

Supplementary Table 1: Programme impact pathway

	Inputs	Process	Outputs	Outcome		
				Short-term	Medium-term	Long-term
Product development and supply related activities	<ul style="list-style-type: none"> ▪ Development of a strategy to promote MMS ▪ Adequate funding secured ▪ Identification of key stakeholders and development of partnership ▪ Adequate and timely supply of raw materials for product development ▪ Supply chain identified and finalized 	<ul style="list-style-type: none"> ▪ Several national and international workshops were organized involving key stakeholders and development partners ▪ Regular update meetings organized among different stakeholders ▪ Ensured policy environment and support of stakeholders, ▪ Taking approval from the government body 	<ul style="list-style-type: none"> ▪ Government-approved product along with promotional activities ▪ Well-developed program impact pathway available ▪ Stakeholders are regularly updated regarding program progress 	<ul style="list-style-type: none"> ▪ Product is available at production and ready to be reached to the supply chain ▪ Program impact pathway is followed as per plan ▪ Problems in product development or supply related are identified through regular updates/meetings with stakeholders and mitigated 	<ul style="list-style-type: none"> ▪ Product is available at all tiers of supply chains as per plan and consumer demand ▪ Product is made available to all pregnant mothers in the target area 	Reduction of % of LBW in target areas compared to control areas
MMS Delivery related activities	<ul style="list-style-type: none"> ▪ Identification of different tiers of service providers ▪ Selection and finalization of areas that will receive product considering priority ▪ Support to upgrade infrastructure (if needed) ▪ Identification of other pharmacies/service providers as the leverage point to promote 	<ul style="list-style-type: none"> ▪ Finalizing agreement with different tiers of service providers ▪ Development of service standards and guidelines 	<ul style="list-style-type: none"> ▪ # of different tiers of service providers trained/reached ▪ # of different tiers of service providers with adequate awareness regarding MMS ▪ # of service providers with adequate logistics to provide the service/counselling 	<ul style="list-style-type: none"> ▪ Well trained service providers with adequate knowledge and training ▪ Service providers operate the following guideline 	<ul style="list-style-type: none"> ▪ Timely access to MMS ▪ Improved quality-adjusted coverage of MMS 	

	MMS (Domino effect!)				
Demand Creation Activities	<ul style="list-style-type: none"> ▪ Business to Business (B2B) – training and seminar with network providers and launch several above-the-line (ATL) and below-the-line (BTL) promotional activities ▪ Business to Consumers (B2C) – develop and air TVC/RDC and implement different ATL and BTL promotional campaigns/activities. 	<ul style="list-style-type: none"> ▪ Development of training manuals and materials ▪ Development of different promotional activities with field testing ▪ Development of BCC materials with field testing ▪ Ongoing training and refresher training for different tiers of service providers ▪ Ongoing promotional activities in the community to promote MMS among the target group 	<ul style="list-style-type: none"> ▪ # of training materials developed ▪ # of promotional activities performed in the community ▪ # of promotional activities performed through media ▪ # of training workshop/seminar conducted ▪ # of different tiers of service providers trained/reached ▪ # of different tiers of service providers agreed to prescribe MMS ▪ # target mothers reached through different promotional activities ▪ # target mothers know about BSP/GSP/PSP ▪ # target mothers know about MMS 	<ul style="list-style-type: none"> ▪ Sufficient awareness was created at the community level ▪ Changes in knowledge (what is MMS, what does MMS do, how many to consume etc.) of the pregnant mothers 	<ul style="list-style-type: none"> ▪ Increase in MMS sale ▪ Improved usage of MMS

