Strategies for Children under Six

WORKING GROUP ON CHILDREN UNDER SIX

Development indices show that India neglects the early care and development of children, especially those under the age of six. The recently released report of the third National Family Health Survey shows that progress in the improvement of their condition is very slow. These children receive very little attention in the media, political debates or Parliament. This paper prepares a framework for the Eleventh Plan that urges the government to prioritise policies towards children under the age of six to protect their rights and ensure a better future for them.

Early childhood care and development (ECCD) has correctly been understood to be the critical foundation for overall growth and development, not only of children but of society on the whole. That it has been seriously neglected in India is amply demonstrated by the poor developmental indices that relate to the situation of children under the age of six, whether they be infant or under-five mortality rates or the prevalence of malnutrition. It is also a fact that most interventions in this issue have so far changed the situation minimally and far too slowly.

The recently released results of the third (2005-06) National Family Health Survey (NFHS-3) show not only the poor state of children under six years of age but also that the progress is very slow. Almost half (46 per cent) of all children under three are underweight (an improvement of only 1 percentage point compared to NFHS-2 which was carried out seven years earlier) and almost 80 per cent of children in the age group of 6-35 months are anaemic. Only 24 per cent of babies are breastfed within one hour of birth, and just about 46 per cent are exclusively breastfed during the first six months. Only 44 per cent of all children in the 12-23 months age group have received all recommended vaccines and only half the pregnant women had at least three ante-natal check-ups. As many as 57 of every 1,000 children die before they reach the age of one year.

On the other hand, only about 1 per cent of the total union budget is spent on children under six years of age (hereafter "children under six") [HAQ, Centre for Child Rights 2007].[1] These children also receive little attention in the newspapers, political debates or the Parliament. For instance, according to a recent analysis of parliamentary proceedings by HAQ: Centre for Child Rights, only 3 per cent of the questions raised in Parliament during the last four years related to children. Further, among the child-related questions, less than 5 per cent were concerned with childcare and development in the age group of zero to six years. There is, therefore, an urgent need to prioritise policies towards children under six, not only to protect their rights but also to ensure that the future generations are healthy and well.

The Supreme Court case – People's Union of Civil Liberties (PUCL) vs Union of India and Others, Writ Petition (civil) 196 of 2001 – on schemes related to the right to food covers the Integrated Child Development Services (ICDS) scheme, a significant state intervention for children under six. An early interim order issued by the Supreme Court in the context of this case converts the benefits of these schemes, including the ICDS, into legal entitlements. This, and subsequent interim orders, have provided a fresh impetus to advocacy efforts on strategies to redress the gross neglect of this issue. A group of people related to the right to food campaign and the Peoples' Health Movement

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– India (Jan Swasthya Abhiyan) have been engaged with this in various ways, whether it be through grassroots action, research or interventions in policy. Some of these efforts are detailed in the 'Focus on Children Under Six' (FOCUS Report), released in December 2006 [Citizens' Initiative for the Rights of Children Under Six 2006].

Simultaneously, a more positive environment has been building up in favour of children under six amongst policymakers who are beginning to acknowledge the problem and look for solutions. In several states, there have been interesting initiatives in this field (for example, related to ICDS) during the last few years, and much more can be done in this direction. This is further enhanced by the advent of complementary policy frameworks such as the National Rural Health Mission (NRHM) and Sarva Shiksha Abhiyan (SSA), which have the potential to provide much support to ECCD even though its primary responsibility lies with the ministry of women and child development.

The Eleventh Plan is a critical process of policy determination for the next phase that could put into motion fresh strategies while positively reinforcing those that have worked before. These could include interventions in the ICDS with a better focus on infant and young child feeding (IYCF) and outreach to children under the age of three years, as well as complementing strategies of crèches and maternity entitlements to women working in the informal sector. The Planning Commission also has the potential to provide the convergence and oversight that is critical to seriously addressing the intersectoral issue of malnutrition and ECCD. It is in this context that individuals associated with the campaigns referred to previously initiated a process of dialogue with the Planning Commission, which resulted in the preparation of this paper.[2] The interventions that are being recommended can only gain ground with continuing debate and advocacy, and it is with that intent that this publication is being placed in the public domain.

1 General Principles

The care of young children cannot be left to the family alone – it is also a social responsibility. Social intervention is required, both in the form of enabling parents to take better care of their children at home, and in the form of direct provision of health, nutrition, pre-school education (PSE) and related services. Interventions for children under six years or ECCD must broadly address at least three dimensions: child health, child development/education and child nutrition. These must necessarily be provided simultaneously in the same system of care. Further, while planning for provision of ECCD, it must be kept in mind that different age groups require different strategies. The three crucial age groups are generally considered to be: (1) children zero to six months of age – the period of recommended exclusive breastfeeding; (2) children six months to three years – until entry into pre-school; and (3) children three years to six years – the pre-school years, until entry into school.

This paper argues for comprehensive strategies for these groups of children, with a special focus on their nutritional needs, even though there is a close relationship between health, growth, nutrition and development in this age group and these dimensions need to be considered holistically. In fact, it is with this understanding that the ICDS was conceived as a comprehensive programme addressing all these needs of children under six.

It is well understood that the health and nutrition of a young child is also determined by the status of the mother's health. A malnourished mother often gives birth to an underweight child who in turn grows up to be a malnourished adolescent, and in the case of girls, perpetuates the cycle of malnutrition by giving birth to a low birth weight baby. It is also important that, simultaneously, there are interventions to ensure nutrition of adolescent girls and women, and for women's access to care during pregnancy, and this has been the rationale of the "life-cycle approach". Therefore, the two aspects to addressing malnutrition, i e, prevention of malnutrition and management of malnutrition, are both linked and complementary. Care of the malnourished child thus, also contributes to prevention through its impact on future generations.

The poor status of women has a direct correlation with malnutrition not only through its effect on birth weight but also on childcare. The "care-giver" role of women is so steeped in invisibility, so poorly understood and so much taken for granted, that interventions to provide support are largely missing even as huge bodies of work now exist to show the relationships of women's work, time, energy and power to the health of children. It is this factor that gives rise to the so-called "south Asian enigma", where populations of non-south Asian countries show a better status of child nutrition than south Asian countries even when the former are substantially poorer. This difference has been attributed to relatively high levels of gender inequity in the south Asian context [Sundararaman and Prasad 2006].

It is recognised that the overarching determinants of malnutrition include not only gender inequality, but also poverty. Poverty has an impact on malnutrition in multifarious ways – by reducing purchasing power for good quality calorie dense foods, by reducing access to healthcare, by giving rise to physical environments lacking in safe water and sanitation and by its impact on education. If this is accepted as one of the main determinants of malnutrition, there must be strategies built in to create livelihoods, reduce poverty and empower the poor. Conversely, no strategy for better nutrition should have the opposite effect.

In this paper, we restrict ourselves to looking at the strategies needed to meet the comprehensive needs of children under six, with special emphasis on nutrition. In particular, we examine the extent to which existing programmes such as the ICDS, with expanded coverage and quality improvements, can be utilised. Complementary interventions such as maternity entitlements, crèches and support to IYCF are also discussed.

1.1 Essential Components of Early Childhood Care

Strategies for children under six require three essential components:

(a) A system of food entitlements, ensuring that every child receives adequate food, not only in terms of quantity but also in terms of quality, diversity and acceptability.

(b) A system of childcare that supplements care by the family and empowers women. Such care needs to be provided by informed, interested adult carers, with appropriate infrastructure.

(c) A system of healthcare that provides prompt locally available care for common but life threatening illnesses. Such a system needs to address both prevention and management of malnutrition and disease.

1.2 Age 0-6 Months

According to most recent guidelines (World Health Organisation (WHO) – guidelines and national guidelines for IYCF), breastfeeding must be initiated within one hour of birth and exclusive breastfeeding should continue until six months of age. Studies have shown that exclusive breastfeeding alone provides all the nutritional requirements in this age group. It has also been shown that this is the best prevention and treatment for the major killers during the neonatal period (for example diarrhoea, pneumonia and sepsis). Recent studies have shown that starting breastfeeding within one hour of birth can help reduce the risk of neonatal mortality by almost a third. Universal coverage of exclusive breastfeeding up to six months of age can save 13 to 15 per cent of all under five deaths, i e, about more than 3.5 lakh children each year for India [BPNI 2006]. Continued breastfeeding for two years of age and beyond, along with the introduction of adequate and appropriate complementary feeding from the seventh month onwards, can further reduce the risk of death by 6 per cent or so.

Even though breastfeeding is such a vital means of reducing deaths of young children, and ensuring their best growth and development, little emphasis is paid at the policy level to promoting and supporting mothers to breastfeed their babies adequately. India is committed to protecting, promoting and supporting breastfeeding through the IMS act.[3] However, there is no budget head for this in the existing child health and development programmes of the country.[4] The National Maternity Benefit Scheme (NMBS), which provides for a one-time payment of Rs 500 to pregnant women below the poverty line, partially addresses maternity entitlements and the nutritional requirements of pregnant women and breastfeeding children. However, this scheme is currently languishing in most of the country [Saxena and Mander 2007]. The huge gap in maternity entitlements for the majority of women who work in the informal sector needs much more public attention as an important element of social security for the well-being of women and children, and specifically for the food security of very young children.

