

INDIA

Policy Decision Analysis Brief
Food and Agriculture Policy Decision Analysis (FAPDA)

Draft for comments
May 2011

Mariana.Aguirre@fao.org
Sumiter.Broca@fao.org

Table of contents

I. Introduction	3
II. Objectives and approach of agriculture and FSN policies in India	5
III. Key policy decisions in agriculture and FSN	6
1. Policies that contribute to food availability	6
2. Policies that contribute towards improving food access and stability	8
3. Policies that contribute to food utilisation.....	11
3.1. <i>General interventions</i>	12
3.2. <i>Specific interventions on micronutrients</i>	12
3.3. <i>Specific interventions on pregnant women and lactating mothers</i>	13
3.4. <i>Specific interventions on drinking water and rural sanitation</i>	13
IV Current and emerging policy issues.....	14
V Institutional set up.....	16
1. Ministries involved.....	16
2. Activeness of civil society	16
3. Independent policy monitoring.....	17
References.....	18
Interviews.....	21
Annex 1: Policy implementation table	22
Annex 2: Other programmes/schemes that contribute for food availability	23
Annex 3: List of programmes/schemes that contribute for food access and stabilisation	24
Annex 3: Figures.....	25
Figure 1. Real GDP growth	25
Figure 2: Per capita income growth	25
Figure 3: Agriculture sector growth: value added as percentage of the GDP.....	26
Figure 4: Population growth	26
Figure 5: Food grain availability	27
Figure 6: Food supply	27
Figure 7: Protein and fat supply	28
Figure 8: Food consumption among rural households	28
Figure 9: Insert table of agri wage/per day vs price/1 kg (wheat/rice)	29
Figure 10: Malnutrition in adults by gender	29
Figure 11: Malnutrition in children (0-5).....	29
Notes.....	31

Disclaimer

This working document is does not reflect the views of the Food and Agriculture Organization of the United Nations (FAO) or of its collaborating organizations. The designations employed and the presentation of material in this report do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

I. Introduction

Economic growth in the Indian economy after independence in 1947 passed through three phases. From 1948 to 1950, the focus of economic policy was on recovering from the dislocations caused by independence from Britain and the partition of India into two states. The first Five Year Plan for economic development was launched in 1951 and the first phase of Indian economic growth started in that year: from 1951 to 1981, real GDP grew at an average rate of 3.5 percent p.a., the "Hindu rate of growth" as Prof Raj Krishna memorably characterised it. From 1981 to 2003, the growth rate of real GDP increased to 5.5 percent following the introduction of economic reforms in the 1980s, followed by another wave of reforms in 1991-92. The third phase of Indian economic growth began in 2004, since when the growth rate of real GDP has averaged 8.3 percent p.a. (See Figure 1).

From 1951 to the present, real GDP has increased about fifteen-fold, with most of the increase occurring in the last 30 years, while the population has grown 3.4 times, implying that real GDP per-capita has risen more than four-fold, which is not a particularly large increase in 60 years (See Figure 2 and 4). This has been accompanied by a fall in food insecurity and poverty and a rise in life expectancy. As would be expected, this decrease was fairly small in the period from 1951-1981 when growth in per-capita GDP was slow. However, the period since 1990 in particular, represents something of a paradox. Despite the relatively stronger growth in real per-capita GDP, average calorie consumption has fluctuated around 2300 kcal / person / day since 1990-92¹ (See Figure 2). The prevalence of underweight in children under 3 years of age has declined from 52 percent in 1992-93 to 46 percent in 2005-06. About one-third of women continue to be underweight and more than half are anaemic. Infant mortality has, however, declined, but not as sharply as in other countries.

For its level of real per-capita income, India's levels of per capita calorie intake, child underweight prevalence, adult body mass, and other indicators are somewhat disappointing. Other countries at similar levels of per-capita income have better indicators, implying that India could have done better.

It can be argued that, to some extent, these outcomes necessarily followed from the development strategy adopted by the Indian government, which tended to a) discriminate against agriculture, and b) to the extent that resources did flow into agriculture they flowed into the relatively well endowed areas. As regards the first point, from the 2nd Five Year Plan (1956-1960), India's development strategy was based on the Mahalanobis-Feldman-Domar model of economic growth which called for priority to be given to investment in capital goods, which would be used in turn to make machinery ("machines to make machines") and would ultimately make consumer goods.

This implied that the terms of trade would move against agriculture because the industrial sector was protected, while agricultural exports were banned. The extraordinarily high levels of protection in India (comparable to the Soviet bloc) meant that the Indian rupee became seriously overvalued, thus hurting the agricultural sector, in which India had comparative advantage.

Neglect for agriculture was built into this strategy (See Figure 3). The result was that there was essentially no yield growth in Indian agriculture from 1950 to about 1965. Whatever agricultural growth occurred did so as a result of area expansion. As a result, India's food needs from 1956 to 1966 were met through food aid from the United States under PL 480, which had the advantage of being repayable in rupees. During these years, food aid from the United States was rarely under 4 million tonnes of wheat per year. Almost 75 percent of the foodgrains supplied to the fair price shops came from PL 480 imports.

This phase ended in a succession of bad harvests in the mid-sixties, and a war with Pakistan. Food prices began to rise sharply and near famine conditions prevailed in Bihar and Eastern Uttar Pradesh. From 1966 onward, the U.S. government changed its policy on food aid. It began to insist on payment in dollars for food shipments to India. Much more importantly, it tried to restrict food shipments in order to compel India to negotiate with Pakistan.

¹ Food Balance Sheets. Food and Agriculture Organization. See Figures 6 and 7 for food supply, protein and fat supply.

With the drying up of food aid under PL480, the Indian government was forced, out of desperation, to try to increase food and agricultural production with the aim of achieving self-sufficiency. There were two key aspects of its strategy, however, that had important implications for inequality and poverty.

- First, in increasing agricultural production it focused on areas which were already well endowed with irrigation, transport and storage infrastructure.
- Secondly, because these areas were relatively well endowed, there was no need to develop infrastructure and so the focus was on price policy, i.e. subsidies, and support prices as the means to stimulate agricultural growth. Agricultural growth was confined to the North-Western region from the mid-sixties to the mid-seventies, spread to the Central and parts of the Southern region in the decade from the mid-seventies to the mid-eighties and to the Eastern region in the decade from the mid-eighties to the mid-nineties. Those parts of the country where rain-fed agriculture was important were basically neglected. It was helped, of course, by the development of the new varieties of wheat and rice from CIMMYT and IRRI, which were adapted to Indian conditions by the Indian agricultural research system.

It should be clear that rising inequality was built into the economic development strategy. First of all, it discriminated against the agriculture sector which contained the largest numbers of poor and hungry people in India. Secondly, within agriculture it discriminated against rain-fed areas which is where the really poor were located. Thirdly, promoting agricultural growth through price policy as opposed to infrastructure development tended to favour larger farmers who had a surplus to sell. Smallholders, by contrast, would have benefited more from infrastructure development as it tends to reduce costs of production and benefits everyone because of its nature as a public good. This point leads to another: the neglect of basic public goods, such as universal primary education particularly for girls, provision of basic health services, provision of safe drinking water etc. was an important cause of the failure of nutritional outcomes to improve in the 1990s: food utilization was poor in the absence of these complementary public inputs. Indeed it can be argued that GDP growth in India since the early 1990s in particular, is largely about increasing private consumption, coupled with a neglect of public goods. This had profound implications for the way malnutrition developed.

There is now increasing recognition of the fact that continuing with the existing strategy will not deliver the hoped for reductions in malnutrition. Protection to industry did decline significantly following the reforms of 1991 and it is also a fact that the Indian Rupee is no longer overvalued. It follows that there must have been an indirect reduction in the taxation of the agricultural sector in India in the 90s. However, this is not enough: three key developments need to take place. First of all, the growth strategy needs to be reoriented towards investment in infrastructure and needs to be focused on rain-fed areas in order to increase the incomes of the poor. Secondly, there needs to be an increased focus on public goods provision, particularly of basic education, safe water and food and basic health services. Thirdly, there needs to be an overarching government body to coordinate government policy related to food security and nutrition, partly because of the new legislation on the Right to Food which will require coordinated government response.

The rationale behind the preparation of this “policy decision analysis brief” is to acknowledge the status of policymaking on the areas where Government of India (GOI) is taking decisions regarding agriculture, and food security and nutrition policies. A key aim is to better understand the background and process of implementation of food and agriculture development policies, particularly; those contributing to improve food availability, food access & stabilisation, and food utilisation are revised². This document is organized in 5 sections. Second section gives a background of the objectives and approach of agriculture and FSN policies. Third Section reviews key policy decisions for food and agriculture policies. Fourth section presents the emerging policy issues. An institutional set up is reviewed in the fifth section to provide quick background of the actors involved (government, civil society, international partners) in the formulation, implementation and monitoring of agriculture and FSN policies.

² An initial collection of data was made in order to understand policies' setup. During October 2010, fourteen interviews were conducted with various stakeholders (Government Authorities, International Partners, NGO's, Academia and Public Research Centres) to complete information and introduce diverse perspectives. Other policy decisions that are not directly related to food and agriculture are included, provided that they have a significant affectation on targeted population.

II. Objectives and approach of agriculture and FSN policies in India

Since 1947, after India's territory was divided in two (Pakistan), India's main concern has been to ensure food production and consumption for its population. At that time, agriculture policy focused on domestic food supply. As yet, major policy changes within the sector are delineated by liberalisation of food grain markets. Therefore, current agriculture and food policies have been formulated under two pillars: (a) Improve **access** to food to the most vulnerable population at affordable prices, and (b) Increase **availability** of rice and wheat, in terms of guaranteeing fair prices to farmers. Indirectly, there are different programmes and specific government interventions that aim to improve **utilisation** of food nutrients.

Agriculture has not been in the centre of development strategies. Since mid-1960s, main approach has been characterised by a strong government intervention in food grain markets. After a period of rapid industrializationⁱ supported by protectionist measures (before the Green Revolution era/ early 1960s), the government started to pay more attention to land productivity. Successful measures strengthened agricultural research, and pricing policy ensured remunerative prices to farmers without harming consumers. However during the decade of 1980, changes in the macroeconomic environment (oil shocks, exchange rate and inflationⁱⁱ) pushed toward a more liberal and open economy regime. Unfortunately, agriculture sector suffered from market distortionsⁱⁱⁱ produced by economic reforms implemented for in non-agriculture sectors (industrial mainly). It was until late 1990 when agricultural-sector reforms took place.

In recent years, livestock, poultry, fisheries and horticulture are surging ahead in production growth and will have greater demand in the future (Planning Commission: 2002). Agriculture growth, including crop and animal husbandry, fisheries, forestry and agro processing reached 17 percent in 2009 (WDI:2009). Despite the fact that the share of this sector in the GDP has been declining over the years, its role remains critical. It provides employment to 52 percent of the population.

As regards nutrition, the only National Nutrition Policy in India was formulated in 1993 with a multisectoral perspective. Main areas for government intervention are identified as: (a) *Direct- short term* interventions: focusing on vulnerable groups (safety net recipients, pregnant and lactating mothers, and adolescent girls) and fortification of essential food products and (b) *Indirect – long term* interventions: dietary patterns, income and education. Lack of enforcement at implementation level persists even though in 1995 the Plan of Action delineated the rules for key departments centrally. During the 10th Five Year Plan an initial road map for nutrition was traced with a more comprehensive focus. On the side of food supply, a nutrition orientation was given to food production policies with emphasis on increase in the production of pulses, vegetable and fruit. On the demand side, an emphasis was made to maintain affordable prices for the population. From then on, agriculture and nutrition priorities started to merge slowly towards a more sustainable improvement in nutrition and health status of the population. (Ramachandran, Nutrition Foundation of India).

The share of Central Government expenditure on social services including rural development has increased from 10.46 per cent in 2003-04 to 19.46 percent in 2009-10. Even though future FSN public interventions will be emphasized under social services; the Government needs to look into further convergence of schemes to reduce overlaps at the implementation level (administratively and financially wise).

Indian agriculture has been undergoing an extended phase of transition, due both to the aggregate macro policy changes, as well as the limits of the green revolution having reached faster (Jharwal: 2008a).

III. Key policy decisions in agriculture and FSN

1. Policies that contribute to food availability

Agriculture and trade are the main areas where FSN policies are being formulated and implemented. **Self sufficiency** remains in the centre of government policies at domestic and macroeconomic level (See Figure 5).

Traditionally this objective has been achieved through **price policies**, leaving rural infrastructure (irrigation, agriculture marketing and storage) policies almost unattended^{iv}. **Agriculture research and development** has been affected even though policy pronouncements accord high priority to this investment, it has not been reflected in financial allocations^v (Jha, D. and S. Kumar: 2006).

There are two implicit objectives on foodgrain policy: stabilize supplies and prices both *over time* and *across regions* (Jha et al: 2010; Basu, K.: 2010). Although it is widely agreed that price policy plays a central role in the process of liberalization of agricultural sector (Jharwal: 2008a), public sector market interventions regarding procurement and stock decisions have a key role on the efficiency and sustainability of the entire system (Basu, K: 2010).

