



World Food Programme



NITI Aayog



TAKE HOME RATION

GOOD PRACTICES-ACROSS THE STATES/UTs





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World Food
Programme



सत्यमेव जयते

NITI Aayog

**TAKE HOME RATION: GOOD PRACTICES
ACROSS THE STATES/UTs**

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Disclaimer:

The document for Take Home Ration Good Practices across the State/UTs is based on secondary data sources and information received from the Department of Women and Child Development of various States/UTs. NITI Aayog does not guarantee the accuracy of data or accept responsibility for the consequences of using this data, as this document is based purely on information received from secondary sources.

Foreword

Vice Chairman, NITI Aayog

Good nutrition is an essential requirement for leading a healthy life and achieving one's full growth potential. Malnutrition is responsible for disease, morbidity, and unequal opportunity. India has been implementing the Integrated Child Development Services Scheme for addressing malnutrition. Under this, the Take-Home Rations (THR) programme provides fortified rations for home use for children aged between 6 and 36 months, and pregnant and lactating women. Malnutrition numbers in the country point to the fact that there is a lot to achieve.

To give further impetus to nutrition efforts the Government of India launched the National Nutrition Mission, or POSHAN Abhiyan, with a target to reduce undernutrition by 2 percent per year.

The current THR programme has been found to be very resilient in the face of the COVID-19 disruption and has helped communities to manage the negative impact of the pandemic on child and maternal nutrition. This programme has catered to the needs of the most vulnerable sections of the society. There is a need to further strengthen it to achieve the nutritional targets in a time-bound manner.

This document on good practices compiles and collates innovations in THR programmes in various States and Union Territories. Aspects related to production, distribution, hygiene, labelling, packaging, monitoring, and quality assurance have been reviewed to generate a catalogue of good practices.

I would like to commend this collaborative effort between NITI Aayog and the UN World Food Programme in developing this document. I trust this will help State Governments/Union Territories to adopt good practices in their THR programmes.



**Vice Chairman
NITI Aayog**

Foreword





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26th November, 2021

Message

POSHAN Abhiyaan is the Government of India's flagship programme to improve nutritional outcomes for children, pregnant women and lactating mothers, and adolescents. It is a multi-ministerial convergence mission with the vision to accelerate India's progress on malnutrition. POSHAN Abhiyaan aims to ensure that every child under 6 years of age, every pregnant and lactating woman, and adolescent girl has access to quality services to address malnutrition across the continuum of care.

Distribution of Take-Home Ration (THR) through Anganwadi Centres under this programme is key to ensure nutritional security of young children, pregnant women and lactating mothers, and adolescents. The THR is a critical part of the diets of these vulnerable groups, and this has played an important role in safeguarding food security during the COVID-19 lockdowns.

There is a need to develop and maintain highest standards for ensuring quality in THR, where the entire THR value chain must ensure quality, transparency, and efficiency. In this review, various good practices at the State level have been identified and are presented, with regard to production, nutritional composition, quality control, monitoring, packaging, and communication.

This review will serve as a guidebook to policymakers and administrators of States/UTs in adopting good practises in various components of the value chain for strengthening their Take-Home Ration system.

(Vinod Paul)



एक कदम स्वच्छता की ओर



Message

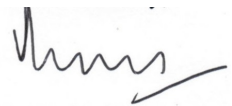
CEO, NITI Aayog

Though India's nutritional outcomes have improved consistently over the years, the country is still grappling with child malnutrition, as reflected in high prevalence of low birth weight, stunting, wasting and severe wasting. The 'first 1000 days' window is of critical importance for ensuring full growth and development of children. India has one of the largest child nutrition programmes in the world – the Integrated Child Development Services (ICDS) Scheme.

Adequate nutrition during infancy and early childhood is essential to ensure that children are healthy and reach their full growth and development potential. After six months of age, complementary feeding is required to meet the infant's nutritional needs. Optimal infant and young child feeding practices are key in helping children reach their potential during infancy and early childhood.

Through the ICDS programme, Take-Home Ration (THR) is distributed to children aged 6–36 months and to pregnant/lactating women for consumption at home. THR aims to fill in the nutrition gap among infants and young children by way of complementary feeding.

I am very happy that NITI Aayog and the UN World Food Programme have collaborated in bringing out good practices related to THR prevalence across the States/UTs. There has been a lot of innovation in the field of THR in terms of production, distribution, quality control, monitoring, and use of technology. Such good practices will definitely help other States/UTs to further strengthen the effectiveness of their THR programmes.



CEO, NITI Aayog

Message

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Preface

Over the past decades, India has been making consistent progress towards ensuring food and nutrition security and reducing malnutrition levels among its citizens. To do so, India has at hand several strong policy initiatives, schemes and programmes including the world's largest food safety nets under the umbrella of the National Food Security Act, 2013.

Within the food-based safety nets, the Integrated Child Development Services (ICDS) scheme seamlessly juxtaposes the 'first 1000 days' window of opportunity whilst aiming to address malnutrition among young children and pregnant/lactating women through a host of services including provision of take-home rations (THR), nutrition health education, etc. Quality assured, safe and nutritious take-home rations delivered to the ICDS participants with appropriate messages on nutrition have the potential to prevent malnutrition in the communities.

I am extremely pleased with the joint efforts of NITI Aayog and WFP in developing this document with the objective of sharing with States/UTs a set of innovative and good practices across the THR production and distribution value chain. We hope this rich compilation of innovative practices across India around THR in the ICDS scheme will be valuable to further improve nutrition among children and mothers.

This resource comes at an opportune moment as there is a growing momentum around THR with the National Nutrition Mission and Poshan 2.0 placing a renewed focus on and seeking inspiration from examples and models to strengthen their THR systems.



In 2019, the United Nations World Food Programme in India conducted a mapping of THR across India and is currently supporting the State Governments of Uttar Pradesh, Rajasthan, and Odisha on improving the composition and establishing decentralized production of fortified nutritious THR. This study builds on this body of work and ongoing partnerships on the ground.

I am confident the publication will be of great value for the policymakers, practitioners, and civil society organisations.



Bishow Parajuli

UNWFP Representative and Country Director for India



Acknowledgement

We are grateful to the Ministry of Women and Child Development for enriching the document by providing comments. We thank Women and Child Development departments of various States/UTs for sharing their good practices.

The document benefited greatly from the comments and feedback of Dr. Neena Bhatia, Senior Specialist, NITI Aayog. We are grateful to the following organization and individuals who provided valuable feedback during the review phase: Dr. Abner E Daniel (Nutrition Specialist, UNICEF India Country Office), Siddharth Waghulkar (WFP), Manisha Kaushik (WFP), Reema Chugh (WFP), Tashi Choedon (Institute of Economic Growth). We are also thankful to Indrani Das Gupta and Vaishnavi Iyer, Young Professional (NITI Aayog) for their meticulous editing of the document.



Acronyms

AWC	Anganwadi Centre
AWH	Anganwadi Helper
AWW	Anganwadi Worker
CDPO	Child Development Project Officer
CFMS	Comprehensive Financial Management System
DSWO	District Social Welfare Officer
EDNF	Energy Dense Nutritious Food
FCR	First Contact Resolution
FCSCM	Food Commodities Supply Chain Management System
FSSAI	Food Safety and Standards Authority of India
GCMMF	Gujarat Cooperative Milk Marketing Federation
GoI	Government of India
HCM	Hot-Cooked Meal
ICDS	Integrated Child Development Services
IEC	Information Education Communication
IVR	Interactive Voice Response
JC	Jaanch Committees
MAM	Moderate Acute Malnutrition
MC	Mothers' Committee
MIS	Management Information System



MSPC	Mahila Supplementary Food Production Centers
NABL	National Accreditation Board for Testing and Calibration Laboratories
NECC	National Egg Coordination Committee
NGO	Non-Profit Organisation
NNM	National Nutrition Mission
NPOs	Non Profit Organizations
PDS	Public Distribution System
PLW	Pregnant and Lactating Women
QA	Quality Assurance
QC	Quality Control
RDA	Recommended Dietary Allowance
RTC	Ready to Cook
RTE	Ready to Eat
SAM	Severe Acute Malnutrition
SBCC	Social and Behavior Change Communication
SHG	Self-Help Group
SNP	Supplementary Nutrition Programme
SOP	Standard Operating Procedure
SUW	Severe Underweight
THR	Take-Home Ration
UT	Union Territory
WCD	Women & Child Development
WDCW	Women Development & Child Welfare
WSHG	Women's Self Help Group



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Executive Summary

To ensure basic nutrition, health, better work potential, and productivity, the Government of India has launched several measures. One such scheme is the Integrated Child Development Services (ICDS). The Supplementary Nutrition Programme (SNP) under ICDS aims to fill the gap in nutrition amongst children under six years of age as well as pregnant and lactating women. SNP is delivered through two modalities – Hot-Cooked Meal at Anganwadi Centers and Take-Home Ration (THR). THR may be delivered in the form of raw ingredients or pre-cooked packets.

An analysis of THR models in various States and Union Territories (UTs) is extremely important to improve and formalize the good practices and to accelerate improvement in the THR value chain. The gaps and deficiencies in various models need to be identified to find better solutions and bring efficacy. This document is an effort to collate and present the various improvisations adopted in the implementation of the THR value chain, from formulations to last-mile delivery, by the States and UTs.

Procurement: This section highlights various good practices related to procurement adopted by various States and UTs. For instance, Delhi, Tamil Nadu, Telangana, Chandigarh, and Mizoram are procuring THR products through e-tendering for maintaining fair play and transparency.

Production model: Decentralized production model increases efficiency for last-mile delivery of THR to beneficiaries, besides boosting local economies and generating livelihoods. In Kerala, Amrutham-Nutrimix THR is produced by WSHGs through a decentralized approach. In Odisha, WSHGs are responsible for each of the processes from procurement to the production of the products within



defined time limits. In Karnataka, THR is produced by Mahila Supplementary Food Production Centers (MSPCs) led by Women Self-help groups.

Product formulation: The THR product must be healthful and enriched with enough ingredients to meet the nutritional requirements of the intended beneficiaries. In Madhya Pradesh, fortified Khichdi premix is made with smaller particles for greater palatability and lower rancidity-causing raw components for increased acceptability. In Kerala, THR is supplemented with 11 micronutrients (vitamins, and minerals). The YSR Sampoorna Poshana scheme in Andhra Pradesh provides milk and eggs. Beneficiaries in Haryana receive fortified sweetened flavored milk. The goal is to ensure that the target population accepts and consumes the product. Because of India's variety, the product must be customized to cater to local circumstances. The Andhra Pradesh, Chandigarh, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Manipur, Mizoram, Odisha, Tamil Nadu, Telangana, and Uttarakhand are providing varied THR menu options to boost acceptability and provide additional choices among recipients. Increased THR quantity, ready-to-eat snacks, enriched THR with extra protein, fat, and eggs, and ready-to-eat therapeutic meals are used for MAM/SAM children.

Quality assurance and quality control: Gujarat has implemented inspections throughout the production process at the Amul THR factory to improve the quality of THR. Once the product enters the Anganwadi centres, third-party laboratories gather random samples. Telangana has a quality control department that inspects the food. In Odisha, payments to WSHGs are withheld in the event of non-compliance with quality requirements, while in Rajasthan, the contract with the SHG is annulled. THR samples are delivered to the regional food testing laboratory of the Mizoram Food and Nutrition Board for analysis, confirming that the THR product meets national standards.

Packaging and labelling: The THR packaging provides a good opportunity to share all information related to the THR product. In Odisha, color-coded packets are distributed, capturing key messages on the importance of breastfeeding. In Jharkhand, the THR is distributed in daily serve size packets. THR packets in Arunachal Pradesh, Gujarat, and Madhya Pradesh include instructions on product preparation.

Monitoring: To ensure effectiveness of the programme, it is critical to monitor its execution. Jharkhand has adopted a real-time monitoring approach using call centres. In Odisha, community-level monitoring is institutionalized through the formation of Mothers Committees (MC) at each Anganwadi Centre and Jaanch Committees (JC) at each revenue village. *Telangana Foods* has a Nutrition Council



that meets twice a year. It also has an executive committee, which convenes every quarter, oversees regular THR production operations. In Himachal Pradesh, an Anganwadi-level Monitoring and Support Committee is formed comprising of members of Pachayati Raj Institution, SHGs, local teachers, and health workers for the purpose of monitoring.

Supply chain management: Supply chain management is an important component of the THR value chain. Odisha has adopted the *Mo-Chhatua* software application and management information system to streamline supply chain management. Similarly, Andhra Pradesh, Gujarat, and Telangana have opted for technological solutions.

Social and Behavior Change Communication (SBCC): For any initiative to have an impact, information, education and communication (IEC) play a pivotal role. Several state governments have designed IEC material showcasing the importance of THR. It includes flyers, flip-books, folk media campaigns, and digital platforms of IVR, and whats app chatbot.

The good practices collated in this booklet will help the States and UTs to learn about and adopt innovations in the Supplementary Nutrition Programme. The improvement of the THR value chain will aid in increasing efficiency and ensuring THR delivery to the beneficiaries.