The following are some of the interventions required to ensure exclusive breastfeeding:

Breastfeeding Counselling and Support: Initiating breastfeeding within the first hour and ensuring colostrum feeding requires that the mother be provided support and counselling for this immediately after the delivery. Many myths that exist, especially regarding colostrum feeding, must be countered through counselling women and their families. Awareness campaigns must be directed towards increasing society's support to mothers for exclusive breastfeeding for six months. Mothers need to be given constant support to continue breastfeeding. There should be a support system that allows a home visit twice a week during the first two weeks and once a week later, after birth, to assist and maintain exclusive breastfeeding. It should be done by an adequately skilled and trained person at the family level, and supported by a "specialist counsellor in IYCF" at the cluster level to help solve the difficult problems that a mother may face.

Crèches: Ensuring exclusive breastfeeding requires that mothers stay close to their infants during this period. However, many breastfeeding women, especially poor women, often need to work outside the home, where they cannot take their infants with them. Crèches at/near workplaces to support frequent breastfeeding, flexible hours and breastfeeding breaks must be provided.

Maternity Entitlements: Women must be enabled to stay home to breastfeed the very young child and compensated for the loss of wages. This is not a controversial concept, since it has broadly been accepted for the "formal sector". Many women are extremely undernourished themselves. While they can still produce adequate milk to feed their infants, exclusive breastfeeding for such long periods can further jeopardise these mothers' health. Women must have access to adequate nutrition and other forms of support to enable them to exclusively breastfeed their infants without endangering either their own health or their economic status. All these, as well as entitlements to healthcare, are included in the term "maternity entitlements".

Crèches and maternity entitlements are not part of current strategy at all. Provisions need to be made for this by expanding and improving existing programmes such as the NMBS, Rajiv Gandhi Crèche Scheme and ICDS. In the current strategy breastfeeding counselling and support is expected to depend mostly upon the skills, training and time of the accredited social health activist (ASHA), who has many other tasks. Significantly, while many of her other tasks are incentivised, there are no incentives for achieving early and exclusive breastfeeding or optimal IYCF targets. It is only through adequate training and motivation of the auxilliary nurse midwife (ANM), 'anganwadi' worker and ASHA together that effective breastfeeding counselling and support can be provided.

Children in this age group also require growth monitoring, immunisation, newborn care and referral services to the health system. Details of what needs to be done, including employing a second worker at the anganwadi to work specifically on children under three years of age, are presented in the Section 2.

1.3 Age 6 Months to 3 Years

From six months onwards, complementary foods are to be introduced to children along with continued breastfeeding for two years or beyond. Children can eat "normal home food" (in mashed or semi-solid form), however children at this age can eat only small quantities at a time and therefore, need to be fed many (about five) times a day and need to be given food that has adequate calories, proteins and micronutrients.

Some of the interventions required for this age group are, first, ensuring that frequent meals in adequate quantity are given to the children. This food has to have adequate nutrients in the form of animal proteins (milk, eggs, meat, fish), adequate in fats, fruit and vegetables. Nutrition counselling and nutrition and health

education sessions for mothers and family members are also required. Second, nutritious and carefully designed take-home rations (THR) based on locally procured food should be provided as "supplementary nutrition" for children in this age group. Currently THRs are in the form of just grain – this is inadequate. Also, THRs must be combined with nutrition counselling to ensure that they are used for the child rather than distributed amongst the family.

Third, crèches must be provided, with trained workers, to ensure that these children are provided with adequate care and development opportunities, especially if there are no adult carers at home. Finally, further services children in this age group require include regular immunisation and growth monitoring, treatment for anaemia and worms, prompt care for fever, diarrhoea, coughs and colds and referral services for the sick and severely malnourished child.

Most of the above can be provided by the ASHA and the anganwadi worker, provided that a second anganwadi worker is available (the need for a second anganwadi worker is discussed in more detail below). However, current strategy provides neither for a second anganwadi worker nor for day care/crèches. This is so in spite of the widely accepted case for increased focus on children under three for prevention and management of malnutrition. Thus, the currently-proposed new strategies for desired focus on nutrition of under threes are limited to nutrition counselling and healthcare by ASHA, that too not incentivised.

1.4 Age 3 to 6 Years: Focus on Pre-school

It is well established that PSE is very significant in helping children prepare for formal schooling. PSE assists children both to enter school and to remain in the system. A child cannot fully realise her right to education unless she has access to quality early childhood care and education. The interventions required for children in the age-group of three to six years (until joining school) are one, a centre-based play-school facility with a teacher trained in conducting pre-school activities. Again, this can be provided by the anganwadi worker only if a second anganwadi worker is appointed for the community-based interventions for children under three, pregnant and lactating mothers.

Two, hot cooked meals, serving the same broad purposes as the mid-day meals in primary schools. These include not only nutritional support but also enhance child attendance, promote social equity, provide income support to poor households, and act as a form of nutrition education. Three, health interventions such as growth monitoring, de-worming, immunisation, care of common illnesses, referral services etc.

The focus should therefore shift to quality PSE as the main task, with nutrition and health services playing roles similar to the Mid-Day Meal Scheme and the School Health Scheme in primary schools. Currently hot cooked balanced meals with adequate (animal) proteins, fats, fruits and vegetables are not part of the strategy for this group of children. (The "supplementary nutrition programme" under ICDS is further discussed below.)

If it is accepted that the ICDS centre (anganwadi) is to function as a proper pre-school facility then a provision has to be made for a teacher-equivalent anganwadi worker who is fully committed to this activity while a second anganwadi worker looks after children under three in the community, as well as for anganwadi cum crèche as and where required. Many children in the three to six age group will also continue to need day care services.

From the above discussion it is clear that different strategies are required for addressing the health, nutrition, care and development needs of children under six, depending on their age. The components of the services required by the three age groups among children under six are summarised in Table 1.

Table 1: Essential Components of Early Childhood Care

	Zero to Six Months	Six Months to Three Years (until joining pre-school)	Three Years to Six Years (until joining school)
Food	Counselling and support for exclusive breastfeeding; supplementary nutrition and maternity entitlements for lactating mother.	Supplementary nutrition in the form of nutritious THRs, nutrition counselling, nutrition and health education.	Nutritious hot cooked meal at the centre.
Childcare and development	Crèches at worksites and maternity entitlements to ensure proximity of mother and child.	Crèches; expanding existing crèche schemes and creating anganwadi cum crèches.	Pre-school at the anganwadi centre; crèches/day care facilities for those who might need it.
Healthcare	Immunisation, growth monitoring, home-based neonatal care, prompt referral when required.	Immunisation, growth monitoring, prompt care for childhood illnesses, referral care for sick and malnourished children, de-worming, iron supplementation.	Immunisation, growth monitoring, prompt care for childhood illnesses, referral care for sick and malnourished children, de-worming, iron supplementation.

2 Strategic Interventions

It is therefore seen that the following systems would be required to provide comprehensive early childhood care and development: (a) Maternity entitlements to ensure proximity of mother and child during the first six months as well as adequate care to both mother and child; (b) breastfeeding, IYCF and nutrition counselling and support services to families; (c) community-based day care services/crèches; (d) pre-school centres; (e) supplementary nutrition; and (f) healthcare services-predominantly community-based with institutional backup.

The ICDS, which is currently the only national programme to address the health, nutrition and pre-school needs of children under six years has the potential and mandate to fulfil many of these requirements. It requires expansion to reach to all children and improvements in quality. However, ICDS alone cannot provide all the required facilities and services. It should be seen as one component, among others, of a comprehensive strategy for children under six.

Specifically, such a strategy must have the following components:[5]

2.1 ICDS: Universalisation with Quality

Given the central role of ICDS in this context, and the fact that about half the child population and over 70 per cent of all poor children are malnourished, an effective strategy for children under six must include the universalisation of ICDS or more precisely, "universalisation with quality".[6] The universalisation of ICDS is one of the core commitments of the National Common Minimum Programme, and is also required for compliance with

recent Supreme Court orders. In concrete terms, "universalisation with quality" would mean that (1) every settlement has an anganwadi centre,[7] (2) all ICDS services are extended to all children under the age of six years and all eligible women and girls, (3) the quality of services is radically improved, and (4) priority should be given to disadvantaged groups, especially residents of scheduled caste/scheduled tribe (SC/ST) hamlets and urban slums, in this whole process.

As discussed earlier adequate attention must be paid to the needs of children within the different age categories. The anganwadi worker must be trained to provide quality PSE to children in the three to six year age group. Her tasks would also include providing a hot cooked nutritious meal that is sufficient in fats and proteins, including animal proteins where culturally acceptable.

