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India's Malnutrition – A Call to Action

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Why are our nutritional indicators not improving faster, even though India's per capita income has risen from Rs 16,528 in 1998-1999 to Rs 77,431 in 2015-16.

This question has a very simple answer - because the primary causes of under-nutrition and micronutrient deficiency in India, as confirmed by repeated national surveys and studies, have not yet been addressed.

Cause 1 - At least 50 % of our population suffers from chronic proteincalorie-micronutrient deficiency,¹ even after implementation of our major food programmes, viz., ICDS for four decades, Midday Meal Programme for two decades, and the PDS, since the early eighties. This factor needs to be stated at policy and programme levels, for finding solutions and structuring strategies to address this dietary deficit.

Cause 2 - Malnutrition in India is deeply rooted in the inter-generational cycle, linking underweight and under-nourished adolescent girls with underweight, malnourished mothers, who give birth to either low birth weight or malnourished babies. The current nutrition programmes do not address the issue inter-generationally. Between the ages of 6 years to 14 years, the only nutrition programme for the girl child is the Mid Day Meal (MDM) programme, which is really a subsistence level substitute meal worth about Rs 7 per day. The Sabla programme was introduced in 200 Districts in 2011, but has coverage problems. Most importantly, there is no mechanism at the village level that ensures that interventions for the nutritional needs of the girl child, the adolescent girl and the expectant mother operate in continuity and simultaneously – the only strategy that can break the inter-generational cycle in the shortest time.

¹ NNMB-Report of the Third Survey: "Diet and Nutritional Status of Rural Population. Prevalence of Hypertension and Diabetes among Adults and Infants and Young Child Feeding Practices" (2011-12) http://nnmbindia.org/1 NNMB Third Repeat Rural Survey Technicl Report 26.pdf

Cause 3 - There is a huge awareness and information deficit across the population regarding proper food intake and nutritional practices (even within the family budgets), particularly regarding nutritional needs and diets of infants and children, adolescents, and pregnant women. A programme for nutrition education and behavioural change at the community level, particularly for the most vulnerable, such as, agriculture/construction labour families, (where almost all wasted children are found), has not yet been conceptualized and initiated, even though it has been recommended right from the Bhore Report of 1946, and been emphasised in successive Five Year Plans.

Cause 4 - Crucial prescriptions of the National Nutrition Policy, 1993, that could have had positive and sustainable impact on the nutritional status of the general public over time, were not translated into national schemes, viz., 'Fortification of Essential Foods', (though some policy guidelines have been issued about iodine and iron); 'Popularization of Low Cost Nutritious Foods'; bringing about behavioural change through 'Basic Health and Nutrition Knowledge' and 'Communication'; and 'Improvement of Dietary pattern through Production and Demonstration.' Except for fortification of essential foods, the remaining are orphan subjects and do not form the mandate of any Ministry.

Cause 5 - Unlike for most issues of national importance, India does not yet have a national programme to combat undernutrition and micronutrient deficiency. Sectoral programmes impacting undernutrition and micronutrient deficiency are being implemented by several ministries, without an over-arching authority to guide and monitor them, or to fix responsibility, or to evaluate and demand outcomes. The problem is further compounded as on the one hand, responsibility for implementation rests with the State Governments, and on the other hand with different line ministries, both in the Centre and the States. Such complex implementation structures can deliver best when there is an empowered governance mechanism at the Central and State levels, that oversees inter-sectoral planning, coordination and deployment of resources, sets time bound monitorable targets, and fixes accountability for achieving them. However, as of now, we do not have such an inter-sectoral oversight mechanism.

II. The National Nutrition Policy (NNP) 1993 and the need to review it.

The NNP advocates a comprehensive, integrated and inter-sectoral strategy for addressing the multi faceted challenge of malnutrition, which also include vital prescriptions of the previous Five Year Plans. The Policy prescribes the following Direct and Indirect interventions:

Direct Interventions

- Expanding safety nets for children
- Triggering behavioral changes among mothers
- Reaching the adolescent girls
- Ensuring better coverage of pregnant mothers so as to prevent low birth weight
- Fortification of essential foods with appropriate nutrients
- Popularization of low cost nutritious foods
- Control of micronutrient deficiencies among vulnerable groups

Indirect Interventions

- Food security
- Improvement of dietary pattern
- Poverty alleviation programmes and strengthening of Public Distribution System
- Land reforms
- Nutrition surveillance
- Monitoring and research
- Equal remuneration
- Communication
- *Minimum wage administration*
- Community participation
- Education and literacy
- *Improved status of women*

The NNP is one of our soundest policy documents - its principles remain as valid today as they were in 1993, though it does require some updating after 23 years.