1 2 3 4 5 6 7 8 9 10

1. వాక్యం ఏమిట? → అక్షరం, పదం, వాక్యం వంటివి

2. వాక్యం ఏమిట? → 15 పదాల వాక్యం 45 పదాల వాక్యం

3. వాక్యం ఏమిట? → 2 పదాల వాక్యం 8 పదాల వాక్యం

గురువారం అక్షరం + కారణం వల్ల వస్తుంది

శుక్రవారం అక్షరం + కారణం వల్ల వస్తుంది

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H I J K L
M N O P Q R
S T U V W X Y

ENGLISH ALPHABETS

A Apple	B Ball	C Cat	D Dog	E Elephant	F Fish
G Goat	H Home	I Ice-cream	J Jar	K Kite	L Lion
M Mouse	N Nose	O Orange	P Parrot	Q Queen	R Rose
S Snake	T Tree	U Umbrella	V Van	W Wheel	X X-ray
Y Yarn	Z Zebra				





1

BACKGROUND AND METHODOLOGY

BACKGROUND AND METHODOLOGY

The National Nutrition Mission (NNM), popularly known as POSHAN Abhiyaan (Prime Minister's Overarching Scheme for Holistic Nourishment), has recently placed a renewed focus on the supplementary nutrition provided under the Integrated Child Development Services (ICDS) scheme. The Supplementary Nutrition Programme (SNP) under ICDS was conceptualized in order to fill the gap in nutrition among children under the age of six years as well as pregnant and lactating women (PLW). SNP is delivered to more than 9 crore beneficiaries registered at Anganwadi Centres (AWCs) through two modalities - Hot-Cooked Meal (HCM) and Take Home Ration (THR). The THR programme aims to provide supplementary food products to children aged 6 to 36 months, and to pregnant and lactating women, for use in their homes. The THR programme takes up a major share of the ICDS budget with the Central and State Governments spending more than ₹ 13,500 crore (about \$2 billion) annually on it.¹ Given the programme's broad reach across most communities in the country, and since it targets beneficiaries within the crucial first 1000-day window of opportunity, it is important that policymakers strive to improve nutrition for the millions of beneficiaries who consume THR

The THR provided through the ICDS is more important than ever before - the COVID-19 pandemic disrupted food systems across the country, reducing individual dietary diversity and impacting household food security. THR represents an opportunity to deliver fortified, nutritious, non-perishable food that goes beyond simply providing calories. By strengthening THR programme, the growth and development of children and pregnant and lactating women can be supported.

The national momentum around POSHAN Abhiyaan provides a great opportunity for State/UTs to re-imagine and strengthen their THR systems. However, for this to happen, it is important to guide the State/UTs towards good practices and innovations on various aspects of the THR system.

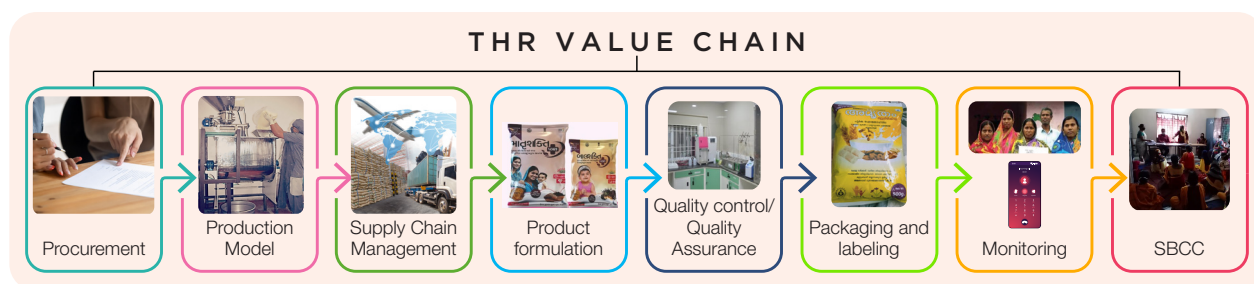


Figure 1. THR Value Chain

¹ Union Expenditure budget, Ministry of Women and Child Development FY 2015-16 to FY 2020-21. Available online at: <https://www.indiabudget.gov.in>. Last accessed on 23 November 2020.



With this effect, NITI Aayog and the UN World Food Programme are continuing their collaboration around THR by focusing on the review and documentation of innovative and good practices across the value chain starting from procurement of raw materials to distribution and consumption (Figure 1).

METHODOLOGY

The following approach was adopted for documentation of good practices:

1. Established criteria for documentation of good practices.
2. Conducted a literature review of documents and case studies available in the public domain.
3. Contacted all States and UTs to learn of their THR practices.
4. Mapped the results according to the components of the value chain.

For each component of value chain, criteria for documentation of good practice were identified and defined by NITI Aayog and WFP, as presented in Table 1.

Table 1. Components of the THR value chain and criteria for documenting good practices

S. No.	Value chain component	Criteria
1	Procurement	<ul style="list-style-type: none"> ◆ Transparency ◆ Government contracting
2	Production model	<ul style="list-style-type: none"> ◆ Decentralized model ◆ THR quality ◆ Community involvement ◆ Sustainability ◆ Timely delivery ◆ Women empowerment
3	Supply Chain Management	<ul style="list-style-type: none"> ◆ Mobile application and web portal ◆ Tech-Innovation- delivery management system ◆ App based tracking supply of commodities
4	Product formulation	<ul style="list-style-type: none"> ◆ Aligned to national and global guidelines on energy density, fat, protein ◆ Fortification ◆ Dietary diversity ◆ Formulations for Severely Acute Malnourished



5	Quality assurance/ Quality control	<ul style="list-style-type: none"> ◆ Quality checks ◆ Random and independent testing ◆ Frequency of checks ◆ Corrective actions
6	Packaging and Labelling	<ul style="list-style-type: none"> ◆ Innovative packaging ◆ Informative labelling conveying messages on nutrition
7	Monitoring	<ul style="list-style-type: none"> ◆ Real time monitoring ◆ Use of technology ◆ Regularity and frequency of reviews ◆ Transparency ◆ Community involvement
8	Social and Behaviour Change Communication (SBCC)	<ul style="list-style-type: none"> ◆ Link with THR product and nutrition of children

While identifying good and innovative practices, it was prudent to focus on those which are implemented at scale and have demonstrated sustainability over a period of time, rather than focus on those which were pilot projects and did not lend themselves to scale-up.





2

**GOOD PRACTICES
ADOPTED BY THE
STATES/UTs**

2.1 PROCUREMENT

State governments contract either private or public-sector companies or Women's Self-Help Groups (WSHGs) for the procurement of THR to ICDS beneficiaries. Given the huge amounts of funds used, it is important that the suppliers are selected based on a transparent and well-defined method. While reviewing the various ways in which the state governments are contracting different suppliers, good and innovative practices are identified.

GoI Guidelines^{2,3}

As per Operational Guidelines of 2013, fair and average quality of rice and wheat should be lifted from the FCI godown. The officer lifting should ensure that the grains are of good quality and if there is any doubt, the higher authorities should be informed immediately. Other ingredients which may be required, such as bengal gram, sugar, jaggery, groundnut, etc., should be purchased from the local market and should be of good quality, have ISI mark, etc.

The responsibility of the SHG/producer selected for the processing and supply of THR is to procure quality ingredients as per the specification by the State Government or as laid under the regulations. A procurement plan should be prepared to have an undisturbed supply of THR to the AWCs, which should be based on the indent from the AWCs. It must also be ensured that:

- ◆ No raw material or ingredient thereof should be accepted by an establishment if it is known to contain parasites, undesirable micro-organisms, pesticides, veterinary drugs or toxic items, decomposed or extraneous substances, which would not be reduced to an acceptable level by normal sorting and/or processing.
- ◆ In addition, the raw materials, food additives, and ingredients, wherever applicable, should conform to the regulations laid down under the FSSAI Act 2006 and Regulations 2011.
- ◆ Records of raw materials and ingredients as well as their source of procurement should be maintained in a register for inspection.

Under the 'Procedure for Procurement', stipulated under the said Guidelines, the State/UT must introduce transparent processes for procurement as per General Financial Rules 2017 and vigilance guidelines and ensure that Take-Home-Ration (not raw ration) procured conforms to technical and nutritional standards set by MoWCD.³

2 Ministry of Women and Child Development, Government of India. Operational Guidelines for Food Safety and Hygiene in ICDS. F. No. 5(25)/2010/ND-Tech Pt. dated 24th December 2013. https://wcd.nic.in/sites/default/files/merged_document_3

3 Ministry of Women and Child Development, Government of India. Streamlining Guidelines on 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. 573479/2021/PM. No...CD -I-24/2/2021-US (e- 90701) .Dated 13th January, 2021.



2.1.1 Procurement through e-tendering (Delhi, Tamil Nadu)

In comparison to the old paper based method, electronic tendering (e-tendering) is a process for sending and receiving tenders by electronic means. It automates the complete procurement process right from tender preparation to purchase order, invoicing and electronic payment. E-tendering streamlines the procurement process and brings in complete transparency. Some of the States and union territories that are using e-tendering for procurement are given below:

- a. In Delhi, the Department of Women & Child Development uses an e-tendering website (<https://govtprocurement.delhi.gov.in/nicgep/app>) for empanelment of SHGs, Mahila Mandals, Village Communities, Non-Government Organisations (NGOs), voluntary organizations, and manufacturers to supply ready-to-eat THR for use in the State.
- b. In accordance with rules laid out under Tamil Nadu Transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tenders Rules 2000 the state of Tamil Nadu provides eggs to the children in the age group of 1 to 6 years, pregnant and lactating mothers as Take Home Ration under the supplementary nutrition programme of ICDS. The state invites open tenders at all India level which is done in e-tendering mode (<http://www.tenderrs.tn.gov.in/website>).

2.1.2 Procurement based on quality parameters (Telangana)

Quality is an important factor during procurement. The procurement process presents an opportunity to assure that quality requirements are met or exceeded. Ensuring an effective quality during procurement reduces the risks of sourcing substandard and subsequent deterioration, thereby potentially reducing the incidence of product complaints and recalls, financial losses, and most important, the risk. Since procurement is essentially all-about sourcing, vendors, and suppliers, having a pool of higher-quality vendors provides a major competitive advantage. Through the e-tendering software, this pool of vendors still has to compete for bids.

Women Development & Child Welfare (WDCW) Department, Telangana follows a transparent online e-tendering system at tender.telangana.gov.in, for procurement of commodities like milk, red gram, egg, and oil and *Balamrutham* from the State-owned Telangana Oil Federation and Telangana Foods, respectively. Rice is procured through the State Civil Supplies Corporation through the e-PoS (electronic Point of Sale) system of Fair Price Shops located at all villages. (<https://tfoods.telangana.gov.in/AboutProductionWing.aspx>).



- a. **Milk:** Milk is procured under the State's flagship *Arogya Laxmi programme*, wherein 200 ml of milk is provided to pregnant women and lactating mothers for 30 days in a month. The milk is procured through the online e-tendering platform (*tender.telangana.gov.in*) of the Government of Telangana, specifying quality and nutritional parameters for milk. One unique approach adopted by the WDCW Department is that only co-operative dairy federations are allowed to participate in the tender, which ensures that the farmer communities are directly benefitted.
- b. **Eggs:** WDCW Department, Telangana adopts a decentralized and transparent approach for procurement of eggs under ICDS wherein tenders are called for procurement of eggs through an e-tendering system by each district. A District-level Purchase Committee (DPC) is formed under the chairmanship of the Joint/Additional Collector and District Welfare Officer (ICDS). The DPC of each district floats the tender for egg procurement. Tenders are valid for a period of one year, after which fresh tenders are called for. Only poultry farmers having poultry units in the respective districts, as certified by the Animal Husbandry Department, Telangana, and registered under NECC (National Egg Coordination Committee) are eligible to participate in these tenders of those districts. Traders and egg aggregators are not eligible to participate in these tenders. This not only enables ICDS to procure fresh farm eggs that can be made readily available, but also benefits the local poultry farmers allowing them to scale up their production to meet the ICDS' demand for eggs within their district. This practice was initiated in 2015, and is being followed since then.
- c. **Red Gram:** Telangana follows transparent process in procurement of pulses like Red gram through a transparent e-tendering/e-procurement platform of Govt. of Telangana *tender.telangana.gov.in*, in accordance to the guidelines established by the Women Development & Child Welfare Department, Telangana. An electronic tender is called specifying the guidelines on quality and other specifications. Superior quality of indigenous red gram variety *SPLIT FOTKA SORTEX* is procured through the tendering process in 1 kg laminated pouch packaging. These packages are disbursed to all Anganwadi centers as per their monthly requirements.

2.1.3 Procurement through Non-Profit Organisation (Chandigarh)

In UT of Chandigarh, 450 AWCs are functional. Four non-profit organizations have been engaged through e-tenders to provide THR to the beneficiaries of 350 Anganwadi centers. Prison department (model jail Chandigarh) is providing THR to the beneficiaries of the remaining 100 Anganwadi centers.



2.2 PRODUCTION MODEL

States/UTs across the country follow different models for the production of THR for ICDS. In the centralized production modality, one or more production facilities are contracted by the state to procure raw ingredients, produce, and distribute THR for the entire State/UT. The contracted production facility may be a state-run entity or a private one. In the decentralized production modality, the THR production facilities are run by local agencies like the Women WSHGs.⁴ When reviewing the various ways in which the state governments are contracting these different suppliers for blended THR production, a decentralized production model involving SHGs stood out as having good practices.

GoI Guidelines⁵

The Supplementary Nutrition (under the Integrated Child Development Services Scheme) Rules, 2017:

Rule 9 of the SNP Rules, 2017 provides for engagement of Self-Help Groups (SHGs), and ensures supply and quality of Supplementary Nutrition through them.⁶

Hon'ble Supreme Court Order dated 07.10.2004 and 26.02.2019⁴

The Supreme Court of India vide order dated 07.10.2004 directed that contractor shall not be used for supply of nutrition in AWCs, and preferably ICDS funds shall be utilized by making use of village communities, SHGs, and Mahila Mandals for buying of grains and preparation of meals. Further vide order dated 26.02.2019, the Hon'ble Supreme Court directed that THR supply should be decentralized as much as possible, as it is not for the big players/ industrialists in the field to cater to the needs of the Scheme.

4 Hon'ble Supreme Court of India judgement of 2004 related to decentralization of THR production.WP No.196/2001-PUCL Vs. &Ors.

5 The Supplementary Nutrition (under the Integrated Child Development Services Scheme) Rules, 2017 Published vide Notifications No. G.S.R. 149(E), dated 20th February 2017.Supreme Court of India. Writ Petition (Civil) No196/2001.Supreme Court of India.Civil Appeal No (S).2336 of 2019.