A second anganwadi worker must be provided in all anganwadi centres (other than the existing Anganwadi worker and helper), who will focus on children under three years of age, pregnant and lactating mothers. The tasks of this second anganwadi worker would include breastfeeding counselling, nutrition and health education and counselling, growth monitoring, provision of supplementary nutrition to children in the six months to three years age group and pregnant and lactating mothers, motivation for ante-natal care, immunisation and related matters. On some of these tasks, she would work in coordination with the ASHA. She would also be required to help in anganwadi cum crèche centres.

Universalisation with quality also requires a range of other steps including adequate and quality training, improved infrastructure, appropriate cost norms to provide nutritious supplementary nutrition, increased community participation, convergence with the health department and so on. IYCF counselling and support should be recognised as one of the core "services" of ICDS.

2.2 National Rural Health Mission

There should be greater convergence between ICDS and the NRHM for prevention and management of malnutrition. At the village level the ASHA and the second anganwadi worker can work together towards promotion of breastfeeding, nutrition counselling, etc.[8] For this, nutrition-related tasks performed by the ASHA (such as ensuring early initiation of breastfeeding) should also be incentivised. The ASHA would further be required to provide essential home based newborn care by making three to seven visits in the first week of birth as well as prompt care on first day of fever, diarrhoea, coughs and colds. Where required, she would have to refer children to the ANM or primary health centre (PHC).

Treatment of severely malnourished children must be the joint responsibility of the health department and the ICDS. While it would be the responsibility of the ICDS to identify severely malnourished children, the health department must make arrangements at the sub-centre and PHC levels for treatment of such children. This requires setting up nutrition rehabilitation centres in PHCs in areas with high malnutrition, training of ANMs on nutrition related issues, and authorising the anganwadi worker to refer malnourished children to the health department. Financial provision should be made to support these children's families during the period of rehabilitation.

IYCF counselling and support, while included under ICDS, should also be a mainstream intervention in reproductive and child health (RCH) and NRHM, and listed as a child survival intervention along with "immunisation". The creation of "IYCF counselling and support centres", run by skilled women in a cluster of 5-30 villages, should also be considered. This "service" should be made available as an entitlement.

Further, the health department must also ensure that the national programmes of immunisation, iron and vitamin-A supplementation are carried out and de-worming takes place. While the anganwadi worker would play a role in motivating children for this, the health department must ensure adequate and appropriate supplies (such as paediatric formulations of iron). A drug kit with essential drugs must be provided at the village level with either the ASHA or the second anganwadi worker.

2.3 Maternity Entitlements

Maternity entitlements are virtually non-existent in the country today, especially for poor women working in the informal sector. It is time that a beginning is made to correct this. Tripartite boards and funds must be set up to implement such entitlements for all sectors of informal work, so that employers contribute. An expanded and improved National Maternity Benefits Scheme must be put in place for all women left out of other schemes/provisions for maternity benefits.

A task force should be set up to look at the existing provisions for maternity entitlements in the country and make recommendations such that programmes are in place that protect the rights of the mothers and children to nutrition, rest and exclusive breastfeeding for six months. The existing laws (Maternity Benefits Act, Employees' State Insurance Act, proposed Unorganised Workers Social Security Act, etc) must be brought in line with the recommended principles.

2.4 Crèches

As mentioned earlier, provision of crèches is an important intervention in addressing malnutrition, as they also provide proper care and attention to children while allowing their mothers to go for work. Existing schemes such as the Rajiv Gandhi Scheme must be expanded. ICDS cum crèches must be provided as identified by need. It must be ensured that the provision under the National Rural Employment Guarantee Act (NREGA) for a crèche at the work site is implemented. Labour welfare boards as under the Building and Construction Workers Act 1996, need to be brought in for the provision of crèches.

3 ICDS: Specific Issues

In this section, we discuss some specific, major steps that are critical for quality improvement and better impact of ICDS.

3.1 Supplementary Nutrition Programme

The "supplementary nutrition programme" (SNP) under the ICDS has a crucial role to play in combating child malnutrition. Nutrition education alone is unlikely to have a major impact, in a

country unable to provide literacy to half its women, especially in the context of food shortages at the household level. Even in the US, one of the richest countries in the world, there is a substantial school breakfast and lunch programme for the country's poor (which provides bread, cheese, fruit, juices, vegetables, etc) because it is recognised that nutrition education cannot be a substitute for food.

However, in its current form the SNP under the ICDS cannot be expected to have a significant impact. For children in the age group of three to six years, the SNP consists of poor, cereal-based items that have little nutritional value. A transition needs to be made towards hot, nutritious cooked meals. The feasibility of providing nutritious cooked meals has been well demonstrated in the context of the mid-day meal programme in primary schools, and this approach needs to be extended to children in the age group of three to six years under the ICDS. As for children below the age of three years, they are virtually excluded from the SNP component of the ICDS in most states. For these children, carefully devised THR programmes, combined with nutrition counselling, are recommended.

3.1.1 Nutrition Aspects of SNP

As we move towards the universalisation of ICDS, it is important to learn from past mistakes relating to the SNP.

The magic figure of 300 calorie deficit for the SNP component of ICDS needs to be re-examined. The latest National Nutrition Monitoring Bureau (NNMB) data (2006-07) show that even today there is a deficit of about 500 calories in the intakes of one to three years old and about 700 calories among the three to six years old (Table 2). There are bound to be additional multiple vitamin and mineral deficiencies when there is a 40 per cent deficit in calories.

Table 2: Nutrient Intakes of Pre-schoolers

Age (years)	Intake (Calories)	RDA (Calories)
1-3	791	1240
3-6	1020	1690

RDA - recommended daily allowance.
Source: National Nutrition Bureau (2006).

It is, therefore, not surprising that the current nutrition supplements of 300 calories, consisting mainly of cereals, often fail to result in better weights and heights of children (though their nutrition status might have been even worse in the absence of these limited supplements). The ICDS programme must incorporate the above information on actually existing food deficits in the country and increase the SNP amounts to 400-500 calories in two sittings.

The SNPs under the ICDS have tended to concentrate on providing a "least cost" source of proteins and calories for children. Pulses were chosen as a source of cheap protein but well known foods like milk, eggs and meat have been ignored. It is known that even small quantities of meat help iron absorption from the diet. In addition, the quality of meat protein is many times superior to cereals and pulses. Milk contains protein, calcium and other nutrients like vitamin A, etc, and egg yolk contains many other nutrients in the right proportion. Over the years even the cereal-pulse recommendation was corrupted to 300 cals from cereals alone, resulting in massive deficiencies of all nutrients, including micronutrients.

It is known that children have small stomach capacities and are only able to eat small volumes at a time. This they would be unable to get all the calories they require from cereals, which are bulky foods and do not have high concentration of calories. The WHO advises that 30-40 per cent of calories should be derived from fats, thus cutting down volumes and assuring energy densities. Currently, the SNP has no component of fats and oils.

Another important point to consider is that foods like vegetables and fruits are an important source of vitamins and other nutrients. They also contain newly identified protective compounds such as anti-oxidants and phytonutrients, which are protective against cancers and chronic diseases.

Providing a hot, cooked, nutritious meal consisting of cereal, pulse, eggs and vegetables is essential for the SNP to have an impact. The provision of good quality balanced meals also has a demonstration value from the point of view of nutrition education.

Table 3: Possible Components of SNP

Source	Quantity/Frequency	Calories	Nutrients
Egg	1 on alternate days	120	Vitamins A, N3, fats, proteins
Oil	10 ml	90	Fats, vitamin E
Rice/wheat	60gm	240	Calories, proteins
Vegetables	Carrots, greens, tomatoes, beans, others		Vitamins, minerals, protective compounds, etc
Groundnut	20gm	140	Calories, proteins, calcium
Sugar	10-15 gm	60	Calories
Pulse	25gm on alternate days	100	Protein, calories, vitamins, minerals
Dairy product			Protein, calcium, vitamin A

As an example of improved SNP menus, the food items in Table 3 may be used in different combinations over the week to provide a varied, tasty and energy-dense meal every day. For example:

Day- 1: egg, rice, oil and vegetables
Day-2: pulse, rice, vegetable and oil
Day-3: wheat, groundnut, sugar and oil
Day-4: egg, rice, oil and milk
Day-5: groundnut, sugar and pulse

3.1.2 On Take Home Rations

Available experience suggests that THRs are the best option for providing food supplements to pregnant and lactating women as well as to children under the age of three years. This is because a pregnant woman or a very young child, may not be able to come all the way to the ICDS centre every day just to receive food supplements. Further, centre-based nutrition programmes such as cooked meals are often not well suited to the needs of young children, who need frequent feeding throughout the day.

THRs are often distributed on fixed days that may correspond to the ANM's visit or to health and nutrition activities such as ante-natal care or immunisation. This is a useful arrangement, which helps to ensure regular and transparent distribution of THRs and facilitates these complementary activities.

