

# Hunger: The true growth story in India<sup>1</sup>

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## Introduction

India's march towards the global economic stage is strikingly visible in many forms. Sparkling office buildings and shopping malls are being foisted with alacrity in nearly every city as corporate India gallops ahead to become the 'office of the world' and middle and upper class consumers are boosting turnover and profits with high-end expenditures. Per capita incomes have risen in nominal terms from 400 USD in 2000 to over 1000 USD in 2009 – an impressive increase by any standard. By 2015, they are expected to be over 1600 USD (IMF, WEO April 2010) – quadrupling in 15 years. Evidently, there has been significant progress in many areas. However, India's rambunctious success, often against difficult odds, belies the fact that socio-economic security remains an enormous challenge for an overwhelming majority of Indian households who struggle with less than \$2 per day (76%, World Bank 2009). Hunger, nutrition insecurity and chronic as well as acute malnutrition are the most severe of their daily experiences.

The fight against hunger, the grim and silent crisis, has been a bitter – and unjustifiable- failure, globally, and even in India. Internationally, according to the 2010 Global Hunger Index constructed by IFPRI, India dangles at an ignominious 67<sup>th</sup> out of 84 countries and is classified as having 'alarming' levels of hunger. It could therefore be said that the real growth story in India is about the silent growth of socio-economic insecurity, hunger and socio-economic disparities – the sordid underbelly of 'mother India'.

## The persistence of multidimensional hunger

India is home to the largest number of 'hungry' people in the world – more than for example sub Saharan Africa – which is the region usually cited as the worst off in terms of lack of human development or socio-economic security. Conservative estimates (FAO, 2009) suggest that even before the financial and food-price crises of 2008/2009, more than 230 million people were 'food insecure' in India – meaning, in simple terms, they did not know where their next meal would come from and suffered from chronic under-nutrition. To put this into perspective, this is like the entire population of the UK, France and Germany *all* going hungry and systematically being deprived of their right to food. The global financial and food price crises of 2008/2009 which brought income losses in parallel with rising domestic food and fuel prices is likely to have tipped these numbers even higher: the dense number of households at the margin, already vulnerable and typically spending as much as 60% of their household budget on food, would have suddenly found themselves food insecure due to price and income shocks. One estimate (UNICEF ROSA, 2009) puts the number of additional hungry people at roughly 20 million more India. These numbers suggest that India's poor carry between 1/3<sup>rd</sup> to 1/4<sup>th</sup> of the global burden of food insecurity.

At the root of the hunger issue – the massive food and nutrition insecurity - are several demand side and supply side factors: the first is the fact that for millions of Indians who work in the informal economy and earn less than \$2 per person per day at the household average, a full day's work still does not create socio-economic security and generate sufficient income to live in dignity, putting a

squeeze not only on food purchases but also on other essential items like shelter, clothing, education, health and access to clean drinking water, none of which are becoming cheaper or easier to access. Sub-subsistence incomes and structurally low wages in the rural and the informal urban economies are in the immediate result of investments bunched in one part of the economy, laggard productivity and falling yields in the agricultural sector, and more fundamentally, the lack of access to land and assets for livelihoods. This is then compounded by India's de facto inability to protect the vast majority of its citizens, especially the most vulnerable and disadvantaged, from price and income fluctuations, often unexpected, that impose their cruel slings and arrows on millions of households and rob them of their fundamental right to food and nutrition security and a life with dignity.

Women and children are especially vulnerable: nearly every other Indian child is malnourished (46%, UNICEF, 2010), denying them of their universal rights to survival and wellbeing, and inflicting a terrible blight on their future. Underlying these numbers, wasting and stunting rates, reflecting acute and chronic nutrition deficiencies, are at 48% and 20% respectively (NFHS-3). Deficiencies in essential micronutrients such as Vitamin A and Iodine affect 50% of India's preschool children while nearly 8 out of every 10 children suffer from anemia ((NFHS-3). Child nutritional status continues to remain one of the worst in the world and has been virtually unchanged in recent years. According to the National Food and Nutrition Bureau, responsible for monitoring nutrition in India, "about half of the children of India might not have reached their physical or mental potential and about one fifth of the children might be functionally impaired" (Bhandari and Zaidi, 2004).

Food and nutrition security is the central nexus for health and well-being: nearly two million children die each year from hunger related causes before reaching their fifth birthday, equaling nearly 6000 child deaths every day (Indian Express, September 8<sup>th</sup> 2010). About half of these deaths occur within the first month of birth reflecting the combined impact of acute severe infant malnutrition, poor and starkly uneven neonate services, and the precarious health and nutrition status of mothers. This is just one aspect of deprivation these children face (UNICEF, 2009): more than 50% of India's children are exposed to concomitant deprivations such as shelter, clothing, health, education, water and sanitation. Unchecked, this portends serious ramifications for the future.

This bleak outlook at the aggregate level is further exacerbated due to sharp disparities arising from intersecting socio-economic inequalities (Kabeer, 2010) such as economic status, gender, caste/tribe, birth order, birth interval, mother's education, religion, mother's nutrition status at birth, children's living arrangements, residential and geographic area.

For instance, children from the lowest wealth quintile are nearly 3 times more likely to be underweight than children from the top wealth quintile. Rural underweight prevalence is nearly 40% higher than the corresponding urban rates. Children belong to underweight mothers are 34% more likely to be underweight than children belonging to mothers with a normal BMI. In SC/ST and OBC households (disadvantaged caste and ethnic groups listed as requiring

affirmative action by the government – scheduled castes and tribes and so called other “backward” castes), children are nearly 50% more likely to be underweight than children from other ethnic backgrounds. Mothers with little or no education have children who face a 66% higher chance of being underweight when compared to children whose mothers have 5 or more years of education (NHFS-3). Interstate heterogeneity in child malnutrition is equally vivid. Though an alarming problem throughout India, child malnutrition is worst in Madhya Pradesh, Bihar, Chhattisgarh, UP and Jharkhand (figure 1).

