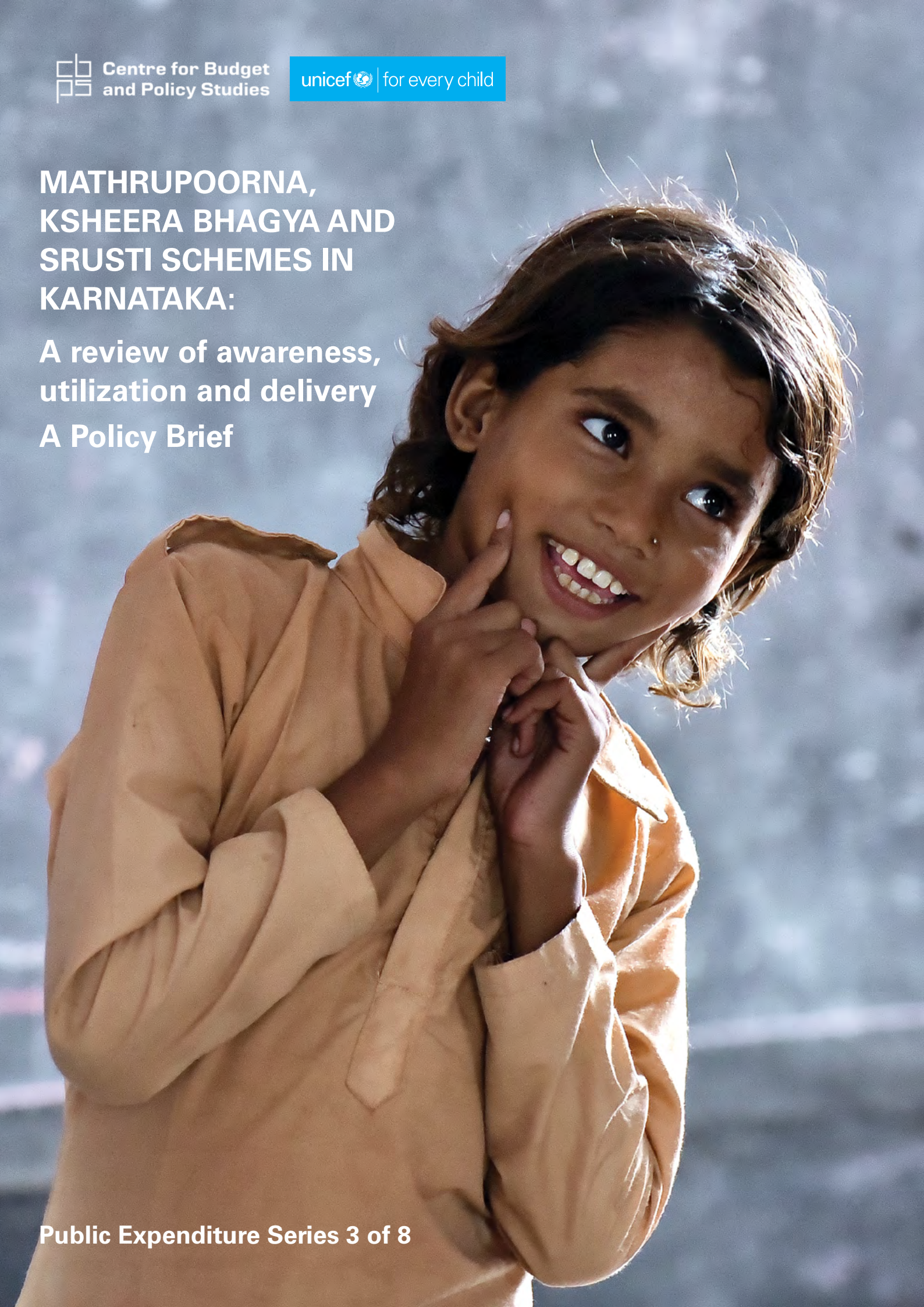


# MATHRUPOORNA, KSHEERA BHAGYA AND SRUSTI SCHEMES IN KARNATAKA:

A review of awareness,  
utilization and delivery

A Policy Brief



# Introduction

Amongst India's states, Karnataka is the eighth most populous state and sixth largest in terms of area. Karnataka stands fourth in terms of Gross State Domestic Product (GSDP) and had the third highest growth rate between 2012-18<sup>1</sup>. Karnataka is also among the first few states to receive the Integrated Child Development Services (ICDS) programme focused on child and maternal health. Despite high economic growth and early introduction of programmes such as ICDS, Karnataka fares poorly in child and maternal health when compared to its southern neighbours i.e., Kerala, Tamil Nadu, and Andhra Pradesh.

