Nutrition-sensitive Social Protection Programs: How Can They Help Accelerate Progress in Improving Maternal and Child Nutrition?

Harold Alderman

Dec. 4, 2013

Why Focus on Nutrition Sensitive Programs?

The 2013 Lancet Nutrition Series estimated that scaling up 10 proven effective nutrition specific interventions would reduce stunting globally by 20 percent.

While this would be a major improvement in the health and development of children, it does not go far enough.

Thus, there is also a need for programs that address the core determinants of undernutrition

This is the role of nutrition sensitive interventions

Definition: Nutrition-sensitive Interventions

These are interventions or programs that address the **underlying determinants** of fetal and child nutrition — food security; adequate caregiving resources at the maternal, household and community levels; and access to health services and a safe and hygienic environment—**and incorporate specific nutrition goals and actions**

Examples

Agriculture and food security	Social safety nets
Early child development	Maternal mental health
Women's empowerment	Child protection
Schooling	Water, sanitation and hygiene
Health and family planning services	

Why Nutrition Sensitive Programs are Important Instruments to Reduce Undernutrition

The potential for nutrition sensitivity in sectors such as agriculture and social protection comes in part from their scale; most governments devote substantial resources to programs in these sectors.

In addition, these programs are generally intrinsically targeted to the poor

They often contain design features that can empower women

These programs can also serve as delivery platforms for nutrition-specific interventions, potentially increasing their scale, coverage and effectiveness

Moreover, by improving nutrition they increase overall economic growth

How Can Social Protection Contribute to Reducing Malnutrition?

Safety Nets provide transfers to a billion poor people globally. These help:

- reduce poverty
- mitigate negative effects of global changes, conflicts and shocks
- enhance women's empowerment when targeted to women
- increase demand for health and education services

By increasing purchasing power they directly address food insecurity

Two points about the economics of nutrition that should already be well known

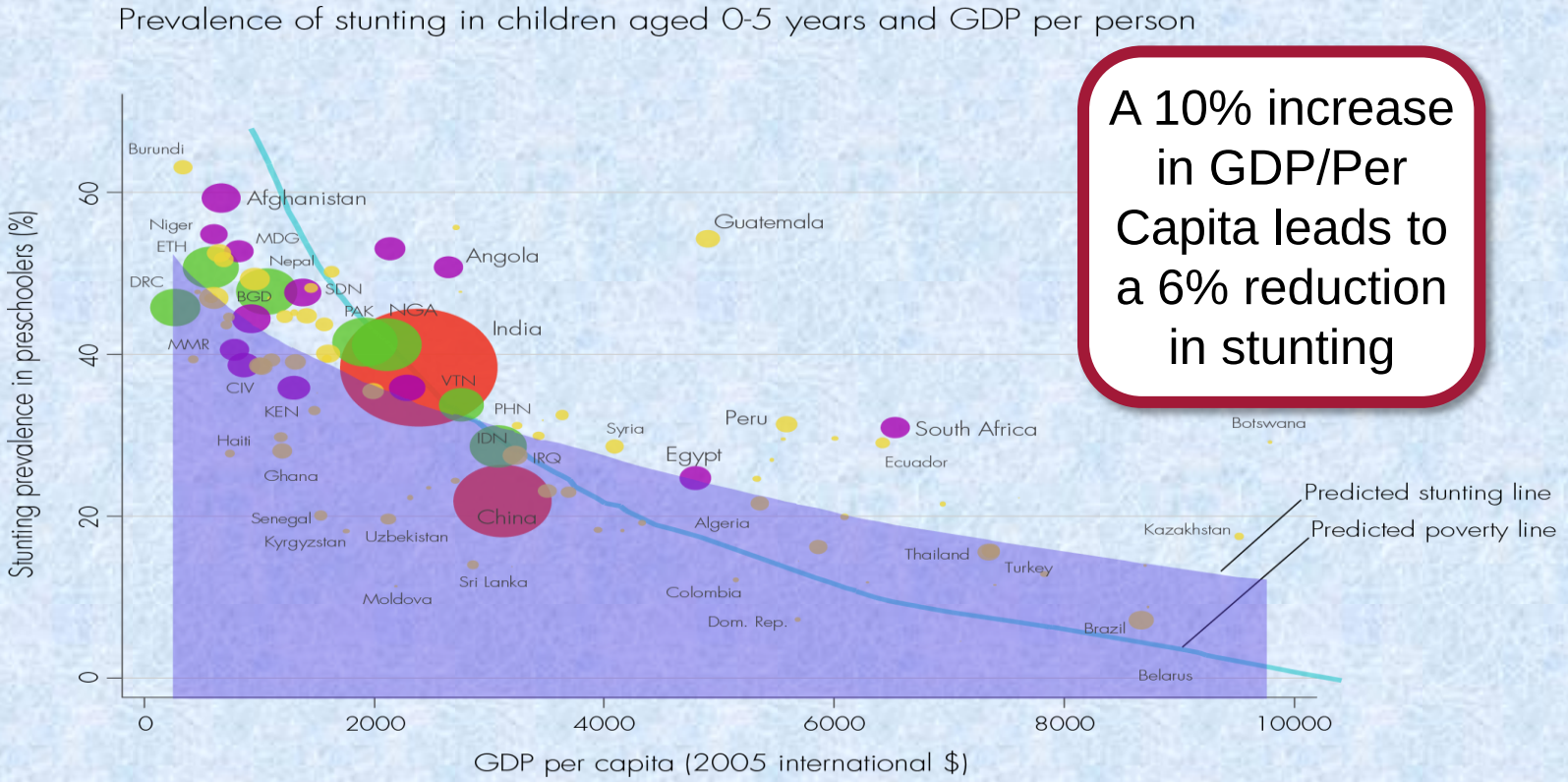
Nutrition interventions have high rates of economic returns:

- This was illustrated with studies of low birth weights as well as comparisons of benefit:cost ratios for the Copenhagen consensus workshops in 2004, 2008, and 2012.
- This approach was recently replicated using data from a large scale intervention in Indonesia with similar results

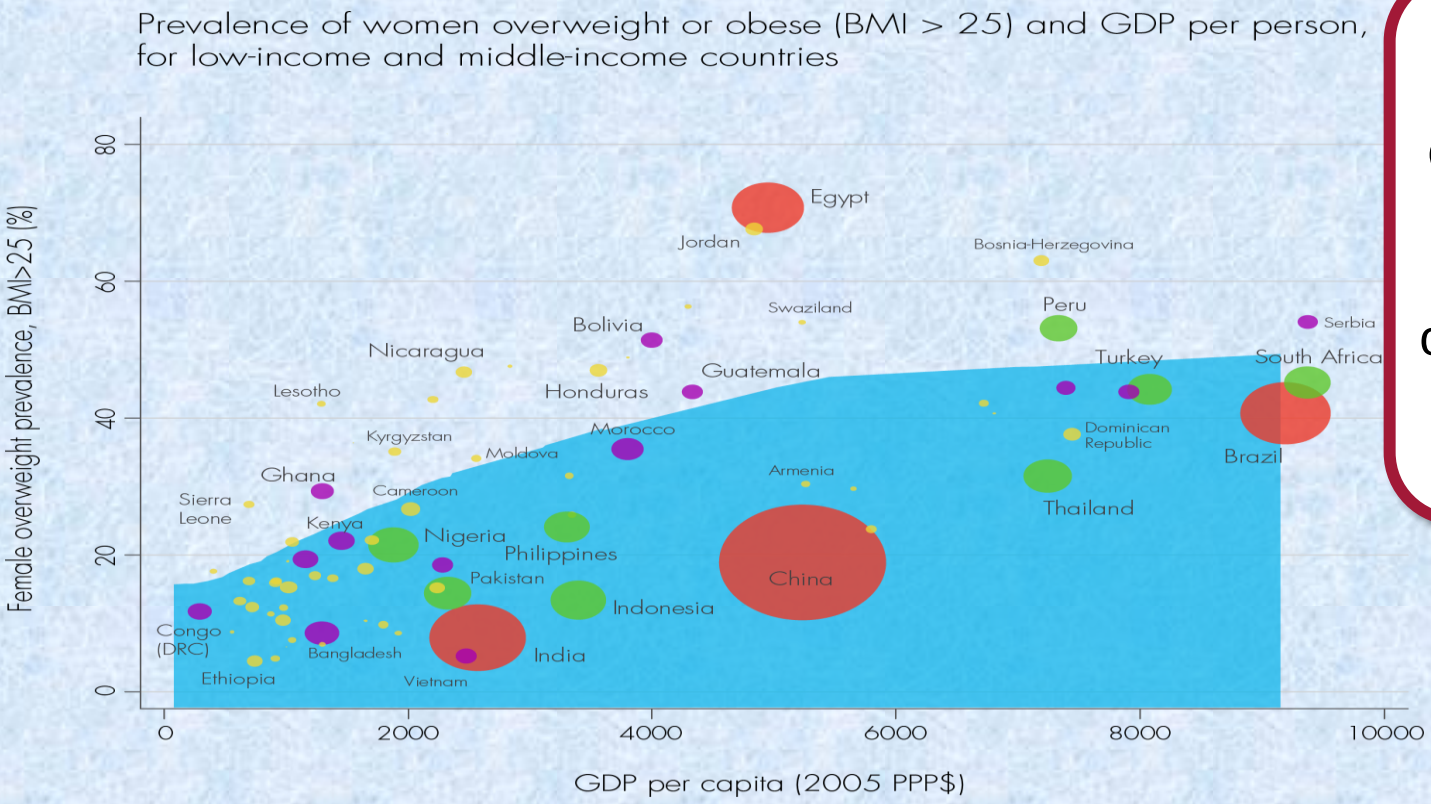
Income growth has a significant, yet modest, impact on malnutrition rates:

- For example, if the poorest 40% of Pakistan were to have the assets of the middle quintile, malnutrition rates would only decline from 41% to 38%

Nutrition-sensitive Social Protection Programs Can Impact Nutrition Through Increases in Income



Income Growth Can Have Unintended Consequences of Increasing Risks of Overweight and Obesity



A 10% increase in GDP/PC leads to a 7% increase in overweight and obesity in women

What outcomes are we seeking to influence with nutrition programs?

MDGs target improvements in weight for age for children < 5

Advantage in ease of measurement and, while individual catch up growth may be under appreciated, nutritional status by 60 months is a fair measure of progress in a population

Weight (particularly weight for height) is also a good measure of acute malnutrition and the risk of infant mortality

But as nutritionists have argued, seeking weight gain on a small frame risks contributing to obesity

Taking that argument one step further: focusing on physical growth deemphasizes what we should really be after - cognitive and socio-economic development

Economic returns to nutrition programs are higher in dynamic, growing economies

This is because the investments in nutrition make labor more productive

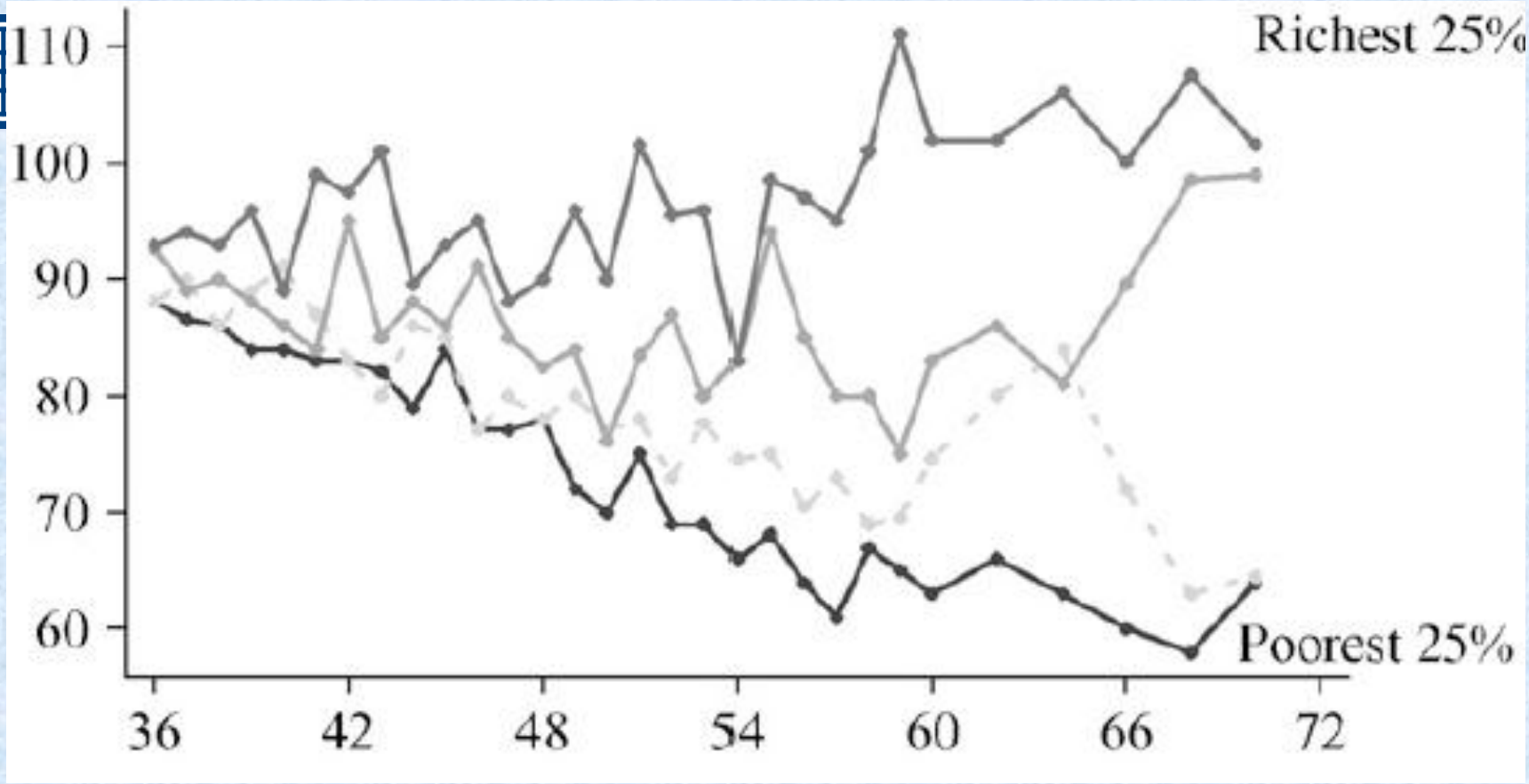
To illustrate, assuming that every child born with low birth weight had a 7.5% reduction in productivity, Jere Behrman and I calculated that for each LBW prevented there would be $510 of economic benefits in a stagnant economy