1. New data and evidence regarding under-nutrition and micronutrient deficiency has emerged since 1993 from the National Family Health Surveys, 1992-93, 1998-1999, 2005-06, the NNMB Repeat Surveys, 1988-90, 1996-97, 2011-12, and the National Sample Survey Organisation (NSSO) 68th Round, which give us the progressive nutritional and consumption profile of our people. This data needs to be collated and analysed to assess what worked and what did not. A revised NNP must identify the gaps and challenges that persist, and define new and innovative strategies to address them, with a vision of at least the next ten years.

2. New policies impacting the nutrition environment have been

announced since 1993, for example, the National Health Policy 2002 and the National Policy for the Empowerment of Women 2001, (both currently under review). Many programmes stated in the NNP have been restructured and gradually amalgamated, such as National Health Mission, and several new national programmes that impact nutrition have been announced and implemented since 1993, especially in the agriculture and horticulture sectors, and the NREGA and the Food Security Act. These must be incorporated in the NNP. Several research findings have been published regarding the critical importance of safe drinking water and sanitation for improving nutritional status, and the correlation between open defecation and stunting.² These inter-sectoral essential interventions must be included in the NNP.

- 3. As stated above in Cause 4, several important prescriptions of the National Nutrition Policy, 1993, relating to nutrition advocacy, communication and behaviour change, did not get translated into national schemes, and remain critical gaps even today. They need to be re-emphasised in the NNP and conceptualized and converted into programmes with budgetary support.
- 4. Even though the per capita income has more than quadrupled in the last decade, all NNMB Reports, the last being NNMB Technical Report No. 26, 2012,³ continuously show a large dietary deficit in terms of protein, calorie and micronutrients among more than 50% of our population of both sexes and all age groups, despite the ICDS and MDM having been in operation for the last four and two decades respectively. What is worrisome is that early data emerging from the NFHS- 4 Factsheets (2015-16) covering 17 States (Fig. 1), informs us that the percentage of children from 6-23 months receiving an adequate diet ranges from a meagre 5.9% to

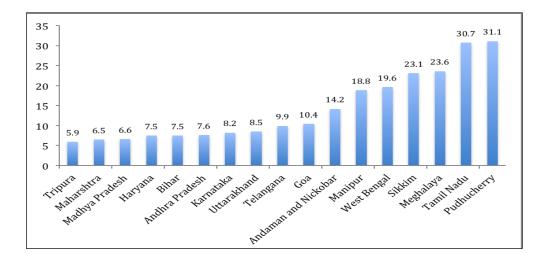
http://sanitationdrive2015.org/wp-content/uploads/2013/09/sanitation-height.pdf

² Spears. D (2013) How Much International Variation in Child Height Can Sanitation Explain?

³ Report of the Third Survey: "Diet and Nutritional Status of Rural Population. Prevalence of Hypertension and Diabetes among Adults and Infants and Young Child Feeding Practices" (2011-12) http://nnmbindia.org/1_NNMB_Third_Repeat_Rural_Survey___Technicl_Report_26.pdf 3rd Repeat Survey, 2011-12

31.1%. This is a serious issue which is the source of under-nutrition in the life cycle of our population that must be addressed through new strategies in the NNP.

Figure 1



- 5. The NNP must also take into account the differentiated levels of development across the country. While some States have made impressive strides in socio-economic and human resource development and improved nutritional levels, other States continue to lag behind. Further, chronic pockets of malnutrition persist in even some of the most developed States. Hence it is necessary to identify these chronic pockets, and target them through flexible customized programmes that address the root causes of their condition. To generate better partnership and awareness, the revised NNP should involve the political leadership in the States in leading the nutrition agenda in their States.
- **6.** The National Nutrition Policy should contain provisions regarding **creation of** an authentic real time data base. This would enable setting of realistic targets and methodology for achieving them at the implementation level, as well as for proper monitoring and fixing accountability.
- 7. There has been a rapid growth of the NGO sector since 1993, and of the private sector after the liberalization of the 90s. A revised National Nutrition Policy should create a platform for the NGO and private sectors, and philanthropies to partner with government in the campaign against malnutrition.