In order to ensure remunerative returns to farmers without harming consumers, a 3-institution mechanism was designed:

- **Commission for Agricultural Costs and Prices (CACP)**^{vi} is in charge of determining MSP prices and making recommendation to GOI, who fixes prices annually (price stabilisation). Through this institution, GOI creates the appropriate incentives for farmers to adopt new technologies.
- **Food Corporation of India (FCI)**^{vii} functions as a parastatal body that formulates and implements government's food policy throughout **public procurement**^{viii}. It enjoys significant autonomy in several functions relating to storage, movement, mode of transport, field operations pertaining to procurement, estimation of its credit requirements and negotiations with the Reserve Bank of India (Jha et al: 2010).
- **Public Distribution Scheme (PDS)** ensuring availability of foodgrains (wheat, rice, sugar and kerosene) to the public at affordable prices through a network of Fair Price Shops (FPS). FCI is responsible for storing, transporting and distributing the grains to the PDS (Specific details of how the PDS operates can be found under "Policies that contribute for food access and stabilisation")

Table 1: Public procurement: rice and wheat

2010/2011	Production (millions of tons)	Public procurement ^{ix} (millions of tons)	MSP
Rice	89.19	30	Rs. 10,000/ US\$222 per ton
Wheat	87.7	22.53	Rs. 11,000/ US\$ 245 per MT

USDA Foreign Agriculture Service. Grain update 2010.

For foodgrain availability per person, per day, see Figure 5.

Wheat and rice production following the Green Revolution were the cornerstone of India's food security. This heavy focus on foodgrains and milk neglected other products (such as vegetables and pulses) and subsectors (horticulture and fisheries). Stagnation in production in recent years is a matter of serious concern to the government^x. Presently, the Planning Commission recognises that the private sector investment has been relatively subdued^{xi} in some States. Agriculture sector wise, oversees that the areas where the **private sector will have more space to perform in agriculture sub-sector areas** (such as horticulture, commercial crops, commercial dairy units and fisheries) and consequently increase the positive impact of Public-Private-Partnerships' (PPP) economic performance through major investments.

Currently, overall emphasis of agriculture policy continues on **production support through input subsidies** (seeds, fertilisers, and irrigation) and MSP operations, however two interesting mechanisms are³:

³ For other programmes/schemes, please see Annex 2.

- (i) A centrally sponsored scheme - the National Food Security Mission (**NFSM**) - was launched in 2007-2008 resulting from a National Development Council Initiative that aims to increase the production of rice, wheat and pulses by 2011-2012. Presently is being implemented in 312 identified districts of 17 States of the country (Ministry of Finance: 2010). The approach of NFSM is **to bridge the yield gap through dissemination of improved technologies and farm management practices** (USDA: 2009). So far, implementation of NFSM has been a key to increase productivity in a programmatic way.
- (ii) Other initiatives that aim to boost production are the Rashtriya Krishi Vikas Yojana (**RKVVY**)^{xii}, especially recognised for its flexibility in giving States the power to choose interventions and set targets (Planning Commission: 2010); and Integrated Scheme of oilseeds, Pulses, Oil Palm and Maize (**ISOPOM**); while others focus on **preventing/responding to natural disasters**, such as the National Rain-fed Area Authority (**NRAA**) and the Calamity Relief Fund (**CRF**) and the National Calamity Contingency Fund (**NCCF**).

NFSM and **RKVVY** had proved to be effective schemes that permit the Ministry of **Agriculture to converge on interventions and engage competences** to involve from the central level position with a more diversified implementation approach.

Box1: Trade oriented policies

Trade oriented policies can be easily understood in two levels: (i) *international*, where restriction for exports and imports of food products have been common policy instruments; and (ii) *domestic* where complex systems operate with restrictions in storage, transport, marketing and zoning. Main regulations for domestic trade are contemplated in the Essential Commodities Act (**ECA**) that was promulgated in 1955¹.

During economic reforms' period, agriculture trade had a *residual* position, consequently in the post- liberalisation period a reform on agriculture trade sector was required. So until 1990, international trade in grains was a state monopoly. In 1994/95, the government authorized some private exporting of rice and wheat, which later on led to a rise in domestic prices. Policy reaction since then has been a series of "flip-flop" in the imposition and relaxation of export controls. Throughout late 1990s and early 2000s GOI took steps towards deregulation of both domestic and international trade in agricultural commodities. Three main actions:

- (a) In 2002 issued the "Removal of Licensing Requirements, Stock Limits and Movement Restriction on Specified Food Stuffs Order" which **allowed the private sector to freely trade** (buy, stock, sell, transport, distribute and dispose) any quantity of food grains.
- (b) In 2003 launched **future trading** for grain commodities, wheat and rice which was banned in 2007/08. However, other commodities such as bullion, crude oil, energy and metal products remain in the futures market.
- (c) Adoption of the Model **APMC** (Agricultural Produce Marketing Committee) where the government facilitated direct contracts with buyers and farmers, known as **contract farming**.

Liberalisation of the international trade in foodgrain markets has primarily taken the form of removal of export controls on grains and other agricultural products, and the replacement of quantitative restrictions on imports with tariffs (Jha et al: 2010). During food crisis 2007/2008 GOI **stabilised domestic rice prices** by using **export bans** and **imported wheat** through a public sector agency, the State Trading Corporation (STC) which functioned as the operating body in trade issues for the government. However the private sector raised the price for wheat above MSP to farmers which affected negatively to government stocks. Therefore the government announced a bonus over MSP. Latter modifications allowed the government to influence the open-market food prices. Wheat and rice imports by the government and private trade currently (2010) attract zero import duty.

However, it is felt that past trade policies and government intervention **discouraged the private sector** to involve into further value chain developments in the long term (technology); promotion of competitiveness to improve resource allocation for farmers and better prices for consumers; among others.

From an agriculture extension and research perspective; on one hand, NFSM has played a key role in the **achievement of the production target** of paddy (10 million tons), wheat (8 million tons) and pulses (2 million tons) where key cultivation areas are identified at district level and sponsored at central level accordingly. On the other hand, RKVY incentives states to **increase public investment** in Agriculture and allied sectors through **“conditional central government funds”**; where the release of funds is against the elaboration of a Comprehensive Agriculture Plan (CAP) that integrates production efforts at different administrative levels and “cross-sector”.

GOI has also identified the need to strengthen smallholder farmers in order to increase their bargaining power with the private sector. Therefore, current the strategy focus on **encouragement to organize in groups (Unions) so they are can achieve better deals** with the private sector. This adds up to the support GOI is providing through federal schemes and technology investment.

Policy challenges remain at **more efficient resource mobilization** and **better accountability**.

2. Policies that contribute towards improving food access and stability^{xiii}

Food expenditure as a proportion of total expenditure (Engel ratio) continued to decline since the decade of 1990s. The National Sample Survey (NSS) also points out that this trend is observed for both rural and urban populations (See figure 8).

Policies that contribute towards the improvement of the purchasing power of the most vulnerable population are described in Annex 3. Only the most relevant⁴ are described in this section. Yet, more social protection measures with great significance to income insurance include (i) the **Unorganized Workers’ Social Security Act** (2008, effective since May 2009) and the (ii) **Bilateral security agreements** with Belgium, France, Germany, Switzerland, Luxemburg and Netherlands.

Public Distribution System (PDS) stocks are purchased by the state from the FCI to allocate food (wheat, rice, sugar and kerosene) in private retail outlets^{xiv}, at subsidised prices for consumers. PDS covers all the **safety nets** and its distribution criteria operate through an entitlement scheme. Key policy decisions comprise a shift towards more targeted interventions; increase the supply of wheat and rice; and starting up the process of approval of the National Food Security Bill (NFSB).

Firstly, in 1997, food distribution policy **shifted for more targeted public interventions** TPDS (Targeted Public Distribution System) targeted families are entitled to a “ration card”. Selection criteria^{xv} took into account below poverty line households (BPL) eligible for more benefits (10kg. of rice, wheat of a combination of both preferential prices in a monthly basis) than above poverty line households (APL). In 2000, food grain rations doubled for BLT, and benefits for APL were eliminated^{xvi}. In 2000, the National Sample Surveys (NSS) identified that 5 percent of the population sleeps without two square meals a day. Therefore, a more focused targeting was needed. Antyodaya Anna Yojana (**AAJAY**) was launched in 2000 to respond to this need. It identifies the poorest of the poor families from amongst the number of BPL families covered under TPDS and provides more food grains at a higher subsidized rate (of Rs.2- per kg. for wheat and Rs. 3 per kg for rice)^{xvii}. The scale of the subsidy was initially 25 kg per family/household per month and since 2002 has been increased to 35 kg per family/household per month with effect from 1st April, 2002. The most recent modification under the NFSB (2011) is still under approval. This draft proposal considers a new criterion for food distribution (see details in paragraph below) as follows:

⁴ The criteria to select which policies are relevant consider mainly the population that has been benefited by improving their physical or economic access to food in more less a sustainable way.

Table 2: New criterion for food distribution (to be approved under NFSB)

Targeted rural population	Quantity (monthly)	Staple food and Price
PRIORITY GROUP	7kg per person	Rs. 3/2/1 per kg for rice/wheat/milletts respectively
GENERAL GROUP	4kg per person	No more than half of the MSP.

Source: National Advisory Council.

It also includes general guidelines for urban populations, apply to priority and general households in urban areas together covering at least 50% of the urban population, of which at least 28% shall be in the priority groups (NAC: 2011a)

Knowing that this programme has expanded its coverage three times already,^{xviii} currently 24.3 million families have been covered under the AAY-^{xix}. PDS has been recently “revamped” and improvement efforts are focusing on the TPDS through coordinated efforts among different government organs (Planning Commission, National Advisory Council (NAC), Ministry of Rural Development and Ministry of Consumer Affairs, Food Distribution) both at central and state level.

Secondly, concerned about food inflation, the government recently decided to **supply additional quantities** of wheat and rice to PDS clientele at the government support price, which are still higher than the current sales price under various PDS programs (USDA: 2010a).

Table 3: Food allocation by programme, commodity, amount, price and number of beneficiaries (2009-10)

Food allocation by programme 2009/10	Aggregated quantity Rice/ Wheat (thousands of tons)	Price Rice/ Wheat (Rs. per kilo)	Number of beneficiaries (10 million household)
AAA	6,700 / 3,500	300/ 200	2.43
BPL	11,400 / 6,000	830/ 610	1.06*
APL	6,700 / 13,300	565/ 415	3.38*

Source: Department of Food and Public Distribution, Saxena (2009)

*Latest information registered from The Times of India^{xx}.

Finally, the process of approval of the NFSB has entailed an active debate at different government levels. One of the most relevant topics is the **Universalization of the PDS**. National Advisory Council started deliberations with the premise that India should progressively move towards ensuring universal entitlements to the essentials of life such as food, basic education and health care. Most salient features include (NAC: 2011b):

- Switch **from household-based to individual-based** food entitlements in order to improve consumption standards.
- A **compensation mechanism** to protect “most deprived populations” by (i) distinguishing two categories: priority and general, where a different criteria applies for both for food amount and prices); and in particular situations, (ii) guaranteeing a minimum entitlement for “single-member-households”

However, other discussions where improvements are needed and how to address them follow: (i) diversification of commodities available in the PDS; (ii) decentralization of procurement and storage; (iii) de-privatization of PDS outlets; (iv) doorstep delivery to outlets; (v) revision of PDS commissions; (vi) ICT end-to-end computerization of the PDS^{xxi}; (vii) full transparency records; and (viii) generalise use of Smart cards and biometrics (NAC: 2010, NAC:2011c).

Recent policy decisions made towards employment and income generation encompass the National Rural Employment Guarantee Scheme Act (NREGA) and Swarnajayanti Gram Swarozgar Yojana (SGSY). NREGA alone has improved income security of 43.4 million households and SGSY has reached 3.7 million Self Help

Groups (SHGs) in order to improve skill development and employability of BLP population, especially the young people (See table 4).

Table 4: Programme by allocation and beneficiaries (2009-10)

Programme/ Scheme		Policy instrument	Budget allocated 2009-10 (in Rs crore)	Number of beneficiaries 2009- 10
National Family Benefit Scheme	NFBS	Cash transfer	NA	4.23 lakh
Indira Gandhi National Old Age Pension Scheme	IGNOAPS	Cash transfer	3874.92	15'930,329
	Dhanlakshmi	Conditional cash transfer	5.95 ⁵	79,555 girls
National Rural Employment Guarantee Scheme Act	NREGA	Employment generation	39,100	4.34 crore (employment provided to household)
Swaranjayanti Gram Swarozgar Yojana	SGSY	Income generating activities	30,896.08	36.78 lakh self help groups and 132.81 lakh individuals
Swarna Jayanti Shahari Rozgar Yojana	SJSRY	Income generating activities	515	154,714 individuals
Aam Admi Bima Yojana	AABY	Insurance	NA	81.99 lakh lives
Rashtriya Swasthya Bima Yojana	RSBY	Insurance	NA	97.91 lakh cards issued

Budget for Rural Development Ministry 2009-2010 <http://rural.nic.in/budget/Budgetframe.htm>

Economic Survey 2009-10 <http://indiabudget.nic.in/es2009-10/chapt2010/chapter11.pdf>

Creore= 10 million, lakh = 100 thousand

National Rural Employment Guarantee Scheme Act (**NREGA**)^{xxii} is one of the major **employment generation** programmes in rural areas, which helps households that are BPL to get some minimum employment by providing at least 100 days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work. They are paid in a weekly basis with statutory minimum wage. If work is not provided within 15 days, applicants are entitled to an unemployment allowance: one third of the wage rate for the first thirty days, and one half thereafter. Implementation of NREGA is done by the States in accordance with the State Employment Guarantee Schemes formulated by various States as per the provisions of the Act.

