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## Food-based safety nets: programs and evolution

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Social Safety Nets and Delivery Course



# **Food-based safety nets: programs and evolution**

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## By many measures cash transfers have become the mainstay of social protection

Cash transfers assist roughly one billion people in low and middle income countries

This reflects a trend over the last two decades prompted by:

- Basic economic theory
- Improved technology for delivery and monitoring
- Extensive evidence on impacts

Nevertheless, food oriented transfers persist, even in countries that also provide cash.



# Is in-kind assistance obsolete?

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Cash transfer technology is advancing and has even been used in emergencies such as the 2004 Indian Ocean tsunami.

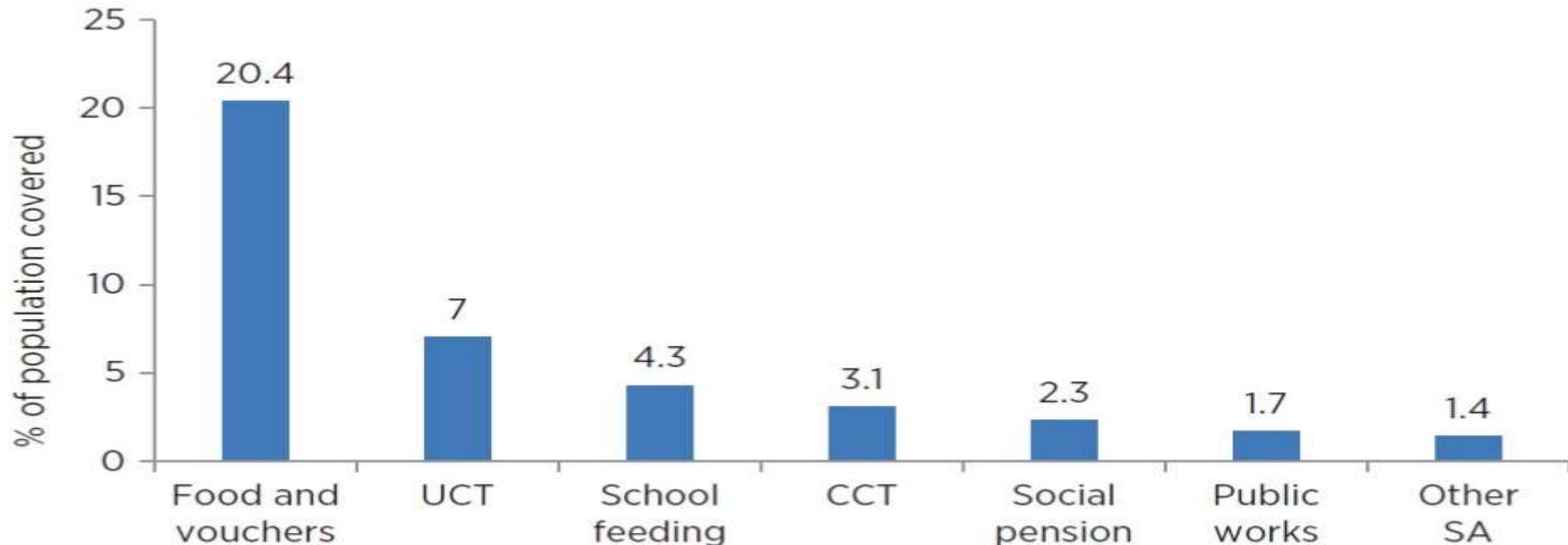
The difference in food consumption between cash and in-kind are slight although cash transfers have been shown to promote diet diversity.

However, cash transfers have a major advantage in that they are less costly than delivering in-kind support; cash transfers saved 13-23% in a set of studies.

Moreover, the fear that cash leads to increased consumption of alcohol and tobacco has been debunked using a review from 19 studies.



## Coverage of Social Assistance Programs in 108 Low- and Middle-Income Countries, Latest Available Data



*Source:* World Bank (ASPIRE database).

*Note:* The ASPIRE database presents combined data for food and vouchers (both are generally unconditional transfers); UCTs = unconditional cash transfers; CCTs = conditional cash transfers; SA = social assistance. Food subsidies are not included in the database.

**Yet in-kind transfers remain prevalent**



# What accounts for this persistence?

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In this session I will attempt to explain the role of in-kind transfers in terms of three inter-related factors:

- To shift demand patterns – particularly towards food consumption
- To assure consumption of a basic minimum [coupled with a distrust of market functioning]
- Politically expediency



## Pragmatism often prevails; many transfer systems are mixed.

For example, the Supplemental Nutrition Assistance Program [SNAP] in the **United States** is a voucher – or food stamp - program that covered 14% of the population in 2014. But it has run in parallel with smaller in-kind programs such as the Women, Infants, Child Nutrition Program [WIC].

This reflects nutritional objectives.

More generally, reforms of in-kind transfers– as well as related price subsidies – towards cash programs are often partial given the myriad objectives such systems try to achieve.



## Example: Mexico's PROGRESA

The transition to PROGRESA and on to Prospera is well known, well studied, and iconic.

