C-MAM Programme/project Implementation Brief

Gujarat:

1	**Why a C-MAM Programme?** Gujarat has a high prevalence of wasting (26.4%) and severe wasting (9.5%). While Gujarat has in place 139 NRCs/CMTCs, these are not enough to treat all the children with severe acute malnutrition, a large proportion of whom do not require to be treated at a facility. Moreover, many of the children miss out on receiving the treatment as parents are unwilling to stay for 14days in the facility. Given the high prevalence of severe acute malnutrition, the DoHFW, GoG, initiated the CMAM programme as this would ensure early and timely detection of children with severe acute malnutrition and take the treatment to their doorstep. The community based approach would also help in raising awareness among the community on undernutrition, its prevention and management.
2.	**What will be achieved?** CMAM program was initially rolled out in 15 blocks of 4 Districts, and then scaled up to cover 39 blocks of 13 predominantly tribal districts during mid-2016. Towards the end on 2016, it was scaled up to cover all 90 talukas of these 13 districts. In the year 2017 DoHFW in Gujarat scaled up the CMAM program across 33 Districts in the state. Details on the data and impact are available with DoHFW, GoG.
3.	**How is C-MAM programme implemented?** The screening and identification is done by the RBSK Teams/ Female Health Worker (FHW) at AWC using weight for height/length z score <-3 SD, MUAC <11.5 cm and bilateral pitting oedema. RUTF (WHO composition) produced by Amul and children are treated at village level. Discharge criteria is based on the admission criteria: If admitted by MUAC <11.5 cm then the discharge criteria is MUAC >12.5 cm. If admitted by W/H <-3SD, then the discharge criteria is W/H /length >-2SD and if admitted by both the criteria (MUAC <11.5 cm and W/H <-3SD) then discharge criteria is MUAC >12.5 cm. Referral linkages: SAM children with medical complications or with failed appetite are initially treated at facility level (Nutrition Rehabilitation Centres) and then enrolled in CMAM program on discharge. If a child in CMAM develops some complications then the child is immediately referred to the NRC for further treatment. During the CMAM programme, indicators monitored are: weight, bilateral pitting odema and RUTF consumption every week followed by counselling, MUAC every 15 days, Weight for Height SD score and checking for medical complications/oedema once a month. After discharge from the CMAM programme the child is followed up once a month up to 2 years, it is ensured that the child is enrolled in the ICDS and receives supplementary feeding and the mothers counselled on care and feeding practices.
4.	**What mechanism is used to assure quality of the programme/ and for inter-departmental coordination?** Monitoring for quality assurance is done by District teams and state officials and Government requested UNICEF supported Consultants. A structured monitoring and supportive supervision framework has been developed and is being put in place, which will be rolled out from July, and would include trained faculty from Medical Colleges. CMAM implementation is reviewed at the District level by the District Nutrition Task Force Committee under the chairpersonship of District Collector/DDO once a month. The programme is also reviewed at the State level either in meetings or through a video conference. The MIS for the CMAM programme has been integrated into E-Mamta (Mother and child services tracking software) Software and programme.