Although NREGA's has been innovative in the introduction of **social accounting processes** by outsourcing evaluation to third sector actors; the introduction of **direct payments** to recipients has reduced the space for corruption; creation of equal opportunities from a **gender perspective**, special arrangements for mothers (childcare) are in place so they can work and benefit from the scheme; and finally the **incorporation of "self-employment"** recipients into the scheme, those who work on their own land and whose farming conditions are marginal.

The current NREGA structure entails a Rs. 100 wage per day (during 100 days) that has set a minimum wage across the country. Implications in the dynamics of labour market are: (i) a slow change towards in the economic attraction centres; (ii) private sector has been forced to increase salaries above market price in order to attract labour force. Nevertheless, in the long run, certain considerations need to be made as (i) improvement for income safety of (targeted) rural population is likely to produce an increase in market prices;

⁵ Amount released during 2008-09 (Ministry of Finance: 2010, page 288).

and (ii) mechanization will tend to substitute human capital. In the medium run, there is the need to introduce these possible scenarios and plan ahead where to re-locate potentially affected labour force in the market.

3. Policies that contribute to food utilisation

According to FAO food security statistics, 237.7 million of people are undernourished (below the minimum level of dietary energy consumption). More than 54 percent of all deaths before age five years in India are related to malnutrition (NFHS-3). An estimated 43.5 percent and 47.9 percent of children under-five years of age are underweight and stunted respectively. Moreover, 46 percent of children under-five years in rural areas are underweight against 33 percent in urban areas; infant mortality rate is 50 percent higher in rural areas (Gulati, A. et al.:2011). (See figures 10 and 11).

While economic growth during the 1990s and 2000s contributed to poverty reduction, India still needs to hasten its battle against poverty and malnutrition (Gulati et al.:2011). Poverty reduction before reforms was associated with sharp reduction in under nourishment and malnourishment and despite faster growth, until 2007, employment generation had been modest and the pace of decline of population below the poverty line (BPL) fairly small.

Nutritional outcomes depend on public inputs (provision of sanitation, sewage, child vaccination, etc.) and private income (household income) because they affect the food absorption⁶. Income growth was not well distributed and investment in public inputs didn't take place as expected: clean drinking water and sanitation facilities, education, health and nutrition services didn't reach the entire population. As a result economic growth has been substantially improved and sustained while –paradoxically- under-nutrition decline rate has been slow (ironically over-nutrition is emerging as a public health problem⁷). Adults in India suffer from a dual burden of malnutrition (abnormal thinness and overweight or obesity). Almost 50 percent of women and 43 percent of men have one of these two nutritional problems (NHFS-3).

Meenakshi et al (2003) observe an apparent divergence between income and calorie poverty where calorie deprivation has increased in rural India. It seems like at all levels of income, the share of the budget devoted to food has declined and Indians consume fewer calories. More than three quarters of the population live in households whose per capita calorie consumption is less than 2,100 calories in urban areas and 2,400 in rural areas^{xxiii}. Ramachandran (2007) points out finding large disparities between intakes of urban and rural populations, different states and different socio-economic groups. Inter-state differences in nutrient intakes persist. The trends above suggest a shift for policy more comprehensive focus on nutrition security and food security.

Overall, **malnutrition programmes remain fragmented among diverse government institutions** where only general and specific type of interventions can be distinguished. At implementation level, some progress has been done to reduce the gap. Key policy decisions took place particularly in **linking supplementation feeding and health care** practices in the Integrated Child Development Services (ICDS); and -despite of its controversial nature-, opening debating spaces for food fortification issues, under the assumption that micronutrient fortification cost effectiveness is higher than any other intervention (Interview with A. Kolhi, World Bank). A third achievement is the **automatic adjustment of the public expenditure in nutritious food distribution schemes**, such as ICDS and Mid Day Meal (MDM) to maintain both the nutrition standards and coverage in children within a high volatility food price environment^{xxiv}.

Current direction on nutrition policy attempts to modify consumption patterns at an early stage (infant and children) in the long run. There is a common understanding that **a multidisciplinary/multisectoral approach (that looks at the education, nutrition, health and food aspects comprehensively)** is the way to go forward. For this reason, in August 2010, the Ministry of Women and Child Development together with the Ministry of

⁶ From 1990-92 to 2005-07, almost all countries in Asia and Pacific region improved their calorie intake per person, per day. For instance, Chinese population increased their daily energy supply per capita from 2500 to 3000 kal per day. Thailand also moved forward from 2250 to 2500. However India remains the same. See Figure 12.

⁷ According to the India Nutrition Profile (INP), almost a third of the total adult population in the 18 states has a chronic energy deficiency. At the other extreme, obesity affects 4–5% of the total adult population (Kumar: 1998).

Health and Family Welfare produced a note on “India’s Nutrition Challenges” where key issues are being raised to push for a more comprehensive nutritional policy agenda.

The following part lists the main policy interventions in health and nutrition in India by general and specific (micronutrients, pregnant women and lactating mothers and on drinking water and rural sanitation).

Table 4: Programme by area of intervention, budget and beneficiaries (2009-10)

Area of intervention	Programme/ Scheme	Budget allocated 2009-10 (in Rs crore)	Number of beneficiaries 2009-10
General	ICDS	5,299.53	8.3 crore children
General	MDM	6940	11.04 crore children
Micronutrient	Anaemia	Included in other prog.	Included in other prog.
Micronutrient	Vitamin A	Included in other prog.	Included in other prog.
Micronutrient	NIDDCP	Included in other prog.	Included in other prog.
Maternity	NBMS	NA	NA
Maternity	RCHP	NA	NA
Maternity	RGNC	3360.84 ⁸	792,950 crèche centres
Drinking water and sanitation	NRDW	41,829	
Drinking water and sanitation	TSC		69 million households, 25769 sanitary complexes, 133,114 aganwadis ⁹
Drinking water and sanitation	NGP		

Sources: Planning Commission and Ministry of Finance.

Note: Crore= 10 million, lakh = 100 thousand

3.1. General interventions

- Integrated Child Development Services Scheme (**ICDS**) it’s a centrally sponsored scheme^{xxv} that addresses a range of children’s needs in one umbrella. Health care, nutrition and pre-school education. It started in 1975 targets children up to the age of six as well as nutrition of adolescent girls and pregnant and nursing women are part of this programme. It encompasses 6 main areas: (i) supplementary nutrition, (ii) immunization, (iii) health check-ups, (iv) health and nutrition education, (v) referral services and (vi) non-formal pre-school education.
- National Plan Action for Children encompasses strategies under (i) promotion of optimal infant and child nutrition (ii) addressing anaemia deficiencies (iii) malnutrition and (iv) micronutrient.
- Mid day meals (**MDM**) provided to every public school^{xxvi} in every part of the country must provide a nutritious, clean hot cooked meal to all primary school children. Meals are cooked with a minimum content of 450 calories and 12 grams of protein and are provided on each working day of the school. The Mid-day Meal Scheme has recently been expanded to cover children in upper primary schools too.

3.2. Specific interventions on micronutrients

According to UNICEF, Vitamin A supplementation the coverage rate for children (6 to 59 months) is 53 percent. Only 52 percent of children are consuming iodized salt^{xxvii}.

⁸ This amount was calculated by Rs. 42,384 per crèche for 792,950 crèche.

⁹ Physical target set on the Eleventh FYP 2007-2012. http://ddws.nic.in/popups/xiplan_bharat%20onirman.pdf

- (d) **National Anaemia Control Programme**^{xxviii} Started in 1961 as a part of National Iodine Deficiency Disorders (**IDD**) control Programme. It distributes 100gr. **tablets of iron and folic acid** to pregnant and lactating women and children.
- (e) **Vitamin A**^{xxix} Active since 1970, it administrates semi-annually massive **doses of Vitamin A** to children between 1 and 5 years old at national level. Implementation is coordinated with state governments.
- (f) National Iodine Deficiency Disorders Control Programme (**NIDDCP**) originally it started in 1962 as the National Goitre Control Programme (NGCP). In 1983 NIDDCP started in phased manner until 1992 when formally adopted the approach of enhancing production, **demand and supply of iodated salt**. As production has been liberalised, NIDDCP tasks are focused on coordination, technical guidance, training and monitoring procurement and distribution.

3.3. *Specific interventions on pregnant women and lactating mothers*

Motherhood programmes are supported by a National Population Policy (**NNP**) from a socio-demographic perspective. Therefore, empowering women for improved health and nutrition policy measures vary on stand-alone programmes or as inter-sectoral programmes (DLHS-3). Following interventions are only for maternity care:

- (g) National Maternity Benefit Scheme (**NMBS**) was introduced in 2001 to provide **nutrition support to pregnant women**. Under this scheme BPL pregnant women are given a one time payment of Rs. 500/- 8–12 weeks prior to delivery. In the year 2005, the Government of India launched the Janani Suraksha Yojana (**JSY**) under the National Rural Health Mission to provide cash incentives for women to have an institutional delivery. The NMBS was then merged into the JSY.
- (h) Reproductive and Child Health Project (**RCHP**)
 - a. **Antenatal Care (ANC)** refers to pregnancy related health care provided by a doctor or any health professional to women during their pregnancy.
 - b. **Institutional Deliveries**, in proper hygienic conditions under the supervision of trained health personnel.
- (i) Rajiv Ghandi National Crèche Scheme (**RGNC**) for children of working mothers provides for supplementary nutrition, emergency medicines and contingencies to children in the age group 0-6 years.

Currently the National Rural Health Mission (**NRHM**) aims to provide an overarching umbrella to the existing programmes including RCHP with integrated disease surveillance (such as malaria, blindness, iodine deficiency, filarial, kala azar, TB and leprosy) in order to improve delivery systems at all levels (Ministry of Finance: 2010).

3.4. *Specific interventions on drinking water and rural sanitation*

Drinking water was out of the influence of the government until 1972-73 when the GOI launch of Accelerated Rural Water Supply Programme (**ARWSP**) which aimed to ensure provision of adequate drinking water supply to the rural community through the Public Health Engineering System. A second generation programme started followed with the Technology Mission in 1986-87, renamed in 1991-92 as Rajiv Gandhi National Drinking Water Mission (**NDWM**), focusing more on water quality, appropriate technology intervention, and human resource development support. The third generation programme started in 1999-2000 introducing a participatory approach (involvement of community in planning, implementation and management of drinking water related schemes), which later scaled up as **Swajaldhara** in 2002. The Rural Water Supply (**RWS**) sector has now entered the fourth phase with major emphasis on ensuring sustainability of water availability while also adopting decentralized approach involving PRIs and community organizations. Currently, the flagship public intervention in this area is called National Rural Drinking Water Programme (**NRDWP**).

Ensuring sustainable drinking water in terms of quality and adequacy represents the major challenge. Another challenge is the integration of RWS with other schemes such as ICDS, National Rural Health Mission and NREGA.

Regarding rural sanitation, the Total Sanitation Campaign (**TSC**) was introduced in 1999 acknowledging a demand-driven approach for individual household latrines, community sanitary complexes, and school sanitation and hygiene education. To encourage Panchayati Raj Institutions (PRIs) to take up sanitation promotion, there is an incentive scheme, Nirmal Gram Puraskar (**NGP**) that awards those PRIs that attain 100 percent open defecation-free-environment.

IV Current and emerging policy issues

Although agricultural development has always been uneven across the regions, during the next decade, performance of Indian agriculture will depend largely on the contributions from the vast rain-fed areas of the country (Jharwal: 2008a). In this line production support through **input subsidies** is expected to continue indefinitely. However during the XII Five Year Plan (FYP), the policy direction will also focus on the identification of areas, regions and crops that have a higher potential to grow (presumably oilseeds, horticulture and floriculture). **Attracting private investment** in agriculture marketing (direct marketing, better market infrastructure and contract farming) is a key priority to further strengthen efficiency³⁰. To improve economic and physical access to food, government will focus interventions through welfare schemes; and the implementation of the Food Security Act. Improving **delivery services and targeting population** effectively remain as cross-cutting priorities.

The current institutional set up to implement all type of policies and especially those with dealing multisector interventions, such as food and agriculture policies is complex. Diversity will always arise within the largest democracy in the world with a multiparty system. During 2000 the Planning Commission reunited 30 field experts to prepare a common vision on the future 20 years on key areas. In this document, Governance related issues tend to follow decentralization process from the formulation of policies to the budget allocation. This has implications in all sectors, raising **challenges to coordinate cross sector policies, such as rural development and natural resources, among different government instances** regarding specific schemes, programmes and policies.

Current policy direction emphasizes strengthening of Panchayati Raj Institutions (PRI's)^{xxx} and development and promotion of district planning. PRI's have three levels: village, block and district. Among their tasks, it is encompassed the development of an economic plan, implementation of schemes and tax collection. There is a particular need to improve delivery mechanisms. **Participation processes are more active and intend to involve States from the beginning stage** so policy formulation is coherent with implementation. Given the institutional infrastructure that is in place, Central Government (GOI) faces difficulties in reaching the bottom on their own (mechanisms in place apply for state level only), there is no legal mechanism in place to "enforce" states to work on their plans of actions.

In regards with policies that contribute to food availability, irrigation, the role of the private sector and the incorporation of risk management instruments that help smallholder farmers to reduce their vulnerability to deal with uncertain events (weather, deaths, etc) still need to be pushed forward in the current agenda.

