

Of False Premises, Faulty Reportage and Declining Hunger: Unraveling the enigma

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Civil society groups see Millennium Development Goals (MDGs) as an important advocacy tool to influence and shape policies and programs at Global, national and sub-national level. Provocatively titled, *The World We Want*, the UN post-MDG, post 2015 consultations have taken the global civil society organisations by the storm. But before we delve into post-2015, what happened on the MDG front? And how did we fare on MDG 1? Let us take a pause and discuss India's (the second fastest growing economy, not so long ago) performance.

What are we tracking?

The first MDG goal, Eradicating extreme poverty and hunger, is of special significance.



GOAL 1: Eradicate extreme poverty and hunger

Target 2: Halve between 1990 and 2015, the proportion of people who suffer from hunger.

Indicator 4: Prevalence of underweight children under five years of age.

Indicator 5: Proportion of population below minimum level of dietary energy consumption.

What has been reported against this target?

The official submission of Government of Indiaⁱ, reports only against indicator number 4. Reporting for the period of seven years (between 1998-99 and 2005-06), it shows reduction in proportion of underweight children below 3 years of age from 43 per cent to 40 per cent. Apart from official submission from GoI, there are few other status reports prepared by experts from academic institutions and World Bank (on Bihar)ⁱⁱ. They also have chosen to only report on indicator number 4. Though using longer period of data (1993-94 to 2004-05) they report bleaker picture (see table 1).

Table 1- A comparison of GoI report and other reports on status of underweight children	Government of India	Other status reports
What could be achieved with current efforts in 2015 against target of reducing underweight children to 26.8 percent?	33.3 per cent	40.7 percent ⁱⁱⁱ
Current rate of reduction	3 per cent	0.8 ^{iv} per cent

¹ The authors work on the inter-sectionality of food, nutrition and social protection policies and effective state-citizen engagement. The current article is an updation and expansion of the lead author's M Phil thesis.

Hunger has declined: Assessment or Myth? Myth Busting 1.0

- a) These expert assessments do not match the ground realities. Grass roots groups and networks working with marginalised groups on hunger point towards worsening hunger and nutrition condition^v. They have been periodically documenting and reporting cases of starvation deaths to support these claims. There are several experts who also support their claims with alternative interpretations and use of different data sources^{vi}.
- b) Besides being dated (data source goes back to 2004-05), the official and academic reports are analytically weak and do not care to disclose nor interpret contradicting facts. For instance, they hide the fact that findings of National Family Health Survey rounds show that the trend in under-3 child malnutrition (wasting) increased from 19.7 per cent to 22.9 per cent during 1998-99 to 2005-06. Similarly, severe child malnutrition for children under 3 (below -3 Standard Deviation), increased from 6.7 to 7.9 per cent from 1998-99 to 2005-06.
- c) Curiously these official and non-official status reports are completely silent on Indicator 5 that looks at proportion of population below minimum level of dietary energy consumption. Once we take the dietary energy consumption seriously, we find that hunger and under-nutrition has actually increased over the last two decades. As the UNDP website reports, the proportion of population below the permissible consumption standards of 2,100-2,400 kcal has risen from 64 percent in 1987-88 to 76 percent in 2004-05^{vii}.

Box 1 – Deafening silence of official MDG report on status on Dalits, Tribal, Women and Muslims

The official sources are also silent about MDG 1 status of the Dalits, Tribal, Women and Muslims. Dalit and Tribals, together face 35 and 55 percent higher risk of facing rural poverty and urban poverty, respectively^{viii}. Besides even when they face similar economic, education and health status they experience higher risk of facing hunger and under-nutrition, largely due to inherent social discrimination in public policy and programs for addressing hunger and under-nutrition^{ix}. Similar evidence of discriminatory nutritional outcome for Muslim children (after taking into account other factors) is also demonstrated in Sachar Committee report. Studies also document increasing discrimination over years in addressing certain under-nutrition indicators (1992/93 to 1998/99) with girl, dalit and tribal children being at receiving end^x. The discriminatory outcomes are stronger when these children face more biological vulnerability (eg facing severe under nutrition). With reference to Muslim children, Sachar Committee again reports worrying trends of *sharp increase* in low birth-weight babies in eastern region including Bihar, Orissa and Uttar Pradesh.

