

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

## The Role of In-kind Transfers and Agriculture in Maintaining Nutrition During an Economic Crisis

Priya Bhagowalia, Jawaharlal Nehru University, New Delhi, India Email: <u>bhagowalia@alumni.purdue.edu</u>

Selected Poster prepared for presentation at the 2017 Agricultural & Applied Economics Association Annual Meeting, Chicago, Illinois, July 30-August 1

Copyright 2017 by Priya Bhagowalia. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

# The Role of In-kind Transfers and Agriculture in Maintaining Nutrition During an Economic Crisis

Priya Bhagowalia, Email: bhagowalia@alumni.purdue.edu

#### Overview:

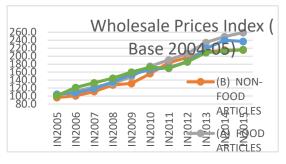
- The global economic crisis of 2008 coupled with an increase in food prices from 2006 onwards, affected the poorest in the world (FAO, 2009).
- India's GDP which grew at annual rate of 6-7 percent till 2005-06, saw a sharp decline to about 4 percent in 2008-09.
- Wasting among children aged 0-3 years increased from 18 percent to 23 percent in 2004-05 (NFHS, 2005-06). Stunting declined from about 45 percent in 2005 to about 37 percent in 2014, a decrease of less than one percentage point per year.
- Increases in food prices increase impoverishment, and impair a household's ability to meet its nutritional and other requirements in the long run, as they may be forced to sell of productive assets or rely on loans (D'Souza and Jolliffe, 2010)
- An increased food bill leads to changes in the consumption basket as households substitute nutritious food with inexpensive but less calorie and nutrient dense foods and low diet diversity

### **Objectives**:

- To check if malnutrition worsened as a result of the rise in food prices
- To assess the role of food subsidies and agricultural activities in coping with the crisis

#### **Conceptual framework**





Source: Office of the economic Advisor, India

#### Data and methods:

- We use information on food, nonfood spending, demographics, anthropometrics of children from the India Human Development Survey (IHDS)
- IHDS includes 41,554 households for 2004-05 and 42,152 households for 2011-12. The IHDS reports price, quantity and value for consumption over a 30 day recall period for food.

$$\ln N_{ijt} = \beta_0 + F_i + \beta_1 \ln price_{ijt} + \beta_2 Ag + \beta_3 X_{it} + \varepsilon i_{jt}$$

#### **Results** :

- A 1% increase in prices increased stunting
- Households substituted between food groups resulting in lower diet diversity
- Agricultural households were more food secure compared to other households due to crop diversification and market surplus

#### **Selected References**

Block SA, Kiess L, Webb P, Kosen S, Moench-Pfanner R, Bloem MW, Timmer CP. Macro shocks and micro outcomes: child nutrition during Indonesia's crisis. Econ Hum Biol. 2004;2:21-44.

D'souza, A., & Jolliffe, D. (2014). Food insecurity in vulnerable populations: coping with food price shocks in Afghanistan. *American Journal of Agricultural Economics*, *96*(3), 790-812.