Less well known is the fact that it was less a quantum leap than an evolution from generalized subsidies to targeted electronic coupons for quotas on tortillas and on to a pilot of debit cards authorized at clinics before becoming a full cash transfer.

But even with a well run cash transfer, the government also spent as much as 7% of the expanded cash transfer budget on a in-kind food program (PAL) which continued until 2016.

Moreover, between a network of 30,000 retail outlets (Diconsa), milk distribution, VAT exemptions on food and other generalized price supports, the country still spends > 1% of GDP on in-kind food support.



## Case Study: Sri Lanka's Samurdhi Cash Transfer

Sri Lanka provided universal low-priced—or free—food on quotas for decades before introducing a means-tested voucher program.

These food stamps were only a way station toward a program of cash transfers.

The evolution included varying combinations of vouchers and cash as well as changes in value with inflation and with successive governments.

During this period of transition, subsidies to wheat imports also fluctuated with particular consequences for estate Tamils.

One significant in-kind transfer still remains: 900,000 children and pregnant and lactating women receive supplementary food in the Triposha program



# Case Study: Egypt

Food subsidies in Egypt are as old as the pyramids, with a system that dates from 1941 only recently receiving structural reforms.

This system combined general bread subsidies and rationed commodity support

Prior to 2014 reforms were only at the margin, determined in part by inflation and deficits, but the government and the populace agree that there is a social contract to make food cheaply available.

Reforms initiated in 2014 consolidated the ration system and the bread subsidy and converted the ration into a voucher program covering a wide range of food items.

A targeted cash transfer runs parallel to the food oriented program but is currently dwarfed by the latter.



# Case Study: India's Public Distribution Scheme

The targeted public distribution system in India is the largest social assistance program worldwide. It provides subsidized food rations to 800 million individuals in designated shops.

A key moment in its evolution stems from a Supreme Court ruling that converted benefits from nutrition programs into a right.

The program walks a tightrope between its aims to ensure food price stability for farmers and consumers and its role as a targeted social protection program meant to ensure food security and nutrition for the poor.

The poverty focus has been promoted by a shift from an urban orientation to rural inclusion.

Distribution has been plagued by inefficiencies, but has improved in some states with increased community involvement.



# Case Study: Indonesia's Raskin Program

Indonesia is a relative newcomer to the distribution of subsidized food, only beginning its Raskin—“rice for the poor”—program after the Asian financial crisis in 1997–98.

Indonesia had a generally successful record of stabilizing prices via trade and storage policies but was reminded in 1998 that it is hard to stabilize rice prices when the macroeconomy is out of control.

Indonesia decided in 2004 to raise domestic rice prices significantly above world prices by preventing imports; Raskin shifted from crisis response to a poverty reduction program.

Indonesia has also run cash transfers in parallel to Raskin and is in the process of reforming the latter as part of a debit card program and is expanding a small system of retail outlets selling subsidized foods (*e-warung*).

# These examples illustrate a common link between transfer choices and agriculture policies



Providing in-kind distribution in India is costly. However, if India is to keep its procurement policies it requires an outlet for its stocks. While other options, such as open market sales to wholesalers— are possible, the TPDS is tried and true.

More generally, in countries with large shares of the population in agriculture, subsidies and transfers allow price support to producers yet also facilitate affordable consumer prices.

Raskin's high domestic rice prices fit this strategy.

Similarly, subsidies have provided a wedge between high producer prices for grain and low consumer prices [eg Mexico as well as Morocco] and have facilitated reductions in mandatory procurement in Egypt.

The political tie between consumers and producers is also indicated by SNAP in the United States. The program is regularly renewed in agricultural legislation by a coalition of urban and farm state representatives

# The origin and persistence of in-kind programs also reflect a distrust of markets



For example, while the majority of India's TPDS beneficiaries are currently rural, the program began as a way of ensuring that grain made it to urban areas.

Rationing is an example of 'one-dimensional equity'. Regardless of a country's tolerance of overall inequality, they often value equity of access to a minimum level of food consumption.

A ration provides a guarantee of food access that might not be the case in emergency situations.

Although such situations are rare, food has been rationed during wartime. The UK discontinued its wartime food ration system in the early 1950s. Its former colonies of Bangladesh, India, Pakistan and Sri Lanka all maintained their ration program well into at least the 1970s; India still has a direct descendant of this legacy, as does Egypt.



# And, to a degree, in-kind programs also reflect a distrust of consumer choices

Basic budgeting: If there is little or no reduction in labor [and a host of studies confirm that this is the case globally] then:

$$\Delta \text{ Total spending} = \Delta \text{ consumption} + \Delta \text{ saving} = \text{transfer.}$$

Do we care how this breaks down? From the perspective of a core tenet of welfare theory, in the absence of externalities such as harm to others, the answer is generally 'no'.

Often, however, programs are designed to increase the share of food in consumption. At the worst this implies that governments do not trust the population to make good choices.

Moreover, the general public may support a food based transfer more readily than it would a similar cash transfer.

To give a more favorable spin on this: an attempt to prod consumers to increase the share of their budget devoted to food may be viewed as advocacy for children who do not have voice in budget decisions.