6 The Supplementary Nutrition (under the Integrated Child Development Services Scheme) Rules, 2017 Published vide Notifications No. G.S.R. 149(E), dated 20th February, 2017.



2.2.1 Decentralized production model involving WSHGs

The decentralized production model promotes income generating activities, empowers poor women by enabling them to become active earners, improves THR access in rural areas and enhances community ownership of THR production. The following decentralized models have delivered good results.

- i. Local production of THR by WSHGs of Kudumbashree mission in Kerala
- ii. THR Production through WSHGs with fixed time periods for each of the processes in Odisha
- iii. THR production by Mahila Supplementary Food Production Centers (MSPCs) led by Women Self-help groups in Karnataka

(i) Local production of THR by Women SHGs of Kudumbashree Mission (Kerala)

In Kerala, the local Nutrimix powder THR has been produced by WSHGs since 2007. Each WSHG involved in the production of THR is equipped with machinery to do so. These WSHGs are part of the Kudumbashree Mission (KDM), which has been a running viable women entrepreneurship project since 1999. THR production through this decentralized model works well in Kerala because of supporting local government along with a focus on financial viability for the WSHGs – a key element contributing to the WSHG motivation and involvement.⁷



Figure 2: Local Production of THR by Women SHG in Kerala

⁷ Guideline for Decentralized Production and Distribution of Supplementary Nutrition by Community-based Enterprises in Kerala https://www.kudumbashree.org/storage/cmspages/downloads/1345721991_The%20Amrutham%20Nutrimix%20Consortium.pdf

Governance of THR Production Ecosystem

Favourable governance elements include:

- ◆ Well-established systems and processes for every aspect of production.
- ◆ District-level consortia for procurement of raw materials: Excellent coordination at the ground-level exists between the Department of Women and Child Development, Kudumbashree Mission production units, and the Department of Local Self-Government.
- ◆ Focus on constant enhancement and capacity building of the WSHGs through regular training programmes to improve skills of the women participants.

Financing and sustainability

- ◆ Seamless and timely reimbursement to the WSHGs for the THR produced.
- ◆ Model is sustainable and profitable, with each participating woman earning reportedly around ₹600 /day.

(ii) THR production through Women SHGs with fixed time periods for each of the processes (Odisha)

The WSHGs participating in the production of THR are selected at the district level based on objective criterion prescribed in the guidelines with support from other relevant government stakeholders.⁸ On an average, every block in Odisha has more than two THR units managed by WSHGs. The WSHGs are responsible for local procurement of raw materials while wheat used in THR is procured from the FCI godowns. All WSGs have the necessary equipment for the production of THR, required FSSAI food license, etc. There are fixed timelines for the entire THR process from indent to distribution, which therefore makes monitoring easy. The indent for production of THR is received by the 10th of every month by the WSHGs, which is then followed by procurement of all raw materials while several processes with regard to production are completed between the 17th and 29th of the month.

(iii) THR production by Mahila Supplementary Food Production Centers (MSPCs) led by Women Self-help groups (Karnataka)

Mahila Supplementary Food Production Centers (MSPC) registered under Society Act are supplying food commodities to AWCs of the state under the

⁸ Revised Guidelines for implementation of Take Home Ration, 2018 - Supplementary Nutrition Programme of ICDS and Scheme for Adolescent Girls http://wcdodisha.gov.in/Application/uploadDocuments/content/Guide_Lines_for_THR_and_HCM.pdf



Supplementary Nutrition Programme of ICDS. Each MSPCs consists of women members ranging from 22-25 from the most vulnerable sections of the society.

At present, 137 MSPCs have been established in the State as per the directive of Hon'ble Supreme Court at the project level and these MSPCs are responsible for production and distribution of Nutri mix (Pusti) and raw ration to the Anganawadi Centres through the CDPOs. The MSPCs procure the raw materials (apart from rice, wheat and oil which is procured through FCI and Karnataka Cooperative Oilseed Growers Federation Limited-KOF) locally, to prepare the food SNP and supply these to the Anganawadi Centers as per the indent of the CDPOs. Through MSPC ware house, the commodities are sent to Anganwadi center. Rice and wheat are procured from FCI, oil from KOF, and milk from Karnataka Milk Federation. MSPCs purchase other commodities like, bengal gram, green gram, soya, ragi, jawar, sugar, jaggery, salt, groundnuts, cardamom, masai powder, wheat rava, etc. depending on the district menu. MSPCs prepare Nutri mix powder (Pusti), which is given to children below the age group of 3 yrs. Every district has its own menu which is decided by the Deputy Commissioner of the districts in consultation with nutritionists and officers from DWCD and Health Department keeping in mind to meet the calories and protein value as per the guidelines of GOI.



2.3 SUPPLY CHAIN MANAGEMENT

Supply chain management is an important and complex process within the ICDS scheme. By utilizing technological advancements in supply chain management, it can be ensured that there are open lines of communication and data analysis throughout the chain, which increases transparency and efficiency in the scheme.

GoI Guidelines⁹

Supply chain process in the States must be made transparent for functionaries to ensure uninterrupted supply to the last mile, which are compliant with FSSAI registration-licensing process for entities involved in manufacture, storage and distribution of food to ensure food safety and hygiene.

(a) At District Level:

The District Magistrate shall be the Nodal Point in the district for monitoring nutrition at status and quality standards. The DM/Collector shall chair, supervise and monitor the activities of the District Nutrition Committee. Nutrition Experts suggested in District Committee have to be mandatorily certified nutrition experts. The Child Development Project Officer (CDPO) who is responsible for administration and implementation of nutrition and ICDS projects, shall carry out major responsibilities as follows under the supervision of the DM/Collector:

- ♦ coordinate and evaluate deliveries in the district as a Key Performance indicator of the DM/Collector for nutritional improvement of beneficiaries, specially SAM/MAM children;
- ♦ undertake overall administration and coordination of the nutrition project and ensure smooth and effective delivery of all intended services in the project jurisdiction;
- ♦ conduct periodic monitoring including surprise spot-checks, draw samples for quality testing of supplementary nutrition (THR and HCM) provided, ensure adequate measures for food safety and hygiene are followed throughout the supply chain, assess the quality of pre-school delivery etc., to ensure quality and undertake necessary course correction;
- ♦ monitor distribution of necessary stocks for delivery of key services;

9 Ministry of Women and Child Development, Government of India. Streamlining Guidelines on 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. 573479/2021/PM. No...CD -I-24/2/2021-US (e- 90701) .Dated 13th January, 2021.



- ◆ participate in the VHSND meetings, community-based events, Jon Andolan activities etc. to motivate field functionaries and beneficiaries;
- ◆ facilitate preparation of Block Convergence Action Plan and its implementation;
- ◆ conduct Joint Field Visits with Medical Officer (MD) and Joint Review Meetings on monthly basis, especially with regards to SAM children;
- ◆ ensure collation of monthly progress reports for the District and share with the State;
- ◆ when visiting AWCs, CDPO must conduct home-visits for pregnant women, new-born and infants crossing 6-months and undertake age-appropriate nutrition counselling, to train and demonstrate the importance of home visits and counselling to AWWs and motivate them to undertake regular home visits.

(b) At State Level:

Nutrition requires convergence of various services that contribute to improved nutritional status. This requires strong and effective multi-department convergent efforts and actions to address malnutrition. Therefore, Chief Secretary of the States/UTs should coordinate the activities of various departments through a State Level Steering Committee to ensure effective convergence between various schemes/programs having bearing on nutrition and review the progress made regarding Nutritional indicators on regular basis.

Secretaries of different departments may assess how their schemes/programs can positively impact nutrition levels and also how POSHAN Abhiyaan can be supported to build awareness and create Jan Andolan around nutrition.

(c) In Village:

Involvement of AWC Level Management Committees, village communities, Mothers Groups, and Panchayati Raj institutions (Poshan Panchayats) will bring community ownership and encourage accountability.

2.3.1 Mo-Chhatua Management Information System (MIS) (Odisha)

In Odisha, SHGs are producing THR at their respective plants for respective ICDS projects under a decentralized production model. The complete cycle consists of different steps, starting from indenting to the procurement of raw materials,



manufacturing, packaging, supply, and payment. In 2019, Mo-chhatua (an end-to-end supply chain management system) was inaugurated using mobile application and web portal. This is helping the department in tracking the status at different stages starting from indenting and manufacturing to supply and payment updates. The Mo-chhatua software and mobile app are made for SHG members (app), ICDS supervisors (app), CDPO, DSWO, district collector, and State officials (web). This system works on a near real-time method and enables each level to take proper and timely steps towards the supply of THR to AWC beneficiaries. This also helps to monitor the fixed-day approach of THR production and delivery system by respective CDPOs and other department officials. A comprehensive dashboard on THR manufacturing and distribution process helps the decision-maker at each level to take corrective measures and suggest interventions.

2.3.2 PuShTI- Poshan Umbrella for Supply Chain through Tech-Innovation (Gujarat)

The Government of Gujarat has developed a platform called PuSHTI- a Delivery Management System for THR with the objectives of increasing responsibility (leveraging the Digital India platform), transparency (for good governance), and sensitivity and efficiency (in processes) of their THR programme.

Key features of software include:

1. Transparency in demand and supply for THR across AWCs
2. OTP-based / photo upload-based verification of THR received at the AWC
3. Seamless payment processes
4. Timely and regular supply, with doorstep delivery of THR to the beneficiary

The basic process flow for data entry, information, and delivery of THR to the AWC is summarized below:

- ◆ By the 3rd of every month, submission of THR demand by the AWW
- ◆ By the 5th of every month, verification and approval of the demand by the CDPO
- ◆ By the 12th of every month, verification by the Programme Officer (PO) in the online portal
- ◆ By the 15th day of the month, verification and finalization of work order to Gujarat Cooperative Milk Marketing Federation Ltd. (GCMMF)
- ◆ By 17th day of the next month, GCMMF supplies THR to all AWWs



- ◆ On 4th of the forthcoming month (Annnavitaran Diwas) of each month, THR is distributed to beneficiaries.
- ◆ Release of payment to GCMMF based on confirmation receipt from AWW

2.3.3 YSR Sampurna Poshana application (Andhra Pradesh)

The Department of Women Development & Child Welfare (WDCW), Government of Andhra Pradesh has developed smartphone-based software named 'YSR Sampurna Poshana'. The software enables to track receipt of multiple aspects of THR – provided under YSRSP scheme as well as Balamrutham, thereby preventing leakages during delivery of THR. The data entry, processing, and validation are done as follows:

1. Data entry by AWWs for number of beneficiaries registered in the AWC, across different categories; updating of information is done every month
2. Development of estimates for quantity of THR, to be procured each month based on the available information on number of beneficiaries, followed by the development of budgetary estimates (cross-validation with data received from e-Sadhana software (<https://wdcw.ap.gov.in/Esadhana.html>) on the estimated current stock available with a beneficiary.)
3. Receipt of requirement by impaneled producers and suppliers registered with the Government of Andhra Pradesh (e.g. milk supplier, egg supplier, Balamrutham etc.)
4. Direct delivery of the required quantity of raw materials by each individual supplier to the AWC
5. Confirmation of receipt of the required quantity of raw material stocks by the AWW via data entry in the app (biometric authentication is expected to be updated soon)
6. Verification of the quantity of THR received at the AWC by the Lady Supervisor, followed by cross-validation by CDPO/PO
7. Payment release for district-based raw material suppliers (eggs) released by District Collector/Magistrate, upon receipt of confirmation of delivery
8. For State-empanelled suppliers of THR (Balamrutham, milk, etc.), payment release is enabled by State-Level Officer via the Comprehensive Financial Management System (CFMS) mechanism, upon receipt of confirmation from District Programme Officer.



2.3.4 Strengthening Food Commodities Supply Chain Management (FCSCM) – Online First Contact Resolution and Mobile Application (Telangana)

An online web application called Online First Contact Resolution (FCR) has been developed for tracking the supply of commodities and is in use since 2017. This mobile app with biometric authentication which is AADHAAR linked was introduced to curb diversions and irregularities in commodity supply. Different commodities supplied by WD&CW dept. like eggs, milk, red gram, Balamrutham, murukulu (snack food), and oil are being supplied to AWCs through Telangana State – Commodities Supply Chain Management System (TS CSMS) App. Through this software application, above commodities are supplied to the doorstep of AWCs through a biometric device that is AADHAR-linked. Likewise, Rice is supplied to Anganwadi centres through an electronic indenting and supply management system e-PoS, in coordination with the Civil Supplies Dept. of Govt. of Telangana.

The application allows automated indent calculation for all AWCs based on requirements and availability of balances at AWCs. With an automated indent management system, indents for all commodities are placed centrally at the Directorate level by the 5th of every month and indent reports are made available online to all suppliers. Supplies for a given month are made between the 7th and 30th of the month by the suppliers. The live delivery status can be tracked by ICDS functionaries through a web portal. The App also maintains the details of opening and closing balances at all 35,700 AWCs in the State, which helps in indenting the correct requirement and also helps in prioritizing AWCs that need immediate food supply in the distribution route.

The AWW/AWH (Anganwadi helper) is required to provide her thumb impression to the supplier and obtain the supplies. An online delivery report is generated after the biometric authentication by the AWW/AWH and payment is made. This prevents any leakages or malpractices in supply of commodities to the AWCs.

Further, Department of Women and Child Development, Telangana has roped in the Cargo Unit under the Telangana State Road Transport Corporation (TSRTC) for supply and logistics of THR commodities. Under this programme, the State RTC transports commodities like oil, Balamrutham, and Murukulu (snack food) directly to the AWCs. The drivers of TSRTC collect the biometric validation from the AWW/AWH, thereby completing the delivery of THR commodities and ensuring an efficient supply chain from production point till the doorstep of the AWC.





