



COVID-19 and its Effects on Nutritional Distributions in Karnataka - 2022



COVID-19 and its Effects on Nutritional Distributions in Karnataka - 2022

All Rights Reserved
@UNICEF - Hyderabad Office, 2022.

**Research and Writing by the following members of
Centre for Budget and Policy Studies (CBPS), Bangalore:**

Achala S. Yareseeme, Gayathri Raghuraman,
Sridhar R Prasad, Jyotsna Jha, Madhusudan B V Rao, & Thyagarajan R

Peer Reviewers: Khyati Tiwari & Keya Chatterjee

This paper can be quoted in part, with the full citation.

Suggested Citation: Yareseeme A. S., Raghuraman G., Prasad S. R.,
Jha J., Rao M.B.V., and R.T., (2022),

“COVID-19 and its Effects on Nutritional Distributions in Karnataka”
Centre for Budget and Policy Studies and UNICEF-Hyderabad Office, India

Table of Contents

Acknowledgments	6
Abbreviations	7
Executive Summary	8
Chapter 1. Introduction	10
1.1 Nutritional Landscape of Karnataka before the Pandemic: A Snapshot	11
1.2 COVID-19 Pandemic	12
Chapter 2: The Study: Approach and Methodology	14
2.1 Objectives	14
2.2 Conceptual Framework	15
2.3 Methods	16
2.4 Selection of Districts	16
2.5. Challenges faced in the fieldwork	17
Chapter 3. Socio-economic profile of Tumakuru and Yadgiri Districts	18
3.1 Economy and demography of Tumakuru district	19
3.2 Economy and demography of Yadgiri district	19
3.3 Pandemic, socio-economic practices and institutional challenges (based on field work)	19
3.3.1 Migrant crisis, livelihoods issues, and coping strategies during the pandemic	20
3.3.2 Role of Gram Panchayat Task Force (GPTF) in managing migrant returnees	21
3.3.3 Socio-cultural conditions	21
3.3.4 Infrastructural facilities in schools and AWCs	21
3.3.5 Teachers in position and enrolment in schools	22
3.3.6 Child labour	22
3.3.7. Child marriages	22
Chapter 4. Public Expenditure on Nutrition in Karnataka	23
Chapter 5. Effects of Pandemic on anganwadi services	25
5.1. Tracing the Government Orders during the pandemic	26
5.1.1. Government orders related to anganwadi services	26
5.1.2. Government orders related to education and school services	26
5.1.3. Other notifications	26
5.2. Take-home rations	27
5.2.1. The process of planning to distribution of THR during the pandemic	27
5.3. Srushti Egg Scheme	34
5.4. Special care for Severely Acutely Malnourished (SAM) and Moderately Acutely Malnourished (MAM) children during the pandemic	36
5.4.1. Nutrition Rehabilitation Centre admissions during COVID-19	37
5.5. Nutritional Initiatives by non-government organisations during the pandemic	37
5.6. Pradhan Mantri Matru Vandana Yojana	37
5.7. Scheme for Adolescent Girls	39
5.8. Activities under Poshan Abhiyan	39
5.9. Non-nutritional Services in anganwadis	39
5.9.1. Growth monitoring services during COVID-19	39
5.9.2. Immunisation services during COVID-19	40

Table of Contents

5.9.3. Counselling services during COVID-19	40
5.9.4. Early Childhood Education (ECE) services during COVID-19	41
Chapter 6. School education and other services for children between the age of six to sixteen years	44
6.1. New enrolments in schools during COVID-19	45
6.2. Nutrition and health services during COVID-19	46
6.2.1. Take home rations during COVID-19	46
6.2.2. Iron and Folic Acid and deworming tablets during COVID-19	49
6.2.3. Mid-day meals (MDM) and children's food patterns during COVID-19	50
6.2.4. Health check-ups during COVID-19	52
6.3. Education and learning loss during COVID-19	52
6.4. Other activities of schools and teachers during COVID-19	55
6.4.1. Activities under Poshan Abhiyan	55
6.4.2. Role of School Development Management Committee (SDMC) Members	55
Chapter 7: COVID-19 Duties and Frontline workers	57
7.1. Surveys during COVID-19	58
7.2. Vaccinations for COVID-19	58
7.3. Additional tasks for Teachers during COVID-19	59
7.4. Challenges faced by frontline workers during COVID-19	60
7.5. Support received during COVID-19	63
Chapter 8. Conclusions and discussions	64
8.1. Nutritional Status of beneficiaries during the pandemic	65
8.2. Plan for THR and response time	65
8.3. Coping strategies during COVID-19	66
8.4. Special focus on SAM children and anaemic PLW	66
8.5. Detrimental impact of COVID-19 on school education and adolescents	66
8.6. Functioning of the elected local government and administrative machinery	67
8.7. Lack of proper monitoring systems	67
8.8. Needs assessment based on taluk specific conditions	67
8.9. Treatment of frontline workers during COVID-19	67
Chapter 9. Recommendations	68
9.1. Recommendations for Rural Development and Panchayat Raj	69
9.2. Recommendations for Women and Child Development Department	69
9.3. Recommendations for Education	70
9.4. Recommendations for Department of Health and Family Welfare	70
9.5. Inter Sectoral Cooperation Recommendations	70
References	71
Annexures	72
Annexure 1: Supplementary Nutrition and Other services in Karnataka	72
Annexure 2: List of Government Orders pertaining to Anganwadi Centres (AWCs) and Schools during COVID-19	74
Annexure 3: Detailed list of Key Person Interviews and Focus Group Discussions conducted	83
Annexure 4: List of items given in Take-Home Ration (THR)	84

List of Tables

Table 3.1.	Comparison of major parameters across Tumakuru and Yadgiri districts	19
Table 4.1.	Public Expenditure on Nutrition in Karnataka (INR in Crore)	24
Table 5.1.	Percentage Increase in number of beneficiaries in 4 taluks	28
Table 5.2.	Steps involved in production at Mahila Supplementary nutrition Training and Production Centres (MSPTC)	29
Table 5.3.	Distribution of Take-Home Ration (THR)	33
Table 5.4.	Process of procurement of eggs	35
Table 5.5.	Process for registrations under Pradhan Mantri Matru Vandana Yojana (PMMVY)	38
Table 5.6.	Summary of availability of Nutritional Services available to Anganwadi Centres' beneficiaries during COVID-19	43
Table 6.1.	New Enrolments during COVID-19 in schools	45
Table 6.2.	Take-home Rations given to Children in schools per day	47
Table 6.3.	Access to food and what children ate	50
Table 6.4.	Education during COVID-19	53
Table 6.5.	Summary of nutritional services for school children during COVID-19	56

List of Figures

Figure 1.1.	Map of Karnataka showing its 31 districts	10
Figure 1.2.	District-wise percentages of children under five years of age who are wasted based on National Family Health Survey-4 (NFHS-4) (2015–16) and NFHS-5 (2019–20), Karnataka	11
Figure 1.3.	District-wise percentages of children under five years of age who are stunted based on National Family Health Survey-4 (NFHS-4) (2015–16) and NFHS-5 (2019–20)	12
Figure 2.1	Conceptual framework	15
Figure 2.2.	List of District and Taluks chosen for the study	17
Figure 5.1.	Planning, Production and Delivery of Take-home rations during pandemic in anganwadi in Tumakuru and Yadgiri	27
Figure 5.2.	Pre-packaged Take-Home Ration in Yadgiri	32
Figure 5.3.	Anganwadi helper feeding egg to a malnourished child in Shahpur, Yadgiri	34
Figure 5.4.	Nutrition Rehabilitation Centre in Yadgiri District Hospital	36
Figure 5.5.	Anganwadi Centre in Tumakuru Rural (Mydala Gram Panchayat)	42
Figure 6.1.	Mid-day Meals in Madhwar School, Yadgiri Taluk	51
Figure 7.1.	Challenges faced by frontline workers	60

Acknowledgments

This report was made possible with the funding support from UNICEF Hyderabad. We would especially like to acknowledge the support from Dr. Khyati Tiwari, Dr. Keya Chatterjee, and Mr. Abid Ahmed from UNICEF, who have been with us from the start of the study. This study would not have been possible without the efforts of Ms Latha R and Thyagarajan R, who were our field officers for this project.

We also want to thank Ms. Priyanka Mary Francis, former Director of the Department of Women and Child, Karnataka, who facilitated the study through requisite permissions. We would also like to extend our thanks to Dr. Usha (Joint Director, Integrated Child Development Services, Dr. Vishal R (Commissioner of public education, and Ms. Shilpa Sharma (Commissioner of Karnataka Panchayat Raj Commissionerate) for giving us their valuable time. We are grateful to all the women and child development officials at the district and block levels of Yadgiri and Tumakuru, who spent their valuable time in helping us understand the functioning of the departments during the COVID-19 pandemic. We would like to specifically thank Mr. Prabhakar (Deputy Director), Mr. Gururaj (Child Development Project Officer [CDPO] Shahpur), Ms. Radha (CDPO, Yadgiri taluk) in Yadgiri. In Tumakuru, we would like to thank Mr. Shridhar (Deputy Director, Tumakuru), Mr. Dinesh (CDPO, Tumakuru taluk), Mr. Byrareddy (Assistant CDPO, Tumakuru Taluk), Ms. Anitha S (CDPO, Madhugiri), Mr. Mahesh D H (Assistant CDPO, Madhugiri), and Mr. Nanjundaiah (Block Education Officer, Madhugiri).

We would also like to acknowledge all the anganwadi workers, anganwadi supervisors, and accredited social health activists for sharing their valuable experience with us. We would also like to thank all the school heads and their teachers who took out time to answer our questions. We would also like to thank all the parents and children who were willing to share their COVID-19 experiences with us.

In the end, we would like to thank the CBPS administrative team, Ms Usha P V and Ms Mrinalika R Pandit for their support throughout the span of this study. It is important to add that we alone are responsible for all errors and omissions.

September 2022
Bengaluru, India

Abbreviations

ANM	Auxiliary Nurse and Midwife
ASHA	Accredited Social Health Activist
AWC	Anganwadi Centre
AWH	Anganwadi Helper
AWS	Anganwadi Supervisor
AWW	Anganwadi Worker
BEO	Block Education Officer
CBPS	Centre for Budget and Policy Studies
CDPO	Child Development Project Officer
CEO	Chief Executive Officer
ECE	Early Childhood Education
FGD	Focus Group Discussions
GoK	Government of Karnataka
GP	Gram Panchayat
GPTF	Gram Panchayat Task Force
HCM	Hot Cooked Meals
ICDS	Integrated Child Development Services
IFA	Iron and Folic Acid
KPI	Key Person Interview
MAM	Moderately Acutely Malnourished
MDM	Mid-Day Meal
MPR	Monthly Progress Reports
MSPTC	Mahila Supplementary Nutrition Training and Production Centres
NFHS	National Family Health Survey
NRC	Nutrition Rehabilitation Centre
ORS	Oral Rehydration Solution
PHC	Primary Health Centre
PLW	Pregnant and Lactating Women
SAM	Severely Acutely Malnourished
SDMC	School Development Management Committee
SNP	Supplementary Nutrition Program
TAC	Technical Advisory Committee
THR	Take-Home Ration
WCD	Women and Child Development
ZP	Zilla Parishad



Executive Summary

In 2015–16, the nutritional status of Karnataka's children in the age group of under five years was looking poor despite the state being one of the economic hubs of the country. Recognising this, the state undertook a series of supplementary nutrition measures to improve the health status of children under five years of age, and of pregnant and lactating women. Although this brought about an improvement in nutritional status of children, the improvement rates varied widely by district. This was further impacted by the COVID-19 pandemic in 2020.

In Karnataka, the first lockdown in 2020 saw mass reverse migration of daily wage labourers back to their hometowns. Closure of schools and Anganwadi Centres (AWCs) led to stoppage of mid-day meals and Take-Home Rations (THR) for lakhs of children in the state. The Department of Women and Child Development (WCD), which supplied hot cooked meals to children aged three to six years and pregnant and lactating women, decided to switch to supply dry uncooked rations, known as THR in April 2020. Anganwadi Workers (AWWs) and anganwadi helpers were tasked with supplying these rations to the homes of the beneficiaries. In addition, they were also undertaking active surveillance of COVID-19 cases. This implied a disruption in the elaborate system of nutrition support that Karnataka had been practising through its anganwadis and schools. Newspaper articles reported on delays in supply of rations in several districts for a variety of reasons in the state.

This study tries to understand the potential and limitations of the elaborate supplementary nutrition interventions in Karnataka, especially with respect to the experience of the pandemic (March 2020 to December 2021), provided mainly through AWC and schools. It also aims at providing pointers for developing strategies to minimise effect of future emergencies on children's nutritional status.

In order to do this, we have looked at how two districts maintained the supplementary nutrition distribution

system and associated functions in AWCs and schools during the duration of COVID-19 pandemic. Literature review pertaining to nutritional interventions during COVID-19 in Karnataka and other states in India was undertaken to develop the conceptual framework for the study as well as to develop the tools. Qualitative interviews were conducted at the village, block, district, and state levels with stakeholders who were assigned roles and responsibilities for the disbursement of various policies and schemes associated with nutrition. Focus group discussions and interviews of beneficiaries were undertaken to gain perspective and get feedback on the various schemes and their functioning during the pandemic. Monthly progress reports from AWCs were collected from the four taluks under the study to understand the changes in beneficiary enrolments during the pandemic. Tumakuru and Yadgiri were identified as the two districts for this study. Within each of these districts two taluks were chosen: Tumakuru Rural and Madhugiri in Tumakuru and Yadgiri and Shahpur Taluks in Yadgiri district. However, the major limitation of our study was recollection bias as the events took place two years prior to the study period. We were also able to undertake only limited analysis of the data from monthly progress reports as the collection of data could not always take place, thus leading to incomplete data for the pandemic period.

The state budget documents from 2016–17 to 2021–22 were also analysed to study the government expenditures on nutrition during this period. The analysis of trends and patterns in public expenditure in nutrition in the state revealed that nutrition expenditure as a proportion of total expenditure of the state declined from 4.08% to 3.2% over the last five years. There was a decrease in expenditure by 13% in 2020–21 when compared to 2019–20, which picked up in 2021–22 and showed an increase by 25%.

In-depth interviews with officials as well as beneficiaries showed that the WCD department

responded to this calamity with speed and efficiency pointing towards resilience of the nutritional distributional system which may have prevented nutritional disaster in many children under six years of age. The first three months were challenging for AWWs and WCD officials as they had to also plan for migrant returnees and conduct surveys of their villages and circles. The supplementary nutrition distribution system was able to cope with the increase in beneficiary numbers as well as maintain minimum quality of food grains. These benefits were more valuable in Yadgiri than Tumakuru due to the poorer socio-economic nature of the former. Anganwadi workers and supervisors pointed out that the number of moderately acutely malnourished children may have increased during this time in Yadgiri. At the same time, it was also true that Nutrition Rehabilitation Centres did not receive many patients during this time due to the fear of infection, which may have had negative impact on severely acutely malnourished children with complications.

The study also found that pregnant and lactating women enrolled in larger numbers to obtain the THR at the centres, but there were delays in enrolling women who had previously enrolled but did not avail Mathrupurna services. The Mahila Supplementary Production and Training Centres also took time to adapt to this situation and planned well to hire more labour to manage the extra workload of increased THR. However, their payments and dues were not cleared for more than four months, and they had to use their savings to procure extra rations. The distribution was a big challenge for AWWs as they had issues of packaging and transportation. Nevertheless, the administrative machinery in Yadgiri responded to this by planning packaging of THR in standard kits, which was a boon for the AWWs, but this happened only after a few months of the first wave of COVID-19.

Local authorities with support from the Zilla Parishad, like in Shahpur taluk, Yadgiri would go the extra mile to prevent increase in severely malnourished children due to initiatives like anganwadi helpers boiling eggs meant for the children, feeding them, and helping track their health status. Delivery of eggs to beneficiaries was also better in Yadgiri, which had given the responsibility to a cooperative following a tendering process to ensure all beneficiaries received the requisite quantity of eggs; in Tumakuru, AWWs had to procure eggs locally, where supply was affected by the rise in prices. However, there were complaints of poor-quality dal as well as eggs in Yadgiri.

All other services available at the AWCs, including growth monitoring, counselling, and immunisation, suffered greatly during lockdowns due to social distancing norms as well as fear of infection. In addition, the Poshan tracker app, which could have a valuable resource for data entry and tracking during the pandemic, was largely dysfunctional due to a variety of reasons. Pre-school education services were also severely restricted in both districts. Support from local Gram Panchayats was largely found lacking in the taluks.

School children aged seven years and above did not receive the care that children under six years of age received during the pandemic. Schools provided THR only after the second wave (September 2020), and it was provided only once in three months in Tumakuru as opposed to Yadgiri, where this was irregular. The distribution of THR through schools started late and did not cover all elements; for example, no attempt was made to replace milk distribution with an equivalent nutrient source. Milk powder was given only once in the two years. There were also no means of assessing the children's nutritional status during this time. There were many instances especially in Yadgiri where parents were unaware of and/or unable to collect THR from schools. To make matters worse, iron and folic acid supplementation and deworming were completely stopped in both districts during school closures, thus increasing the possibility of worsening the already poor iron deficiency anaemia numbers in the state.

The out-of-school adolescent girls were the most neglected lot as they stopped receiving benefits under the Scheme for Adolescent Girls due to administrative policies and absence of coordination between the WCD and education departments. There were reports of children taking up habits like drinking and instances of irregular attendance and lack of attention in schools. Our interviews suggested that many children in Yadgiri were forced to undertake daily wage labour to support their families. Reports of increased child marriages were also quite common in the area. School closures have indeed caused learning loss and deepened the issues of child labour in districts like Yadgiri.

There is currently no social security or any health insurance in place to ensure that AWWs and anganwadi helpers are protected from any health issues that may come up while carrying out their duties. Hence, it becomes imperative for the government to provide better compensation and social security.



Chapter 1

Introduction

Karnataka, a state with 31 districts, is in the southwest part of India. Its capital, Bangalore (now Bengaluru) is known as the “IT (information technology) capital of India” and the state is well known for its penchant for encouraging start-ups. Karnataka is among the top five states contributing to India’s gross domestic product and has demonstrated strong growth over the years. Its per-capita gross state domestic product of INR 3.05 lakhs (estimated for the financial year 2021–22) is the highest among these top five states. It is also a major job producer, having produced 10% of the formal jobs in the country, while contributing 8.8% to the national gross domestic product and constituting less than 5% of the nation’s population (Government of Karnataka, 2022).

The state provides piped water to 95% of its population and 76% of its women are literate (Indian Institute of Population Sciences, 2019). The National Family Health Survey-5 (NFHS-5) also shows that only 47% of the state's population have access to piped drinking water in their household even though 93% have access to basic drinking water. Similarly, the report also states that 83% of households have access to toilet facilities, but there is a huge variation in access to toilets between districts. While only three districts—Dakshina Kannada, Udupi, and Kodagu—show 100% access to toilets, districts like Yagchiri show only 47% access to toilets. As hinted above, there is large a socio-economic divide

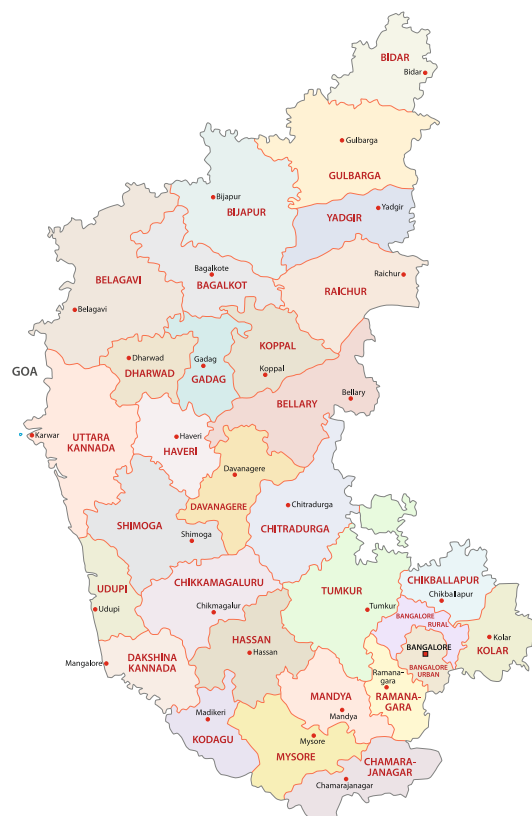


Figure 1.1. Map of Karnataka showing its 31 districts

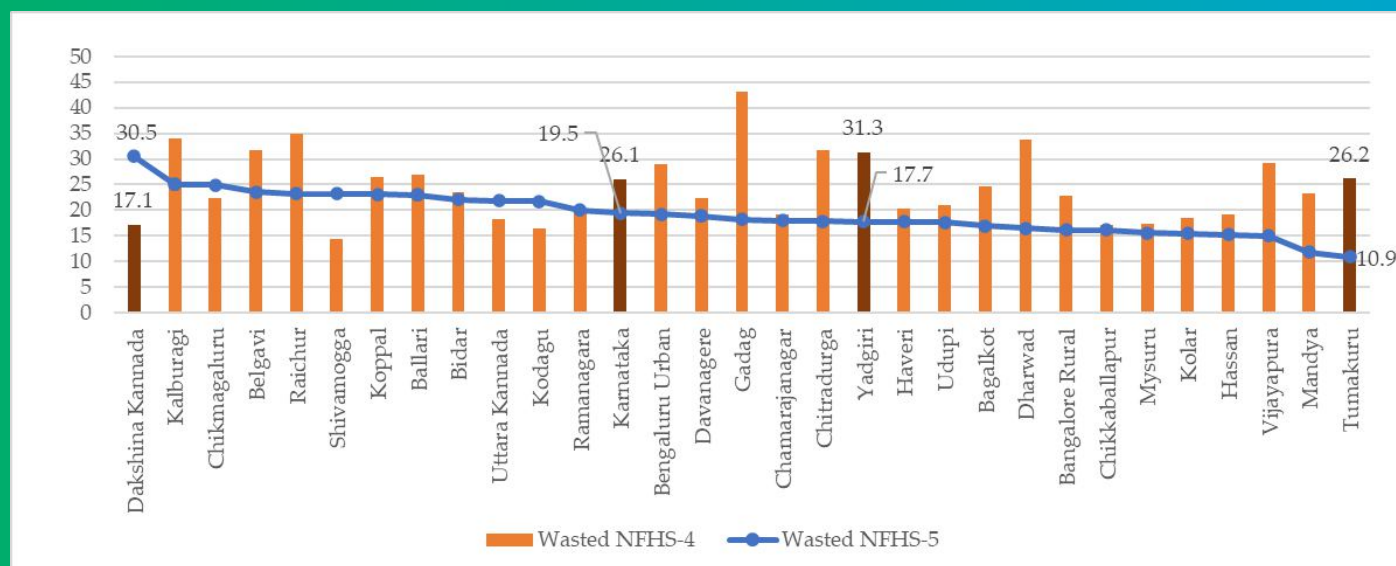
between the northern and southern parts of Karnataka with its northern districts showing poorer socio-economic indicators (Mishra & Bhattacharya, 2015; NITI Aayog, 2021; Sripad, 2021). Furthermore, a study has shown that a higher level of hunger is observed among people who have poorer socio-economic indicators like lower literacy (Hanagodimath & Annigeri, 2019). Hence, districts in northern parts of Karnataka are more likely to suffer from poorer nutrition and health indicators. The following section gives more details of the current nutritional landscape in Karnataka.

1.1 Nutritional Landscape of Karnataka before the Pandemic: A Snapshot

In 2015–16, nutritional status of Karnataka's children in the age group of under five years (here in after referred to as 'children under five') was looking poor despite the state being one of the top economic hubs of the country. In 2015–16, NFHS-4 showed that 26% of its children under five had not achieved the expected weight for their age, while 36% had not achieved the desired height for their age (stunted). Recognising this, the state undertook a series of supplementary nutrition measures to improve the health status of children under five and of pregnant and lactating women (PLW). This seems to have led to some gains as in 2019–20 during NFHS-5, the wasting had come down by six percentage points (Figure 1.1), while stunting also came down by one percentage point (Figure 1.2).



Figure 1.2. District-wise percentages of children under five years of age who are wasted based on National Family Health Survey-4 (NFHS-4) (2015–16) and NFHS-5 (2019–20), Karnataka

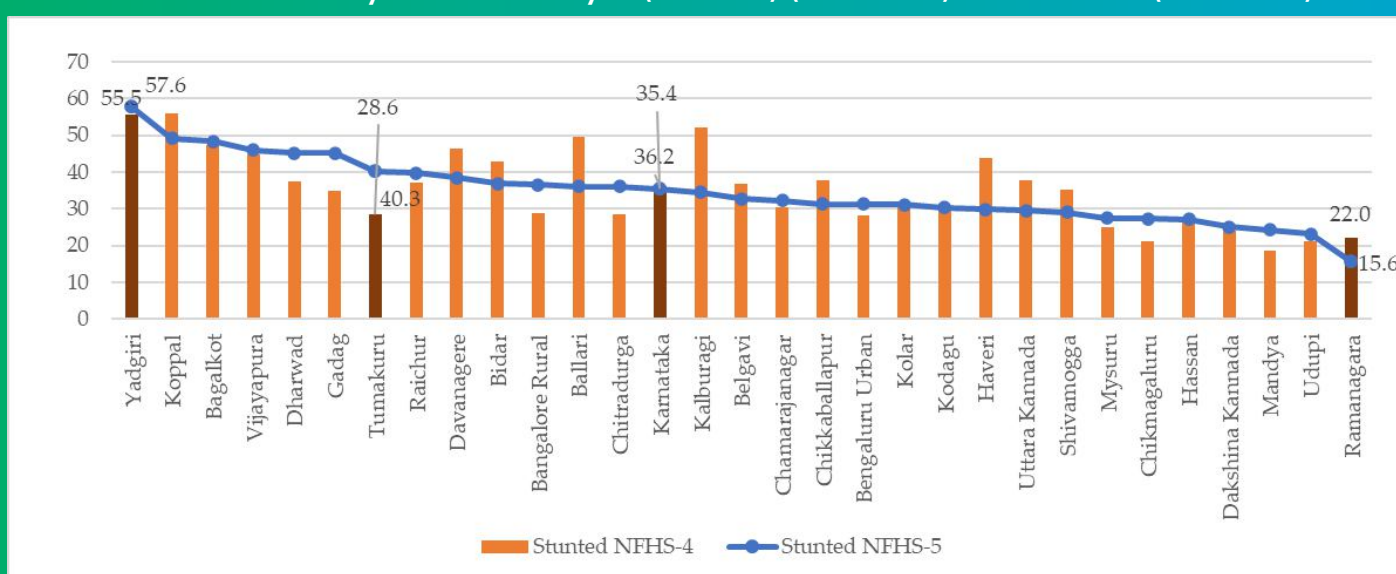


Source: National Family Health Survey (NFHS)-4 and NFHS-5 factsheets.

When one breaks down the state into districts, this scenario changes. For instance, five districts located in the southwest regions of Karnataka with relatively better economic indicators showed an increase in wasting numbers in 2019-20. In fact, Dakshina Kannada, Kodagu, and Shivamogga had registered the lowest rates of wasting in 2015-16. Similarly, when we look at stunting numbers, 16 districts registered an

increase in stunting levels, with Yadgiri district having 57% of its children reported as stunted in 2019-20. In addition to stunting and wasting among children, 47% of the women in the state aged 15-45 years had anaemia in 2019-20. This proportion too varied widely with the districts, ranging from 60% in Raichur to 35% in Bengaluru Urban districts.