Though the concern has been articulated that THRs find their way into the family pot rather than the stomachs of the children they are intended for, it is considered (and substantiated by collective experience) that THRs can be effective when combined with nutrition counselling and support at the family level (this, again, requires the involvement of a second anganwadi worker).

As with nutrition supplements provided at the anganwadi, current THRs have also tended to be cereal-based only. It is

recommended that THRs comprise of fats/oils and proteins in addition to cereals and pulses at Rs 3 per child per day (plus foodgrains) to be most effective.

Of course, pregnant or lactating women and children under three who prefer to come to the centre on a daily basis should receive hot cooked meals as discussed above.

3.1.3 Food Fortification and Micronutrients

Fortified foods and micronutrient supplements, mixed in different vehicles such as 'atta', rice, biscuits, candies, etc, are rapidly spreading in the SNP under ICDS, even when they have questionable nutrition value.[9] Often this happens under pressure from various lobbies and commercial interests. These processes and technologies promote centralised production and procurement of food stuff and detract from local control and autonomy over diets. Sometimes they even displace local livelihoods such as milling. They certainly promote the notion that special, "medicalised" and expensive food is required to deal with micronutrient deficiencies. Where there is, on the one hand, a decision not to spend on more expensive "natural foods" like milk or eggs, there is no hesitation to spend much more on micronutrient supplements of this variety.

To illustrate, consider the case of atta fortification. When this form of fortification is adopted for our local atta the phytates tend to precipitate the iron making the fortification ineffective. This is even more likely to happen when a long shelf life is required as in the case of programmes like ICDS and the public distribution system (PDS). Large-scale micronutrient and fortified distribution to populations with malnutrition may not only be ineffective but also have hazardous effects.

However, all these concerns have not compelled the creation of a government policy on micronutrients and food fortification. Thus, it is critical to constitute a regulatory framework for fortification and micronutrients in India. Such a framework must address the following issues: first, any large-scale micronutrients fortified food distribution should be preceded by a process of documenting and researching its implications.[10] Second, any request for a trial of micronutrients and food fortification with undernourished populations should be placed before an appropriate authority, constituted by the government of India. The trial should be continuously monitored and recorded by an independent monitoring group, so as to record any adverse effects.

It is the responsibility of the state to provide wholesome balanced food to children rather than a package of chemical nutrients. Micronutrient deficiencies in India exist because of massive macronutrient deficiencies, and if adequate food is supplied, most micronutrient deficiencies will disappear. There are already three national programmes pertaining to micronutrient deficiencies of vitamin A, iodine and iron. These should be carried out effectively. Thus, the ICDS programme must focus on a meal-based strategy rather than a pill-based strategy for micronutrient deficiencies.

There is an urgent need therefore to constitute a regulatory body which approves all usage of micronutrients only after proper scientific scrutiny and after the efficacy of the micronutrients has been established over and above the many benefits of providing hot cooked good quality meals as detailed in the section above.

3.1.4 Diverse Roles of SNP

Before concluding on the SNP, it is worth pointing out that the provision of nutritious food to young children under ICDS' SNP serves a range of important purposes, including – but not restricted to – nutritional goals. Indeed, this programme can serve at least seven important purposes:

(1) It provides quantitative supplementation by increasing children's food intake, and in particular their calorie intake.[11] Children aged three to five years who are attending the anganwadi for pre-school activities for a period of three hours most certainly require to be fed at least once in that duration to prevent "classroom hunger".

(2) It enhances the quality of children's diets by giving them nutritious and diverse food items they may not get at home, such as vegetables, eggs, fruit, etc.

(3) The provision of nutritious, cooked meals at the anganwadi is a form of "nutrition education" – it helps to convey what a nutritious meal looks like, and to spread the notion that children require a regular and balanced intake of various nutrients.

(4) The provision of nutritious food at the anganwadi helps to ensure regular attendance.[12] This provides an entry point to all the other comprehensive health and development services that the ICDS offers.

(5) The SNP is a form of implicit income support and an intervention in poverty, since it saves feeding costs to the parents.

(6) The sharing of cooked meals at the anganwadi, irrespective of caste and class, helps to break traditional social prejudices, and to impart egalitarian values to children at a young age. This is an important start to the kind of socialisation required to bring about social change.

(7) Finally, aside from these instrumental roles, nutritious meals at the anganwadi have intrinsic "enjoyment value". They can bring a touch of colour and well-being in the lives of poor children, especially when they are shared in a welcoming environment.

The SNP needs to be seen in the light of these diverse roles of nutritious meals. A narrow focus on "quantitative supplementation" (important as it may be) tends to miss the rich opportunities presented by this programme. This is, indeed, an important lesson from India's recent experience with mid-day meals in primary schools.

3.2 Priority without Targeting

The suggestion is often made that nutrition programmes (or other components of ICDS) should be "targeted" at specific groups of children. For instance, an early draft of the Sarva Bal Vikas Abhiyan proposal[13] suggested that the SNP under ICDS should be "operationalised as follows for the management of underweight":

– "Children with mild underweight: Caregivers/mothers would be advised to take care of the children with available foods at home.

– Children with moderate underweight: Single ration would be provided along with appropriate nutrition and health advice.

– Children with severe underweight: Double ration would be provided along with appropriate nutrition and health advice and referral service."

This targeted approach, however, is problematic for several reasons. First, this issue has to be seen in the light of the massive reach of undernutrition among Indian children. As mentioned earlier, nearly half of all Indian children are undernourished based on standard "weight-for-age" criteria, and nearly 80 per cent are anaemic (NFHS-3). Thus, only a small proportion of children could be "safely" excluded from nutrition programmes. The financial savings involved in excluding this small minority are unlikely to justify the efforts, costs and risks associated with targeting – especially the risk of inadvertent "exclusion" of many undernourished children.[14]

Second, this approach focuses exclusively on the "management" of undernutrition, at the cost of "prevention". Providing nutritious food to all children (through take-home rations at an early age, and nutritious cooked meals from the age of three) helps to ensure that most of them do not fall in the category of "moderate or severe underweight" in the first place. This is much better than trying to extricate them from this predicament after they have lost weight – repairing that damage can be quite difficult, increasingly so as the child gets older. (The notion that children with mild underweight could be effectively protected by advising their mothers to "take care of the children with available foods at home" is wishful thinking.)

Third, targeting is a slippery slope. It paves the way for gradually narrower eligibility restrictions, possibly leading to the "dismantling" of the programme (recent experience with the public distribution system is quite sobering in this regard). Targeting is also divisive and undermines social solidarity. As it is, political commitment to ICDS is quite weak. Targeting would further undermine this fragile support for the programme, as the better off sections of the population would no longer have a stake in it.

Finally, the targeting issue has to be assessed bearing in mind the diverse roles of the supplementary nutrition programme, discussed in the preceding section. For instance, a universal SNP has much greater "socialisation" value than a targeted programme. Similarly, a universal programme is likely to have stronger incentive effects, in terms of promoting regular attendance.

Thus, in many different ways, the targeting of nutrition programmes is fundamentally at variance with the "rights approach" advocated in this paper. Having said this, it should be clarified that we are not arguing for identical treatment of all children. Universalisation does not mean "uniformity". For instance, intensive rehabilitation of severely undernourished children is essential, and this involves a limited form of targeting. We have also argued, elsewhere in this paper, for giving priority to disadvantaged groups (for example, residents of scheduled caste/scheduled tribe hamlets and urban slums) in the process of universalisation. Special financial allocations for deprived areas may also be advisable in some circumstances. Thus, we are not ruling out some differentiation of entitlements between different groups. But the basic entitlements (for example, to a nutritious cooked meal, in the case of children in the age group of three to six years) should have universal coverage.

3.3 Need for Second Anganwadi Worker

The ICDS programme through the anganwadi centre aims to provide a package of comprehensive services addressing the health, nutrition, growth and development needs of children under six. For this to be done effectively, each anganwadi centre must have two anganwadi workers and a helper. The second worker is required because the number of women and children to be covered by an anganwadi is too large to be handled by a single anganwadi worker. The number of children being covered by a typical anganwadi would be around 100.[15] Added to this, the anganwadi centre would also have to reach out to pregnant and lactating mothers and adolescent girls. It is impossible for a single anganwadi worker to provide effective services to such a large number of women and children.

Secondly, as discussed earlier, the services required by the different age groups (namely, zero to six months, six months to three years, and three to six years) entail diverse strategies. While children under three mainly require community-based services,[16] children in the three to six-year age group require centre-based services. In the present scenario of having one anganwadi worker, neither of these two groups is being effectively reached. While many have pointed out the neglect of children under three by the ICDS, studies have also shown that the ICDShas failed in providing quality pre-school education to children in the age group of three to six years. Therefore, having two workers and a helper at each anganwadi is essential to ensure that all ICDS services are provided effectively to the different age groups. The three of them could work as a team with one anganwadi worker focusing on children under three and the other on providing pre-school education. Both the workers would have to be given basic training on the entire range of issues.