Figure 3: Biometric authenticated supply of THR

2.3.5 Engaging Sakhi Mandals SHG (Jharkhand)

Engaging sakhi mandals SHG for distribution of THR has witnessed multiple benefits for the individual and community at large. Currently, approximately 29,342 women from local communities, who are SHG members, and 4,583 village organizations have been engaged and are managing the entire THR supply chain process in Jharkhand. It is important to mention that the SHG members have become a role model, as they not only procure raw materials at well negotiated rates from local vendors, but they also manage logistics and packaging of THR while ensuring smooth supply of THR packets to AWCs for further distribution to the beneficiaries. The THR that is supplied to respective AWCs as per the requirement following the chartered route map are distributed by the AWWs during the Village Health Sanitation and Nutrition Day (VHSND).¹⁰ The SHG members in the community, through informal communication, inform the beneficiaries about the distribution of THR packets, which in turn has contributed to increased community participation in the VHSND.

¹⁰ The Village Health, Sanitation and Nutrition Day (VHSND) has been conceptualized as a community-level strategy connecting the community and health systems and facilitating convergent actions. It attempts to bring health, early childhood development, nutrition, and sanitation services to the doorstep and promote community engagement for improved health and wellbeing (https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/CH/Guidelines/National_Guidelines_on_VHSND_English_High_Res_Print_ready.pdf).



2.4 PRODUCT FORMULATION

The THR products are distributed during key physiological periods of life when nutritional requirements are high, and if they possess right nutritional composition, they can play an important role in preventing malnutrition and improving pregnancy outcomes.

Of the variety in THR product formulation among States/UTs, examples of good practices have been selected based on the criteria under the ICDS norms for **energy and proteins**, globally defined norms for products meant for infants and young children, and the World Health Organization (WHO) norms on nutrition for pregnant and lactating women.

GoI Guidelines.¹¹

National -The National Food Security Act, 2013 and the Supplementary Nutrition rules, 2017 have in place calorie and protein norms for THR. The nutritional standards for children in the age groups of 6 months to 3 years, 3 to 6 years (severely underweight), and pregnant women and lactating mothers are required to be met by providing THR are as follows:

- ◆ Children aged 6 months to 3 years: Food supplement of 500 calories of energy and 12-15 grams of protein per child per day
- ◆ Severely underweight children aged 6-72 months: Food supplement of 800 calories of energy and 20-25 grams of protein per child per day
- ◆ Pregnant women and lactating mothers: Food supplement of 600 calories of energy and 18-20 grams of proteins per person per day

Further, the guidelines issued in 2009 by the Ministry of Women & Child Development allowed for fortification of the supplementary nutrition upto 50 percent of the recommended dietary allowance (RDA) level per beneficiary per day

Under this section, good practices on Product formulation have been listed under two sets of criteria:

2.4.1 THR for normal beneficiaries

2.4.2 THR for moderate & severely acute malnourished beneficiaries

¹¹ Revised Nutritional and Feeding Norms for Supplementary Nutrition in ICDS scheme, Feb, 2009 https://wcd.nic.in/sites/default/files/univ_icds5.pdf



2.4.1 THR for normal beneficiaries

i. Enriched THR prepared through fortification

a. Fortified THR with 50% RDA (Madhya Pradesh)

The Madhya Pradesh is producing THR products that meet most of the national and global standards.

Khichdi premix is served to children aged 6-36 months. The product is made up of fortified rice, roasted soya flour, moong dal, spices, and refined vegetable oils and fortified with Iron, folate, zinc (50% RDA); Vitamins B6, B12, and D (50% RDA). The product has improved palatability by reducing the size of particles and increased acceptability by reducing rancidity-causing raw materials.¹² (Table 2, 3)

Table 2. THR product formulation in Madhya Pradesh

THR product	Ingredients	Quantity	Per day consumption	Frequency of distribution	Weight of 1 packet
Khichdi premix	Fortified rice	70.50g	150gm	6 days in a week	900gm
	Soya flour	21g			
	Moong daal	37g			
	Spices	3g			
	Refined vegetable oil	15ml			

Table 3. RDA (%) contribution from Khichdi Premix

THR product	Energy-dense	Protein content	Ingredients	Sugar content	Fat content	Fortificants
Khichdi premix	Yes	14.3%	Fortified rice + soya + pulses	0%	33%	Iron, folate, zinc (50% RDA*); Vitamins B6, B12, and D (50% RDA)

*RDA: recommended dietary allowance

b. THR prepared by WSHGs fortified with 11 micronutrients, vitamins and minerals (Kerala)

The several States/UTs, especially those sourcing THR through private or public enterprises, already provide fortified products, but there are few examples of fortified THR provision through decentralized production models. Therefore, the good practice detailed out here refers to the integration of THR fortification by WSHGs.

¹² Source: Review of Take-Home Rations under the Integrated Child Development Services in India, World Food Programme; 2019 <https://www.wfp.org/publications/review-take-home-rations-under-integrated-child-development-services-india>



In Kerala, a nutritive powder is provided as THR locally known as Amrutham-Nutrimix. It is a product prepared by WSHGs of Kudumbshree mission across the State through 248, Nutrimix production units. This product includes 5 ingredients viz. wheat-45g, sugar-20g, bengal gram-15g, soya chunks-10g, and groundnut -10g per 100g of nutrimix. 135gm of nutrimix per day is provided to beneficiaries which provide them 500kcal and 12-15 gm protein. Amrutham Nutrimix is fortified with 11 micronutrients all over the State at 50% RDA for children aged 6-36 months. A NABL accredited laboratory is also on board to analyze the retention of micronutrients in fortified Amrutham-Nutrimix.¹³ (Table 4)

Table 4. Composition and attributes of Amrutham Nutrimix (Kerala)

THR Product	Ingredients	Quantity	Fortification	Per day consumption	Frequency of distribution	Weight of 1 packet
Amrutham-Nutrimix	Wheat	45g	11 micronutrients, namely Calcium, Iron, Zinc, Vitamin A, Thiamine, Riboflavin, Niacin, Vitamin B6, Folic Acid, Vitamin C, and Vitamin B12, at 50 percent RDA	135g	Monthly (7 packets)	500g
	Soya Chunks	10g				
	Bengal gram	15g				
	Ground Nut	10g				
	Sugar	20g				

c. Premix enriched with essential micronutrients (Gujarat)

In Gujarat ready to cook premix is provided to children 6-36 months, pregnant ladies, lactating mothers, and adolescent girls. Bal Shakti premix for children is made of wheat flour, soya flour, gram flour, sugar, oil. Matru Shakti pre-mix is for pregnant ladies and lactating mothers and Purna Shakti pre-mix is for adolescent girls. Both products are made of wheat flour, soya flour, maize flour, rice flour, gram flour, sugar, and oil. All premixes are in dry form, energy-dense, and enriched with essential micronutrients. The premixes are palatable and can even be consumed with lukewarm water. The products have a shelf-life of 4 months. (Table 5)

13 https://sightandlife.org/wp-content/uploads/2020/09/THR-Compendium_A-Cluster-Model-in-Kerala.pdf



Table 5. Composition and attributes of Bal Shakti and Purna Shakti (Gujarat)

THR Product	Ingredients	Quantity	Fortification	Per day consumption	Frequency of distribution	Weight of 1 packet
Bal Shakti (for Children)	Wheat flour	62g	Iron, Vitamin A, Calcium, Thiamine, Riboflavin, Niacin, Vitamin C and Folic Acid at 50% RDA	125 g	Monthly (7 packets)	500 g
	Gram flour	6g				
	Soya flour	10g				
	Sugar	36g				
	Oil	11g				
Purna Shakti (for Adolescent Girls) Matru Shakti (for Pregnant & Lactating Mothers)	Wheat	40g	Iron, Vitamin A, Calcium, Thiamine, Riboflavin, Niacin, Vitamin C and Folic Acid at 50% RDA	145 g	Monthly (4 packets)	1000 g
	Besan	4g				
	Soyabean Flour	19g				
	Maize	19g				
	Rice	15g				
	Sugar	31g				
	Oil	17g				



Figure 4: THR premixes: Balshakti, Matrushakti, Purnashakti

ii. Diverse THR products

a. Region Specific diverse Menu

Common feedback received from the ICDS THR beneficiaries is of monotony -that they have been receiving the same product for years. This affects the acceptability of the THR resulting in its limited use and diversion for consumption by the family, other than the target beneficiary. Therefore, several States/UTs, now distribute a variety of THRs, giving more choices to the beneficiary. A list of States/UTs producing multiple blended products are outlined in Table 6.

Table 6. Region-specific diverse menu

State	Products
Himachal Pradesh	Fortified Panjiri, Sweet dalia, Fortified wheat seviyan, Sprouted gram, Rice rajma, Rice khichari, Namkeen dalia, Fortified wheat oats & Ajwain biscuits
Karnataka	Multi-grain nutri-mix, Milk ragi mix, Rice kheer mix ,Multi-grain payasam, Groundnut green gram laddoo, Multi-grain laddoo
Madhya Pradesh	Khichdi premix, Halwa premix, Balahar premix, Sookha dalia, Atta besan laddoo, Wheat soya barfi
Gujarat	Fortified premixes, wheat and pulse-based energy food -Balshakti for children, Matru shakti for PLW, and Purna shakti for adolescent girls, fortified milk with THR , fortified groundnut oil , satva (double-fortified salt -iron and iodine) 1-kg packet / month for PLW and adolescent girls
Odisha	Eggs provided under THR to fulfill energy gaps and to improve quality of protein, THR for suji halwa, groundnut, jaggery, and sesame chikki for PLW, atta and besan laddoo/ Ragi and besan laddoo
Haryana	Micronutrient fortified panjiri, Refined fortified soyabean oil, Paushtik panjiri, Fortified skimmed milk

Details of types of THR, per day consumption, frequency of distribution, number of packets given, and weight of each packet in various States/UTs is given in **Annexure I.**

b. Special Initiative for 'Inclusion of Millets in THR (Chandigarh, Odisha)

- i. Looking at the nutritive value of millets and to promote their use in daily diet, the Union Territory of Chandigarh has taken an initiative to include millets -jowar and bajra (as per season) in the THR. Bajra millet was distributed from 16th December 2020 to 15th June 2021, and now jowar millet is being distributed since 16th June 2021. The objective is to improve the nutritional status of beneficiaries by providing them a healthy and balanced diet and also revives the age-old traditional culture of millet consumption. This was done by a dedicated supply chain through various Non-Profit Organizations (NPOs) who deliver the THR at various AWCs in the UT of Chandigarh.



- ii. Department of Odisha has introduced Ragi Ladoo in Keonjhar and Sundergarh districts since July, 2020 as morning snacks for the pre-school children (3-6 yrs) covered under ICDS. As the COVID protocols are currently in place, pre-cooked ragi laddu mix is provided via home delivery. The provisions are over and above the existing entitlements under SNP. Premix for Ragi laddo is prepared by the SHGs with technical support from Millets Mission and is supplied to the AWCs for the supply of Ladoo to the children. The core objective of the programme is to improve the nutritional status of pre-school children and revive the age-old traditional culture of millet consumption once prevalent among the tribal communities of Keonjhar. The initiative has provided an additional source of income to women's SHGs, an assured price to farmers for Ragi and a boost to local production of Ragi and other millets. With this historic step, Keonjhar became the first district in the state to include millets under ICDS. This is also a unique model in the country with decentralized production, procurement, processing, supply and consumption of millets. Taking into account, the successful implementation of the programme; it is now proposed to scale up the programme in the District Mineral Foundation (DMF) districts in the state.

c. Egg and Milk under THR (Andhra Pradesh, Haryana)

- i. YSR Sampoorana Poshana Scheme: Under the YSR Sampoorana Poshana Scheme in Andhra Pradesh, eggs and milk are provided to the beneficiaries. (Tables 7)

Table 7. Provision of egg and milk for children 6-36 months under YSR Sampoorana Poshana scheme

Commodity	Qty. per month
Balamrutham	2.5 kg
Eggs	25 nos.
Milk	2.5 litres

- ii. YSR Sampoorana Poshana Plus scheme- The beneficiaries in scheduled and tribal sub-plan mandals across the state are being covered under YSR Sampoorana Poshana Plus (+) Scheme. The state is providing egg and milk to the beneficiaries. (Tables 8)



Table 8. Provision of egg and milk for children aged 6-36 months under YSR Sampoorna Poshana Plus (+) scheme for scheduled and tribal sub-plan mandals

Commodity	Qty
Balamrutham	2.5 kg
Eggs	30 nos.
Milk	6 litres

- iii. Haryana is providing skimmed milk under Mukhya Mantri Doodh Uphaar Yojna from State funds to improve the health and nutritional status of children and mothers. Under the scheme, 200 ml of fortified skimmed milk which is fortified with Vitamin D3 in six flavors such as rose, ellaichi, chocolate, vanilla, butterscotch, and plain is being distributed for six days a week to pregnant and lactating women and children 1-3 year. Flavored milk is provided to avoid pilferage. The Fortified Sweetened Flavoured Milk is being supplied through Haryana Dairy Development Cooperative Federation (HDDCF) and Vita.

d. Special Initiative: (Ayush THR)

To improve the nutritional status, Gujarat state has taken an initiative of introducing the value addition of the Ayush component in present THR for pregnant lactating women and children under age group 6 months to 3 years. The product Balshakti is value added with *trikatu* and *vidang* which control intestinal worms and indigestion, improve appetite, help in weight gain and increase absorption of nutrients. The product Matru Shakti is value added with *jeera* and *musta* which improve appetite, help in weight gain, increase absorption of nutrients, prevent oxidation stress in preeclampsia, reduce abdominal pain and fever. (Table 11)

Table 11. Value addition in THR product

Product	Value Addition	Benefits
Bal Shakti +	<i>Trikatu & Vidang</i>	Control intestinal worms and indigestion Improve appetite Weight gain Increase absorption of nutrients
Matru Shakti +	<i>Jeera & Musta</i>	Improve appetite Weight gain Increase absorption of nutrients Prevent oxidation stress in preeclampsia Abdominal pain relief Reduce fever





Figure 5: Ayush THR: Value addition in THR product

2.4.2 THR for Moderate & Severe Acute Malnourished beneficiaries

The children with Moderate & Severe Acute Malnourishment (MAM & SAM) require more energy dense food as compared to children with normal nutritional status. The food given to children with MAM & SAM should be sufficient to meet their increased requirements of energy, protein and micronutrients. Different food items under THR provided by different States/UTs for malnourished beneficiaries can be categorized as:

- i. Increased THR quantity for malnourished children
- ii. Ready to Eat Snack prepared by SHGs
- iii. Enriched THR with extra protein, fat, and eggs
- iv. Ready-to-Eat Therapeutic Food for children

i. Increased THR quantity for malnourished children (Chhattisgarh, Rajasthan, Bihar and Kerala)

In Chhattisgarh, all children aged 6–36 months are given ready-to-eat packets of Shishu Shakti Ahaar as THR. All children in the normal category receive a 750-gram packet of THR per week, while children with SAM in the same age group receive a 1200-gram packet of THR per week.