5.	**Which department leads the implementation and which are the supporting Departments and their roles and responsibilities?** DoHFW leads the implementation supported by DWCD. All supplies are procured by DoHFW and brought to the session site (AWC) by MO and FHWs. Screening is mainly done by MOs and FHWs assisted by ASHA and AWW. ASHA is responsible for reaching out the RUTF to the mothers and maintaining the registers with the help of FHW. Weighing of the child is done jointly by AWW and ASHA on a weekly basis, as well as counselling the mothers on care and feeding practices and hygiene. ASHA receives an incentive of Rs. 25/child/week to monitor the progress of the child, reach out the therapeutic food and counsel the mothers.
6.	**How are linkages established with health institutions, community service delivery points and families?** The programme is jointly implemented by Health and ICDS at the community level, with the health functionaries taking the major responsibilities and ICDS supporting. On identification, children with severe acute malnutrition with medical complication or with failed appetite are initially treated at facility level (Nutrition Rehabilitation Centres) and on discharge enrolled in the CMAM program. If a child in CMAM develops some complications then the child is immediately referred to the NRC for further treatment. Meetings are held with PRIs, community leaders and the communities to ensure community participation.
7.	**Who were the other partners that supported C-MAM programme?** The government departments involved are: DoHFW, General Administration Department, Finance department, DWCD. Gujarat Socio Economic Development Society - **GSEDS** (A separate body or Society formed by pooling the financial resources under corporate Social Responsibility through big corporates of the state) initially provided funds for the procurement of RUTF. Additionally GMSCL (Gujarat Medical Services Corporation Limited) supported the procurement, distribution and storage of RUTF at state, regional and district level. All district drug stores were provided licence for storing RUTF there. UNICEF provides technical support for the CMAM programme.

Jharkhand:

1	**Why a C-MAM Programme?** Jharkhand has very high prevalence of severe wasting (W/H <-3SD) with a state average of 11.4%. The state has 87Malnutrition treatment Centres (MTCs) with bed capacity of 93, which is not adequate to address the issue. Many children lose out on treatment as they are not able to access facility-based care for various reasons. A comprehensive programme is required not just for treatment of children with SAM, but also to address prevention and early detection of cases. The pilot intervention covers one tribal block, and aims to establish the required systems that can be scaled up integrated programme for prevention and treatment of acute malnutrition.
2.	**What will be achieved?** The programme aims at a coverage of at least 60%, with cure rate >75% and mortality rate below 5%. It also aims at establishing systems for scale up.
3.	**How is C-MAM programme implemented?** Children are screened using MUAC, children with MUAC < 11.5 cm without complication will be treated at the community-level at the Anganwadi centres. Energy dense food will be provided to children, which will be procured by government through CSR wing. For children with medical complications referral linkages will be established with the MTC. Angnwadi workers and ASHAs will jointly follow up the children at community-level. To prevent relapse counselling skills to be developed for frontline workers on IYCF, linking children to supplementary nutrition programme of ICDS, community mobilization through women's groups on IYCF using SHG platforms, co-location of WASH/ ODF interventions, linking families with children with SAM to food security programmes (PDS).
4.	**What mechanism is used to assure quality of the programme/ and for inter-departmental coordination?** A Technical Advisory Committee is being formed at State level under State Nutrition Mission (SNM); SNM is also facilitating interdepartmental coordination at State level, at District level, Deputy Commissioner is the lead to ensure interdepartmental coordination. Robust MIS being set up. Standard methodology will be used (SMART survey and SQUEAC survey) to assess impact and coverage of the intervention.
5.	**Which department leads the implementation and which are the supporting Departments and their roles and responsibilities?** The State Nutrition Mission is the Nodal agency for the intervention. At District level, Dy Commissioner is the lead to ensure interdepartmental coordination. Robust MIS being set up. Procurement and warehousing of the energy dense food is done by Dept of Industries, through CSR wing. Technical assistance for the intervention was requested from and provided by UNICEF & Kalawati Saran Children's Hospital. At the block level the intervention will be jointly implemented by Health and ICDS. The intervention will establish effective linkages with Swatchh Bharat Mission (open defecation free), State Livelihood Programmes and PRI (community mobilization) and with Food and Civil Supplies (PDS).
6.	**How are linkages established with health institutions, community service deliver points and families?**

		Services Cooperation).	
3.	Rural Development	NRLM	Social Mobilization & SBCC
4.	Local Self Governance	PRI	Social Mobilization & SBCC
		Kudumbshree	Social Mobilization & SBCC
5.	Tribal welfare	ITDP	Social Mobilization & SBCC
6.	District Administration	District Collector	Overall management & coordination
		Sub-Collector	Review & Monitoring