- Although major changes had occurred in the implementation of irrigation schemes for both irrigated and non irrigated areas; current efforts are not being successful enough to make water available for a second crop; which is crucial to boost production in the agricultural sector. Formulation of rain water conservation policies (through construction of ponds, wells and tanks and also through watershed schemes) is essential.
- From the private sector perspective, regulation of markets is still rigid as the prices are set by the government throughout public procurement and price stabilisation policies at minimum support prices (MSP). Main policy issue is the entrance of the major food chain suppliers to the food market in order to increase competitiveness. Wholesalers oppose and they have the power to obstacle this regulation. There is a policy window for the private sector in food storage and GOI can benefit from allowing private storage facilities manage efficiently warehouses.
- Incorporation of climate change (content and action wise) remains as a challenge for GOI. Although credit and insurance schemes are moving towards a rain-fed agriculture (including flood and drought

³⁰ Weak regulation, enforcement and infrastructure for markets, has created little space (such as the upgrade market infrastructure and support services, modernisation of marketing operations) for another player besides the public sector. Favourable environment should be created for bit private players to operate in food market for price stabilisation (Kaur, S.: 2010; Basu, K.: 2010).

scenarios), there are other areas to attend in order to reduce smallholder farmers' vulnerability against risks, such as crop improvement and research to develop drought –resistant, and high – yielding varieties of seeds.

An accurate targeting of beneficiaries has become a big challenge for GOI, not only to facilitate food access but also to ensure stability of food and agriculture systems. PDS distributes food to BPL population. The number of households is defined as an estimation from poverty numbers in 1993-94, which rises up to 6.52 crore households. At the implementation level, States are to define the number of households in need in rural areas as per guidelines of Ministry of Rural Development^{xxxix} (Interview with NK. Sinha, MCAFD).

Different methodologies do not agree on the “cut-off point” for the poverty line. Simrit Kaur points out that solving out the poverty line issue is not enough to prevent a debate on targeting BPL households; as it is likely to lead to both errors of inclusion (including the non-poor) and exclusion (excluding the poor). The current discussion is **under the universalization of the PDS**.

Although the main challenge concentrates on **producing an accurate number of beneficiaries** (those identified as “not poor” commonly are “nutritionally poor”), the ongoing approval process for the **National Food Security Bill** has entered to debate the quantity of food to be given, through what type of policy instrument and at what subsidized rate “to ensure that the fiscal system is able to withstand the expenditure” (Basu, K: 2010). Many authors agree that public expenditure in PDS is still financially viable between 1 and 1.42 percent of the GDP (Jean Drèze and Awanish Kumar) while others try to orientate discussions towards calorie intakes^{xxxix} (Ministry of Finance: 2010).

Recommendations on the **National Food Security Bill** agreed that legal entitlements on subsidized food grain should be extended to 75% of the population (90 percent in rural areas and 50 percent in urban areas). Priority households will be given monthly entitlements to subsidized prices. Rural coverage will be adjusted state-wise given poverty estimates from PC; however minimum entitlements and coverage will remain unchanged until the end of the XII FYP. (National Advisory Council: 2010). There are contrasting impressions to the agreements reached. While some believe that these recommendations don't represent anything new (distribution system has been operating under similar orientations for long); others believe that up scaling a benefit to a right is good enough achievement. Nevertheless improved processes **to identify and estimate the poor are crucial to correctly target the beneficiaries of safety nets**.

Efforts are being made towards a revised methodology through the launch of the Unique Identification Authority^{xxxix}; even though it is uncertain how long this process will take, it is expected to be finalised by the end of XII FYP.

V Institutional set up

1. Ministries involved

Ministry/ Policy decision area	Availability (production and trade oriented policies)	Access & Stabilisation (consumer oriented policies)	Utilisation (health and nutrition assistance)
1. Ministry of Agriculture	✓		
2. Ministry of Commerce and Industry	✓		
3. Ministry of Consumer Affairs, Food and Distribution	✓	✓	
4. Ministry of Environment & Forests		✓	
5. Ministry of Finance	✓		
6. Ministry of Health and Family Welfare		✓	✓
7. Ministry of Industry and Transport	✓	✓	
8. Ministry of Labour	✓	✓	
9. Ministry of Rural Development		✓	
10. Ministry of Urban Development		✓	
11. Ministry of Water and Resources		✓	
12. Ministry of Women and Child Development		✓	✓
13. Reserve Bank of India	✓	✓	

2. Activeness of civil society^{xxxiv}

International organisations:

- Asian Development Bank
- DARE
- European Commission
- Global Fund
- IFAD
- OPEC Fund for International Development
- United Nations Development Programme
- United Nations Population Fund
- World Bank^{xxxv} through:
 - International Bank of Reconstruction and Development
 - International Development Association

Other governments (bilateral cooperation):

- Government of Germany
- Government of Italy
- Government of Japan
- Government of United Kingdom
- Government of United States

3. Independent policy monitoring

No. Regular monitoring is done by each ministry with their own parameters and criteria which often varies among different organs in both frequency and quality.

References

- **ADB (2010)**. Key indicators for Asia and the Pacific 2010: Rise of Asia's middle class.
- **Banerjee, Abhijit and Esther Duflo (2011)**. More than 1 billion people are hungry in the world: But what if the experts are wrong? In *Foreign Policy* (May/ June).
- **Basu, Kaushik (2010)**. The economics of foodgrain management in India. Ministry of Finance and Government of India, New Delhi.
- **Broca, Sumiter (2004)**. *Comments on draft right to food*. Mimeo.
- **Broca, Sumiter (2010)**. *Comments on agricultural trade liberalisation and food security in India*. Mimeo.
- **Chand, Ramesh (2006)**. India's national agricultural policy: A critique. , Working Paper No. 85, Institute of Economic Growth. New Delhi.
- **Chang, Ha-Joon (2009)**. Rethinking public policy in agriculture: Lessons from distant and recent history. FAO, Rome.
- **Clareson, Mariam, E. R. Bos, T. Mawji and I. Pathmanatha (2000)**. Reducing child mortality in India in the new millennium. *Bulletin of the World Health Organization* 78(10) 1192-1199.
- **Dawe, David (ed.) (2010)**. The rice crisis: Markets, policies and food security. FAO- Earthscan, London, Washington DC.
- **FAO Food Security Statistics**. <http://www.fao.org/economic/ess/food-security-statistics/en/>
- **FAO (2009)a**. Agricultural reforms and trade liberalization in China and selected Asian countries: lessons of three decades. RAP 2009/15, Bangkok.
- **FAO (2009)b**. India. *Country Brief*. Technical Cooperation Department. Rome.
- **Gulati, Ashok; Kavery Ganguly and Ganga Shreedhar (2011)**: Food and nutritional security in India: A stocking exercise. IFPRI- ICAR. New Delhi.
- **Institute of Manpower and Research (2010)**. All-India report on evaluation of NREGA: A survey of 20 districts. New Delhi. http://planningcommission.gov.in/reports/genrep/rep_NREGA_03-08-2009.pdf
- **Jha, Shikha; Srinivasan, P.V., and Ashok Ganesh-Kumar (2010)** "Achieving food security in a cost-effective way: Implications of domestic deregulation and liberalised trade in India" in Ganesh-Kumar, A., Devesh Roy and Ashok Gulati (2010). *Liberalising food grain markets*. Oxford University Press.
- **Jha, Dayanatha and Sant Kumar (2006)**. Research resource allocation in Indian Agriculture. National Centre for Agricultural Economics and Policy Research. Policy Paper 23: New Delhi, India.
- **Jharwal, SM (2008)a**. Glimpses of Indian agriculture. Macro and micro aspects: Volume 1, Macro aspects. Academic Foundation. New Delhi.
- **Jharwal, SM (2008)b**. Glimpses of Indian agriculture. Macro and micro aspects: Volume 2, Micro aspects. Academic Foundation. New Delhi.
- **Kaur, Simrit (2010)**. Financial crisis and food security. Paper prepared for the workshop on Food and Financial Crisis. Bangkok, Thailand.

- **Kholi, Atul (2006).** Politics of Economic Growth in India, 1980-2005. Part I: The 1980s. Economic and Political Weekly: 1251-1259.
- **Kholi, Atul (2006).** Politics of Economic Growth in India, 1980-2005. Part II: The 1990s and Beyond. Economic and Political Weekly: 1361-1370
- **Kumar, Sanjay (1998).** First state by state data in India's nutrition. The Lancet: 352(913): 751-830.
- **Meenakshi J.V and Brinda Vishwanathan (2003).** Calorie Deprivation in Rural India 1983-1999/2000 in Economic and Political Weekly.
- **Ministry of Consumer Affairs, Food and Public Distribution and GOI (2010).** Annual Report 2009-2010. Department of Food and Public Distribution. New Delhi.
- **Ministry of Finance (2010).** Economic Survey 2009-2010.
- **Ministry of Finance (2011).** Economic Survey 2010-2011.
- **Ministry of Health and Family Welfare and GOI (2006).** Revised policy guidelines on national iodine deficiency disorders control programme. Directorate General of Health Services. New Delhi.
- **Ministry of Health and Family Welfare and GOI (2007-2008).** District level and household facility survey (DLHS-3). International Institute for Population Sciences. Mumbai.
- **Ministry of Health and Family Welfare and GOI (2009).** Nutrition in India: National family health survey 2005- 2006 (NFHS-3). International Institute for Population Sciences. Mumbai.
- **Ministry of Human Resource Development and GOI (1993).** National nutrition policy. Department of Women and Child Development. New Delhi.
- **Ministry of Rural Development (2009).** National Social Assistance Programme. <http://nsap.nic.in/nsap/NSAP-%20About%20us.pdf>
- **Ministry of Rural Development and GOI (2010)a.** Outcome Budget of Department of Rural Development 2009-2010. <http://rural.nic.in/budget/Budgetframe.htm>
- **Ministry of Rural Development and GOI (2010)b.** National Rural Drinking Water Programme. Rajiv Gandhi National Drinking Water Mission, New Delhi. http://ddws.gov.in/popups/RuralDrinkingWater_2ndApril.pdf
- **Ministry of Statistics and Programme Implementation and GOI (2005-2006)a.** Highlights: Employment and unemployment situation in India. Report 522.
- **Ministry of Statistics and Programme Implementation and GOI (2005-2006)b.** Highlights: Household consumer expenditure in India. Report 523.
- **Ministry of Statistics and Programme Implementation and GOI (2009-2010).** Annual report. New Delhi. http://mospi.nic.in/Mospi_New/site/inner.aspx?status=2&menu_id=21
- **Ministry of Women and Child Development and GOI (2009).** Integrated child development services scheme (ICDS): Working paper for preparation of State Annual Programme Implementation Plans. New Delhi.
- **National Advisory Council (2010).** NAC recommendations finalized in its meeting held on 23 October 2010. Prime Minister's Office, New Delhi. Source revised on December 16th, 2010. http://nac.nic.in/images/recommendations_oct.pdf

- **National Advisory Council (2011)a.** Note on the draft national food security bill, January 2011. New Delhi. Retrieved on May 13th, 2011. <http://nac.nic.in/foodsecurity/nfsb.pdf>
- **National Advisory Council (2011)b.** Draft national food security bill: Explanatory note, February 2011. New Delhi. Retrieved on May 13th, 2011. http://nac.nic.in/foodsecurity/explanatory_note.pdf
- **National Advisory Council (2011)c.** Feedback received until March 7th on national food security bill and the explanatory note. March 2011. New Delhi. Retrieved on May 13th, 2011. http://nac.nic.in/foodsecurity/feedback_nfsb.pdf
- **Planning Commission (2002).** India Vision 2020. Report of the committee. New Delhi.
- **Planning Commission (2007).** Eleventh five year plan: Rural drinking water and sanitation in the 11th FYP period, excerpts. New Delhi.
- **Planning Commission (2010).** Mid term appraisal of the eleventh five year plan.
- **Planning Commission (2011).** Issues for approach to the 12th Five Year Plan. Full Planning Commission meeting, April 21st, 2011.
- **Ramachandran, Preema (2007).** Nutrition transition in India 1947- 2007. Nutrition Foundation of India. New Delhi.
- **Ramachandran, Preema (2008).** The double burden of malnutrition in India. Nutrition Foundation of India and FAO.
- **Rodrik, Dani and Arvind Subramanian (2003).** The primacy of institutions (and what this does and does not mean). Finance&Development 40(2): 31–34.
- **Saxena, NC (2009).** Modernisation of Public Distribution System in India through Computerization. Supreme Court Commissioners.
- **Supreme Court Commissioner's cpw 196/2001.** The right to life is the right to food. <http://www.sccommissioners.org> Revised on 14-09-2010.
- **Timmer, Peter (2010)a.** Reflections on food crises past. Food Policy 35: 1-11.
- **Timmer, Peter (2010)b.** Behavioural dimensions of food security. Mimeo.
- **The Hindu.** Food Security Act: humungous but welcome challenge. Source revised on December 16th, 2010. <http://www.thehindubusinessline.com/2010/11/01/stories/2010110150261700.htm>
- **The Times of India.** PDS cleansing process: More than 50,000 fake ration cards cancelled in 2009-10. New Delhi. Source revised on September 29th, 2010. <http://timesofindia.indiatimes.com/city/lucknow/PDS-cleaning-process-More-than-50000-fake-ration-cards-cancelled-in-2009-10/articleshow/6549821.cms>
- **Umali-Deininger, Dina L. and Klaus W. Deininger (2001).** Towards greater food security for India's poor: Balancing government intervention and private competition. Agricultural Economics 25: 321-335.
- **UNICEF.** Statistics by country. http://www.unicef.org/infobycountry/india_statistics.html#64
- **USDA Foreign Agriculture Service (2009).** Grain and feed annual 2009. Global Agricultural Information Network: IN9025.