8. The coordinating mechanisms envisaged in the NNP failed to take off, namely, the Inter-ministerial Coordination Committee in the Department of Women and Child Development, overseen by the National Nutrition Council headed by the Prime Minister. The National Nutrition Council never met and the Inter-ministerial Coordination Committee turned out to be non-functional. No sectoral programmes were drawn up in accordance with the NNP, and consequently no budgets were allocated. Effective and functional inter-sectoral mechanisms need to be built up in the NNP which can oversee inter-sectoral planning and deployment of resources, provide coordination, set time bound monitorable targets, and fix accountability for achieving them.

III. Why a National Nutrition Mission

- 1. Ideally, the essential interventions of the NNP should have been woven into a national programme to combat under-nutrition, with a definite implementation template of workable interventions on the ground, a strong overarching coordination mechanism, and a system in place on the ground to ensure that these critical inter-sectoral interventions operate simultaneously with full coverage of target groups. However, this did not happen.
- 2. The Finance Minister announced a National Nutrition Mission in his Budget Speech on July 10, 2014 "A national programme in Mission Mode is urgently required to halt the deteriorating malnutrition situation in India, as present interventions are not adequate. A comprehensive strategy including detailed methodology, costing, time lines and monitorable targets will be put in place within six months." This too, has not happened yet.
- 3. The National Nutrition Mission should be built upon the prescriptions of the National Nutrition Policy, that address the direct and indirect causes of undernutrition and micronutrient deficiency, most importantly bridging the protein calorie micronutrient deficit, breaking the inter-generational cycle, improving coverage of existing nutrition programmes, establishing inter-sectoral convergence and filling gaps, disseminating information and messages for behavioral change at community/family level, setting up real time monitoring systems and

accountability, and providing a template for participation of the private sector, NGOs and philanthropic agencies.

- 4. A national programme by itself would be the strongest advocacy tool for spreading information and awareness about malnutrition in the community and families, which presently lack information about their own affliction. It would also address the information vacuum among community organizations, Panchayat Raj Institutions (PRIs) and field staff of Non Government Organisations (NGOs) and Government, regarding critical issues like preventing child under-nutrition, proper maternal nutritional care to ensure adequate pregnancy weight gain and prevent low birth-weight babies, (first casualties to neo-natal mortality), and nutritional care of adolescent girls, (the most under-nourished in the world), who are future mothers.
- 5. The Nutrition Mission would also trigger capacity creation at all levels and stages of the participation/implementation process from the Village to the State level. It would facilitate creation of research or capacity building institutions at State or District levels (completely missing today), and building an information base in local languages to inform rural populations, NGOs or local institutions about the subject. In most States, vernacular equivalents for terms like 'body mass index' or 'chronic energy deficiency' do not exist.
- 6. The Mission would provide the private sector a platform to complement Government efforts in its campaign against malnutrition, based on its strengths, expertise and comparative advantage; particularly for making available appropriate low-cost energy foods for poor, under-nourished and anaemic children, women, adolescent girls and boys, the sick, aged and infirm, in rural and urban markets. The numbers are large enough to support a viable business proposition, and this is the only sustainable solution for enabling the under-nourished percentage of the population to bridge their macro and micro nutritional deficit for the present generation. There is a huge market vacuum in this respect, unfortunately filled up by forcefully advertised low-cost junk foods and tobacco products, which are consumed by the poor without any

nutritional benefit. The presence of high cost energy foods for women, children and the general population, mostly marketed by global companies, is expanding in the market, and are consumed by middle class and higher income families. Why deny similar, more affordable products to the poor, who are most in need of them, and form the critical mass of the undernourished population of India?

7. The revision of the NNP and drafting and implementation of the National Nutrition Programme would require inter-sectoral coordination between major Ministries, most importantly, Ministries of Women & Child Development, Health & Family Welfare, Food, Agriculture, Rural Development, Drinking Water & Sanitation, and Human Resource Development, and with State Governments. Can the Ministry of Women and Child Development or any other single Ministry in the Government of India effectively steer such mega coordination between these major Ministries which already have very substantive primary mandates of their own?

The Niti Aayog, as the highest inter-sectoral policy making body in the country, must take charge of this long-orphaned subject, and constitute a High Power Committee headed by an eminent Social Scientist, serviced by the Ministry of Women and Child Development, to revise the National Nutrition Policy, 1993 and prepare the blueprint for the National Nutrition Mission within a given time frame.