In Rajasthan, children with normal nutritional status receive 4500g of THR every month, while SAM children receive 6500g of THR. In Bihar, children in the Normal and MAM categories in the age group 6months to 3 years receive rice (2.5kg), dal (1.25kg), and eggs (8 nos.) or soyabean (500g); children in the SAM category (6 months to 3 years) receive rice (3.75kg), dal (1.75 kg), and eggs (12 nos.) or soya bean (875g) every month. In Kerala, children (6 months-36 months) with normal nutritional status receive 7 packets of 500g each nutritive powder monthly, while severely underweight children receive double the quantity. In Gujarat, daily 125g of Balshakti is given to normal beneficiaries as THR and for severely underweight children, the THR quantity is 185g of Balshakti.



Figure 6: THR in Gujarat

ii. Ready to Eat Snack prepared by SHG (West Bengal)

In West Bengal, Ready to Eat (RTE) wheat-pulse mix is given to all identified severely underweight children 6-59 months, including SAM. A pack of 480g is given as weekly THR to each severely underweight/ SAM child to consume at least 80g of the mix every day at home. The RTE mix is being prepared by trained SHG clusters under the certification of FSSAI. (Table 12).



Table 12. Summary of Ready-to-Eat THR product for West Bengal

THR	Ingredients and composition (per pack)	Frequency of distribution	Number of packets given	Packet weight	Consumption per day	Available composition of ingredients (per day)	Available composition of ingredients (per 100 g)
Brand name of RTE product: 'Pushti' (Poustik Powder)	<ol style="list-style-type: none"> Roasted wheat flour: 228 g Roasted and crushed Bengal gram: 108 g Roasted and crushed groundnut: 84 g Sugar/castor sugar: 60 g 	Weekly	1	480g	80 g	<ol style="list-style-type: none"> Roasted wheat flour: 38 g Roasted and crushed Bengal gram: 18 g Roasted and crushed groundnut: 14 g Sugar/castor sugar: 10 g 	<ol style="list-style-type: none"> Roasted wheat flour: 47.5 g Roasted and crushed Bengal gram: 22.5 g Roasted and crushed groundnut: 17.5 g Sugar (castor sugar): 12.5 g

iii. Enriched THR with extra protein, fat and eggs (Telangana, Odisha)

- Balamrutham and Balamrutham plus were introduced by the Government of Telangana to provide improved supplementary nutrition for children between 6 months to 3 years of age. It is prepared using wheat, chickpeas (chana dal), milk powder, oil, and sugar. It is fortified to provide 50% of iron, calcium, vitamins, and other Recommended Dietary Allowances (RDAs) that children require per day. Technical support was provided to the Government of Telangana by the National Institute of Nutrition and UNICEF in revising the composition of Balamrutham to Balamrutham Plus. Revised THR (Balamrutham plus) contains more skimmed milk powder and oil, the addition of groundnut and rice flakes, but reduced amounts of wheat flour to lower the phytate content. Balamrutham Plus, with enhanced nutrient composition, is also given to children with MAM and SAM who are enrolled in the Supervised Supplementary Feeding Programme (Tables 13 and 14). In addition, these children also receive 1 egg and 100 ml of milk for 30 days and mini-meal + 5g extra oil for 25 days to enhance the quality of protein by including protein rich sources of animal origin.

Table 13. Composition of Balamrutham and Balamrutham Plus

Ingredients	Amount (per 100g)	
	Balamrutham	Balamrutham Plus
Roasted wheat	55g	26.7g
Bengal gram	5g	3.3g
Skimmed milk powder	10g	13.3g
Sugar	20g	20g
Oil	10g	20g
Groundnut	-	3.3g
Rice flakes	-	13.3g
Total	100g	100g

Table 14. Nutritive composition of Balamrutham and Balamrutham Plus per 100grams

Nutrients	Balamrutham			Balamrutham plus		
	Available in natural ingredients	Fortification	Total	Available in natural ingredients	Fortification	Total
Energy (kcal)	414	0	414	460	0	460
Protein (g)	11	0	11	11	0	11
Calcium (mg)	167	200	367	219	200	419
Iron (mg)	3.1	6	9.1	3.1	6.0	9.1
Vitamin A (µg)	2.5	200	202.5	0.1	200	200.1
Vitamin B1 (µg)	0.3	0.3	0.6	0.2	0.3	0.5
Vitamin B2 (mg)	0.2	0.35	0.55	0.3	0.4	0.6
Vitamin C (mg)	0.5	15	15.5	0.7	15.0	15.7
Folic acid (µg)	7.1	15	22.1	21.1	15.0	36.1
Niacin (mg)	2.3	4	6.3	1.5	4.0	5.5
Vitamin B12 (µg)	-	-	-	0.1	0.6	0.7

- b. In Odisha, routine THR consisting of chhatua, eggs, and THR for suji halwa is provided to children with normal nutritional status. Augmented THR is currently being provided for SAM children (6-59 months) identified in vulnerable projects in the state. Under the programme, augmented THR along with 1 egg per day is being provided to children aged 6-59 months in the SAM category. Augmented THR is prepared using ingredients like Wheat, Bengal gram, groundnut, sugar with the addition of vegetable oil and milk powder to make it energy dense. The addition of oil & milk



powder to the THR is done in order to enhance its protein quality and micronutrient content. The extra egg will further supplement protein and micronutrients for the SAM children (Table 15).

Table 15. Nutritive composition of THR – Chhatua given to children in Normal category vs Augmented THR – Chhatua given to children with SAM

Ingredients	Routine THR	Augmented THR
Wheat	62.5g	30g
Bengal gram	9.4g	10g
Groundnut	12.5g	10g
Sugar	15.6g	15g
Vegetable oil	-	15g
Milk powder	-	20g
Total	100g	100g
Nutritive Value		
Energy	346.0 kcal	462.0 kcal
Protein	11.0 g	16.0 g
Fat	5.0 g	20.1g

In addition to THR, beneficiaries under the ICDS in Odisha receive eggs in the following manner mentioned in Table 16.

Table 16. Provision of egg/other products

Beneficiary	Provision of egg*
Normal children (6months to 3 years)	Three boiled eggs per week
SAM children (6 months to 3years)	One egg daily

* Additional quantity of besan and atta/ragi and besan laddoo (60 pieces/month) is provided to children who do not eat eggs.



Figure 7: Children receiving eggs

2.5 QUALITY ASSURANCE AND QUALITY CONTROL

The THR is distributed to young children and pregnant and lactating women. It is therefore imperative to ensure that the products are safe for consumption. Quality assurance (QA) and quality control (QC) are integral parts of the production process.

Despite being a critical step in the production process, not much is known about the measures undertaken by different States/UTs on QA and QC. However, a few have been identified for good practices based on their quality checks of the THR product, and corrective action taken.

GoI Guidelines¹⁴

The Ministry of Women and Child Development has issued operational guidance for foods safety and hygiene in ICDS on 24th October 2013. The following needs to be taken care of, with regards to ICDS foods and THR:

- ◆ It should be ensured that the ICDS foods should be free from any contamination and adulterants.
- ◆ Segregation should be provided for the storage of raw, processed, rejected, recalled, or returned materials or products.
- ◆ Containers made of non-toxic materials should be provided for storage of raw materials, work-in-progress, and finished /ready to serve products. No raw material or ingredient thereof should be accepted by an establishment if it is known to contain parasites, undesirable micro-organisms, pesticides, veterinary drugs or toxic items, decomposed or extraneous substances, which would not be reduced to an acceptable level by normal sorting and/or processing.
- ◆ FIFO - 'First in First Out' - system should be applied to release the raw materials (for processing, packaging, and delivery) in order to protect the food from being stored too long and becoming contaminated or spoiled.

14 Ministry of Women and Child Development, Government of India. Operational Guidelines for Food Safety and Hygiene in ICDS.F. No. 5(25)/2010/ND-Tech Pt. dated 24th December 2013https://wcd.nic.in/sites/default/files/merged_document_3



- ◆ Food should be sent for laboratory testing at regular intervals. The States and UTs may consider engaging CSIR institutes/National Accredited Board for Laboratories accredited and other recognized labs for carrying out sample checking of SNP, to ensure quality food is provided through ICDS.
- ◆ Periodic inspection (preferably every week) should be undertaken.

Adherence to Quantity Standards and Testing¹⁵

States/UTs shall ensure the quality of Supplementary Nutrition being provided with reference to the norms of food safety as well as nutrient composition. Supplementary Nutrition must conform to prescribed standards laid down under the Food Safety and Standards Act, 2006 and regulations made thereunder to ensure consistent quality and nutritive value per serving. The periodicity of sample testing shall be once in a quarter of an annual year, per project. Take-Home Ration (not raw ration), shall be tested from FSSAI owned/registered/empaneled/NABL accredited laboratory. Random testing must be conducted by Anganwadi Services functionaries after receipt of stock at the AWC or at the Block level. Anganwadi Services functionaries i.e. CDPO or Supervisor shall draw the samples, as per the prescribed procedure and send the sample for testing to a FSSAI owned/registered/empaneled/NABL accredited laboratory.

2.5.1 Quality control

Quality control is the process by which products are tested to ensure that they meet the standards. It encourages quality consciousness, satisfaction of consumers, reduction in production cost and most effective utilisation of resources. The following quality control mechanisms are adopted by the States/UTs:

- Robust testing mechanism
- Batch testing from Government Analytical Labs

i. Robust testing mechanism (Gujarat, Telangana, Odisha, Mizoram)

- In Gujarat Quality checks are carried out from the procurement of raw materials to every step in the production process at the AMUL THR facility. Wheat is sampled by respective milk unions' QA personnel at

¹⁵ Ministry of Women and Child Development, Government of India. Streamlining Guidelines on 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. 573479/2021/PM. No...CD -I-24/2/2021-US (e- 90701) .Dated 13th January, 2021.



the FCI / CWC godown. Once the lot is approved, the milk union starts lifting the wheat from the FCI / CWC godown. Wheat is then unloaded and transferred to the storage area/silo for cleaning purpose.

Apart from an online quality check system, in-house lab testing of the final THR product is also done. After clearance from the quality department only, THR product is dispatched from the plant. Additionally, random samples drawn from each THR batch are sent for analysis to the Food & Drug Laboratories of Government of Gujarat.¹⁶

- b. Telangana Foods, a Govt. of Telangana undertaking is a subsidiary under Dept. of Women Development & Child Welfare department, specifically to produce nutritive Modern therapeutic foods (MTF) and ready-to-eat snack foods for children under ICDS program. Telangana Foods is an ISO 22000:2018 certified institution, having a nationally accredited quality control laboratory with ISO 17025:2017 certification and undertakes quality tests on food quality in its own facility at all levels of production, from procurement of raw material to the final product stage. The on-site laboratory tests the quality of raw materials, packaging, and the finished THR. They also have the capacity to test vitamins and mineral composition. Any complaints received on THR quality are immediately addressed through quality control testing in the laboratory.
- c. In Odisha THR samples are sent from the ICDS projects to the State Public Health Laboratory every month for quality testing. The lab submits the test report to the Child Development Project Officers (CDPOs) after testing.

Monitoring squads have been constituted at the districts and blocks - they make random checks during the preparation of THR and ensure that proper quantity and quality is maintained.

Fixed day approach has been adopted for monitoring the quality of THR. Ingredients of THR (Chhatua) are mixed on the 23rd of every month and THR is distributed on the 1st of every month at the AWCs. This has helped in maintaining the quality of THR and in ensuring transparency.

- d. In Mizoram for quality control, samples are sent to Food & Nutrition Board Regional Food Testing Laboratory, Department of Women & Child Development Government of India in Kolkata for analysis, ensuring that the THR conforms to the national standards.

¹⁶ A Public-Private Partnership in Gujarat: The Amul Case Study https://sightandlife.org/wp-content/uploads/2020/09/THR-Compendium_PPP-in-Gujarat_The-Amul-Case-Study.pdf



ii. Batch testing from Government Analytical Labs (Kerala)

In Kerala, under the Kudumbashree Mission, all the samples are tested from each batch of product from a Government Analytical Laboratory by the ICDS Supervisor in-charge. The production unit follows the government-approved SOP to ensure quality. Surprise visits are conducted by an approved joint committee comprising of Programme Officers from the Social Justice Department and Kudumbashree District Mission Team. Food and Safety officials conduct regular visits to the units and assist them in improvement. District-wise food and safety training are periodically given to all unit members.¹⁷

2.5.2 Quality enforcement

Some of the States have taken strict action in case of non-compliance of prescribed product parameters including cancellation of the contracts, and replacement of the product in stipulated time.

i. Strict action in case of non-compliance as per prescribed parameters (Odisha, Rajasthan, Mizoram)

- a. In Odisha, non-compliance to the prescribed parameters set in the THR guidelines with regards to production and supply of quality THR invites strict action against the SHG, which includes termination of the contract, stoppage of microcredit support by the department, and/or enforcement of fine. Proper procedure ensuring natural justice is followed before taking any action.
- b. In Rajasthan, cases of non-compliance to quality parameters and nutritional standards of THR by the WSHG attract warnings in the first instance. In case of repetition of non-compliance, the contract with the WSHG is cancelled.¹⁸
- c. In Mizoram, in case the THR product is found to lack the quality control parameters laid down, they are instructed to comply with the nutritional norms while also ensuring the nutritional food is fit, hygienic, and palatable for consumption. In case of repetition or non-compliance, penal action is taken in which case security deposit is forfeited and contract order cancelled.

