BHP Billiton Sustainable Communities/UCL Grand Challenge Symposium Series Global Food Security: Adaptation, Resilience and Risk November 9-10, 2015

Food consumption in India: comparison of dietary data sources

Lukasz Aleksandrowicz^{1,3}, Mehroosh Tak^{2,3}

¹London School of Hygiene and Tropical Medicine, UK; ²School of Oriental and African Studies, UK; ³Leverhulme Centre for Integrative Research on Agriculture and Health, UK

Lukasz.aleksandrowicz@lshtm.ac.uk







Background

- Dietary data important for various food/health policies
- Indian calorie puzzle: rising incomes, yet decreasing intake seen in national expenditure survey
- Few studies have compared food intake between various Indian dietary surveys





Methods

- National Sample Survey Organisation (NSSO)
- India Human Development Survey (IHDS)
- Indian Migration Study (IMS)
- National Nutrition Monitoring Bureau (NNMB)







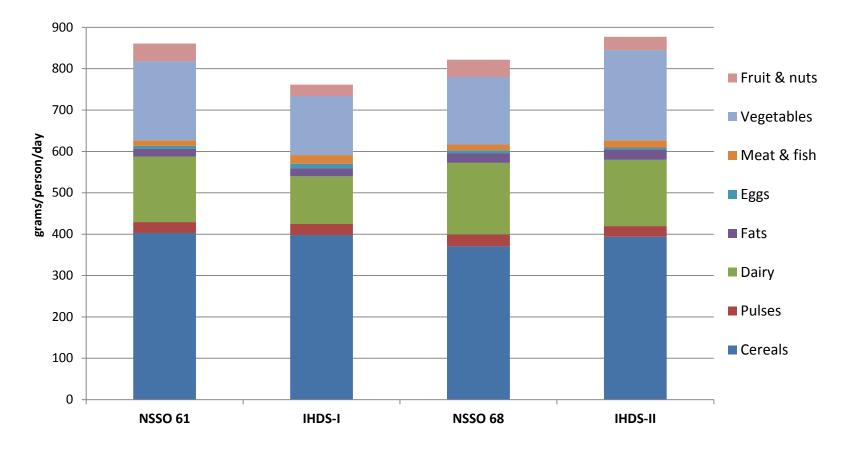
Methods

- Comparisons:
 - NSSO 61 vs. IHDS-1 (2005-2006), and NNMB
 - NSSO 68 vs. IHDS-2 (2010-2011), and NNMB
 - IMS vs. IHDS-1 (2004-2006)
- Intake g/day, 16-59yrs
 - Cereals, pulses, dairy, fats, eggs, meats and fish, vegetables, fruit and nuts