6.	**How are linkages established with health institutions, community service delivery points and families?** The programme is jointly implemented by Health and ICDS at the community level, with the health functionaries taking the major responsibilities and ICDS supporting. On identification, children with severe acute malnutrition with medical complication or with failed appetite are initially treated at facility level (Nutrition Rehabilitation Centres) and on discharge enrolled in the CMAM program. If a child in CMAM develops some complications then the child is immediately referred to the NRC for further treatment. Meetings are held with PRIs, community leaders and the communities to ensure community participation. Implemntation is guided by a joint action plan and is followed by field and grassroots level functionaries for harnessing ANMs visit for other service deliver for screening as well. The mobile Medical Care units for curative services are lately being linked to address issues around SAM and MAM.
7.	**Who were the other partners that supported C-MAM programme?** UNICEF at the request of the state government provides technical support for the programme.
8.	**What results were achieved?** # children treated through CMAM e.g. in 2016 Of the total 4632 children below five years, 4519 were screened and over 484 children were referred to primary OTP for further confirmation.

Madhya Pradesh:

1 Why a C-MAM Programme?

Madhya Pradesh has high burden of children with SAM. Although the state has shown a reduction of 3.4% point (12.6% in 2005-06 NFHS 3; 9.2% - 20015-16 NFHS 4) in the prevalence of severe wasting among children under 5 years, in a span of 10 years. However, with a SAM prevalence of 9.2 % (NFHS -4, under5 years), the state still has an estimated 9.2 lakh children with severe acute malnutrition, at any given point of time.

Estimated caseload of SAM in the State (NFHS-4)	9.2 lakh
Upto 15% SAM require Facility treatment due to medical complications	1.4 lakh
Total no. of available beds for SAM management in the State	3,797
At 100% bed occupancy, number of SAM children that can be treated annually	91,128
Children treated in NRCs in year 2015– 16	73,694
Un-catered caseload of SAM	~ 8.46 lakh

Looking at the magnitude, state of Madhya Pradesh is all set to establish continuum of care for the management of SAM by integrating community centric care with the facility based management of children with SAM.

2. What will be achieved?

The Government has initiated a process to implement a C-MAM program in several districts during the coming months. Within this a learning pilot will cover 3114 children with SAM (with coverage of about 70%) in one tribal block of Hoshangabad district covering; these children with SAM will be identified using MUAC at the community level. The pilot proposes to assess effective implementation of CSAM pilot in Kesla block of Hoshangabad district. The lessons and recommendations from the operational pilot will be used by the state for scaling up the intervention.

The specific objectives are:

1. To create effective treatment capacity for community based management of severe acute malnutrition using standardized protocols.
2. To assess feasibility to effectively deliver the community based management of severe acute malnutrition through existing Govt. system.
3. To demonstrate and promote linkages between CSAM and FSAM, while emphasizing on essential nutrition interventions.

3. How is C-MAM programme implemented?

The programme will focus on the following components:

1. Community outreach.
2. Community based management for SAM children without medical complications
3. Facility based care for SAM children with medical complications
4. Prevention through promoting infant and young child feeding practices and Linkages with Supplementary Nutrition Programme, ICDS

4. What mechanism is used to assure quality of the programme/ and for inter-departmental coordination?

Quality assurance will be through:

-State technical committee comprising of representatives from Health, ICDS, Pediatricians from Medical Colleges