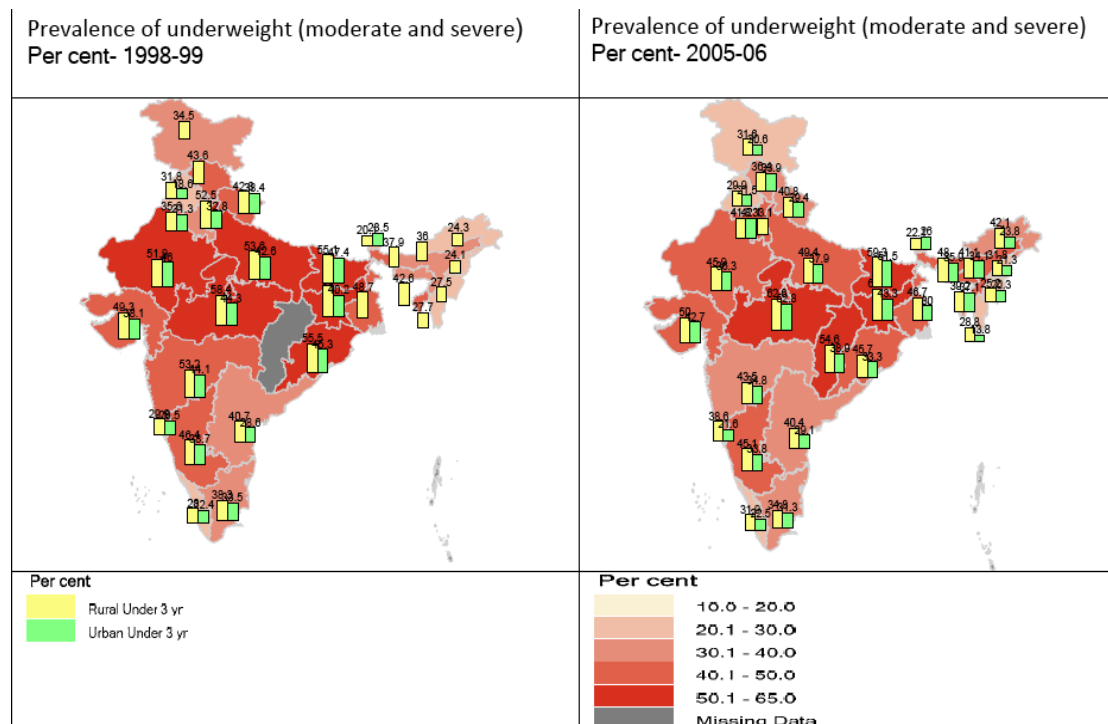


Figure 1: Prevalence of underweight (moderate and severe)<sup>2</sup>

More than 1 in 3 Indian adults have been consistently underweight over the last decade: the proportion of Indians with a BMI of less than 18.5 (defined as thin/moderate to severe underweight) has barely declined from 36% in 1995 to 35% in 2005 (GoI, 11<sup>th</sup> Plan, 2008). This macabre reality is significantly worse for adults in ST/SC (on this term, see discussion below) households where nearly 50-60% have a BMI less than 18.5 (Sen, 2004) thereby crumbling all hopes for a healthy productive life and any escape from socio-economic exclusion. More than 1/3<sup>rd</sup> of adult Indian women suffer from CED (having a BMI < 18.5). Data on the age-distribution of BMI for adult women show that Indian women are the most ‘weight deficient’ during their reproductive years. Over half the pregnant women in the age group 15-49 suffer from anemia. The situation in India is inordinately dire for women belonging to the lower income households, women in rural households and those living in the so-called scheduled tribe or scheduled caste households – those who are the most disadvantaged and therefore listed on the government’s plans for affirmative action. These trends have held firm over the

<sup>2</sup> Source: GoI 2009. MDG country report: India

last decade despite income growth and impose an ominous loss in terms of quality of life, wellbeing, and dignity as well as in terms of economic productivity foregone. This is a shameful reminder of how contemporary India continues to treat women and children even as it prepares for global economic and political leadership.

#### **Box: Measures of hunger and the situation in India**

There is no certainty about the precise number of 'hungry' or 'calorie-deficient' people in India: hunger is easy to recognize but hard to calibrate. It has many faces ranging from chronic lack of energy, to acute malnutrition, to death. Various estimates measure different aspects of hunger or use different measurement techniques and hence are difficult to compare. A useful starting point is to measure calorie intake as a proxy for hunger. This is not fully sufficient though, because an arbitrary cut-off point cannot measure the multidimensional aspects of hunger and it is quite possible that even people above this cut-off are undernourished. Indeed, the choice of the cut-off point itself can influence the outcome significantly as there is a dense spread of households just above and below the typical food poverty lines.

As argued by Deaton and Dreze (2008) – it is difficult to find a tight link between calorie intake and nutrition or health status in India: states like Orissa and Bihar have a higher calorie consumption than states like Kerala and Tamil Nadu but also higher malnutrition due to the absence of proteins in their diet. Thus these food intake estimates are often supplemented with anthropometric measures of body mass and weight which are strongly correlated to 'hunger' or systematic under-nutrition.

IFPRI calculates a 'global hunger index' for each country by combining the proportion of calorie deficient people with child mortality rates and child underweight rates. Since Indian adults and children have among the worst indicators in the world in relation to food intake and anthropometric measures, it is not surprising that the latest IFPRI global hunger index for 2010 shows India sliding backwards over the last three years – currently ranked 67 out of 84 countries, lower than Pakistan and significantly lower than China. While countries like Angola, Ethiopia, Ghana, Mozambique, Nicaragua and Vietnam made significant improvements in their hunger index scores between 1990-2010, India remains mired in the 'alarming' category.

At the macro or aggregate level, estimates of hunger vary from 1.9% of households 'self reported' as being 'hungry in NSSO 2004/05, and there are many reasons to treat this number with caution, to as high as 75% of households when a more meaningful 2400/2100 calorie-cutoff is used (Deaton and Dreze, 2008). Other estimates (FAO, 2009) suggest that undernourishment prevalence has increased from 19% in 1990 to 21% during 2005-2007 using different cut-off points for calorie intake. By these estimates, the calorie deficient population surged from around 172 million in 1990 to more than 235 million by 2005-2007. Most of the increase occurred recently, during years of rapid economic growth.

Looking inside the aggregate data, there is considerable heterogeneity across Indian states, and within states, across districts and villages in relation to food and nutrition insecurity. All Indian states have 'serious' levels of hunger (IFPRI ISHI 2009)<sup>3</sup> but in 12 of the 17 states studied, hunger levels were described as 'alarming'. In Madhya Pradesh hunger levels have been described as 'exceedingly alarming'. Even in states that have performed well in economic terms, 'seriously high' levels of hunger persist. It is obvious that economic growth alone cannot lead to food and nutrition security at the aggregate and state level. Figures 2 and 3 show the highest rate of hunger in Madhya Pradesh, Jharkhand, Bihar and Chhattisgarh, all above an index of 25 and even in the latter three that featured good rates of growth in state-level per capita income, the food and nutrition situation did not improve. Systematic research into the

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<sup>3</sup> The State Hunger Index for each state is calculated using a calorie cutoff point of 1,632Kc per capita/diem.

reasons for the extremely poor outcomes in these particular states is needed; possible initial explanations include that India's interior states have large tracts of poverty as a result of very poor infrastructure and low connectivity, harsh weather and climate events, and overall low education levels and other social service delivery. Other factors could lie in practices related to women such as high birth frequency and childhood marriages.

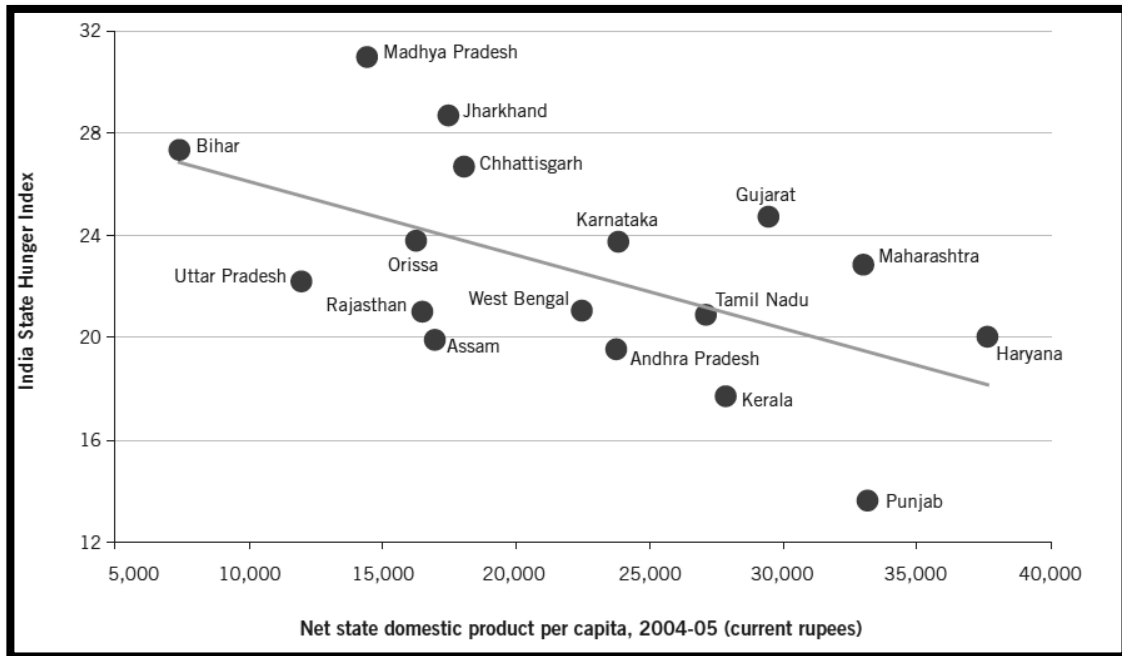


Figure 2: India State Hunger Index and net state domestic product per capita<sup>4</sup>