The role of under-nutrition in maternal and child mortality is well-recognised. Under-nutrition is the cause of a third to half of deaths among

children under-five years of age. Roughly a third of infants in India are born with a low birthweight every year. One of the major reasons for this is the poor nutritional status of Indian women. Recognising the importance of lifecycle approach and supplementary nutrition to improve child and maternal health outcomes, Government of Karnataka has launched schemes such as Mathru Poorna, Ksheera Bhagya and Srusti in order to address the nutritional needs of pregnant and lactating mothers and children in the state.

This policy brief is based on an assessment of these three schemes with a specific focus on the beneficiaries' awareness levels, extent of utilization and implementation related challenges.



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## A Snapshot of the Three Programmes

|   | Mathru Poorna  | Srusti   | Ksheera Bhagya  |
|---|--|--|---|
| <b>Objective</b>                                    | Reduce maternal mortality and anaemia through provision of one hot cooked meal.  | To prevent occurrence of stunting and malnutrition in pre-school children through provision of eggs. | To prevent occurrence of stunting and malnutrition in pre-school and school-going children through provision of milk. |
| <b>Eligible beneficiaries</b>                       | Pregnant and lactating women   | Children of pre-school age   | Children of pre-school and school going age groups  |
| <b>Percentage of eligible beneficiaries reached</b> | 75% <sup>2</sup>   | ~ 90%  | ~ 90% <sup>3</sup>  |
| <b>Allocation in 2019-20</b>                        | Rs 645 crores  |  | Rs 1,043 crores <sup>4</sup>  |
| <b>Utilization in 2019-20<sup>5</sup></b>           | Rs 161.7 lakhs   | Rs 16,692 lakhs  | Rs 484.16 lakhs   |
| <b>Major issues/challenges in implementation</b>    | Procurement of supplies, lack of coordination between Accredited Social Health Activist (ASHA) and anganwadi workers, social taboos associated with mobility during pregnancy. | Quality of eggs, lack of storage space at the anganwadis.  | Lack of acceptance of milk powder, safe storage space at the anganwadis and schools.                                  |



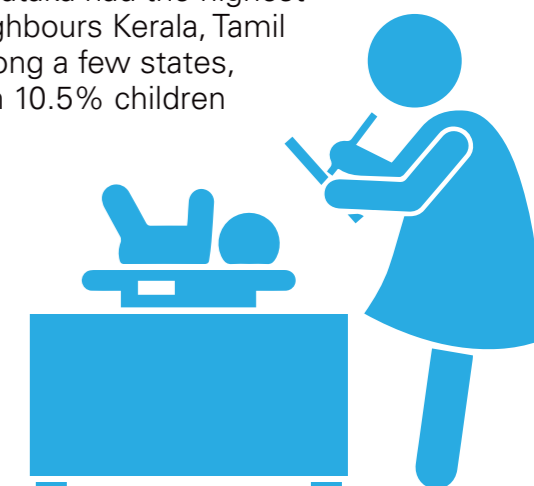
## The Issues

### Underweight children:

According to the National Family Health Survey (NFHS)-3, Karnataka had the highest percentage of underweight children when compared to its neighbours Kerala, Tamil Nadu, Maharashtra, and Andhra Pradesh. Karnataka is also among a few states, which experience the highest incidence of severe wasting with 10.5% children being under this category.

### Maternal Mortality Rate:

According to the Sample Registration System, the maternal mortality rate in Karnataka stood at 108 per one lakh births during 2014-16. While Karnataka is in the eighth position in India in terms of maternal mortality, it continues to fare poorly in comparison to its southern peers, i.e. Kerala, Tamil Nadu, and Andhra Pradesh. In terms of neonatal mortality rate too, Karnataka's position within India has dipped from the seventh rank in 2014-15 to the ninth in 2015-16<sup>6</sup>.