¹⁷ https://www.kudumbashree.org/storage/files/zutiy_40.nutrimix%20document.pdf

¹⁸ ICDS Rajasthan.(2020, September 22). Order No. 103684 Regarding making available nutritional supplements regularly to all registered beneficiaries. <https://wcd.rajasthan.gov.in/content/dam/wcd-cms/icds/order/2020/103684%202292020>



ii. Replacement of product in 30 days and penalty charge (Gujarat)

If the product fails the microbiological parameters, making the product unsuitable and unacceptable to consumers, the producers are liable for replacement free of cost at the ultimate destination. The manufacturer (dairy union) is expected to replace such product within 30 days from the date of intimation. Upon failure to replace the unsuitable products within the given time limit, a penalty at 5% of the invoiced price is recoverable from the manufacturer.

As far as premises are concerned, the premises are expected to reach the AWCs within a maximum delivery period of 50 days from the date of the receipt of the wheat or dispatch advice whichever is later. After completion of 50 days of delivery period, penalty is charged at 1% from the 57th day up to the 80th day for the quantity delivered late or remains undelivered. After 80 days, penalty is charged at 2%.



2.6 PACKAGING AND LABELLING

Good practices on packaging and labelling were identified based on innovation and the use of packaging to convey relevant nutritional messages to end-users, caregivers, and families of the beneficiaries.

GoI Guidelines¹⁹

The operational guidelines on Food Safety and Hygiene issued by the Ministry of Women & Child Development on 24th October 2013 also cover packaging and labelling. The packaging and proper labelling of the THR is crucial in maintaining its quality. THRs should comply with the following for packaging and labelling:

- ◆ Packaging unit should be close to the processing unit. The packaging unit should be clean and be made free from spilled powdered food materials which may attract or harbour pests, rodents, or micro-organism.
- ◆ Weight machine, sealing machine, scoops, and packaging material should be available.
- ◆ Packaging should be done wearing proper apron, head gear, gloves, and mask to cover mouth and nose. No footwear should be allowed in the area.
- ◆ Packaging materials should be such that it provides protection for all food products to prevent contamination and damage. Packaging material should be those which are permitted as laid down under the FSSAI Act and the Regulations there under.
- ◆ Processed food should be packed on the day of production to prevent any possible infestation or adulteration.
- ◆ Packets should carry proper labelling and information such as: Name of the Product, Nutritive value, Ingredients used, Instructions for use /process of consumption, best before, Batch number, Date of packing, Weight of the product, Name of the producer, Address of the producer.
- ◆ All packets should carry the label 'Food for ICDS supplementary nutrition –Food not for sale'. Immediately after packaging and proper labelling, the products should be placed in the rooms provided for storage under the required temperature and humidity conditions to prevent any spoilage.

¹⁹ For more details on the guidelines, please refer to Ministry of Women and Child Development, Government of India. Operational Guidelines for food safety and Hygiene in ICDS.F. No. 5(25)/2010/ND-Tech Pt. dated 24th December 2013. https://wcd.nic.in/sites/default/files/merged_document_3



2.6.1 Packaging of THR product

Packaging for THR products is important for a number of reasons. Firstly, good packaging conveys a sense of quality about the products to the end user and ensures better usage and adherence to the product.

Secondly, packaging offers an opportunity to educate users about preparation and use of the product. Additional information on appropriate feeding practices for infants and young children can also be provided. The packaging methods adopted by different States/UTs are as follows:

- i. Beneficiary specific colour coded packets
- ii. Glass bottle distribution
- iii. Customized weight specific packets

i. Beneficiary specific colour coded packets (Odisha)

Colour-coded packets are distributed to different beneficiary categories:

- ◆ Yellow: Pregnant/lactating women
- ◆ Blue: Children 6–36 months
- ◆ Red: Severely underweight children

Given that the State Government distributes multiple products, colour-coded packs ease the job of the AWW during distribution. The THR products for young children also carry messages on the importance of breastfeeding.

ii. Glass bottle distribution (Kerala)

To ensure appropriate storage of the THR post opening of the packet, the State distributes glass bottles as a one-time activity.

iii. Customized weight specific packets (Telangana)

The weight of packages of Balamrutham is customized to 1.25 kg packets from the previously existing 2.5 kg to facilitate easy consumption of the weaning food. This has ensured a hassle-free storage and maintains freshness at the household level as the weaning food can be consumed from smaller packets as and when required thereby preventing spoilage/contamination. The packaging designs of Balamrutham and Murukulu (snack food) provided as THR are made in attractive packaging designs to appeal to children. (Figure 8)





Figure 8: Customized weight-specific packets

2.6.2 Labelling on packets

Labelling of the THR is crucial in maintaining its quality. Labelling products not only provide crucial information and instructions to beneficiaries but can also help the product stand out. They are usually on the back of the product and contain important product information.

i. Customized messages on packets (Jharkhand)

THR is packaged as per pre-decided norms and protocol; it gives an opportunity for the department to customize messaging to effectively reach the households. This has a lot of potentials, especially in times like the COVID-19 pandemic.

ii. Instruction of preparation method (Arunachal Pradesh, Gujarat, and Madhya Pradesh)

The THR packs in **Gujarat and Madhya Pradesh** carry instructions on the THR packs on how to prepare dishes using the product. The THR of **Arunachal Pradesh** contains information like nutritive value, ingredients, shelf life, manufacturing month, manufacturer details, and instruction for preparation method. In addition, it is labeled as *specially packed for SNP-Arunachal Pradesh*.

iii. Informative labelling (Mizoram)

THR are procured from manufacturers having fully automated plants and technical expertise thereby ensuring zero contamination, which is crucial for maintaining quality. Packets are properly labelled and information such as the name of the product, nutritive value, instructions for use/preparation for consumption, ingredients, best before, batch number, date of packaging, weight of the product, name of the producer, and address of the producer are clearly indicated. Packets are also labelled with '*Specially Packed for SNP, Not for Sale*'



2.7 MONITORING

As with any programme or activity, monitoring is important for accountability, to be able to measure impact and ensure that the target beneficiaries have received the product.

To provide systemic approaches, several States have introduced some management practices into ICDS, such as involving community groups like SHGs, Mothers' Committees, Jaanch Committees, real-time monitoring systems for use in monitoring of day-to-day functioning of AWCs.

GoI Guidelines²⁰

The Ministry of Women and Child Development, Government of India in its operational guidelines on food safety and hygiene issued in 2013 specifies several monitoring protocols and standard operating procedures that need to be followed at different stages of THR production and distribution.

As per Operational guidelines issued by the Ministry of Women and Child Development dated 24th October 2013 on Food Safety and Hygiene in ICDS, the Five-Tier Monitoring and Review Committees setup under ICDS should monitor the different aspects of supplementary nutrition and ensure that food safety measures are adhered to at all levels. CDPOs and ICDS Supervisors have the primary responsibility of monitoring of the Supplementary Nutrition Programme in their jurisdiction. ICDS Supervisors should ensure that all AWCs under their jurisdiction follow proper norms of food handling, right from receipt of stocks to delivery of supplementary nutrition to target beneficiaries. They should also inspect the general hygiene of the AWCs and personal hygiene of workers and other food handlers. Simple checklists should be used for monitoring food safety measures at every stage by Supervisors/ CDPOs. The Anganwadi-Level Monitoring and Support Committee and Gram Panchayat Pradhans should be involved for monitoring of activities under Supplementary Nutrition. District-level monitoring committees should review the Supplementary Nutrition Programme under ICDS regularly and redressal mechanism may be set up for at the district level.

- ◆ Food and Nutrition Board, Ministry of WCD, with its 43 field units carry out inspection and monitoring of Supplementary Nutrition.
- ◆ Central Monitoring Units (CMUs) carry out monitoring of ICDS Services.

²⁰ Ministry of Women and Child Development, Government of India. Operational Guidelines for Food Safety and Hygiene in ICDS. F. No. 5(25)/2010/ND-Tech Pt. dated 24th December 2013
https://wcd.nic.in/sites/default/files/merged_document_3



Appropriate records of food processing/preparation, production/cooking, storage, distribution, service, food quality, laboratory test results, cleaning and sanitation, pest control and product recall should be kept and retained for a period of the shelf-life of the product.

This review has focused on two main components of monitoring:

2.7.1 Real time monitoring

2.7.2 Community participation in monitoring



Figure 9: Community involvement

2.7.1 Real time monitoring

Real time monitoring involves robust digital technology platform and management information system (MIS) designed to view the complete status of service delivery to all categories of beneficiaries, namely pregnant women, lactating mothers and children. The system enables tracking of all AWCs, AWWs, and beneficiaries on THR delivery.

i. Real time monitoring using call centres (Jharkhand)

In 2011, the Real Time State Monitoring Cell was launched at the Directorate of Social Welfare, Ranchi, with support from UNICEF. The monitoring cell is a call centre through which real time feedback on regular functioning of AWC is collected from AWWs and beneficiaries. This information includes timeliness of the distribution of supplementary nutrition, quality and available quantity of food at AWC level, availability of essential items, adequate infrastructure facility at AWC for effective delivery of service, and availability of adequate and safe water sources.

ii. GPS enabled monitoring system (Gujarat)

Government of Gujarat has developed the online monitoring system to keep eyes on the entire distribution process. Before the THR stock is dispatched to the AWCs, advance intimation is sent to the AWWs. All delivery vans have GPS. The THR stock delivered at the AWC is authenticated through a system generated, One Time Password. Quantity of THR delivered with the exact delivery time gets recorded in the system.

The entire chain of distribution process right from demand generation till the delivery to the AWC is closely-monitored by State Management Centre (SMC) established at the Commissionerate of Women and Child Development with support of GVK EMRI through an online system which allows access to each stakeholder. Desk operators at State Management Centre (SMC) monitor each delivery, and follow-up with the AWWs, supervisors and other officers for timely lifting of food grains under HCM and distribution of THR to beneficiaries.

2.7.2 Community participation in monitoring

Community ownership of any project increases transparency, accountability and quality standards. Various states have engaged communities in monitoring of THR supply chain as well as products.

i. Community participation in monitoring of THR production and distribution (Odisha)

In order to encourage community participation and ownership of the THR programme, community-level monitoring is institutionalized through the formation of Mothers Committees (MC) at each AWC and Jaanch Committees (JC) at each revenue village in Odisha. The role of MCs is to ensure quality of THR distributed at AWCs and the role of JCs is to ensure that the programme maintains prescribed quality and quantity. Both committees are constituted of well-educated individuals from the locality. Greater community involvement during implementation ensures accountability in the timely distribution of high-quality THR to beneficiaries. Additionally, in Odisha there is a system in place wherein the government staff (supervisors, CDPOs, DSWO, and staff from Mission Shakti) regularly visit the THR production units on fixed days of the month to oversee the production process.

ii. State level Monitoring Committee (Telangana)

'Telangana Foods' has a Nutrition Council which meets twice a year. It is headed by the Chief Secretary to the Government of Telangana and includes a member from the National Institute for Nutrition for oversight on the nutritional quality



of THR. An executive committee, that convenes every quarter, oversees regular THR production operations.

Vigilance teams are formed at the level of Commissionerate and District level to collect random samples from the field/suppliers of various commodities of THR like red gram, milk etc., for checking quality of food items to ensure the food is free from adulteration, spoilage or contamination. Samples of every batch are sent for quality testing at nationally accredited food testing laboratories and reports are collected. Punitive actions are taken on defaulters for any lapses in quality as per the terms and conditions applicable.

iii. Supervision under local task force during pandemic (Mizoram)

During the first and second waves of the COVID-19 pandemic, AWCs could not be opened everyday due to the enforcement of lockdowns/partial lockdowns and other containment measures. Even in such times, the Local-Level Task Force (a committee comprising of local leaders to combat COVID-19 by ensuring safety protocols) played a key role in the distribution of THRs. Under their supervision, AWWs while following strict COVID-19 protocols (social distancing, wearing of face masks, distributing hand sanitization materials, etc.), also distributed essential food items from the AWCs to their beneficiaries.

iv. Anganwadi- level Monitoring and Support Committee (Himachal Pradesh)

The Anganwadi-level Monitoring and Support Committee (ALMSC), which comprises members from amongst Pachayati Raj Institutions (PRIs), SHGs, beneficiaries (ICDS), local teachers, health workers, etc., with AWWs as member secretary, decides the local source of procurement of green leafy/root vegetables and pass a resolution to this effect. Thereby, the AWWs procure it from the source decided by the ALMSC. Further, this Anganwadi-level committee also ensures the smooth functioning of AWCs and also exercises checks on proper delivery and distribution of supplementary nutrition. The Gram Panchayat Pradhans have been empowered to inspect the AWCs and also to exercise check on the distribution of supplementary nutrition, balance stock of nutrition, balance stock of nutrition available in the centers, quality of nutrition and storage/maintenance of food items, etc.



2.8 SOCIAL AND BEHAVIOUR CHANGE COMMUNICATION (SBCC)

The THR distributed through the ICDS scheme can prevent malnutrition in young children and improve pregnancy outcomes if its benefits and importance are conveyed effectively to the end-users. However, it is understood that the natural link between THR and nutrition is best addressed through social and behavior change communication (SBCC) conducted during the process of product distribution.