Supplementary Table 2: Process evaluation indicators

Dimension of implementation	Purpose	Indicators (quantitative)
Implementation process	the structures, resources, and mechanisms through which delivery is achieved	<ul style="list-style-type: none"> ▪ # of MMS tablets received as per agreement ▪ # of MMS tablets dispatched from SMC warehouse to 12 Area offices ▪ # of MMS tablets distributes from area office to Star network pharmacies/other outlets (area wise) ▪ # of star providers / other pharmacies have MMS tablets (as planned) ▪ Monthly sales report disaggregated by locations and outlets ▪ # of MMS tablets repeat sales through star providers / other pharmacies <p>Viability of the business model</p> <p><u>Sales:</u></p> <ul style="list-style-type: none"> ▪ Sales per blue star outlet per month ▪ Sales per pink star outlet per month ▪ Sales per green star outlet per month ▪ Overall Sales per month <p><u>Reach:</u></p> <ul style="list-style-type: none"> ▪ # of BlueStar outlets stocking MMS ▪ # of green star outlets stocking MMS ▪ # of pink star outlets stocking/prescribing MMS <p><u>Supply Chain Efficiency:</u></p> <ul style="list-style-type: none"> ▪ Perfect Order rate (how many orders shipped without incident like damage/delayed) - SMC to pharmacy ▪ Perfect Order rate - Renata to SMC
Fidelity (quality)	the consistency of what is implemented with the planned intervention	<ul style="list-style-type: none"> ▪ # of training conducted to BSPs, GSPs & PSPs on MMS (monthly) after product launching ▪ # of District where training program on MMS for BSPs completed ▪ # of providers reached through field visits ▪ # of regional Seminar organized with OBGYN ▪ # of meeting/visit organized in Upazila Health Complex ▪ # of Somabesh (courtyard meeting) organized with pregnant mother (10 PW per Somabesh) ▪ of promotional materials developed for different tiers of service providers ▪ # of a TV Talk show on MMS and ANC ▪ Digital interface established ▪ # of repeat purchase tracked of MMS tablet by pregnant mother ▪ # of the interactive message provided to the pregnant mother

Adaptations	alterations made to intervention to achieve a better contextual fit	<ul style="list-style-type: none"> ▪ If any changes were made to the BCC materials ▪ If any changes were made to the training materials ▪ If any changes were made to the timing/duration of counselling sessions ▪ Any other changes made related to the intervention
Dose delivered	amount or number of intended units of each intervention or component delivered or provided	<ul style="list-style-type: none"> ▪ # of training conducted to BSPs, GSPs & PSPs on MMS (monthly) ▪ # of Somabesh (courtyard meeting) organized with pregnant mother (10 PW per Somabesh) ▪ # of a TV Talk show on MMS and ANC
Reach	the extent to which a target audience comes into contact with the intervention	<ul style="list-style-type: none"> ▪ # of pregnant mother reached ▪ # of family members (husband, mother-in-law, etc.) reached ▪ # of community key members reached (social/political/religious leaders, teachers, etc.) ▪ MMS intake adherence among women during pregnancy ▪ % of pregnant women who heard about MMS ▪ Contact Coverage (proportion of mothers going to BSP/GSP/PSP) ▪ Quality-adjusted Coverage (proportion of mothers receiving service according to recommended standard)
Dimension of Mechanisms of impact	Purpose	Indicators (qualitative)
Participant responses	how participants interact with the activities related to the MMS intervention	Target participant's perception, knowledge, attitude, and practice regarding the MMS product
Mediators	the process through which intervention and outcome are related	<ul style="list-style-type: none"> ▪ National policy/guideline in place ▪ Work plan exists for timely procurement of supplements ▪ The distribution system in place ▪ Quality assurance plan in place ▪ Behaviour change intervention strategy exists focused on supporting programme participants and programme advocacy ▪ Adequate storage of MMN supplements at warehouse and distribution sites
Unintended pathways and consequences	The ways the intervention might be affecting the outcome indirectly and its	# of pharmacies (other than BSP/GSP) selling the MMS product (spillover effect)

	impact	
Dimension of Context	Purpose	Indicators
Contextual moderators	may include anything external to the intervention which impedes or strengthens its effects	<ul style="list-style-type: none">▪ How ongoing COVID-19 pandemic affects the implementation of the intervention▪ How ongoing COVID-19 pandemic affects the uptake of the intervention by the target participants