# In principle, price subsidies can nudge consumer choices in a manner different than income transfers



Generalized [untargeted] subsidies have inherent drawbacks and are less common than in previous decades.

A particular concern is that benefits are proportional to the amount purchased:

- For normal goods such as grains and pulses the well off get more per person but this will be smaller as a share of their total income
- For luxuries such as meat and milk the rich receive more in both absolute and relative terms
- **If** there is a commodity for which consumption declines as income rises, that good will be self-targeted. But few commodities are both self-targeted **and** also a significant share of the diets of the poor.

Tax exemptions on food are analogous to generalized price subsidies. For example, South Africa exempts maize, beans, oil, milk at a cost 1.6B Rand in 1994. But only maize and kerosene exemptions were well targeted. 65% of exemption on maize went to poor compared to 18% with a proposed exemption for meat.

# Most price subsidies are limited by quotas or rations



## Universal rations:

- Ensure minimum access during shortages
- Limit program costs compared to open ended subsidies

## Targeted quotas:

- May be progressive but may also be targeted for civil servants.
- Run parallel to open market sales of same goods
- Such two-tier price systems often lead to 'back door sales' in which subsidized commodities are diverted to open markets. In Pakistan consumers reported purchasing only 60% of the quantity of flour released to ration shops. This has also been a problem in some Indian states, but is somewhat reduced by electronic tagging and community mobilization.



# On average, impacts of cash and food transfers are similar

	Transfers Provided	More Effective Modality							
		Food Consumption	Calorie Intake	Food Gap	Dietary Diversity	Poverty	Anemia	Child Malnutrition	Child Mortality
Bangladesh	Cash, food	Cash	Cash	-	-	Food	-	-	-
Cambodia	Cash, food	Cash	-	-	Food	-	-	-	-
Congo, Rep.	Cash, vouchers	Vouchers	-	-	Cash	-	-	-	-
Ecuador	Cash, food, vouchers	Food	Food	-	Vouchers	-	-	-	-
Ethiopia	Cash, food			Food		-	-	-	-
Malawi	Cash, food, cash + food	-	-	-	Cash	-	-	-	-
Mexico	Cash, food	Cash	Food	-	-	Food	-	-	-
Niger*	Cash, food	-	-	-	Food	-	-	-	-
Niger**	Cash, food, cash + food	-	-	-	-	-	-	Cash + food	Cash + food
Sri Lanka	Cash, food	Cash	Cash	-	-	-	-	-	-
Uganda	Cash, food	-	-	Cash	-	-	Cash	-	-
Yemen, Rep.	Cash, food	Cash	Food	-	Cash	-	-	-	-

- Cash more effective in 48% of the cases, food in 36%
- In one of the best studies in Ecuador vouchers led to greater diet diversity but fewer calories than in-kind



# There is extensive evidence that both forms of transfers have favorable impacts on household budget priorities

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In-kind transfers are generally on quotas and thus serve more or less as an income transfer. This is a major limitation on their role in changing demand patterns

Still, both in-kind transfers and most cash transfers, even those without conditions, nudge consumers to increase the share of their additional budget devoted to food.

For example, cash transfers in Colombia, Ecuador, Mexico, and Nicaragua led to more expenditures on food and health compared to general increases in income.

Similar findings have been noted in studies of the food stamp program in the United States.



# But, the path from increased resources to improved nutritional status is not assured

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Neither conditional nor unconditional cash transfers have delivered improvements in nutrition commensurate with their success in addressing poverty.

Meta-analyses of 17 cash transfers programs (mainly from Latin America) show little impact on height. Newer studies from Pakistan, Peru, and the Philippines are more positive.

The core issues is that increased income guarantees neither quality health services nor improvements in sanitation.

Knowledge about child care is one of the pillars of good nutrition, but is not intrinsic to programs designed to transfer income.



# There are a range of reasons for limited impacts of transfers on nutrition

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Some may be methodological – looking at impact of transfers on children who are not severely malnourished. Also, many studies look at children 0-5 even though growth velocity is greatest for younger children.

In addition, stunting is cumulative, and a short trial will bias impacts downward.

But there are substantive barriers as well: The most challenging issue for nutrition-sensitive transfers is the quality of health care that households are able to obtain.

Growth monitoring is a common conditionality but is not the same as growth promotion. Face to face services for growth promotion are often under-delivered.



## Cash transfers as well as most in-kind transfers are provided to households; nutrition may require a child oriented approach