- d) Not only proportion of calorie deficient people increased in India, evidence suggests that this trend is contrary to the trend elsewhere in the world. Official MDG reports of neighboring

countries like Nepal^{xi} and Bangladesh^{xii}, which experienced lesser GDP growth, show that over the last two decades they successfully reduced the proportion of calorie deficient population. Similarly, comparable countries like China and Brazil have much higher average calorie intake figures and, unlike India^{xiii}, they were still able to increase their energy uptake. Therefore if the trend is contrary in India, despite higher growth rates, there is reason to get worried and do some introspection.

Box 2 - Freezing standard reference weight for adult men in Recommended Dietary Allowance (RDAs) -2010

The Indian Council for Medical Research (ICMR) Advisory group in 1958 used a reference weight of 55 kgs to recommend dietary allowance for average Indian adult Male. When ICMR advisory group met again in 1989, it increased the reference weight by 5 Kgs, and took a reference weight of 60 kgs, obviously to reflect the standards for taller and healthy adult of new/ next generation. However in 2010, when the ICMR advisory group again met, after a period of unprecedented GDP growth rate, it could not revise the reference weight. The average weight for reference adult male was frozen at 60 kg. An increase in standard reference weight, would have led to higher calorie requirement or at least prevented rate of reduction in RDAs. Such decision at a period, when National Nutrition Monitoring Bureau (NMB) reports have shown increasing overweight among adults in India, reflects the parallel under-nutrition faced by poor. It also shows the bleak aspirations that nutritionists have for the next generation and from current pattern of development. Almost in a retro-fitted legitimisation of the inequity in dietary access and consumption, the RDA was frozen at 60 kgs.

- e) Such introspection becomes very pertinent because the poor and marginalised groups would be severely affected by this calorie deficiency and decline. Even people belonging to poorest 30 per cent households had experienced fall in calorie consumption between 1993-94 and 2004-05. Since these poor would be engaged in heavy work, such reduction in calorie intake would have severe consequences on their health. The next table explains that reduction in calorie intake of poor is also accompanied with decreasing intake of protein. Ironically, calorie and protein deprivation of hardworking families of agricultural labourers and marginal farmers (0-1 hectare) households is much higher than deprivation faced by general population which largely leads a sedentary life^{xiv}. The calorie deprivation not only affects this generation, but it has inter-generational effect. Surveys by National Nutrition Monitoring Bureau show shortfall of 20-30 per cent calorie intake for pregnant and lactating mothers^{xv}. It is important to note that, contrary to the predictions, the poor not only experienced decline in calorie intake they also reduced their intake of protein. Therefore dietary diversification of poor as an explanation of this reduction has to be ruled out^{xvi}. This led to pernicious concept of body consumption when the food intake could not replenish the body heat lost through hard labour and hence the body consumes itself, famishing out the person. Rural India and urban Indian construction sites and traffic signals are dotted with such famished citizenry.

- f) The figure below shows the declining trend in calorie and protein intake of the rural poor in India over a decade, based on NSSO data^{xvii}.

Table 1: Declining Calorie and Protein Intake of the Poorest 30 Per Cent Households (all-India rural)^{xviii}

Average Calorie Intake (Kcal)		Average Protein intake (gms)	
1993-94	2004-05	1993-94	2004-05
1687	1655	47	46

Priced Out! Persistent Hunger: Myth Busting 2.0

There are number of evidences which deserve attention of the policy makers. About time!

a) **Supply side distress revisits?**

The period associated with decline in calorie intake is also associated with decline in per capita food grain availability. Previous gains made in addressing food supply constraints have been reversed drastically^{xix}.

During the last two decades, every five year, average Indian faced reduced availability of food grains^{xx}. The per capita net food grain availability was 480.3 gm during 1987-91 and experienced a secular reduction every five year and reached 440.4 gm during 2007-2010.