Supplementary Table 3: Programme's activity monitoring and course-correction indicators					
	Inputs	Outputs	Indicator	Data Source/collection method	Data collection frequency
Product development and supply related activities	<ul style="list-style-type: none"> ▪ Development of a strategy to promote MMS ▪ Adequate funding secured ▪ Identification of key stakeholders and development of partnership ▪ Adequate and timely supply of raw materials for product development ▪ Supply chain identified and finalized 	<ul style="list-style-type: none"> ▪ Government-approved product along with promotional activities ▪ Well-developed program impact pathway available ▪ Stakeholders are regularly updated regarding program progress 		Key in-depth interview with SMC/GAIN KII with the Government's key health and nutrition personnel (IPHN, DGDA, etc.)	Once
MMS Delivery related activities	<ul style="list-style-type: none"> ▪ Identification of different tiers of service providers ▪ Selection and finalization of areas that will receive product considering priority ▪ Support to upgrade infrastructure (if needed) ▪ Identification of other pharmacies/service providers as the leverage point to promote MMS (Domino effect!) 	<ul style="list-style-type: none"> ▪ # of different tiers of service providers trained/reached ▪ # of different tiers of service providers with adequate awareness regarding MMS ▪ # of service providers with adequate logistics to provide the service/counselling 	<ul style="list-style-type: none"> ▪ # of BSP/GSP/PSP service providers trained ▪ # of BSP/GSP/PSP service providers have regular stocks of MMS ▪ # of BSP/GSP/PSP service providers express satisfaction selling MMS 	<ul style="list-style-type: none"> ▪ SMC digital dashboard ▪ Training logbook of SMC ▪ Exit interview with providers after training ▪ Cross-sectional survey ▪ Direct observation and stock check 	<ul style="list-style-type: none"> ▪ Ongoing

<p>Demand Creation Activities</p>	<ul style="list-style-type: none"> ▪ Business to Business (B2B) – training and seminar with network providers and launch several above-the-line (ATL) and below-the-line (BTL) promotional activities ▪ Business to Consumers (B2C) – develop and air TVC/RDC and implement different ATL and BTL promotional campaigns/activities. 	<ul style="list-style-type: none"> ▪ # of training materials developed ▪ # of promotional activities performed in the community ▪ # of promotional activities performed through media ▪ # of training workshop/seminar conducted ▪ # of different tiers of service providers trained/reached ▪ # of different tiers of service providers agreed to prescribe MMS ▪ # target mothers reached through different promotional activities ▪ # target mothers know about BSP/GSP/PSP ▪ # target mothers know about MMS 	<ul style="list-style-type: none"> ▪ # of BSP/GSP/PSP service providers agree that training material was easy to understand and follow ▪ # of target participants agree that any specific promotional activity was helpful ▪ # of target participants agree that message of any specific promotional activity was clear ▪ Perception of the target community regarding MMS ▪ # of other pharmacies in the target area selling MMS (Domino effect!) ▪ Crude coverage of the MMS in the target community ▪ Quality-adjusted coverage of the target community (% of care seekers perceive the service as good quality) ▪ # of target mothers come to the pharmacy ▪ # of target family members come to the pharmacy ▪ # of target mothers received tele-messages to pharmacy ▪ # of target mothers who are repeated buyers ▪ # of target mothers/family members willing to pay ▪ # of target mothers experienced any difficulties to obtain MMS 	<ul style="list-style-type: none"> ▪ Cross-sectional survey ▪ Exit interview with providers ▪ Exit interview with participants after the promotional activity ▪ Cross-sectional survey ▪ FGD with target participants 	<ul style="list-style-type: none"> ▪ Ongoing
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