Figure 1.3. District-wise percentages of children under five years of age who are stunted based on National Family Health Survey-4 (NFHS-4) (2015-16) and NFHS-5 (2019-20)



Source: National Family Health Survey (NFHS)-4 and NFHS-5 factsheets.

1.2 COVID-19 Pandemic

In Karnataka, the first case of COVID-19 was detected on 8 March 2020. We accessed the media bulletins released by Government of Karnataka's Department of Health and Family Welfare. It was seen that the number of cases in Karnataka rose from just 68 in the April 2020 to 1.7 lakh active cases in September 2020—this was the first wave. The second wave started in March 2021 with 28,000 active cases, which quickly rose to 3.8 lakh in April 2021. Bengaluru Urban district was the most affected in the two waves of COVID-19 and had 2.5 lakh active cases at the end of April 2021. In comparison, Tumakuru had 12,000 active cases during the peak of second wave, and Yadgiri, however, was only affected in limited capacity with about 2,259 active cases during its peak in the second wave. The pandemic also led to strict lockdowns being implemented, especially in the first wave where the first

lockdown began on 24 March 2020 and lasted until the end of May 2020. Following this, the lockdowns were eased in a stepwise manner.

The first lockdown saw mass reverse migration of daily wage labourers back to their hometowns. Closure of schools and Anganwadi Centres (AWCs) in March 2020 led to the stoppage of Mid-Day Meals (MDM) and Take-Home Rations (THR) for lakhs of children in the state; however, the AWCs and district authorities were directed to immediately calculate the THR due to the beneficiaries and take action to distribute them¹ (refer to Annexure 2 for government orders pertaining to MDM and THR). The Department of Women and Child Development (WCD), which supplied Hot Cooked Meals (HCM) to children aged three to six years and PLW, decided to switch to supply dry uncooked rations,

¹Take Home Rations are given to children aged six months to three years in AWCs. Hot cooked meals/ mid-day meals are given to children aged 3-6 years in AWCs and all children in government and aided schools from grades 1-10.

known as THR in April 2020. Anganwadi workers (AWWs) and Anganwadi Helpers (AWHs) were tasked with supplying these rations to the homes of the beneficiaries. In addition, they were also undertaking active surveillance of COVID-19 cases. This implied a disruption in the elaborate system of nutrition support that Karnataka had been practising through its anganwadis and schools.

Newspaper articles reported delays in supply of rations in many districts in the state for a variety of reasons. For instance, in Ballari, this was attributed to the high workload of AWWs, especially during the times when COVID-19 caseloads were high (Balannanavar, 2020). In other districts like Kalaburagi, there was shortage of ration kits in June/July 2020, which was attributed to failure in payments by the government. In Raichur, children were supposed to get 5 eggs every week but were supplied with only 6 eggs once a month (Ram, 2020). Reports also pointed out that many children suffering from severe malnutrition were not admitted to Nutrition Rehabilitation Centres (NRCs) due to fear of contraction of COVID-19 (Madhavan, 2020). Schools only started giving out THR from September 2020 (Government order dated 4 August 2020; see Annexure 2). This delay could have affected school children adversely, where doctors later observed that children suffered from nutrient deficiencies, which were earlier controlled by micronutrient supplementation in schools such as Vitamin A (Chatterjee, 2020). In many places, lockdown restrictions caused lots of inconvenience to people at ration shops because of long queues and a cap on the number of people allowed a day (J, 2021). In addition to worries of undernutrition, many reports talk about the loss of learning in children due to closure of schools and lack of access to e-learning tools (Azim Premji Foundation, 2021; Research Group of Azim Premji Foundation, 2020). All these reports point to the need for a plan in order to prepare for future pandemics.

This study, therefore, is an important step towards understanding the potentials and limitations of the elaborate Supplementary Nutrition Programme (SNP) interventions in Karnataka, especially with respect to the experience of the pandemic, and provided mainly through AWCs and schools. This is also aimed at providing pointers for developing strategies to minimise effect of future emergencies on children's nutritional status. It is important to remember that SNP services do not replace the primary meal to be given at home for the children but are meant as an additional source of nutrition to ensure that children's daily dietary requirement is fulfilled at least partially. Further, AWCs serve as focus points to deliver other important services to under six populations like immunisation and growth

monitoring, both of which play an important role in maintaining the health and nutritional status of a child. In addition to children, PLW also receive food, check-ups, and nutritional counselling at the AWCs. Schools, on the other hand, serve as focus area for child nutrition and micronutrient supplementation areas. Annexure 1 provides the details of the SNP services through AWCs and schools in Karnataka.

COVID-19 was more than a health emergency. It had a much broader impact on the economy, health and social services, and individual wellbeing. Responses to COVID-19, particularly lockdowns and restrictions in movement, in addition to fear and reluctance to seek health services, limited access to healthy food, constrained livelihoods, and disruptions in food production and distribution systems reportedly led to adverse consequences on access to income and food, potentially reversing the progress made towards achieving improved nutrition in India. A modelling study in early 2020 suggested that the COVID-19 could lead to increases in wasting of 10%–50% (Robertson et al., 2020). It is clear that COVID-19 has overlaid an additional nutrition crisis on the pre-existing nutrition emergency. Districts in North Karnataka have reported persistent drought since the last decade, and certain districts have faced issues of flash floods. This has created additional vulnerability towards health and nutrition services being unavailable, with its access and uptake being low. The COVID-19 pandemic has made the already vulnerable children even more vulnerable to food and nutritional insecurity as well as heightened susceptibility to infections.

In this scenario, it is important to know how the state of Karnataka coped with the nutritional fallout due to the pandemic and use those lessons in preventing future nutritional disasters. In our study we have looked at how two districts maintained the supplementary nutrition distribution system and associated functions in AWCs and schools during the duration of COVID-19 pandemic. In the following chapter, we look at the study methodology and conceptual framework. Chapter 3 gives us a summary of nutritional expenditure in Karnataka, while Chapter 4 gives us a background on the Taluks (subdistrict unit) we selected for the study. Chapters 5 and 6 describe our findings in AWCs and schools, respectively. The report would not be complete without the role of frontline workers during the COVID-19 fight, as described in Chapter 7. Finally, Chapters 8 and 9 describe our conclusions and recommendations.



Chapter 2

The Study: Approach and Methodology

The main objective of the study was to create evidence on the impact of the pandemic on the delivery of the SNP services and in turn on nutrition-related practices in Karnataka. The specific objectives are outlined below.

2.1 Objectives

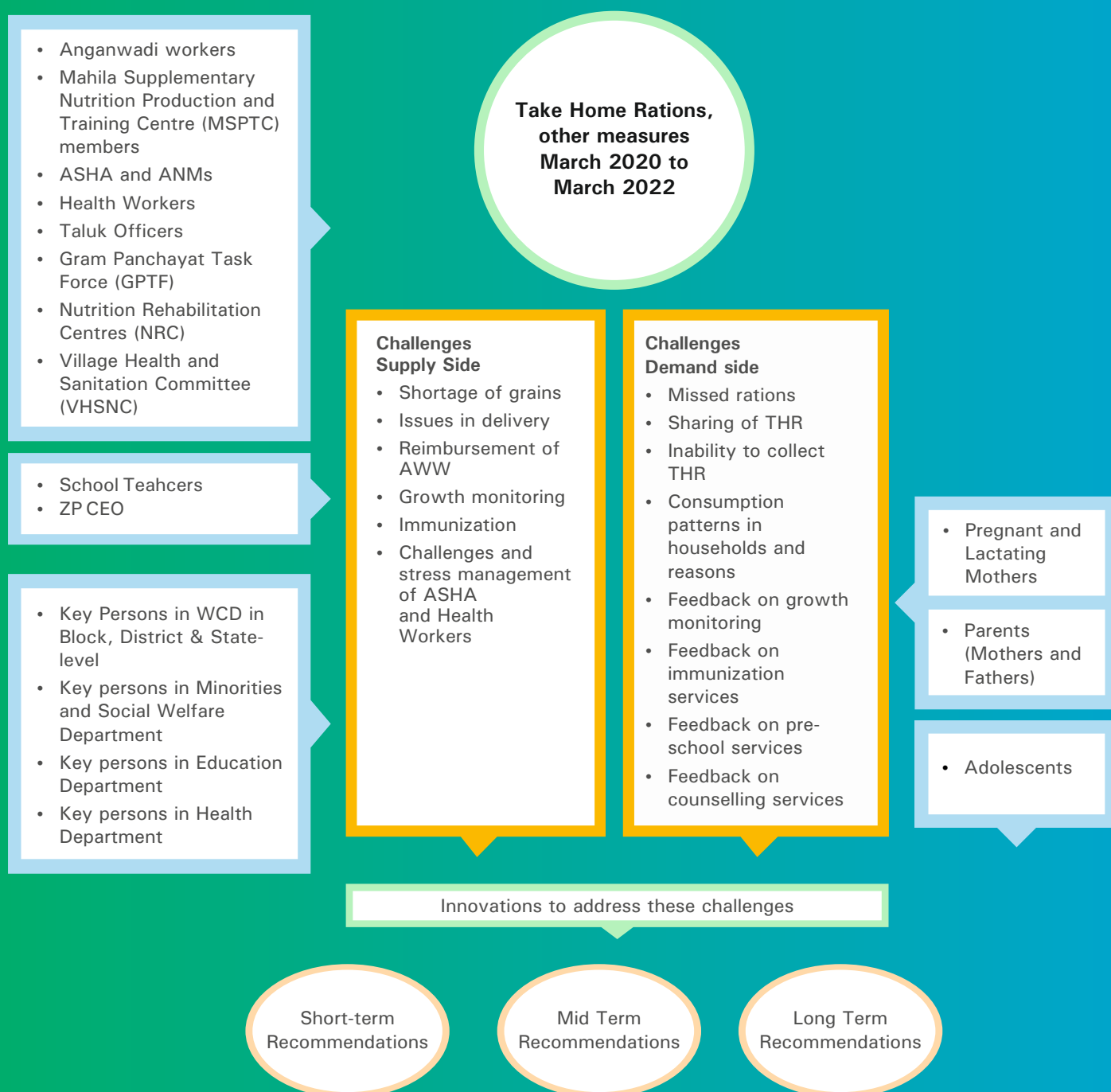
1. **Review evidence** (both primary and secondary) in order to assess the impact of COVID-19 on implementation of public nutrition interventions and challenges to the implementation and innovations undertaken to address these challenges
2. **Develop a conceptual framework and tool** for analysis of the potential impact of COVID-19 on food and nutritional security and appropriate responses
3. **Develop recommendations on a set of interventions and responses** that are high impact, large scale, and adaptive to the changing setting (lockdowns, etc.)
4. **Provide guidance and support** to the government, development partners, and other stakeholders to take up the recommendations by adapting policies, plans, and interventions for food and nutritional security in the short, medium, and long-term
5. **Develop a monitoring and evaluation framework** for measuring the ongoing impact of COVID-19 and the chosen interventions on food and nutritional security, with a focus on utilising existing government information systems

2.2 Conceptual Framework

In order to analyse the potential impact of COVID-19 on food and nutritional security and develop appropriate responses, we designed a conceptual framework that takes into account the most important nutritional interventions and the key stakeholders who are

primarily responsible for delivering these schemes. We studied the demand and supply side challenges faced by various stakeholders in the provision of nutrition related measures between March 2020 and December 2021 during the pandemic. The study focused on nutritional interventions for children aged 0–18 years) and PLW as well as associated services.

Figure 2.1: Conceptual framework



Source: Developed by the CBPS research team.

2.3 Methods

a. Literature Review: Literature pertaining to nutritional interventions during COVID-19 in Karnataka and other states in India was undertaken to develop the conceptual framework (Figure 2.1) for the study as well to develop the tools.

b. Key Person interviews (KPI) of supply side personnel: Interviews were conducted at the village, block, district, and state levels with stakeholders who were assigned multiple roles and responsibilities for the disbursement of various policies and schemes associated with nutrition. These stakeholders are as follows: AWWs, Accredited Social Health Activists (ASHAs), Gram Panchayat Task Force (GPTF), schoolteachers, Taluk officers, Mahila Supplementary Nutrition Production and Training Centre (MSPTC) members, village health and sanitation committees, hostel authorities, NRCs, Zilla Parishad (ZP) Chief Executive Officers (CEO), key persons in WCD

department, Minorities and Social Welfare department, Department of Education, and Department of Health (a detailed table on KPIs has been given in Annexure 3).

c. Focus Group Discussions (FGDs) of demand side stakeholders: The demand side stakeholders were the parents of children aged 0–6 years in AWCs and in schools and hostels (children aged 7–18 years), PLW, and adolescents who were the beneficiaries of these services. The interviews and FGDs were undertaken to help us gain perspective and get feedback on the various schemes and their functioning during the pandemic (a detailed table on FGDs has been given in Annexure 3).

d. Monthly Progress Report (MPR) Analysis: Monthly Progress reports from AWCs were collected from the four Taluks under the study. The reports were collected for the years 2019-20, 2020-21 and 2020-22. It is to be noted that the MPR were not always available for all month's due to data collection issues during peak COVID-19 months.

2.4 Selection of Districts

We identified two districts, Tumakuru and Yadgiri for conducting the study. We used an existing nutritional index developed earlier by CBPS to rank and identify the districts. The district nutritional index for NFHS-4 and NFHS-5 consistently indicated Yadgiri as the poorest performing district in North Karnataka; therefore, it was identified as one of the districts for the study. In South Karnataka, for 2014–15, the poorest performing district was Chikkaballapur, while in 2019–20, it was Dakshina Kannada, which had dropped from the third place in the previous round to the 28th place in NFHS-5. However, Tumakuru was identified for two reasons: (i) despite its proximity to the state capital, the district's status had remained the same in both rounds of the NFHS, and (ii) in terms of nutritional index, it had been one of the worst performing districts in South Karnataka with a low rank in the nutritional index and a rise in the proportion of stunted children from the previous round (indicative of chronic malnutrition). The analysis takes the inter-district as well as intra-district variations into account. Figure 2.2 provides the details of the taluks and Gram Panchayats (GPs) chosen in these two districts for field work.



²As part of our study on expenditure on direct nutritional interventions in Karnataka, we had developed a nutrition index by using data from NFHS-4 (2015-16) and NFHS-5 (2019-20). The index used three indicators: percentage of children under five years of age who are stunted, percentage of children under five years of age who are wasted, and the percentage of women who are anaemic

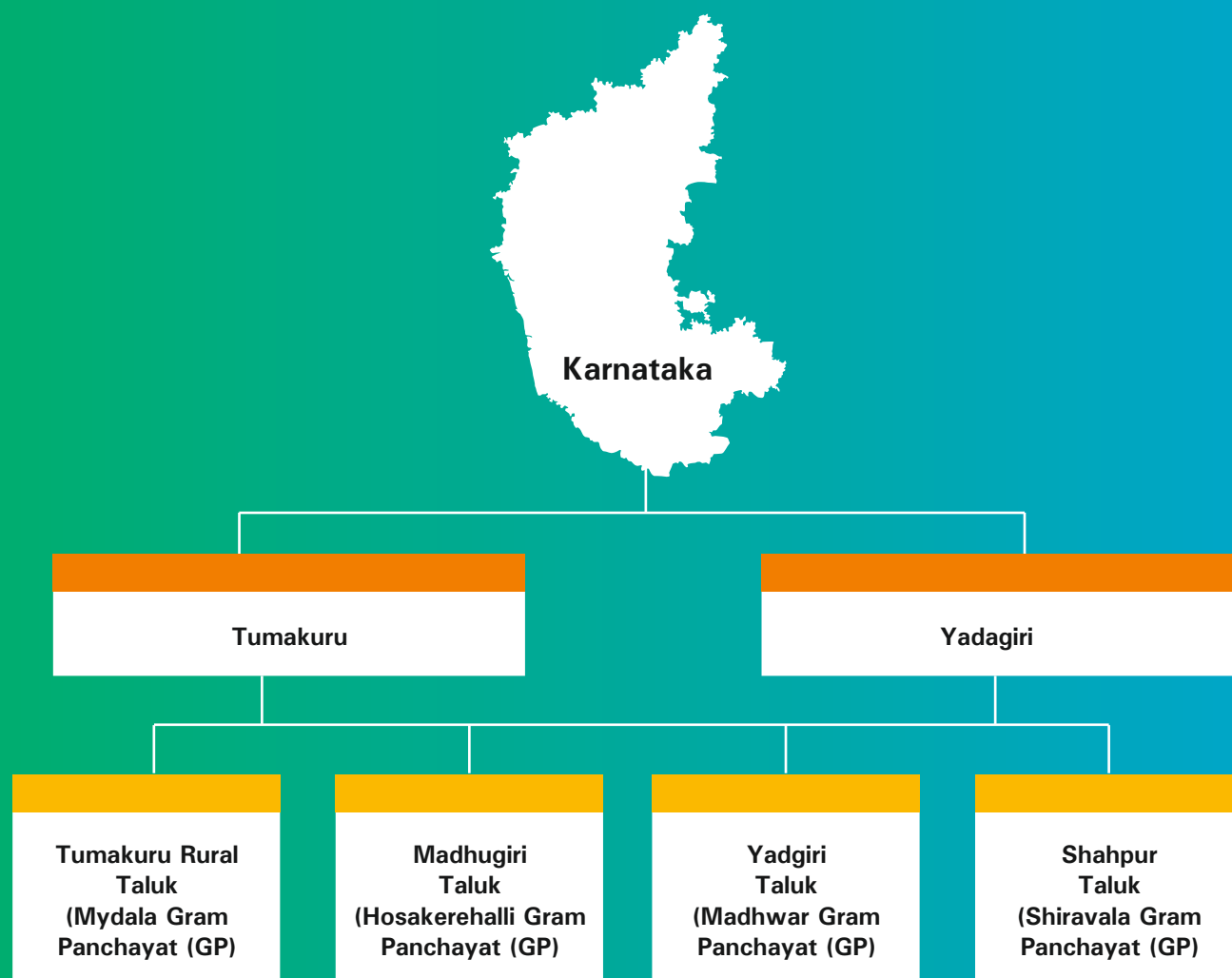
2.5. Challenges faced in the fieldwork

We identified two major challenges in conducting the fieldwork and tried to address those to some extent.

a. Recollection Bias: The study tried to understand the impact of an event that was most intense two years ago; hence, there was a possibility of bias due to recollection- and this turned out to be true. However, we tried to address this by covering multiple stakeholders on both demand side and supply sides and triangulating the findings.

b. Incomplete MPRs: Generally, MPRs included data on number of beneficiaries of SNP at AWCs in every taluk. However, data was often incomplete for the pandemic period as the collection could not always take place. For instance, nutrition status, which depends on weight, could not always be collected during the pandemic due to issues of social distancing. However, we were able to undertake a limited analysis of the MPRs of Shahpur, Madhugiri, and Yadgiri Taluks, and have used that for our inferences.

Figure 2.2. List of District and Taluks chosen for the study



Source: Developed by the CBPS research team.



Chapter 3

Socio-economic profile of Tumakuru and Yadgiri Districts

Tumakuru belongs to the Bengaluru administrative division and Yadgiri belongs to the Kalaburagi administrative division. Yadgiri was carved out of erstwhile Kalaburagi district in 2009 as the 30th district of Karnataka. Tumakuru is the third largest district in terms of area and fourth largest in terms of population, while Yadgiri is the 16th largest district with the seventh least population in the state. In terms of its geographical location, Tumakuru is in very close proximity to Bengaluru, about 70 kms away, with many people commuting daily to Bengaluru for work; Yadgiri is about 480 kms away from Bengaluru, and still has a substantial part of its population migrating to Bengaluru and other nearby states like Maharashtra. Tumakuru has 10 Taluks, whereas Yadgiri now has 5 Taluks.

3.1 Economy and demography of Tumakuru district

The population of Tumakuru consists of majorly Hindus (90.10%), followed by Muslims (9.18%), and Christians (0.34%); Scheduled Castes and Scheduled Tribes make up 18.92% and 7.82% of the population, respectively. It has a sex ratio of 984 females for every 1,000 males (Tumkur City Population Census 2011-2022, 2011)

Also known as 'Kalpataru Nadu', the district mainly has an agrarian economy and is known for its production of coconuts and areca nuts. The other cash crops grown in Tumakuru include paddy, ragi, and groundnuts. However, since it is surrounded by many hills, it also serves as a source of mining activities for minerals such as iron ore, manganese, and granite.

Tumakuru is also one of the cities identified to be developed as an "Industrial Smart City". Large scale infrastructure projects are also coming up in the region including a National Investment and Manufacturing Zone to make it a hub for industrialisation ("12,000 acres of land okayed for manufacturing zone in Tumkur" - The Hindu, 2013). Its closeness to the state capital, which is now overpopulated and overbuilt, makes it a desirable destination for such investments. It also boasts of the world's largest solar power plant in Pavagada taluk.

3.2 Economy and demography of Yadgiri district

Yadgiri is one of the most underdeveloped districts in the state. It has the lowest literacy rate in the state at 51.8% with a large difference between the male (62.3%) and female literacy rate (41.4%). The population of Yadgiri consists of majority Hindus (85.0%) followed by Muslims (13.2%), and Christians (0.3%); scheduled Castes and Scheduled Tribes make up 23.3% and 12.5% of the population, respectively, which is much higher than those in Tumakuru. It has a sex ratio of 987 females for every 1,000 males, which is a little higher than Tumakuru (Yadgir District Population Census 2011-2022, 2011).

The district has vast stretches of fertile black soil with jowar and red gram being the major crops grown, and is known as the 'Daal bowl' of the state (Govt. of Karnataka, n.d.). In terms of industries, the district is known for the cluster of cement industries as it has a distinct stone called as the 'malakheda stone', which is suitable for these industries. Other industries include textile, leather, and chemical production. However, the industrial sector is not very well developed due to non-availability and/or delay in release of bank finance, investment subsidy, and general backwardness of industrial infrastructure (Govt. of Karnataka, n.d.).³ The district has some important rivers flowing in the region, including the Krishna and Bhima rivers.

Table 3.1. Comparison of major parameters across Tumakuru and Yadgiri districts

Parameters	Tumakuru	Yadgiri
Area	10,597 sq. km (4,092 sq. mi)	5,234 sq. km (2,021 sq. mi)
Population	2,678,980	1,174,271
Population density	253/sq. km (660/sq. mi)	224/sq. km (580/sq. mi)
Literacy Rate	75.14%	51.83%
Children under 5 years of age who are stunted (National Family Health Survey-5)	40.3%	57.6%
Children under 5 years of age who are wasted (National Family Health Survey-5)	10.3%	17.7%

Source: Census 2011 and National Family Health Survey-5.

3.3 Pandemic, socio-economic practices and institutional challenges (based on field work)

This section presents the socio-economic context while taking the existing condition and the pandemic's impact into account as emanating from the field. These are

presented here as they serve as critical backdrop for analyses of data and inferences presented in subsequent chapters.

3.3.1 Migrant crisis, livelihoods issues, and coping strategies during the pandemic

One of the main issues that came to the forefront during COVID-19 all over India is the migrant crisis. Bengaluru, being the state capital, is a hub for economic activities; therefore, many people from across the state and other parts of India migrate to Bengaluru. During the COVID-19 induced lockdowns, a huge number of migrant workers returned to their villages and towns from large metropolitan cities like Bengaluru.

Tumakuru and Yadgiri were also no strangers to this phenomenon of emigration of labourers, which had implications for nutritional services. Both districts reported an increase in the number of beneficiaries availing services from the AWCs, though the increase was marginal in Tumakuru district for both the children and PLW. There was a much higher increase in the number of beneficiaries in Yadgiri district because of the higher rate of emigration from there to both Bengaluru and other neighbouring states such as Maharashtra. One of the main reasons for large scale emigration (estimated to be more than about 50% of the working population) is the backwardness of the north Karnataka districts due to lower industrial development and fewer livelihood opportunities available in their district (KPI with deputy director, WCD, Yadgiri, June 2022).

In Tumakuru, people are engaged in small businesses and labour work, while also actively being engaged in agricultural activities; therefore, emigration is not so high. Nevertheless, it also witnessed some return migration of engaged in construction work, garment factory workers, drivers, and people who had small businesses like selling vegetables in Bengaluru (KPI with AWW and FGD with parents, April 2022).

While the livelihoods of the people in general were affected during COVID-19, people engaged in farming and agricultural labour did not get affected much during COVID-19. Many farmers in Yadgiri were mainly engaged in growing toor dal (pigeon pea) and cotton; while they faced some delays in selling their produce, it did not impact their income (FGD with fathers, Yadgiri Taluk, June 2022). Vegetables were expensive during COVID-19, and people were thus unable to afford to buy vegetables. However, this was not reported as a major issue as many of them grew them in their farmlands and neighborhoods (FGDs with fathers in Yadgiri and Shahpur Taluks, and FGD with mothers in Shahpur Taluk, June 2022). It had been normal for farmers to take loans to buy inputs for agricultural

production, and they were able to get the support of villagers for medical purposes. However, Panchayats were not of much help during COVID-19, and the villagers did not get any help from them; Panchayats did not do much to alleviate the condition of the people. In terms of aid received from the government, in the FGDs, fathers acknowledged that they received financial support from the government ranging from INR 2,000 once in six months to INR 2,000 once every three months under the Pradhan Mantri Jan Dhan Yojana (FGDs with fathers, Yadgiri Taluk, June 2022). Villagers got rations regularly from the public distribution system, and they got double ration during COVID-19 under the Pradhan Mantri Garib Kalyan Anna Yojana (FGD with fathers, Shahpur Taluk, June 2022).

The situation in Tumakuru was slightly different as people were engaged in small business and labour, apart from being engaged in farming and agricultural labour. Since lockdowns were much stricter, especially during the first wave; they could not keep the shops open or carry out businesses, and they thus experienced losses in income and shortfall of earnings during COVID-19. However, the situation became a bit better during the second lockdown and businesses were allowed to stay open for some time every day. Those engaged in labour lost employment and faced economic difficulties. For instance, one of the fathers had to sell one of the two cows he owned to make ends meet (FGD with fathers, Shahpur Taluk, June 2022). Farmers engaged in floriculture also could not sell their produce in the markets (FGD with fathers, Tumakuru Taluk, April 2022).

Borrowing from money lenders and other well-off people in the villages was a common coping strategy during the pandemic. People also took loans from sanghas (community/caste groups) who initially informed them while borrowing the money that there was no need to pay any interest. However, once the lockdown ended and people started returning to work, the sanghas demanded interest payments as well. In some cases, the people have pledged jewels to make ends meet. Some of them even found it difficult to pay house rents during the pandemic (FGDs with fathers and mothers of schoolgoing children, Tumakuru District, June 2022).

Food expenses also increased in families as most of the members were at home, thus increasing cooking costs. There were some difficulties in buying groceries as the prices of oil, diesel, and essential goods also increased during COVID-19. However, they got extra ration from the ration shops under the Pradhan Mantri Garib Kalyan Anna Yojana, which helped them manage their needs. They used to buy vegetables as and when they had money and a lot of the people grew their own rice, ragi

(finger millets) etc., and they even had small kitchen gardens. Panchayats in Tumakuru distributed 5 kg of vegetables once during COVID-19, especially in urban areas. Some of the poor people were also supplied cooked food and some vitamin C tablets by the Panchayats—all of this came in as timely help and helped them tide through the crisis period (FGDs with fathers and mothers of schoolgoing children, Tumakuru District, June 2022).