If we were to assume that the economy was growing at 2% (and changing no other assumption) these estimated benefits would come to $783

Nutrition is a concern both for growth (efficiency) and for equity

The 2011 *Lancet* review of Early Child Development emphasized the contribution of ECD to intergenerational equity. The 2 papers concluded that nutrition is important for a productive and healthy life, but substantial gains in children's development require:

- Improvements in parenting, stimulation and early education
- Reductions in stressful experiences including maternal depression and exposure to violence
- Increases in protective influences such as maternal education that reduce impact of risks



TVIP Vocabulary Scores of 36-to-72-Month-Old Ecuadorian Children by Wealth Quartiles

Ability responds to environment in early years

How Have Social Protection Programs Performed to Date?

To the degree that these programs reach the poor (and they generally do) they increase food security. It is not uncommon for a program to augment overall consumption in low income households by 20%.

Some transfer programs have a wide coverage; transfers in Brazil and Mexico reach 25% of the population. Ethiopia's productive safety net, the 2nd largest transfer program in Africa, covers 10% of the population

There is strong evidence of impacts on health care utilization, but limited impacts on child nutrition

Some impacts on younger, poorer children, with longer exposure

Linking household transfers with mother and child specific supplements may increase nutritional impact

Conditional transfers may increase the utilization of health services

Global Experience on CCTs for children shows:

- Increased use of clinics for preventative health care of children
- Significant effects on growth monitoring
  - Colombia: 23-33 % points
  - Honduras: 20 % points
- Mixed results on immunization rates
  - No effects in Mexico
  - Turkey: 14 % points
  - Indonesia: 11%

Some Reasons Why Targeted Household Transfers Appear to Have Only a Modest Impact on Nutrition