One anganwadi worker would focus on providing community-based services for children under three, pregnant and lactating mothers. Her tasks would include the provision of supplementary nutrition to pregnant and lactating mothers, breastfeeding counselling and support for families of zero to six month old children, growth monitoring of children under three, distribution of take-home rations, and nutrition education and counselling for families with children under three. Further, she would have to identify severely malnourished children and sick children and refer them to the health system. She would motivate families for immunisation, update the "mother and child card" and work along with the ASHA. This worker would be key to convergence between NRHM and ICDS.

The second anganwadi worker would run the anganwadi centre for children in the three to six years age group. She would be a teacher-equivalent worker who provides quality pre-school education to the children attending the anganwadi centre. Further, she would have to ensure that pre-school children are provided with a nutritious hot cooked meal everyday and health check ups as with the school health programme.

The anganwadi helper would be responsible for fetching the children, cooking and serving the food in the anganwadi centre, keeping the centre clean and helping children and anganwadi

worker in play activities. In anganwadi-cum-crèches, the team would be responsible for running the crèche services for young children.

Other than these three workers of the ICDS programme, the ASHA under the NRHM would also have a role. The ASHA is responsible for the promotion of an early initiation of breastfeeding within one hour of birth, colostrum feeding and follow up support for the first two weeks. She would also be responsible for home-based neonatal care by making home visits during the first month after birth. These tasks of the ASHA must be incentivised. The ASHA cannot however replace the need for a second anganwadi worker as she has many other responsibilities such as mobilising the community towards local health planning, help in developing a village health plan, escort women and children requiring medical treatment, provide primary medical care, promote construction of household toilets and so on.[17]

Table 4 summarises the main tasks of different workers in the proposed approach.

Another benefit of the two-worker model is that it would enhance the accountability of anganwadi workers and improve their work environment. The disempowering work environment of anganwadi workers is one reason for the poor quality of ICDS services in many states. The fact that the anganwadi worker has to cope on her own with all the challenges of looking after up to 100 children, with little support (if any) from her supervisor, is one aspect of this disempowering environment. The two-worker model, on the other hand, makes room for mutual support as well as peer monitoring.

The "two-worker" model is often resisted on the grounds that it is too expensive. This view fails to appreciate how "cost-effective" this model actually is. To illustrate, under the current salary norms (Rs 1,000 per month), posting an additional worker in each of the country's 8.5 lakh anganwadis would only cost about Rs 1,000 crore per year. This is a very small price to pay for a measure that could make a big difference. Of course, both the number of anganwadis and the salary norms are likely to increase during the Eleventh Plan. But even posting a second worker in 14 lakh anganwadis, at twice the current salaries, would cost just Rs 3,360 crores per year. This is not much more than what India spends every year to defend the Siachen glacier.

Further, these figures refer to financial costs, and the "real" economic costs are likely to be much lower. Indeed, to a large extent, the labour of an anganwadi worker is an efficient substitute for much greater expenses of labour on the part of the children's mothers. For instance, when the anganwadi worker and helper provide a mid-day meal to the children, their work "saves" a lot of work to the mothers, who don't have to cook for the children at home. While the anganwadi worker's work is paid, the mothers' work is unpaid, and this creates the impression that a "cost" is involved but in fact, resources are being saved! This would be reflected in the financial costs if mothers' work were paid, and it is the absence

Table 4: Role of Anganwadi Workers, ASHA and ANM (in Relation to Children under Six, Pregnant and Lactating Mothers)

Focus Group	AWW 1 Focus on under-3s	AWW 2 Pre-school Teacher	ASHA Community-based	ANM Sub-Centre Based with Field Visits
Zero-six months	Supporting exclusive breastfeeding. Motivating for immunisation. Growth monitoring and encouraging early initiation of breastfeeding.		Providing new born care, supporting management of low birth weight and sick babies. Weighing at birth and recording birth weight, assist in beginning breastfeeding within one hour, and establishing exclusive breastfeeding as an accepted community norm, establishing complete immunisation as a community norm.	Providing immunisation services and timely curative & referral services for sick new borns. Assists in beginning breastfeeding within an hour (if she is conducting delivery) Management of severely undernourished children
Six-36 months	Growth monitoring, providing supplementary nutrition in the form of THR. Motivating for complete immunisation, vitamin supplementation. Nutrition rehabilitation of severely undernourished children and referral		Positively influencing complementary feeding practices of families and at the community level, encouraging adoption of hygienic practices regarding water and sanitation, early detection and management of childhood illness especially management of diarrhoea. Counselling and follow up of families with severely undernourished children	Providing timely curative and referral services. Management and referral of severely undernourished children
Three-six years		Pre-school education, growth monitoring, organising cooked mid-day meal, nutrition rehabilitation of severaly undernourished	Identification and referral of sick children. Counselling and follow up of families with severely undernourished children	Health check ups and curative services, management and referral of severely undernourished children
Pregnant women	Growth monitoring and supplementary nutrition		Working with women, families and the community to ensure adequate weight gain through appropriate nutrition, reduction in workload, rest and accessing timely health services especially supporting clean and institutional delivery	Antenatal care, promoting delivery by trained birth attendant, promoting and supporting institutional delivery
Nursing mothers	Supplementary nutrition, breastfeeding support		Postnatal care, encouraging early initiation of breastfeeding	Postnatal care, immunisation
AWW-cum-crèche (0-6 years) (10% of all AWWs)	Both the anganwadi workers to be full-time workers where they continue to perform their regular duties and also share the responsibility of running the crèche.			
Anganwadi helper (full-time in case of AWW-cum-crèche)	• Cook and serves food in the crèche • Help children and AWW in play activities			

Source: This table is adapted from Sundararaman and Prasad (2006).

of any payment for domestic work that creates the illusion that anganwadi workers are "expensive". Further, reduction in household work would contribute to better health and nutrition for women, which is closely linked to the status of health and malnutrition of children. Taking all this into account, the economic cost of the two-worker model is likely to be much lower than the financial cost, and good economics requires us to focus on the former.

This conclusion would be reinforced by a proper accounting of the benefits of having additional anganwadi workers. It is not just that the children will be healthier, better nourished and better prepared for school. Anganwadi workers are also useful role models and agents of change in a fairly conservative and patriarchal rural society. In many villages, the anganwadi worker is the only woman who has a paid and dignified job, with opportunities to develop her creativity and talent. Her presence can greatly help, in many different ways, to give younger girls a sense of possibility and to secure a better deal for women in society (in some states, for instance, anganwadi workers have played an active role in recent campaigns against domestic violence and sex-selective abortion). All this adds to the social value of anganwadi workers. As the largest employment programme for women in rural India, with a potential to employ as many as four million women everyday, ICDS also has a very significant contribution to make to women's empowerment.

In short, the two-worker model is not just enlightened social policy but also sound economics. India has a "comparative advantage" in labour-intensive provision of social services; large-scale mobilisation of educated women as anganwadi workers would be an excellent use of this comparative advantage.

Learning from Thailand's Experience

Thailand (1980s)	India (2007)	How to Close the Gap
Able to halve child malnutrition levels in 1980s	Child malnutrition rate stagnant for last five years	Strengthening ICDS
Coverage – universal, very high coverage ensured	Coverage – low, two-thirds children left out	Increase no of AW centres Increase no of workers in each AWC to two to enhance outreach
SNP- Strong universal SNP provision, provided 450 kcal in 100 grams by providing pulses and fats	SNP – 300 kcal, mainly cereal	Raise SNP norm in ICDS to Rs 3 per child/day plus 80 gram grain. Provide oil, pulses in take home rations for under 3s, Provide hot cooked meals with eggs/milk for three-six year olds
High manpower intensity: 1 nutrition worker per 20 children, helps to ensure very high coverage of under-6s and effective nutrition education on breastfeeding, complementary feeding	Worker: child ratio at 1:100, single part-time worker per centre unable to devote time to home visits	Having two AW workers each in 14 lakh centres will enable a ratio of 1 worker per 25-30 children and effective nutrition education and coverage
Universal iron, vitamin supplementation – successful in reducing anaemia	Supplementation part of strategy and policy but huge gaps in providing it - absence of pediatric iron tablets Irregular IFA supply for pregnant women	Ensure regular supplies of iron supplements to women and children
Strong linkage with health	Weak linkage with health so far, malnutrition not seen as any department's responsibility, but NRHM present as an opportunity	ICDS-health convergence at all levels from ASHA onwards Regular drug kits to AW centres Clinical support for Grade 3 and 4 children needing institutional check-up or care

Source: Garg and Nandi (2007).

3.4 Making ICDS Work

In moving towards universalisation with quality, one major challenge is the management of a large public service delivery programme.[18] Much of the hesitation to sanction such an expanded scheme stems from the past experience with implementing ICDS. Poor capacities to manage such a large public programme, poor governance, high leakages, lack of local accountability, low motivation levels and poor community ownership are some of the problems that have plagued ICDS.