<sup>1</sup> Ministry of Statistics and Programme Implementation (<http://mospi.nic.in/data>)

<sup>2</sup> <https://www.indiaspend.com/how-karnataka-is-improving-childrens-health-by-focusing-on-mothers/#:~:text=The%20Mathrupoorna%20scheme%20aspires%20to,WCD%2C%20which%20implements%20the%20programme>

<sup>3</sup> Approximate coverage under the mid-day meal programme (figure not available separately). [http://mdm.nic.in/mdm\\_website/Files/PAB/PAB-2020-21/Minutes/Karnataka%20PAB%20Minutes.pdf](http://mdm.nic.in/mdm_website/Files/PAB/PAB-2020-21/Minutes/Karnataka%20PAB%20Minutes.pdf)

<sup>4</sup> <http://www.finance.kar.nic.in/bud2019/2019-BSEnglish.pdf>

<sup>5</sup> All these figures are calculated from the number of beneficiaries under the scheme and the unit cost. Separate budget figures for these schemes are not available as they are covered under the Supplementary Nutrition programmes.

<sup>6</sup> NITI Aayog Report, 2018.

**Capacities of Anganwadi centres:**

Lack of adequate infrastructure/resources and staff at Anganwadi centres have contributed to the poor monitoring and implementation of various nutritional related programmes<sup>7</sup>. For instance, many of the anganwadis lack sufficient and safe storage space for perishable food materials. Many of them also do not have a source of clean drinking water and sanitation facilities within the premises. This poses challenges when pregnant and lactating women as well as children are supposed to be provided with meals in the premises and thus spend a long time within the anganwadis. Similarly, because the limited number of anganwadi workers are responsible for the procurement of food materials, management of the nutrition interventions as well as the pre-school education of children, they find it extremely hard to achieve a balance between all these roles.

**Mathru Poorna scheme implementation:**

Although the scheme targets both pregnant and lactating mothers, the uptake of the scheme is much lower among lactating mothers when compared to pregnant women. Also, lack of consensus among the community and frontline workers along with strong socio-cultural beliefs have been major obstacles to the smooth functioning of the scheme<sup>8</sup>.



**The Study**

The study was conducted in four districts of Karnataka (Belagavi, Raichur, Mysuru, and Tumkur). One taluk from each of these four districts was selected considering the presence of a high percentage of malnourished children and pregnant woman suffering from anaemia. The study design was mixed-method and comprised of both quantitative and qualitative research components. A household survey of approximately 1,500 households was undertaken in the four districts in addition to an anganwadi facilities survey as well as a time use survey of the anganwadi workers as part of the quantitative framework. As part of the qualitative study, Focus Group Discussions (FGDs) (both scheme recipients as well as other community members), detailed interviews with anganwadi workers, and semi-structured interviews with officials from the Department of Women and Child Development (WCD) were undertaken. All data presented here are based on primary fieldwork.