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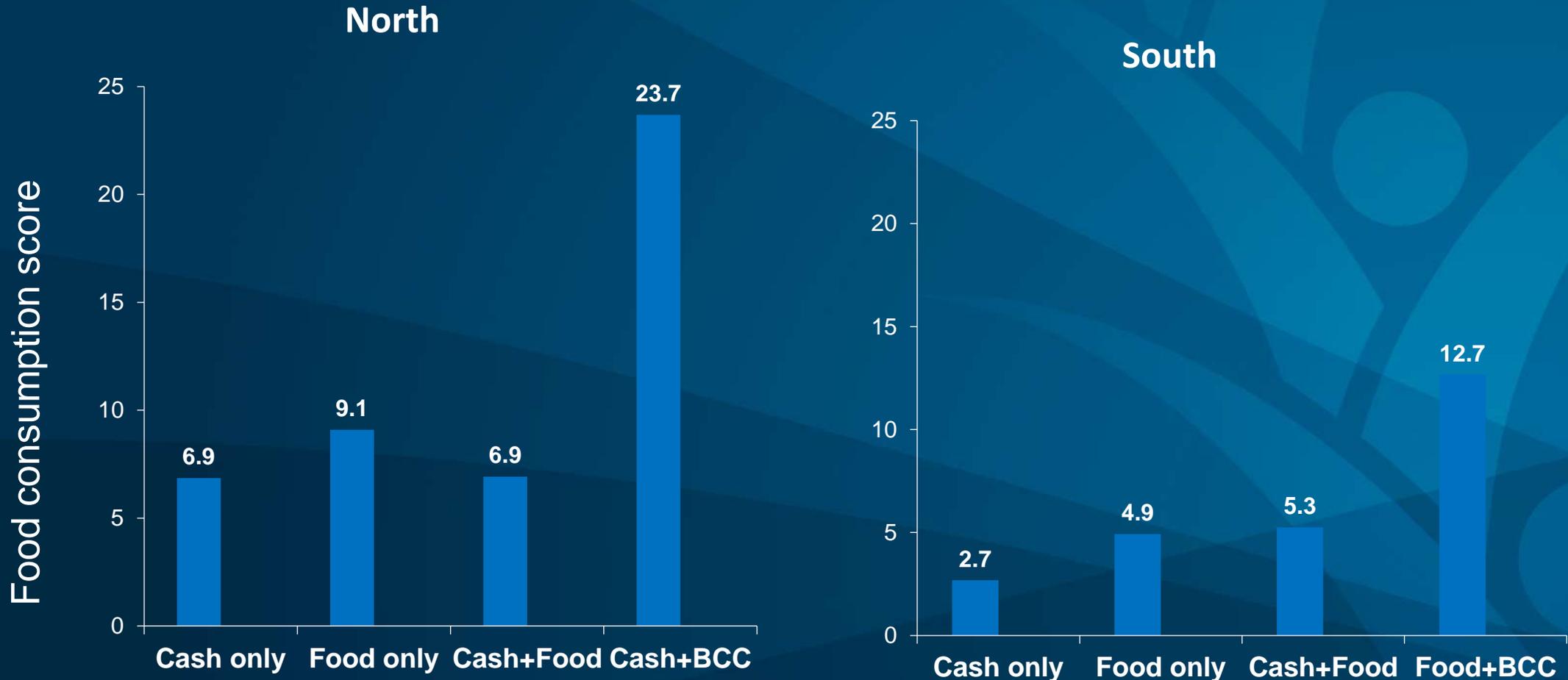
PROGRESA did reduce undernutrition but only if accompanied with child specific fortified food supplements.

Similar evidence comes from a World Bank supported project in Mali; no nutritional impacts were found with a cash transfer until supplements [corn-soy-blend] were added

These are examples of mixed cash and in-kind transfer programs. There is, in addition, extensive experience on the provision of complementary food at weaning. However, most of these programs – which are generally effective in food insecure environments – are not administered as targeted safety net programs.



# Adding behavior change communication [BCC] increased diet quality in Bangladesh





## There are some other inherent advantages of in-kind transfers

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Where markets are not integrated, cash can put pressure on prices as was noted in very remote Mexican villages.

In-kind transfers were preferred in Ethiopia in a period of food price inflation.

This advantage can be offset with increases in wages for public works (Ethiopia) or in a monthly cash grant (Brazil). Reverting to original transfers when food prices recede, however, may be difficult.

More generally, households that receive cash usually prefer it; households that receive in-kind are often reluctant to shift.



## One role that cash transfers cannot fill directly is micronutrient fortification

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In-kind transfers (including food subsidies) are core elements of many safety net systems. Both Egypt and India spend US\$ billions on such programs.

The former ceased fortification of highly subsidized flour in the absence of WFP support.

India's record with iron fortification in the TPDS is also checkered at best.

In part this is because the center subsidizes grains but states have had to subsidize any milling

Also, local millers resist centralized processing

# School meal programs have played a unique in-kind role but this is evolving



School meal programs have a historic role in stimulating school participation.

Their contributions to addressing food insecurity and improving nutritional status is also well documented.

Recently school meal programs have been given a new objective: to enhance small holder farm integration and market development.

Which objective is emphasized depends, of course, on context.

The availability of new social protection instruments have shifted the potential roles of school meal programs into new areas and challenges.

# To a large degree we often use 20<sup>th</sup> century findings to motivate 21<sup>st</sup> century school programs



Bear in mind three points relevant to school meals:

- A recent review found an overall impact of school meals on learning, but the evidence was mixed; impacts are strongest where enrolment is low and food insecurity high
- **But** programs are not concentrated where food insecurity is high; only 12 percent of children attending school in low-income countries receive school meals. In contrast, 37 percent of students in upper middle income countries benefit from such support
- Globally, primary enrolment is > 90%. In contrast, preschool enrolment is < than 50%.

