# Supplementary Table 1. Costing for Policy Option 1: Promotion of Infant and Young Child Feeding (IYCF) knowledge and practices by Mass Media and Community Support

Fixed Costs	Unit cost in MMK	No. units	Years	Total costs in MMK	Remark
Facility costs					
Media campaign design <sup>a</sup>	-	-		5,000,000	This cost included video clip development, recording for radio, IEC development and actor, actress, and director fees
Advertisement cost on radio channel <sup>a</sup>	17,280,000	-	5	86,400,000	Five minutes duration of advertisement for 8 episodes per month during prime time.
Advertisement cost on MRTV <sup>a</sup>	432,000,000	-	5	2,160,000,000	Five minutes duration of advertisement for 8 episodes per month during prime time.
Advertisement cost on MRTV4 <sup>a</sup>	843,840,000	-	5	4,219,200,000	Five minutes duration of advertisement for 8 episodes per month during prime time.
CSG guideline development	-	-	-	-	NNC already has a guideline for promotion of IYCF counselling by volunteers.
IYCF Flipchart cost <sup>b</sup>	15,000	<b>74,021</b> <sup>c</sup>	-	1,110,315,000	
MUAC tapes for volunteers <sup>b</sup>	200	74,021	5	74,021,000	
IEC materials cost <sup>b</sup>	250	5,500,000 <sup>d</sup>	5	6,875,000,000	Distributed to volunteers for under five children (5,500,000*5).
Training cost for CSG <sup>b</sup>				7,475,027,500	2 days' training for all CSG. Details assumption described in Supplementary table 3.
Volunteer incentives <sup>e</sup>	56,000	990 <sup>f</sup>	5	277,200,000	Performance-based Recognition Certificate for 3 persons/ township annually during NPM activities. Cost included certificate, TA and per diem.
	<b>Grand Total</b>	Cost (MMK)		22,282,163,500	
	<b>Grand Tota</b>	l Cost (USD)		14,854,775.67	

MMK=Myanmar Kyats; CSG= Community Support Group; NNC = National Nutrition Center; IYCF= Infant and Young Child Feeding; MUAC = Mid Upper Arm Circumference; IEC = Information, Education and Communication; NPM = Nutrition Promotion Month; TA = Travel Allowance; PA System= Public-address System; All costs are in MMK unless otherwise stated.

1 USD = 1500 MMK (Exchange rate at the time of evaluation, 2018)

- <sup>a</sup>The current cost of the Myanmar Radio and Television, Ministry of Information, Naypyitaw (2018).
- <sup>b</sup> Estimated cost (The Supply Section UNICEFF Country Office in Myanmar).
- <sup>c</sup>Total number of volunteers (Department of Public Health, Ministry of Health and Sports)
- d Total number of under five children (14)
- <sup>e</sup> Estimated cost (National Nutritional Center, Naypyitaw, 2018)
- <sup>f</sup>Total number of outstanding volunteers from 330 townships (9).

## Supplementary Table 2. Costing for Policy Option 2: Nutrient Supplementation to undernourished pregnant women to reduce low birth weight

Fixed Costs	Unit cost in MMK	No. units	Years	Total costs in MMK	Remark
Supplies and equipment					
Guideline development	-	-	-	-	NNC already have the national guideline on Integrated Management of Acute Malnutrition.
IMAM Guideline Cost	10,000	26,270ª	-	262,700,000	
Training Cost				3,203,054,500	Details assumption described in Supplementary table 3.
IMAM reports format and registers	5,000	26,270	-	131,350,000	
IEC materials cost	500	9,180,000 <sup>b</sup>	5	11,475,000,000	Five items of IEC related to PLW nutrition & Anemia for all pregnant women (9,180,00*5).
MUAC Measuring tape	200	26,270	5	26,270,000	
Materials distribution cost	100,000	330°	-	33,000,000	
Balanced protein energy supplementation	550	1,468,800 <sup>d</sup>	5	290,822,400,000	80% of undernourished pregnant women received 90 days of treatment (1,468,800*0.8*90).
	Grand Tota	l Cost (MMK)		305,953,774,500	
	Grand To	tal Cost (USD)		203,969,183.00	