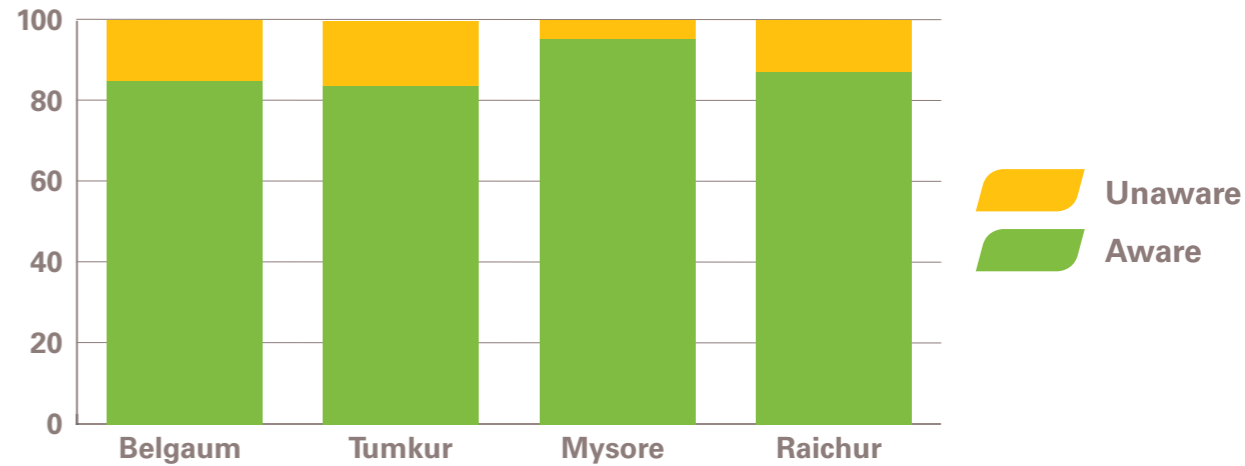


**The Findings**

**1 Mathru Poorna**

**Awareness levels are fairly high regarding the scheme and its eligibility criteria.** Out of the 1,497 households surveyed, 1,314 households (87.8%) were aware of the Mathru Poorna scheme even though only 720 households had pregnant or lactating women who are eligible to be enrolled (Figure 1). Amongst the households who claimed awareness, 98.5% were also aware that both pregnant and lactating women were eligible, and 98.3% knew that it was open to women belonging to all caste categories.

**Figure 1: Awareness levels of Mathrupoorna Scheme**



**Understanding of the intent behind the scheme is not consistent across all beneficiaries.**

While most beneficiaries know that nutritious food is good for them and their babies' health, an understanding of why a certain type of nutrition is being provided to them or how to incorporate this nutrition into their meals is not the same across beneficiaries.

**Strong socio-cultural taboos create barriers for young mothers to acquire a more nuanced understanding of the scheme.**

The presence and influence of older men and women in the household resulted in many young mothers not being able to interact with the anganwadi worker to gain knowledge regarding pregnancy and childcare. It was found in the study that women had a deeper understanding of the objectives and benefits of the scheme if they had spent longer time in the anganwadis. However, many of the women were unable to do so because of their care work burden and because of the taboos associated with mobility during pregnancy/lactation. Thus, these socio-cultural barriers emerged as a reason for lack of understanding about the scheme.

**A larger number of beneficiaries belonging to Scheduled Caste (SC), Scheduled Tribe (ST), and Muslim communities are enrolled and /utilize the scheme in comparison to their proportion in the population (Table 1).**

The need for the scheme is felt more by the traditionally disadvantaged sections of the population; hence, they are largely availing the much-needed benefits under the scheme.



<sup>7</sup> An ethnographic study of the Mathru Poorna Yojana pilot project for pregnant and lactating mothers in two blocks of two districts in Karnataka, CBPS, 2017.

<sup>8</sup> An ethnographic study of the Mathru Poorna Yojana pilot project for pregnant and lactating mothers in two blocks of two districts in Karnataka, CBPS, 2017.

**Table 1: Proportion among population vis-à-vis proportion among beneficiaries**

| Taluk (District)     | Category                    | Proportion (%) |      |       |        |           |      |
|----------------------|-----------------------------|----------------|------|-------|--------|-----------|------|
|                      |                             | SC             | ST   | Hindu | Muslim | Christian | Jain |
| Saundatti (Belagavi) | Population                  | 9.5            | 11.0 | 88.4  | 10.7   | 0.0       | 0.6  |
|                      | Mathru Poorna Beneficiaries | 18.6           | 13.7 | 83.9  | 16.1   | 0.0       | 0.0  |
| Raichur (Raichur)    | Population                  | 21.0           | 12.7 | 79.2  | 18.6   | 1.2       | 0.4  |
|                      | Mathru Poorna Beneficiaries | 27.6           | 14.9 | 71.3  | 28.7   | 0.0       | 0.0  |
| Madhugiri (Tumkur)   | Population                  | 24.1           | 12.2 | 94.9  | 4.8    | 0.0       | 0.0  |
|                      | Mathru Poorna Beneficiaries | 32.1           | 14.5 | 87.4  | 11.9   | 0.6       | 0.0  |
| Nanjangud (Mysuru)   | Population                  | 22.6           | 13.8 | 95.8  | 3.5    | 0.3       | 0.1  |
|                      | Mathru Poorna Beneficiaries | 27.3           | 17.3 | 91.4  | 7.9    | 0.0       | 0.7  |

Note: SC stands for Scheduled Caste and ST stands for Scheduled Tribe.