Questions for discussion:

Placed below is a Table which gives the nutritional status of India's population, based on available data from different sources, namely, the National Family Health Surveys, and the National Nutrition Monitoring (NNMB) Repeat Surveys, recommendations of the National Nutrition Policy, the programmes that presently exist to address them, and the gaps.

In this context, the following questions are posed for discussion:

- 1. How do we address the protein-calorie-micronutrient deficit that persists among children, adolescent girls and boys, (despite the operation of the ICDS and MDM for decades), and Chronic Energy Deficiency among adults, that is amply brought out in the National Nutrition Monitoring Bureau (NNMB) Repeat Surveys [(NNMB Reports of the First, Second and Third surveys; (1988-99), (1988-99), (2011-12)], and the NFHS 3 and 4.
- 2. How do we engineer the convergence of critical indirect interventions, most importantly, Immunization, Vitamin A and IFA supplementation, use of iodized or double fortified salt, safe drinking water, sanitation, and socio-cultural factors, like female literacy, late marriage, feeding children of both sexes equally, at the community level, that are critical to eradicate malnutrition on a long term, sustainable basis.
- 3. How can we overcome the information deficit at the family/community level, and provide basic information and messages regarding proper food intake in the family, even within family budgets; about proper complementary feeding of infants after 6 months, about proper weight gain of pregnant women, so as to prevent low birth weight babies, about adolescent nutritional requirements?
- 4. How can we establish effective real time monitoring mechanisms to track improvement of nutritional indicators, and fix accountability at the village/community levels?

- 5. What is the most effective over-arching inter-sectoral mechanism that can ensure coordination between major Ministries, most importantly, Ministries of Women & Child Development, Health & Family Welfare, Food, Agriculture, Rural Development, Drinking Water & Sanitation, and Human Resource Development, and with State Governments? And how would it work?
- 6. What role do we see for the private sector, for NGOs, community organizations, and philanthropies, in our mission against malnutrition?
- 7. How can we get a strong political statement that combating malnutrition and micronutrient deficiency stands in high priority in the development agenda, both at the Centre and in the States that it will improve the physical and cognitive potential of our human resources for building the nation.

Nutritional Status of India's Population					
Age Group	Nutritional Indicators	Recommendations in NNP, 1993	Government Programme		
0-3 years	NFHS-2 (1998-99) 47 % Underweight 18% Severely Underweight 46% stunted 23% severely stunted 16 % wasted	Nutrition interventions for specially vulnerable groups: Improving growth monitoring between the age group 0-3 years in particular, with closer involvement of the mothers, is a key intervention	ICDS		
	NNMB (2012) 49% infants consume adequate amount of protein and calories				
	NFHS- 4 (2015-16) 5.9% to 31.1%. children from 6-23 months receive adequate diet in the 17 States				
0-5 years	NFHS-3 (2005-06) 42.8 % underweight 48% stunted 19.8% wasted 69.5% anemia	Substantially expand the nutrition intervention net through ICDS so as to cover all vulnerable children in the age group o-6 years	ICDS		
	NNMB (2012) 41.8% Underweight 43.1% stunted 22% wasted				
6-14 years girls	NNMB (2012) 36.9% consume adequate amount of protein and calories		Mid Day Meal Programme; Weekly Iron and Folic Acid Programme, (WIFS)2013 10-19 years		
6-14 years boys	NNMB (2012) 31.9% consume adequate amount of proteins and calories		Mid Day Meal Programme		
14-18 year girls	NNMB (2012) 42.2% consume adequate amount of proteins and calories	All adolescent girls from poor families should be covered through ICDS by 2000 A.D in all CD blocks of the country and 50% of urban slums	Some States have MDM up to High School; Sabla announced in 2011 –		
11-18 years girls	UNICEF, 2011 56% of Adolescent girls aged	Iron supplementation to Adolescent girls shall be introduced	operational in 200 Districts.		