Let us look first at the stylized evidence.

# Do School Meals Improve School participation?



Short answer: Often

Impact on enrollment is similar to Conditional Cash Transfers.  
Also little difference between meals and take home rations

But success in universal school participation and gender parity in the last two decades has reduced the need for additional incentives for school enrollment, particularly for primary schools.

School meals are usually pro-poor and, thus, serve a social protection function. But since meals are hard to target to poor children within schools, cash transfers serve this function more effectively.

# Do School Meals Improve learning?



Short answer: Occasionally

Timing is an issue; snacks or breakfasts may influence attention span; lunches less likely. Timing may be disruptive in some settings.

Cash transfers generally do not address hunger and skipped meals directly.

Impact of meals on learning is dependent on classroom organization and teaching quality.



# Do School Meals Improve Nutrition?

Short answer: This is highly context specific, partly because the most vulnerable period for stunting is in utero and before 2 years

Global evidence shows that meals contribute to weight gain. This gain is greater the younger the child.

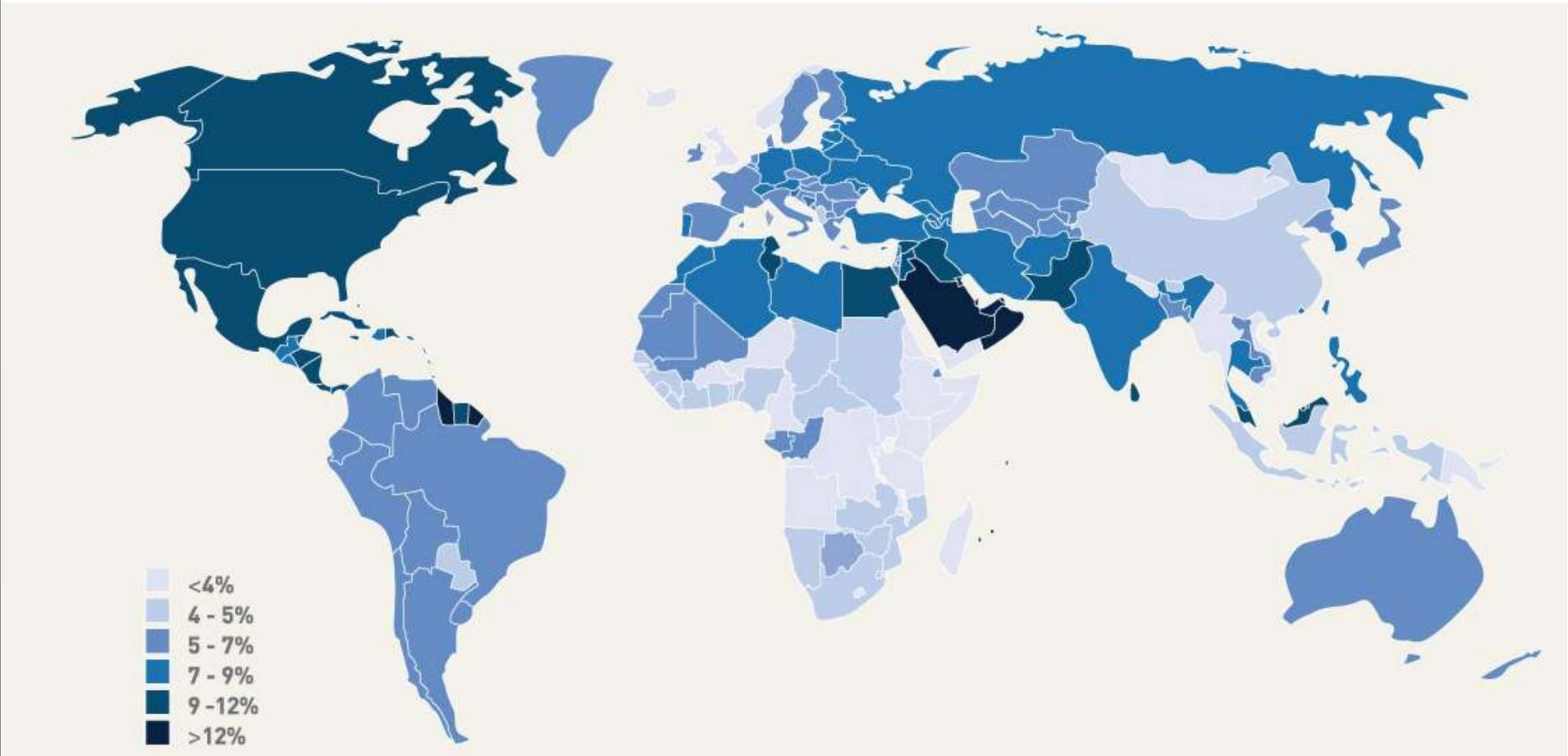
**But** this may not be desirable. Indeed, in many settings, new programs are being designed to reduce the risk of overweight and to increase diet diversity.

Do we want the meal to 'stick' to the student? Or is it a transfer to the household perhaps to the advantage of younger siblings? There is evidence on both.