- **USDA Foreign Agriculture Service (2010)a.** Grain and feed annual 2010. Global Agricultural Information Network: IN1011.
- **USDA Foreign Agriculture Service (2010)b.** Grain update 2010. Global Agricultural Information Network: IN1068.
- **Vats, Vaibhav (2010).** Food Security: Interview with Jean Dreze. Tehelka Magazine. Vol (7):44, New Delhi. http://www.tehelka.com/story_main47.asp?filename=Neo61110The_middle_class.asp
- **Vijayaraghavan, K. (2002).** Control of micronutrient deficiencies in India: Obstacles and strategies. Nutrition Reviews 60(5): S73-S76.
<http://onlinelibrary.wiley.com/doi/10.1301/00296640260130786/abstract>
- **World Development Indicators Online** <http://ddp-ext.worldbank.org>. Revised on 31-08-2010.

Interviews

FAO

- Gavin Wall, Country Representative, FAO India
- Gopi Ghosh, Programme Assistant- FAO India

International Partners

- Vincent Darlog, Director IFAD-WFP India
- Kanjali Paintal, Nutrition Specialist, UNICEF
- Dr. Ashi Kohli Kathuria Senior Nutrition Specialist - World Bank India

Government Authorities

- Dr. VV Sadamate Agriculture, Adviser- Planning Commission
- Nitish K Sinha, Director (IC) - Ministry of Consumer Affairs, Food and Distribution
- Dr. BS Bhandari, Directorate of Economics and Statistics/ Department of Agriculture and Cooperation- MOA
- Dr. PC Bodh, Directorate of Economics and Statistics/ Department of Agriculture and Cooperation- MOA
- Dr. Gangaiah, Directorate of Economics and Statistics/ Department of Agriculture and Cooperation- MOA
- Prof. Ramesh Chand, Director -National Centre for Agricultural Economics and Policy Research
- Mukesh Khullar, Joint Secretary - Ministry of Agriculture
- Dr. Shreeranjana Joint Secretary- Ministry of Women and Child Development

Public Research Institute

- Dr. KR Koundal, Research Director - Indian Agricultural Research Institute

NGOs

- Dr. Prema Ramachandran, Director- Nutrition Foundation of India
- Dr. Sunman Sashay, Director- Gene Campaign

Academia

- Prof. Amite Kudu , Centre for the Study of Regional Development- Jawaharlal Nehru University

Annex 1: Policy implementation table

FSN	Scheme/ programme		Sponsored (centralised or decentralised)	Implementation	Financing (public/private/international)	Initial Date	Final Date
Access and Stabilisation	Annapurna	AS	Centralised	Ministry of Rural Development	Public- central gov.	01/04/2000	28/04/2011
Access and Stabilisation	Mid day meals	MDM*		Ministry of Human Resource Development		01/01/1995	Indefined
Access and Stabilisation	National Family Benefit Scheme	NFBS*	Centralised	Ministry of Rural Development	Public- central gov.	15/08/1995	28/04/2011
Access and Stabilisation	National Old Age Pension Scheme	NOAPS*	Central & State Government	Ministry of Rural Development	Public- 50/50 centre/states	19/11/2007	27/04/2011
Access and Stabilisation	National Rural Employment Guarantee Act	NREGA*	Central & State Government	Ministry of Rural Development	Public- 90/10 centre/states	02/02/2006	27/04/2011
Access and Stabilisation	Rural Housing	IAY	Centralised	Ministry of Rural Development	Public- 75/25 centre/states ^{b/}		
Access and Stabilisation	Swaranjayanti Gram Swarozgar Yojana	SGSY	Central & State Government	Ministry of Rural Development	Public- 75/25 centre/states ^{a/}	01/04/1999	28/04/2011
Access and Stabilisation	Targeted Public Distribution System	TPDS*	Central & State Government	Ministry of Consumer Affairs, Food and Public Distribution	Public	01/01/1971	Indefined
Access and Stabilisation	Swarna Jayanti Shahari Rozgar Yojana	SJSRY	Centralised	Ministry of Urban Development	Public- 75/25 centre/states	01/09/2006	31/01/2012
Availability	Decentralized Procurement Scheme	DPS	Centralised	Ministry of Consumer Affairs, Food and Public Distribution	Public- 50/50 centre/states		24/12/2015
Utilisation	National Rural Drinking Water Programme	NRDWP	Central & State Government	Ministry of Rural Development	Public- 75/25 centre/states ^{a/}	01/01/1972	Indefined
Utilisation	Integrated Child Development Services Scheme	ICDS*	Centralised	Ministry of Health and Family Welfare	Public- central gov.	15/12/2008	01/01/2012
Utilisation	National Maternity Benefit Scheme	NMBS*					
Utilisation	National Plan Action for Children	NPAC					
Utilisation	National Programme for Control of Blindness/ Vitamin A	NPCB	Centralised	Ministry of Health and Family Welfare	Public- central gov.	01/04/1976	28/04/2011
Utilisation	Reproductive and Child Health Programme	RCHP	Centralised	Ministry of Health and Family Welfare	International: WB, EU	01/10/1997	28/04/2011

Source: Ministry of Consumer Affairs, Food and Public Distribution, Ministry of Health and Family Development, Ministry of Human Resource Development, Ministry of Rural Development.

*Encompassed and enforced by the Right to Food, Ministry of Rural Development

a/ Except in the case of North Eastern states here it is 90/10 basis.

b/ Centrally Sponsored ongoing programme being implemented throughout the country except Delhi and Chandigarh under which financial assistance is provided to shelterless rural BPL households for construction of their dwelling units. The funds are shared by the Centre and the States in the ratio of 75:25. However, in the case of Union Territories, 100% assistance is provided by the Centre.

Annex 2: Other programmes/schemes that contribute for food availability

Credit and Insurance

Although different interventions have taken place to promote credit and support smallholder farmers; such as the revival of short term Rural cooperative Credit – Rs. 13,596 crore- and the rehabilitation package for 31 suicide-prone districts (Ministry of Finance: 2010); it is felt that the government has not provided enough diversified and sophisticated **credit instruments for the agriculture** sector that can support farmers to reducing risk and vulnerability. The financial crisis adversely impacted the growth rate of the economy which simultaneously led to a credit crunch, and most of the government's measures were designed to revive the stock market and investor confidence, left aside the farmers and agriculture (Kaur, S.:2010).

Increasing frequency and severity of droughts, floods, cyclones and erratic climatic changes accentuate uncertainty and risk in agricultural production and livestock breeding. Amid the most relevant public interventions concentrate in the continuation of the National Agricultural Insurance Scheme (**NAI**), the Coconut Palm Insurance Scheme (**CPIS**); and the Pilot Weather Based Crop Insurance Scheme (**WBCIS**) which has been lowering some administrative costs. All of them combine public-private funds and implementation (Planning Commission: 2010; Ministry of Finance: 2010).

Other relevant policy decisions

Rural Development Programmes operating at village level are not caste neutral, even with positive discrimination (Jharwal: 2008b). **The Forest Right Act^{xxxvi}** (2006) is a significant achievement as it covers a vulnerable population (The Scheduled Tribes and Other Traditional Forest Dwellers) and focus on where little attention was paid in the previous years. Agriculture represents a self subsistence mean for livelihood security, but the lack of entitlements and technical assistance prevents them from benefiting from their community forest resource. This act provides the **restitution of deprived forest rights across India, including both individual rights to cultivated land in forestland and community rights over common property resources**.

Policy issues and future challenges

· Irrigation

Although major changes had occurred in the implementation of irrigation schemes for both irrigated and non irrigated areas; current efforts are not being successful enough to make water available for a second crop; which is **crucial to boost production** in the agricultural sector. Formulation of rain water conservation policies (through construction of ponds, wells and tanks and also through watershed schemes) is essential.

· Role of the private sector

From the private sector perspective, **regulation of markets is still rigid** as the prices are set by the government throughout public procurement and price stabilisation policies at minimum support prices (MSP). Main policy issue is the entrance of the major food chain suppliers to the food market in order to increase competitiveness. Wholesalers oppose and they have the power to obstacle this regulation. There is a policy window for the private sector in **food storage** and GOI can benefit from allowing private storage facilities manage efficiently warehouses.

· Risk management for smallholder farmers

Incorporation of **climate change** (content and action wise) remains as a challenge for GOI^{xxxvii}.

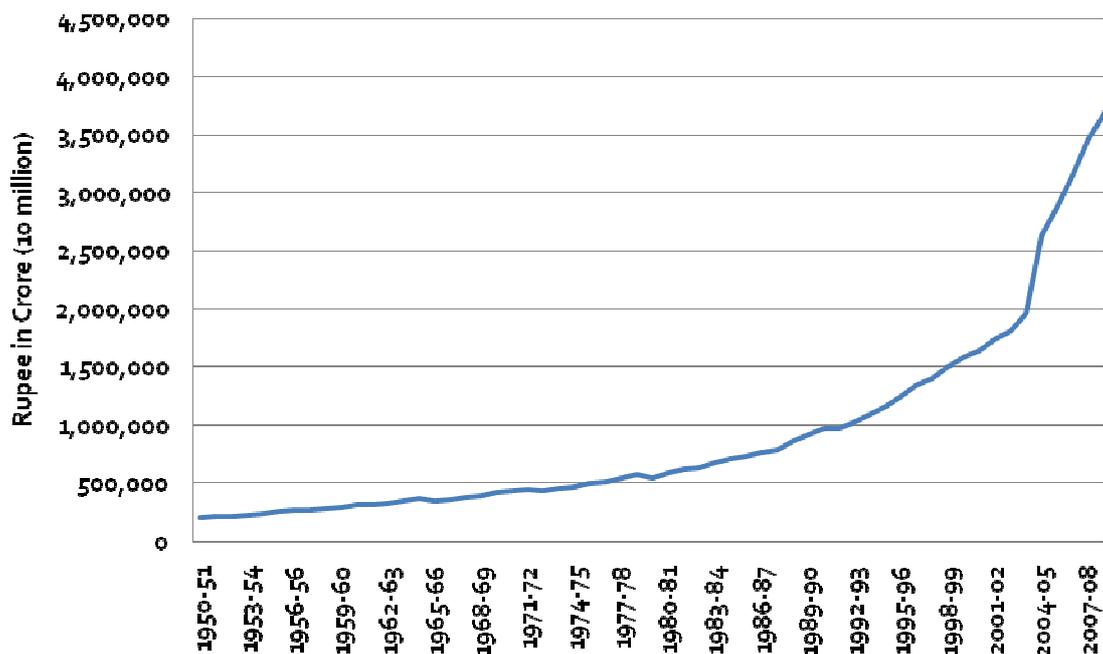
Although **credit and insurance schemes^{xxxviii}** are moving towards a rain-fed agriculture (including flood and drought scenarios), there are other areas to attend in order to reduce smallholder farmers' vulnerability against risks, such as crop improvement and research to develop drought –resistant, and high –yielding varieties of seeds.

Annex 3: List of programmes/schemes that contribute for food access and stabilisation

- (a) In 1997, food distribution policy shifted for more targeted public interventions **TPDS (Targeted Public Distribution System)** targeted families are entitled to a "ration card". Selection criteria^{xxxix} took into account below poverty line households (**BPL**) eligible for more benefits (10kg. of rice, wheat of a combination of both preferential prices in a monthly basis) than above poverty line households (**APL**). In 2000, food grain rations doubled for BPL, and benefits for APL were eliminated^{xl}. In 2000, the National Sample Surveys (**NSS**) identified that 5 percent of the population sleeps without two square meals a day. Therefore, a more focused targeting was needed.
- a. Antyodaya Anna Yojana (**AAY**) was launched in 2000 to respond to this need. It identifies the poorest of the poor families from amongst the number of BPL families covered under TPDS and provides more food grains at a higher subsidized rate (of Rs.2/- per kg. for wheat and Rs. 3/ per kg for rice)^{xli}. The scale of issue was initially 25 kg per family/household per month and since 2002 has been increased to 35 kg per family/household per month with effect from 1st April, 2002. This programme has expanded its coverage three times^{xlii}. With these expansions, as against 25 million families (i.e. 38% of BPL) to be covered, 24.3 million families have been covered already under the AAY (MCAFPD: 2010).
- (b) National Family Benefit Scheme (**NFBS**) provides a "lump sum" **cash transfer** BPL households on the death of the primary breadwinner (member of household whose earnings contribute substantially to household income) between the age group of 18–65 years. The Scheme provides for Rs. 10,000/- to be paid in cash to the family in case of the breadwinner's death. This payment is made after inquiring the surviving head of the bereaved household. This programme is coming to an end in 2012.
- (c) The National Family Benefit Scheme (**NFBS**)^{xliii} targets all poor persons aged 65 years or older and provides a **cash transfer** (Rs. 200/- per pensioner per month). Currently is known as "Indira Gandhi National Old Age Pension Scheme (IGNOAPS)"^{xliiv}.
- (d) Dhanlakhmi **conditional transfer scheme** for girls that fulfil certain requirements regarding birth and registration, immunization and enrolment and retention on schools. It was launched as a pilot project in March 2008.
- (e) Rashtriya Swasthya Bima Yojana (**RSBY**) provides **annual cashless transactions** of Rs. 30,000 through a smart card and targets BLP families (not more than 5 members) in the unorganized sector.
- (f) National Rural Employment Guarantee Scheme Act (**NREGA**)^{xlv} is one of the major **employment generation** programmes in rural areas, which helps households that are BPL to get some minimum employment by providing at least 100 days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work. They are paid in a weekly basis with statutory minimum wage. If work is not provided within 15 days, applicants are entitled to an unemployment allowance: one third of the wage rate for the first thirty days, and one half thereafter. Implementation of NREGA is done by the States in accordance with the State Employment Guarantee Schemes formulated by various States as per the provisions of the Act.
- (g) Swarnajayanti Gram Swarozgar Yojana (**SGSY**) provides **income generating assets** through a mix of bank credit and Government subsidy to bring poor families (Swarozgarues) APL. The programme aims at establishing a large number of micro enterprises in rural areas based on the ability of the poor and the potential of each area. The scheme involves organization of the poor into Self Help Groups (**SHGs**) build their capacities through a process of social mobilization, their training, selection of key activities, planning of activity clusters, creation of infrastructure, provision of technology and marketing support, etc. Under the scheme focus is on the group approach. However, individual Swarozgaris can also be assisted. During 2008-2009, diverse modifications had been formulated in order to expand its coverage^{xlvi}.
- (h) Swarna Jayanti Shahari Rozgar Yojana (**SJSRY**) provides gainful employment to the urban unemployed and underemployed poor by encouraging the **setting up of self-employment ventures** by the urban poor and also by **providing wage employment** and utilizing their labour for construction of socially and economically useful public assets. This scheme was revamped in April 1st, 2009^{xlvii}.
- (i) Aam Admi Bima Yojana (**AABY**) provides **insurance** against natural and accidental death and partial/ permanent disability to the head of the family of rural landless households. It was launched in October 2007. Up to September 30th, 2009, the scheme covered 81.99 lakh lives (Planning Commission: 2010).
- (j) Rashtriya Swasthya Bima Yojana (**RSBY**) provides insurance to the unorganized sector. Until January 2010, 26 States/ Union Territories have initiated the process of implementing the scheme.