Table 2: Staggered reduction over last 20 years
Trend in per person net cereal availability (in gm)

Years (Average)	Per person net cereal availability (in gm)	Per person net pulse availability (in gm)	Per person net food grain availability (in gm)
1987-91	440.7	39.6	480.3
1992-96	439.3	35.6	474.9
1997-2001	423.7	33.6	457.3
2002-06	419.6	32.9	452.4
2007-10*	403.9	36.5	440.4

Note: * Four year average

Source: P. Sainath, *The Food, the Bad and the Ugly*, The Hindu, March 22, 2012.

Even if we distribute the food grains equally among the population, each person will still not meet 480 gm requirement, prescribed by ICMR (2010) for persons engaged in moderate activity.

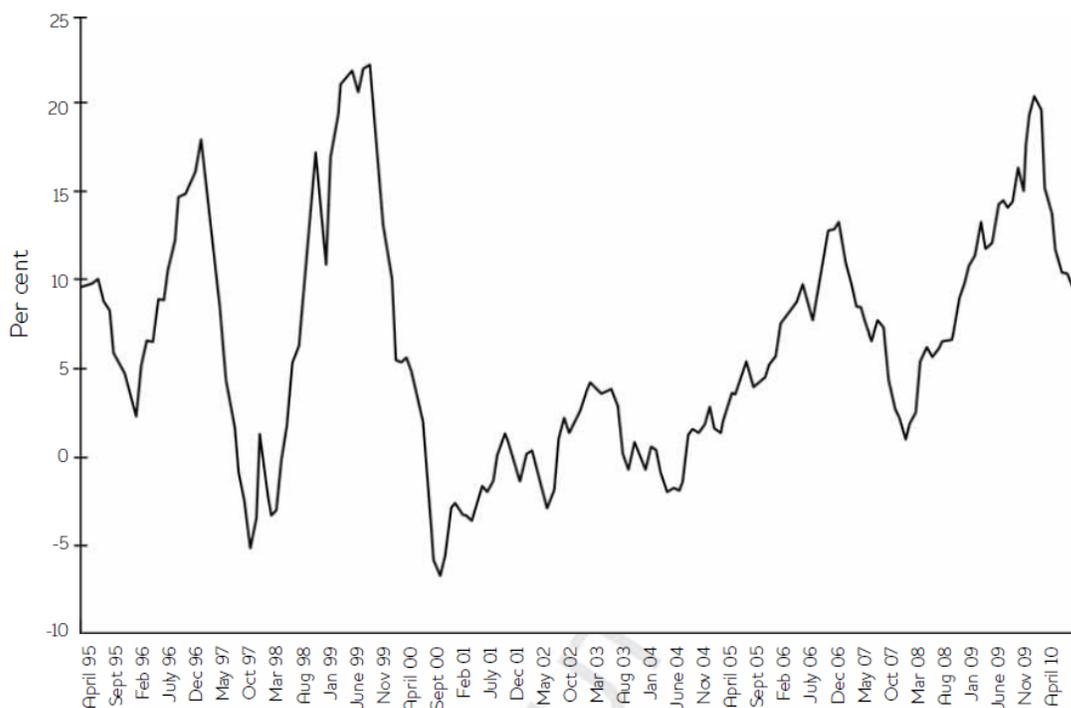
In reality, even these official statistics are overestimates. Since they still include stocks withheld by private traders and large farmers from market for speculative purposes, which will not be actually available in market especially for poor people. Besides the higher food grain demand^{xxi} and food wastage by better-off consumers^{xxii} with 'purchasing power' will further reduce the per-capita availability of the poor.

b) Price led distress shows up?

A worrying trend during the last two decade was co-occurrence of increasing (high) GDP growth rate, reducing (low) per capita food grain availability and volatile double digit inflation that makes food grains access difficult for poor. With declining food grain availability, especially of protein sources^{xxiii} and demand from small emerging section of affluent population in India; the food price inflation would have hurt the 77 per cent of the people in India who live with less than Rs. 20 per day (NCEUS^{xxiv} 2004) and are engaged in a failing struggle to guard their bare minimum level of food grain consumption.