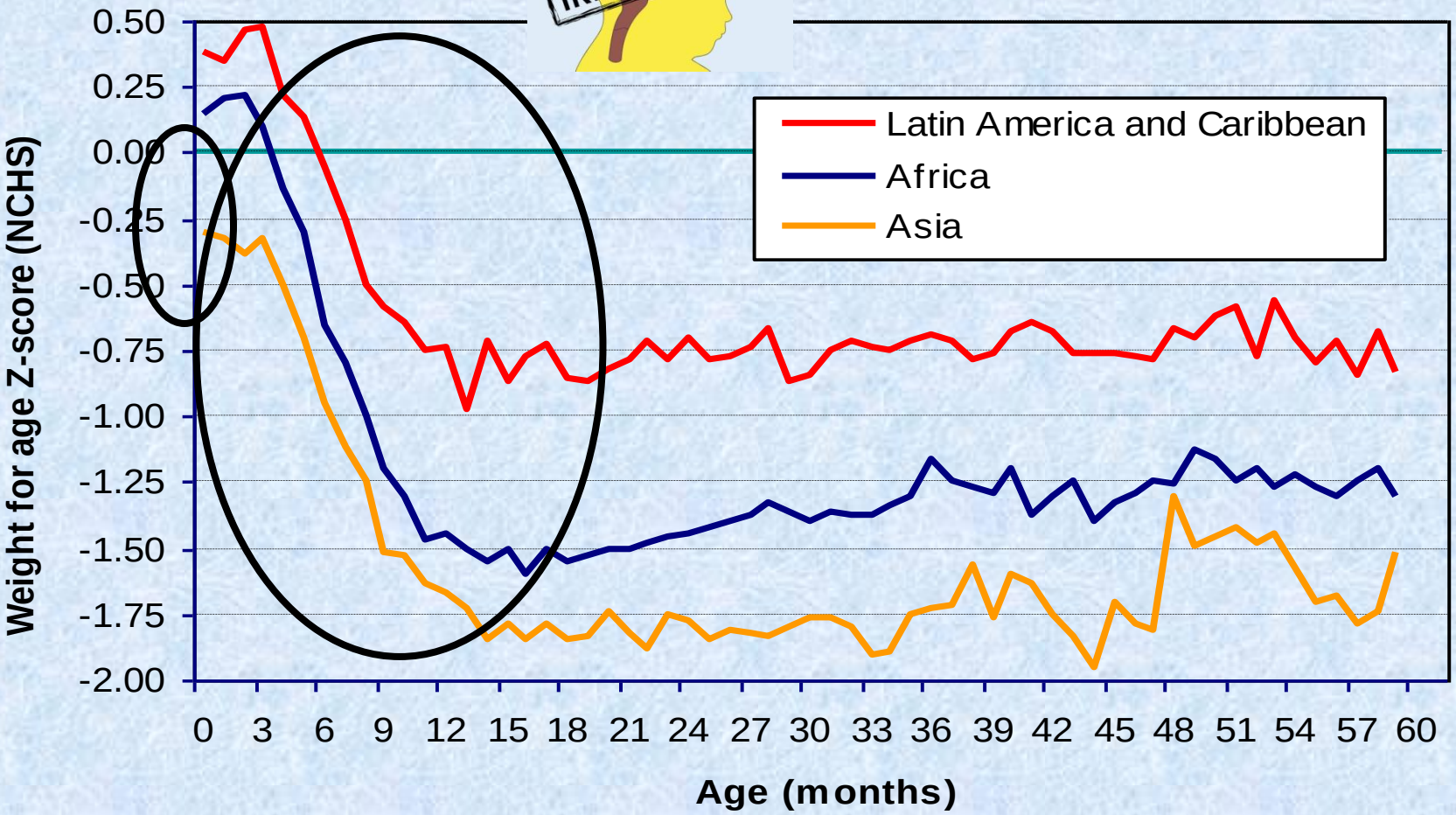
Few transfers have been targeted on the basis of the risk of undernutrition.

Most of the programs that have been studied extensively have not been in regions of high stunting rates and often their nutritional impact has been assessed outside the critical 1000 days from conception through the child's second year of life

Poor quality health services also is likely responsible for the limited nutritional impacts

Finally, some evidence is based on too short a period for full cumulative results

The "**Window of Opportunity**" for Improving Nutrition is very small: pre-pregnancy until 18-24 months of age



Prioritization of Vulnerable Groups

- Targeting transfers to the elderly can be an important poverty reduction policy. However, it is difficult to justify these on the grounds of their positive impact on children.
- The common argument that they support children, based on Duflo's study, ignores the fact that Duflo reports this occurs only if the pension went to a women and only if the child was a girl. Also, only 42% of elderly lived with their grandchildren
- Targeting to HH with children <2 or pregnant women, on the other hand, is straightforward
- Targeting to adolescent girls makes sense from the standpoint of nutrition but there is little evidence to date
- Targeting cash to malnourished children has possible disincentives and is curative not preventative but providing special supplements to acutely malnourished children is a proven intervention to reduce mortality

A few conditional transfers have prioritized pregnant women

Global Experience on CCTs for women shows:

- Increased number of prenatal visits in Indonesia
- Mexico's CCT program raised birthweights and markedly reduced the share of low weight babies. Use of services did not increase but the quality did, likely due to community awareness of what they could expect.
- Payments for clinic deliveries in India helped reduce infant mortality
- Trials in South Asia have addressed maternal depression which reduces risk of undernutrition and cognitive impairment of children as well as improves lives of mothers.