<sup>4</sup> Source: GoI, 2009. MDG country report: India

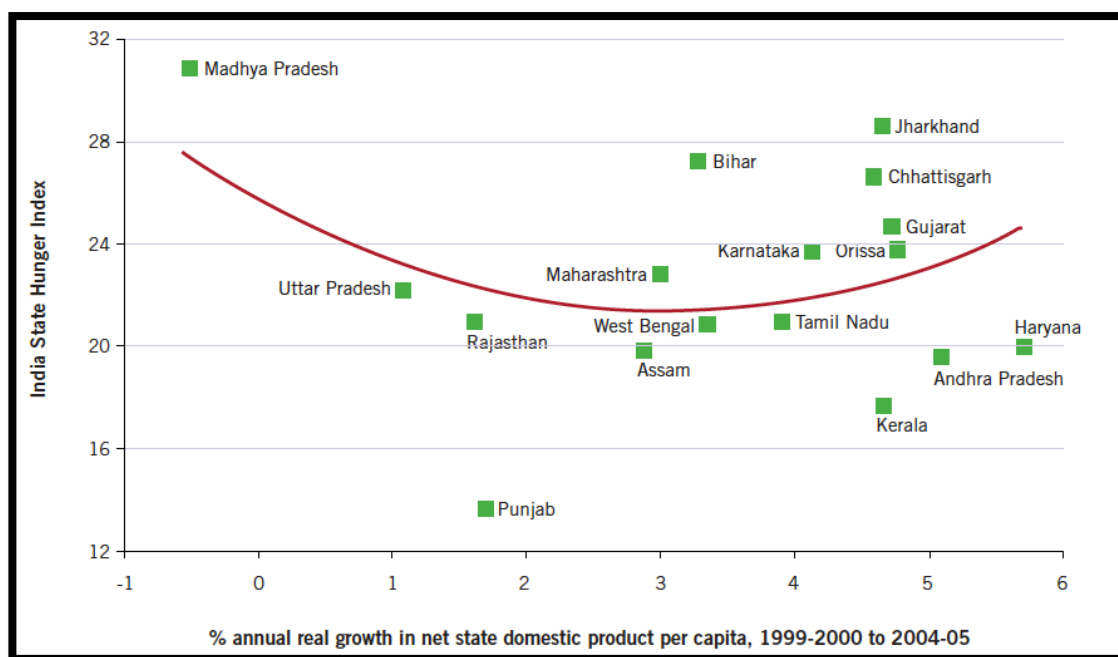


Figure 3: India State Hunger Index and growth<sup>5</sup>

Not only has 'hunger' remained persistent, NSSO data (various rounds) suggest that per capita calorie intake as well as per capita protein intake in India have systematically declined over the last decade (Deaton and Dreze, 2008). The fall in per capita calories from cereals over the same period is significant: in rural India especially, there was no substitution towards alternative sources of calories resulting in a decline in per capita calorie consumption. Not surprisingly, per capita calorie intake at poverty line has declined over the same time period (Patnaik, 2006).

While per capita expenditures have risen across India, *real* per capita expenditures on food have stagnated over the last twenty years. This is an important observation because it suggests that poverty estimates based on rising household expenditure levels could have declined from this movement in expenditures, nutrition indicators based on calorie consumption have certainly not improved. Families are struggling to afford sufficient nutritious food while having to spend more on items like housing and shelter, health, education and transport. It is simply unconscionable that vast sections of the population are still unable to eat a 'decent' meal.

Food availability, when measured in terms of cereal output per capita, has been declining rather rapidly following the green revolution bubble, which raised agricultural productivity, but at the same time generated food and nutrition insecurity and inequity because it bypassed the smaller farmers – and omitted the landless. The focus of the program was on providing cheap farm inputs which were predominantly bought up by largest landholders.

<sup>5</sup> Source: Gol, 2009. MDG country report: India



Thus, the government's interventions via support prices and subsidies to farm inputs have not succeeded in creating or providing access to vital rural assets and infrastructure that can assist families gain traction in their fight against hunger and poverty and provide avenues to better livelihoods. Credit flow and finance to the agriculture sector has been drooping significantly over the years. Per capita food availability dropped from well above 480 grams per capita in 1994 to 440 grams in 2006 (11<sup>th</sup> Plan, GOI). Forecasts suggest that India would soon be food deficient due to stagnant yields, population growth and increased demand. This spells additional trouble for food and nutrition security.

### **Food prices**

After the global financial, economic and food price crisis of 2008/9, India was among the countries to recover, at the macroeconomic level, very quickly. Monetary and fiscal stimulus action is seen to have supported a return to an estimated GDP growth rate of 7.2 % for fiscal year 2009. This was carried by manufacturing and services expansion, each increasing by almost 9 percentage points compared to previous year.

Conversely, agricultural output fell by 0.2% and farm production by almost 3% (ADB has output and farm production – difference?). This was accompanied by a renewed drastic surge in food price inflation – food prices rose 20% between July and December 2009 and continued rising till July 2010 (figure 4). Escalating prices have also been registered for cereals, pulses, vegetables and poultry (Asian Development Bank, ADO, India pp. 170 -171). Furthermore, the recent fuel price decontrols in India present an upside risk for food prices.

The agricultural productivity issues, continued vulnerability to droughts, floods and other climatic challenges, and the inefficiency of food price controls mean that those already at the socioeconomic margin are impacted severely, hunger and food insecurity has increased again in 2009 despite the macroeconomic rebound.

Households, especially those at the margin, have had to cobble together ingenious and often detrimental coping mechanisms in their desperate search for employment and incomes, using multiple sources of livelihoods. Some impact has been switching to less nutritious diets, taking children out of school and-or putting even younger and more children to work, cutting back on health, education and other expenses, undertaking even more distress migrating in search for livelihoods, or exploiting the environment.