3.3.2 Role of Gram Panchayat Task Force (GPTF) in managing migrant returnees

The GPTF was assigned an active role in managing the migrant returnees and ensuring institutional quarantine. They created COVID-19 care centres across the villages in various places like schools and hostels. In co-ordination with ASHAs and AWWs, the GPTF had to note down phone numbers of returning migrants, conduct tests for them, and take them for compulsory quarantine. They also had to continuously raise awareness on the COVID-19 norms to be followed, and they conducted a special programme for one week during the first wave with the project development officer and GP president in attendance (KPI with a GPTF member, Shahpur, June 2022).

3.3.3 Socio-cultural conditions

Tumakuru and Yadgiri are socio-culturally significantly different. Education and economic prosperity seem to be a major differentiator, where awareness about children's health and aspirations for children are high in Tumakuru. Parents were aware of health issues and concerned about their child's overall health and educational attainment (FGD with fathers, April 2022). Birth rates are low, and people said they 'have faith in the government administrative machinery and follow the norms suggested by AWWs and ASHAs (KPIs, Mydala and Hosakerehalli GPs, Tumakuru, April 2022).

In Yadgiri, along with low literacy and education levels and low awareness of the programmes, parents also have less faith in the government administrative machinery and often question the utility of health interventions like Iron and Folic Acid (IFA) tablets that are being given to children (FGDs with mothers of adolescent children, Shahpur, June 2022). The district has a high total fertility rate, and a higher prevalence of early marriages and early pregnancies (KPIs, Madhwar and Siravala GPs, Yadgiri District, June 2022).

3.3.4 Infrastructural facilities in schools and AWCs

Availability of roads and transport make a major difference in accessibility to services. Poor transportation facilities in Yadgiri made it difficult for people to commute to remote areas. Teachers and children often found it difficult to commute to schools to be able to access THR or even the Vidyagama classes.⁴ (FGDs with teachers, with school heads, and with adolescents, Yadgiri District, June 2022).

For instance, a sample school in Shahpur Taluk had no provision for drinking water even prior to the pandemic (KPI with school head and FGD with adolescent children, Shahpur, June 2022). However, after the pandemic, they built a borewell with funds collected from the school's alumni and other local donors. The school has toilets, but those do not have water and are very badly maintained. Hence, both boys and girls go to the nearby fields/open areas for defecation, putting themselves at risk of various infections. Although sanctions have been made under the Jal Jeevan Mission, water facilities are yet to reach the schools. The school maintenance funds are inadequate to address all maintenance needs, and though the funds increased from INR 8,000 in 2020–21 to INR 12,000 in 2021–22, they apparently still remain inadequate as schools did not receive any contribution from the GP (KPIs with school head and adolescent children, Shahpur, June 2022).

With no proper water provisions, the sample AWCs in Shahpur also faced similar challenges; one was located right next to a garbage dump making it extremely unhygienic and dangerous for the health of the children. Although Tumakuru did not have transport issues, lack of attention to details that are crucial for children's health was observed there as well. For instance, one sample AWC in Tumakuru had tap water facilities but did not have a proper compound wall with a big cesspool right outside, which is a mosquito breeding ground putting the children at risk of some communicable diseases (KPIs with AWWs and school heads, April 2022).

⁴Karnataka government launched the Vidyagama Scheme in order to provide education to all those students who are not able to avail education due to not having a mobile phone. Government order dated 4 August 2020; see Annexure 2 for more details.

3.3.5 Teachers in position and enrolment in schools

Remoteness and lack of transportation has made it difficult for Yadgiri district to fill its teachers' vacancies leading to shortage of teachers in schools. For instance, in a sample school there, English, mathematics, and science teachers were not in position and the school head taught these subjects. The school has not had an English teacher for the last five years. Schools have computers, but there is never any electricity during school hours; hence, schools cannot operate the computers (KPIs with school head, Madhwar GP and with Block Education Officer [BEO], Shahpur Taluk, June 2022). There were no such shortages of teachers observed in the Tumakuru interviews. In fact, in Mydala GP School (Tumakuru), although the pre-pandemic teacher strength was full, due to increase in enrolments during the pandemic, the school head felt the need to increase the strength of teachers to maintain the pupil-teacher ratio in schools.

There appeared to be a huge gap in enrolment and attendance in high schools of Yadgiri. For example, in a sample high school, it was estimated that nearly 40% of children had never stepped into the high school even for a single day through they remain enrolled (KPI with school head, Madhwar GP, June 2022). These children are likely to be engaged in labour either through migration with families to distant destinations or engaged in animal grazing or cotton farms within the village and its surroundings (KPI with school head, Madhwar GP School, June 2022).

In conclusion, while there was an increase in enrolment in schools in both districts, it did not mean increased access to education, especially in Yadgiri where attendance was poor during this time.



3.3.6 Child labour

As is clear from the discussion in previous paragraphs, the prevalence of child labour is high in Yadgiri. Apparently, children's engagement in labour was an important coping strategy during COVID-19 in the district. For instance, during the fieldwork, a young adolescent boy shared that that he picked cotton in a farm and was paid INR 120 per day for that, and through the pandemic he was able to save almost INR 12,000 and contributed to running his family (FGD with adolescent children, Yadgiri School, June 2022). Poor attendance in school is often attributed to child labour, especially because of the wage rates being high for cotton picking during the season (KPI with BEO, Yadgiri, June 2022). No such phenomenon was reported from Tumakuru. Hence, during the pandemic, child labour seems to have increased in few districts like Yadgiri due to the need for extra income.

3.3.7. Child marriages

Child marriages are common in Yadgiri. The fear of loss of honour due to girls being way led by men into relationships and affairs which could bring them shame in the community is the main guiding factor for early marriages; parents do not worry much about the age of the man if he comes from a well-off family and are willing to get young underaged girls married to such men (FGDs with anganwadi supervisors, June 2022). The Anganwadi Supervisors (AWS) shared that though they have stopped a good number of child marriages, it was not easy to do so because of threats received from the families, absence of support from the middle and senior officials, and the political patronage that the families enjoy (FGD with AWS, Shahpur, June 2022).

Tumakuru also witnessed a rise in child marriages during COVID-19; however, the issue was not as rampant as in Yadgiri district. As Madhugiri Taluk in Tumakuru district shares its border with the neighbouring state of Andhra Pradesh, many girls were married off to men from that state. It, thus, became difficult to prevent such marriages during COVID-19 (KPI with Child Development Project Officer [CDPO] and FGD with AWS, Madhugiri, April 2022).

What becomes evident from the above discussion is that while people in both districts faced financial crises during the pandemic, a number of structural issues and socio-cultural practices made the challenges of child health and nutrition much more deep-rooted and challenging in a district like Yadgiri as compared to a district like Tumakuru.



Chapter 4

Public Expenditure on Nutrition in Karnataka

We briefly analyse and discuss the trends and patterns in public expenditure on nutrition in Karnataka. Since it is difficult to do any similar analysis of the districts, we are limiting ourselves to the state level analysis. Table 4.1 presents the allocations for major nutrition schemes operational in the stage for the five-year period of 2018–19 to 2022–23. It allows us to see the trend over pre- and post-pandemic phases, which has also been presented in the table in the form of its relative share in the total public expenditure of the stage.

Table 4. 1. Public Expenditure on Nutrition in Karnataka (INR in Crore)

Description	2018-19 AE	2019-20 AE	2020-21 AE	2021-22 RE	2022-23 BE
Universalisation of Primary Education - Akshara Dasoha	1,705.63	1714.27	1312.03	2046.99	2251.40
Centrally Sponsored Scheme (CSS) - Integrated Child Development Scheme - Supplementary Nutrition Programme	1,888.28	1,890.21	1,946.97	1,973.19	1,956.49
Meeting Medical Expenses of Mal Nourished Children (Bala Sanjeevini)	1.67	1.63	1.49	0.00	0.00
CSS Scheme for Adolescent Girls	0.13	0.75	0.16	3.19	2.76
National Nutrition Mission	87.58	65.76	58.21	85.00	85.00
Boarding Charges (all departments) for Residential schools, Hostels and Orphanages	961.29	961.29	846.56	961.29	961.29
Annabhagya for beneficiaries below poverty line towards subsidies for Food Grains	3,570.04	3,698.96	3,103.66	3,946.55	2,810.00
Vidyasiri	74.95	55.75	25.00	65.00	75.00
Vidyasiri for minority students	11.35	9.90	4.49	6.92	12.50
Total	8,300.92	8,398.52	7,298.58	9,088.13	8,154.44
Annual Growth		1%	-13%	25%	-10%
Total Expenditure of the State	2,03,446	2,13,857	2,24,129	2,38,599	2,51,541
Total Revenue Receipts of the State	1,64,979	1,75,443	1,56,716	1,89,579	1,89,888
Nutrition Expenditure as a proportion of Total Expenditure	4.08%	3.93%	3.26%	3.81%	3.24%
Nutrition Expenditure as a proportion of Revenue Receipts	5.03%	4.79%	4.66%	4.79%	4.29%

Note: AE stands for actual expenditure, RE for revised estimates, and BE for budgeted expenditure.

The nutrition expenditure included the aspects of supplementary nutrition provided to children in schools and AWCs. About 48 to 51 lakh beneficiaries receive the benefits of supplementary nutrition in AWCs. Nearly about 60 lakh beneficiaries get the benefit of afternoon meal (Akshara Dasoha) in the state. The boarding charges provided to the students in residential schools and hostels also form a significant portion of the expenditure. About 5.5 to 6.5 lakh students get benefitted through residential schools, hostels, and orphanages by way of boarding charges. Food grains through public distribution system also accounts for a significant portion of nutrition expenditure.

The nutrition expenditure in absolute terms declined for two consecutive years till 2020–21 during the pandemic and started recovering thereafter. It saw a decrease of 13% during the year 2020–21 compared to the 1% growth during the previous year 2019–20. The number of beneficiaries of hostels and residential schools also saw a big reduction during the year 2020–21, which

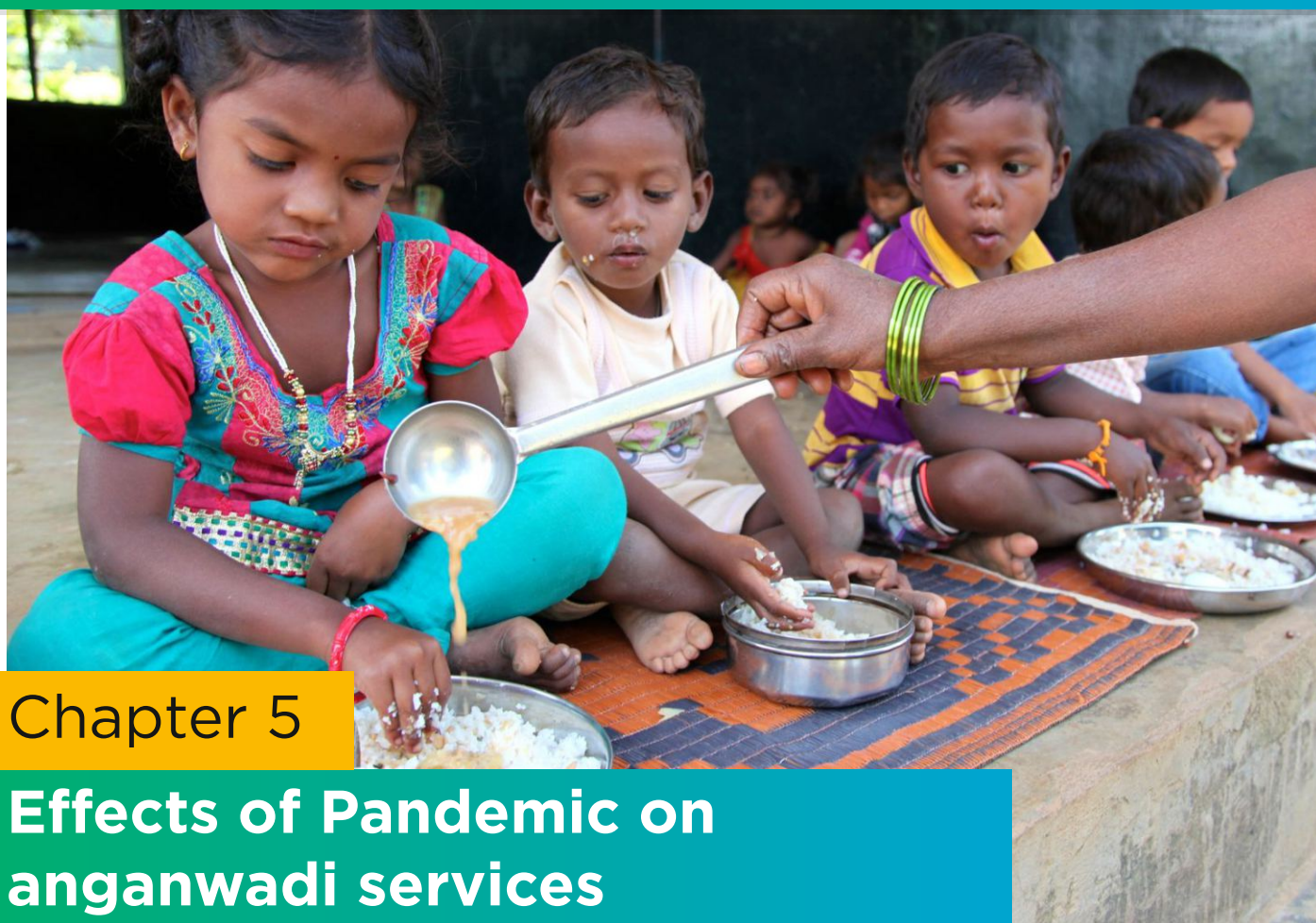
could be one reason for this decline. The shift from providing HCMs at the AWCs and schools to THR could have also meant decline in expenditure. However, the growth of expenditure in 2021–22 over the previous year was impressive, at 25%. Notwithstanding that, in 2022–23 again, owing to big reduction in Anna Bhagya expenditure, there is an absolute decrease in the nutrition expenditure which needs attention.

Nutrition expenditure as a proportion of total expenditure of the state has declined from 4.08% to 3.2% over the last five years. Similarly, nutrition expenditure as a proportion of revenue receipts of the state also has declined from 5.03% to 4.29% during the same period.

With this background of state expenditure on nutrition and the detailed socio-economic profile of the two districts, we now move to analysing the data from the field. The next chapter analyses the effects of the pandemic on the nutrition-related anganwadi services for children aged 0–6 years.

⁵ Anganwadi Centres, Beneficiaries and Funds Released under the Scheme, Ministry of WCD press release, 1 December 2021, <https://pib.gov.in/PressReleasePage.aspx?PRID=1776876>

⁶ Karnataka at a glance, <https://pib.gov.in/PressReleasePage.aspx?PRID=1776876>, page 156



Chapter 5

Effects of Pandemic on anganwadi services

Anganwadi centres are an important conduit in the battle against stunting and wasting in children aged under 6 years old. There are 62,580 AWCs and 3,331 mini AWCs in the state. During 2017–18, 56.50 lakh beneficiaries availed benefits under the Integrated Child Development Services scheme.⁷ This chapter describes how the AWC services fared during the pandemic. It begins with a brief timeline of government orders that came into effect during this period and then describes the nutritional services available to different beneficiaries during the pandemic, focusing on THR and the process of delivering it to the beneficiaries. Also included in the subsections are descriptions on role of non-governmental organisations in supplementary nutrition, care of severely malnourished children, and the Pradhan Mantri Mathru Vandana Yojana. The second part of this chapter deals with the availability of non-nutritional services during the pandemic, such as immunisation, growth monitoring, counselling, and preschool education services.

⁷Integrated Child Development services Scheme, Government of Karnataka, <https://dwcd.karnataka.gov.in/info-2/INTEGRATED+CHILD+DEVELOPMENT+SERVICES+SCHEME/en>

5.1. Tracing the Government Orders during the pandemic

The situation posed by the COVID-19 pandemic and the subsequent lockdowns were unique for everyone to handle. Different institutions across the world were dynamically responding to this situation by coming up with the most apt decisions that they could take based on the available information. Karnataka Government took various decisions based on discussions with various officials, experts and set up a Technical Advisory Committee, which would review the situation in detail before recommending various measures across different sectors like education, health, industries,

AWCs, etc. The main task of the committee was to ensure a way to contain the spread of COVID-19, while at the same time reviewing the possibility of continuity of activities that would otherwise hamper the social and economic matters of the state.

In this section, we analyse various government orders that were released during COVID-19 and the sequences of decisions taken based on the situation at that time, mainly pertaining to AWCs and schools, which are the two institutions of focus for our study.

5.1.1. Government orders related to anganwadi services

About 13 various notifications were released between 14 March 2020 and 10 February 2022, which focused on opening and closing of AWCs. The first notification directed the AWCs to be shut and THR to be given, and the Government was quick to act on the decision to ensure children did not miss out on the HCM-equivalent quantity of food at home. The immunisation services too were closed soon after (on 22 April 2020). It took the government more than six to seven months to partially resume anganwadi services like counselling and pre-school education for small groups of children outside of the containment zones, and the decision to this effect was to be taken based on the local scenarios. The next few sets of notifications on opening of AWCs

also gave detailed information on measures to be taken including following all COVID-19 appropriate behaviours, vaccinations for AWWs and AWHs, vaccination of parents, partial opening of centres, opening to the full capacity, etc. The notifications went into the details of cleaning procedures, the due diligence to be followed, consent from parents to send the children to the centres and such measures as taking the children to the nearby government hospitals in case of symptoms.

The chain of notifications showed the unpredictability of the COVID-19 situation and its spread, and thus the changing nature of government decisions.

5.1.2. Government orders related to education and school services

In terms of notifications issued with respect to school education, the issues were related to various aspects like continuity of education (through Vidyagama classes or online mode), giving THR instead of MDMs, vaccination of children, maintaining physical distance in schools, regulation of fees collected by private unaided schools and creation of quarantine centres in schools. The decision to give THR in the school came in the later months, much after the AWCs moved to the THR mode. The idea of Vidyagama classes came sometime in August 2020, after the schools had stayed closed for

more than two to three months. Apart from Vidyagama, not much was done for the continuation of learning among children except for asking schools to move to online modes (in case Vidyagama could not be practiced).

In terms of opening and closing of schools, due to the difficulty in assessing the situation, the order came at many different times, and some were limited to schools and colleges in Bengaluru city alone as it had the highest COVID-19 cases.

5.1.3. Other notifications

The health department was under immense pressure during COVID-19 as it had to deal with multiple issues, including COVID-19 infections, treatment of patients, vaccinations, etc. India had one of the biggest vaccinations drives, and we have mainly discussed the notifications issued by them that include measures to

vaccinate all the front-line workers, health staff, school staff, PLW, and creating awareness campaigns for the same. The detailed list of notifications is given in Annexure 2, which also shares details of the GPTF that was set up and the role it was expected to play during COVID-19.

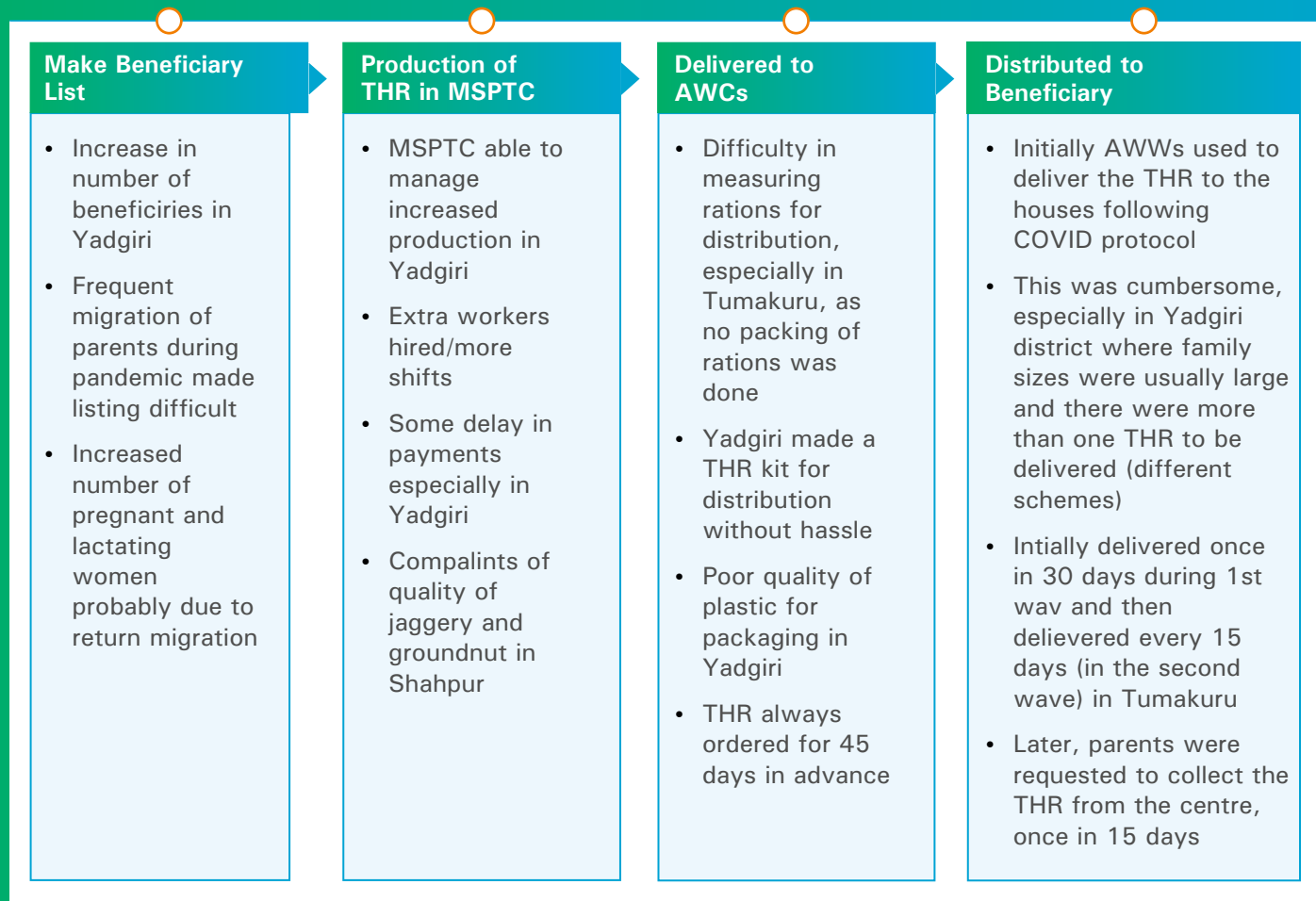
5.2. Take-home rations

The state government's decision to replace HCMs with THR for children aged between six months to three years as well as for PLW in the wake of COVID-19-related lockdowns came into effect from April 2020. In the initial months right after the lockdown was declared, there were some challenges, especially in terms of planning the process of distribution of THR as the situation was unique and required novel ideas. District level officials were assigned with the task to come up with an action plan suitable to local sensibilities to ensure continuation of services provided by the government. The following section describes the process as well as the challenges of planning and distribution of THR through AWCs in two districts in the pandemic period.

5.2.1. The process of planning to distribution of THR during the pandemic

The process of planning, production, and distribution of THR included the following steps: (i) preparation of a list of beneficiaries, (ii) production of THR at MSPTC, (iii) supply of THR to AWCs, and (iv) distribution of THR to beneficiaries. We describe each of these processes below in detail as understood through a wide range of interviews with the supply side stakeholders: AWWs, AWS, CDPOs, MSPTC in-charge, and others.

Figure 5.1. Planning, Production and Delivery of Take-home rations during pandemic in anganwadi in Tumakuru and Yadgiri



Source: Figure based on CBPS interviews; MSPTC stands for Mahila Supplementary Nutrition Training and Production Centres, THR for take-home rations, AWW for anganwadi workers, and AWCs for anganwadi centres.

(1) Preparation of beneficiaries list during COVID-19

In order to alleviate the effects of COVID-19 on migrant workers who returned to their villages, the government decided to include all children in the age group of six months to six years, and PLW from the migrant returnees' families under the ambit of anganwadi-based THR distribution. Accordingly, ASHAs and AWWs prepared a list of beneficiaries based on the household surveys, specifically noting down details of migrant returnee households and registered all eligible beneficiaries into the AWCs. Such beneficiaries were noted down as temporary beneficiaries so that the THR could be supplied to them, and they could avail other services of the AWCs.

The analysis of the MPR reports of Yadgiri and Shahpur Taluks showed that the number of child beneficiaries aged six months to six years increased between February 2020 and April 2021 by 26% in Yadgiri taluk, and 11% in Shahpur between April 2020 to June 2021. Even though the number of migrant families in Yadgiri district

is very high, many of them leave behind their children in the care of relatives and enrol their children in the local AWCs/school. Hence, the number of child beneficiaries may not have significantly increased during the pandemic in Shahpur Taluk. However, the real challenge was the varying number of beneficiaries among children aged under two years as parents frequently migrated back and forth from the cities whenever there was a lockdown and, in the process, enrols/un-enrol them as they would travel along with them.

In Tumakuru Rural, the total number of beneficiaries increased by less than 10% (March 2020–April 2021), which could be due to migrant families returning to their hometowns. In Madhugiri Taluk, however, the number of child beneficiaries decreased by 5% (February 2020–April 2021). It is difficult to explain this reduction, and perhaps the data entries in the MPR need to be rechecked.

Table 5.1. Percentage Increase in number of beneficiaries in 4 taluks

Taluk	Time period	Pregnant and Lactating women	Children aged 6 months to 6 years
Madhugiri, Tumakuru	February 2020–April 2021	39%	-5%
Tumakuru Rural, Tumakuru	March 2020–April 2021	12%	9%
Yadgiri, Yadgiri	February 2020–April 2021	61.30%	26%
Shahpur, Yadgiri	April 2020–June 2021	8%	11%

Source: Monthly progress reports from February 2020 to June 2021, in all four taluks.

An important reason for the increase in the demand for THR was due to a high number of PLW who had earlier refused to come to AWCs to eat the HCMs under the Mathrupoorna scheme but now claimed their right to THR as they were registered beneficiaries. In Tumakuru district, for the first three months (April to June 2020), THR was given only to the PLW who used to come to the AWCs regularly and eat HCMs. However, after facing pressure from all other PLW enrollees, it was decided to give THR to all enrolled PLW. Eventually the state department issued a notification that THR be provided to all PLW who had registered at an AWC, and this issue was resolved. It can be seen in the Table 5.1 that the number of beneficiaries varied widely within Taluks and that the percentage of PLW beneficiaries availing THR increased significantly in some Taluks but not in others. This could be because of a higher number of return immigrants in some places as compared to the others.



(2) Production of THR at Mahila Supplementary nutrition Training and Production Centres (MSPTC)

Karnataka is one of the states that has specialised production units known as MSPTC, which is mainly tasked with preparation and delivery of take-home-rations and other groceries and raw material used by AWCs for preparation of HCMs. These MSPTCs played a crucial role in timely supply of THR during the pandemic. In the regular process before the pandemic, an indent based on the number of beneficiaries in each AWC was collected by AWS, who then submitted it to the CDPO. The office of the CDPO is generally in regular touch with the MSPTC managers to whom the

information was passed on to. Then, the MSPTCs prepared the THR kits for children aged six months to three years and sent the stock of raw materials and other prepared items like nutrimix to be directly delivered to the doorstep of the respective AWCs. The same process was followed with several new features to rise up to the challenge of COVID-19 and the responsiveness of the machinery reflected its resilience. Table 5.2 below captures the detailed steps involved in the production activities at the MSPTCs during the pandemic.