When we examine the proportion of beneficiaries according to their economic situation, it can be seen that the largest proportion of beneficiaries belong to the Below Poverty Line (BPL) category across all the four districts. The finding that socially and economically disadvantaged communities are the largest users of the facilities under this scheme is reinforced by finding from our qualitative study where we found that one of the largest hindrances in utilization was the loss of prestige associated with eating at the anganwadi.

**Table 2: Economic classification of consumers of Mathru Poorna benefits**

|               | Belagavi | Tumkur | Mysuru | Raichur | Total |
|---------------|----------|--------|--------|---------|-------|
| Antyodaya     | 11.2     | 1.9    | 5.0    | 3.9     | 5.5   |
| Below Poverty | 78.9     | 87.4   | 85.6   | 83.4    | 83.8  |
| Above Poverty | 5.0      | 3.8    | 2.9    | 5.0     | 4.2   |
| No Ration     | 5.0      | 0.6    | 0.0    | 4.4     | 2.7   |

**A majority of beneficiaries have enrolled in the scheme only during the latter half of the 15 months (9 months pregnancy and 6 months lactating period).** As is observed from the table, only 2.5% of the respondents enrolled into the scheme from the beginning of pregnancy, while 22.3% of the sample joined the programme in the later months of pregnancy. However, a very high percentage of women (75.2%) only joined the programme in their lactating period (Table 3). Thus, many beneficiaries are missing out on the intake of nutritious meals and supplementary tablets in the crucial early days of pregnancy.

**Table 3: Timelines of enrolment and percentage enrolled**

|                        | Belagavi | Tumkur | Mysuru | Raichur | Total |
|------------------------|----------|--------|--------|---------|-------|
| Beginning of Pregnancy | 4.4%     | 1.3%   | 2.9%   | 1.7%    | 2.5%  |
| Middle of Pregnancy    | 31.1%    | 12.0%  | 9.4%   | 33.7%   | 22.3% |
| Lactating period       | 64.6%    | 86.8%  | 87.8%  | 64.6%   | 75.2% |

**The utilization levels and the regularity of consumption of hot cooked meals and Iron and Folic Acid (IFA) tablets is fairly high amongst the enrolled households.** Of the women who had enrolled in the scheme, 96.1% had consumed hot cooked meals provided by the anganwadi, while 91.4% of them had consumed IFA tablets (Table 4). Also, the regularity of consumption on an average was 23 days out of a maximum of 25 days per month.

**Table 4: Percentage consumption**

|                  | Belagavi | Tumkur | Mysuru | Raichur | Total |
|------------------|----------|--------|--------|---------|-------|
| Hot cooked meals | 100      | 93.7   | 93.5   | 96.7    | 96.1  |
| IFA tablets      | 85.7     | 95     | 96.4   | 89.5    | 91.4  |

**These are the perceived benefits of the scheme according to the survey.** Apart from provisioning of hot cooked meals, other benefits of the scheme as perceived by the respondents are (i) health check-up facilities which include gestational weight monitoring, IFA supplementation, tetanus injections, and deworming (ii) dissemination of health-related information such as the importance of nutrition during pregnancy and lactation and information on the necessity of institutional births, and (iii) improving the health of both mother and child by provision of IFA supplements, and provision of postnatal care including immunisation and vaccinations etc.

### Major reasons for non-utilization of the scheme

**Customs, traditions, and loss of prestige:** While many lower caste communities have strict taboos related to pregnancy and childbirth that prohibit women from coming to the anganwadi, many belonging to upper caste and wealthy communities consider anganwadi food to be inferior to what they can provide in their own households. Additionally, many upper caste families are not willing to eat food prepared by an anganwadi helper belonging to a lower caste. Another predominant factor is that many families consider it as a loss of their prestige if they send their wives or daughters to eat at the anganwadi.

**Poor taste and quality:** The same kind of food being served everyday (rice, sambhar and rasam) gets very boring and unappetising. Also, the combination of food provided was found very problematic. For example, they complained that having eggs with milk or having IFA tablets with food brought on indigestion. Another problem was related to the quality of food—they felt that the quality of ingredients used was worse than the one that they procure from the local store.

**Burden of care work:** They complained that it was extremely difficult to leave their care work responsibilities, just to eat food every day at the anganwadi. Often their family members would come home for lunch, and they would not be able to cater to them, especially children. Others reported that they had elders at home who needed continuous assistance.