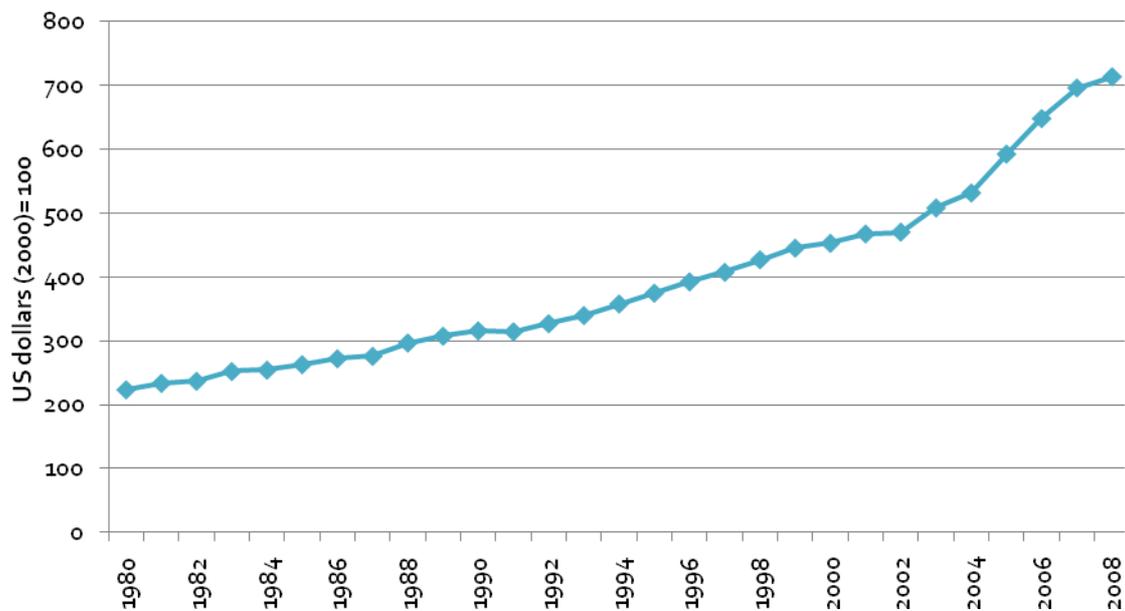
Annex 3: Figures

Figure 1. Real GDP growth



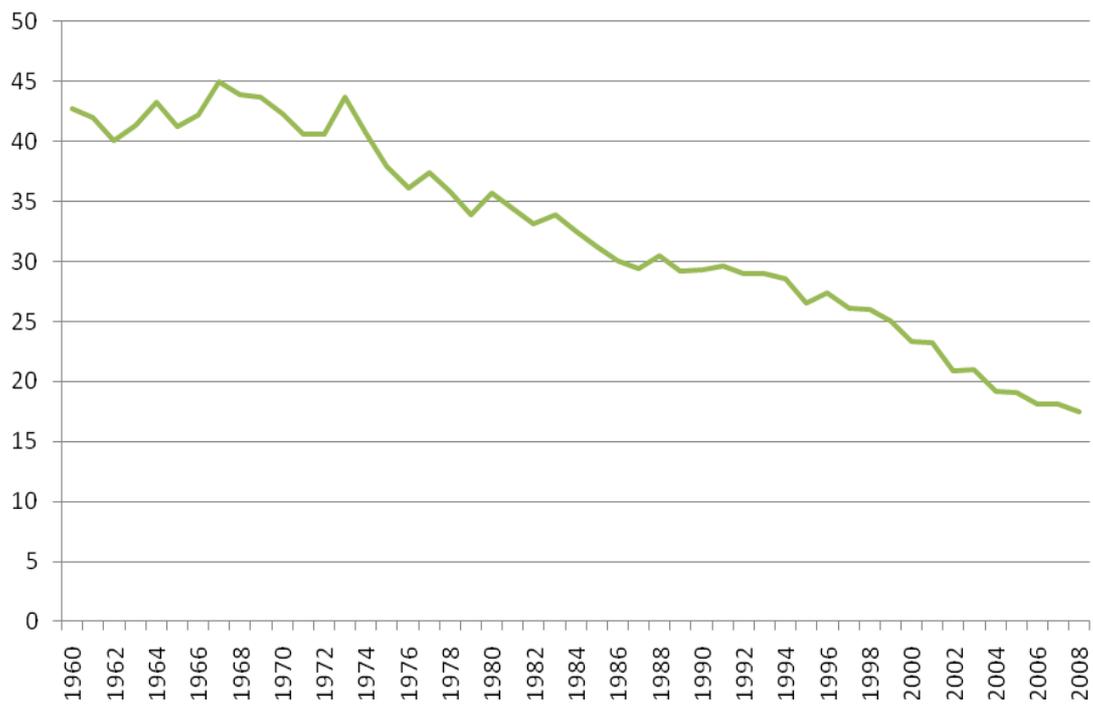
Source: Economic survey 2010- 2011 Table A3