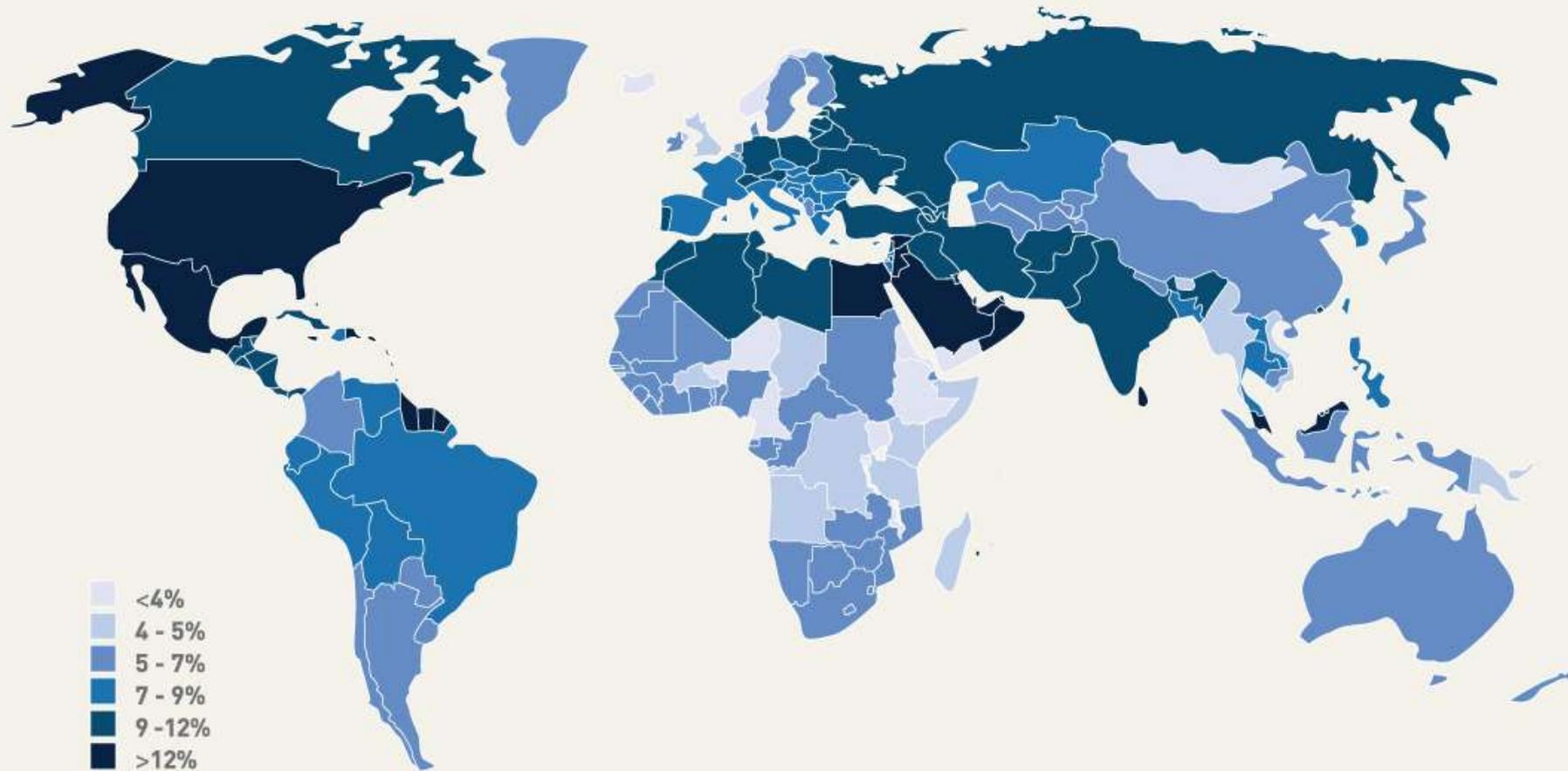
**There is a Double Burden of Malnutrition  
that changes how we look at programs**