Table 5.2. Steps involved in production at Mahila Supplementary nutrition Training and Production Centres (MSPTC)

	Tumakuru	Yadgiri
Planning for THR during COVID-19	<p>Collective exercise taking inputs from the workers and incorporating their suggestions</p> <p>Deputy director of Women and Child Development (WCD) in the district visited the MSPTCs and checked on the tasks</p> <p>Tahsildar of Madhugiri also gave them guidance on how they could plan the preparations of THR, which included COVID-19 appropriate measures to maintain hygiene</p>	<p>Active involvement of the deputy director of WCD with inputs from the chief executive officer of the Zilla Parishad. Deputy director visited the MSPTC and checked on the tasks</p>
Managing stock availability	<p>Received the supply from the vendors, especially items required to make nutrimix on time</p> <p>They always have extra stock kept for 15 days of Hot-Cooked Meals (HCM) requirements, which came in handy during the pandemic. This is kept to manage any changes in supply requirements that may come up, like it did in the case of COVID-19.</p>	<p>Received the supply from the vendors, especially items required to make nutrimix on time</p> <p>In Yadgiri taluk, production increased by 10% to 15%, and the tonnage requirements in Shahpur for preparation of nutrimix increased from 6 to 11 tonnes. The kits for pregnant and lactating women as well as children aged 3–6 years increased from 5,000 to 10,000.</p>
Managing labour/workforce and working hours	<p>In Madhugiri Taluk, they had started working in two shifts to follow the norms and did not require to hire any extra labour</p> <p>Turnaround time for preparation of the ration kits was faster during the pandemic as per the MSPTC manager</p>	<p>In Yadgiri Taluk, the additional workload was almost 4 times the regular packing activity for THR for children aged 0.5 months to 3 years.</p> <p>They had to hire about 10–20 additional labourers on a temporary basis for this specific requirement, for about 10 days a month</p> <p>The pandemic did not lead to any issues in shortage of workforce and leaves.</p>

⁹Nutrimix powder or Pushti is a combination of healthy fortified ingredients manufactured in MSPTCs in Karnataka. Each district has its own nutrimix powder. For example, in Tumakuru district, 2,500 gm of nutrimix powder contains 450 gm roasted rice flour, 900 gm roasted wheat flour, 150 gm roasted chana gram powder, and 1,000 gm roasted green gram powder. In Yadgiri district, 1 kg of nutrimix contained 268.75 gm roasted wheat flour, 62.5 gm rice flour, 100 gm roasted finger millet flour, 87.5 gm roasted moong dal flour, 18.75 gm roasted chana dal flour, 18.75 gm roasted soyabean flour, and 375 gm sugar.

	Tumakuru	Yadgiri
		<p>In Shahpur, in the first lockdown when the workload increased, 22 people worked in two shifts</p> <p>Based on the deputy director's guidance, during the second lockdown, they hired six more people on an average, on a daily wage basis of INR 260 per day and worked in shifts from 7:00a.m. to 2:00p.m. and from 2:00p.m. to 8:00 p.m.</p>
Budgets for increased indents	<p>The MSPTC in Madhugiri used the money saved in their accounts during the months of April and May 2020 for the procurement of ration</p>	<p>The payment was delayed by about three to four months from the WCD/state government to the MSPTC in the Yadgiri district.</p> <p>The Yadgiri Taluk MSPTC had to often take credit and ensure that salaries of the workers were at paid on time. Despite these measures, on one occasion the salaries of workers also got delayed.</p> <p>In Shahpur, the MSPTC had their own savings during COVID-19 which they used during such shortage of funds. They also had to convince the vendor and get the raw materials for preparation of kits. However, all dues were later cleared by the Child Development Project Officer [CDPO] office.</p> <p>The Shahpur MSPTC have raised their profitability to 5% as decided by the district commissioner committee and as the number of beneficiaries increased, their profitability also increased. Although Nutrimix involves a lot of work, they are ready to produce more of it as they have higher profitability due to economies of scale</p>
Quality checks of ration	<p>The anganwadi supervisors visit the MSPTCs for quality and quantity checks</p> <p>There were no issues raised about the quality during COVID-19.</p>	<p>The anganwadi supervisors visit the MSPTC for quality and quantity checks</p> <p>In Shahpur, the supervisors raised complaints with the CDPO about the quality of groundnut and jaggery once in the past, and it has been replaced. During COVID-19, the MSPTC manager also said that they got bad quality of green gram, cumin seeds, tamarind, pigeon pea (toor dal), groundnut, etc., which they sent back to the vendor and asked for good stock.</p> <p>They also faced some issues with the quality of the covers sent for packing THR and there was a delay of 15 days in receiving them as the printing of covers got delayed.</p>
Vehicles for transportation	<p>A single vehicle was assigned to drop raw materials to the MSPTCs and pick up the ready kits from the MSPTCs, which got delivered to the CDPO warehouse</p> <p>Initially, vehicles used for transportation were stopped by the police.</p> <p>This was resolved quickly by allowing free movement during the lockdown by giving them permission letters from the district commissioner as vehicles under 'essential services'</p>	

Source: Key person interviews with managers/in charges at MSPTC in all four Taluks, Deputy Directors of WCD in Tumakuru and Yadgiri (April 2022 and June 2022).

(3) Anganwadi centres and distribution of take-home rations

The primary responsibility of distributing the rations during the pandemic was with the AWCs. The items given across both the districts for THR has been listed in Annexure 3. The process followed by the AWCs in packaging and distribution of THR is described in detail here.

Packaging of THR: In the first few months of the COVID-19 pandemic starting April 2020, the items delivered by the MSPTCs to the doorstep of AWCs had to be packed into smaller packets based on the quantity that each beneficiary was eligible for and supplied to the doorstep of the beneficiaries. This posed several difficulties for AWWs as they had to purchase the

smaller packets with their own money, and no stipend was provided for this. In many cases, measuring the groceries without the right equipment created problems for as there was suspicion among the beneficiaries about the quantity of ration given to them and mistrust about the workers (KPIs with AWWs, Madhugiri, April 2022). The AWWs used to measure the ration in containers/glasses and then give the ration to the beneficiaries. Measuring smaller items, especially masala (spice) items where the quantity was as low as 50 grams and packing them in small packets was challenging for workers. It was difficult for the beneficiaries to accept that this was the quantity that they were otherwise entitled to while eating HCMs in the AWCs. There were some strategies adopted to manage this.

Provision of THR preferred over HCM during first wave of the pandemic:

A mother attached to the Mydala GP (Tumakuru Rural) AWC shared that during the first lockdown period between March 2020 to June 2020, there was a lot of fear regarding the virus, and no one was willing to step outside their homes. It really helped that AWWs and AWHs came and delivered the THR at their doorstep. However, by the time the second lockdown was imposed in April/May 2021, the fear was lower, and there was increased awareness in the community; hence, all mothers volunteered to come to AWCs and collect the THR by maintaining social distancing. Every 15, the AWWs would call and inform them that the THR is packed and ready to be collected from the AWC. This arrangement continued during the third wave in January 2022 as well. During the peak of the

pandemic, mothers preferred THR over HCM since they did not want their children to go the AWC and contract the virus from other children. They feared that children were high susceptible to the virus and that it was impossible to maintain social distancing between them. Otherwise, they preferred HCM over THR since they felt that their children ate more in the company of other children and were also more disciplined in their eating habits due to the presence of the AWW. They also felt that children got to eat at least one healthy meal as, otherwise, the ration got distributed among all at home. Some mothers also mentioned that it was a good walk to come to the AWCs and it kept them active. The AWWs, especially in Yadgiri district also said that a lot of families had a real need for the THR during the pandemic due to loss of livelihoods and they would ask the AWWs about it.

In Tumakuru, AWCs stopped giving items with very small quantities like masala (spices) once the existing stock got over. They started distributing only items with larger quantities. This task took them about four to five days in a month to complete (KPI with AWW, Tumakuru District, April 2022).

In Yadgiri taluk, from March 2020 to December 2020, the weighing and packing of THR was being done by AWWs along with the AWHs. In this time period they spent INR 150 per month on an average for plastic covers, which was not reimbursed to them. Hence, the district deputy director with the guidance of the ZP CEO came up with the innovative idea of creating a master kit, which included all the ration that one beneficiary was eligible for into one single sealed kit. Hence, three different kinds of kits were prepared: one for children

aged six months to three years, one for children aged 3–6 years, and one for PLW. The AWWs and AWHs had to deliver these kits directly to the beneficiaries, thus avoiding the major task of measurement and packing. As per the officials in the Yadgiri MSPTC, they received an additional 2% for packaging THR during the pandemic. For example, if raw material is procured at INR 100, then 15% of it is for MSPTC operational costs and an additional 2% towards packaging. But this additional 2% did not result in increased expenditure for the department. This budget was reallocated from products that had small quantities such as sambar powder, jeera powder, salt, and chillies—these products were not being additionally procured since HCMs were not being served during the pandemic to the beneficiaries.

Providing THR in pre-packaged units inspired confidence about quality:

Mothers in FGDs also felt that it would have been better had the state government itself provided the THR in pre-packed sealed covers instead of the AWWs having to do so. According to them, this would not only avoid wastage since AWWs were not required to measure and pack small quantities but also bring in more transparency and trust in the entire process of providing THR to beneficiaries, Tumakuru District, April 2022)

Figure 5.2. Pre-packaged Take-Home Ration in Yadgiri



Source: Anganwadi Worker, Yadgiri Taluk.

(4) Distribution of THR

Once the packaging of ration was done by the AWWs, the next step was to distribute the ration as per the government order. Some of the steps involved in the

distribution and monitoring of THR, and the various challenges faced have been given in detail in Table 5.3 below.

Table 5.3. Distribution of Take-Home Ration (THR)

	Tumakuru	Yadgiri
Responsibility of distribution	<p>The main responsibility was with the Anganwadi Workers (AWWs) and Anganwadi Helpers (AWHs).</p> <p>In Madhugiri, when AWWs became COVID-19 positive themselves, the AWWs in their circles from other nearby centres would help distribute the THR.</p> <p>In the Tumakuru block (Mydala Gram Panchayat), after the unfortunate death of an AWH due to COVID-19, AWWs were able to deliver rations only to the nearby households.</p> <p>The faraway households were requested to come and collect their THR from the Anganwadi Centre (AWC) itself, which they readily obliged to.</p>	<p>The main responsibility was with the AWWs and AWHs.</p>
Modes of transportation used	The means adopted included carrying THR packets on their heads, using push carts, milk carts, cycles, autos, taking the help of the police, etc.	
Frequency of distribution of THR	<p>Distributed once a month and later changed to once in 15 days to ensure uniform consumption. When it was proposed to be distributed once in a week, parents resisted as it would entail coming quite frequently to collect small quantities of THR.</p>	<p>Distributed once a month</p> <p>Distributed in batches of about 10 per day.</p> <p>The task used to take them about 5-6 days in a month to complete it</p> <p>Parents themselves were asked to come to AWCs and collect their THR after December 2020.</p> <p>In Yadgiri taluk, on one occasion, the THR was delayed by 10 to 15 days and on two occasions toor dal (pigeon pea) and rice were not supplied along with the remaining THR. However, this was compensated in next month's THR</p>
Challenges with distribution of ration	Distribution of THR was particularly difficult for AWWs from a mini AWC as they had no AWH and struggled to deliver it alone.	

Source: Key person interviews with AWWs in Tumakuru and Yadgiri Districts, and key person interviews with the child development project officer of Tumakuru Block, April 2022 and June 2022.

Provision of THR to Mathrupoorna beneficiaries has two opposing views in the same district, in Yadgiri.

Even in pre-pandemic times, in Shahpur Taluk, the mothers preferred THR as many of them were daily labourers, and it was tough for them to leave their workplaces and come for HCM to AWCs. Also, the option of finding a neighbour or a family member who would come and pick up the HCM for PLW and give it to them did not work. Here, the CDPO came up with the suggestions that such mothers should be sent packed food kits to their doorstep so as to ensure that the objectives of Mathrupoorna scheme are met.

In Yadgiri taluk, however, Mathrupoorna scheme had been a big success and was running well; PLW preferred coming to AWCs and having HCMs since they found it much more nutritious, and they got the entire meal for themselves. However, during the pandemic, when they received THR, they faced two issues: (i) they had to cook their own lunch, and sometimes had no support and (ii) THR that was given would automatically get distributed within the household and what was meant for one month would get over within 15 days.

In order to ensure that the beneficiaries had received the THR, the deputy director's office in Tumakuru had prepared a format that was supposed to be filled every month and approved and signed by each and every member of the Bal Vikas Samiti for every AWC to testify that the THR had been given.

Take-home ration was perceived as being very beneficial to the people, especially in Yadgiri District owing to their poor economic conditions and as livelihoods were severely impacted especially during the second wave when there were no employment opportunities that were available (KPIs with deputy director, WCD, Yadgiri District, and FGD with AWS in Shahpur Taluk).

5.3. Srushti Egg Scheme

The process for procurement of eggs, which was a part of the THR, was slightly different and outside the ambit of the MSPTCs. Each district had the autonomy to decide the process of procurement of eggs, and they invite a district level tender for the same. In Tumakuru, children received two eggs a week, and malnourished children received three eggs a week. In Yadgiri, which has poorer nutrition parameters, normal children received three eggs a week and malnourished children received five eggs a week.

In Tumakuru District, during the first lockdown period, eggs were being distributed on a monthly basis, then it became fortnightly and eventually from 2021 onwards it became weekly. The frequency of distribution was increased for two reasons: the first was to ensure that the eggs remained fresh, and the second was to prevent the entire quota of 25 eggs being consumed by the family in the first week of the month itself. Table 5.4 below given details of the process of procurement of eggs in both the districts.

Figure 5.3. Anganwadi helper feeding egg to a malnourished child in Shahpur, Yadgiri



Source: Photo by anganwadi worker, Yadgiri.

Table 5. 4. Process of procurement of eggs

Process of Procurement of Eggs		
	Tumakuru	Yadgiri
Process of procurement before the pandemic	<p>Anganwadi Workers (AWWs) had to procure it from local shops.</p> <p>The amount fixed at INR 5 per egg.</p> <p>Procurement happened once a week from a wholesale dealer.</p> <p>The amount deposited in joint account of a Bal Vikas Samiti member and an AWW.</p>	<p>AWWs were responsible for procuring the eggs locally.</p>
Challenges during pandemic	<p>Prices of essentials, including eggs increased to INR 6–7 per egg</p> <p>AWWs found it difficult to procure at the previous rate</p> <p>They incurred additional transportation expenses to travel to the nearest market where eggs were available.</p> <p>Increasing the frequency of providing eggs once a week led to further increase in transportation expenses.</p> <p>Decrease in eggs provided to beneficiaries based on child development project officer's direction due to prohibitive costs.</p> <p>AWWs in Madhugiri protested against upfront spending for eggs.</p>	<p>This became a challenge in first six months of the pandemic as the rates were fixed rate while the supply was disrupted.</p> <p>The deputy director decided to call for a tender and identified the Karnataka State Co-Op Credit Societies Federation Ltd to supply eggs directly to all AWWs on a monthly basis.</p> <p>This ensured continuous supply of eggs without any disruptions on the agreed price.</p> <p>The eggs were provided in disposable foam trays to the beneficiaries, and hence the trays did not need to be recycled.</p> <p>In Shahpur, this had other challenges as sometimes poor quality and spoilt eggs were received.</p> <p>Eggs were provided once a month.</p>
Impact on beneficiaries	<p>Fewer eggs than usual could impact the nutritional requirements of children.</p>	<p>No impact on beneficiaries as they got all the eggs that they were entitled to.</p>

Source: Key person interviews with deputy director, Women and Child Development Department, with child development project officers, and with anganwadi workers in Tumakuru and Yadgiri Districts, April 2022 and June 2022.

In February 2022, AWCs reopened, and AWWs started providing HCMs to the beneficiaries. There has only been a slight change in the menu in Tumakuru, where the wheat payasa is being replaced by rice payasa as

they were getting less wheat as compared to rice. The change has been approved after discussions with the committee in the deputy director's office.



Figure 5.4. Nutrition Rehabilitation Centre in Yadgiri District Hospital

Source: Photos taken by CBPS research team.

5.4. Special care for Severely Acutely Malnourished (SAM) and Moderately Acutely Malnourished (MAM) children during the pandemic

In Yadgiri, where the number of SAM and MAM children had been high, special attention was paid to their care. There were 70 AWCs in Shahpur with SAM children, i.e., around two per centre. The deputy direct, WCD and the ZP officials planned and took special measures to care for the SAM and MAM children to ensure that their nutrition was not affected due to the pandemic. However, when officials examined the status of SAM and MAM children, they found that there was an increase in MAM children during the pandemic period in Yadgiri district. Our own analysis of the MPR reports from Yadgiri Taluk between March 2020 and April 2021 showed that absolute numbers of MAM children had increased. However, the proportion of MAM children aged 0–6 years had decreased from 17% to 15% during the same period. It was felt that this was because the ration meant for them was used by everyone at home and they were missing the HCMsearlier given in the AWCs. Officials in all capacities also felt that the parents could not give enough attention to their children's nutrition at home as they often migrated for work leaving their children at the care of relatives. Most relatives, especially grandparents were illiterate and unable to take full care of these children (KPIs with AWS Shahpur Taluk, June 2022). Children who were SAM and MAM usually belonged to poor households. Children from better off households faced nutritional deficiency usually because of pre-existing/genetic health issues (KPI with CDPO, Shahpur Taluk, June 2022).

Anganwadi helpers were supposed to visit these households and feed the boiled eggs to malnourished children. In Shahpur Taluk, AWHs had to take photographs of boiled eggs being fed to every SAM and borderline MAM children in her circle, which was on an average of about two children per day and upload the photographs in the respective WhatsApp groups of the departments, especially of children whose parents were illiterate and would refuse to send the pictures themselves. This was attached with the condition to parents that only if proof of feeding the children eggs was provided every day, the ration kits would be given to them. Such children were supposed to be weighed every month and given eggs and milk every day, and this was the only task assigned to AWHs. In some cases, AWHs also prepared porridge using the nutrimix powder given for these children and ensured

that this was eaten by the SAM children (KPI with CDPO and FGDs with AWS, Shahpur, June 2022). To ensure that the children got their share of milk as per the meal plan, WCD supplied milk powder as early as 6a.m. in two of the circles during some months of the lockdown period so that the children's meal requirements were not affected (FGDs with AWS, Yadgiri Taluk, June 2022).

There was regular monitoring of SAM and MAM children in Yadgiri District and the deputy director and CDPOs were actively involved in monitoring activities through WhatsApp groups and visits (KPIs with deputy directors, WCD in Yadgiri District and KPI with CDPO in Shahpur, June 2022). Auxiliary Nurse and Midwives (ANMs), ASHAs, and other medical officers checked them at recommended frequency; a child who was found severely malnourished was sent to NRC and from there to Raichur Institute of Medical Sciences for 15 days, where the child's health status got better, and the child gained weight and developed strength before returning home (KPI with CDPO, Shahpur Taluk, June 2022).

Tumakuru District had fewer SAM and MAM children. However, when children came back to the AWCs when it was briefly opened in October 2021, it was realised that some of them who were normal during pre-pandemic period had slipped into the MAM category. The weight loss in these children was not very alarming as MAM can be rectified by adequate food. Hence, while the number of MAM children had increased in some circles, the number of children identified as SAM remained the same (FGD with AWS, Tumakuru Taluk, April 2022). Even the ASHAs mentioned that they did not see any cases of weak children in their areas or any children being impacted by COVID-19. In some Panchayats of the Madhugiri Taluk, SAM children were provided with millet-based food by the panchayat development officer. In order to ensure that MAM children do not become SAM children, AWS used to contact the parents and keep tabs on the MAM children. There was no increase in SAM or MAM children during the pandemic; only some MAM children continued to stay the same. About two–three children who had become weak during the pandemic have become well due to use of the nutrimix powder (KPI with AWWsand FGD with AWS, Madhugiri Taluk, June 2022).

5.4.1. Nutrition Rehabilitation Centre admissions during COVID-19

Admissions to NRC were low in general in both the districts during COVID-19 due to the fear contacting virus. In many districts, NRC is housed in the district hospital and during the pandemic, either doctors in NRCs were assigned COVID-19 duty or parents of SAM children were hesitant to admit their children to the NRC since the district hospital had admitted COVID-19 positive patients.

In Yadgiri district, AWWs carried out home visits and educated parents about the importance of sending children to NRCs as there was a higher likelihood of SAM children being more affected during COVID-19. However, only very few parents took their children to NRCs then; parents refused to bring their children to NRCs as they earned daily wages between INR 600–700, and this was not comparable to the allowance of INR 289 given at the NRCs. This money was deposited into the account of parents with a delay of ten to fifteen days, which was inconvenient as they had an immediate need for cash. The fear of being quarantined in hospitals

for COVID-19 also acted against NRC admissions. Even after warning them that the ration would not be given if the child was not admitted to the NRCs, many parents did not opt for the NRC (KPI with AWW and FGD with AWS, Shahpur, June 2022).

Even in Tumakuru, parents refused to send their children to the NRCs and even accused authorities of wanting to kill their children. There were no admissions to NRCs in that district, and they used to get the children tested and send them back home. To compensate for the lack of NRC stays for SAM children, no additional benefits were given (1.5 times more ration than that given for a normal child is the norm); however, tonics used to be given to the children who would visit the Primary Health Centres (PHCs). In both districts, the number of children enrolled in NRCs increased after easing of the lockdowns showing that the fear of infection was perhaps the biggest barrier.

5.5. Nutritional Initiatives by non-government organisations during the pandemic

Here, we document some of the non-governmental initiatives with implications for nutrition in these two districts as a number of such efforts were reported during the fieldwork.

(1) Sathya Sai Annapoorna Trust (<https://saisure.org/>) provided 500 gmpackets of SaiSure protein/malt powder to all SAM children aged 2–6 years in Yadgiri and Raichur districts. This was given to them thrice with a gap of two months during the second wave of the pandemic. According to the CPDO, this also helped in improving the condition of SAM children and reduced the number of SAM children. This was later discontinued.

(2) Akshaya Patra foundation provided food kits for the entire Yadgiri district, for PLW below 45 kgs weight and anaemic. The kit consisted of 5 kg of rice and 1 kg toor dal (pigeon pea). This was given for a period of one month and was discontinued after that. After that for the next six–seven months, the foundation gave a smaller kit that included 2 kg Vita protein powder, 500 gm green gram (hesaru bele), 500 gm groundnut, 1 kg salt, 100 gm turmeric powder, 500 gm SaiSure protein powder, and iron tablets (Ayurvedic). The foundation would deliver these kits to the CDPO office, who had taken the responsibility to transport these to AWCs. This became a huge challenge as the CDPO office did not have any funds for this purpose. Subsequently, they asked the parents to come to the CDPO office and collect them directly, but the response was very poor.

(3) Spirulina Foundation worked closely with the WCD in Tumakuru District. The foundation had partnered with women SHGs and provided them with training on how to grow spirulina and manufacture products such as spirulina chikki, tablets, spirulina granules (sugar coated) and powder (Kashyap et al., 2022). During the

5.6. Pradhan Mantri Matru Vandana Yojana

The process of registering for various welfare schemes provided through AWCs and receiving benefits from the same was not impacted during the pandemic. One such example is the centrally sponsored scheme, Pradhan Mantri Matru Vandana Yojana. Table 5.5 below gives the details on how the registration process was carried out during COVID-19.

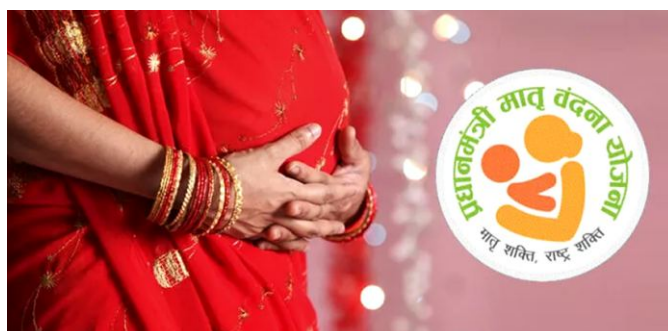


Table 5.5. Process for registrations under Pradhan Mantri Matru Vandana Yojana (PMMVY)

Process for registrations under PMMVY		
	Tumakuru	Yadgiri
Process of registration of beneficiaries	<p>Anganwadi Workers (AWWs) registered mothers, while they went for other house surveys.</p> <p>Collected various details and documents through WhatsApp.</p>	<p>Online registrations were taken care of by the AWWs and child development project officer. Documents were collected during house visits.</p> <p>Regular monitoring by deputy director who he collected the progress on the number of enrollees through WhatsApp daily.</p> <p>Shahpur has the highest enrolments among all taluks.</p> <p>Follow-up with beneficiaries start even before they get married, i.e., once they are adolescents (kishoris)</p> <p>Due to early marriages in their district, as soon as they find out about a girl's engagement and then subsequently marriage and pregnancy, they are tracked through the AWW and registered for PMMVY benefits</p> <p>They ensure that the husbands do not know about the benefits of the scheme so that the money is used by the women for her own purposes</p>
Reaction of Mothers to the process	<p>Beneficiary mothers said that they did not face any issues while enrolling for the PMMVY scheme during the pandemic as most of it was done online and they had to only provide soft copy of the required documents.</p>	<p>AWWs took care of their registrations, and they did not face much hassle in doing it.</p> <p>Some mothers wanted the scheme to extend beyond two children.</p>
Receipt of amount	<p>In Tumakuru Rural, mothers confirmed that they received all three instalments on-time through direct cash transfer to their bank accounts.</p> <p>In Madhugiri, there was some delay in the beneficiaries receiving the money during the pandemic, they received the amount afterwards.</p>	<p>Two of the participants confirmed that they got INR 5,000</p>

Source: Key person interviews with Deputy Director, Women and Child Development Department, with child development project officers, and with anganwadi workers in Tumakuru and Yadgiri Districts, April 2022 and June 2022.

5.7. Scheme for Adolescent Girls

In Yadgiri District, the Scheme for Adolescent Girls, which started in 2017, continued to function, while it had stopped in Tumakuru district. Under this scheme, out-of-school girls aged 11–14 years were provided with THR. Yadgiri had about 257 beneficiaries as of May 2022. In Shahpur, there were about 23 girls who had been provided with THR and IFA tablets under this scheme. The Shuchi Pads (sanitary pads) scheme was discontinued in 2019, after a new condition brought in from 2017–18 onwards lowered the uptake. The condition was that these out-of-school adolescent children needed to produce an out-of-school certificate from the school head, which had to be verified by the BEO as well. The schools were reluctant to issue this certificate, and it was inconvenient for girls to get that verified by the BEO.



5.8. Activities under Poshan Abhiyan

Under the Poshan Abhiyan, one of the important tasks assigned to the AWWs was to maintain the data in the Poshan app once a month. The app only needs AWWs to upload the measurements taken of the beneficiaries and the app calculates the nutrition indices. While AWWs were doing this on a regular basis, many glitches like dysfunctional smart phones, network issues, non-payment of dues, etc., caused AWWs a lot of inconvenience in carrying out these activities. The end result was that AWWs maintained two registers, one for the app and one for the centre increasing their already high workload (FGDs with AWWs in Madhugiri, April 2022). Some mismatch was also reported by officials; when calculated manually by AWWs the numbers showed a larger number of MAM children, while when seen on the Poshan tracker software, the number was larger for SAM children.

Another feature of Poshan Abhiyaan is to encourage local nutritional innovations. In Yadgiri, some AWCs were selected to develop kitchen gardens; however, AWCs which have perpetual water shortage could not sustain them. The kitchen gardens could be more effective if the water shortage was addressed (KPIs with AWS, Yadgiri, June 2022).