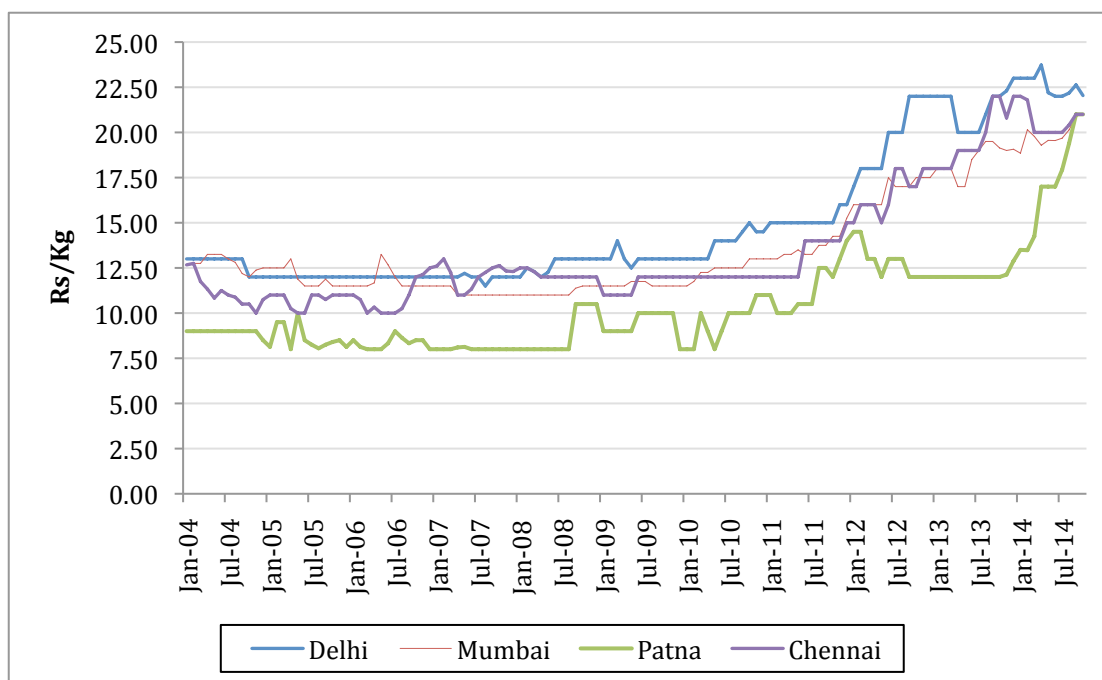


Figure 4: Rice prices in major Indian cities (2000-2010)<sup>6</sup>

### Outcomes and policy reflections

Stagnant if not worsening nutrition indicators suggest that the scourge of pervasive hunger continues to lurk, unhinged, despite India's rapid economic growth. The government's sanguine expectations that growth along with residual programs, targeted to those most vulnerable and in need, would control the problem have not yielded the desired outcomes and been unable to make a dent on the problem of hunger and food and nutrition insecurity in India. This is not surprising – it completely misses the point that hunger in India is embedded in interlocking factors impeding socio economic security - the lack of decent work and employment, the lack of predictable incomes, especially in the agricultural and informal sectors, and persistent exclusion from assets. Inadequate or impossible access of the vulnerable to food and product exchange markets in addition to entrenched social and cultural norms perniciously and systematically exclude millions of Indians from adequacy and security in food, shelter, clothing, education, health and access to justice – the basis of human rights, dignity, and wellbeing.

The focus on growth and its so-called trickle down might have hoisted the incomes of one – significant – group as evidenced by the spectacular growth of the Indian urban middle class over the last two to three decades. This growth is expected to continue. Even in rural areas there is increasing penetration in middle class households of consumer goods, electronics, machinery and capital goods. However, this has not translated into increased food and nutrition security for the majority of the low-income population. The contraction in demand in the rural sector, stemming from low productivity, high and uncertain

<sup>6</sup> Source: Created from FAO, GIEWS database

unemployment and low incomes is compounded by supply side problems of falling availability and rising prices of food and inadequate market access.

This interaction of deep structural issues continues to undermine the effective combating of hunger. There is a policy logic as well as empirical evidence that these impediments to food and nutrition security, and to the deeper goals of human rights and social justice will not materialize unless persistent inequities and exclusions are redressed.

Rapidly cascading socio-economic inequities, when juxtaposed with stubborn and intractable hunger, can have violent outcomes. It can lend wings to friction, insurgency, conflict and strife. The opportunity cost of violence is lowest in areas with poor governance, inept and corrupt institutions and exclusion or isolation from markets, and a resulting acute food and nutrition insecurity. After all, there is not much to lose. For example, of Jharkhand's 24 districts, the state government's own assessments of food security suggest that 17 districts "do not have access to sufficient, safe and nutritious food". These are also the districts considered as "highly Naxalite affected" (Livemint, April 13, 2010).

There is also a connection with the farmer suicides observed at ever increasing rates across India. Over 17,500 farmers are estimated to have committed suicide per year over 2002-2006 as a last resort in light of indebtedness and abject penury (Patel, 2007). This would point to the pervasive inequities and lack of economic and social transformation in the rural areas.

Arguably, food and nutrition security is at the core of human development. Hunger is a violation of the most basic right, and it offends principles of dignity and equity. This is so globally and it is so in India, where the Prime Minister stated that "malnutrition is a curse" that must be removed, (Independence Day speech 2008, quoted in IDS Bulletin No 40, 2010).

Policies to address hunger span the entire spectrum of economic or development policy. However, despite the centrality of food and nutrition in overall socio-economic security, policy makers disagree on the most efficient and appropriate policy interventions. In part, this is a "technical issue", because policy response draw on a range of expertise domains, and evidence bases offer varied conclusions, for example on how best to raise agricultural productivity, or how most effectively to treat acute or chronic child malnutrition. But it is primarily a political issue, since policies for socio-economic security at the micro, meso, macro, and at regional and global levels, touch upon and will upset power relations.

In the following section, we address a sequence of policy areas relevant to achieving food and nutrition security. Redressing persistent hunger and socioeconomic insecurity will require many layers of transformative social and economic policies and effective and participatory interventions.

### **Measures/interventions towards immediate, household level food security**

As the data show, at the aggregate level, food and nutrition security in the immediate is achievable, and various measures are in place in India at the programmatic level. These include among others:

- Food subsidies to provide access to affordable food via the TPDS;
- Cooked midday meals (MDM) which are a right for all children studying in classes 1-V in government and aided schools;
- Integrated Child Development Scheme (ICDS) – the largest early child development scheme in the world with over 700,000 service (anganwadi) centers;
- Food or cash for work schemes (such as the Mahatma Gandhi National Rural Employment Guarantee Act of 2005(NREGA)).

The TPDS, one of the mainstay programs designed to fight hunger has been disappointing. With a network of more than 400,000 fair price shops as distribution outlets this is one of the largest food distribution systems in the world. However, less than 29% of poor rural households and less than 10% of poor urban households have reported receiving any benefits from the PDS (NSSO, 2004 report on the PDS). The planning commission study on the PDS noted serious errors of omission and inclusion. There are also questions about the food allocation being too meager. A family of five can hardly be expected to subsist on 35kgs/month – its requirements would be more in the range of 45-50Kgs/month (assuming the recommended norm of 300-330gm per capita per diem).

In tandem with surging food prices, the government food stocks have been bulging to reach nearly 60 million tons – considerably higher than the buffer norm - amidst shocking reports of food rotting in public warehouses. At a time of high food prices and when there is an urgent need to feed many hungry households, this is incomprehensible and indefensible. Reports of hunger deaths in Orissa juxtaposed with reports of food rotting and wasting, prompted the Supreme Court to ‘order’ the Government to distribute food to the hungry in 2010.

The central objectives of government procurement to afford food security and avoid price fluctuations in food are unlikely to succeed until food grain policy is enmeshed in a more holistic logic that examines the entire food chain – from production, to procurement to distribution – both domestically and abroad. For instance, increased exports of food grains, especially in the early years of the millennium, in the face of declining per capita production of cereal accentuates a policy approach that favors generating export revenues over distribution among the nation’s own hungry (Saxena, 2008). This raises serious questions about the efficacy of government interventions and their unintended but imperiling consequences on food security and the food commodity market in general (Basu, 2010).

Operating in more than 950,000 schools in India, the Midday Meal program (MDM) covers more than 130 million children making it the largest program of its kind in the world. It provides cooked meals to enrolled school children containing 300 calories with 8-12 grams of protein. Among the more successful government interventions, this program has demonstrated positive effects such as improved school attendance and retention, especially among girls and is an important non-income support to many families. However, limited in scope to enrolled students only, it fails to reach the most vulnerable children – those out of school or living off the streets. Infrastructural facilities are uniformly poor.

There are also concerns regarding the quality of meals as well as discrimination towards children from SC/ST households (Thorat 2008 and WFP, 2009).

The ICDS implemented through a vast network of over 700,000 community or 'anganwadi' centers (AWC) aims to provide a combination of health, nutrition and education interventions for pregnant women, lactating mothers and children under the age of 6. Although nearly 80% of children live near one of these centers, the effective coverage and program intake is low. Less than 1 in 4 children under the age of 6 receive any services (NFHS-3). The problem is exacerbated by variations across states: in Delhi, Bihar, Meghalaya and AP coverage is less than 10%. Even more problematic, the scheme does not focus on the first two years of childhood when nutrition and health interventions have lasting benefits (Saxena, 2009).

The Mahatma Gandhi National Rural Employment Guarantee Act provides a statutory right to 100 days of wage labor at minimum wages, with equal pay for women and men and a statutory provision of child care if needed (<http://www.nrega.nic.in/Homepanch.asp>.) This program, again globally unprecedented in scale, reaching nearly 34 million workers in 2010, is an important supplemental income for many rural households. In many instances, wage payments are distributed through banks and post offices thereby encouraging financial inclusion and circumventing corruption. However, implementation has been highly uneven across states and discouraging in poorer rural areas where most households scrounge for a living. Furthermore, discrimination against older workers and women has been cited as eroding the effectiveness of this Act (Maninder, 2008).