14-18 year	between 11 and 18 years are anaemic NNMB (2012)		Coverage problems WIFS
boys	28% consume adequate amount of proteins and calories	Nil	Some States have MDM up to High School
Adult Women	NFHS-3 (2005-06) 36% with a BMI < 18.5; 55% are anaemic NNMB (2012) 70.7% consume adequate proteins and calories; 34.7% have BMI <18.5	Ensuring better coverage of expectant women: In order to achieve a target of 10% incidence of low birth weight by 2000 A.D, such coverage should include supplementary nutrition from 1st trimester and should continue during the major period of lactation, at least for the first one year after pregnancy. Control of Micro-Nutrient Deficiencies amongst vulnerable Groups:- Deficiencies of Vit. A, iron and folic acid and iodine among children, pregnant women and nursing mothers shall be controlled through intensified programmes. Nutritional blindness should be completely eradicated by the year 2000 A.D. The National Nutritional Anaemia Prophylaxis Programme should be extended and strengthened to reduce anaemia in expectant women to 25% by 2000 A.D.	ICDS – Targeting pregnant and lactating mothers NHM - IFA during pregnancy Comment: In addition to IFA, anemia reduction requires a combination of IFA, safe drinking water, sanitation, deworming, and a sustained consumption of iron rich foods
Adult Men	NFHS-3 (2005-06) 34% with BMI <18.5; 24% are anaemic	NIL	PDS
	NNMB (2012) 63.4% consume adequate proteins and calories; 34.9% have BMI <18.5		

General Recommendations for the population in NNP, 1993

Recommendations in NNP, 1993	Government Programme
Fortification of essential foods: Essential items shall be fortified with appropriate nutrients. for example, salt with iodine and/or iron. The distribution of iodised salt should cover all the population in endemic areas of the country to reduce the iodine defictorcy to below endemic levels. Research in iron fortification of rice and other cereals should be intensified.	The use of Double Fortified Salt (DFS), developed by NIN, has been made compulsory in National Programmes such as the ICDS and MDM
Popularisation of Low Cost Nutritious Food : Efforts to produce and popularise low- cost nutritious foods from indigenous and locally available raw material shall be intensified. It is necessary to involve women particularly in this activity.	No Government Programme
Control of Micro-Nutrient Deficiencies amongst vulnerable Groups:- Deficiencies of Vit A, iron and folic acid and iodine among children. pregnant women and nursing mothers shall be controlled through intensified programmes. Iron supplementation to adolescent girls shall be introduced. The programme shall be expanded to cover all eligible members of the community.	ICDS and NHM; IFA Programme for Pregnant and Lactating women and Children; WIFS
Basic Health and Nutrition Knowledge: Basic health and nutrition knowledge with special focus on wholesome infant feeding practices, shall be imparted to the people extensively and effectively. Nutrition and health education concepts shall be effectively integrated into the school curricula, as well as into nutrition programmes. Nutrition and Health Education are very important in the context of the problems of Overnutrition also.	No Government Programme
Nutrition Surveillance : Nutritional surveillance is another weak area requiring immediate attention. The NNMB/NIN of ICMR needs to be strengthened so that periodical monitoring of the nutritional status of children, adolescent girls, and pregnant and lactating mothers below the poverty tine takes place through representative samples and results are transmitted to all agencies concerned. The NNMB should not only try and assess the impact of ongoing nutrition and development programmes but also serve as an Early Warning System for initiating prompt action.	NNMB Reports come periodically

Research: Research into various aspects of nutrition, both on the Information not consumption side as well as the supply side, is another essential available. aspect of the strategy. Research must accurately identify those who Does MWCD have any are suffering from various degrees of malnutrition. Research should monitoring mechanisms enable selection of new varieties of food with high nutrition value as nodal Ministry for which can be within the purchasing power of the poor. Nutrition? **Communication:** Communication through established media is No national programme one of the most important strategies to be adopted for the effective implementation of the Nutrition Policy. The Department of Women, and Child Development will have a well-established, permanent Communications Division, with adequate staff and fund support. While using the communication tools, both mass communication as well as group or inter-personal communication should be used....in a big way to improve nutrition and health education.... for promoting sound feeding practices, which are culturally acceptable and /based on local food habits... focus on ways and means to combat malnutrition among girl children, adolescent girls and women in the reproductive age group. Community Participation: (a) Generating awareness among the Happening sporadically. community regarding the National Nutrition Policy and its major Not conceptualized into a concerns; (b) involving the community through their Panchayats.... **Community Programme** in the management of nutrition programmes, and interventions related to nutrition....(c) actual participation, particularly of women, in food production and processing activities; (d) promoting schemes relating to kitchen gardens, food preservation. preparation ot weaning foods and other food processing units. both at the home level as well as the community levels: and (e) Generation of effective demand at the level of the community for all services relating to nutrition. Improvement of Dietary pattern through Production and Happening sporadically. **Demonstration**: Improving the dietary pattern by promoting the No programmatic linkage with MWCD production and increasing the per capita availability of nutritionally rich foods