The trend in wholesale price index of food items below shows that latter half of both decades (1990s and 2000s) saw double digit inflation that was highly volatile^{xxv}.

Figure: Month-on- Month Annual Rate of Inflation in Prices of Food Articles (index with base 1993-94=100)



Source: Chandrasekhar, C.P (2012)

The manifestation of inflation at retail price level was much higher. For instance, “at the end of January 2010, which was just after inflation as measured by the Wholesale Price Index had peaked.... The price

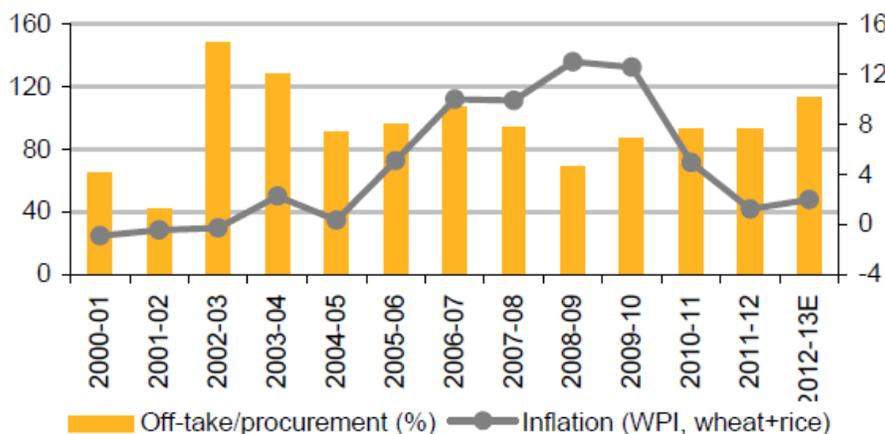
increase had been alarming, with rice prices increasing by nearly half in northern cities and more than half in southern cities. Atta prices had on average increased by around one-fifth from their level of two years previously.”^{xxvi}

Small and marginal farmers, who are largely net food buyers, agriculture labourers, wage labourers in unorganised sector and fixed income earners in urban areas, would be adversely affected with major and sudden erosion of purchasing power^{xxvii}.

The major gainers of such runaway inflation would be (a) merchants, (b) large farmers (often traders), and (c) minuscule affluent section of population, with their income or revenue linked to inflation, who would increase their consumption despite overall shortage and inflation^{xxviii}. The wide divergence between whole sale price index and consumer price index and the widening gap between farm gate prices and retail prices, indicates high profit margins for the private food grain merchants^{xxix}.

The predatory behavior of the speculative trade by merchants is evident by its impact on PDS offtake level (see figure below). PDS by definition is meant to also protect consumers from price shocks/inflation and hence reliance over the same during periods of high food prices is, but natural. However the trend in the PDS offtake data, during the last decade, shows that the delivery of food grains through PDS was lower in years when the foodgrain inflation was at peak. This could be largely because of the price incentive to divert food grains from Food Corporation of India and speculate is higher during periods of high inflation. The figure also shows that, offtake levels are restored to previous higher levels when the market price inflation falls.

Figure- Trend in Food Inflation (wheat and rice) and Offtake Per Cent from Public Distribution System



Source: APMC, CACP, Emkay Research

Apart from the general food inflation, food price spike specific to PDS (by creating APL category), during 1990s, would have had a major knock-out impact on poor. As the table shows, the policy led price rise in PDS food grains during the decade was highest. The growth rate in rice and wheat almost tripled in

1990's than previous decades. Similarly the price rise was almost 50 per cent higher than retail and wholesale market price rise.

Table 3: **Growth Rates in Different Types of Prices of Rice and Wheat (Per cent/annum)**

Commodity price	1980-81 to 1989-90	1990-91 to 1999-00
Wheat		
Wholesale price	5.67	9.48
Retail price	6.62	8.88
PDS price	3.74	11.85
Rice		
Wholesale price	5.24	9.24
Retail price	7.36	8.69
PDS price	5.80	12.96

Source: Chand Ramesh (2005)^{xxx} p-1057

Box 4 – Cash transfers, targeting and subversion of National Food Security Bill

One of the important critiques of the current national food security bill tabled in the Parliament is that it paves way for cash transfers in PDS. Civil society groups have strongly opposed this move, on the grounds that it would blatantly expose poor households to food inflation, increase intra-household discrimination and would pave way to dismantling of food security system in India. There are several other counts where the bill falls short of the expectation of civil society groups. Despite huge mobilisation by the Right to Food campaign, the core demand of universal Public Distribution System is subverted in each consecutive government proposal. The bill opens up avenues for corporate influence on food policy and completely ignores the looming agrarian distress.