An understanding of poor ICDS performance as stemming mainly from operational problems often leads to a search for "contracting out" solutions, where commercial and not-for-profit non-governmental institutions are asked to organise the services. But since the central problem behind the inefficiency of state-run ICDS is mis-governance and not merely lack of capacities, any attempt at contracting out part or all the functions usually leads to even greater problems of governance – but now without the built-in checks and balances that public service delivery has.

Thus, the operational issues of managing such a large and expanding programme as a public service need to be faced. Some of the key operational issues are discussed below.

3.4.1 Decentralisation and Community Participation

Decentralisation and the involvement of communities is the first key aspect that must be considered. For instance, the selection of anganwadi workers must be done by the gram panchayat but through a supervised process that involves the community. It should not be left to the whims of the local elite who often control the panchayat but nor should it disregard the central authority of the panchayat, for the alternative is usually an unacceptable process where selection is left to the bureaucracy or the local legislative member. What is said for selection is also applicable to the process of accountability and of monitoring and support – primarily by the panchayat but not passively left to it.

There is very little community involvement in the current programme. Except for rare instances like the Mitanin programme in Chhattisgarh or the work of the Rajmata Jijau Mission in Aurangabad, the involvement of communities and panchayats has rarely gone beyond sub-contracting tasks (like the cooking of the meals) with very little real financial or other powers. Yet there are large areas of untapped potential for community contribution.

Informed and involved communities can have a major impact on nutrition practices and outcomes. For instance, one of the barriers in the fight against undernutrition is the gross social under-recognition of this issue. Community mobilisation can play a critical role in influencing the way society perceives undernutrition and create a social will to fight it.[19]

Community mobilisation can also play a major role in supporting behaviour change in long-standing childcare practices, and in achieving improvements in the utilisation of ICDS services. For instance, there may be a variety of genuine reasons for a mother not sending her child to the anganwadi (for example, distance from the centre, irregular opening hours, low-quality food, lack of trust in the anganwadi worker). In such a situation, a stand-alone behaviour change communication (BCC) message to

the mother, asking her to send her child to the anganwadi may not work but the community may be able to tackle some of the underlying issues. Community mobilisation is needed to create an enabling atmosphere for more appropriate childcare practices and empowerment of the local community, especially families facing marginalisation or social exclusion. Community monitoring of ICDS can also help in ensuring greater regularity and quality, and in building a more functional relationship between the anganwadi worker and the community.

The ASHA is one of the key agents in achieving active community participation and in promoting equity of access at the village level. Some of her roles have been discussed earlier but it is important to recognise that the ASHA is also a significant link between the community and the government (particularly the health system). Other important tools of community mobilisation arising from the NRHM include the monthly "health and nutrition day" and the village health committee (VHC). These committees are initiated by the ASHAs with the help of the anganwadi worker, and they are also intended to link with existing community institutions such as mahila mandals, youth clubs, self-help groups (SHGs) and panchayati raj institutions. VHCs can be an important agent of community mobilisation, by motivating parents to send their children to the anganwadi, monitoring undernutrition levels in the village, drawing out an action plan, spreading awareness of health-related issues, helping anganwadi workers in ECCD and BCC tasks, helping remote hamlets to access ICDS services, and monitoring anganwadis, among many other possible activities. They can also act as forums through which women become more aware of their rights and fight gender discrimination in health, nutrition and other fields. Other community-based groups and forums (such as mahila mandals, SHGs, gram sabhas and youth clubs) can play similar roles, in collaboration with ASHAs and anganwadi workers. Adequate budgetary provision should be made for supporting such community mobilisation processes.

Another useful aspect of decentralisation would be district-specific planning. Different districts have different technical and administrative requirements. They need to tailor communication materials, training programmes and nutrition schemes to suit their specificities. District planning designs (and then fund allocations based on such plans) is an operational challenge but the effort can be quite rewarding, and requires little additional resources. However, district level planning needs to proceed "bottom up", based on village-level and panchayat-level planning. Panchayat-level planning can be used as a mechanism for bringing the various aspects of ICDS together, as well as for achieving local convergence between ICDS, the ASHA programme and Sarva Shiksha Abhiyan. The plans should clearly outline the roles of different sectors in contributing towards the elimination of undernutrition and the provision of comprehensive child care.

3.4.2 Developing Human Resources

Human resource issues are critical to the success of the ICDS. An effective human resource policy must be created for the same. To start with, anganwadi workers should be recognised as regular, skilled workers and their concerns should be addressed, particularly those relating to work overload, inadequate remuneration, delayed salary payments and poor working conditions. Avenues must be made available for promotion, skill enhancement and accreditation. Anganwadi workers should not be recruited for non-ICDS duties and their official job description should be adhered to.

Urgent action is needed to address the shortage of ICDS staff at all levels. Women should be better represented among supervisors, child development project officers (CDPOs) and other ICDS staff above the anganwadi level. Programme management structures should also be strengthened by inducting subject-matter specialists, especially women (example for pre-school education, health and nutrition) at the district, state and central levels. This could be facilitated by building linkages between local colleges of home science and social work and training institutions.

An essential element for securing better operational results is better capacity-building. About 5 to 10 per cent of expenses must be earmarked for capacity-building of the anganwadi workers and other staff on a regular basis. Continued capacity-building also requires the creation of adequate institutions for this purpose.

This involves re-examining the existing modes, means and sites of training and development of training content and material. The inadequacy of present arrangements is reflected in the fact that the government of India allocated a sum of just Rs 87 crore in the last financial year for training activities, in a programme that has more than a million workers and helpers. Nearly a fourth of this money apparently remained unutilised.

Training, both initial ("pre-service") as well as ongoing ("in-service"), is usually recognised as an important component of programme implementation. Unfortunately, the current training system appears to be quite divorced from field reality and practitioner experience. Most training institutions have neither any field sites nor directly run anganwadi centres, which could enable them to make the training more practice oriented. Ongoing field-based training is almost absent as most supervisors focus mainly on registers, attendance, salaries and numbers rather than processes.

One reason for the disjunct between training and field reality is that training curriculum, syllabus and material are usually centrally determined. This information is then transmitted down the chain to the anganwadi worker who is expected to convert it into practice and improve child development indicators for the entire programme. Building more lively and effective training programmes, linked with ground realities, would require: (i) building crucial linkages between training, programme implementation and review, and child development knowledge and practice; and (ii) building technical and institutional capacity in the ICDS programme to develop into a learning system.

The following steps would be useful in this regard: first, decentralised development of training curriculum, approaches and material (say, at the state or district level) based on national guidelines. Second, convergence of ICDS and NRHM training, not simply by training the respective staff together but also through joint development of the training modules. Third, allocating anganwadi training centres (AWTCS) for capacity-building at the district or sub-district level. Fourth, recognition of pre-school

education and nutrition counselling as essential components of training programmes. Fifth, developing a system for continuous field level support (for instance, identifying a relatively accessible anganwadi and developing it as a local resource centre, where the supervisor/trainer can facilitate peer learning through monthly cluster-level meetings). Sixth, upgrading mid-level training centres (MLTCs) and AWTCs, not only as training centres but also as local resource and research centres. Seventh, enabling MLTCs and AWTCs to directly run anganwadis in their campus/vicinity.

3.4.3 Governance Reforms

The ICDS suffers from high levels of corruption and mis-management. It is essential to define standards and norms for access and quality of services and to monitor and support the programme to ensure that these standards are attained and sustained. Output and outcome indicators, and a reliable monitoring system, also need to be put in place so that the progress of ICDS in each district is known.

In addition, wide-ranging action is required to restore transparency and combat corruption in the entire system. All ICDS-related information should be in the public domain. The provisions of the Right to Information Act, including proactive disclosure of essential information, should be implemented in letter and spirit in the context of ICDS. All agreements with private contractors (if any) and NGOs should be proactively disclosed and made available in convenient form for public scrutiny. All AWCs should be sign-posted and the details of ICDS entitlements and services should be painted on the walls of each anganwadi. Social audits of ICDS should be conducted at regular intervals in gram sabhas and/or on "health and nutrition day".

Effective indicators of good governance need to be developed for ICDS for the adequate evaluation of the scheme at every levels. Decentralisation, adequate space for public participation, greater attention to human resources and transparency are important steps towards building a responsive and accountable administration and these need to proceed apace with the greater devolution of funds for the programme.

4 Financial Requirements

Low budgetary allocations have been one of the key factors responsible for the limited impact of the ICDS and related programmes so far. For instance, the current allocation for ICDS is only around one rupee per child per day (on average, for all children under six). This level of expenditure is utterly inadequate to ensure effective and universal programmes. Much higher allocations are needed for actually making a real dent on malnutrition, ill-health and gaps in psycho-social development.