**Distance and mobility:** Anganwadi workers have reported lower attendance among beneficiaries who live too far from the anganwadi centre. Anganwadi workers themselves opined that walking every day to get food is too taxing on the women and can, in fact, be detrimental to them.

**Poverty:** Although beneficiaries belonging to extremely poor families are utilizing the scheme, they prefer take-home rations so that the food could be distributed across the household. They feel that the take-home rations could be distributed across all three meals for themselves or to improve the nutrition of their children.



## 2 Ksheera Bhagya and Srusti

**Awareness levels of both the schemes are very high.** All the FGDs including those with community members, Mathru Poorna groups, women’s groups, men’s groups, and adolescent girls indicate that people across different social strata are aware of both these schemes, as well as their intention to provide nutrition to children (Table 5).

**Table 5: Awareness levels among respondents**

| Scheme         | No. of households aware of the scheme | Total Households Surveyed | Percentage (a/b*100) |
|----------------|---------------------------------------|---------------------------|----------------------|
|                | a                                     | b                         | c                    |
| Ksheera Bhagya | 1,456                                 | 1,497                     | 97.26%               |
| Srusti         | 1,385                                 | 1,497                     | 92.52%               |

**Utilization levels of Ksheera Bhagya is quite high when compared to Srusti scheme.** Ninety-five per cent of the respondents replied in the affirmative with regard to consumption of either milk provided at the anganwadi or usage of milk powder at home. In comparison, only 63.4% replied in the affirmative to consumption of eggs. However, lower utilization levels might be because of food habits of households among the respondents (being vegetarians) and not necessarily a lower level of utilization of the scheme.

**A larger number of beneficiaries belonging to SC, ST and Muslim communities utilize the scheme in comparison to their proportion in the population (Table 6).** Even among these categories, we see that SCs and Muslims utilize it more when compared to STs. This might indicate a need to analyse whether access to anganwadis for the ST community is more challenging.