Micro insurance can play an important role in providing socioeconomic and nutritional security because it has the potential to address both demand and supply side credit constraints faced by the poor through community based risk pooling and insurance arrangements. To the extent that micro insurance, micro savings and micro credit afford the poor some leverage in managing risks (e.g. crop insurance), they can be welfare enhancing. But in India, the high costs of penetrating rural markets and the difficulty in pricing products and calibrating risks arising from information gaps continues to frustrate attempts at extending inclusive financing and risk management tools to the very poorest. The southern belt of India: Andhra Pradesh, Kerala, Tamil Nadu and Karnataka, accounts for a majority of micro finance insurance schemes in India (ILO, 2004). Given the paucity of public spending on health and the traumatic financial distress faced by poor households in the event of poor health, life and health insurance are the two most popular products.

However, these are policies that have shown a very mixed grip on the problems of malnutrition and are undermined due to deficiencies in design, poor administration and failures at delivery points, often even at the intermediate level.

For example, regarding the PDS, the Planning Commission for some years has been investigating the lack of effectiveness in the form of exclusion and inclusion "errors", the systemic leakages, corruption, and material and monetary wastage. On midday meals, the contention is over the primary purpose – whether it is an

inducement for schooling, a measure to ensure access to food, or whether it is geared primarily to improving nutrition and, more broadly, human development outcomes. The assessment of its efficacy varies depending on how the purpose of the measure is framed. Food for work or cash for work are also, in a first degree, programs to address food insecurity, as well as other acute manifestations of poverty and social exclusion, and development debates are currently favoring cash transfers over food-for-work, with the Indian NREGA being an outlier compared to policy movements in other regions. We will come back to this below.

The policy discourse therefore needs to urgently solve the challenges and either redesign the measure and redirect the resources to other delivery forms, or enforce the programs with the equitable and efficient intent with which they were introduced. Institutional and contract failures must be rectified. Consigning more power and voice to communities and households by actively promoting their participation in the design ('needs assessment') as well as in administration, monitoring and evaluation of program outcomes can enhance the efficiency and relevance of many of these programs. A firm political commitment towards transparency, accountability and efficient service delivery through the use of modern e-technology and IT would assist these programs in gaining traction and credibility.

All of the above are measures that – provided they are implemented properly – can address immediate food insecurity. They do not tackle the structures that produce and perpetuate food insecurity.

### **Measures/interventions towards increased productivity and higher yields**

Since the green revolution of the 1960s, and the recent revisits in the form of the TNC policies on GMOs etc, one strand of the discussion on addressing hunger and food insecurity has zeroed in on agricultural productivity, measured crudely in yields per land unit or in calories produced per land unit. Following the recent food price crisis (2007-2009), policy and program responses concentrated on investment in agriculture, notably with a notion of enhancing productivity through a distribution of inputs, or enhancing production and/or marketing by improving access to credit, especially for small scale and marginal producers and traders.

Productivity measured as output per hectare has indeed been stagnating in India: the yield in the start of the millennium was pretty much the same as it is now. Per capita food availability has in fact declined from 454 to 444 grams per diem (GoI, 2010). In India, small and marginal farmers comprise nearly 80% of rural farmers and they operate on less than 40% of land with average land holding size as well as productivity shrinking. Although the casual nexus of land distribution and productivity is beyond the scope of the paper, the technological "fatigue" in agricultural India is a sordid reality that needs to be addressed if food productivity is to be buoyant. A technological "fix" (green revolution) could address this problem effectively if supplemented with measures (a) to utilize existing technologies more efficiently, equitably, and in tune with environmental sustainability (b) ensure the provision of other required inputs in an inclusive manner, and (c) address rural asset and power inequalities.

The 11<sup>th</sup> plan targets a growth rate of 4% per annum in agricultural GDP. Achieving and sustaining this growth would depend on the equitable and efficient dispersion of inputs, technology as well as finance within the sector. Water is one of the biggest constraints for agriculture. The extension and improvement of irrigation systems will have a positive and enduring impact on yields. However, because it is not possible to irrigate nearly 55-60% of the land, improved watershed management, cost effective ground water recharge, and innovative rain harvesting must be obvious policy priorities. In SC situations and ST areas, especially, development of watersheds can play a significant role in improving food productivity and security. In addition, to the extent that the NREGA prioritizes water conservation projects it will automatically play a role in the broader water supply management for the agricultural sector thereby entwining the provision of supplemental income with the creation of useful agricultural infrastructure.

At the same time, output or supply side conditions need to change considerably too. Private investment by farmers must increase for land development, drip irrigation and agricultural machinery. Product diversification (horticulture, floriculture, other foods) as well as access to markets and information, connectivity, competitive transportation, financial services and storage facilities are among some of the factors that influence incentives and therefore agricultural productivity. The real challenge is to ensure the equitable distribution of agricultural inputs, market access at remunerative prices and information so that marginal farmers too can have access to viable market opportunities.

**Table 1: Yields in Indian Agriculture**

Year	Area (mill. Hectares)	Output (Mill. Tons)	Yield (Kg/Ha)	Net per capita availability of food grains (gms/day)
2000-01	121.05	196.81	1626	416.2
2001-02	122.78	212.85	1734	494.1
2002-03	113.86	174.77	1535	437.6
2003-04	123.45	213.19	1727	462.7
2004-05	120.00	198.36	1652	422.4
2005-06	121.60	208.60	1715	445.3
2006-07	123.71	217.28	1756	442.8
2007-08	124.07	230.78	1860	436.0
2008-09	122.83	234.47	1909	444.0
2009-10*	121.37	218.20	1798	...

Source: Agriculture Statistics, 2010. Ministry of Agriculture. Gol

In a more enlightened policy discussion, focus would also have to include inter alia sustainable agriculture, the tension of sustainable land use and productivity; the complex mix of foodstuffs between earth – and water based commodities; and the discussion of land use in light of climate change.

Sustainable and remunerative agricultural production also needs to look into the entire value chain, enabling value added to the agricultural product itself (branding, packaging, storage as well as processing).

Other farm-based and non-agricultural employment opportunities need to supplement such an enlightened “new-green revolution”. Examples include employment in services such as the care economy (UNRISD, 2010) or rural tourism. Equally useful can be a “new industrial policy” (UNCTAD, 2009a)--promoting particular sectors of the rural, off-farm economy. An interesting example is the promotion of creative industries in segments such as music, art, fashion, or crafts, or the creative industries based on cultural products such as design, music, visual arts, that can be produced independent of locations, provided there is internet connectivity (UNCTAD/UNDP, 2008). This can serve a triple purpose of generating employment opportunities, enhancing incomes, as well as valorizing minority cultures. Many segments of the creative industry are identity based, such as the music or crafts of particular language or ethnic groups, so that, if well-conceptualized and carried through, there can be an element of social inclusion integral to the process.

Again, such interventions are much needed to address food and nutrition insecurity in the immediate to medium term, but do not tackle the systemic issues underlying food deprivation in India.

### **Structural rights-based universal food security in India**

There is no shortage of food in India. The impediment is, as is well known and obvious, the inequitable and skewed access to productive assets, to land or rural incomes, and to decent work. Social exclusion is a primary driver of food and nutrition insecurity. State policy (contract) failure has been unable to rein in the festering problem. Hence, a whole gamut of policies and policy interventions are needed, ranging from the macro to the household level, if the structures of food and nutrition insecurity are to be fundamentally changed.