5.9. Non-nutritional Services in anganwadis

5.9.1. Growth monitoring services during COVID-19

In Tumakuru, growth monitoring services for children were completely disrupted in the first three months of the pandemic between April 2020 and June 2020. Children stopped coming to AWCs during this time period and AWWs could not visit the homes of children due to imposition of strict lockdowns; in addition, there was a high degree of fear within the community of contracting the virus by allowing any outsider within their homes. However, this gradually changed after June 2020 when a few families started allowing AWWs into their homes to take measurements of the children's heights and weights. Then, AWWs began making monthly home visits for growth monitoring from July 2020, and it has been happening consistently since (KPIs with AWWs, Tumakuru and Madhugiri Taluks, April 2022). One of the challenges was to accurately measure the weight of children since they found it difficult to mount the analog weighing scale in people's homes (KPIs with ASHAs, Tumakuru Taluk, April

2022). During the pandemic, the WCD had produced an instructional video on how to accurately do growth monitoring of children and shared it with the AWWs. Despite this, being in regular communication with all the AWWs during peak lockdown periods and collecting growth monitoring data from them was very challenging for the WCD functionaries (KPI with CDPO, Tumakuru Rural, April 2022).

In Yadgiri, growth monitoring did not happen regularly but when AWWs were conducting home visits for distribution of ration, they also measured the weights of children. Sometimes, small batches of five children would be called to the centres for early childhood care and education classes, and the weight measurements also happen there. However, there was no regularity in weight monitoring for all the months. The weight of newborn children was to be measured by ASHAs, but this did not happen as they were not allowed to touch them.

5.9.2. Immunisation services during COVID-19

One of the important services provided in AWCs are immunisation services for both children aged 0–6 years and for PLW.

In Tumakuru Rural Taluk, immunisation services for children had completely stopped during the first six months of the pandemic, from April 2020 to September 2020, but they services resumed after that without any break during the subsequent pandemic waves / lockdowns. However, immunisation was not being given at the AWCs but in an adjacent open-air auditorium to maintain distancing. If a parent would miss a scheduled immunisation appointment for their child, an ASHA would visit their homes and ensure that the child got immunised at the nearest PHC (FGD with mothers of anganwadi children, Tumakuru Rural, April 2022). It was estimated that not more than 10% of the eligible children might have missed their immunisation schedule during the first wave of the pandemic in 2020 (KPI with CDPO, Tumakuru Rural, April 2022). For PLW, since IFA tablets and calcium supplements could no longer be given at the AWC along with HCM, the ASHAs distributed them whenever they made home visits for counselling. During the first few months of the pandemic, many pregnant mothers decided to get their immunisation in private hospitals rather than from government hospitals or PHCs. However, this trend slowly changed from June 2020 onwards. A few mothers who were pregnant during the pandemic said that with the help of ASHAs, they were able to get both their doses of tetanus toxoid injections at the nearest PHC itself (FGD with mothers of anganwadi children and KPI with ASHAs, Tumakuru Rural Taluk, April 2022).

In Madhugiri Taluk, immunisation services discontinued for about three months at the onset of the pandemic. After this period, the parents would bring their children to take the vaccines as they were aware that their children must take them in a timely manner at different growth stages. The AWCs used to open for immunisation services and health check-ups, and the beneficiaries were informed beforehand by the AWWs and ASHAs to come on the assigned days. In cases where it was possible, the immunisation was provided at the doorstep of the beneficiary's home.; in addition, ANMs would give the regular vaccinations to children with a maximum of one week to fifteen days delay. A mothers mentioned the delay was due to other tasks assigned to the AWWs, including COVID-19 vaccination drives. Madhugiri also had special lasika melas or vaccination drives to ensure that immunisation services were not hampered due to COVID-19. For the

pregnant women, the COVID-19 rush did not affect services, as the ante natal care services continued after 2:00p.m. in the nearby PHCs; PLW would be informed through ASHAs to come to the PHC for check-ups and they did so without any hesitation (KPI with ASHAs and FGDs with mothers of anganwadi beneficiaries, Madhugiri taluk, April 2022).

In Yadgiri District, immunisation services such as TT and polio injections were given at the AWCs (FGD with mothers of anganwadi children, June 2022). The parents would be informed in advance. The immunisations took place on Fridays and ASHAs used to take the children and PLW women to the centres. The mothers were asked to come in allocated time, to wear masks, and maintain physical distance, and the centres were cleaned frequently. The ASHAs also said that they got the stock on a regular basis. For PLW, ASHAs distributed IFA tablets as and when they got the stock, which was about once in a month. However, it was irregular during COVID-19, and it did not reach them every month (FGD with AWS, Shahpur, June 2022). Even the mothers in Yadgiri were unable to recollect receiving IFA tablets from the ASHAs. In some cases, ASHAs were reported as not being prompt or taking sufficient initiatives in bringing the children to the centres (KPI with AWS, Shahpur, June 2022).

5.9.3. Counselling services during COVID-19

Counselling on birth preparedness, safe delivery, and feeding practices were in general affected during COVID-19 as thayi sabhas or mothers' meetings were not held during COVID-19. In Tumakuru District, home visits picked up from June 2020 onwards, but the families were still apprehensive about allowing ASHAs and AWWs inside. Hence, the workers undertook counselling from a distance while they went to deliver THR, standing outside the houses during their general and COVID-19 related visits, approximately visiting one area in one day; ASHAs were instructed even by the doctors to maintain distance from new mothers. They counselled the parents to give children good and nutritious food and prevent them from going outside to avoid contracting the infection. Lactating mothers were told about safe breastfeeding practices, and how it was safe to feed the newborn even in case they were COVID-19 positive. They also told them about the importance of getting immunisations for children and allaying any other fears they had around COVID-19. However, ASHAs in Tumakuru Rural felt that the nutritional counselling was very brief and not very effective since they had to stand outside their homes and provide counselling. Once the intensity of cases came down, AWWs would conduct counselling sessions in AWCs

itself (KPIs with AWWs and ASHAs and FGD with AWS, Tumakuru and Madhugiri Taluks, April 2022).

In Shahpur too, ASHAs were able to meet the mothers as they were not allowed to go close to them; therefore, they counselled the mothers, from a distance, on how to prevent infections, especially once the women came

home after delivering their babies. During COVID-19, they did not weigh newborn babies and infants as the families would not allow them to do so. However, the counselling was not universal as one of the mothers who had delivered a baby during COVID-19 shared that no counselling happened for her (FGDs with ASHAs and mothers of anganwadi children – Shahpur, June 2022).

5.9.4. Early Childhood Education (ECE) services during COVID-19

Apart from providing nutritional and health support, AWCs also act as centres for pre-school education. The ECE activities saw a complete disruption during COVID-19 due to many reasons. Firstly, in the initial months of the pandemic, as maintaining physical distance became a norm, educational services automatically got affected. Parents were also apprehensive about sending their children outside the home as there was uncertainty around how COVID-19 affects young children. As per the order dated 11 November 2020, ECE services were supposed to resume in small groups of 5–8 children, where children were allowed to visit AWCs once a week and follow up lessons could be taken up at home. In Shahpur, they were able to hold some of these ECE classes during months when COVID-19 was less intense. During the peak of the second wave, AWCS closed again. It was only from October 2021 that the early childhood education activities slowly resumed in a limited manner.

In Tumakuru Rural, the CDPO also expressed concern that even though ECE education activities resumed, many AWWs recruited during the pandemic had not received any orientation on how to conduct these activities considering the major break that children have had as the AWW training centres were not operational. This issue has largely remained unaddressed.

In February 2022, early childhood and care education classes resumed in the entire state, and this turned out to be a relief for parents as they faced difficulties in managing the children at home. Some parents also stepped out for work, and they had no choice but to leave them alone at home or drag them along. As AWCs opened in February 2022, they used to take around batches of 5–10 children each after ensuring that these children do not have any of the COVID-19 symptoms and only the children of double vaccinated parents were allowed to come to the AWC. This was to enforce double vaccination of unvaccinated/partially vaccinated parents of children. Children came to the AWCs with interest and enjoyed playing with the toys available there (KPI with AWWs, Yadgiri and Tumakuru, June 2022).

The mothers of AWC going children felt that there was a definite loss in learning during the pandemic. A couple of mothers pointed out that their children had forgotten numbers, alphabets, and rhymes that were taught to them prior to the onset of the pandemic. Even though a few mothers did try to teach their children at home, they felt that it was not as effective. At AWCs, children listened to the instructions of AWWs, who could make the children sit together and teach them. Both AWWs and AWS had observed that many of the children had become unruly when they returned to AWCs after a long break of close to eighteen months; in this period, as they had lost the habit of being in the company of other children.



Figure 5. 5. Anganwadi Centre in Tumakuru Rural (Mydala Gram Panchayat)



Source: Photos taken by CBPS Research Team.

In conclusion, the government had to continuously evolve its policies based on the ever-changing information in face of the pandemic. The WCD department responded to this calamity with speed and efficiency pointing towards its resilience, which may have prevented nutritional disaster in many children under 6 years of age. Although the experiences in the four Taluks have been diverse, THR played an important role in preventing any nutritional disaster among the children during the pandemic. The fact that the districts could adopt local solutions seemed to have played a major role in making the service delivery responsive to the challenges and needs of the pandemic.

Table 5.6. Summary of availability of Nutritional Services available to Anganwadi Centres' beneficiaries during COVID-19

Services	Tumakuru	Yadgiri
Services during COVID	<ul style="list-style-type: none"> Full stoppage of services for the first three months of the lockdown, and Take-Home Rations (THR) was resumed after one month. Anganwadi Workers (AWWs) were able to provide THR regularly and deliver it to homes Growth monitoring was done from time to time with delivery of THR. Due to COVID-19 fears, nutritional counselling, growth monitoring, Village Health and Nutrition Days were not carried out Accredited Social Health Activist (ASHAs) were able to visit pregnant women Immunisation for kids carried out in batches at Primary Health Centres after initial months of lockdown Iron and Folic Acid (IFA) was distributed to mothers once a month. 	<ul style="list-style-type: none"> Full stoppage of services for the first three months of the lockdown, and THR was available at the end of one month. AWWs provided THR initially, but parents had to collect them later because of sheer number of packs per house after three months Growth monitoring as per interviews done when possible Due to COVID fears nutritional counselling, growth monitoring, and Village Health and Nutrition Days were not carried out. ASHAs visited pregnant women after three months during the lockdown IFA was distributed to mothers. Pradhan Mantri Matru Vandana Yojana was done well in Yadgiri with easy registration during pandemic Immunisation for kids carried at anganwadi centres
Take Home Rations in AWCs	<ul style="list-style-type: none"> Distributed once in 15- 30 days by AWW to beneficiary homes AWWs measured each item and distributed as cost was prohibitive No issues in quality and quantity Eggs given under Mathrupoorna, less than 21 given as price not fixed for eggs (given once a week-Tumakuru) Milk powder given to all beneficiaries MSPTCs saw 2-3 tonne increase in production 	<ul style="list-style-type: none"> Parents collected the THR once a month from AWC as number of beneficiaries was large AWWs were able to distribute prepacked packages (after six months) Small items like sambhar powder, mustard, etc not distributed Complaints on quality of dal Eggs were given as required under Mathrupoorna and for SAM/MAM as prices fixed in Yadgiri through a district level tendering process. However, one batch was rotten. Milk powder given to all beneficiaries MSPTCs saw 6 to 11 tonnes increase in production, needed to hire more
Nutrition for severely acutely malnourished and moderately acutely malnourished children (SAM/MAM)	<ul style="list-style-type: none"> Received double rations Spirulina chikkis were provided to SAM/MAM children by the spirulina foundation in a few Gram Panchayats. 	<ul style="list-style-type: none"> Received double rations, eggs. AWWs cooked eggs for SAM/MAM children at their home Lower enrolments with COVID-19 in Nutrition Rehabilitation Centres - fear of contracting COVID Efforts of non-governmental organisations: SaiSure multi-nutrient protein mix was provided. Shakti kit was provided by Akshaya Patra Foundation to anaemic pregnant women.



Chapter 6

School education and other services for children between the age of 6 to 16 years

School children from all strata suffered due to school closures across the world but school closures in India were among the longest ones. Children in government schools, in addition to learning, also faced food security issues as they stopped receiving HCMs in the school because of the school closures.

Government schools in Karnataka provide a one-time mid-day meal all children in grades 1–10 during school hours. In addition, they are beneficiaries of another programme, Ksheera Bhagya, where they are provided milk once a day in school. While AWCs have a system of intensive and holistic care given to the children aged 0–6 years with extensive data available in the form of monthly progress review reports to evaluate the effectiveness of these interventions, there is not much information available on the nutritional status of schoolgoing children in government schools. Even their nutrition and health related details are hardly available to understand their status. As mentioned in the previous sections, we had extensive interviews with officials associated with school education to understand the supply side effects and with the adolescent children and their parents to understand the demand side impacts. Before discussing the issue of midday meal and alternatives, we present here some key school-related findings to set the context.

6.1. New enrolments in schools during COVID-19

During the pandemic, the state witnessed an increase in enrolments in government schools mainly due to two reasons: (i) a few parents decided to transfer their children from private schools since they did not want to pay hefty tuition fees when the schools were not even functioning and only online classes were being conducted, and (ii) children belonging to migrant families who came back to their villages during the pandemic also enrolled in the nearby government schools. This was observed both in Tumakuru and Yadgiri districts.



Table 6.1. New Enrolments during COVID-19 in schools

New enrolments during COVID-19		
Services	Department	Details
New enrolments	<ul style="list-style-type: none"> In the beginning, they were unable to estimate the number of new children who enrolled in government schools. There were about 15,000 to 20,000 new children admitted during 2020–21 and 2021–22 in Tumakuru District In Madhugiri taluk, there was a 20% decline in enrolments in unaided schools as these children have now joined government schools. In Tumakuru Rural, 3,000 new enrolments came from private schools and 1,000–1,500 children came from outside the block. There was no decline in enrolment of girls in both taluks as there was higher awareness about education for girls. 	<ul style="list-style-type: none"> In Yadgiri taluk, the number of children increased from 54,000 to 61,000, which was about a 13% increase. In Shahpur taluk, there was a 10% rise in enrolments. In both schools in Shahpur where we conducted interviews, there were about 20 new children in one of the schools and about 100 new children in the other; these children had enrolled in government schools for similar reasons of high private school fees and migration to villages. A school we interviewed in Yadgiri saw an increase of 10 to 15 children. There was no decline in enrolment of girls.
Challenges	<ul style="list-style-type: none"> There were issues of getting transfer certificates from private schools as they were unwilling to give the certificates. Due to lapses in the Student Achievement Tracking Systems, children enrolled in Government schools from other districts who came back to Tumakuru taluk faced difficulties registering here as they were not recorded as having left the previous school. 	<ul style="list-style-type: none"> Children enrolled in schools but did not attend schools Many of the children were engaged in child labour and some girls were married off.
Measures	<ul style="list-style-type: none"> The block education officer in Tumakuru tried to contact schools from other districts for transfer certificates so that benefits could be given here. 	

Source: Key person interviews with in charge for Zilla Parishad Akshara Dasoha in Tumakuru District), -block education officers in Madhugiri and Tumakuru Rural in April 2022, Block Education Officers in Shahpur Taluk and Yadgiri Taluk, school heads in three schools in in Yadgiri District in June 2022.

Enrolments in hostels

Karnataka also has a massive system of hostels where children from remote and rural areas stay for their school and college education.¹⁰ No new admissions were made to the hostels during the 2021–22 academic cycle (KPI with warden of boys' hostel, Tumakuru Rural, April 2022). When hostels opened in January 2022, the overall strength of the students fell by 50%. One of the main reasons was the uncertainty due to the frequent closure of hostels throughout the pandemic; this meant that the parents needed to come back each time to take their children home. Additionally, the fear of infection meant that parents found it more convenient to transfer their children to schools near to their homes. Many parents were worried about their children contracting the virus from other children in the hostel since enforcing distancing among children was a challenge.

During the field visit, we noticed in Shahpur that children had not yet come back to the hostels. There were also comparatively low enrolments in hostels, and the authorities had to go roam around villages to enrol children in the hostels (KPI with the hostel cook, Shahpur Taluk, June 2022).

However, there was no drop in enrolment in the Morarji Desai residential schools when compared to the hostels attached to government schools as they are English medium residential schools, which is very sought after by the parents. Hence, there were no transfer certificates issued during COVID-19 (KPI with a school principal of Morarji Desai school, Gurmitkal, June 2022).

6.2. Nutrition and health services during COVID-19

6.2.1. Take home rations during COVID-19

As the COVID-19 crisis hit the country and the government announced a complete lockdown in the nation, schools were one of the first few institutions to be closed as a precautionary measure to protect the children from being infected with the virus. While the government was providing hot MDMs in schools till March 2020, the schools were shut for two months in April and May 2020. Mid-day meals are an extremely important component of school education for a lot of children coming to government schools as they get at least one HCM a day to take care of their minimum basic nutritional requirements, which is necessary for the overall growth and good health of children. Apart from MDMs, the schools also provide IFA supplementation tablets twice a week and deworming or Albendazole tablets once in a period of six months as a part of overall measures to care for the children's health and wellbeing.

The schools did not open in June 2020 like in the previous academic years. For the two months of April and May 2020, government of Karnataka had provided dry ration kits (Table 6.2 provides details of THR given

in the two districts). However, the government did not supply the next batch of ration until November 2020, when it supplied the ration in batches for the months of June to October 2020. This ration had become very crucial for certain households that were reeling under severe economic stress due to complete lockdowns.

Process of ration procurement by schools: In Tumakuru district, school authorities had to submit an indent for THR to the cluster resource person, who then shared it with the BEO who, in turn, submitted the indent to the Taluk Panchayat office. The Taluk Panchayat office then consolidated all the requirements at the block level and sent it to Akshara Dasoha Program¹¹ section. The indent has essentially had three fields to be filled: (i) THR consumed the previous time, (ii) THR demand for the next three months, (iii) the stock remaining from previous time. Additionally, since HCMs were not being served in schools, it was decided to transfer a sum of INR 248 to children in grades 1–5 and INR 372 to children in grades 6 and 7 from the vegetable contingency fund. This amount from the vegetable contingency fund was

¹⁰Karnataka runs government hostels and ashrama schools for boys and girls belonging to Scheduled Caste, Scheduled Tribe, and Other Backward Classes. The minorities departments also run similar hostels in their categories. In addition, there are also residential schools like 'Morarji Desai' for boys and 'Kittu Rani Chellama' for girls. According to lists obtained from the social welfare, minorities, and education departments, an estimated 4 lakh children use these hostel facilities alone in Karnataka. Source: Internal analysis for CBPS report; <http://cbps.in/wp-content/uploads/Estimating-District-Level-Costs-for-Nutrition-Specific-Interventions-in-Karnataka-1.pdf>

¹¹This is the name of the scheme in Karnataka that serves mid-day meals.

given for the academic year 2021–22 but not for the previous academic year 2020–21. In Yadgiri District, the ration was given to the children once in three months. The ration would come from the Food Corporation of India godowns to the district and then to the Taluk level offices from where the ration was directly sent to the schools (KPI with in charge for MDM in ZP, June 2022).

Transportation of ration to schools: In Tumakuru District, there were issues with transportation of grains as the tender was called before COVID-19 struck, and as the tonnage increased during COVID-19, the rates fixed for transportation of ration was only for rice and wheat, while more items got added to the list of THR.

People involved in transportation of goods were getting paid INR 150 per quintal for transportation of food grains from Food Corporation of India to the schools; however, they were demanding an increase in compensation. Labourers too were unwilling to transport the goods, and they had to be convinced about the times and reaching out to people in need. Some of them were even threatened to be blacklisted if they did not complete this task. The coolies involved in shifting the ration were also scared to touch the ration, and this was true even for the teachers who had to distribute it in schools.

In Yadgiri District, we did not hear of any issues faced during transportation of rations.

Table 6.2. Take-home Rations given to Children in schools per day

Item	Grades 1–5	Grades 6 and 7
Rice/Wheat	100 gm	150 gm
Oil	5 ml	7.5 ml
Pigeon Pea (Toor Dal)	20 gm	30 gm
Salt	1 gm	5 gm
Milk powder (once during the pandemic in academic year 2020-21)	1 kg during the entire pandemic period	1 kg during the entire pandemic period

Note: The ration was given for 19 working days in March 2020 in the academic year 2019–20, and for 240 working days for the period June 2020–April 2021. From April 2021 onwards, the ration was distributed based on the number of working days on which hot cooked meals were not given. In Shahpur, the rations were distributed to last for 45 days, 35 days, 57 days, and 83 days, respectively.

Source: Key person interviews with school heads in all four Taluks, April 2022 and June 2022.

Both districts did not complain about any shortages in receiving ration stocks despite an increase in beneficiaries caused by the increase in enrolment, which was reflected in the new demand/indent that was submitted for the next quarter. However, in Tumakuru Rural school, there were a couple of occasions when there was a shortage in rations, but they managed it by taking it from the stocks that were remaining in the adjacent high school (KPI with the president of the School Development Management Committee [SDMC]). Since the dates for distributing the THR in the high school were different, they returned the borrowed rations once they got their stocks. These are indeed examples of cooperation to ensure accountability to citizens.

In terms of the budget availability, there were no shortages in funds, and they managed to get the ration within the yearly budget. Interestingly, in Tumakuru the amount allotted for Ksheera Bhagya of about INR 17–18 crores, was used for adjusting any change in costs (KPI with in charge for MDM in ZP, Tumakuru District).

Quality checks on ration: Ration was procured from the office of the ZP CEO and, in order to keep a check on the quality, a joint inspection committee consisting of the deputy director, joint director, district health officer, deputy director of Public Instruction, and the manager of Food Corporation of India was formed under the leadership of joint director. If the ration received was found to not be in order, it would be returned, and new stock would be provided; both districts confirmed this process. In Tumakuru District, schools protested about the quality of gunny bags as the items would spill out from there due to tear in the bags. In one particular month, toor dal (pigeon pea) was sent back in all Taluks as it was of poor quality and did not meet the set standards.

Ration distribution in schools: Once the ration reached the schools, the process of giving it to the children happened in a hassle-free manner. The cooks of MDMs and helpers were given salaries during the COVID-19 lockdown period and were assigned the task of cleaning the ration, measuring the quantities, and distributing it to the children. The teachers too were present to assist them in this when required.

Individuals played important roles in determining how active schools were. For instance, in Tumakuru District, a school head was very active and would inform the parents, including via WhatsApp groups, when the stocks of THR were received and distribute them to the parents or the children. On the other hand, in Shahpur Taluk, the teachers were not very proactive in informing the parents about the arrival of rations to schools. In cases when the schools experienced a delay in receiving the stock, THR for the delayed months would be provided altogether in the next supply.

Parents' reactions to THR given in schools

Overall, parents in Tumakuru district were satisfied with the quality of ration received in the schools and mentioned that it was better than the ration given in the public distribution system. They said that more ration is always welcome for them, but they understood that the quantity of ration given was meant for the child's one time meal missed due to school. The parents were appreciative of the dry ration given to them and most of them went to schools to collect the same.

Parents in Yadgiri District termed the quality of the THR provided as medium, while parents in Shahpur Taluk said that they were not very satisfied with the rations. A father said that the rice was not good and that it had worms; another father mentioned how the toor dal (pigeon pea) was of poor quality and that it could not even be fed to the cows. Even the eggs given to children were spoilt. The Shahpur school head also mentioned that they returned the ration when it was of poor quality.

Collecting ration from schools: In order to collect rations from schools, the children themselves or the parents would come to the school premises and collect the ration outside the curfew timings, in the designated hour. In Tumakuru District, the parents or children did not face any difficulties. The police did not prevent them from moving around and collecting the ration (FGDs with fathers of schoolgoing children and with adolescent children, Tumakuru District, April 2022).

However, in Shahpur taluk, some of the parents found it difficult to collect the THR due to distance of schools from the houses. The teachers also found it difficult to commute to schools to give out the rations. In fact, the collection schedule by the children was quite different where different children took it at different times, ranging from once a month to three–four times or even ten times during the entire lockdown period (FGDs with adolescent children, mothers, and fathers, Shahpur Taluk, June 2022). In Yadgiri taluk, while the attendance otherwise was reported to be low (about 60%), more than 90% of the enrolled children's families would come to collect THR. This showed that this ration was critical for the families. Only on one occasion, there was a shortage of toor dal (pigeon pea), and it was not given as part of the THR but was compensated during the next delivery of THR.

For the hostel children attached to the Morarji Desai School, no THR were given to children for the entire period from April 2020 to May 2021. After the second lockdown, in June and July 2021, rations were given and families of children living nearby came and took the ration, while others came and took it when the school/hostel reopened in August 2021 as it was otherwise difficult for parents to travel so far just to collect the ration.

6.2.2. Iron and Folic Acid and deworming tablets during COVID-19

During the 1.5 years of school closures, IFA tablets were not given to children. In Madhugiri, the supply from the government medical stores itself had stopped due to COVID-19 caseload, and it started again after three to four months. The stocks were received only two times during the entire pandemic period, i.e., in November 2020 April 2021. Whenever the stocks were available, ASHAs and ANMs collected it from the PHC stores and took it to the schools.

In Madhugiri, once the schools resumed in September 2021, the children started getting the IFA and the deworming tablets (FGDs with adolescent children, Madhugiri Taluk, April 2022). A parent mentioned that the school head gave them one sheet of tablets while they went to collect THR, but the parents did not give it to the children as they did not know its importance (FGD with fathers of schoolgoing children, Madhugiri taluk, April 2022). However, in Tumakuru Rural (Mydala GP), the distribution of IFA tablets had stopped from 2017–18 onwards and the situation had remained the same even when the schools had shut down due to

the pandemic (KPI with school head of GP high school, fathers, mothers, and adolescent children, and KPI with ASHA, Mydala GP, April 2022). On the other hand, deworming tablets had been administered to children once every six months by ASHAs, and this continued even during the pandemic.

In Shahpur, children got IFA tablets just once during their exams in February 2022 (FGD with adolescent children, Shahpur taluk, June 2022). In Yadgiri taluk, children did not get IFA tablets in the last four years (FGD with adolescent children, with school head of Madhwar GP School, Yadgiri taluk, June 2022). However, deworming tablets and elephantiasis prevention tablets were given to the children.

The commissioner of Public Instruction attributed the shortage of IFA tablets to failure of tenders for procurement and supply as there was confusion in procedures. Raw materials were unavailable; some people bid very high; and there was not enough interest to bid.



6.2.3 Mid-day meals (MDM) and children's food patterns during COVID-19

In November 2021, HCMs/MDMs restarted again in schools as per the Pradhan Mantri Poshan Shakti Nirman (PM Poshan) scheme. The menu remained the same as per pre-COVID-19 norms; however, in Tumakuru district, the government wants to align the menu as per local nutritional requirements and have proposed ragi (finger millet) to be included in the menu.