**Table 6: Proportion in the population vis-à-vis among the beneficiaries**

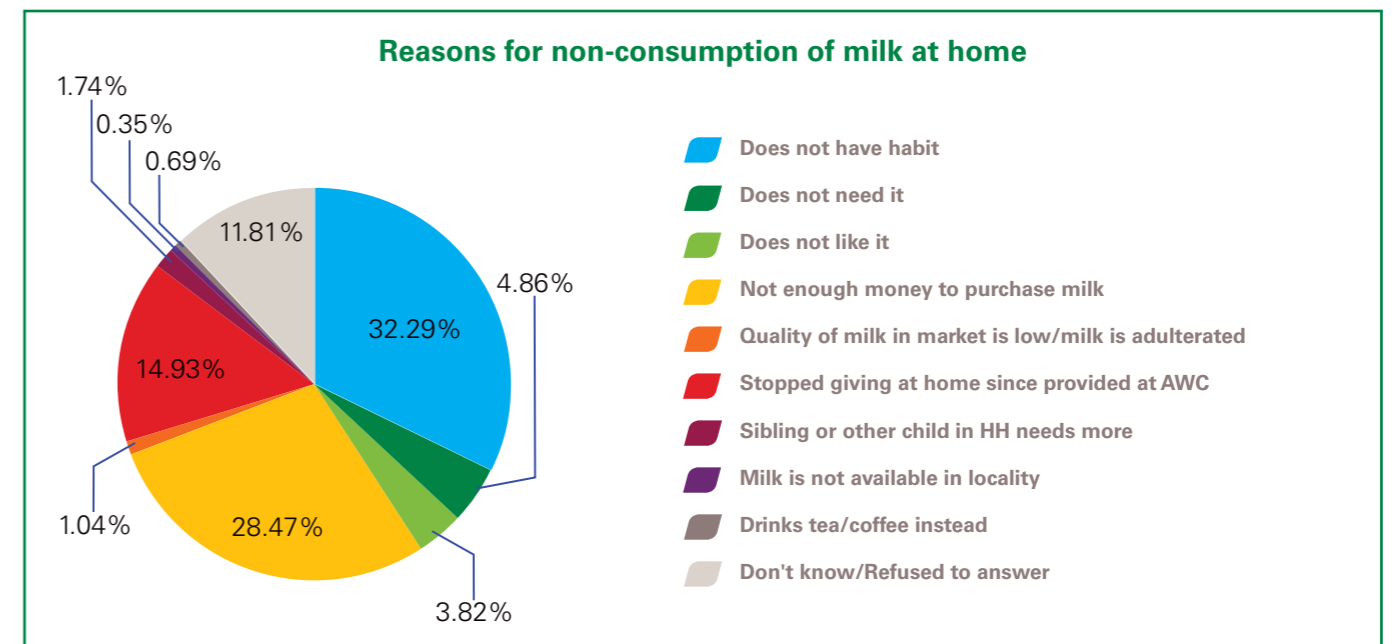
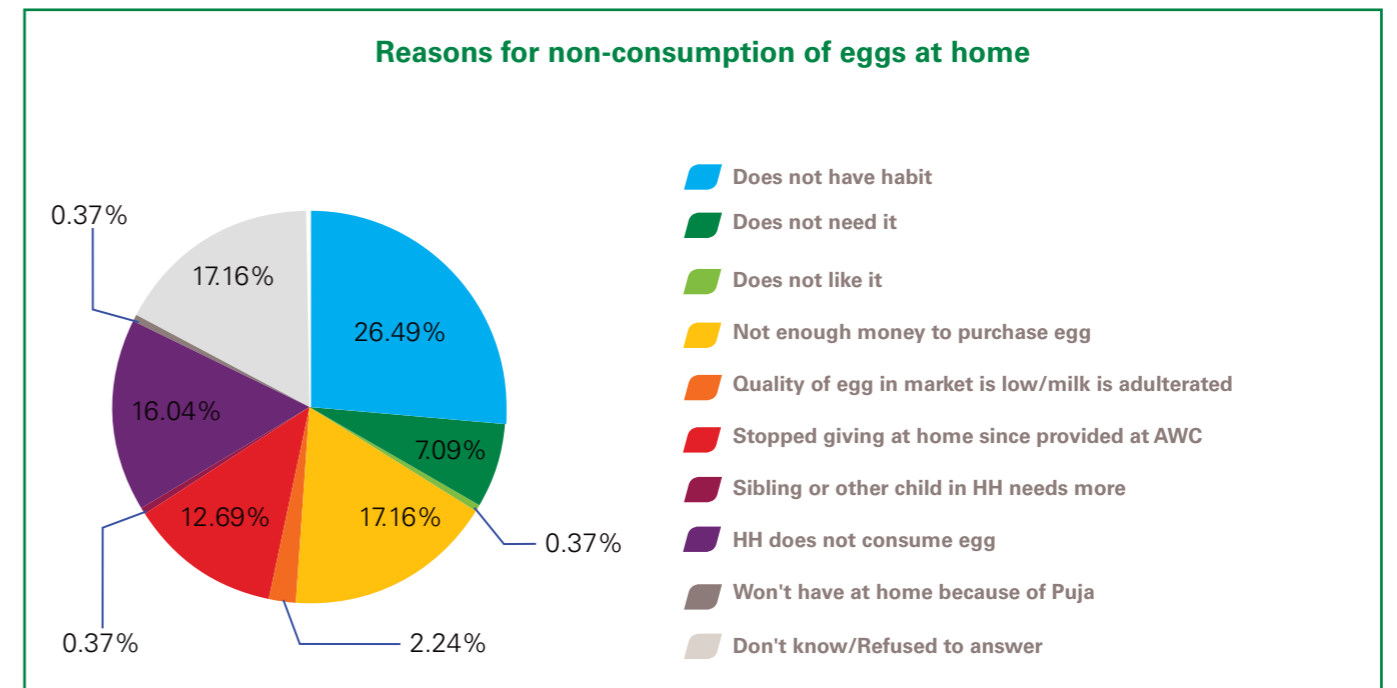
| Category             | Proportions (%) in population and in enrolment of respective schemes |                |        |
|----------------------|--|----------------|--------|
|                      | Population   | Ksheera Bhagya | Srusti |
| Scheduled Caste (SC) | 19.3   | 24.3           | 24.7   |
| Scheduled Tribe (ST) | 12.4   | 13.7           | 14.4   |
| Muslim               | 9.4  | 14.4           | 12.5   |

**Only a small fraction of the households complained regarding the quality of milk and eggs being served under these schemes.** Despite an overwhelming support, one of the major complaints appears to be about the quality and taste of the milk powder being provided. A few mothers reported their children feeling nauseous after drinking milk made from powder. With regard to eggs, only in Raichur district, about 6.46% of the respondents raised complaints regarding the quantity and quality of eggs being provided.