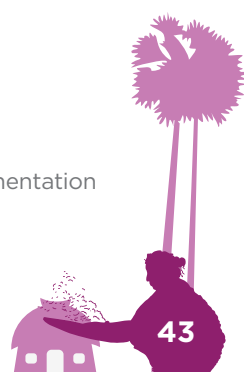
For the purposes of this document and its focus on THR, examples have been picked, which establish connections between the THR distributed, nutrition, and SBCC.

GOI Guidelines²¹

As per the administrative guidelines issued by the Ministry of Women and Child Development, Government of India on the implementation of the National Nutrition Mission on 26th February 2018, IEC activities play a very important and strategic role in the area of public health. A successful IEC plan would help in refuting myths and misunderstandings prevalent in the society and will lead to a demand for the various health services being provided, thus bringing about a behavioural change among individuals and the community at large.

The IEC strategy aims to create awareness and disseminate information regarding the benefits available under the various nutrition- and health-related government schemes and to guide the citizens on how to access them. The objective is also to encourage build-up of health-seeking behaviour among the masses in keeping with the focus on promotive and preventive healthcare. The IEC strategy will cater to different needs of the rural and urban masses through the various tools used for communication. Separate funds shall be allotted for this purpose at the Centre and State levels. The IEC activities mostly will be done through the following methods: (a) Print media (b) television (c) All India Radio (d) Social media campaigns.

²¹ Ministry of Women and Child Development, Government of India. Administrative guidelines for implementation of National Nutrition Mission. NNM/2017-WBP; 2018.



2.8.1 Use of color-coded flyers for improved complementary feeding practices (Kerala)

The Department of Women and Child Development, Government of Kerala in collaboration with the World Food Programme have developed a set of flyers on age-appropriate complementary feeding practices. These flyers are designed for children between 6–8 months of age, 9–11 months of age, 12–23 months of age, and for feeding of young children during illness.

Whilst stressing upon the consistency, quality, and frequency of complementary feeds to be given to young children, the flyers also stress upon the importance of the local THR – Amrutham-Nutrimix. These age-appropriate flyers are distributed to the caregivers of young children at the AWC when they collect the THR. In addition to these flyers, the State has also invested in development of other IEC material and conducting folk media campaigns highlighting the importance of including THR in a young child’s diet (Figure 10).



Figure 10: IEC materials highlighting the importance of THR in everyday diet

2.8.2 Community based events (Telangana)

Community-based events are organized at the Anganwadi-levels for a day, mobilizing young mothers and family members of children to enhance awareness on nutritional values. Different activities are conducted during these events such as:

- a. Demonstration of different food recipes and a variety of dishes are prepared during the programme to train mothers to prepare palatable and tasty dishes for their children using THR commodities. Family members like mothers-in-law and husbands of pregnant and lactating women are particularly involved during these community-based events to create awareness on healthy food practices, behavioural aspects, etc. Cooking and food recipe competitions are also conducted for husbands during these events.



- b. Personnel from line departments such as health and panchayati raj are invited during these programmes and awareness on good health and nutrition practices is created among pregnant women and lactating mothers through such channels.

2.8.3 Training of AWW and SHGs on nutrition (Jharkhand)

The AWWs, members of SHGs were jointly trained by the Social Welfare and Jharkhand State Promotion Society on nutrition and services is being provided through AWCs. These 29,342 women eventually become an asset for promoting nutrition in their community and play a significant role in sharing the importance of good nutrition in their weekly meetings.

2.8.4 IEC material focusing changing behavior pattern (Odisha)

The Department has developed various IEC materials for promoting complementary feeding practices. Animation videos have been developed with the protagonist tiki mausi promoting messages on complementary feeding for children.

The IEC activities focus on changing behavior patterns related to IYCF practices and ensuring improved practices on consumption of THR.

2.8.5 Awareness about nutritional content of traditional and local food (Mizoram)

For the purpose of behavioural change communication, a nutri-plate chart is being supplied to mothers and they are told about the nutritional contents of traditionally and locally available fruits, vegetables, pulses, legumes, and sources of protein. This helps mothers in getting informed of the various foods that are locally available along with their nutritional contents to ensure that there is 360-degree coverage of all nutrients that are needed by their child.

This nutri-plate chart also includes tables of locally available food items that would help ensure mothers to include them in their daily food intake. It also helps mothers in receiving and spreading the good message, through word-of-mouth, conveying the nutritional importance of the five food groups – vegetables, fruits, whole grains, healthy proteins, and dairy products – that can help enhance the nutrition intake and aid in growth and development of their child. This process imparts nutritional knowledge to the local community thereby ensuring that they include all the five food groups in their daily food plate and that each child is not missing out on any nutrients from the different food groups that are essential for their growth. This also helps mothers who are not aware of the good practices for their child’s nutritional intake and they come to know about the positive effects of good nutritional intake in a child’s growth and development.



2.8.6 Message through digital platform (Maharashtra)

In order to ensure continuity of counselling efforts despite the challenges posed by the COVID-19 pandemic, *Tarang Suposhit Maharashtra* was conceived as an adaptation, and launched by the Department of Women and Child Development, Government of Maharashtra. Through these digital communication platforms, the department reaches out to households in the State and conveys essential nutrition-related information customized to the household's needs. The digital platform - *Tarang Suposhit Maharashtra* - encompasses a multichannel approach by integrating IVR helpline, auto-generated broadcast calls/ SMS, and a whatsapp chatbot. The system empowers parents to assess the nutritional condition of their children, and seek for suitable system-generated follow-up messages.

Major themes accessed through these platforms are nutrition during COVID, early childhood development, and nutritious recipes. The digital platforms strengthen the supplementary nutrition programme by providing information about both HCM and THR, readily available to the users. Nutritious recipes using the THR are demonstrated through the '*Ek Ghas Mayecha: Feeding with care*' video series. These videos also help in creating awareness around complementary feeding and responsive feeding.

The screenshot shows a YouTube playlist for the video series 'एक घास मायेचा (Ek Ghaas Mayecha)'. The playlist includes 8 videos, each with a thumbnail and a duration. The channel is 'Rajmata Jijau Mother-Child Health and Nutrition Mission' and has 32 videos, 46,222 views, and was last updated on May 19, 2021. The videos are:

1. एक घास मायेचा चे स्टार्स (0:34)
2. Tandul Mugdal Kheer - एक घास मायेचा (2:39)
3. Khajur Barfi - एक घास मायेचा (2:22)
4. Boiled Chat Egg - एक घास मायेचा (2:11)
5. मुगाचे धिरडे - एक घास मायेचा (3:02)
6. Tomato Rice - एक घास मायेचा (3:04)
7. मुगाचा शिरा - एक घास मायेचा (3:03)
8. वरण फळ - एक घास मायेचा

Figure 11: '*Ek Ghas Mayecha: Feeding with care*' recipe video series



The digital platforms have been further optimized through its use for program monitoring and improvement. Through the platforms, parents can participate in a social audit through whats app and IVR and provide feedback regarding ICDS services such as THR delivery and access, as well its usefulness at the household level. The data captured is valuable for State and district level review and mid-course correction in programs.

So far, the platform has reached more than 35 lakh program participants. whats app chatbot has been used by 13 lakh users through 5 crores messages. About 21 lakh calls have been received on IVR Helpline. Broadcast calls/SMS have been sent to 38 lakh people. More than 76 thousand people have responded to the social audit through whats app and the IVR system





चरुड तीव
 नानि पिनि काय काय राणा वी
 सोडली काय।
 काय सडु वरुड-वर
 काडका पिने विवा फार
 काडकाय घर वरुड या
 पिनांनी लोका मजबु या
 सडुनी रावोली काद या
 कायती विव मजबु या
 टावली उरु सोव या
 एक दोन तीव-वार

श्रीगणेशाय नमः
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प्राणी

प्राणी



3

WAY FORWARD

WAY FORWARD

India is committed to achieve Sustainable Development Goals (SDGs)-2030. Sustainable Development Goals aim to end all forms of malnutrition and achieve zero hunger. In this direction, Supplementary Nutrition Program under ICDS plays a pivotal role by trying to bridge the gap of nutrients in the diet of vulnerable groups such as pregnant women and lactating mothers, children 0-6 years of age and adolescent girls.

Take Home Ration is provided to pregnant and lactating women and children 6 months to 3 years of age. States/UTs have tried to improve its procurement, production, product formulation, quality, monitoring and supply chain management. Further, there is realization that more value can be delivered from THR in terms of improving complementary feeding practices for young children and thereby preventing malnutrition and boosting nutritional status of pregnant women and lactating mothers, leading to better birth weights of children and improved health outcomes.

There continue to be some persistent challenges across the THR value chain. In order to realize the full potential of the THR, all components of this value chain need to function at optimum. This therefore calls for the following:

- ◆ Building a robust system for procurement, supply chain management and monitoring that ensures complete transparency, standardized process, sustainability, full coverage, leverages local ties, foster a culture of collaboration, builds trust within a community, and less susceptible to corruption and mismanagement.
- ◆ Adoption of such production model that not only helps to optimize production but also improves THR access in rural areas, produces THR with high nutrient value through addition of micronutrient premix, enhances community ownership involving SHGs and promotes income generating activities and female empowerment.
- ◆ It is important to provide, good quality THR product having nutritive value rather than ensuring only calories and proteins.
- ◆ Quality testing is an integral part of assurance of good product to beneficiaries. The States/UTs may consider regular testing of THR through recognized labs, to ensure quality meal through ICDS.
- ◆ To improve the nutritional status of beneficiaries, it is important to aware masses about nutritional value of food through Information Education



and Communication (IEC) material distribution, message through digital platform, community based events and dissemination, capacity building of AWW and SHGs, community mobilization and action.

Key takeaways

- ◆ Regular sensitization of States/UT on the enhanced role of THR as well as dissemination of guidance notes on different aspects of THR.
- ◆ Creation of opportunities for cross-learning between States/UTs for mainstreaming of good and innovative practices.
- ◆ Implementation of good practices in THR across the value chain with enhanced coverage, continuity, quality, and intensity.
- ◆ Greater adoption and enhancement of good practices and sharing back these innovations





ANNEXURE

ANNEXURE I

THR IN VARIOUS STATES/UTs

Bihar

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
Normal and MAM children (6months to 3years)	THR for 25 days	Monthly	Rice(100g), Dal(50g), Soya bean(20g) =170g/day	Rice: 2500g Dal: 1250g Soya bean: 500g =4250g (170gx25days =4250g)
SAM children (6months to 3years)	THR for 25 days	Monthly	Rice(150g), Dal(70g), soya bean(35g) =255g/ day	Rice: 3750g Dal: 1750g Soya bean: 875g =6375g (255g x25 days =6375g)
Pregnant Women and Lactating Mothers	THR for 25 days	Monthly	Rice(140g), Dal(60g), Soya bean(18g) =218g/ day	Rice:3500g Dal:1500g Soya bean: 450g =5450g (218g x25 days =5450g)

Chhattisgarh

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
Normal and MAM children (6months-3 years)	Ready to Eat (RTE) for 6 days	Weekly	(Shishu Shakti Ahar) Wheat(37.5g), Soyabean (12.5g) Channa(25g) Jaggery(33.75g) Fortified soya bean oil (6.25g), Peanut (6.25g) Ragi (3.75g) =125g/day	750g (125g x 6 days = 750g)



Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
SAM children (6 months -3 years)	Ready to Eat (RTE) for 6 days	Weekly	(Shishu Shakti Ahar) Wheat(60g) Soyabean (20g) Channa(40g) Jaggery(54g) Fortified soyabean oil (10g) Peanut (10g) Ragi (6g) =200g/day	1200g (200g x 6 days = 1200g)

Gujarat

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
Normal Children (6 to 36 months)	Ready to Cook (RTC) - Bal Shakti for 28 days	Monthly	Fortified Wheat(62gm), Besan (6g), Soyabean flour (10g), Sugar(36g) Fortified oil (11g) =125g/ day	500g per packet 7 packets provided for 25 days 500g x7days =3500g 3500g for 28 days
SUW (6 to 36 months)	RTC -Bal Shakti for 27 days	Monthly	Fortified Wheat(92gm), Besan (9 g), Soyabean (15g), Sugar(53g) Fortified oil(16g) = 185g/day	500g per packet 10 packets are provided for 25 days 500g x10 packets =5000g 5000g for 27 days
Pregnant Women and Lactating Mothers	Ready to Cook (RTC) -Matru Shakti for 28 days	Monthly	Fortified Wheat(40g) Besan (4g) Soya bean Flour(19g) Maize(19g), Fortified Rice(15g) Sugar(31g) Fortified oil(17g) =145g/ day	1000g per packet 4 packets are provided for 25 days 1000g x 4packets =4000g 4000g for 28 days



Haryana

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
Normal children (6 months to 6years)	Panjiri for 6 days	Weekly/ Fortnightly	Fortified Wheat(100g) Oil (15g) Sugar (35g) =150g/day	No packing is done as panjiri is being prepared by the mother group
SAM children (6 months to 72 months)	Paushtik Panjiri for 6days	Weekly/ Fortnightly	Fortified Wheat (100g), Besan (20g) Peanut(15g) Fortified Oil (15gm) Sugar (50g) =200g/day	No packing is done as panjiri is being prepared by mother group

Kerala

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
All children (6months to 5 years)	Amrutham-Nutrimix for 25 days	Monthly (7 packets)	Wheat (60.8 g) Soya chunks 13.5g) Bengal gram (20.3g) Groundnut (13.5g) Sugar(27g)	500g per packet 7 packets provided for 25 days 500g x 7days =3500g (3500 g for 25 days)
SUW Children	Double quantity provided			

Karnataka

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
Normal children (6 months to 6years)	Pusthi powder for 25 days	Monthly	Roasted rice powder (18g) Roasted wheat powder (36 g) Roasted green gram powder (40g) Roasted bengal gram powder(6g) =100g/ day	2500 g 100gx25 days=2500g



Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
SAM children (6 months to 6years)	Pusthi powder for 25 days	Monthly	Roasted rice powder(27g) Roasted wheat powder(54g) Roasted green gram Powder(60g) Roasted bengal gram powder(9g) =150g/ day	3750g 150gx 25days =3750g