**Overweight is a Global Problem**

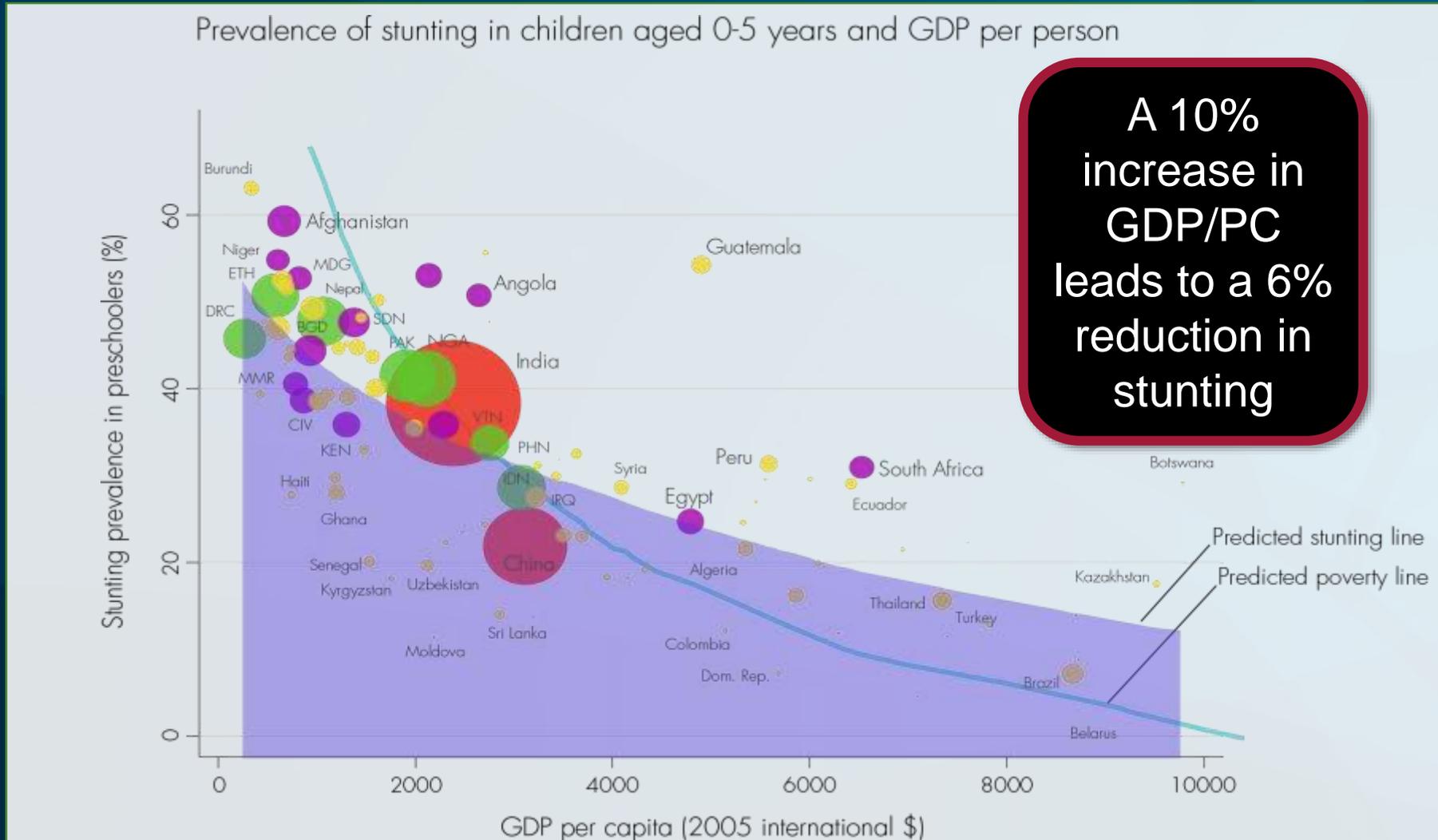
# Prevalence of Diabetes among Persons Aged 20-79 in 2010 (percentage)



# Prevalence of Diabetes among Persons Aged 20-79 in 2030 (Percentage)



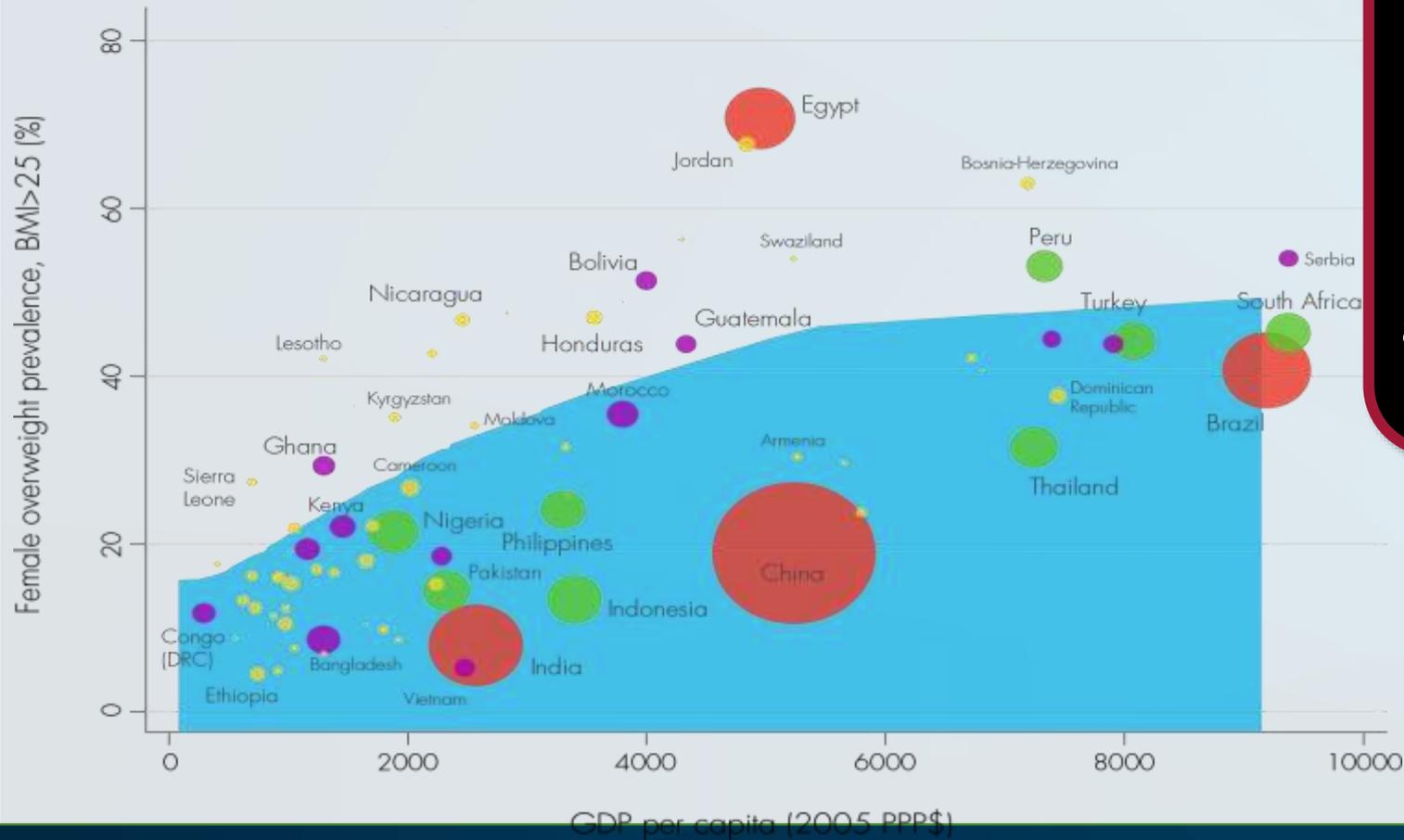
# Nutrition-sensitive Programmes Can Impact Nutrition: Through Increases in Income