NNC = National Nutrition Center; IMAM = Integrated Management of Acute Malnutrition; IEC = Information, Education and Communication; MUAC = Mid Upper Arm Circumference; PLW= Pregnant and Lactating mother. **Note:** All the costs were calculated based on the estimated cost (The Supply Section UNICEFF Country Office in Myanmar). All costs are in MMK unless otherwise stated.1 USD = 1500 MMK (Exchange rate at the time of evaluation, 2018) <sup>a</sup> Total number of Basic Health staff (Department of Public Health, Ministry of Health and Sports)

<sup>&</sup>lt;sup>b</sup> Total number of pregnant women (9)

<sup>&</sup>lt;sup>c</sup>Total number of townships (9)

<sup>&</sup>lt;sup>d</sup> Total number of undernourished pregnant women (9)

#### Supplementary Table 3. Details training costs which involved in three policy options in MMK

Manage		Option 1		Option 2 & 3				
Items	Central level	S/R level	Township level	Central level	S/R level	Township level		
Venue	600,000	6,800,000	132,000,000	600,000	6,800,000	132,000,000		
Refreshment	1,530,000	13,200,000	575,897,000	1,530,000	13,200,000	241,640,000		
Per diem (Participants)	1,050,000	34,320,000	213,840,000	1,050,000	34,320,000	213,840,000		
Per diem (Facilitators)	1,326,000	15,810,000	3,619,924,000	1,326,000	15,810,000	1,518,880,000		
Travel allowance	2,550,000	24,900,000	1,645,420,000	2,550,000	24,900,000	690,400,000		
Backdrop	100,000	510,000	13,200,000	100,000	510,000	13,200,000		
Refreshment for <5 children (Practical session)	90,000	1,530,000	59,400,000	-	-	-		
Transportation for <5 children	50,000	510,000	6,600,000	-	-	-		
Refreshment for pregnant women (Practical session)	-	-	-	90,000	1,530,000	59,400,000		
Transportation for pregnant women	-	-	-	50,000	510,000	13,200,000		
Stationery	178,500	2,490,000	164,542,000	178,500	2,490,000	16,500,000		
PA System	500,000	5,100,000	33,000,000	500,000	5,100,000	33,000,000		
Miscellaneous	7,974,500	7,650,000	66,000,000	7,974,500	7,650,000	66,000,000		
Sub-total	824,410,000	112,820,000	6,529,823,000	824,410,000	112,820,000	2,998,060,000		
Grand Total			7,475,027,500	3,203,054,500				

S/R= State and Region; PA System= Public-address System

**Note:** All the costs were calculated based on the estimated cost (The Supply Section UNICEFF Country Office in Myanmar) and National Nutrition Center, Naypyitaw. All costs are in MMK unless otherwise stated.

The main difference of the costing between two policy options at township level were due to the difference in number of volunteer (74,021) and Basic Health Staff (26,270) as trainees.

## Supplementary Table 4. Costing for Policy Option 3: Expansion of current implementation of package of ten proven nutrition-specific interventions

Fixed Costs	Unit cost in MMK	No. units	Year	Total Costs in MMK	Current Costs in MMK	Additional Costs in MMK	Remark
Supplies and equipment							
Refresher training for BHS				3,203,054,500	-	3,203,054,500	2 Days duration for 26,270 BHS. Details calculation can be found in Supplementary table 3.
Micronutrient tablet for pregnant women	23	918,000ª	5	15,202,080,000	12,066,651,000	3,135,429,000	80% of the pregnant women receiving 180 micronutrient tablets.
Vitamin A for 6-59 months	30	5,000,000 b	5	1,350,000,000	816,000,000	534,000,000	90% of 6-59 months children receiving 2 times per year.
Vitamin A for PN mothers	30	918,000	5	110,160,000	48,470,400	61,689,600	80% of PN mother receiving vitamin A.
Zinc supplementation for diarrhea management	30	520,000°	5	780,000,000	65,520,000	714,480,000	Children with diarrhea who received 10 days of Zinc supplementation on average.
Micronutrient powder	35	1,530,000 d	5	28,917,000,000	6,426,000,000	22,491,000,000	90% of 6-59 months children receiving 1 sachet/day for 2 months, 2 times in a year.
Supplementary foods for MAM	550	446,880 <sup>e</sup>	5	110,602,800,000	-	110,602,800,000	MAM children receiving 1 sachet/day for 90 days.
Community-based management for SAM	450	50,000 <sup>f</sup>	5	15,187,500,000	-	15,187,500,000	SAM children receiving 3 sachets/day for 45 days.
Mebendazole for pregnant women	43	918,000	5	157,896,000	109,145,610	48,750,390	80% of pregnant mother receiving vitamin A (9).
Albendazole for children	37	1,530,000	5	509,490,000	241,158,600	268,331,400	90% of 6-59 months children receiving 2 times (9).
Salt test kit	600	26,270 <sup>g</sup>	5	157,620,000	78,810,000	78,810,000	Testing iodine content of salt in the community.
IEC	500	918,000	5	9,180,000,000	5,737,500,000	3,442,500,000	80% of pregnant mother receiving Five items of IEC (9).
Materials distribution cost	100,000	330 <sup>h</sup>	-	33,000,000	33,000,000	-	