The prevalence of food and nutrition insecurity is inextricably linked with concomitant deprivations (multidimensional poverty and social exclusion). The provision of 35 kg of rice per month at Rs 3/kg on its own can hardly be expected to solve the food and nutrition crises in India as the causes are deeply rooted in the unprotected exposure of vast swathes of the population to wide spread multifarious risks associated with highly variable and uncertain incomes and livelihoods, inequitable distribution of assets and access to markets and resources, health risks, poor and low quality education, inadequate human rights and voice, gender and child discrimination, lack of adequate hygiene and forced-migration.

Quite naturally therefore, social protection policies based on the principles of rights based socio-economic security have to be an integral part of any solution for food and nutrition security (11<sup>th</sup> 5 Year Plan, 2009). A wide range of



intersecting policies that simultaneously protect households from nutrition, health, education and income shocks would offer increased traction in the effort to arrest nutrition problems and hunger in India.

As is increasingly accepted all over the world, including in South Asia, investing in equitable social protection programs have yielded abiding human development benefits that enhance food and nutrition insecurity by reaching out to the poorest and the most vulnerable. Recent discussions on social protection in the region have tended to evolve around issues of program design (funding, targeted or universal, cash transfer or food transfer, poverty-targeted versus life cycle or age-contingent), enhancing transparency in administration and governance, and utilizing cost effective delivery mechanisms (Koehler et al, 2009). The disappointing impact of social protection in India is fettered to the low take-up rate or coverage of these interventions. Recent efforts to spread social protection to rural India through various initiatives ranging from cash or food for work to informal sector old age income transfers can enhance household food security (by reducing other correlated risks and raising incomes) if implemented well.

Another major challenge would be to introduce 'public' social protection for India's households without adversely displacing extant informal, family or community-based arrangements that are the de-facto institutional providers of social protection as well as food and nutrition security for large swathes of the population outside the ambit of existing social protection coverage.

Land reform is a key facet in food insecurity, and is where the political face of the issue is the most visible. Nearly 80% of agricultural households have shrinking landholdings - less than 2 acres. Land reform can be graded in its degrees of intervention, starting from an abolition of exploitative share cropping and day laborer relationships, all the way to a systematic approach to some form of legally agreed redistribution of land ownership or title deeds which would need to be developed and implemented in a genuinely participatory and democratic fashion. This thorny political issue is usually skirted or tabooed, and it is one core reason why food insecurity prevails, and is - counter-intuitively - higher in rural than in urban areas.

A more moderated form is the cooperative approach, such as the expanding movement of community-based food security, which is supported by interventions such as community or village grain bank initiatives. These have been fairly successful in India and worth exploring. For instance, in the state of Andhra Pradesh, villages in India's 'hunger belt' were found to be surprisingly food secure even during the crippling drought of 2001-2002 and despite these villages being poor and consisting largely of SC/ST households.

They were able to overcome individual food insecurity because women from these villages organized themselves into farming community-groups (sanghams) to develop pragmatic solutions that included inter alia: crop rotation and inter-cropping to promote biodiversity, promotion of local variety coarse grains inured to dry and arid soil conditions, cultivation of millets, pulses, fruits and vegetables. The absence of chemicals in this agricultural system creates an abundance of "uncultivated foods" such as greens, tubers and small wild animals

that can contribute between 40-100% of household food requirements (Inter Pares, 2004). These experiences illuminate that food security is possible through innovative 'group based' or 'community based' solutions without necessarily sacrificing biodiversity (Agarwal, 1994).

Similarly, there has been a positive impact of NREGA in those states where it is working – day wage rates are improving and so incomes of the landless seem to be rising while distress out-migration has also been arrested (Planning Commission, 2009). At the same time the NREGA has also been credited with developing productive social and rural infrastructure (Dreze, 2008). The full potential of this program is stymied by corruption, but nonetheless it is the first beginning to tackle the structures that create and perpetuate food insecurity.

A most recent initiative by the government enshrines the right to food as a legal prerogative (The right to Food Security Act 2010). The right to food act is one in a series of innovative 'rights based' bills, where India is globally a leader, perhaps together with South Africa and Brazil in the area of rights based policies which and – at least conceptually – are justiciable entitlements that citizens can claim from their government in courts. India has made a huge contribution to the awareness of hunger and to the policy discourse on food and nutrition insecurity. The right to food campaign has been instrumental in India in fundamentally reshaping policy discussions. Driven by civil society and intra-party politics the Indian government has enacted certain rights such as a right to a midday meal, education, a right to employment and minimal social security in rural areas, and a right to information. These rights cohere to make a dent in the right to food and in approaching structural food security.

Nevertheless, in its present form, and quite correctly so, the Right to Food Act (RTFA) has raised considerable criticism from several quarters: first there are skeptics concerned that enshrining as a law that which is impossible to deliver is not a good idea, it only adds to the list of laws being violated and debases the value of a right. But a more strident objection to this bill has come from the right to food campaign in India whose proponents argue that the bill in its current form is a 'minimalist' farce because it ignores an apex court order for a higher entitlement and promises as a 'right' a set of *reduced* entitlements to what people were already getting.

By targeting BPL families only the bill ignores the 'right to food' for non-BPL families and does not recognize multiple entitlements to food, especially for women and children, and other vulnerable groups like the ST/SC households, people living with HIV/AIDS, and the elderly. It leaves the absurd identification and distinction between the poor, very poor, hungry, anemic, malnourished and destitute up to state officials and the fulfillment of certain qualifying criteria that is bound to be subjective and antithetical to the principal of an inalienable entitlement.

**Box: Five questions regarding targeting**

Targeting has a dangerously seductive appeal. Claiming to be resource strapped, the government is averse to a Universalist approach, arguing that it is unable to ensure access to adequate food and nutrition to every person in need, so it must direct its resources to the 'most deserving'. It is also argued that universalizing food security risks that the rich or more influential and powerful

appropriate the lion's share of the resources, leaving the problem unresolved – or even exacerbated.

Nevertheless, the government's attempt to deliver targeted programs in key sectors such as employment and livelihoods, nutrition, education and health has oiled the fires of a lively debate in India. The sheer scale of the issues, the public policy instruments and resources required, and the prevalence of ineffective state institutions, especially at the grassroots levels, implies that serious issues of justice and democracy are being sacrificed on the altar of 'affordability'. Some questions await an answer:

First, can a right based on targeting be considered a right at all? An Indian citizen's right to food security stems from the Directive Principles of State Policy that guide the Constitution of India, and cannot be accorded by virtue of belonging to a calibrated list constructed by the state. It violates the principles of universality and of self-determination inherent to a human right.

Second, can the challenge of food and nutrition insecurity be genuinely resolved if the voices and the interests of the most vulnerable are not central in discourses on government policy. This would require affirmative action on multiple domains -political, social, economic – as well as empowerment and transformation of decision-making processes.

A third question is under which democratic and legal criteria can a government or the state select the 'deserving' or the 'target' group in the widening and deepening milieu of multidimensional deprivations? The Right to Food Act applies an unrealistic calibrated distinction between the very poor and the poor and so on. How does it determine a 'just' or 'equitable' distribution of food (Sen, 2009)?

Fourthly, is it not time to discard the neo-classical obsession with 'affordability' and 'fiscal sustainability'? What is considered 'affordable', or 'sustainable' in social policy expenditures should be the outcome of 'reasoned' social discourse and not based on a prescription of an accounting or economic equation, or ceilings on fiscal budgets or debt to GDP ratios. Sophisticated sustainability and economic costs need to factor the costs of purposely excluding some of the vulnerable by design (exclusion errors) as well as the cost of including those who are not 'deserving' (inclusion errors). Notions of sustainability should be evaluated over a longer time frame to truly capture the enduring impact of social protection policies whose impacts are both immediate as well as long-term.

Finally, why does the government consider there are not enough resources to implement universal rights based programs – at least in relation to basic needs? Why is there not enough 'money' or 'grain'? Is it not possible to raise 'money' – government resources - by reducing tax subsidies or exemptions benefiting the wealthiest households and corporations, or by raising taxes and the tax to GDP ratio? And in real terms: is the current stock of grain not sufficient to provide all Indians with food and nutrition security. If not, why not?