Table 5 (p 99) presents estimates of what is required for fair implementation of the framework proposed in this paper during the Eleventh Plan. The reference year for these estimates is the "terminal year" of an expansion phase, by the end of which (1) ICDS would reach universal coverage, and (2) substantial progress would have been made towards providing other support structures such as maternity entitlements, crèches and supplementary nutrition for adolescent girls. The terminal year of this expansion phase is not specified, but it would have to be, at any rate, within the Eleventh Plan.[20]

The estimates in Table 5 are based on the following assumptions:

(1) The number of AWCs: This has been fixed at 14 lakh, in line with Supreme Court orders as well as with independent estimates of the number of AWCs required to implement improved norms for the creation and placement of anganwadis. Of these, we assume that 10 per cent (1.4 lakh) will have the status of "anganwadi-cum-crèche" in the reference year (as a step towards wider outreach of crèche facilities).

(2) The number of children: It is estimated that there are currently about 14 crore children under six in the country, of which 10 crore live in rural areas and 4 crore reside in urban areas. It is further estimated that about 1 crore children live in urban slums [Government of India 2007: 1]. Allowance has to be made for the fact that not all parents may wish to enrol their children at the local anganwadi. Assuming that about 75 per cent of children in rural areas and urban slums are enrolled, the budget estimates are for 8 crore children under six. Of these 8 crore children, 10 per cent (0.8 crore) would be enrolled in anganwadi-cum-crèche centres.

(3) SNP: The SNP allocation here is similar to the enhanced norms that have been proposed to the Planning Commission for the mid-day meal scheme [Sundaram 2007] i e, Rs 3 per child per day (in addition to 80 grams of grain).

(4) Second anganwadi worker: As explained earlier, a second anganwadi worker is essential to provide adequate care to children below the age of three years along with food supplements and quality pre-school education for those in the age group of three to six years. Thus, a provision has been made for implementation of the two-worker model in all AWCs.

(5) Remuneration of anganwadi workers and helpers: Our estimates assume that central government's contribution to the remuneration of anganwadi workers is raised from Rs 1,000 per month to Rs 2,000 per month (for four hours of skilled work per day for around 25 days a month). For anganwadi helpers the corresponding contribution would be Rs 1,000 per month.

(6) Anganwadi-cum-crèche centres: These centres would require higher allocations, for both staff and food. The two anganwadi workers and helper would have to be paid for full-time work, and children attending the crèche will have to be given adequate food. Thus, we have made an allowance for higher remuneration of anganwadi workers and helpers at anganwadi-cum-crèche centres (Rs 3,000 and Rs 1,500 per month, respectively), and doubled the provision for supplementary nutrition.

(7) Maternity entitlements: For maternity entitlements, we propose a national scheme on the lines of the Dr Muthulakshmi Reddy Maternity Benefit Scheme in Tamil Nadu. This involves cash support of Rs 1,000 per month for six months for care during pregnancy and after delivery. We recommend that, as a first step towards eventual universal coverage of maternity entitlements, 25 per cent coverage should be achieved in the reference year. Other schemes would also need to be developed to cover the range of circumstances of women working in the informal sector.

Under these assumptions, the proposed plan of action would cost around Rs 33,000 crore (at 2006-07 prices) in the reference year, including "recurrent costs" of Rs 30,000 crore per year. If the Indian economy grows at 8 per cent per year on average during the Eleventh Plan, this financial requirement will represent about one half of 1 per cent of India's GDP five years from now. This is a very reasonable price to pay to protect 14 crore children from hunger, ill-health and related deprivations.

Table 5: Financial Requirements

	ICDS: Universalisation with Quality				
	Assumptions	Number			
	Total under six children covered	8 crore			
	Children covered by AWC-cum-crèches	80 lakh			
	Pregnant, lactating women covered	1 crore			
	Total anganwadi centres (AWCs)	14 lakh			
	Anganwadi centres also working as crèches (10 per cent of total centres)	1.4 lakh			
	Anganwadi buildings to be built and equipped per year	2 lakh			
	Budget Required (Rs crore)	No	Rate (Rs)	Frequency of Cost per Year	Amount (Rs crore)
	Recurring Costs				
1	Supplementary nutrition				
1.1	SNP children (@ Rs 3/day for 300 days/yr)	7,20,00,000	3	300	6,480
1.2	SNP pregnant/lactating women (@ Rs 3/day for 300 days/yr)	1,00,00,000	3	300	900
1.3	SNP for children in AWC cum crèches (@ Rs 6/day for 300 days/yr)	80,00,000	6	300	1440
1.4	Rice/wheat (80 gram per child per day)	8,00,00,000	0.8	300	1920
2	Education/health kits				
2.1	Pre-school education kits for AW centres (Rs 1,000 per AWC per year)	14,00,000	1,000	1	140
2.2	Medicine kits for AW centres (Rs 1,000 per AWC per year)	14,00,000	1,000	1	140
2.3	IEC materials (Rs 25,000 per project per year)	6,000	25,000	1	15
3	Untied grant to AWCs (Rs 5,000 per AWC per year)	14,00,000	5,000	1	700
4	AWC rent (till such time that centres don't have their own buildings)				
4.1	Rural	6,00,000	200	12	144
4.2	Urban	2,00,000	1,000	12	240
5	Honorarium for AWWs/helper				
5.1	AWW 1 honorarium (at Rs 2,000 per month)	12,60,000	2,000	12	3,024
5.2	AWW 2 honorarium (at Rs 2,000 per month)	12,60,000	2,000	12	3,024\
5.3	AW helper/cook (at Rs 1,000 per month)	12,60,000	1,000	12	1,512
5.4	Workers in AW cum crèches (3 full-time workers at Rs 3,000, Rs 3,000 and Rs 1,500)	1,40,000	7,500	12	1,260
6	Training				
6.1	Existing anganwadi workers (six days of training @ Rs 150/day)	7,50,000	150	6	67.5
6.2	New AWW1 (10 days of training @ Rs 150/day)	6,50,000	150	10	97.5
6.3	AWW2 (10 days of training @ Rs 150/day)	1,400,000	150	10	210
6.3	CDPOs (eight days of training per year at Rs 300 per day)	6,000	300	8	1.44
6.4	District POs (eight days of training at Rs 300 per day)	600	300	8	0.14
6.5	State officials (three officials per state, eight days of training at Rs 600 per day)	90	600	8	0.04
7	Salaries and office expenses				
7.1	State office	30	12,00,000	1	3.6
7.2	District office	600	10,00,000	1	60
7.3	Project/block office	6,000	7,00,000	1	420
8	Contingencies				
8.1	Project	6,000	30,000	1	18
8.2	District	600	60,000	1	3.6
8.3	State	30	1,00,000	1	0.3
9	Fuel				
9.1	Project	6,000	1,00,000	1	60
9.2	District	600	1,00,000	1	6
9.3	State	30	1,00,000	1	0.3
	A Sub-total (recurring)				2,1887
	Non-recurring costs (capital expenditure)				
10	Equipment and furniture for AWCs	2,00,000	5,000	1	100
11	Anganwadi buildings (@ Rs 1.30 lakh materials cost per building with unskilled labour component of Rs 40,000 from NREGA) and assuming 2,00,000 centre buildings will be constructed per year	2,00,000	1,30,000	1	2,600
	B Sub-total (Non-recurring)				2,700
	C Total (ICDS)				24,587
	Maternity benefits (Rs 1,000 per month for six months, for 65 lakh women [25 per cent of all pregnant women] to begin with – see text)	65,00,000	1,000	6	3,900
	SNP for adolescent girls Covering five crore adolescent girls (at Rs 3 per day for 300 days)	50,000,000	3	300	4,500
	D Grand total				32,987
	Components from other programmes				
	NRHM ASHA incentives (Rs 100 per family counselled (four neonatal visits) assuming 1 crore families will get counselling per year	1,00,00,000	100	1	100
	NREGA Labour component of AW building construction (assuming 2 lakh buildings will be constructed per year)	2,00,000	40,000	1	800

5 Summary of Key Recommendations

In this paper we have tried to present a broad framework of action for "children under six" in the Eleventh Plan. Before concluding it may be useful to summarise some of the key elements of this framework.

5.1 General Principles

The general principles are the following:

Rights Approach: This framework recognises that childcare, healthcare, nutrition and development are basic rights of all Indian children.

Age-specific Interventions: Attention has to be paid to the varying requirements of different age groups (specifically, zero to six months, six months to three years, and three to six years), and to the need for corresponding interventions.

Three Core Interventions: These interventions involve the integration of three related systems, focusing respectively on: (i) food and nutrition; (ii) health services; and (iii) childcare.

Role of ICDS: Many of these interventions can be taken care of through the ICDS, provided its initial vision is revived.

Complementary Strategies: However, other institutional arrangements are also required, including (i) maternity entitlements; (ii) crèches and childcare arrangements; and (iii) institutionalised support for "infant and young child feeding" (especially breastfeeding).

Convergence: Effective strategies for children under six also require

active "convergence" between core programmes, especially ICDS, the NRHM and Sarva Shiksha Abhiyan.