MUAC Measuring tape	200	26,270	5	26,270,000	18,389,000	7,881,000	
G	Grand Total	Cost (MMK)		185,416,870,500	25,640,644,610	159,776,225,890	
Grand Total Cost (USD)				123,611,247.00	17,093,763.07	106,517,483.93	

BHS= Basic Health Staff; HMIS= Health Management Information System; PN =Post-natal; MAM = Moderate Acute Malnutrition; SAM= Severe Acute Malnutrition; IEC = Information, Education and Communication; MUAC = Mid Upper Arm Circumference. All costs are in MMK unless otherwise stated.

1 USD = 1500 MMK (Exchange rate at the time of evaluation, 2018)

Note: All costs described in the three policy options are additional costs. It did not include the cost of building, clinic maintenance costs, utilities and staff time to implement these options and was expected that no additional staff will be needed to implement these options. All costs are in MMK unless otherwise stated.

<sup>&</sup>lt;sup>a</sup> Total number of pregnant women (14)

<sup>&</sup>lt;sup>b</sup> Total number of under five-year old children (14)

<sup>&</sup>lt;sup>c</sup> Total number of under five-children got diarrhea (14)

<sup>&</sup>lt;sup>d</sup> Total number of children 6-23 months old children (or under 2 years old children)

<sup>&</sup>lt;sup>e</sup> Total number of undernourished mother and MAM children (National Nutrition Center, Naypyitaw)

<sup>&</sup>lt;sup>f</sup> Total number of SAM children (National Nutrition Center, Naypyitaw)

<sup>&</sup>lt;sup>g</sup> Total number of BHS (Department of Public Health, Ministry of Health and Sports)

<sup>&</sup>lt;sup>h</sup> Total number of townships (9)

## Supplementary Table 5. Sensitivity Analysis comparing the three policy options after five years with the status quo where the % of stunted child among normal birthweight and good IYCF

% of stunted child among Normal BW & good IYCF	Option 1			Option 2			Option 3		
	Case %	Cases averted	Cost/case averted	Case %	Cases averted	Cost/case averted	Case %	Cases averted	Cost/case averted
10	19.03	18,416	806.6	19.29	5,446	37,450.0	16.64	137,142	901.0
11	20.94	20,257	733.3	21.22	5,991	34,046.0	18.31	150,856	819.4
12	22.84	22,099	672.2	23.15	6,536	31,208.9	19.97	164,570	751.1
13.5	25.70	24,861	597.5	26.05	7,353	27,741.2	22.47	185,142	667.7
14	26.65	25,782	576.2	27.01	7,625	26,750.4	23.30	191,999	643.8

BW=Birthweight; IYCF= Infant and Young Child Feeding

### Supplementary Table 6. Sensitivity Analysis comparing policy option 3 after five years with the status quo where the % good IYCF ranges from 11 to 21%

0/ 4110	0/ ANG Increased	% Stunt	ed Case	Stunted Cas	ses averted	Cost/stunted case averted		
% ANC coverage	Minimum		Maximum (11% good IYCF)	Minimum (11% good IYCF)			Maximum (11% good IYCF)	
70	1.5	23.43	25.18	81,058	105,580	1,171	1,525	
70	2.5	21.16	23.99	140,295	218,669	565	881	
70	3.0	20.02	23.39	169,914	275,214	449	728	
80	1.5	23.30	25.03	88,237	112,261	1,101	1,401	
80	2.5	21.03	23.85	147,134	224,701	550	840	
80	3.0	19.90	23.26	176,582	280,921	440	700	
90	1.5	23.16	24.89	95,415	118,942	1,039	1,296	
90	2.5	20.91	23.70	153,972	230,732	536	802	
90	3.0	19.79	23.12	183,251	286,628	431	675	

ANC=Antenatal Care; IYCF= Infant and Young Child Feeding