A far more progressive bill – such as one specifying a universal entitlement to food for all citizens - could have ensured food security for all. Some of the best outcomes for the PDS are in states where access is near universal – Kerala and Tamil Nadu. This is not 'unaffordable'. Preliminary estimates suggest that if universalized, the food subsidy bill would not inflate by more than Rs.50,000--100,000 crores (at Rs. 3/kg, Jha and Acharya, 2010) – between 1-2% of GDP. As the experience of some states have demonstrated, it is not that difficult given the political commitment to improve grassroots institutions that implement these programs.

This rights based movement needs to be seen in the context of policies and interventions to address and redress systematic social exclusion which causes food insecurity as a component of structural multidimensional poverty. The necessary policy measures range from affirmative action at the macro, meso and

micro level in both the political and social domains. Again, policies are in place in India, such as the reservation system to enable women's participation in the panchayats, or the quota system or selective school stipends for students from socially excluded communities ("SC/ST"). There are also proposals for much-needed affirmative action in the private sector (Thorat et al 2005). These processes are important, as in the longer term, they will enable the excluded to claim and assert their rights – including the right to and the requisites for food and nutrition security.

Last but not least, macro and meso level policies need to be cognizant of the fact that food insecurity is often "internalized" and reproduced at the community, household and personal level. Behavior change is therefore needed to initiate change in intra-household and intra-community behaviors. The most harmful of these is gender based discrimination and violence, which systematically and in some ways deliberately excludes girl children and adult women from food and nutrition in the household. Similarly, communities practice systematic social exclusion vis à vis castes or ethnic groups considered hierarchically inferior (and labeled, in the most appalling language as "backward" or "tribal"), excluding them from opportunities to earn the income and have the assets and resources to be food secure.

### **Regional and global measures for food and nutrition security**

The food and fuel price crisis of 2007/2008 brought into focus the international ramifications of food and nutrition insecurity in numerous ways. Increasing demand for grain-intensive foods such as meat in the affluent segments of China and India put pressure on food stocks. The rise of bio-fuels grown on lands hitherto used and the increasing use of land for construction put pressure on arable land for food crops. In addition, and unlike the massive food price rise of the mid 70's, commodity price speculation was seen as one of the main drivers of food prices in the recent crisis. A definitive outcome of recent analyses (UNCTAD 2009b) has been the recognition of the speculative role of commodity trade in driving up food prices. Falling food stocks in conjunction with financial market failures and housing market collapses pushed funds into commodities including food. Panic export-controls and other nationalist policies (procurement, distribution and price setting) further exacerbated the impact of the price spike by curtailing net supply from regional markets. In 2008, India's decision to ban exports of non-basmati rice squeezed world trade in rice by nearly 10% as global trade fell from 31.3 million metric tons estimated in 2006 to less than 28.2 million metric tons by 2008. The resultant international price increases forced many households in neighboring countries such as Bangladesh and Nepal, both low-income net food-importing countries, to adopt drastic coping measures as the search for affordable food dominated all other decisions.

In another manifestation of speculative preemption, developed countries and private corporations are rapidly venturing on land in developing countries ostensibly in the interest of national food security. This current 'land grab' phenomenon is controversial for a variety of reasons, including the complete lack of any regulatory control, a mismatch with host nations' socio-economic and sustainable development priorities, and most critically, the actual or potential displacement of populations and a violation of their human rights (see Special

Rapporteur on the right to food, 2009). There is a risk of destabilization and open conflict as rural populations, most often small farmers, the landless, and pastoralists lose control over their lands by the arrival of these “big players”.

- Indian companies have acquired an estimated 350,000 hectares in Africa for agribusiness, including land in Sudan and Ethiopia – both countries with well-known and endemic hunger problems of their own. Indian companies in Myanmar, Indonesia, Malaysia, Paraguay and Uruguay have also acquired Land. The driving force behind this land acquisition is “food security” for India, as the approach is to grow pulses, oilseeds and sugarcane in these countries and export back to India at concessional duties. India here follows a trend set by other countries: South Korea, China, the Gulf States, Sweden and Libya are also acquiring agricultural lands. Target countries include Cameroon, Ethiopia, Madagascar and Zambia (GRAIN, 2008).

Threats to global and individual food and nutrition insecurity need a response that is beyond India---and at the same time, India could play a progressive role via its important position in the G20 and its pivotal influence in the South Asian Association for Regional Cooperation (SAARC). Regional and global cooperation are needed to regulate financial speculation, minimize the negative impact of cross-border large-scale land acquisitions, and find innovative approaches to solve not merely national-level, but regional and global food security challenges. There needs to be a twin focus on scientific research around “new-green” agricultural productivity on the one hand, and a rights based discussion framework of universal food and nutrition security on the other. Interestingly, this approach points to a possibly transformative direction: food security, employment and decent work, and social protection are highlighted as interrelated policy directions in both the outcome document of the UN General Assembly High-level Panel on the MDGs (UN General Assembly 2010) and the Seoul outcome document of the G20, which both emphasize the need for investment in agriculture.

### In closing

Food and nutrition security is a basic human right. It is achievable and affordable in India – and it is an urgent necessity. Many of the policies needed – basic social protection provisions such as those falling under the PDS, the NREGA, the angandwadi and school meal systems – and some forms of affirmative action – such as reservations - are in place, but do require a genuinely inclusive, empowering approach and more public resources. Other policies are emerging – such as a sustainable, “new-green” agriculture policy, new industrial policy approaches, and movements for decent work, or for affirmative action in the private sector. Other needed policy changes will be more painful and will need to lead to a change in social exclusion acts and behaviors at the personal and the political level, and to tackle, and make more equitable, incomes, the access to assets, and the control of power, so that economic growth and social justice converge. The specter of hunger in high-growth, resource-rich India will drive these processes and can help the different policy areas – in India and also at regional and global levels - cohere to ensure universal food and nutrition security.

## References

- Agarwal, B 1994. A field of one's own. Cambridge University Press.
- Asian Development Bank (ADB) 2010. Asian Development Outlook (ADO). Manila. Philippines.
- Bhandari, L; Zaidi, L. 2004. Reviewing the costs of malnutrition in India. Department of Women and Child Development. Government of India. New Delhi. India.
- Basu, K. 2010. The economics of foodgrain management in India. Chief Economic Advisor. Government of India
- Bonnerjee, A; Koehler, G 2010. The 3F crises and Impact on South Asia. UNICEF Report 2010. Bonn. UNICEF Komitee Deutschland
- Bonnerjee, A; Braithwaite, J; Subbarao K 1997. Safety Net Programs and Poverty Reduction: Lessons from cross-country experience. World Bank. Washington DC. ISBN 9780821338902
- Braun, von Joachim; Ruel Marie; Gulati, Asok 2008. Accelerating Progress toward Reducing Child Malnutrition in India. A Concept for Action. IFPRI.
- CLRA 2009. Call to Action: Hunger, Under-nutrition and Food Security in India. Policy Brief Series No. 7. New Delhi. India
- Deaton, Angus; Dreze, Jean 2009. Food and Nutrition in India: Facts and Findings. Economic & Political Weekly. Vol. XLIV No. 7. India.
- Dreze, Jean; Sen, Amarta. 2002. India: Development and Participation. New Delhi. Oxford University Press.
- FAO 2009. Food Security Statistics. <http://www.fao.org/economic/ess/food-security-statistics/en/>
- FAO 2010. GIEWS Country Brief: India.
- Food Corporation of India (FCI) 2009. Note on Distribution of Food grains under Public Distribution System and Other Welfare Schemes. Government of India.
- Gaiha, R; Kulkarni, V; Pandey, M; Imai K 2009. On Hunger and Child Mortality in India. ASARC Working Paper 2009/04.
- Ghosh, Jayati 2010. Poverty reduction in China and India: Policy Implications of recent trends. DESA Working Paper No. 92. ST/ESA/2010/DWP/92
- Gopaldas, Tara 2006. Hidden Hunger: The Problem and possible interventions. Economic and Political Weekly, 41 No. 34. India
- Government of India (GoI) 2006. National Guidelines on Infant and Young Child Feeding. Ministry of Women and Child Development. New Delhi. India.
- Government of India (GoI) 2007. Economic Survey 2009-2010. Ministry of Finance. New Delhi. India
- Government of India (GoI) 2008. 11th 5-Year Plan. Vol 1 and Vol 2. Planning Commission. India.
- Government of India (Go) 2009. Millennium Development Goals – India Country Report 2009. Central Statistical Organization. Ministry of Statistics and Program Implementation. New Delhi. India
- GRAIN 2008. Seized! The 2008 land grab for food and financial security. GRAIN briefing. [www.grain.org/go/landgrab](http://www.grain.org/go/landgrab)