Table 6.3. Access to food and what children ate

	Tumakuru	Yadgiri
MDM in schools pre COVID-19	<ul style="list-style-type: none"> In Madhugiri, children liked the Mid-Day Meals (MDMs) given in schools. There were enough vegetables in MDM given in schools, and they were mainly given dishes made from rice, like lemon rice, rice with vegetables and sambar, pulao etc. However, most children preferred home cooked meals. Mothers also said that the meals made in schools were not very tasty, and the children thus preferred eating meals at home In Tumakuru Rural, some children liked the MDMs, but a few others found it to be very monotonous and bland; they thus preferred THR over MDMs. Parents preferred HCM over THR as they felt that children ate in a more disciplined manner and did not waste food at school. It was difficult for mothers to cook food for their children and manage working in the fields during the day. The children also got hot meals. A few parents did highlight that when the schools were functioning, children also got vegetables and milk, which they had to provide for during the pandemic. 	<ul style="list-style-type: none"> In the Yadgiri Taluk school, parents preferred Take-Home Rations (THR) as they could prepare meals as per their liking Children were not very happy with the food that they received in school in both taluks. As per our observation too, the MDM served on the day of our visit, for example, did not seem nutritious at all. It was very thick boiled rice with watery dal, no vegetables, and some green chillies (Figure 5.1). Parents informed us that the cook and the helper were relatives of a school development management committee member, so whenever they have complained about quality, this has led to serious arguments between them. In Shahpur, teachers think it is better if the children eat in schools because the children come to school for the milk given in the mornings, thus staying for classes for the full day. Children in Shahpur school got rice, sambar, lemon rice, and sometimes sambar with vegetables and sometimes without. Insects were found in the sambar. There was less salt in the food, and salt was available separately to be added to the food if one wanted to. The rice was not boiled well and sometimes the children went home hungry when they did not like to eat the food in the schools. They got milk in schools every day, and some children carry their own powder (Boost) packets to make the milk tasty for themselves.

	Tumakuru	Yadgiri
Affordability of food during COVID-19	<ul style="list-style-type: none"> • There was much of an issue of affordability for food during COVID-19. • Mothers were able to use greens, fresh vegetables, and other dairy products from their own farm or a neighbour's farm, thus being able to provide different varieties of food. • Being a pastoral population, people in Madhugiri did not have problems accessing vegetables. • Very few children said that they did not eat enough vegetables as they could not afford it during COVID-19 	<ul style="list-style-type: none"> • None of the children in Shahpur said there were food shortages at home.
Dietary diversity	<ul style="list-style-type: none"> • Children liked the food being given in the hostels. • In Madhugiri, under Ayush, children are provided an immunity-booster drink, in which they add ginger in the tea provided in the morning. • The children were healthy after returning post COVID-19. 	

Source: Focus group discussions with adolescent children, fathers of adolescent children, and mothers of adolescent children, and key person interviews with block education officers and in charge of hostel in all four Taluks, April 2022 and June 2022.

Figure 6.1. Mid-day Meals in Madhwar School, Yadgiri Taluk



The health or nutritional status of children from both the districts had not worsened during the pandemic as shortage of food was not a big issue since people received adequate ration from the public distribution system and other schemes (KPI with school heads and parents in all Taluks April and June 2022). Parents felt that children ate well and did not have any health issues, and there was no reduction in weight. There was not much change observed in the health status of the hostel children or any visible loss of nutrition, and the children seemed healthy when they returned to the hostels (KPI with in charge of hostel, all Taluks, April 2022 and June 2022).

Source: Photos taken by CBPS research team.

6.2.4 Health check-ups during COVID-19

Health check-ups under Rashtriya Bal Suraksha Karyakram were not held regularly during the COVID-19 period. In Shahpur, only one health check-up happened during the COVID-19 period, i.e., one week before their exams in January–February 2022. Primary school children in Shahpur did not have any health check-ups or dental check-ups, and only the height and weight of the children were checked (FGD with adolescent children, Shahpur Taluk, June 2022). In the Yadgiri school, a thorough physical examination of the children was done by the medical doctor; their heights and weights were recorded, and the data was kept with the physical education teacher. It also included an eye examination, and children were provided with glasses for short sightedness. All of this was done once in September 2021 when the schools reopened (KPI with Yadgiri school head, Yadgiri Taluk, June 2022). Some senior officials in the Department of Public Instruction, the education department in Karnataka) emphasised

the need for more Rashtriya Bal Suraksha Karyakram teams in the state as they think that the way the teams conduct health check-ups in schools now have many lacunae in the way. There are currently 436 teams, and the current teams mainly focus on the children pre-selected by the teachers as vulnerable; other children do not undergo in-depth clinical examination (KPI with the commissioner of Public Instruction, Education Department, Government of Karnataka, July 2022). According to them, the most common diseases in schoolgoing children include scabies, caries, vision, auditory, abdominal pain, and pulmonary hypertension (congenital heart disease), and they questioned the practice of conducting this whole examination for some students only as it would result in check-ups of only 150 children per day. The children thus diagnosed should undergo dietary, medical and rehabilitative interventions as a follow-up, which was not happening at the time of the study.

6.3 Education and learning loss during COVID-19

Timeline of school closures and opening: The state government decided to close schools on 14 March 2020, and schools remained closed till July 2020. In August 2020, the education department launched the Vidyagama programme, a concept aimed at taking schools to the doorsteps of children at villages in the absence of physical classes. As per the programme, teachers were required to meet children at a spacious location close to their (children) place of stay and engage them in academic activities. Children gathered in batches of 10–15 and were required to wear face masks, undergo thermal screening, and maintain physical distancing among them. Teachers would then engage them in academic activities for at least two hours a day, teaching them common subjects such as science, mathematics, social science, and English. During this interaction, teachers also cleared any doubts that the students had and assigned them homework sheets. However, the programme was suspended in October 2020 after COVID-19 cases were reported among students and teachers involved in this initiative. Subsequently, some teachers made learning videos on various subjects and shared it with students through mobile phones and WhatsApp groups. A few government schools, on their own initiative, also conducted online classes for their students but with limited success. The education department also telecast classes on Doordarshan's regional channel, Chandana.

From December 2020 onwards, the Vidyagama programme was relaunched by the education department in a revised format with offline classes being held on school campuses, and students were

allowed to attend them after obtaining parental consent. No HCMs were provided to students, and they even had to carry drinking water from their respective homes. While students belonging to grade 10 had classes every day for a couple of hours, classes for students in grades 1–9 were scheduled on alternate days in batches. However, these offline classes were suspended in March 2021 due to the second wave of the pandemic. After the second wave subsided, the state government reopened schools for students in a phased manner; classes for students in grades 9 and 10 started in August 2021, for children in grades 6–8 in September 2021, and for children in grades 1–5 in October 2021. Prior to the onset of the third wave of the pandemic in December 2021, the state government had instructed schools to postpone all social, academic, and cultural events for a period of two months. However, for the entire month of January 2022 when the third wave of the pandemic was at its peak, offline classes for students in grades 1–9 were once again cancelled. Schools reopened in February 2022 and have since then followed their regular pre-pandemic timetable of physical classes. Throughout the pandemic period between March 2020 to March 2022, hostels also followed a similar pattern of opening and closing as was the case with government schools.

The table below summarises the effects of school closures during COVID-19 on children, how the situation was managed for an interim period through Vidyagama classes, online education, and learning losses experienced by children.

Table 6.4. Education during COVID-19

	Tumakuru	Yadgiri
Classes under Vidyagama programme	<ul style="list-style-type: none"> The Vidyagama programme was only partially successful in Tumakuru Rural Gram Panchayat high school. Children from 13 nearby villages attend the school; three teachers divided 13 villages among themselves and met students twice a week, taught for a couple of hours, and assigned them homework sheets. Attendance of students was highly irregular, and very few of them would complete their homework assignments. The revised Vidyagama programme met with limited success since parents were afraid that their children would contract the virus from teachers who usually came from Tumakuru city where the COVID-19 caseload was high A primary school teacher from an adjacent GP succumbed to the virus, and this instilled further fear among parents. On many occasions, not even a single child showed up at school. In Madhugiri, classes were held regularly for three months, three to four days in a week, where the teacher would take the children in batches and conduct classes in open spaces. Not all children found this useful because there was no board on which the teachers could teach, especially for subjects like mathematics; children were unable to understand these concepts just by listening. They also got tests and worksheets to answer under these classes, which were checked the next day. 	<ul style="list-style-type: none"> In Shahpur, classes under Vidyagama, known as vatara shaales, were being held in temples, mosques, churches, under trees, etc. Children used to be given various tasks, including study, writing, drawing, and worksheets which used to be checked the next day. The worksheets were designed to make the core concepts stronger. About 50%–70% of the children attended these classes, and the attendance was at 50% when it rained. The cluster resource persons, block resource persons, block resource centres, and education and communication officers all helped in the supervision of these classes. Teachers had difficulty in commuting to these areas to teach for these classes; hence, teachers requested the block education officer them to allow to conduct Vidyagama classes in the school children premises in open spaces. Children from all classes including children from grades 4, 5, 6 and 7 were included. In Yadgiri block, the first version of Vidyagama scheme (between Aug to Oct 2020), had about 80% of the students attend these classes This was not very effective since children were easily distracted in an outdoor setting, and there used to be a lot of traffic noise. The revised version of the Vidyagama scheme where teaching happened in the classrooms (from December 2020 onwards) was far more effective and successful. On an average, about 50% of the children would come to the school and would be taught in the open playground under the tree shade while maintaining social distancing. For children in grades 8 and 9, classes happened only for half a day, while they were conducted for a full day for children in grade 10. In the Morarji Desai schools in the Yadgiri block, neither the Vidyagama scheme or the online classes succeeded as a lot of children lived very far away (up to 150 kms) and they were able to reach less than 10 children.
Online classes for children	<ul style="list-style-type: none"> Children coming to government schools in general belong to households coming from lower socio-economic backgrounds. Access to online classes was more difficult for such children. Parents were unable to provide a dedicated mobile phone for their children. Even if the children shared mobile phones, there were internet/network issues. 	<ul style="list-style-type: none"> In Shahpur, less than 50% of the children could access smartphones or any online education material that was shared on school WhatsApp groups. This was biased and gendered against girls, thus hampering their access to smart devices required for online learning In Yadgiri block, only 30%–40% children had access to online classes; 90% of the children in grade 10 could not attend the online classes, and hence, these online classes were a failure.

	Tumakuru	Yadgiri
Other initiatives for continuation of learning	<ul style="list-style-type: none"> In Madhugiri, children also watched the educational programmes that were broadcast on national TV, which was an initiative of the government to keep the children engaged in their school curriculum and be able to continue their learning despite school closures. Parents purchased expensive smart phones so that their children could attend online classes. Parents also concurred that online classes were ineffective. 	<ul style="list-style-type: none"> Some of the children took interest in the programmes show on TV and watched them. In Yadgiri block, teachers took initiative of maintaining blogs and putting up articles related to their subjects.
Behaviour of children during the pandemic	<ul style="list-style-type: none"> Children had become highly undisciplined and used the smart phones to play games or watch entertainment videos. Parents found it difficult to handle children at home, and they were extremely relieved when schools finally reopened. 	<ul style="list-style-type: none"> They used to fight a lot with the parents, were not listening to them, and behaved very badly It is difficult to keep the children at home. The boys go to their parents' farms just to kill time. They also watch a lot of TV when the parents are off to work.
Learning loss due to pandemic	<ul style="list-style-type: none"> Children had forgotten most of the subjects that were taught in the academic year prior to the onset of the pandemic, and they hardly learnt anything new during the pandemic. They had lost basic skills in mathematics and writing Children in higher classes like grade 10 did not have the foundational training of grades 8 and 9 and hence faced issues with some subjects. Since no exams were held for two years, it will make it difficult for students to appear for grade 10 exams. Some adolescent children from Mydala GP (Tumakuru Rural) had picked up habits like smoking, gambling, drinking, and chewing tobacco during the pandemic when the schools were shut. 	<ul style="list-style-type: none"> School closures have impacted learning during foundational years, especially for children in lower primary schools as they missed many years of elementary schooling, which is highly critical for their future education. In Yadgiri Taluk school, children have faced a major loss in learning and have been set behind by four years. A child who was in grade 6 at the onset of the pandemic is now in grade 8 but with the abilities of a student in grade 4 when it comes to subjects like maths, science, etc. The children have forgotten everything, and they only keep roaming around
Challenges as school re-opens	<ul style="list-style-type: none"> Even though there have been no dropouts from the school, one of the biggest challenges that the school is facing ever since it reopened is irregular attendance of students. Students frequently apply for leave and start drinking alcohol in the afternoon itself In addition, many students demonstrated unruly behaviour and did not pay much attention in classrooms. Parents expressed that teachers should conduct extra classes to compensate for the learning loss 	<ul style="list-style-type: none"> Children not coming back to schools after schools reopened in June 2022 Many children have gone for child labour and many girls have been married. Some of the children engaging in child labour were reluctant to leave their source of livelihood and return to school. Children's behaviour improved once they came back to schools.

Kalike Chetarike Programme: In order to compensate for learning losses that occurred during COVID-19, government of Karnataka has implemented a programme called Kalike Chetarike, which will be integrated with the existing syllabus throughout the year.

In a sample evaluation study of school children done by the Azim Premji Foundation and Tata Kalike Trust prior to schools reopening after the pandemic, it was found that 20 out of 60 competencies were completely lost. Worksheets were provided for each class and each subject to assess this during school closures due to COVID-19 (KPI with BEO, Yadgiri Taluk, June 2022). However, In Yadgiri, the school was yet to receive the worksheets for Kalike Chetarike even after 15 days of the program launch to assess where the children are in terms of their education (KPI with school head, June 2022). The hostel children are also supposed to undergo a bridge course once they come back to schools (KPI with the Morarji Desai school principal, Yadgiri, June 2022).

Other activities of children during Covid-19: A higher proportion of girls were involved in household chores and remained confined to home as they were not allowed to go outside like boys, indicating a gender-based differentiation in their treatment. Boys were more mobile and were generally allowed to roam around. The children said that they missed their teachers and friends. Most of the children wanted the schools to be open despite COVID-19; they were interested in studying and also missed sports, exhibitions, and cultural activities (Prathiba Karanji). None of the extra-curricular activities had resumed even after eight months of schools reopening. Some children mentioned that they went for tuitions during COVID-19. Quite a few children in Yadgiri were involved in child labour and worked in fields, shops, etc. Both boys and girls reported to have gone for some agriculture labour work in Yadgiri.

Source: Focus group discussions with adolescent children, fathers, and mothers, and key person interviews with block education officers, in charge of hostels, and president of school development management committees in all four Taluks, April 2022 and June 2022.

6.4 Other activities of schools and teachers during COVID-19

6.4.1 Activities under Poshan Abhiyan

The Poshan Abhiyan has been implemented very effectively, and children in all the schools attended awareness activities about vegetables and nutrition education (KPI with BEO, Madhugiri, April 2022). In Yadgiri taluk, the ANMs and ASHAs created awareness on nutrition, personal hygiene, and dietary diversity once in 3 months (KPI with school head, Yadgiri Taluk, June 2022). No additional budget had been given to the schools to grow and maintain kitchen gardens or for other activities. However, under THE Mahatma Gandhi National Rural Employment Guarantee Act, some kitchen gardens were built in schools, and they have grown vegetables through the Panchayat approved works. Under the GP's Shikshana Pade, 30% of the schools used these funds for building infrastructure such as rainwater harvesting (KPI with BEO, Yadgiri Taluk, June 2022).

6.4.2 Role of School Development Management Committee (SDMC) Members

Members of SDMC did not seem actively involved in taking decisions involving improvements in the educational status of children. Their involvement was limited to decisions related to financial matters. Primary schoolteachers in Shahpur told us that the SDMC members did not actively help during COVID-19 related tasks; however, they would come as and when the school authorities requested them to come, especially for purposes of signing documents. They were also concerned about the loss of learning among the children but did not do much to compensate for this. The school heads opined that SDMC members should not limit themselves to financial decisions alone.

Overall, the state seems to have successfully provided THR to school children during the pandemic, but this has not been as extensive as in case of AWCs. The distribution of THR through schools started late and did not cover all elements; for example, no attempt was made to replace milk distribution with an equivalent. Nutritional support activities such as distribution of IFA tablets were also not resumed effectively, and the experience was diverse for different districts. However, though not evidenced through any specific measurement, the study in these two districts suggest that this did not cause any adverse impact on children's nutrition. School closures did, however, causes learning loss and deepened the issues of child labour in districts like Yadgiri.

Table 6.5. Summary of nutritional services for school children during COVID-19

Services	Tumakuru District	Yadgiri District
1. Micro-nutrient Correction of micronutrient loss with distribution of Take-Home Ration (THR) and proper counselling	<ol style="list-style-type: none"> 1. Children in school have not received any Iron and Folic Acid (IFA) tablets for two years. 2. Some schools have said that no iron tablets were given to schools since 2018 and they did not receive stock. 3. Some parents were given iron tablets with THR, but they had not used it. 	<ul style="list-style-type: none"> • No IFA for 1.5 years
2. THR in Schools	<ol style="list-style-type: none"> 1. Given regularly every three months 2. Milk powder was given only once during the entire period of COVID. 3. Quality was good. 4. Contingency fund was being distributed now, after April 2022. 5. Few schools with vegetable gardens 	<ol style="list-style-type: none"> 1. Given irregularly four times in a year, for 35 days, 45 days, and for 57 days and for 85 days (Shahpur), and there was no communication 2. Milk powder was given only once during the entire period of COVID 3. Quality was not good, and bele (dal) was sent back once 4. Contingency fund for vegetables Not distributed yet 5. Poor condition of school, few teachers, no water
3. Learning and health lags	<ol style="list-style-type: none"> 1. Younger children moving towards obesity 2. Older children moving towards poorer habits 3. No programmes for adolescents for support, and Suchi scheme stopped 4. Irregular attendance and unruly behaviour 	<ol style="list-style-type: none"> 1. Given irregularly four times in a year, for 35 days, 45 days, and for 57 days and for 85 days (Shahpur), and there was no communication 2. Milk powder was given only once during the entire period of COVID 3. Quality was not good, and bele (dal) was sent back once 4. Contingency fund for vegetables Not distributed yet 5. Poor condition of school, few teachers, no water
4. Hostels	<ol style="list-style-type: none"> 1. Food is better in hostels. 2. Enrolment had reduced because children registered in nearby schools. 	Morarji Desai hostels saw better enrolments.



Chapter 7

COVID-19 Duties and Frontline workers

The frontline workers including AWWs, ASHAs, and teachers had to shoulder additional responsibilities and were the backbone of COVID-19 related public service last mile delivery system. Keeping nutrition related services at the centre, this chapter analyses their roles, additional responsibilities, and performances, as emanating from the fieldwork.

7.1. Surveys during COVID-19

The most important link for the information needed to respond to the unprecedented pandemic were the AWWs, ASHAs and teachers. As discussed in the previous sections, one of the first tasks assigned to AWWs and ASHAs during COVID-19 was to conduct surveys of every household in the villages for migrant returnees, COVID-19 symptoms, random testing, and all other information that was relevant to diagnose and prevent the spread of COVID-19. These services were essential in combating the spread of the virus, and these tasks would have been very difficult to accomplish without the involvement of the frontline workers.

In Madhugiri, the AWWs and ASHAs undertook a survey of people who came back from other cities and collected detailed information, such as where they came from, the modes of transport used to commute, COVID-19 negative certificates, their profession, when they planned to return, and other such details which would assist in understanding the spread of the virus. These tasks had to be done on a regular basis, i.e.,

almost every single day. They also had to educate people about COVID-19 and ask them to follow appropriate behaviour. Some of these migrants had come back from other cities and would not inform the authorities due to fear of institutional quarantine while being COVID-19 positive, and AWWs and ASHAs even had the responsibility of locating such cases.

In Shahpur, ASHAs mentioned conducting fever surveys and taking anyone with symptoms of cold or cough to the PHCs. Based on details of where they came from, they were also tasked with reporting them for quarantine for 14 days. In cases of people being COVID-19 positive, the ASHAs had to take photos of the houses and note the GPS location, give them immediate medications, take them to the hospitals, get them admitted, and monitor them once they returned home. They had to conduct such surveys almost 30 times during the COVID-19 period. The ASHAs said, that it was helpful when GP members went with them for door-to-door visits.

7.2. Vaccinations for COVID-19

One of the biggest trials that went about during COVID-19 was the need to discover a quick remedy for COVID-19 to prevent its spread, or at least reduce the risk of being severely impacted in case of contracting the disease. India has recently administered over 200 crore doses, which is among the highest in the world, and it has a vaccine coverage of 98% for two doses, while 90% people have received at least one dose. Karnataka is at the forefront of vaccine coverage with 94% of its population having taken the vaccines. The vaccinations have been successful due to a very intensive drive conducted by the government, with ASHAs and AWWs workers being at the forefront of it.

The first priorities of the government were to administer COVID-19 vaccines to the frontline workers, and all of them in Tumakuru and Yadgiri said that they have taken the vaccines. In Yadgiri, ASHAs said that they were initially scared to take the vaccinations themselves but after being educated about its benefits and the importance of taking it, they accepted it. The AWWs and ASHAs worked together during COVID-19 to vaccinate the population of the people in their circles with specific targets being given to them. They had a difficult task of convincing the people in the villages to take the vaccinations due to a lot of hesitations, such as the vaccinations were harmful and would even result in vaccine-related deaths. COVID-19 vaccinations were promoted door-to-door by ASHAs. The population

coverage was a combined effort of many departments and officials including the GPTF officials, ASHAs, AWWs, tahsildars, district health officials, etc.

In Shahpur, AWWs mentioned that they visited almost 90% of the houses at their doorstep, and people would close the doors on seeing them. Some of the people even accused the AWWs of trying to kill them with the vaccines. But AWWs and AWHs tried to repeatedly reach out the households, and in some cases, they visited the houses up to seven or eight times. The tahsildar and all other officials from various departments, especially in backward regions, went around to convince people to take the vaccinations. In some cases, some men took it and women in the family did not take it as they were old or pregnant and would connect any deaths in the village to COVID-19 vaccinations. There was probably also a belief that men are more resilient and would be able to bear the adverse effects that may come with vaccinations.

In Madhugiri too, various officials were tasked with the responsibility of administering the COVID-19 vaccines. They also faced issues with vaccine hesitancy, and ASHAs and AWWs had to do several rounds of house-visits to convince the villagers to take vaccines. This was a challenging task for them, and, on many days, they started their day at seven in the morning. Some AWS said that the people of the villages cooperated for

the vaccines only because the tahsildars, police, and assistant commissioners, would also accompany the AWWs, ASHAs, and AWS during their door-to-door visits to convince them about the vaccinations.

An AWS told us that certain communities like the Scheduled Castes and Muslims were not willing to take the vaccinations; in such situations, they roped in the community leaders to convince them to take it. They also mentioned how some of the villages even blocked entrance to their villages during the vaccination drive and even accused the AWWs of forcing vaccines on the villagers as they were getting commissions for it. Some people would even escape to the neighbours' houses. They gave their own examples of taking the vaccines, but the people were still not convinced. The tahsildar and others in the village threatened them with consequences like cuts in electricity supply or stoppage of ration supplies, etc. to coax them into taking the vaccines. The tahsildar, taluk health officer, CDPO, and others also met the local leaders and convinced them to take the vaccines to assure the villagers about its safety. An AWS told us that she got to meet some of the beneficiaries during the vaccination drives and talk to them about other anganwadi services.

The pregnant and lactating women too were extremely concerned about taking the COVID-19 vaccines. In Madhugiri, they were worried about going to the PHCs for vaccinations as they were also COVID-19 care centres. The AWWs gave them their own examples and showed photos of them taking the vaccinations and told them about its potential for safety.

7.3. Additional tasks for Teachers during COVID-19

The teachers in Shahpur said that they were involved in conducting surveys during COVID-19 where they had to conduct random checks of people above the age of 60 years among the migrant returnees for COVID-19 symptoms. They did tests like blood sugar, blood pressure, etc. This task was done for five days. Apart from this, they also had to conduct a survey of children above the age of 12 years and get them to take vaccinations and the primary school was a vaccination centre. They also vaccinated all the children currently in grade 7. They did this along with the help of AWWs and ASHAs.

In Madhugiri, the BEO told us that he was member of the committee under the tahsildar, and he had to assign a few teachers to monitor the check-posts for incoming vehicles to the state and check lorries, especially of people coming from the Andhra Pradesh border.



7.4. Challenges faced by frontline workers during COVID-19

Frontline workers were at the forefront of providing crucial services and maintaining the social infrastructure during COVID-19. Both the AWWs and ASHAs worker were part of the GPTF for COVID-19 management and were assigned several responsibilities such as creating awareness regarding COVID-19, ensuring effective quarantine, contact tracing and testing, enforcing covid appropriate behaviour in the community and providing food and medicines to COVID-19 positive patients. However, performing the tasks were extremely challenging, and they faced many difficulties in the process.

Figure 7.1. Challenges faced by frontline workers



7.4.1. Provision of safety gear

Although ASHAs and AWWs were provided with basic safety gear like N95 masks, sanitisers, soaps, etc., they said that for discharging some of their responsibilities they would have liked to have worn a full personal protective equipment kit for personal safety but instead they were only given a face shield. An AWS in Madhugiri mentioned how they just got masks and no other safety gear although they were expected to monitor the activities.

7.4.2. Issues with unavailability of transportation

All frontline workers including AWWs, anganwadi supervisors, ASHAs, MSPTC workers, schoolteachers, and labourers faced the common issue of unavailability of transportation as a lot of them were dependent on public transportation during COVID-19, which came to a standstill in the first three months with the onset of COVID-19. An MSPTC manager in Madhugiri told us how the women reached the MSPTC centres with the help of family members as they were not issued passes. The husbands who came to drop them had to face harassment at the hands of the police for being out on the streets. In some cases, the husbands waited all day at the centre to take their wives back home and save money on the fuel expenses. In Madhugiri, the CDPO office used to arrange vehicles for AWS.

The AWS also found it very difficult for them to physically visit all the AWCs that fell within their circle and supervise/monitor the services being provided. Hence, they had to rely on either private vehicles or use their own personal transport. While the monthly allowance given for this purpose is INR 750, most AWS said that they would have easily spent close to INR 2,000/month during the pandemic. In Shahpur, AWS had to pay double fares for autos due to shortages of options. The travel allowance given to them is only INR 500 per month and many places have no buses to commute to; they ended up spending between INR 2,000–3,000 on petrol.

7.4.3. COVID-19 infections and other health issues

They were at a high risk of COVID-19 infections and mortality as they met a lot of people every single day and, hence, deserved adequate compensation. In Tumakuru Rural Taluk, an AWW who succumbed to COVID-19 got INR 30 lakhs from the government as

compensation; unfortunately, the same compensation was not given to an AWW who too succumbed to the virus. Also, when a frontline worker died on the line of duty with all COVID-19 like symptoms, they could not claim the compensation as they could not produce a COVID-19 positive certificate. Many AWS also tested COVID-19 positive, and some of them even incurred a fair amount of medical expenses but this was not compensated by the government. An MSPTC worker in Tumakuru Rural had also succumbed to COVID-19, but she was not given any compensation as MSPTC workers were not considered frontline workers. In Madhugiri, an AWS said that due to the continuous calls that they had to make to the beneficiaries to monitor the delivery of services, their ears had started to pain. In Shahpur, an MSPTC worker told us, 'Namma sontu biddu hoyithuri yella hennu makaladu', which translates to 'Our backs were broken due to the work'. Due to the heavy tasks that they had to perform including bending continuously and lifting heavy items during packing, they faced severe back issues; therefore, they decided to work in shifts so that they could get some rest.

7.4.4. No social security and other benefits

As MSPTC members are not considered frontline workers, they have no insurance, Provident Fund, pension, and other social security benefits. Many of these workers felt that they should also be considered as frontline COVID-19 warriors since they too took a fair amount of risk while working in conditions wherein it was difficult to maintain distancing. For the preparation of Pushti (nutrimix), workers must work in an environment that produces dust, thus causing health hazards. The workers may need medical attention; however, they have no health insurance to spend on any medical expenses that may arise.