-Centre of Excellence at AIIMS

	-District level Coordination and monitoring committee under the chairmanship of District Collector -Supervisory visit by CDPO, Block Medical Officer and Supervisor -Monitoring through web based application
5.	**Which department leads the implementation and which are the supporting Departments and their roles and responsibilities?** The program implementation will be led by Atal Baal Mission of the Govt of MP and will be supported by NHM, Govt of MP and AIIMS (Bhopal), UNICEF.
6.	**How are linkages established with health institutions, community service deliver points and families?** The proposed interventions will take into account the key principles outlined for CMAM i.e. community mobilizations and sensitization; timely and effective screening for case detection; maximum access and coverage; appropriate medical care and nutrition rehabilitation; continued treatment until recovery is achieved; follow-up of children for a period of six months after discharge from the program; and establishing a strong link with the existing NRCs as well as community health system. Additional health, nutrition and hygiene messages will provided during follow-up visits, as part of an extended health and nutrition education program. These messages will focus on – • Basic hygiene such as hand washing, • The importance of frequent and active feeding • The importance of activities promoting child stimulation and caretaker emotional responsiveness • What local foods to give young children • How to enrich and improve the quality of complementary foods • How many times the child should be fed • Continued feeding during illness • Identifying malnutrition (when to bring children for enrollment into CMAM prog); • Management of diarrhoea and fever and recognizing danger signs **Linkages with facility based care at NRC** CMAM programme will have linkages with the nearest NRCs in the pilot district (in Hoshangabad) for referral of children with SAM having any medical complication or who develop complication during treatment. Similarly, children transferred from NRC after initial stabilization will be enrolled in CMAM programme and continued on therapeutic feeding (without anti-biotic) till they achieve discharge criteria decided for CMAM programme
7.	**Who were the other partners that supported C-MAM programme?** -National Health Mission -Kalawati Saran Children's Hospital -AIIMS

Maharashtra:

1	**Why a C-MAM Programme?** Maharashtra has 9.4% of its children under five years severely wasted (WZH <-3SD). Following reports of child deaths due to malnutrition and High Court directive the State under NRHM adopted a strategy for treating children with SAM through Village Child Development Centers (VCDC). These VCDC were run at Anganwadi Centres from time to time depending upon the number of children who were severely wasted. In addition, based on the request of the government a large scale pilot on community management of acute malnutrition (CMAM) was initiated jointly with Tata Trust, UNICEF/DWCD/Public Health and Mission in Nandurbar the most vulnerable tribal district. The pilot using global protocols aims to inform state-wide scale up of the strategy to prevent deaths due to SAM. Currently CMAM is implemented in Nandurbar as per the MOU to treat 11,000 children.
2.	**What will be achieved?** Currently CMAM is implemented in Nandurbar as per the MOU. So far 11,000 children have been treated. Now these children are surviving well. CMAM is expected to contribute to reduction in U5 mortality due to SAM.
3.	**How is C-MAM programme implemented?** CMAM is implemented at the village level through the AWC. In Nandurbar both active and passive screening is done using WFH <-3SD and MUAC<11.5 cms. However for VCDC it is W/H across the state. The discharge criteria used is if the child is admitted by MUAC then discharged with MUAC >12.5. Before the screening the communities are sensitized about the process and after screening the children with complications are endorsed by the medical officers and referred to the NRC. Those without complications are enrolled in CMAM. Families are counselled by the Anganwadi Workers and the ASHAs. Children are given the RUTF (approx. 3 packets per day) as per the admission weight. The AWWs monitors consumption of therapeutic food. The duration of treatment is 8 weeks and for children with W/H <-4 SD or MUAC <10.5 cms the duration is 12 weeks. Data on the average weight gain per gm/kg/day is monitored and entered in SAM register. In Nandurbar RUTF is procured by Tata trust. So far 11000 children have been treated and more than 75% have met the discharge criteria (MUAC > 12.5 cm or W/H > - 3SD), and after one year follow up 70% children have continued to maintain their nutritional status and 20 per cent children have MAM. In normal VCDC budgets are provided by Tribal development department in tribal areas for 4 weeks only. Advocacy continues for at least 8 weeks.
4.	**What mechanism is used to assure quality of the programme/ and for inter-departmental coordination?** At the district level Collector DM is the head of the committee with CEO member secretary and the respective heads of the department /UNICEF/Tata trust as members. The CMAM program is reviewed once in two months. At the state level it is reviewed by Chief Secretary as part of the High Court Directive.
5.	**Which department leads the implementation and which are the supporting Departments and their roles and responsibilities?** Earlier VCDC was implemented through NHM now it is DWCD which is the lead.
6.	**How are linkages established with health institutions, community service deliver points and families?** Children with complications are treated at NRC or Child Treatment Centres. At the community-level AWC serves as the point of convergence.
7.	**Who were the other partners that supported C-MAM programme?** CMAM Tis implemented in partnership with Tata Trust and supported also by UNICEF.
8.	**What results were achieved?** In 2016 10,000 children were treated with a recovery rate of >70%. One year follow of children indicates that 70% children have maintained their nutritional status and 10% children are MAM>