Madhya Pradesh

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
All children (6months to 6 years)	Energy-dense Balahar for 5 days	Weekly	Roasted wheat flour (57.6g) Sugar (19.2g) Roasted soya flour (16.8g) Milk powder (14.4g) Vegetable oil (12g) =(120g/day)	600g (120g x 5 days = 600 g)
All children (6months to 6 years)	Energy-dense premix khichdi for 5 days	Weekly	Fortified Rice (58.75g) Moong dal (31.25g) Defatted soyagrits (17.5g) Oil (15g), DFS, spices and condiments (2.5g) = (120g/ day)	600g (120g x 5 days = 600 g)
All children (6months to 6 years)	Energy-dense premix halwa for 5 days	Weekly	Roasted wheat flour(50g) Roasted soya flour (16.8g) Sugar(19.2g) Roasted besan (9.6g) Milk powder(12g) Refined vegetable Oil(12g) =(120g/ day)	600g (120g x 5 days = 600 g)



Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
Normal children (3-6years)	Sookha daliya mixture for 15 days	Fortnightly	Wheat (79g) Moong dal (48g) Soyabean (10g) Groundnut (13g) =(150g/ day)	2250g (150g x 15 days = 2250 g)
Normal children (3-6 years)	Sookha khichdi choora for 15 days	Fortnightly	Wheat (65g) Maize (35g) Moong dal (30g) Chana dal (20g) =(150g/ day)	2250g (150g x 15 days=2250g)
MUW children (6months to 5years)	Sookha dalia mix for 15 days	Fortnightly	Wheat (125g) Moong dal (55g) Soyabean (20g) Groundnut (30g) =(230g/ day)	3450g (230g x15 days =3450g)
MUW children (6months to 5years)	Sookha khichdi choora for 15 days	Fortnightly	Wheat (110g) Maize (60g) Moong dal (40g) Chana dal (30g) =(240g/ day)	3600g (240g x15 days =3600g)
Pregnant and lactating women	Gehu soya barfi premix for 6 days	Weekly	Roasted Wheat Flour(63g) Roasted soya flour(Defatted)(21g) Sugar(27g) Roasted besan (12g), Refined vegetable oil (15g) =(150g/ day)	900g (150g x6 days =900g)
Pregnant and lactating women	Atta Besan Laddu premix For 6 days	Weekly	Roasted Wheat Flour(51g) Roasted Soya Flour(21g) Sugar(27g) Roasted Besan (24g) Milk powder(21g) Roasted Vegetable oil(15g) =(150g/ day)	900g (150g x6 days =900g)



Children receive the following premixes:

- ◆ Sookha daliya mixture: For normal children (3-6 years) and for SUW children (6months to 5years)
- ◆ Sookha Khichdi choora: For normal children (3-6 years) and for SUW children (6months to 5years)
- ◆ Khichdi premix: For all children (6months to 6years)
- ◆ Halwa premix: For all children (6months to 6years)
- ◆ Balahar: For all children (6 months to 6years)

Note: Khichdi premix, Halwa premix and BalAhar mix packets are given to children on an alternate basis. One week Khichdi premix is given, the next week Halwa premix is given and in the following week BalAhar mix is given.

Odisha

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
Children (6 months to 3 years)	Ready to Eat (RTE) chhatua for 25 days	Monthly	Wheat (62.5g) Bengal gram dal (9.4g) Groundnut (12.5g) Sugar(15.6g) = 98g/ day	2450g per packet (98g x 25 days = 2450g)
SAM children (6-59 months)	Augmented THR - Ready to Eat (RTE) chhatua	Fortnightly	Wheat (30g) Bengal gram dal (10g) Groundnut (10g) Sugar (15g) Vegetable oil (15g), Milk powder (20g)	100g per packet Packets are provided as per weight of the child 3.5-6.0kg =14 packets 6.1-8.7kg =21 packets 8.8-11.3kg =28 packets >11.4kg= 35 packets



Rajasthan

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
Normal children (6 months to 6years)	THR for 25 days	Monthly	Wheat(50g) Rice(50g) Chana dal (80g) =180g/ day	Wheat (1250g) Rice (1250g) Chana dal (2000g) = 4500g 180g x25days=4500g
SUV children (6 months to 6years)	THR for 25 days	Monthly	Wheat (80g) Rice (60g) Chana dal (120g) =260 g / day	Wheat (2000g) Rice (1500g) Chana dal (3000g) 6500g 260gx 25days=6500g

Telangana

Beneficiary	Type of THR and number of days for which THR is provided	Frequency of distribution	Quantity of THR (Per day consumption)	Net Weight of 1 packet of THR
All children (6months to 3 years)	Weaning food: Balamrutham for 25 days	Monthly	Roasted Wheat (55g) Sugar (20g) Oil(10g), Milk powder (10g) Bengal Gram(5g) =100g/ day	1250g per packet (2 packets are provided for 25 days) 1250 g x 2packets=2500g
SAM and MAM children (7months to 6years)	Balamrutham Plus	Weekly	Roasted wheat (26.7g) Milk powder (13.3g) Oil(20g) Sugar (20g) Bengal gram (3.3g) Groundnut (3.3g) Rice Flakes(13.3 g) =100g/day	Depends on child weight. For example: If child weight is 11.8 kg, 5 packets (1 kg per packet) per month are given.



ANNEXURE II-I

STATES/UTs WISE LIST OF DIRECTORS, ICDS AND NODAL OFFICERS, POSHAN GYAN PORTAL

S. No.	State	Directors, ICDS	Nodal Officers, Poshan Gyan Portal
1	Andhra Pradesh	Dr. Krithika Shukla Director Department of Women Development & Child Welfare Government of Andhra Pradesh Mobile: 8374032888	Ms. Sujatha Rani B Joint Project Coordinator POSHAN Abhiyaan, Government of Andhra Pradesh Mobile. 09550360918 e-mail: apwdcw@gmail.com
2	Chhattisgarh	Smt. Divya Umesh Mishra Director Department of Women Development & Child Welfare Govt. of Chhattisgarh, Mob No.: 9425227700 dirwcd.cg@gov.in	Mr. Nand Lal Choudhary Joint Director WCD Department Government of Chhattisgarh Mobile: 09425555088 e-mail - nlcbsdwd@gmail.com
3	Delhi NCT	Dr. Rashmi Singh Director Women and Child Development Govt. of NCT of Delhi, Delhi Secretariat, New Delhi - 110002 Ph. 011-23862652/20832581 Mob. No.: poshan.dwcd@gmail.com	Ms. Suman Sharma Asst. Director POSHAN Mobile - 9968249891 poshan.dwcd@gmail.com
4	Gujarat	1. Mr. D.N .Modi Director ICDS, Commissionerate of Women and Child Development "mailto:gujicds@gujarat.gov.in" gujicds@gujarat.gov.in Landline: 07923253305 Mobile: 09978402983 2. Smt. H. G. Raj Deputy Secretary Phone No. 079-232-54260, Fax No. 079-232-52251 ds-icds-wncw@gujarat.gov.in	Mr. Yatinkumar K Gajera, ICDS, Commissionerate of Women and Child Development, Government of Gujarat, Mobile: 9016201963 e-mail: icdsiec2019@gmail.com



S. No.	State	Directors, ICDS	Nodal Officers, Poshan Gyan Portal
5	Himachal Pradesh	Ms. Rakhil Kahlon Director Department of Women Development Govt. of Himachal Pradesh H.P. Secretariat, Shimla - 171002. Ph.: 2622033 Email - wcd-hp@nic.in	Dr. Seema Thakur, Assistant Director, Nutrition Mobile: 09418060328
6	Jharkhand	Mr. Anjaneyulu Dodde Director Deptt. Of WCD and Social Welfare Govt. Jharkhand Ph. No: 0651-2400749 dsw_jharkhand15@yahoo.com	Ms. Kanchan Singh e-mail: swdjharkhand@gmail.com
7	Karnataka	Mr. Chandrashekhar Joint Secretary Department of Women and Child Development and Empowerment of Differently Abled and Senior Citizens, Bangalore-560 001 Ph. No. 080-22032191 ds-wcd@karnataka.gov.in	Priyanka mary Francis Director Women and Child Development Department Govt. of Karnataka, Mob. 09632643017 Email - jdicds.dwcd@gmail.com directorwcd01@gmail.com
8	Kerala	ANUPAMA T V Director Directorate of Women and Child Development 8078071070 director.wcd@kerala.gov.in Ph. 0471-2346508,2346534	Ms. Bindu Gopinath Additional Director WCD Dpt., Kerala Ph. 0471-2346534 swdicds@gmail.com
9	Madhya Pradesh	Sh. Naresh Pal Kumar, Commissioner Women and Child Development Department, Government of Madhya Pradesh Mobile: 9425007887	-
10	Maharashtra	Ms. Indra Mallo Commissioner ICDS Deptt., Govt of Maharashtra, Raigad Bhawan, 1st Floor, Rear Wing, Belapur CBD, Navi Mumbai Ph. No. 022-27576388 Email - mahaposhan@gmail.com	Ms. Neha Arora Consultant - Health & Nutrition SMPU POSHAN Abhiyaan & ICDS Maharashtra Phone. 022-27576388/322 Mobile: 9167756260 e-mail: icdssmpu@gmail.com



S. No.	State	Directors, ICDS	Nodal Officers, Poshan Gyan Portal
11	Manipur	Ngangom Uttam Singh Director Department of Social Welfare, Government of Manipur Mobile: 9354336850	Mr. Bantee Singh Konthoujam Deputy Secretary Social Welfare, Government of Manipur "mailto:bantee.konthoujam@gmail.com" bantee.konthoujam@gmail.com Mobile: 8730877424
12	Meghalaya	Shri. L. M. Momin, Deputy Director of Social Welfare, Govt. of Meghalaya, Main Secretariat Building, Shillong - 793001 Mobile: 8131003864 Email: dte_swmege@yahoo.in lm.momin@yahoo.com dte_swmege@yahoo.co.in	Smt. V H Blah, Programme Officer, ICDS Mobile: 7005651362 e-mail: dte_swmege@yahoo.in
13	Odisha	Kalyani Patnaik Joint Secretary to Govt of Odisha Department of Women & Child Development Ph. No. 0674 - 2322929 Mobile: 9438106239/9437572567 dirwcd.or@nic.in	Ms. Nandita Nayak,SPM(C), WCD Department, Government of Odisha Mobile: 9437161856 e-mail: nandita20in@gmail.com
14	Rajasthan	Mr. O.P Bunker Director, Child Rights, Govt. of Rajasthan, G-3/1, Ambedkar Bhawan, Rajmahal Residency Area, Jaipur - 302005 Office No. 0141-2220258 Mobile No. : 9414244278 E-mail: raj.sje@rajasthan.gov.in director.wcd@rajasthan.gov.in	1. Mr. Rajesh Verma, Addl. Director (Nutrition), ICDS, Govt. of Rajasthan Mobile: 09414058387 Ph. 0141-2700246 Email: adn.wcd@rajasthan.gov.in 2. Dr. Bhag Chand Badhal, Addl. Director (Nutrition) Nodal Officer Poshan Abhiyaan, ICDS Rajasthan Phone no: 0141-2700246 Mobile: 91-9414082333
15	Tamil Nadu	Dr. Rathna Commissioner, Social Welfare & Nutrition Meal Programme, Government of Tamil Nadu, Office: 044-24351891 Mobile: 9894991655 e-mail: "mailto:dsw@tn.nic.in" dsw@tn.nic.in	Mrs. V. R. Jayalakshmi Joint Director (NNM) Government of Tamil Nadu Mobile: 09444222809 e-mail: poshanabhiyaan.tn@gmail.com



S. No.	State	Directors, ICDS	Nodal Officers, Poshan Gyan Portal
16	Telangana	Smt.Sunandha, Joint Director (Admin &ICDS) Government of Telangana	Mr. Johnson Asst. Director (NNM) WDCW Department, Government of Telangana Mobile: 9440324928 e-mail: pwjohny@gmail.com
17	West Bengal	Mrs. Nilanjana Das Director WCD and Social Welfare Govt. of West Bengal, Mob No. 8334915554 Scpswb2013@gmail.com	Sri Pijush Saha Assistant Director, ICDS Mob. 08927800035 pijushsaha67@gmail.com
18	Haryana	Smt. Hema Sharma Director, Women and Child Development Deptt., Govt. of Haryana, Base No. 15-20, Sector-4, Panchkula, Chandigarh- 134112 Tel. No. 0172-2560349 Mob No. 9416935000 dgwcdhry@gmail.com	Ms. Rajbala Kataria Joint Director (ICDS) WCD Haryana Poshan Abhiyaan Women and Child Development Department Sec-4, Panchkula, Haryana Mob. 9416654430 poshan.wcd@gmail.com



ANNEXURE II-II

LIST OF RESOURCE PERSONS FOR VARIOUS GOOD PRACTICES ADOPTED BY STATES/UTs

S. No.	Institution	Contact Details
1	Mission Shakti, Odisha	Mr. Binod Kumar Jena, Joint Secretary pmumissionshakti@gmail.com ; 0674-2974093
2	Uttar Pradesh State Rural Livelihood Mission	Mr. Bhanu Chandra Goswami, Mission Director mdsrilmup9@gmail.com
3	Kudumbshree Kerala	Renu Georgy, State Assistant Programme Manager, Kudumbashree Mission, GoK sapmkshree@gmail.com 9495369436
4	Telangana Foods WDCW Department, Telangana	1. Sri. S. Yellamanda, Manager (Process) mprocess.tsfoods@gmail.com 9989501532 2. Sri. N. Babu, Deputy Manager (Q.C) qc.tsfoods@gmail.com 9989501552
5	Sahaspur Lohra Jagdamba Samuh Gram Daroli Chhattisgarh	Smt. Kiran, Programme Head 9755787081 7000789546