Long Term Impacts of Short Term Shocks

Numerous studies have documented undernutrition years after a crisis:

- Drought and civil unrest contributed to increased stunting in Zimbabwe (independently as well as jointly)
- Similarly, drought and conflict contributed to persistent stunting – tested separately but not jointly – in Rwanda
- Evidence form Indonesia shows that a rain shortfall does not have to be substantial to result in reduced linear growth and schooling.
- Nor are these human capital crises confined to conflict and drought affected economies; the incidence of low birth weight increased with the economic contraction in Argentina in 2001-2002

There is Some Debate on Catch-up

Some longitudinal studies, for example, the Young Lives Project in Ethiopia, India, Peru, and Vietnam as well as a 40 year project in Guatemala have tracked individuals over their lifetimes. These studies have indicated that improvement in nutritional status is possible.

This is particularly the case where socio-economic conditions change as is the case with adoption.

Additionally a few studies of school feeding or public works in India show a role of safety nets in reversing some malnutrition.

Moreover, the consequences of undernutrition on either mortality or early child cognitive development can be addressed without necessarily reversing stunting.

There is growing evidence on the most effective ways to address acute malnutrition (wasting) but the costs of second chance programs to offset cognitive impairment are not well studied, however.

Social Protection and Nutrition in Emergencies

Although food aid deliveries overall declined from 15 million metric tons in 1999 to 4·1 million t in 2011, emergency deliveries have remained almost constant; they now account for more than 67% of total food aid.

Most programs target households, not children, but there is interest in the provision of lipid-based nutrient supplements [LNS] for children based on similar supplements used to address acute chronic malnutrition.

There is still limited experience but LNS provided in addition to household rations has reduced wasting or stunting in a few studies. This is a preventative role that is distinct from a therapeutic role.

Cash or In-Kind?

New evidence has been brought to bear on the perennial question of whether to transfer cash or food

Both forms of transfers increase household food security but their relative roles for improving diet diversity – a key factor in nutritional impact – depends on contexts including structure of local markets and seasonality of purchases

In virtually all contexts it is cheaper to deliver cash. Cash transfers, however, can erode in an inflationary environment

Evidence from Bangladesh as well as the Philippines shows that the nutritional impact of either form of transfer is strongest when accompanied by behavioral change communication

Recent Trials Comparing Food versus Cash

In remote villages in Mexico, cash led to increased prices for processed foods and a smaller impact than a slightly larger package [in value terms] of food. But in Niger cash did not lead to price increases perhaps due to market integration.

In Ecuador, cash, vouchers and in-kind were compared in urban areas. There were few substantial differences, but in-kind had a larger impact on calories consumed while vouchers had a greater influence on diet diversity.

In a RCT in Uganda cash had a greater impact on cognitive development as well as anemia, attributed to both increase in diet diversity as well as the use of cash for payments to preschool providers.

Enhancing the Nutritional Impact of School Feeding

School feeding programs clearly have an impact of school attendance and enrollment

Since girls' schooling is often more responsive to demand side schooling interventions (and some programs like take home rations are often targeted to girls) this by itself will indirectly improve the health of the next generation

School meals improve household food security; in some studies this has an indirect impact on the nutritional status of younger siblings of students

But school feeding programs are not directly targeted to children in vulnerable ages

When programs are fortified with iron or include supplements they reduce anemia but not all programs include this element

Empowering Women within Nutrition Sensitive Social Protection

Most transfer programs include women as direct recipients of benefits.

Control of cash resources surely helps, but time allocation remains a challenge for many women

Public works programs are occasionally designed to offer flexible hours or include crèches for child care. Some offer cash in lieu of participation in labor intensive works. Others offer job training as an option

Djibouti implements a public works program in which nutrition is a direct objective. Women are the main beneficiaries. Activities are suited to pregnancy or lactation and, like conditional transfers, participation in health care programs is part of the design

Where poor women are covered in formal labor activities, they may benefit from maternity leave policies as well as work safety regulations

Enhancing the Nutrition Sensitivity of Social Protection

Few social protection programs are designed with clear nutrition goals and actions to be monitored. This reduces accountability. The solution is straightforward.

Prioritize nutritionally vulnerable ages as well as improve timing and duration of exposure to interventions

Optimize women's nutrition, time, physical and mental health and empowerment

Programs can use conditions and social mobilization (or both) to stimulate demand for health services and then coordinate to ensure that these services are of high quality. This includes using social protection as a platform for nutrition specific interventions.