Figure 2: Per capita income growth



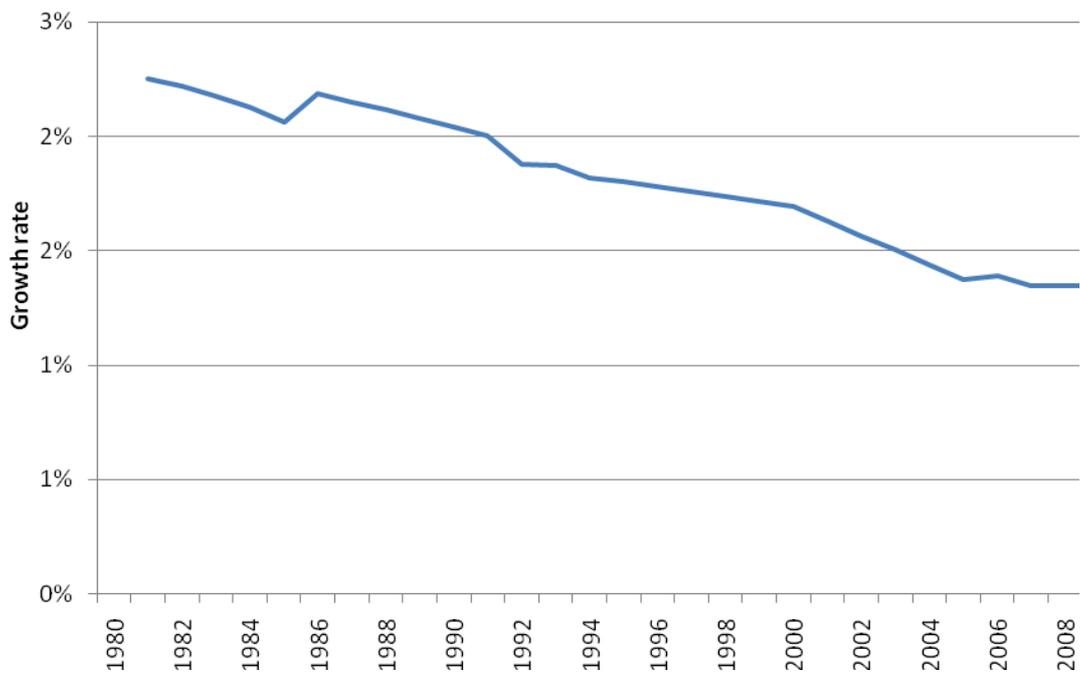
Source: World Development Indicators

Figure 3: Agriculture sector growth: value added as percentage of the GDP



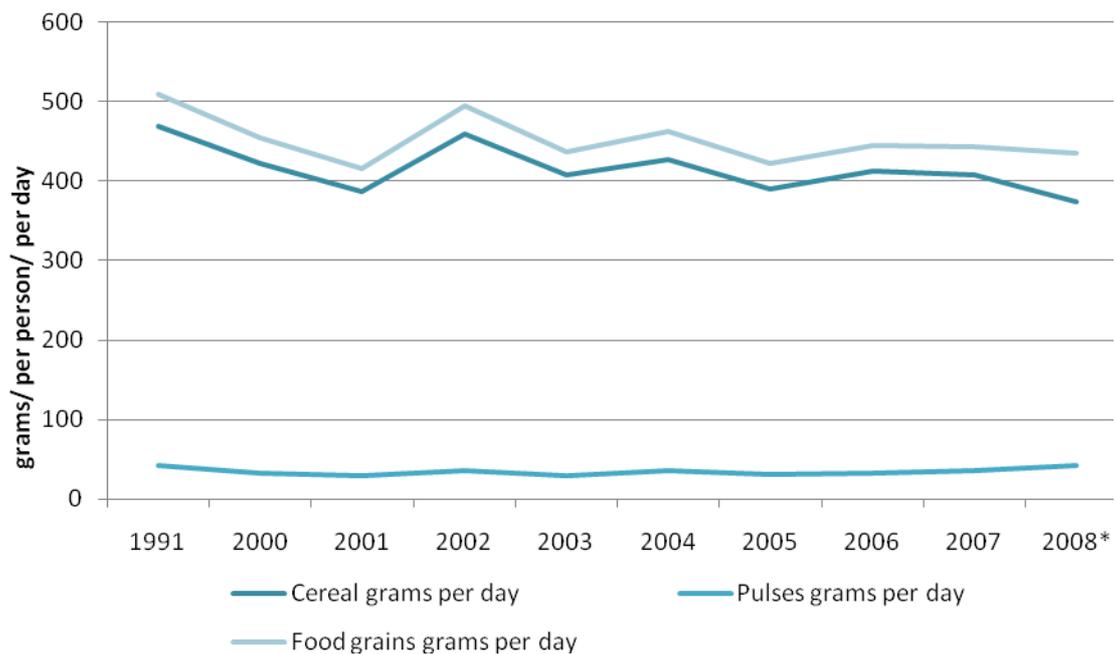
Source: World Development Indicators

Figure 4: Population growth



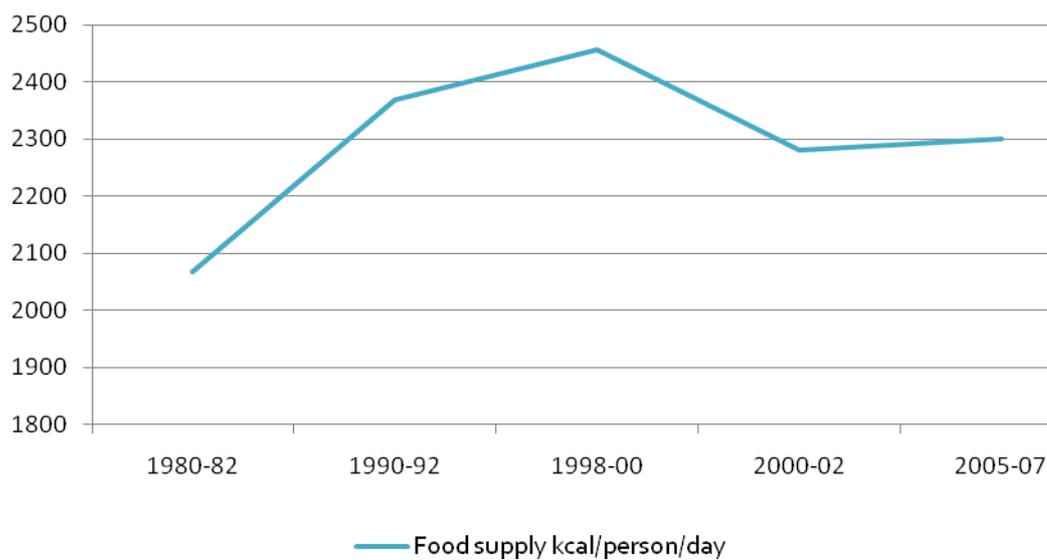
Source: World Development Indicators

Figure 5: Food grain availability



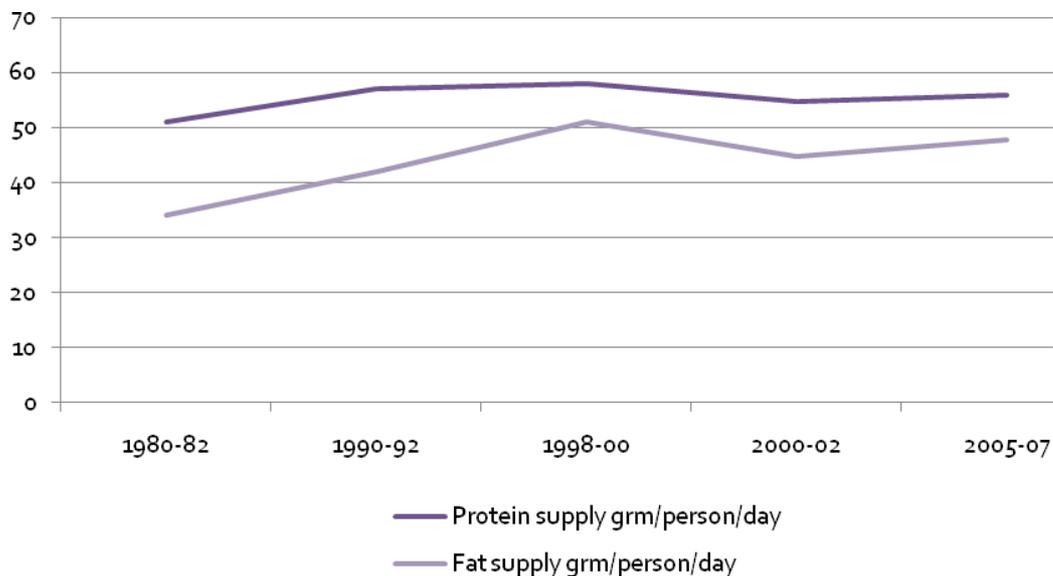
Source: Ministry of Statistics and Programme Implementation and Economic Survey 2009-2010 Table A22

Figure 6: Food supply



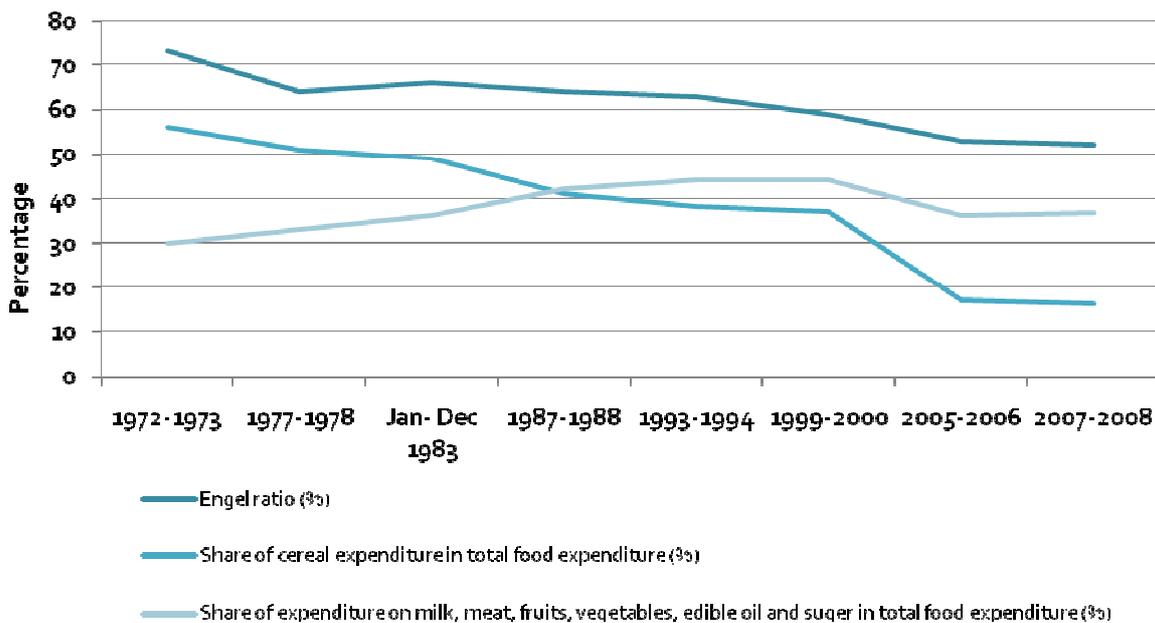
Source: FAO- Food Security Statistics <http://www.fao.org/economic/ess/food-security-statistics/en/>

Figure 7: Protein and fat supply



Source: FAO- Food Security Statistics <http://www.fao.org/economic/ess/food-security-statistics/en/>

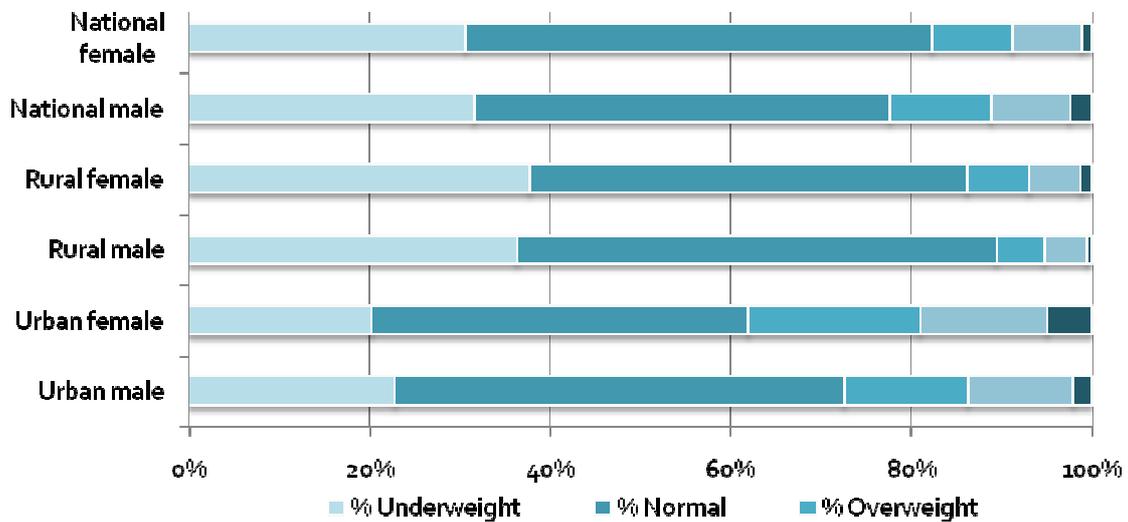
Figure 8: Food consumption among rural households



Source: Sarvekshana 86 April-September 01, Table 10R, (NSS) Consumer Expenditure Survey (62nd and 63rd rounds)

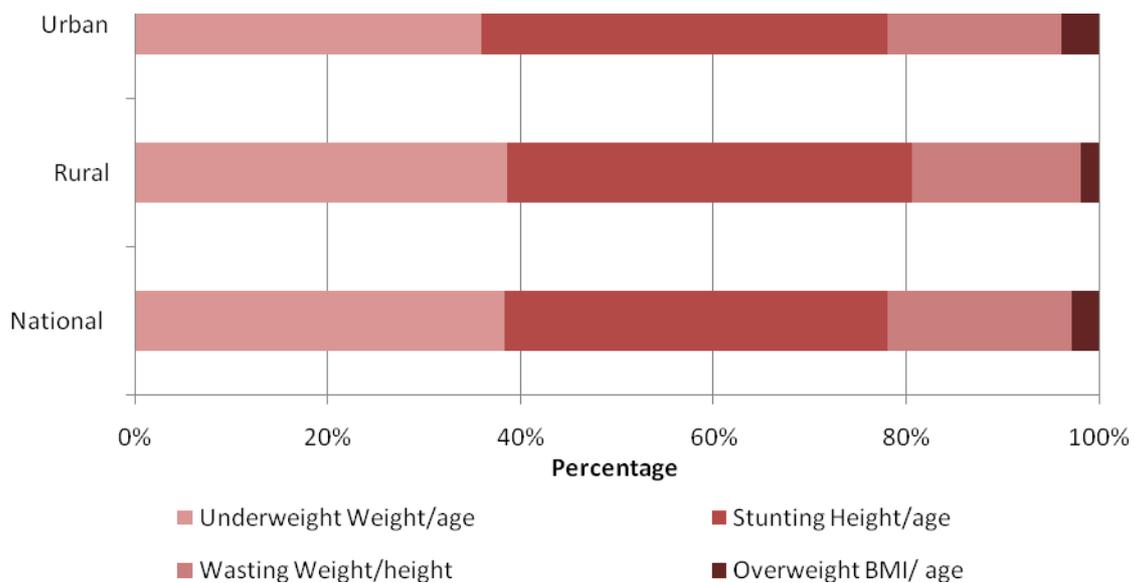
Figure 9: [Insert table of agri wage/per day vs price/1 kg \(wheat/rice\)](#)

Figure 10: Malnutrition in adults by gender



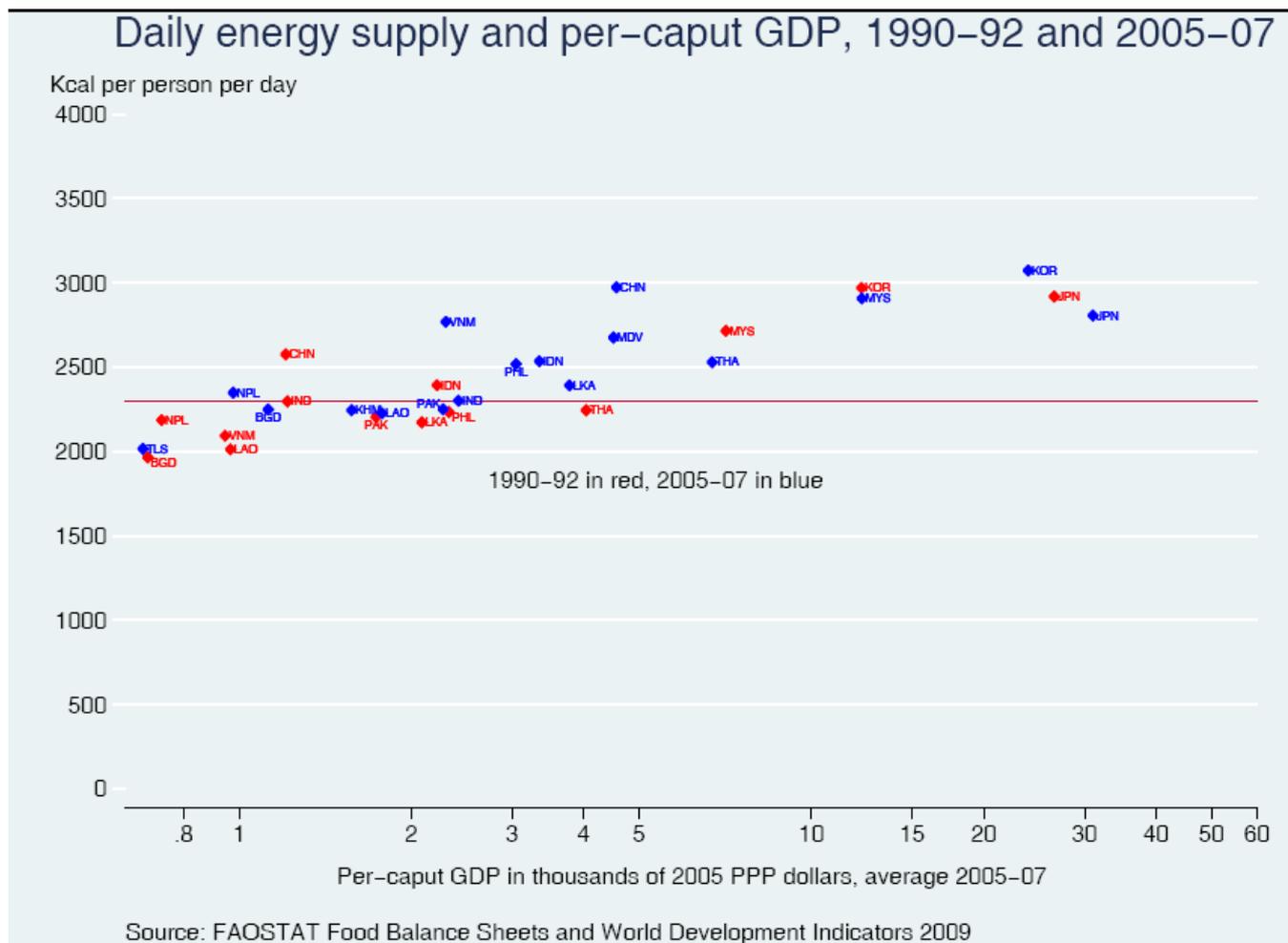
Source: WHO, Global Database on Body Mass Index. Note: Latest data available for India is from 2005-2006

Figure 11: Malnutrition in children (0-5)



Source: WHO, Global Database on Child Growth and Malnutrition.
 Note: Latest data available for India is from 2005-2006

Figure 12: Daily energy supply and per – caput GDP



Source: Broca, Sumiter

Notes

ⁱ According to Chang (2009), expansion of irrigation was one of the major achievements which unfortunately, didn't result on a commensurate increase in production given not enough attention was given to develop appropriate technologies and ensure incentive prices.