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



Prevalence of women overweight or obese (BMI > 25) and GDP per person, for low-income and middle-income countries



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



## Transfers are seldom designed with overweight in mind

While PROGRESA had many positive impacts in accord with its goals, an undesirable side impact was that it increased obesity.

School meals can be an exception to this challenge.

They can promote diet diversity as well as exercise programs

And they can include nutrition education at an early age.

All well and good, but the evidence base is still thin.

# Making school meals more nutrition sensitive: micronutrients



Diverse menus in school meals can decrease anemia. This is particularly the case with programs that provide meat.

Far less expensive: Micronutrient fortification of meals.

For example, a review of 10 studies found that school feeding raised serum concentrations of iron, iodine, vitamin A and vitamin B in 8 cases while also improving hemoglobin levels.

Fortified snacks can also help address anemia.

Flour is the most common vehicle for fortification although extruder rice can be fortified; milk as well. Salt can be fortified with iodine (and iron) and oil can be fortified with vitamin A.

In some countries, biofortified foods such as beans and millet for iron and maize, cassava and sweet potato for vitamin A are also available.

# Making schools more nutrition sensitive: a platform for health interventions



Schools can provide an environment for regular screening for malnutrition and referrals.

More broadly, schools can be the setting for scheduled health programs. Indeed, they can even be used as a venue for programs aimed at adolescents no longer enrolled as students.

An innovation in Peru used videos in schools to promote iron supplementation although the supplements were supplied at the local health clinic. On average students obtained 9.3 pills over the study. Siblings not directly targeted also sought iron pills.

For anemic students, an average of only 10 100mg iron pills taken over three months improved average test scores by 0.4 standard deviations and increased grade progression by 11%.



## More on schools as a platform for iron supplementation

Schools can provide periodic supplementation on site as well. For example, daily multivitamins provided to 4<sup>th</sup> grade students in China increased hemoglobin as well as math test scores. The students who were anemic responded the most.

While few studies report costs, those that do indicate that iron folate supplements costs between \$0.1 and \$1.14 per year. Management and disruption of class time can be minimal if the program is weekly and at meal time.

Some school health programs can be decentralized: In China schools provided information about anemia to principals and, for some, also provided a financial incentive to improve.

Both interventions led to improvements although the principals who received incentives achieved larger improvements.



# General Point on Reforms: Crises as Critical Junctures

Almost every crisis is a reminder for policymakers of the volatility of markets and ensuing risks for producers and consumers.

Often, but not always, a crisis opens the political space and generates opportunities for reform.

Many food-based programs were introduced or significantly reformed during war-times or after severe economic shocks. For example, Mexico's reform followed NAFTA and the aftermath of the Chiapas uprising.

Program stasis often builds rent seeking (millers, shop keepers and bureaucrats all have stakes in long running programs).

Democracy and civil society can be a catalyst for reforms but in other circumstances the former can encourage clientism.



# Conclusion

There is a general trend towards cash transfers but the path is not linear.

But even food programs are becoming more integrated with the social protection systems and, on average, have improved their performance

The fact that a program is food or cash does not necessarily determine performance in terms of coverage, targeting accuracy, and other dimensions of impact

Most programs have multiple objectives: poverty reduction, improved nutrition, and support to agriculture.

The policy choices available at any given time are not just about optimal strategies but rather, in part, the legacy of previous policies.