Juxtapose this with Chhattisgarh, which has not only enacted a Bill with near-universalised food entitlement but expanded it to include pulses (taking the steep dal price into cognizance).

While the central government sees' the National Food Security Bill as a measure to strengthen and improve existing food and nutrition programmes (PDS and ICDS). Government's prime concern is to address the 'less than required progress' in fight against under-nutrition and to absolve itself of the 'national shame'. However in contrast, the Right to Food campaign recognises the current 'emergency' and sees the bill as a rightful demand that should strike at the 'structural roots of hunger'.

c) Land distress

Studies have shown that access to agriculture land is an important factor contributing to food security of the families of small farmers. Rural households with land have higher food security and farmers with larger land holding size were found more food secure. Incidence of hunger by farm size reveals that

more than half of the landless people and little less than half of landless labour report hunger (see table). Hunger gets significantly increased from 12 per cent among farmers holding more than 4 ha to 49 per cent among landless labours, further suggesting that even a small piece of land can greatly reduce hunger.

Table 4: Incidence of hunger^{xxxii} by farm size in rural India

Land holding category	Percent of population facing Hunger
Land less	49
<0.5 ha	32
0.5-1ha	24
1.0-2ha	17
2.0-4ha	12
>4ha	12

Source: IARI-FAO/RAP study (2001) based on 50th NSS Round(1993-94) quoted in Viramani (2006)

The study further shows that the incidence of hunger gets reduced as one is able to meet even part of her/his dietary energy requirement through growing her/his own home grown food. The household group without any home produced calorie had 49 per cent facing hunger, while only 26 per cent households having 25-50 per cent of home grown calories were facing hunger. The relationship between hunger and land holdings comes out very clearly in subsequent studies. For instance, World Bank study using NSSO data 1999-2000, shows strong relation between lack of cultivable land and calorie deficiency.

If one looks at the figures on land distribution, by the year 2002-03, the benefits of land reforms were literally reversed and the concentration ratio of ownership holding reached almost the same level as pre-reforms^{xxxii} period. The latest available data in 2005 shows increase in rural landlessness by 10.6 per cent between 1993-94 and 2004-05^{xxxiii}. The land deprivation was also accompanied with increasing marginalisation of land holdings, which would adversely affect the marketable surplus of food grains with farmers. The proportion of farmers holding marginal land (.002- 1.00 ha) increased from 62.8 per cent in 1991-92 to 69.7 per cent in 2002-03^{xxxiv}. Within the marginal farmers, the proportion holding 0.01 to 0.04 hectares increased substantially.

This pattern was also accompanied by a worrying trend of diversion of 180 lakh hectares for non-agricultural purposes during the last decade, as estimated by activists^{xxxv}. Similarly during the last two decades when tribal displacement was at its peak, the rate of diversion of forest land went up substantially^{xxxvi}.

d) Agrarian distress and push factors leading to decline in calorie intake

In year 2003, around 42.4 per cent of the small farmer households in India covered by Situation Analysis Survey (SAS) conducted by National Sample Survey Organisation reported they would quit farming, given a choice. These small and marginal farmers consist of 83% of the total farmers in India and around

1/3rd of them are Dalits and Scheduled Tribes. A disturbing finding of SAS was that in 14 out of 18 states, the income for farmer households with land holdings up to 2 hectares was insufficient to meet their own consumption expenditure^{xxxvii}. SAS also found that in course of their farming, nearly half of the farmer households are indebted in the country. Owing to withdrawal of public credit to farmers, the major source of credit to farmers was informal sector, where the interest rates were predatory and ranged between 20 to 38 per cent. While there is no large scale survey capturing farmer's overall plight after 2003, evidences strongly suggest of worsening condition. Between 2005 and 2010, a quarter of a million farmers have killed themselves^{xxxviii}. As approach paper to the twelfth five year plan notes, "with farm debt increasing more than farm incomes, there was deficit of hope that was captured tragically by a spate of farmers' suicide^{xxxix}".

e) Food budget squeeze?