**Children not in a habit of drinking milk or eating eggs is the single largest reason for non-consumption at home.** However, it is also important to note that the next important reason for non-consumption is not having enough money to purchase milk and/or eggs (Figure 2).

**Figure 2: Reasons for non-consumption of milk and eggs at home**



### 3 Functioning of Anganwadi Centres: Major Issues

| Infrastructural  | Institutional   | Governance related  | Procurement Related   |
|--|---|---|---|
| Almost 50% of the anganwadi centres did not have a separate storage space for perishables nor the access to clean drinking water facilities or a water source. | While a large proportion of the anganwadi workers (43%) have been in their role for a long time (20-30 years) and most of them have also received training of some kind during their service period, trainings specific to government schemes were found to be limited. | Anganwadi workers are overburdened with respect to their time use. The total time consumed in the procurement of supplies, cooking, and serving food/supplements to various beneficiaries is much more than imparting pre-school education. This has resulted in a shift from the anganwadi's original mandate of providing both educational and nutritional resources to now becoming only a nutritional centre. | Delays caused by procedures in procurement of supplies and delays in reimbursements and estimation of supplies considering the food consumption patterns of beneficiaries are perceived as challenges by the anganwadi functionaries. |

### Implications for policy/institutional shifts for more efficient delivery

| Mathru Poorna   | Ksheera Bhagya   | Srusti   | Implementation through Anganwadis   |
|---|--|--|---|
| <p>Need to increase awareness about the importance of antenatal care among beneficiaries:</p> <ul style="list-style-type: none"> <li>develop an education model for this.</li> </ul>                  | <p>Concern about quality and taste of milk:</p> <ul style="list-style-type: none"> <li>provide pasteurised milk with higher shelf life instead of milk powder.</li> </ul>  | <p>Quality of egg supplied:</p> <ul style="list-style-type: none"> <li>regular monitoring through community engagement and ensure proper quality of eggs to be provided.</li> </ul>    | <p>Overburdened:</p> <ul style="list-style-type: none"> <li>adequate provisioning of human resources through hiring of more workers so that a clear demarcation of activities between nutrition and education is established.</li> <li>need to separate the management of procurement for efficient supply chain management.</li> </ul> |
| <p>Need for better coordination among anganwadi workers and local health workers:</p> <ul style="list-style-type: none"> <li>establish process mechanisms for the same at all levels.</li> </ul>      | <p>Children not interested:</p> <ul style="list-style-type: none"> <li>provision of fruits in addition to milk to supplement nutrition and overcome the issue of unwillingness of some children to take milk.</li> </ul> | <p>Non-egg-eating Families:</p> <ul style="list-style-type: none"> <li>provide an alternative such as fruits for vegetarians or children who do not like the taste of eggs.</li> </ul> | <p>Infrastructure:</p> <ul style="list-style-type: none"> <li>to provide or improve storage space for perishables, and clean drinking water and sanitation facilities at the centres through higher investments.</li> </ul>   |
| <p>Need to address social norms around childbearing:</p> <ul style="list-style-type: none"> <li>community education to address the issue of taboos surrounding mobility of pregnant women.</li> </ul> |  |  | <p>Lack of training:</p> <ul style="list-style-type: none"> <li>in addition to providing job related training to anganwadi workers, regular training on health, nutrition practices, and other government initiatives based on a long-term holistic capacity development plan leading to certification.</li> </ul>                      |





The brief has been prepared by Sridhar Prasad, Archana Purohit and Jyotsna Jha. In addition to these three, Niveditha Menon, Shreekanth Mahendiran, Madhusudhan Rao B.V., Thyagarajan R, Anusha Iyer and Mithila Abraham Sarah from CBPS were also part of the study team that conducted the research. Acknowledgments are due to Soumen Bagchi, Reeni Kurian, Sandip Ghosh and Khyati Tiwari from UNICEF for their comments.

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