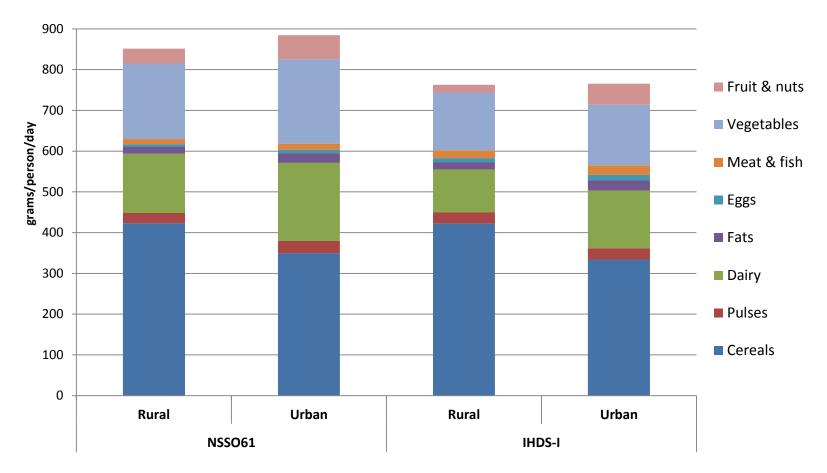
2005/6 – 2010/11, national level







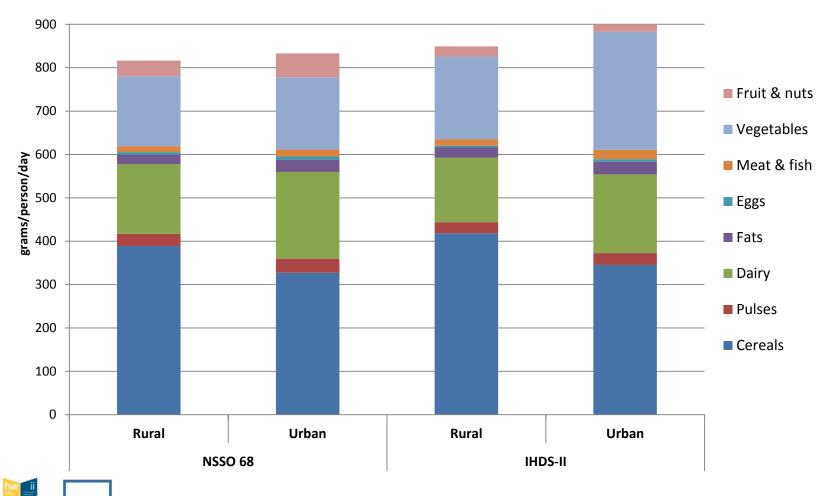
2005/2006 - by rural/urban



UCL Institute for Sustainable Resources



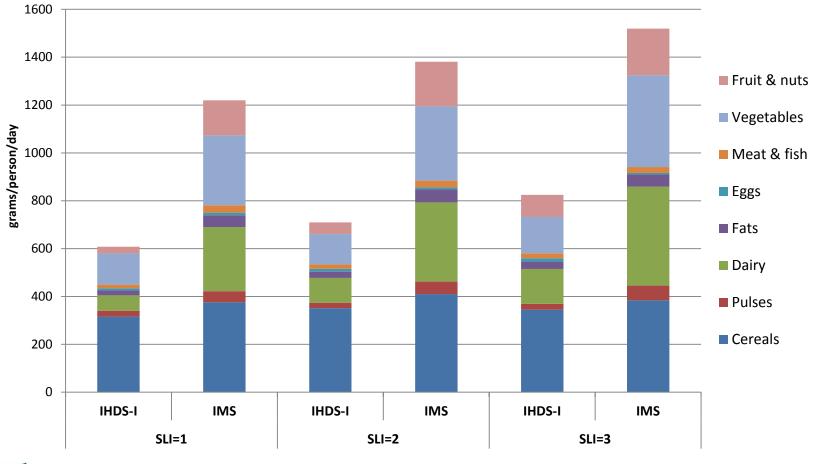
2010/2011 - by rural/urban



UCL Institute for Sustainable Resources



2004/2006 – urban intake, by SLI



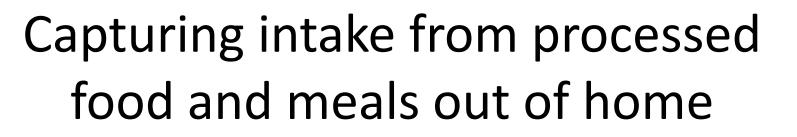
UCL Institute for Sustainable Resources

Household expenditure vs. 24-hr recall

Intake in grams/person/day

	2005-200	6	2004-2005	2010-2013	1	2011-2012
	NSSO61	IHDS-I	NNMB	NSSO 68	IHDS-II	NNMB
Cereals	423	423	452	389	419	417.5
Pulses	25	27	29	28	25	32.5
Dairy	145	106	71.5	161	149	75.5
Fats	17	' 18	14	22	24	15.5
Eggs	6	5 10	-	6	4	-
Meat & fish	12	20	13	14	15	12.5
Vegetables	186	5 141	120	161	190	114.5
Fruit & nuts	37	' 19	31.5	36	24	31
Total	852	763	731	816	849	699





- Difference in overall intake, IMS and IHDS-1
 - Urban: IMS 92% higher
 - Rural: IMS 95% higher
- Expenditure on processed food and meals eaten out of home (NSSO):
 - 2005: 7%
 - 2010: 13%





Key findings

- NSSO, IHDS, NNMB relatively similar overall intakes, 2005-2011
- IMS intakes much higher, across rural, urban, and SLIs
- Difficult to fully assess calories and food group intake from HCES processed foods and meals eaten out of home – needs further work





Next steps

- Comparing additional datasets
- Approximations of food groups from processed food, meals eaten out