7.4.5. Increased workload

As the risk of contracting COVID-19 infection was high, frontline workers had to maintain hygiene and sanitation which increased their workload a lot. An MSPTC worker in Madhugiri mentioned how it was challenging to keep the premises in which they prepared Pushti (Nutrimix) clean all the time. The ASHA and anganwadi workers said that they had to work twice as much during COVID-19 related surveys and even worked continuously for 12 hours on several occasions.

7.4.6. Faulty and dysfunctional devices

To carry out the tasks of fever surveys, ASHAs had been assured a mobile phone but even that was not given to them though they were expected to monitor certain parameters on their mobile phones. They had to buy smartphones and mobile recharges at their own expenses. Under the Poshan Abhiyan, AWWs were expected to maintain many parameters in the Poshan Tracker App, but they ended up wasting a lot of time due to the poor-quality phones they had been provided with.

7.4.7. Shortages of staff

As only half of the AWS posts were filled in Madhugiri, each AWS was managing two circles; this was making it very difficult to monitor activities during the pandemic when the workload was already high. Usually, in Madhugiri, a circle consists of anywhere between 16 to 33 villages and 17 to 37 AWCs. In Madhugiri, the CDPO mentioned that due to this labour problem, working online made things easier for them. Although shortage of AWS was not an issue in Yadgiri, the major issue there was a shortage of schoolteachers. This became a problem as they (teachers) had to monitor the schedule of THR and conduct Vidyagama classes.

7.4.8. Poor treatment by villagers

The frontline workers felt that they were not treated with dignity by the people while carrying out their duties, and it took a lot of convincing and coercion for them to discharge their responsibilities as frontline workers. People were, in general, antagonistic to them as there was stigma attached to COVID-19, and ASHAs visiting the houses of such people would lead to neighbours distancing themselves from them. Hence, the families of COVID-19 positive patients viewed them as enemies and rarely cooperated with them. In some cases, ASHAs were accused of reporting COVID-19 positive patients for the greed of commission; elsewhere, they were shouted at during vaccine drives for making people take the vaccine. The stress caused some ASHAs to suffer from fever and constant tiredness. Some AWWs were even hit by people and even hurt during the process, and some ASHAs faced threats of disrobement. Many mentioned that their hands hurt due to the large number of COVID-19 vaccines they injected in a day.

7.4.8. Pressure, stress, and personal losses

The frontline workers said that sometimes they broke down when they had to come to work due to the fear of contracting COVID-19, and they were worried about going back home to their family members. An AWW in Madhugiri said that she even had to fight with her family members as they were uncomfortable with her going out for her job; she said that she did not go back home for 1.5 months even though she had small children at home. The workers also took measures such as taking a bath once they were back home and changing into fresh clothes in order to keep their family members safe. Not all husbands of AWWs or ASHAs were supportive; in such cases, the workers used to just wait at AWCs until the next day when they finished work late in the evening. There have been instances when AWS, AWWs, and ASHAs worked even on Sundays and festival days. They were not given any financial benefit during the COVID-19-induced lockdowns for the extra hours that they worked. The AWS were even sent an order that they would not be provided with leaves during COVID-19. Frontline workers worked without food or water on many days as no one was willing to have contact with them. They said they would become so tired that they would just fall asleep as soon as they went home after distribution of rations. An AWW in Madhugiri said that she herself got COVID-19, and she was extremely upset as the doctors would not even touch her and check her; they would give very little food and, overall, she had a bad experience in the hospitals with the treatment meted out to her.

7.4.9. Anganwadi supervisors' concerns with AWWs

Some AWS and CDPOs in Tumakuru Rural also spoke about the challenges they faced in managing AWWs during the pandemic. They felt that some of the older AWWs had become slightly lazy because barring the additional workload during the peak of the pandemic, their job primarily entailed only providing THR to beneficiaries once a month. Since AWCs were shut, they did not have other responsibilities such as providing pre-school education or preparing HCM for children. Also, many of them were neither updating the AWC registers nor submitting the MPR on time.

7.5. Support received during COVID-19

Although frontline workers faced many challenges while discharging their duty, they also found support from family members, communities, and the local government.

7.5.1. Support from families

During the interviews, AWWs and ASHAs confided in us that even though their families were extremely worried considering the nature of their work as frontline COVID-19 warriors, most of them said that they received complete support from their family members.

7.5.2. Monetary support received

From the prime minister's scheme for frontline workers, AWWs received only a one-time payment of INR 2,000 during the first wave but nothing after that. An MSPTC manager in Madhugiri told that the overtime pay was hiked during COVID-19 as an incentive for all the extra work that workers had to do. Across both districts, ASHAs got INR 1,000 extra per month during COVID-19, which later stopped in the month of October 2021/November 2021.

7.5.3. Care for frontline workers

An MSPTC manager in Madhugiri told us that there were weekly COVID-19 checks for the employees, and they were not allowed to come in case of symptoms. The school head in Shahpur was also affected with COVID-19 and in a critical condition, and he mentioned how he received good support from local authorities.

7.5.4. Support from higher officials

For preparation of supplying extra THR during the pandemic, MSTPC centres received support from different officials. They were given masks and sanitisers during the entire pandemic, and AWS also did not fear roaming around as much because the CDPO was roaming around the villages during COVID-19 themselves, which gave the AWS the moral support to do so themselves. There was also good coordination between all the departments and the Taluk level officers used to meet often with the assistant commissioner and district commissioner in attendance and conduct home visits.

7.5.5. Poushtika Mitras

The deputy director in Tumakuru district came up with the idea of poushtika mitras (nutrition friends), which was completely based on the idea of self-service, where they selected two young, educated youth on a voluntary basis, i.e., a boy and a girl who would help the AWWs and AWHs to go around and meet the households during COVID-19.

7.5.6. Support from Panchayats

In Madhugiri, the Panchayat was active and gave the COVID-19 warriors, including the ASHAs, 1kg of vegetables and 25kg rice. They also got masks, umbrellas, and sanitisers from the panchayat development officer. They said that they got good support from the Panchayat, and the members used to roam around with them. In fact, even the GP president used to stand at the borders with them to enforce border closures and effective quarantine for incoming migrants. They also made arrangements for food for officers who were in constant movement and provided food for some of the poor people in the villages. The villagers in Shahpur also supported ASHAs by accompanying them to go around houses and talk about COVID-19 and appropriate behaviour.

7.5.7. Felicitation for services provided

The Tahsildar office also felicitated the AWWs and ASHAs for their services during COVID-19, by giving them shawls and flowers.

7.5.8. Online training / capacity building for COVID-19

In both districts, frontline workers were counselled about COVID-19 and its issues, about COVID-19 appropriate behaviour in the PHCs by the doctors, when to bring the people to the hospitals, etc. In addition, some other videos and trainings were conducted for them to carry out their duties. Some COVID-19 trainings happened using Google Meet for AWS, and discussions and monitoring happened in WhatsApp groups.

In a nutshell, it can be concluded that frontline workers faced various challenges in fulfilling their duties during the pandemic and though there was space for greater institutional support, they were supported in part by their families, communities, and the local government.



Chapter 8

Conclusions and discussions

Although, over the years, India has been doing better in terms of food security, it still has many challenges to address when it comes to nutritional security. In Karnataka, as per NFHS-5, a little over a third of children under five and about a fifth of them are stunted and wasted, respectively. Some of these conditions are irreversible causing issues for life that the child will have to live with through its adult years. COVID-19 disrupted normal lives significantly, and this study attempts to understand the effects of the pandemic on nutrition related services in Karnataka. Here, we discuss conclusions of the study based on findings discussed in the previous chapters before outlining the recommendations in the following chapter.

8.1. Nutritional Status of beneficiaries during the pandemic

The COVID-19 pandemic brought with it fears of the increased nutritional vulnerability of children under six years of age as well as of PLW. It had the potential to reverse all the improvements seen in the wasting status of children. However, the WCD department with support of other departments and institutions in the state was able to effectively maintain supplementary nutrition for these children during this time. Our analysis of the MPR showed that AWCs were able to provide additional THR to new enrollees seen during this time and that the proportion of undernourished in the taluks did not change drastically. These benefits were more valuable in Yadgiri than Tumakuru due to varied socio-economic nature of the districts. The AWWs pointed out that numbers of MAM children that may have increased during this time, and it could be easily rectified by few months of proper nutrition. Special efforts were made by the WCD department, especially in Yadgiri, to prevent any increase in SAM numbers. However, it was also true that NRCs did not receive many patients during this time due to the fear of infection, and this may have had negative impact on SAM children with complications. The number of PLW enrolled at the AWCs also increased, which underscores the importance of THR in maintaining their nutritional status during COVID-19.

If the family had COVID, as was seen in Tumakuru, AWWs were able to deliver food and supplies to the affected children and their families. They also counselled pregnant women on adequate nutrition and care if they had contracted COVID.

Schoolgoing children aged 7 years and above did not receive the care that those under six received. Provision of THR for school children started very late and was given only at three-month intervals in Tumakuru and in varying intervals in Yadgiri, and milk powder was given only once in the two years. There were also no means of assessing the children's nutritional status during this time. There were many instances, especially in Yadgiri, where parents were unaware of/unable to collect THR from schools. To make matters worse, IFA supplementation and deworming were completely stopped in both districts during school closures, thus increasing possibilities of worsening the already poor iron deficiency anaemia numbers in the state. In the absence of any systematic monitoring of nutritional status of children in school, it is not possible to assess the impact of these lapses.

8.2. Plan for THR and response time

The pandemic caught everyone unprepared and the conditions in which governments were thrown into required special and unique measures to manage the continuation of services. As AWCs and schools shut down completely, both the WCD and education departments took time to respond to the situation. The first three months were challenging for them as they had to also plan for migrant returnees and conduct surveys of their villages and circles. Although the notification of giving out THR came early at the onset of the pandemic, there were other things that the WCD was not prepared for. First, as the migrant crisis became evident, the WCD had to plan for giving out THR even to the people who returned to their respective villages to alleviate the crisis that they were facing. Second was the issue of giving out THR to PLW who were enrolled at the AWCs but otherwise not coming to the AWCs for HCM. It took about two–three months to respond to this situation although the plan to have extra 15 days additional rations, more than the required indent, improved efficiency during the pandemic. This practice of maintaining contingency proved beneficial and helped the departments tide through the situation better. Schools, however, provided THR only after the second wave and it was provided only once in 3 months in Tumakuru as opposed to Yadgiri, where this was irregular.

The MSPTCs also took time to adapt to this situation and planned well to hire more labour to manage the extra workload of increased THR. However, their payments and dues were not cleared for more than four months, and they had to use their savings to procure extra rations. The distribution was a big challenge for AWWs as they had issues of packaging and transportation. Nevertheless, the administrative machinery in Yadgiri was sensible to respond to this by planning packaging of THR in standard kits, which was a boon for the AWWs; however, this happened only after a few months of the first wave of COVID-19.

8.3. Coping strategies during COVID-19

The first lockdown was the toughest phase of the pandemic according to various interviews. Panic and misinformation led to many beneficiaries being wary of accessing services provided by frontline workers. The migrant population in both districts came home and had no means of livelihood during the initial four months of the pandemic. People undertook loans and sold their cattle to feed their families during this time. Food expenses also increased in families as most of the members were at home, thus increasing cooking costs. However, they got extra ration from the ration shops under the Pradhan Mantri Garib Kalyan Anna Yojana, which helped them manage their needs. The families who were farmers were able to sustain by using produce grown in their fields.

In addition, families with children or PLW received THR as per norms. In Yadgiri, parents preferred THR to school HCM as they complained about the quality of food. However, in Tumakuru, mothers felt children ate better when they were served HCM in schools/AWCs with peers rather than at home. The PLW who usually preferred THR during normal times could access THR from AWCs during the pandemic, which was visible by the large number of enrollees. However, on the flipside, some mothers in Yadgiri also mentioned that THR now was shared by all family members, thus leaving little for them.

8.4. Special focus on SAM children and anaemic PLW

There was good management of SAM and MAM children due to initiatives like AWHs boiling eggs meant for the children, feeding them, helping track their health status in Yadgiri. However, additional children moved from normal to the MAM status as they missed the one HCM per day and the ration was getting distributed among family members.

Another special initiative in Yadgiri called the 'Anaemia Mukta Yadgiri' included the following: giving IFA tablets and iron sucrose injections to PLW in PHCs, and blood transfusion was carried out in severe cases to ensure the women do not have children born with any complications.

8.5. Detrimental impact of COVID-19 on school education and adolescents

School children were one of the biggest losers during the pandemic, experiencing nutritional deficiencies and learning losses. Adolescent health, one of the least funded programmes, had been completely side-lined by the governments with no proper comprehensive plan in place to ensure their overall health and nutritional requirements. Mobilisation of services like replacing MDM with THR for school children took many months, and the first step towards that was taken in November 2020 due to uncertainty around school opening. Also, IFA tablets have not been given to children for the last two years, and this will be a setback in treating micronutrients deficiency. Even milk under the Ksheera Bhagya scheme had stopped completely during COVID-19, only milk powder of 2 kg was given once with the THR. Milk is an essential protein supplementation to prevent protein energy malnutrition among adolescents.

The out-of-schools girls were the most neglected lot as they have now stopped receiving benefits under the Scheme for Adolescent Girls due to administrative policies and absence of coordination between the WCD and education departments. Older children turned to bad habits like drinking, and there are instances of irregular attendance and lack of attention in schools due to lack of regular peer support and discipline, which are important parts of school. Many children in Yadgiri also were forced to undertake daily wage labour as a means to support their families. Reports of increased child marriages were also quite common in the area.

Districts like Yadgiri suffer from historical, cultural, economic, and social causes for malnutrition like poverty, high birth order, early marriages, pregnancies. Therefore, adolescent health and maternal health become the most critical areas to tackle for governments to ensure long term improvement of stunting figures. The pandemic only worsened this situation as there were higher number of pregnancies, thus leading to higher risk of continued malnutrition among children.

Children also experienced a huge learning loss during COVID-19 as observed by all the stakeholders that we interviewed. The learning loss has also varied across both districts; hence, policies must be comprehensive and tailored to address district specific situations to tackle this issue.

8.6. Functioning of the elected local government and administrative machinery

The Zill Parishad office in Yadgiri was very active and functional during COVID-19, highlighting the importance of good nutritional governance. The chief executive officer during COVID-19 told us about various initiatives like reactivating the NRCs thoroughly by giving the responsibility to the CDPOs and supervisors to ensure that SAM children are taken to these centres. The GPTF played an active role during the pandemic in ensuring that COVID-19 care measures were undertaken in their areas.

8.8. Needs assessment based on taluk specific conditions

The pandemic affected both the districts differently, with Yadgiri having very low COVID-19 cases when compared to Tumakuru, probably due to its proximity to Bengaluru, which is the state capital and had the maximum number of cases. Hence, the challenges and issues in both the districts need to be addressed differently. Although both Tumakuru and Yadgiri districts took various initiatives at their level, some of the challenges also needed to be addressed at the block (taluk) level. Block level indicators may vary due to many reasons, such as the type of community that inhabits that block and its socioeconomic development, and it was difficult to study such differences due to unavailability of such granular data. Now with tools like the availability of the 'district at a glance' indicators, Poshan trackers, etc., monitoring the taluk level indicators had become easier. For e.g., from our MPR analysis it was expected that there should be an increase in number of AWC beneficiaries in all taluks during the pandemic. However, the number of child beneficiaries decreased in Madhugiri taluk while there was an increase in the same in Tumakuru taluk of the same district. Hence, there is a need for looking at data at Taluk level for diagnosing problems and finding their solutions.

8.7. Lack of proper monitoring systems

COVID-19 exposed the monitoring system for AWCs and schools with no proper system in place to track the status of children in the state. Though the Poshan Tracker app was being implemented, it appeared to have failed in the state due to many technical glitches causing a double burden on the AWWs to maintain physical registers as well as update the trackers. Tracking of school children is completely missing in the agenda of the government and there is no constant monitoring or information on their health status anywhere, thus posing a huge gap for any kind of policy making.

8.9. Treatment of frontline workers during COVID-19

The crisis of COVID-19 pandemic could not have been managed without the contribution of AWWs, ASHAs, and teachers who are always pulled up in such crucial times to carry out various tasks. A lot of them were infected with COVID-19, with some of them even losing their lives. When an AWH died in Tumakuru, her family was not compensated as she was not considered as a frontline worker. This kind of mistreatment could result in killing the spirit of the frontline workers. They currently have no social security or health insurance in place to ensure that they are protected from any health issues that may come up while carrying out their duties. Hence, it becomes imperative for the government to meet their long-standing demands for better compensation and social security. Although some measures were taken to help them handle additional responsibilities, these remained inadequate and were also not necessarily universal.

Based on these conclusions, we have formulated a few recommendations that we present in the next chapter.



Chapter 9

Recommendations

Based on the study our recommendations can be divided into short-term, medium-term, and long-term recommendations. This classification becomes essential in view of the nature of actions that are required and that cannot be taken all at once. The state has been able to respond well to address the nutritional challenges even during the pandemic, and a few more actions in the right direction will make it more resilient.



9.1. Recommendations for Rural Development and Panchayati Raj

1. Develop a system for fast and credible information dissemination to counter rumours and misinformation. This would instil trust in community, which helps frontline workers undertake their duties without fear of discrimination.
2. There is a need for strengthening community participation and engagement with nutritional concerns. For e.g., local self-help groups could be involved and become responsible for tracking the nutritional status of children, ensuring specific interventions for SAM/MAM children and admission to NRCs etc.
3. Encourage local economy by supporting self-help groups, farmers, and local businesspeople to encourage local produce and local dietary diversity through these initiatives.
2. Packaged cooked meals can be delivered to AWC beneficiaries to their homes in transition time between HCM and THR. This is especially important in the time taken to provide THR, which should be managed by local authorities. This may be considered depending on the nature of emergency encountered, for e.g., during floods or other natural disasters, etc.
3. Distribution of THR should be pre-packaged in future. Packaging in MSPTC reduced burden of the frontline workers and instilled trust in beneficiaries.
4. Both life and health insurance should be there for frontline workers. Also, provisions can be made to recognise the MSPTC workers and anganwadi helper as emergency frontline workers, who would be taking risks and therefore be eligible for adequate compensation and support. An emergency package for frontline workers should be part of planning during emergencies.

9.2. Recommendations for Women and Child Department

1. Strengthen the system of identifying the most vulnerable and ensure uninterrupted services for SAM children, women with complicated pregnancy, and women in their third trimester: Priority can be decided based on case load of vulnerable population covered by the particular AWC. Poshan tracker can be and is supposed to be used for this purpose, but this means the phones provided should be functional at all times, especially in such emergencies. Allowing flexibility in times of need to local officials to ensure services are uninterrupted is important, and a higher level of untied funds could be made available for this.
5. Encouraging districts for greater engagement and co-ordination with non-governmental organisations for innovations and haring of best practice. Technical support from institutions like Central Food Technological Research Institute should validate such innovations and further support adoption of successful endeavours at local levels.
6. Using Poshan Abhiyaan funds during times of need for innovative ideas: Using Poshan Abhiyaan funds to fuel innovations in nutrition should be encouraged. Poshan Vatikas are not very successful due to lack of ownership by the communities. Hence, we need to build capacities on the demand side to undertake ownership of nutritional health of the community.



9.3. Recommendations for Education

1. The contingency funds given in early 2022 were not well used due to the lack of means to transfer these funds to the parents' accounts. The funds could be instead transferred to the SDMC that could be used to enrich the mid-day meals provided at the school.
2. Strengthening nutritional monitoring of schoolgoing children especially those in MAM and SAM categories should be followed from AWCs to schools to ensure their health as well as availability of THR in recommended quantities. Currently, no such follow-up system is in place. Health/nutritional monitoring mechanisms (such as MPR in AWCs) should be extended and integrated with current school tracking systems such as the Student Achievement Tracking Systems.

9.4 Recommendations for Department of Health and Family Welfare

1. Distribution of IFA along with rations should be planned, and parents should be counselled accordingly. Intersectoral coordination is important between health and education department to ensure such coordinated deliveries.
2. Along with under nourishment, one should also address the problem of over nourishment in better performing districts, like Tumakuru, that are facing additional burdens of childhood obesity.

9.5. Inter Sectoral Cooperation Recommendations

1. Involving SDMC, GP, and other such bodies more actively in any future emergencies would make activities such as distribution of THR smoother. The SDMC should keep all parents informed and monitor the situation and ensure that no child is missed. Involvement of GP in distribution of THR is pertinent during emergencies, especially in cases where the children are far away. This should be led by Rural Development and Panchayati Raj in collaboration with the education department.
2. Poshan Vatikas should be rigorously promoted as a tool for self-sufficiency as well as nutrition education in children.
3. Adolescents' health and nutrition need greater attention, especially to make them less vulnerable. They can be collectivised and trained to play an important role in awareness building, nutrition education, and community engagement. Also, the need for paperwork such as out of school certificates, etc., can be made easier by engaging GPs rather than making school or the administrative units responsible for it.
4. Procurement of eggs with quality check as with Karnataka State Cooperative Credit Societies Federation Ltd. should be ensured instead of burdening AWW in Tumakuru to buy eggs locally. This ensured everyone got the correct number of eggs in proper packaging. However, there were instances of poor quality; hence, some measures for quality checks could be integrated.
5. Clear guidelines ensuring inclusion of all enrolled beneficiaries should be issued. For e.g., PLW not availing THR normally but requiring it during pandemic or any other emergency should not be denied. It is important to undertake policy decisions in advance considering potential future emergencies so that the vulnerable are not left out on such occasions. All line departments should provide clear guidelines.

References

- 12,000 acres of land okayed for manufacturing zone in Tumkur. (2013, July 6). The Hindu. <https://www.thehindu.com/news/national/karnataka/12000-acres-of-land-okayed-for-manufacturing-zone-in-tumkur/article4885649.ece>
- Azim Premji Foundation. (2021). Loss of Learning during the Pandemic. In *Field Studies in Education* (Issue February). https://azimpremjiuniversity.edu.in/SitePages/pdf/Field_Studies_Loss_of_Learning_during_the_Pandemic.pdf
- Balannanavar, K. (2020, July 22). Karnataka: Pandemic affects supplement distribution for malnourished children. The New Indian Express. <https://www.newindianexpress.com/states/karnataka/2020/jul/22/karnataka-pandemic-affects-supplement-distribution-for-malnourished-children-2173455.html>
- Chatterjee, S. (2020, December 1). Experts fear rise in child malnutrition due to Karnataka govt inaction. The News Minute. <https://www.thenewsminute.com/article/experts-fear-rise-child-malnutrition-due-karnataka-govt-inaction-138790>
- Covid vaccine: India becomes second country to cross two billion Covid jabs - BBC News. (2022). BBC. <https://www.bbc.com/news/world-asia-india-56345591>
- Government of Karnataka. (n.d.). District Profile - Yadgiri. Retrieved October 5, 2022, from <https://yadgir.nic.in/en/profile/>
- Government of Karnataka. (2022). Economic Survey of Karnataka 2021-22. https://des.karnataka.gov.in/storage/pdf-files/KARNATAKA ECONOMIC SURVEY 2021-22-M2_ENG_FINAL.pdf
- Hanagodimath, S. V., & Annigeri, V. B. (2019). Investigating the Hunger Index Evidence from Karnataka. *Economic & Political Weekly EPW* November 1, LIV(15).
- Indian Institute of Population Sciences. (2019). National Family Health Survey - 5 Karnataka.
- J, N. A. (2021, May 12). Karnataka lockdown: Ration card holders wait in queue in Mangaluru. Deccan Herald. <https://www.deccanherald.com/state/karnataka-districts/karnataka-lockdown-ration-card-holders-wait-in-queue-in-mangaluru-985055.html>
- Kashyap, G. C., Sarala, R., & Manjunath, U. (2022). Impact of Spirulina Chikki Supplementation on Nutritional Status of Children: An Intervention Study in Tumkur District of Karnataka, India. *Frontiers in Pediatrics*, 10, 860789. <https://doi.org/10.3389/FPED.2022.860789>
- Madhavan, R. (2020, November 23). Coronavirus fans child starvation epidemic in Karnataka? The New Indian Express. <https://www.newindianexpress.com/states/karnataka/2020/nov/23/coronavirus-fans-child-starvation-epidemic-in-karnataka-2226820.html>
- Mishra, S., & Bhattacharya, P. (2015, March 19). A tale of two Karnatakas | Mint. Mint. <https://www.livemint.com/Politics/D4cqsMugVTato7NFF3xbl/A-tale-of-two-Karnatakas.html>
- NITI Aayog. (2021). National Multidimensional Poverty Index Baseline Report.
- Ram, T. (2020, December 21). Mid-day meals stopped after lockdown in Karnataka, child malnutrition sees a spike. The News Minute. <https://www.thenewsminute.com/article/mid-day-meals-stopped-after-lockdown-karnataka-child-malnutrition-sees-spike-140043>
- Research Group of Azim Premji Foundation. (2020). Myths of online education. *Field Studies in Education*, September, 1–13.
- Roberton, T., Carter, E. D., Chou, V. B., Stegmuller, A. R., Jackson, B. D., Tam, Y., Sawadogo-Lewis, T., & Walker, N. (2020). Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. *The Lancet Global Health*, 8(7), e901–e908. [https://doi.org/10.1016/S2214-109X\(20\)30229-1](https://doi.org/10.1016/S2214-109X(20)30229-1)
- Sripad, A. M. (2021, December 6). Karnataka stands last in South in poverty index: Report. The New Indian Express. <https://www.newindianexpress.com/states/karnataka/2021/dec/06/karnataka-stands-last-in-south-in-poverty-index-report-2392306.html>
- Tumkur City Population Census 2011-2022. (2011). Census 2011. <https://www.census2011.co.in/census/city/447-tumkur.html>
- Vaccination: Four districts achieve 100 percent second dose coverage - The Hindu. (2022). The Hindu. <https://www.thehindu.com/news/national/karnataka/vaccination-four-karnataka-districts-achieve-100-percent-second-dose-coverage/article65184578.ece>
- Yadgir District Population Census 2011-2022. (2011). Census 2011. <https://www.census2011.co.in/census/district/270-yadgir.html>

Annexures

Annexure 1: Supplementary Nutrition and Other services in Karnataka

A. Supplementary Nutrition and other services in Anganwadi Centres (AWCs)

The basic unit of Integrated Child Development Services (ICDS) is the AWC, and it has become synonymous with the provision of supplementary nutrition. Supplementary nutrition in various forms is provided to all children aged 0–6 years, adolescent girls, and pregnant and lactating women; it is the main stay of nutritional expenditure on children. Following are the supplementary nutrition schemes operational in Karnataka under ICDS.