One would agree that it would be naïve to argue that shift of population from rural to urban India indicates better living conditions because urban areas generally have higher income. We know for sure that this is not the case, since the urban livelihood framework depends on a set of socio-environmental factors that requires larger income to barely survive. Therefore despite higher household income in urban areas, the household would still fare poor in terms of nutrition, sanitation and housing compared to a rural household with lower income. Keeping in view this reality, the planners have set a different poverty line cap for urban areas which is much higher than rural areas.

In other words, with different (change in) livelihood frameworks a person will require different basket of goods for consumption that often would require larger income. However, many times, the income increase is insufficient to take care of all items corresponding to the new consumption basket. In such situations, people choose to forgo formal level of consumption standard associated with specific items. The proliferation of urban slums is a classic example of such failures, where poor is forced to squeeze out housing requirements and live in congested, insecure, unhygienic slums in order to manage other crucial consumption items in the basket.^{xl}

Evidences from recent studies indicate that the recent increase in monthly per capita consumption expenditure in rural areas, especially with poor households, is a result of changing livelihood frameworks. However the increase is not enough to take care of all corresponding consumption requirement. This has lead to emergency where the poor had no option but to squeeze out their consumption of food^{xli}. Needless to say that shift to these new distressful livelihood frameworks is due to a push factor, associated with agrarian distress.

For the first time in India, the number of people depending on agriculture came down in absolute numbers during 2004-05 to 2009-10. The casualisation of workforce and resulting livelihood framework that accompanied such changes also had corresponding new consumption requirement. The consumption items which ate up major share of increased monthly consumption expenditure were cooking fuel, transportation, education, health services and rent. Studies showed that expenditure

heads reflecting these items has together increased their share in total consumption expenditure from 19.1 per cent in 1993-94 to 33.6 per cent in 2004-05.^{xlii}

All these consumption items are directly and indirectly results of the new livelihood framework that people had to adopt. Mobility, travel away from domicile and speedy motorised transportation is crucial requirement and direct outcome of casualisation of labour. Similarly such casualisation, along with environmental pressure heightened by agrarian distress, leads to reduced access to common property resources and increased reliance on cooking fuel purchased from the market^{xliii}. The poor working conditions associated with casual work and the need to quickly repair body for daily hard work, again results in increased expenditure on health. At last, the lack of hope to return/ shift to viable farming and the need to escape drudgery of casual labour, results in increased necessity to spend on education.

The changes in livelihood framework, directly resulting in certain new/increased consumption requirement, are also accompanied by regime shift, involving withdrawal and weakening of public provisioning and reliance on costly private provisioning of these services. Studies have shown that these services when provided through private players are much more costly than private provisioning^{xliv xlv}.

Ideally, if the increased income through new/addition work adequately provides for these new requirements, there would be no need for the rural poor to squeeze their food budget. However the fact that poor have squeezed out their cereal consumption and calorie intake, stands evidence to the fact that increase in income is highly inadequate and people are forced to changed livelihood options due to push factors and limited choice.

Despite worsening farming condition with a reduction in share of agriculture in GDP from 30 per cent in 1990-91 to 14.5 per cent in 2010-11 and unprecedented growth in other sectors, , there were not many avenues for willing shift of workforce from agriculture and neither were there avenues to make agriculture viable. During this period, the workforce dependent on agriculture declined at a very slow rate from 65 per cent to 58 per cent. In other words, the option for poor was to move from one distress to other kind.