- Himanshu 2007. Recent Trends in Poverty and Inequality: Some Preliminary Results. *Economic and Political Weekly*, 10.
- Institute of Development Studies (IDS) 2009. Lifting the curse: Overcoming Persistent Undernutrition in India. Haddad, Lawrence and Shushila Zeytlin, editors. *IDS Bulletin* 40.4. U.K. [www.ids.ac.uk](http://www.ids.ac.uk)
- IFPRI 2009. International Food Policy Research Institute. India State Hunger Index 2009. Deutsche Welthungerhilfe.
- IFPRI 2010. International Food Policy Research Institute. Global Hunger Index. Deutsche Welthungerhilfe. <http://dx.doi.org/10.2499/9780896299269GHI2010>.
- Indian Express 2010. 8th September.
- IMF 2010. International Monetary Fund, World Economic Outlook. October 2010. Washington, DC. [www.imf.org](http://www.imf.org)
- Institute of Applied Manpower Research 2009. All India Report on Evaluation of NREGA: A Survey of Twenty Districts. New Delhi. India.
- Jha, P; Acharya, N 2009. Universalizing the PDS. How much does it cost anyway? *India current affairs*. <http://indiacurrentaffairs.org/universalising-pds-how-much-does-it-cost-anyway-praveen-jha-nilachala-acharya/>
- Menon, P; Deolalikar, A; Bhaskar, A 2009. India State Hunger Index. Comparisons of Hunger Across States. IFPRI. Welthungerhilfe. Washington, DC. USA
- National Family and Health Survey 2005-2006. NFHS-3. India. Mumbai. IIPS.
- National Nutrition Monitoring Bureau 2002. Diet and Nutritional Status of Rural Population. Hyderabad. National Institute of Nutrition.
- National Rural Employment Guarantee Act (NREGA) 2005. Government of India.
- National Sample Survey Organization 2001. Nutritional intake in India 1999-2000. Ministry of Statistics and Program Implementation. New Delhi. India.
- National Sample Survey Organization (NSSO) 2007. Round 61. Summary Report. Ministry of Statistics and Program Implementation. New Delhi. India.
- NSS 2005. Perceived Adequacy of Food Consumption in Indian Households. Report No. 512. Ministry of Statistics and Program Implementation. New Delhi. India.
- Kabeer, Naila 2010. Can the MDGS provide a pathway to social justice? The challenges of intersecting inequalities. *IDS. Sussex*. U.K
- Koehler, Gabriele; Bonnerjee, A 2009. The social services sector in Maldives: Overview and Policy Ideas. UNICEF ROSA. Katmandu. Nepal.
- Koehler, Gabriele; Cali, M; Stirbu, M 2009. Social Protection in South Asia: An Overview. UNICEF ROSA. Katmandu. Nepal.
- Koehler, Gabriele; Toole, D. 2009. The impact of the Crisis on Children: A Policy View from South Asia. *Global Social Policy* Vol 10 (2). UNICEF. Sage Publications. London.
- Patnaik, Utsa 2004. The Republic of Hunger. *Social Scientist*. Volume 32. New Delhi. India
- Patnaik, Utsa 2007. Neoliberalism and Rural Poverty in India. *Economic and Political Weekly*, 42(30).

Piess, J; Thirtle, C 2009. Three bubbles and a panic: An explanatory review of recent food commodity price events. Food Policy.

Ramachandran, K 2006. Nutrition Monitoring and Surveillance. India.

Saxena, N.C 2009. Hunger in India.

Sen, Pronab 2005. Of Calories and Things: Reflections on Nutritional Norms, Poverty Lines and Consumption behavior in India. Economic and Political Weekly. 40(43).

Special Rapporteur on the right to food, 2010, The right to food. Interim report of the Special Rapporteur on the right to food, Olivier De Schutter. UN General Assembly A/65/281. [http://www.srfood.org/images/stories/pdf/officialreports/20101021\\_access-to-land-report\\_en.pdf](http://www.srfood.org/images/stories/pdf/officialreports/20101021_access-to-land-report_en.pdf). Also at <http://www.srfood.org/index.php/en/documents-issued>

Special Rapporteur on the right to food, 2009, Large-scale land acquisitions and leases: A set of minimum principles and measures to address the human rights challenge. Addendum. Report of the Special Rapporteur on the right to food, Olivier De Schutter. UN General Assembly A/HRC/13/33/Add.2. [http://www.srfood.org/images/stories/pdf/officialreports/20100305\\_a-hrc-13-33-add2\\_land-principles\\_en.pdf](http://www.srfood.org/images/stories/pdf/officialreports/20100305_a-hrc-13-33-add2_land-principles_en.pdf).

Thorat, Sukhadeo; Aryama; Negi, Prashant, editors, 2005, Reservation and private sector : quest for equal opportunity and growth. [Jaipur Rawat Publications and Indian Institute of Dalit Studies 2005](http://www.jaipurrawatpublications.com)

Thorat, Sukhadeo 2008, Social Exclusion in the Indian Context: Theoretical Basis of Inclusive Policies. In: Indian Journal of Human Development. Special Issue on Universalization of Socio-economic Security. Guest editor: Ashwani Saith. Institute for Human Development. Delhi 2008. Vol, 2, Number 1. January-June, pp. 165-181

UNCTAD/UNDP 2008, Creative Economy Report 2008. The Challenge of Assessing the Creative Economy: towards Informed Policy Making. Geneva. [www.unctad.org](http://www.unctad.org)

UNCTAD 2009a. The Least Developed Countries Report 2009. The State and Development Governance. New York and Geneva: United Nations. [www.unctad.org](http://www.unctad.org)

UNCTAD 2009b. Trade and Development Report. New York and Geneva: United Nations. [www.unctad.org](http://www.unctad.org)

UN General Assembly, 2010, Keeping the promise: united to achieve the Millennium Development Goal. Draft resolution referred to the High-level Plenary Meeting of the General Assembly by the General Assembly at its sixty-fourth session Follow-up to the outcome of the Millennium Summit. A/65/L.1. <http://www.un.org/en/mdg/summit2010/pdf/mdg%20outcome%20document.pdf>

UNICEF 2010. State of the World's Children (SOWC). New York. USA

UNICEF ROSA 2009. Matter of Magnitude. Kathmandu. Nepal. [www.unicef.org/rosa](http://www.unicef.org/rosa)

UNRISD 2010. Combating Poverty and Inequality: Structural Change, Social Policy and Politics. Geneva: United Nations. [www.unrisd.org](http://www.unrisd.org)

Vaidyanathan, A 2003. Food Consumption and Nutritional Status: A Re-examination Based on Indian Evidence. In: AK Bagchi, M Chattopadhyaya and R Khasnabis (ed.). Economy of the Quality of Life: Essays in Memory of Asok Rudra. Kolkata. India.

Wadhwa Committee 2009. Report of the Justice D.P. Wadhwa Committee on Public Distribution. India.

World Bank 2009. Global Economic Prospects. Washington, DC. USA



World Food Program (WFP) 2007. India – A desk review of the Mid-day Meals Program. Cardiff.  
UK