- **Supplementary Nutrition Programme for Pregnant and Lactating women (Mathrupoorna scheme):** One full meal consisting of rice, dal with leafy vegetables/sambar, vegetables for a minimum of 25 days, boiled egg, and 200 ml milk for 25 days in a month, and chikki are provided to pregnant and lactating women.
- **Cash Transfers under the Pradhan Mantri Matru Vandana Yojana:** This scheme seeks to provide a cash incentive of INR 5,000 in three instalments to pregnant women and lactating mothers for the first live child through direct benefit transfer.
- **Nutrition to children aged 0–3 years and those aged 3–6 years through ICDS:** Children aged 0–3 years are given take home rations, while children aged 3–6 years are provided a hot cooked meal at the AWC. The feeding norms are of 500 calories of energy and 12–15 grams of protein to children aged 0–3 years and 800 calories of energy and 20–25 grams of protein to severely malnourished children as a supplement to their normal intake.
- **Srushti egg scheme:** Children aged 3–6 years are provided eggs twice a week as part of their hot cooked meal. Severely malnourished children aged six months to three years are provided eggs thrice a week. Children who do not consume eggs are given extra milk or bananas.
- **Ksheera Bhagya scheme:** Under Ksheera Bhagya scheme, children aged six months to six years in AWCs are provided 150 ml milk 5 days a week (15 grams milk powder and 10 grams sugar).
- **Scheme for Adolescent Girls:** Currently active in only 20 districts in Karnataka, this scheme provides hot cooked meals to out-of-school adolescent girls.
- **Preschool Education:** Children aged 3–6 years are also provided preschool education at AWCs by Anganwadi Workers (AWWs).
- **Growth Monitoring:** One of the important tasks assigned to AWCs is to monitor aspects related to growth of the children. They monitor the height, weight, and shoulder width measurements once in a month, and based on these, they classify the children into various categories: i) underweight (weight for age)—severely underweight, moderately underweight, and normal ii) stunting—severely stunted, moderately stunted, and normal, iii) wasting—severely acutely malnourished, moderately acutely malnourished, and normal, overweight, and obese. Prior to the pandemic, AWWs had to monitor children for different growth parameters and based on the inputs, classify them into different categories. Once this is done, the moderately and severely acutely malnourished children get special attention in terms of higher quantity of food and ration.
- **Immunisation Services:** The AWWs ensure that all children coming to the AWCs are immunised. Along with Accredited Social Health Activists (ASHAs), AWWs organise Village Health and Nutrition Days, when they ensure that all children in the village are vaccinated.

B. Supplementary Nutrition in Schools

- **Mid-day meals (Akshara Dasoha)** are wholesome freshly cooked lunch served to children in grades 1–8 in government and government-aided schools in India. In order to successfully carry out this mandate, each state government started its own mid-day meal programme; Akshara Dasoha has been initiated by the Government of Karnataka and extends to children in grades 9 and grade 10 as well.
- **Ksheera Bhagya:** In addition to mid-day meals, school children also receive milk five days a week under Ksheera Bhagya scheme. Children in grades 1–10 in government and government-aided schools also receive 150 ml of milk (18 grams milk powder and 10 grams sugar).



C. Micronutrient Supplementation in AWCs, Schools and Primary Health Centres

- The Weekly Iron and Folic Acids Supplementation Programme covers the adolescent population studying in government schools in grades 1-6 all over the state. Under this programme, a weekly dose of iron and folic tablet (100 mg elemental iron + 500 μ gm folic acid) is provided to beneficiaries in schools under the supervision of teachers. Iron and folic syrup is administered to children under five during bi-weekly fixed days by ASHAs or AWWs. Children in grades 1-5 are yet to be covered under this scheme in the state.
- Vitamin A supplements are provided to infants aged 6-11 months and children aged 12-59 months bi-annually. Karnataka provides Vitamin A supplements for people up to 19 years of age.
- Bi-annual deworming days are organised every year in February and August. Albendazole tablets are provided to children in schools and AWCs for deworming children and to adolescents up to 19 years of age. The medicine is meant to kill three types of stomach worms—round worms, whip worms, and hookworms—transmitted from the soil.
- Zinc tablets and Oral Rehydration Solution (ORS) are distributed to children with diarrhoea in all health facilities as well as by ASHAs and AWWs. The Intensified Diarrhoea Control Fortnight consists of a set of activities to be implemented in an intensified manner for prevention and control of deaths due to dehydration from diarrhoea across all states and union territories. These activities mainly include intensification of advocacy and awareness generation activities for diarrhoea management, strengthening service provision for diarrhoea case management, establishment of ORS-zinc corners, prepositioning of ORS by ASHAs in households with children under five and awareness generation activities for hygiene and sanitation.

D. Nutrition Rehabilitation Centres

Facility-based treatment is available for children suffering from severe acute malnutrition. The child and caregiver can stay at the Nutrition Rehabilitation Centre for 14 days, where food and treatment are provided for them free of cost. Daily wages are also paid to the caregiver. However, studies have shown that lack of co-ordination between the Nutrition Rehabilitation Centres under the health department and AWCs and AWWs under the WCD department results in unsuccessful tracking of the children post treatment (Ningadalli et al., 2015; Kamath et al., 2015).

E. Nutritional Counselling

Currently, counselling for mothers and pregnant women is provided by ASHAs and AWWs. Counselling occurs on Village Health and Nutrition Days and on days mothers come to collect take-home rations at the AWC. In addition, both ASHAs and the AWWs go to beneficiaries' houses for counselling.

F. Poshan Abhiyaan

Nutritional interventions have gotten a boost since the advent of the Poshan Abhiyaan in 2017. The scheme essentially acts as a body which monitors, supervises, fixes targets, and guides nutrition-related ministries. Under this, AWWs are given smart phones to enable them to undertake real time tracking of beneficiaries in their coverage area.

Annexure 2: List of Government Orders pertaining to anganwadi Centres (AWCs) and Schools during COVID-19

Services	Department	Related to	Date of Notification/ Govt. Order	Details
Anganwadi Services	Government of Karnataka (GoK)	Closing of Anganwadi Centres (AWCs)	14 March 2020	A letter dated 9 March 2020 had allowed all AWCs in the Bengaluru and Bengaluru rural districts to shut for a week's time. This letter further extended that holiday and observed the spread of COVID-19 happening in other districts and directed the deputy director of Women and Child Development (WCD) in each of the districts to take a decision on closure of AWCs in consultation with the district chief executive officer and also directed the AWCs to calculate the take-home ration that was applicable for each beneficiary and supply it to them at home for the period of closure.
Anganwadi Services	National Health Mission, Karnataka State Health and Family Welfare Society	Delivery of immunisation services during COVID-19 outbreak	22 April 2020	All routine immunisation services except birth dose were suspended in the state at the outset of the pandemic. Resumption of immunisation services at health facilities except containment zones
Anganwadi Services	Ministry of Women and Child Development, Government of India (GoI)	Resumption of Anganwadi Services	11 November 2020	<ul style="list-style-type: none"> - Resumption of anganwadi services like growth monitoring, supplementary nutrition etc. outside of the containment zones. - Maintaining COVID-19 appropriate behaviour; door-to-door provision of supplementary nutrition to continue; and to deliver cooked food or take-home ration either at the AWC or deliver home depending on the prevailing situation. <p>Growth monitoring services:</p> <ul style="list-style-type: none"> - Roster of children to be maintained by Anganwadi Workers (AWWs) to avoid overcrowding at AWCs, and to be also carried out during Village Health Sanitation and Nutrition Day or during home visits - Severely acutely malnourished children and high-risk pregnancy and lactating mothers to be monitored continuously and home-based service delivery and take-home cooked food <p>Counselling Services: Counselling on maternal, infant, and young children to be carried out during home visits, during Village Health Sanitation and Nutrition Days or video/telephone calls and WhatsApp messages</p> <p>Early Childhood Care and Education Services: Pre-school education to resume in small groups of five to eight children. Children can visit AWCs once in a week and follow up lessons at home. Online preschool education using satellite telecast and sharing lessons through mobile network may be encouraged.</p>

Services	Department	Related to	Date of Notification/ Govt. Order	Details
Anganwadi Services	Health and Family Welfare Department	Opening of AWCs	2 December 2020	The Technical Advisory Committee (TAC) setup by the state government had, based on the letter from the Ministry of WCD dated 11 November 2020, advised opening of AWCs based on the COVID-19 situation in those states. To this effect, the committee recommended opening of the AWCs after careful assessment of local COVID-19 scenario. The AWCs were closed in March 2020.
Nutrition	Ministry of Women and Child Development, GoI	Streamlining Supplementary Nutrition Programme and Poshan Abhiyan	13 January 2021	Quality assurance, roles and responsibilities of duty holders, procedure for procurement, integrating AYUSH concepts, and data management and monitoring through 'Poshan Tracker' for transparency, efficiency, and accountability in delivery of supplementary nutrition, procedure for procurement, convergence of roles and responsibilities at grassroot level, integration of AYUSH concepts for holistic nourishment, etc.
Anganwadi Services	Department of WCD, GoK	Opening of AWCs	3 February 2021	<p>As per the high court orders, the AWCs were directed to be open by 31 January 2021. The WCD had been directed to take all the necessary measures and open the AWCs after making all necessary preparations and to open immediately. The notification also had a detailed note on all the measures that needed to be taken including the following:</p> <p>Sanitisation of AWCs by the Gram Panchayats (GPs); compulsory RT-PCR tests for the AWWs and anganwadi helpers; cleaning of equipment, toilets and all other materials in the centre; not allowing more than five children to come to the centres at a time; soap to wash hands of children; taking consent from parents every day to allow the children to come to AWCs; continuation of take-home rations and usage of amount from flexi-funds for any miscellaneous expenses incurred to follow COVID-19 rules; and in case of any COVID-19 like symptoms, taking the children to the nearest government doctor</p>
Anganwadi Services	WCD, GoK	Opening of AWCs	6 February 2021	The letter directed the Bruhat Bengaluru Mahanagara Palike office to take measures to be ready to open the AWCs as per directions of the High Court

Services	Department	Related to	Date of Notification/ Govt. Order	Details
Anganwadi Services	WCD, GoK	Opening of AWCs	27 October 2021	<p>To open the AWCs for at least two hours from 8 November 2021 based on the following pre-requisites:</p> <ul style="list-style-type: none"> - to be open in taluks with less than two test positivity rate, and child development project officers to ensure this - only open AWCs where AWWs and Anganwadi Helpers (AWH) are vaccinated. <p>The exhaustive list of conditions included the following.</p> <ul style="list-style-type: none"> • The staff should have taken two doses of COVID-19 vaccinations. • Cleaning inside and outside the AWCS • Cleaning of items in the AWCs including the toys, desk, chair, mat etc and keeping the windows open one day prior to opening of AWCs • Cleaning of equipment, toilets, and all other materials in the centre • Taking consent letter from parents who want to send their children to AWCs • Compulsory two doses of COVID-19 vaccinations of parents who want to send their children to AWCs • To be open between 10a.m. and 12:00p.m. • Parents informing AWCS about any COVID-19 symptoms that the children may have after they visit AWCs. • The beneficiaries to be welcomed by the Bal Vikas Samiti members and GP members. • Educating the Parents of beneficiaries about COVID-19 • Continuation of take-home ration • Ensuring senior citizens do not come to AWCs • In case of any COVID-19 like symptoms, taking the children to the nearest government doctor • At the entry, the children are applied hand sanitizer and the bottle is strictly kept out of reach of the children • Ensuring good light and ventilation in AWCs • Registering of all children including migrant children and giving them all the services • Preventing any interviewers from coming to the centre • Maintaining physical distance while holding meetings and ensuring that it is done in an open space as much as possible

Services	Department	Related to	Date of Notification/ Govt. Order	Details
Anganwadi Services	National Health Mission	COVID-19 tests for AWWs & AWHs	2 November 2021	Random COVID-19 test to be conducted for AWWs and AWHs as soon as the centres are open on 8th November 2021
Anganwadi Services	Director's Office, WCD, GoK	Opening of AWCs	20 November 2021	Re-opening of AWCs for full time and giving hot cooked meals, milk, and eggs as already done in schools (mid-day meals); to also keep AWCs open for full day from 9:00a.m. to 4:00p.m. and beyond the two hours that it is open for currently (10:00a.m. to 12:00p.m.)
Anganwadi Services	State COVID-19 TAC, Department of Health and Family Welfare	Opening of AWCs	26 November 2021	<p>It was decided to reopen AWCs for full day (9:00a.m. to 4:00p.m.) in the state with serving of hot meals, milk, eggs, etc. with effect from 1 December 2021.</p> <p>The main reason for considering this is because test positivity rate as per COVID-19 surveillance in children (0-17 years) is less than 1%. There are no/nil reports of clustering of COVID-9 cases in children in the community or hospitalisations.</p> <p>AWW and AWHs need to have completed both doses of vaccination and all other COVID-19 related protocols needed to be adhered to in the AWC.</p>
Anganwadi Services	GoK	Closing of AWCs in Bengaluru district	6 January 2022	Direction by the government to close the AWCs to prevent the spread of Omicron virus in Bengaluru district. However, the WCD was directed that the anganwadi services like health check-ups, immunisation, and distribution of take-home rations should continue without any disturbance.
Anganwadi Services	COVID-19 TAC, Karnataka	Anganwadi Services	2 February 2022	<p>Among other agenda items discussed in the TAC, full day (9:00a.m. to 4:00p.m.) reopening of AWCs in the state with serving of hot meals, milk, eggs, etc. Presently, the schools (classes/grades 1 and above) are open throughout the state, and classes 1-9 in Bangalore city were reopened on 31 January 2022).</p> <p>Technical advisory committee has recently recommended reopening of childcare centres (Shishu Palana Kendras) in the state. In this context, after due deliberations, TAC recommends reopening of AWCs with strict compliance to following guidelines:</p> <ul style="list-style-type: none"> • Only asymptomatic children shall be allowed inside like those without cough, running nose, cold, sneezing, throat pain, fever, etc. • Those children with the above symptoms are referred to the nearest health centre for medical advice. • The staff shall be strictly asymptomatic. • The staff shall have two dose vaccination certificates and the second dose is taken earlier than fourteen days of AWC opening. • The staff shall compulsorily wear clean, good face mask covering mouth and nose correctly. However, N-95 masks are recommended.

Services	Department	Related to	Date of Notification/ Govt. Order	Details
Anganwadi Services	Director, WCD, GoK	Anganwadi Services	10 February 2022	<ul style="list-style-type: none"> At the entry, the children are applied hand sanitizer and the bottle is strictly kept out of reach of the children. There is no need for children to wear face masks. At least one meter/three feet physical distance shall be maintained. There shall be good natural ventilation in the centre. The health staff shall pay regular monitoring visit to the AWCs to ensure compliance to the recommended COVID-19 protocol. <p>Directing AWCs to open from 14 February 2022 according to the directions from the TAC based on the meeting held on 2 February 2022 and to follow compulsorily the given very detailed instructions starting from vaccinations of AWWs and AWHs, cleaning of existing ration, premises, toys and other equipment, vaccination guidelines for parents, informing the GP and other officials about plans to open the centres, social distancing within the centres, measures to be taken in case of COVID-19 like symptoms among beneficiaries or family members of beneficiaries. Keeping soaps, sanitisers, preparing for cooking hot cooked meals and all other activities of the AWCs.</p> <p>Detailed: Ensure AWWs and AWHs have taken two doses of vaccinations and the last one is taken at least 14 days prior to AWC opening, the joint director and child development project officer to ensure this; To clean the ration, keep them in the sun and also throw away any spoilt ration; Cleaning inside and outside the AWCs; and Cleaning of items in the AWCs including the toys, desk, chair, mat etc., and keeping the windows open one day prior to opening of AWCs.</p>
Schools as quarantine centres	Education Department	Quarantine centres in schools	14 May 2020	<p>To select schools as quarantine centres and provide all facilities having well-ventilated and airy rooms, availability of potable water and clean toilets for all migrant returnees including students. Provision of cots/bedding by GP/family members, each individual to be given a separate room if possible, facilities to wash their clothes, food to be arranged by GP, etc. Guidelines for obtaining samples for testing, screening of patients etc, procurement of essential equipment/labs for response to COVID-19 were also given.</p>
Education	Karnataka Secondary Examination Board	Maintenance of Physical Distance	15 May 2020	<p>The notification gave very detailed guidelines on maintenance of physical distance in primary and secondary schools for the academic year 2020–21, including the spacing of desks, using of other rooms in the school in case of insufficient space and using anganwadi spaces post lunch time and other such guidelines.</p>

Services	Department	Related to	Date of Notification/ Govt. Order	Details
Education	Commissioner of Public Instruction Office, Dept. of Education, GoK	Reduction of fees in private schools	1 June 2020	The notification gave directions on arranging meetings with all stakeholders (teachers, parents) about opening of unaided private schools based on the directions of the Ministry of Home Affairs based on the situation in that state.
Education	Secretariat, GoK	Increase in fees of private unaided schools	19 June 2020	Under the Karnataka Educational Institutions (Control of Private Educational Institutions) Rules, 1999, the government has directed the private unaided schools on the request of parents, to not increase the fees for the academic year 2020–21 and necessary action will be taken if the fees exceed that of 2019–20.
Education	Office of the Commissioner of Public Instructions, Department of Education, GoK	Vidyagama	4 August 2020	As schools have been closed until 31 August 2020 as on the date of notification, it is the responsibility of the government to ensure continuation of education of children. The full details of the scheme can be found in this link: https://govtyojanas.com/karnataka-vidyagama-scheme-2020/ . About mid-day-meals: Under, Nerehore, the schools were supposed to disburse the ration to the parents for one month at home.
Education	Office of the Commissioner of Public Instructions, Department of Education, GoK	Fees and admission into private schools	5 September 2020	Regarding admissions and fees in private schools during COVID-19. The notification identified the need for continuation of education, i.e., continuation of children's interest in education and for them to not lose focus or not become victims of child labour and child marriages. For this to happen, the government schools, aided schools and unaided schools have to confirm the enrollment of students in their schools by 30 September 2020 and inform the parents. The private unaided schools can collect the fees only for the first semester. The schools have also been directed to ensure that Vidyagama and Samvedhana sessions happen on a regular basis and private unaided schools also have their own similar programme.
Education	Office of the Commissioner of Public Instructions, Dept. of Education, GoK	Mid-Day Meals	5 November 2020	Giving of food grains instead of hot cooked meals, in two phases of 53 and 55 days each. For classes 1–5, 100 gm rice/wheat per day and 58 gm toor dal (pigeon pea), and for classes 6–10, 150 gm rice, and 87 gm toor dal
Education	Directorate of Health and Family Welfare Services, GoK	Schools and colleges opening	13 November 2020	In view of colleges reopening on 17 November 2020, and as per standard operating procedure of GoK, the staff, teachers and students should produce a COVID-19 negative certificate before joining. The health department to prepare for the same.
Education	Office of the Commissioner of Public Instructions, Department of Education, GoK	Opening of schools	23 December 2020	Regarding opening of all schools for students of classes 10 and 12 from 1 January 2021 and for grade 11 from 15 January 2021 based on discussions with the chief minister, TAC, health secretary, education secretary. To follow all COVID-19 appropriate

Services	Department	Related to	Date of Notification/ Govt. Order	Details
				behaviour and directions decide in schools to follow precautions school staff, students, and teachers to test themselves before coming to schools, sanitisations, of schools, thermal screening of children, wearing of masks and maintaining physical distance etc.
Education	Office of the Commissioner of Public Instructions, Dept. of Education, GoK	Continuation of Vidyagama classes	23 December 2020	To restart Vidyagama classes for children in classes 6–9 from 1 January 2021 and after 14 January 2021 for classes 1–5 in school premises keeping in mind the directions of the TAC
Education	Directorate of Health and Family Welfare Services, GoK	Schools and colleges opening	24 December 2020	Allowing children, teachers, and other staff of schools and colleges to enter the premises only if they have RT-PCR negative certificates prior to three days of opening. And in case of asymptomatic COVID-19 infected students, they will be allowed to come to schools / colleges after 17 days of completing the period of quarantine and recovery from COVID-19. They do not need to present a COVID-19 negative certificate; however, they need to get a fitness certificate from the doctor that they are consulting with.
Education	Education Department	Starting of classes students in classes 9 and 10	16 August 2021	Regarding the starting of full classes in government, aided and unaided high schools for the classes 9th and 10th. Wherever the COVID-19 positivity is more than 2% the classes to be conducted as per the order dated 10 June 2021. Wherever the COVID-19 positivity is less than 2%, the classes to be conducted half day (morning). Students to bring food and water from home. Hot water facility to be provided. COVID-19 negative certificate must.
Education	Dept. of Public Instruction, Education Dept., GoK	Samudaya-datta Shale Programme	29 October 2021	Conducting of Samudayadatta Shale Programme (a yearly exercise of the Department of Public Instruction to involve parents in the affairs of the school)
Education	Directorate of Health and Family Welfare Services, GoK	Schools and colleges opening	13 November 2020	In view of colleges reopening on 17 November 2020, and as per standard operating procedure of GoK, the staff, teachers and students should produce a COVID-19 negative certificate before joining. The health department to prepare for the same.
Education	GoK	Postponement of social, cultural, and academic activities	28 November 2021	Due to the detection of clusters of COVID-19 in educational institutions in Bengaluru, Mysuru, and Dharwad districts, it was decided that all social, cultural, and academic events be postponed for a period of two months. Conferences, seminars etc. should be conducted either in complete virtual mode or in hybrid mode with in-person participants maintaining social distancing. Heads of educational institutions should ensure that their entire staff is vaccinated with a double dose at the earliest.

Services	Department	Related to	Date of Notification/ Govt. Order	Details
Education	National Health Mission	Vaccinations for children	30 December 2021	Letter to education department to help conduct COVID-19 vaccination drives for children aged 15–18 years and co-operating with them. The notification gave detailed instructions to school on how to conduct the vaccination drive.
Education	Office of the Commissioner of Public Instructions, Department of Education, GoK	Closing of schools in Bengaluru Urban District	5 January 2022	Regarding measures to be taken to prevent the spread of Omicron virus and following the directions of the department to prevent the spread of this variant, all schools, and colleges except medical and paramedical to remain closed from 6 January 2022 till 19 January 2022 or until further notice in Bengaluru Urban District. Classes 1–9 will be closed and classes/learning to continue in online /other modes and for class 10, follow all precautions and come to schools.
Education	Department of Public Instruction, Education Department, GoK	Closing of schools and educational institutions	6 January 2022	To control the spread of COVID-19 mutant virus "Omicron" in schools of the state and to take public health safety measures. - The government-aided Schools and un-aided schools (educational institutions including coaching institutions) remains closed from 5 January 2022 to 19 January 2022.
Education	GoK	Vaccinations for children	29 March 2022	Notification about giving out vaccinations to children aged 12–14 years and the steps to be followed with respect to that
Education	Ministry of Health Department	Awareness about vaccinations for children	30 March 2022	Conducting awareness for children aged 12–14 years eligible for COVID-19 vaccination
Health	National Health Mission, GoK	Fit Health Worker Campaign	29 September 2020	To conduct the Fit Health Worker campaign for all health care providers, sanitary workers and government employees in the three-week period starting from 2 October 2020, where screening for the following non-communicable diseases should take place: hypertension, Diabetes, three common cancers (oral cavity, breast, cervix) for all health care providers, including AWWs workers and Accredited Social Health Activists. This should happen at the district level based on the local context of COVID-19
Health	National Health Mission, GoK	Vaccination for Mothers	26 May 2021	To vaccinate lactating mothers on priority basis Mothers aged 18-44 years are to be provided state supplied vaccine, while those above 45 years are to be provided with GoI supplied vaccine
Health	National Health Mission, GoK	Vaccination for Health Care Workers	8 June 2021	Conducting awareness for COVID-19 vaccination for dependents of health care workers
Health	National Health Mission, GoK	Vaccination for Pregnant Women	9 July 2021	Conducting awareness for COVID-19 vaccination for pregnant women and operational guidance for COVID-19 vaccination for pregnant women

Services	Department	Related to	Date of Notification/ Govt. Order	Details
Health	National Health Mission, GoK	Vaccination for State Govt. Teaching and Non-Teaching Staff	22 July 2021	Conducting awareness for COVID-19 vaccination for all state government teaching and non-teaching staff
Health	National Health Mission, GoK	Vaccination for Front Line Workers	21 March 2022	Conducting Awareness for Precautionary Dose for COVID-19 Vaccination for Frontline Workers Identified by GoI
Gram Panchayat Task Force	Panchayat Raj Department, GoK	Creation of GP Task Force	23 March 2020	Regarding the creation of rural task forces in GPs to prevent the spread of COVID-19. Roles and responsibilities to be taken care during COVID-19. Awareness programmes to be followed, masks/sanitiser/cleaning materials to be provided in public places. Health Workers/AWWs/ASHAs along with GP officials to have daily discussions and decisions taken to be shared with Taluk Panchayat officials
Gram Panchayat Task Force	Panchayat Raj Department, GoK	Appointment of COVID-19 warriors and other measures	27 March 2020	Regarding the creation of GP and village level task force to prevent spread of COVID-19 and appointing of volunteers as COVID-19 warriors of age between 18-35 years and National Cadet Corps/National Service Scheme preferred (no salaries). Providing awareness over mic between 7:00a.m. to 9:00a.m. and between 5:00p.m. to 7:00p.m. in the evening. Any shortages in supplies and issues to be informed to Zilla Parishad officials. Expenses for purchasing masks/sanitiser/cleaning materials to be spent from 14th Finance Commission Funds or own source funds. The above responsibilities to be followed by GP officials also.

Annexure 3: Detailed list of Key Person Interviews and Focus Group Discussions conducted

Type of Interview	Person(s) interviewed	Number of Interviews	Level of Interviews
Key Person Interview	Anganwadi Worker	4	Gram Panchayat
	Accredited Social Health Activist (ASHA) Worker	4	
	School head	5	
	Gram Panchayat Task Force Member	4	
	School Development Management Committee	4	
	Mahila Supplementary Nutrition Production and Training Centre	4	Taluk/ Sub district
	Assistant Child Development Project Officer	1	
	Child Development Project Officer	4	
	Nutritional Rehabilitation Centre In-charge	1	
	Hostel Warden (1, Morarji Desai residential school/3, Other Backward Classes hostels)	4	
	Block Education Officer	4	District
	Chief Executive Officer, Zilla Parishad	2	
	Deputy Director, Department of Women and Child Development [WCD]	1	
	Director, WCD – Integrated Child Development Services	1	State
	Commissioner, Department of Education	1	
	Commissioner, Rural Development Department	1	
	TOTAL	45	
Focus Group Discussion	Anganwadi Supervisors	4	Taluk / Sub district
	Hostel Children	4	
	Adolescent Children	4	Gram Panchayat
	Mothers of Anganwadi Centre Children	2	
	Mothers of School Children	4	
	Fathers of School Children	4	
	School Teachers	1	
	TOTAL	23	

Annexure 4: List of items given in Take-Home Ration (THR)

For Tumakuru district, the monthly THR for children aged 36–72 months consisted of rice (1.6 kg), milk powder (300 g), sugar (100 g), green gram (500 g), chickpeas (500 g), groundnuts (180 g), toor dal (pigeon pea) (200 g), jaggery (500 g), and sambar powder (50 g). A few other smaller ingredients that were being used to make hot cooked meals and already stocked in the anganwadi kitchen were also distributed along with the THR for the first four to five months starting March 2020. This included mustard seeds (10 g), red chillies (10 g), salt (50 g) and cooking oil (50 g). Apart from this, both moderately acutely malnourished and severely acutely malnourished children were given eight eggs per month. The monthly THR kit for pregnant and lactating mothers consisted of rice (2 kg), milk powder (500 g), sugar (250 g), green gram (500 g), chickpeas (250 g), groundnuts (250 g), toor dal (pigeon pea) (250 g), jaggery (1 kg), broken wheat (1 kg), and sambar powder (100 g); along with THR, they were also given 25 eggs per month.

In Yadgiri, the THR contained rice, toor dal, green gram, chickpeas, groundnuts, sugar, milk powder, and jaggery, and it was being provided to the beneficiaries on a monthly basis. Other items such as sambar powder (spices mix), salt, cooking oil, mustard seeds, turmeric powder, garlic, and chillies were not distributed to the beneficiaries since they were smaller in quantity and difficult to weigh and distribute. Hence, it was decided that these smaller items were to be utilized by the anganwadi workers themselves for their personal use and restocked for distribution once anganwadi centres were to reopen after the pandemic. Apart from THR, normal children are given 8 eggs a month, moderately acutely malnourished and severely acutely malnourished children are given 25 eggs a month, and pregnant and lactating mothers are also given 25 eggs a month.