ⁱⁱ Regarding exchange rate, the rupee was made convertible on current account by 1993 following a devaluation of 50 percent against the US dollar. Inflation was 13 percent annually (Broca: 2010).

ⁱⁱⁱ For instance the dismantlement of protective measures, control on commodity prices remained the same, increase on agricultural input subsidies, weak public investment in infrastructure and little support for smallholder farmers to face competitiveness.

^{iv} In most of the cases, benefiting the most those areas where infrastructure was already in place.

^v Although investment intensity in agriculture research and development rose from 0.2 percent of the Agriculture GDP during the decade of 1960 to 0.5 percent to the decade of 1990, still remains below the globally accepted. Recently investment growth has been affected by poor public finances and even though policy pronouncements accord high priority to this investment, it is not reflected in financial allocations (Jha, D. and S. Kumar: 2006).

^{vi} Since the decade of 1990 the government has followed a MSP policy for 24 major crops, including paddy and wheat. GOI announces the level of MSP (based on the advice of the Commission on Agricultural Costs and Prices) in a year basis (Umali-Deininger: 2001). According to Jha et al. (2010), various noneconomic factors influence the process of setting up the price, such as political influence of state governments and farm lobbies. In some cases, these prices resulted not being "minimum", as they reached the level of the market prices.

^{vii} FCI was created in 1965 has the primary responsibility for the formulation and implementation of national food policies. Stabilizes prices for wheat and paddy at a pan-territorial and pan- seasonal minimum support prices (MSP) aiming to meet: (i) public distribution programme and (ii) [fixed] stock buffer requirements as well as (iii) open market operations.

^{viii} NAFED undertakes procurement for oilseeds, pulses and cotton. Under the PSS and when prices fall below the MSP.

^{ix} Numbers reflect data collected until July 26th, 2010. According to USDA (2010b), public procurement of rice may reach an estimated 31.2 million ton-procurement by September 2010, which would accomplish the second largest procurement ever accounting for 35 percent of the total production. Regarding wheat, procurement season is 2.8 million tons behind last year; however, it is still 3rd highest record procurement, accounting for 28 percent of the domestic production.

^x Livestock and fisheries sector contributed over 4.07 percent to the GDP during 2008-09 and about 26.84 percent value of the output from the total agriculture and allied activities. Poultry continues to play an important role in providing livelihood support and food security, especially to the rural population (Ministry of

Finance: 2010). According to the Planning Commission, the growth of this high value segment (horticulture, livestock and fisheries) has to be demand led, where the role of the government is (i) to create an enabling environment for private entrepreneurs to enter this agri-system; (ii) act as a coordinating actor along diverse value chains (Planning Commission:2010).

^{xi} In "Issues for approach for the 12th Five Year Plan", presentation made in the Full Planning Commission on April 21st, 2011.

^{xii} RKVY was launched in August 2007 with the objective to re-orient current agricultural development strategies to meet the needs of farmers and rejuvenate the agricultural sector as to achieve 4 percent annual growth during the XI FYP. During 008-09 the areas in focus were seeds, fertilisers, IPM testing laboratories, horticulture, farm mechanization, extension, crops marketing and cooperatives (Ministry of Finance: 2010).

^{xiii} Access and stability only includes measures affecting directly FSN by income and safety nets. However, there are certain measures which are being applied to BPL population and affect indirectly FSN but in a significant way, such as housing.

^{xiv} Namely "fair price shops" which operate under a commission basis (Umali-Deininger, Dina L et al: 2000).

^{xv} Currently, the BPL quota for each state is determined by the Planning Commission's estimates of poverty in the state, which is in turn calculated on the basis of the National Sample Survey Organisation's (NSSO) Consumption Expenditure Surveys (CES). For more information, see

<http://www.sccommissioners.org/schemes/tpds>

^{xvi} Food grain ration was raised from 10 kg. to 20 kg. at 50% of the economic cost whereas APL households had to pay full economic price. According to the WB the latter eliminated any existent price subsidy (Umali-Deininger, Dina L et al: 2000).

^{xvii} The States/Union Territories (UTs) are required to bear the distribution cost, including margin to dealers and retailers, as well as the transportation cost. Thus the entire food subsidy is being passed on to the consumers under the scheme (MSPI: 2009-2010). For more information, go to <http://www.sccommissioners.org/pdfs/primers/aayguidelines.pdf>

^{xviii} Selection criteria for additional families profile is: (i) landless agriculture labourers, marginal farmers and rural artisans/ craftsmen; (ii) households headed by widows or terminally ill/disabled persons aged 60 years or more; (iii) widows or terminally ill/disabled persons aged 60 years or more, who doesn't have any societal support or assured means of subsistence; and (4) all primitive tribal households. (MSPI: 2009-2010).

^{xix} Out of the 25 million families (i.e. 38% of BPL) that need to be covered (MCAFPD: 2010).

^{xx} The article argues that after a "cleansing process" was announced by GOI when officials acknowledged a serious flaw in their targeting system. <http://timesofindia.indiatimes.com/city/lucknow/PDS-cleaning-process-More-than-50000-fake-ration-cards-cancelled-in-2009-10/articleshow/6549821.cms> Official information is available only on 2000. Please see:

<http://fcamin.nic.in/dfpd/EventDetails.asp?EventId=524&Section=PDS&ParentID=0&Parent=1&check=0>

^{xxi} Incorporation of smart cards that aim to link information from allocation centre and the PDS has been successful in the improvement of accountability processes, reducing the probability of the agency problem (often known as the principal agent problem) arising.

^{xxii} Brought into force w.e.f. 2nd February 2006 and came into force with effect from 1st April, 2008 (MRD: 2010).

^{xxiii} Banerjee, A. and E. Duflo (2011).

^{xxiv} MDM has experienced a long process to introduce minimum requirements for food consumption. Only in 2006/07 a comprehensive pattern of consumption was established for cooked meals. Institutionalization of minimum requirements for cereals, pulses, vegetables and iodised salt facilitated specific arrangements in food production and preparation areas. However in 2008, with the rise of food prices, MDM and ICDS went through various difficulties in order to keep these standards. Subsequently efforts brought together the institutionalization of a policy that ensured the automatic adjustment of the amount of budget allocated for these schemes that permitted to maintain both the nutrition standard and coverage in children. Therefore, a reform on the current policy took place to ensure that resources allocated are directly linked to the price of food (incorporating market changes).

^{xxv} Meaning that the state governments contributing towards 50% of the costs of supplementary nutrition. For more information

<http://www.sccommissioners.org/schemes/icds>

^{xxvi} Every Government and Government-aided primary school and all schools run by a State Government, UT Administration, or with Government money by a Local Body or Non-Government organisation. (Supreme Court Commissioners: consulted on 14/09/2010)

^{xxvii} Statistics by country. Revised on October 11th, 2010.

http://www.unicef.org/infobycountry/india_statistics.html#64

^{xxviii} Severe nutritional anaemia increases maternal mortality, reduces resistance to infections and alters mental function in children.

^{xxix} Vitamin A deficiency (VAD) lead to nutritional blindness in young children increases the risk of respiratory infections, diarrhoea and mortality.

^{xxx} The term 'Panchayat Raj' is relatively new, having originated during the British administration. 'Raj' literally means governance or government. Mahatma Gandhi advocated Panchayati Raj, a decentralized form of Government where each village is responsible for its own affairs, as the foundation of India's political system. His term for such a vision was "Gram Swaraj" or Village Self-governance. It was adopted by state governments during the 1950s and 60s as laws were passed to establish Panchayats in various states. It also found backing in the Indian Constitution, with the 73rd amendment in 1992 to accommodate the idea. The Amendment Act of 1992 contains provision for devolution of powers and responsibilities to the panchayats to both for preparation of plans for

economic development and social justice and for implementation in relation to twenty nine subjects listed in the eleventh schedule of the constitution. The panchayats receive funds from three sources (i) local body grants, as recommended by the Central Finance Commission; (ii) funds for implementation of centrally-sponsored schemes; and (iii) funds released by the state governments on the recommendations of the State Finance Commissions. This information was copied from <http://www.panchayats.in> For further information, please go to:

<http://panchayat.nic.in/index.do?siteid=101&sitename=Government%20of%20India%20%3Cbr%3E%20Ministry%20of%20Panchayati%20Raj>

^{xxxi} While the central government has fixed the number of BLP families (according to the Planning Commission's estimates), state governments "adjust" their own number; the latter being often higher than the one released by the central government. Therefore some fiscal implications may arise depending on who finances what amount of families (Kaur, S.: 2010)

^{xxxii} According to the Economic Survey 2009-10, the estimation of BLP households in rural/urban areas observed that the national poverty line permitted people to consume 1,820 k calories against the desired norm of 2,400/2,100 (rural/urban). Hence, a large number of the rural poor got left out of the BLP status benefits as in order to consume the desired norm of 2,400/2,100 k calories, the cut-off line for determining BPL status should be revised. Two arising concerns are (i) **income wise**, at any given point, the calorie intake of the poorest quartile continues to be 30 or 50 percent less than the calorie intake of the top quartile despite needing more calories because of harder manual work; and (ii) **nutrition wise**, the consumption of the bottom of 50 percent of the population has been consistently decreasing since 1987 (Ministry of Finance: 2010).

^{xxxiii} On January 28th, 2009, was created a Unique identification Authority that aims to ensure coordination between ministries/departments, stakeholders and partners to bring in efficiency in the implementation of government programmes through a unique identification number linked to a person's demographic and biometric information (photographs, finger prints and iris) which will be unique to a person. A special focus will be developed for pro-poor interventions, especially the NREGA, RSBY and PDS. Timeline is expected to complete 600 million people within four years. The first UID Numbers will be issued by early 2011. In March, GOI approved the creation of National Population Register (Ministry of Finance: 2010; Planning Commission: 2010).

^{xxxiv} Ministry of Economic Affairs, Coordination & Decision Support System on External Assistance India: <http://www.cdssindia.gov.in/cdss/rc?sessionid=128497257092115844>

^{xxxv} For a detailed list, please take a look on:

<http://www.worldbank.org.in/external/default/main?menuPK=295615&pagePK=141155&piPK=141124&theSitePK=295584>

^{xxxvi} For more information, go to <http://www.fra.org.in/>

^{xxxvii} MoA has created a task force, National Mission for Sustainable Agriculture, which is currently identifying challenges and working on an internal circulation document on how to orientate investment in agriculture taking into consideration climate change.

^{xxxviii} In the XII Five Year Plan, an agro-meteorological system will be introduced which will enable more the environment for the private sector players.

^{xxxix} Currently, the BPL quota for each state is determined by the Planning Commission's estimates of poverty in the state, which is in turn calculated on the basis of the National Sample Survey Organisation's (NSSO) Consumption Expenditure Surveys (CES). For more information, see

<http://www.sccommissioners.org/schemes/tpds>

^{xl} Food grain ration was raised from 10 kg. to 20 kg. at 50% of the economic cost whereas APL households had to pay full economic price. According to the WB the latter eliminated any existent price subsidy (Umali-Deininger, Dina L et al: 2000).

^{xli} The States/Union Territories (UTs) are required to bear the distribution cost, including margin to dealers and retailers, as well as the transportation cost. Thus the entire food subsidy is being passed on to the consumers under the scheme (MSPI: 2009-2010). For more information, go to

<http://www.sccommissioners.org/pdfs/primers/aayguidelines.pdf>

^{xlii} Selection criteria for additional families profile is: (i) landless agriculture labourers, marginal farmers and rural artisans/ craftsmen; (ii) households headed by widows or terminally ill/disabled persons aged 60 years or more; (iii) widows or terminally ill/disabled persons aged 60 years or more, who doesn't have any societal support or assured means of subsistence; and (4) all primitive tribal households. (MSPI: 2009-2010).

^{xliii} For more information, see:

<http://www.sccommissioners.org/schemes/noaps>

^{xliv} NOAPS started under the umbrella of the National Social Assistance Programme (NSAP). Over the years, it suffered some modifications: (a) in 2007 was named Indira Gandhi national old Age Pension Scheme (IGNOAPS) on 11/19/2007 (effective date) and extended its coverage to all BPL recipients. (b) In 2009 two other schemes were originated, for widow pensions (IGNWPS) and for disabled people (IGNDPS). Currently, the three of them remain under the umbrella of NSAP.

^{xlv} Brought into force w.e.f. 2nd February 2006 and came into force with effect from 1st April, 2008 (MRD: 2010).

^{xlvi} (1) Universalization of SHG's to ensure that at least one member of each rural BPL household be brought under the SHG net over the period of seven years, from 2009 to 2016; (2) Skill development and placements in order to increase the employability of rural BLP young people ; and (3) Expansion of rural development and self employment training institutes (RUDISSETI).

^{xlvii} It has five components: (i) Urban self-employment programme (USEP) that targets individual urban poor for setting up of micro enterprises; (ii) Urban women self-employed programme (UWSP) which targets urban poor women self-help groups for setting up of group

enterprises and providing them assistance through a revolving fund for thrift and credit activities; (iii) Skill training for employment promotion amongst urban poor (STEP-UP); (iv) Urban wage employment programme (UWEP) for construction; and (v) Urban community development network (UCDN) assists urban poor into organizing themselves into a self-managed community structures to participate in effective implementation poverty alleviation programmes (Ministry of Finance: 2010)