Odisha:

1	**Why a C-MAM Programme?** Over the last decade, Odisha has shown substantial progress in improving nutrition outcomes for children. However, reduction of prevalence of wasting among children requires accelerated efforts in the state, with the prevalence of severe wasting among under-five children increasing from 4.9% to 6.4% between NFHS-3 and NFHS-4. Children with SAM are at increased risk of mortality due to common childhood illnesses since they have reduced immunity and deranged metabolic system. According to the WHO, these children are 5 - 20 times more likely to die compared to well-nourished children if they develop common illnesses like diarrhoea, pneumonia, malaria etc. Further all the children with SAM cannot and need not be treated within facilities (NRC).
2.	**What will be achieved?** CMAM programme aims to identify and effectively treat children with severe acute malnutrition in 30 districts of Odisha, using nationally and globally accepted protocols, forging linkages between community and facility-based management, as well as strengthening essential preventive measures (IYCF practices, early child development, and improved hygiene and sanitation).
3.	**How is C-MAM programme implemented?** Initial mass screening to be done statewide to identify the SAM cases using MUAC (<11.5cm). For the first 6 months of programme implementation, children screened to have MUAC <11.5 cm will be referred to NRCs for initial clinical assessments. Children with medical complications will be treated at NRC. Children without medical complications will receive energy dense food from the NRC for initial period of two weeks. Thereafter, regular follow-up and subsequent provision of special foods will be done at AWCs. Children will be discharged if the MUAC is >=12.5 cm. Children who do not reach discharge criteria after 12 weeks of therapy will be referred to NRC. After program stabilizes at around 6 months, the identification, treatment, follow-up and discharge of children with SAM will be at the AWC level. Referral to NRCs if case becomes complicated/ sick/ does not respond.
4.	**What mechanism is used to assure quality of the programme/ and for inter-departmental coordination?** (Steering Committees, Technical Resource Centres etc.) An Executive Monitoring Committee would be established for reviewing progress under CMAM programme. This would include: Director, Social Welfare (Chairperson); MD, NHM; Deputy Secretary, ICDS; Nutrition Specialist, UNICEF; Health Specialist, UNICEF; Pediatric Consultant, NHM; SPM, APPI. Center of Excellence for SAM proposed to be set up in Sishu Bhawan Cuttack and the Community Medicine Department, MKCG Medical College will provide technical oversight into the implementation.
5.	**Which department leads the implementation and which are the supporting Departments and their roles and responsibilities?** Led by DWCD and supported by Health Department. Funds will be provided under the state IMR-MMR reduction strategy called Sampurna.
6.	**How are linkages established with health institutions, community service deliver points and families?** Convergence between Departments of Health and ICDS implementing the CMAM programme is crucial for achieving the synergistic impact. District and Block level Supervisory staff from the Health, ICDS and other related departments should provide supportive supervision to the ANM, AWW and ASHA.
7.	**Who were the other partners that supported C-MAM programme?** Azim Premji Philanthropic Initiatives and UNICEF

Rajasthan:

1	**Why a C-MAM Programme?** As per NFHS –4, Rajasthan has estimated 735,991 children (8.6% of children) with SAM (severe wasting). Though state has a network of 147 functional MTC's not all children require institutional/facility based care. Considering the higher risk of mortality among children with SAM state felt the need for reaching out to these children through community based approach, especially for those children who did not have medical complications. In December 2015, Community Management of Acute Malnutrition (CMAM) Programme - POSHAN was launched in Rajasthan.
2.	**What will be achieved?** Total of 9,640 children were enrolled and treated under POSHAN in phase - I (Dec 2015-June 2016). The state has now got the approval for the second phase, with the plan to cover 15,500 children in the Phase II of the POSHAN programme in Rajasthan.
3.	**How is C-MAM programme implemented?** The broad strategies adopted for POSHAN pilot initiative in Rajasthan includes the following: 1. Screening and identification of children with SAM at village level a. Active Case Finding (Screening) b. Criteria of Screening - MUAC< 11.5 cm, bilateral pitting oedema 2. Final screening and enrollment of children for CMAM programme at Sub-Centre level. 3. Treatment protocols at community level–The treatment protocol was divided as phase –I as treatment phase and Phase –II as Post treatment for follow up after the treatment phase. 4. Provision of Medical Nutrition Therapy (MNT.) 5. Incentives to Poshan Prahari (ASHA/Anganwadi Workers) for Treatment Phase I 6. Home Visit schedule for Treatment Phase for each enrolled child (from enrollment to 2 months) per day by Poshan Prahari. 7. Poshan Day- Every Sunday was celebrated as Poshan Day where children would come for anthopometric measurements, medical assessment by ANM and assessment of appetite. 8. Phase –II was Post-Treatment (3rd month to 6th month) - Follow-up after Discharge from CMAM Program POSHAN-Children discharged from the program were enrolled in the Supplementary Nutrition Program (SNP) of the ICDS and their growth was monitored monthly; children who have not recovered (not met the discharge criteria) after 12 weeks in the treatment phase were referred to MTC for further treatment and were classified as non-recovered. 9. Discharge criteria from CMAM – Discharge criteria for POSHAN is: • MUAC ≥ 12.5cm, W/H Z-score ≥ -2 SD, alert and clinically well child. **10.** The 104 calling centre was used during the follow-up phase to personally contact all the parents of the discharged children. They were given reminder about the next Poshan Day and were given some tips for child care and feeding. They were also counselled about benefits of AWC and where to go in case the child is sick.
4.	**What mechanism is used to assure quality of the programme/ and for inter-departmental coordination?** Committees namely the Technical Advisory Committee, State Review Committee, product approval committees and a technical subcommittee were formed to oversee the pilot design and implementation.
5.	**Which department leads the implementation and which are the supporting Departments and their roles and responsibilities?**

	National Health Mission (NHM), Department of Health and Family Welfare, Government of Rajasthan led the programme. In POSHAN Phase –II, which is just started, stronger linkages established for ICDS for active identification, referral, follow up and enrollment in SNP after discharge from POSHAN/MTC.
6.	**How are linkages established with health institutions, community service deliver points and families?** Children discharged from the CMAM programme were enrolled in the Supplementary Nutrition Program (SNP) of the ICDS and their growth was monitored monthly; children who have not recovered (not met the discharge criteria) after 12 weeks in the program were referred to MTC for treatment and were classified as non-recovered.
7.	**Who were the other partners that supported C-MAM programme?** Phase-I the partners were - GAIN, ACF, UNICEF In Phase II- the partners are – ICDS, UNICEF, GAIN, and ACF and TATA Trust.
8.	**What results were achieved?** # children treated through CMAM were 9640.

	Sphere Standards	Rajasthan
Recovery Rate (Cured)	> 75%	94.57%
Death Rate	<10%	0.44%
Default Rate	< 15%	2.46%
Non Recovered		2.84%

10.	**What is the cost of implementing C-MAM programme?** INR 11,584/- per child as per cost Analysis done by R4D (commissioned by NHM).