More recent studies show that the declining trend in calorie and protein intake has continued till 2009-10^{xlvi}. Further studies provide more conclusive evidence, to earlier hypothesis that the reduction in intake is due to food squeeze, where households are cornered to reduce their food intake in order to meet the cost of other essential services like health and education^{xlvii}. Since women and girl children are likely to share larger share of this burden, this is bound to increase child malnutrition in future. Recent studies have also shown that families have attempted to create protective barriers that would safeguard their children from calorie deprivation^{xlviii}. Perhaps the current increase in wasting among the children is an indication of hard times ahead.

Why this deafening silence on hunger: Reason of the State?

More than often, public policy decisions in India are not based on consensual expert opinion. Recent experiences, especially the defence of poverty line by the Planning Commission (also related to MDG goal 1), has shown that despite fierce opposition by experts and popular opinion, few experts can have their way. They not only continue using poverty line at macro level to assess impact of their past policies but can also influence happenings at hamlet level- ending up forcefully excluding non-poor/non-destitute from welfare entitlements.

- A) These experts also ignore contradictory evidences, because it is difficult for them to think of increasing hunger at time when India is experiencing unprecedented 'affluence'. The strong belief in the growth story makes them ideologically averse to contradicting evidences. Even political leaders respond arrogantly to public queries on mass hunger and malnutrition. As they have already assumed that erstwhile poor are currently 'middle class', they cry foul and give strange justifications for current level of hunger and malnutrition, that become selling points in media^{xlix}. Moreover, with the narrative of 'awakened giant' catching up quickly, the policy concerns are looking forward to the next step, where the economic 'giant' will stand up and flex its muscles. There is no time to do unbiased introspection.
- B) Experts, national and global, are not just policy advisers; they are also proponents of certain developmental discourse and models. This reality makes fair unbiased assessment very difficult. Besides, when the story of the 'awakened gaint' is giving a 'ray of hope' globally and shows possibility of addressing hunger within the larger framework of neo-liberal development model, it would be difficult to even acknowledge any possibility of increasing hunger.

Reclaiming the meta-narrative: Shining a light on India's hunger status:

The current policy discourse on hunger, nutrition and poverty is based on the assumption that we are making progress in addressing these over last two decades. Such assumptions, with the questionable evidence base would result in faulty programmes and trap us into technical debates over best ways to improve hunger. There is a need to challenge this assumption and bring a paradigm shift in public policies around hunger. Overall the need of the hour is to:

1. Visibilise hunger and the quantum and scale of the challenge that India needs to tackle, especially in terms of fixing the broken food system.
2. Strengthen the provision of National Food Security Bill as per the recommendations of Right to Food campaign and other civil society groups and taking a leaf out of the recently enacted Chhattisgarh Food Security Act.
3. Feed into the global post-MDG, post-2015 process and kick-start a process of building a groundswell of opinion and critical movement around and independent global goal on Livelihoods and Productive work in post-2015 framework.

4. Keep the discourse on hunger alive especially coupled with runaway inflation and livelihoods insecurity.

However, introducing a counter narrative with data-sets to inject sobriety and honesty in the official planning and programming process, would be the first and most important step forward!

ⁱ GoI (2011a)

ⁱⁱ World Bank (2005)

ⁱⁱⁱ Mundle Sudipto (2011)

^{iv} Ram, F; S. K. Mohanty, Usha Ram (2009)

^v See, NACDOR (2006), Starvation death complaints in reports submitted to Supreme Court by Dr. N.C. Saxena and Harsh Mander, Supreme Court Commissioners (PUCL vs. UoI, 196 of 2001), Starvation death cases documented by members of right to food campaign http://www.righttofoodindia.org/links/field_reports.html, Oxfam India (2011) Report on public hearing on food security in 2011.

