Lukasz Aleksandrowicz

Co Author: Mehroosh Tak (SOAS), Rosemary Green, Andy Haines (LSHTM)

Topic: Food and nutrition security

Title: Food consumption in India: comparison of national and regional dietary data sources

Presentation Type: Oral

Introduction
Accurate data on dietary intake is important for public health, nutrition and agriculture. The commonly-used National Sample Survey (NSS) estimates nutritional outcomes in India and has shown a decrease in calories eaten over recent decades as incomes have grown. Despite policymakers' reliance on the NSS, it has not been compared to other dietary data sources.

Methods
We compare intake of food groups across six Indian national and regional surveys, representing various dietary intake estimation methodologies, including two national household consumer expenditure surveys (NSS and IHDS), a large-scale rural 24-hour recall survey (NNMB), two regional food-frequency questionnaires (FFQs), and FAO food balance sheets (FBSs). Surveys were conducted between 2004-2012. We matched data for years, regions, and economic groups. Relative differences in food group intake were compared.

Findings
The NSS and NMNB showed a decline in food intake nationally between 2005-2012, while the IHDS and FBSs showed an increase. Differences in intake were smallest between the two national expenditure surveys. Relative to these, FFQs and FBS overestimated, and the 24-hour recall underestimated intake. Cereal consumption had high agreement across survey types, while dairy, sugar, fruit and nuts, and meat and fish had the least agreement.

Conclusions
Intake of foods eaten out of the home may explain the relative underestimation of expenditure surveys and 24-hour recalls compared to FFQs and FBSs, while FBSs may overestimate intake. Although not possible to validate these data against a gold standard, relative differences in consumption highlight sources of under- or over-estimation for policymakers using these data.