Decentralisation: A decentralised approach is required, fostering participatory planning, community ownership, responsiveness to local circumstances, and the involvement of panchayati raj institutions.

Community Action: Various forms of community action need to be promoted. These include monitoring and supporting the local anganwadi, selection and evaluation of anganwadi workers, participatory planning, use of untied grants, etc. This process should be adequately planned, budgeted for and institutionalised. The ASHA needs to be empowered to play the critical facilitation role between the communities, panchayati raj institutions and the programme.

Capacity-Building: Major investments in capacity-building and training are required at all levels, all the more so as ECCD is poorly understood. Programmes of such scale and complexity as ICDS cannot succeed without extensive investments in improving management skills and practices.

Human Resources: Anganwadi workers should be adequately remunerated and they should be recognised as regular skilled workers. A human resource policy needs to be put in place for anganwadi workers.

Administrative Reforms: Capacity-building and decentralisation are essential but not sufficient conditions of improved governance. There needs to be a central mechanism that sets standards, maintains quality, safeguards equity concerns, redresses uneven development and allocates (and accounts for) resources in a transparent and equitable manner. This would require improved institutional frameworks, improved workforce management policies and professionalisation of management. Accountability at senior levels of administration and governance needs to be measured through appropriate mechanisms, subjected to public scrutiny.

Overseeing Mechanism: A high-level overseeing mechanism (for example, empowered steering committee along the lines of the NRHM) should be created to ensure convergence and accountability in the range of interventions concerned with child nutrition.

5.2 ICDS: Key Recommendations

The following are the key recommendations regarding the ICDS:

Universalisation with Quality: "Universalisation with quality" should be the overarching goal for ICDS in the Eleventh Plan. This would include raising the number of anganwadis to a minimum of 14 lakhs (with priority to disadvantaged groups), extending all ICDS services to all children under six and all eligible women, and improving the quality of services.

Focus on Children under Three: ICDS should give much greater priority to children under the age of three years. This would include providing adequate incentives to ASHAs for the relevant services (including home-based neonatal care, breastfeeding and nutrition support), provision of nutritious THRs, better training on issues related to children under three, and the adoption of the "two-worker" model.

Two-Worker Model: Adequate care of children under three combined with effective pre-school education for children aged three to six years cannot be achieved without the involvement of two anganwadi workers (along with the anganwadi helper).

Anganwadi-Cum-Crèches: Crèches ensure that adequate care and development opportunities are available to children whose mothers go for work outside the home (especially if there are no adult carers at home). Crèches are required for children, in both the zero to three and the three to six age groups, for the entire day. To begin with, we recommend that 10 per cent of all anganwadis be converted to anganwadi-cum-crèches. This would mean that these centres are open full time, both the workers are present all day and are given additional training on running a crèche.

Pre-School Education: For children aged three to six years, pre-school education should be the primary focus of ICDS activities. Aside from adoption of the two-worker model, this requires appropriate training, infrastructure, equipment, supervision and support.

Nutrition Programmes: For children in the age group of three to six years, the SNP should be based on hot, cooked, nutritious meals, along the same lines (and with the same financial norms) as the "mid-day meal" scheme in primary schools (with a minimum financial norm of Rs 3 per child per day in addition to grains). For younger children, it should be based on carefully-designed THRs, combined with nutrition counselling.

5.3 Other Recommendations

The other recommendations are:

Maternity Entitlements: A national scheme for maternity entitlements in the informal sector, on the lines of the Dr Muthulakshmi Reddy Maternity Benefit Scheme in Tamil Nadu (including cash support of Rs 1,000 per month for six months for care during pregnancy and after delivery), should be introduced. A national task force should be created to further investigate the modalities of universalising maternity entitlements to all working women. All existing laws – MBA, ESI Act, all labour laws, proposed unorganised workers social security act, etc, should be brought in line with recommended principles.

Crèches: Apart from the creation of anganwadi-cum-crèches on a pilot basis (in 10 per cent of all anganwadis), there should also be a major expansion and improvement of crèche facilities under the Rajiv Gandhi National Crèche Scheme. The provision for a crèche at all NREGA worksites, as provided for under the act must be implemented so that women can avail of employment

opportunities as well as have a safe place to leave infants where their basic needs are addressed.

Infant and Young Child Feeding: Infant and young child feeding counselling and support should be recognised as one of the core "services" both in ICDS and NRHM, with a clear budget head. This should include skilled counselling and support (incentive based) for initiating breastfeeding within the first hour of birth, continued counselling and support in the form of home visits for maintaining exclusive breastfeeding for six months, and counselling and support for continuing breastfeeding for two years or more, along with adequate and appropriate complementary feeding.

Financial Commitments: Fair implementation of the above recommendations would require a recurrent budget of around Rs 30,000 crore at 2006-07 prices, to be reached in a phased manner within the Eleventh Plan. By the end of the Eleventh Plan, this is likely to represent just over one half of 1 per cent of India's gross domestic product (assuming a growth rate of 8 per cent per year). This is quite reasonable, considering that children under six account for 15 per cent of the population, and represent the future of the country.

Children under six have been grossly neglected for a long time in Indian planning, and the country is paying a heavy price for this today. The Eleventh Plan presents an opportunity to correct this bias and give children their due. However, this cannot be done through marginal expansion or superficial "reform" of existing child development programmes. It requires bold initiative, new strategies and – not least – a massive increase in financial allocations for children under six.

NOTES

1 The share of child development (which includes ICDS and the crèche scheme) and child health in the total union budget is 1.3 per cent.

2 Since we had been specifically requested to analyse the experience of countries like Thailand during the developmental phase when they were most akin to India, a companion paper on Thailand's experience has also been prepared [Garg and Nandi 2007] and is summarised in a table in this paper.

3 The full name of this act is the Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992, as amended in 2003 (IMS act).

4 The Supreme Court directive of Rs 2 per day per child for supplementary nutrition covers all children, including infants zero to six months old. However, these infants do not need any supplementary nutrition, they only need breastmilk. The money meant for this group of children (Rs 2 per child born for 180 days) can be used for protecting, promoting and supporting breastfeeding through a separate budget head created for this purpose.

5 Detailed recommendations consistent with what follows are presented in the FOCUS Report (2006) and Gupta et al (2007).

6 For further discussion see the collection of articles on ICDS published in *Economic & Political Weekly* on August 26, 2006.

7 Specific directions on this are included in the Supreme Court's judgment of December 13, 2006 which also establishes a right to "anganwadi on demand": "…rural communities and slum dwellers should be entitled to an 'anganwadi on demand' (not later than three months) from the date of demand in cases where a settlement has at least 40 children under six but no anganwadi".

8 See Sinha (2007) on convergence with NRHM on malnutrition, need for a second anganwadi worker to reach out to the households and role of the anganwadi worker and ASHA in behaviour change communication.

9 In a recent unpublished meta-analysis by H P S Sachdeva (presented at the National Institute of Nutrition, April 2006), the impact of iron fortified foods on anaemic populations was studied. Only an increase of 0.4 g in existing haemoglobin levels was found.

10 In fact, the Prevention of Food Adulteration Act currently does not allow fortification of foods with anything else besides iron and iodine.

11 Though the concern is sometimes raised that the SNP may displace food provided by the family, there is evidence that this rarely happens [Jacoby 2002]. If any substitution does happen, it is typically less than one-to-one, so that there is some "net" quantitative supplementation. Qualitative supplementation through the programme can only add to the net gains to the child. There is thus the real potential of augmenting a largely cereal-based home meal with good quality more expensive foods as part of an SNP.

12 The fact that the provision of cooked food has considerable effects on child attendance is well-documented in the context of mid-day meals in primary schools [see e g, Drèze and Goyal 2003 and Khera 2006]. If anything, the attraction of nutritious food is likely to be even higher for younger children. The FOCUS survey found that the provision of cooked food at the local Anganwadi raised the probability of regular attendance of an average child by nearly 50 percentage points (FOCUS Report 2006: 61).

13 Government of India (2007). More recent versions of this document, however, do not include this approach.

14 There is much evidence of poor reporting of weight-for-age data under ICDS as things stand. Anganwadi workers are often under pressure to "hide" undernutrition (especially severe undernutrition), and the official figures often underestimate the number of malnourished children [see for example Garg 2006].

15 This would be the case when the new norms of one anganwadi centre per 800 population comes into force assuming about 80 per cent of children use ICDS services.

16 As mentioned in previous sections many of these children also require that crèche/day care services are provided at the anganwadi centre.

17 For ASHA's roles and responsibilities, see the web site of the ministry of health and family welfare (www.mohfw.nic.in).

18 This section draws on an earlier discussion note for the Planning Commission prepared by Patnaik, Deshpande, Zaidi and others (2007).

19 On this issue, see for example Garg (2006) and Sinha (2006).

20 In this connection, it is also important to remember that the Supreme Court judgment of December 13, 2006 on ICDS directs the government to expand the number of anganwadi centres to 14 lakhs by December 2008.

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