^{vi} See Mehat, Jaya and Shanta Venkataraman,(2000); Patnaik, Utsa (2004); Qadeer, Imrana and Anju P Priyadarshi (2005); Sagar, Alpana (2005); Ray, Ranjan and Geoffrey Lancaster (2005); Ray, Ranjan (2007)

^{vii} <http://www.undp.org/content/india/en/home/mdgoverview/overview/mdg1/> accessed on 29 August 2012

^{viii} Radhakrishna, R; C.Ravi, and B. Sambhi Reddy (2011)

^{ix} See a review paper by Mangain Rajendra P and G. Dilip Diwakar (2012)

^x Gragnolati, Michele, Meera Shekar, Monica Das Gupta, Caryn Bredenkamp and Yi-Kyoung Lee (2005)

^{xi} GoN (2010)

^{xii} GoB (nd)

^{xiii} The entire rural population experienced decline in average calorie intake from 2153 Kcal in 1993-94 to 2047 kcal in 2004-05

^{xiv} Mishra, Srijit (2012)

^{xv} Vepa, S. Swarna (2010)

^{xvi} Deaton, Angus and Jean Drèze (2008)

^{xvii} 61st round of NSSO consumption expenditure round conducted by National Sample Survey Organisation (July, 2004-June, 2005),

^{xviii} Kumaran, M (2008)

^{xix} Patnaik, Utsa (2004), 'Rural India in ruins', Frontline, Volume 21 - Issue 05, February 28 - March 12, 2004.

^{xx} The reason behind the reduced availability is not only policy induced production failures but direct role played by Government through hoarding and wasting food grains. Firstly, despite growing demand from peoples' groups, the procurement through FCI in excess of buffer norms is hoarded rather than distributed through PDS. Secondly, an estimated 7 percent of food grains are wasted per annum due to lack of storage space and inefficient transportation.

^{xxi} Persons from richest 10 per cent, consume 27% more cereals than poorest 10 percent who engage in heavy work with demanding intake requirement.

^{xxii} See 'Law to curb food wastage at weddings soon', The Indian Express, New Delhi, Tue Feb 22 2011

^{xxiii} Non-plant protein sources further feeds on available calorie sources.

^{xxiv} National Commission for Enterprises in the Unorganized Sector set up by Government of India in 2004.

^{xxv} Chandrashekar, C.P (2012)

^{xxvi} Ibid, p- 76

^{xxvii} Ibid

^{xxviii} See www.isid.ac.in/~pu/conference/dec_11_conf/.../MichelMorisset.doc, In 2004-05, products that evidently recording a major increase in expenditure include; cold beverages, apple, prepared sweet, other processed food,

ghee, bread, fish, banana, biscuits, salted refreshment, chicken, fluid milk. Besides, food minister reported that 30 percent of food is wasted at weddings in India and could be a major cause for food inflation.

^{xxix} Chandrashekar, C.P (2012)

^{xxx} Chand, Ramesh (2005)

^{xxxi} Using a threshold energy intake of 1 800 kcal/ person.day

^{xxxii} Bhalla, G.S. (2007)

^{xxxiii} Bakshi, Aparajita (2008)

^{xxxiv} Bhalla, G.S. (2007)

^{xxxv} 'Medha Patkar responds' The Hindu, 29 August, 2012.

^{xxxvi} Kothari, Ashish (2010)

^{xxxvii} Bhalla, G.S. (2006)

^{xxxviii} Gol (2007)

^{xxxix} Gol (2011)

^{xl} It is important to note that while such decisions to compromise housing condition and location in favour of other items, is very difficult if the household remains in rural areas. It is certain set of corresponding changes in cultural attributes that makes such change bearable in urban context

^{xli} Mehta, Jaya and Shanta Venkataraman (2000), Patnaik, Utsa (2007), Ray, Ranjan (2007), Kumaran, M (2008), Saxena, N.C (2012), Chandrasekhar, C.P (2012)

^{xlii} Patnaik, Utsa (2007)

^{xliii} Mehat, Jaya and Shanta Venkataraman,(2000)

^{xliv} Qadeer, Imrana (2007)

^{xlv} Rao, K. Sujatha; Madhurima Nundy and Avtar Singh Dua (2005)

^{xlvi} Himanshu (2012)

^{xlvii} Basu Deepankar and Amit Basole (2012)

^{xlviii} Maitra, Pushkar; Anu Rammohan; Ranjan Ray and Marie-Claire Robitaille (2010)

^{xlx} See 'Chidambaram in 'middle class' row', Indian Express, July 10, 2012 and 'Gujarat Girls malnourished as they are scared of getting fat: Modi'- Indian Express, 30 August 2012

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