



Rice Fortification in Myanmar

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Ministry of Health and Sports, Office No (4), Nay Pyi Taw.

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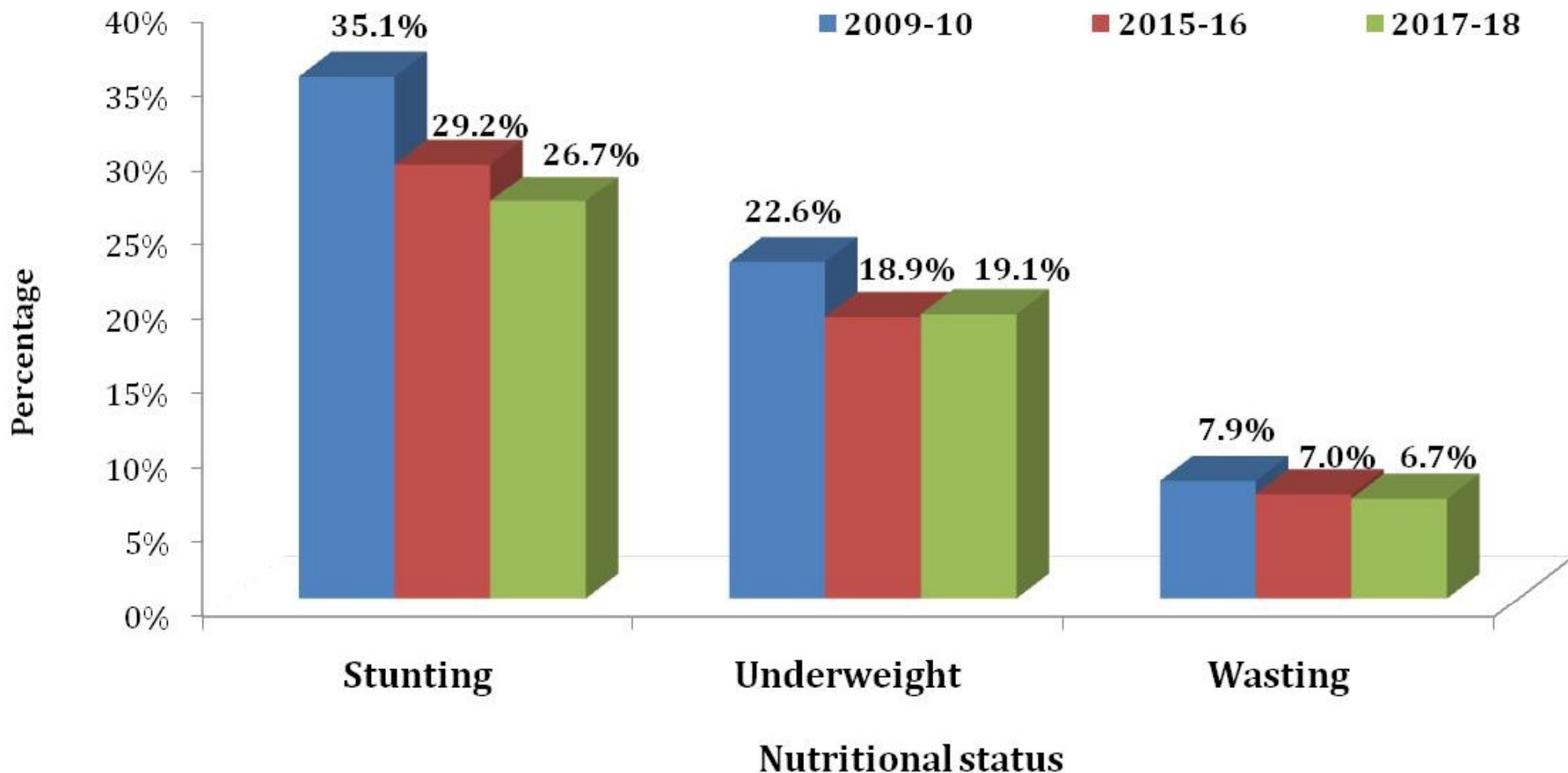


Outline of presentation

- ❑ Nutrition situation in Myanmar
- ❑ Strategies to reduce micronutrient deficiencies
- ❑ Rice fortification in Myanmar
- ❑ Way forward



Nutritional status of under-five children (2010-2018)



Source:

Multiple Indicator Cluster Survey (2009-2010), N = 15,224 (children 0-59 months)

Myanmar Demographic and Health Survey (2015-2016), N = 4,100 (children 6-59 months)

Myanmar Micronutrient and Food Consumption Survey (Nov 2017-May 2018), N = 8,959 (children 6-59 months)



Consequences of micronutrient deficiencies

Iron deficiency and Anemia



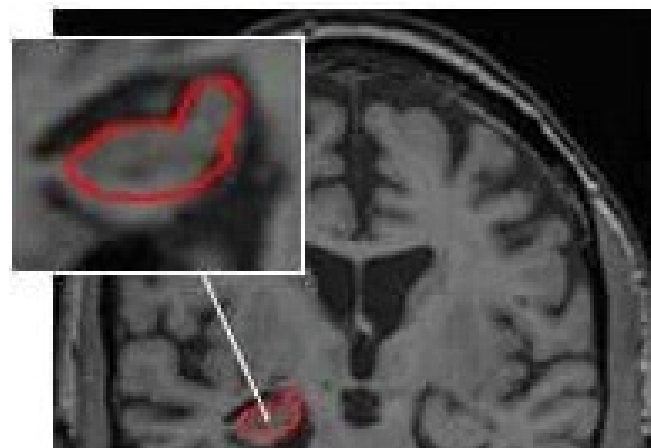
Iron deficiency



Low-birth weight babies



Pre-mature babies



Cognitive impairment

Iron and Iodine deficiencies



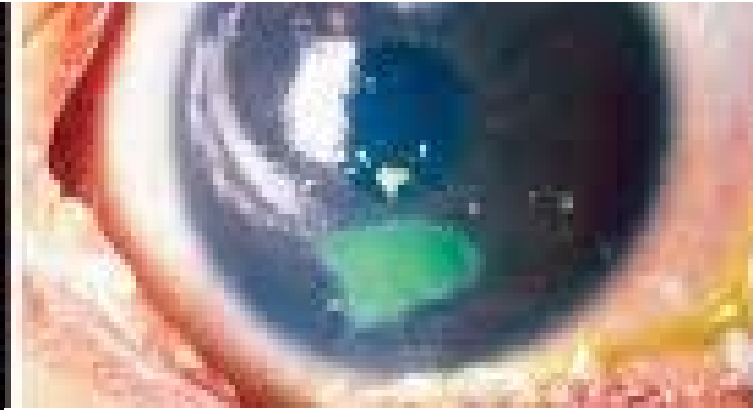
Still birth & Abortion



Vitamin A deficiency



Bitot spot



Corneal dryness



Corneal ulceration



Corneal scarring



Vitamin B1 deficiency



Infantile beri beri (successive cry, fits without fever, Liver enlargement, peripheral edema)

Folate deficiency

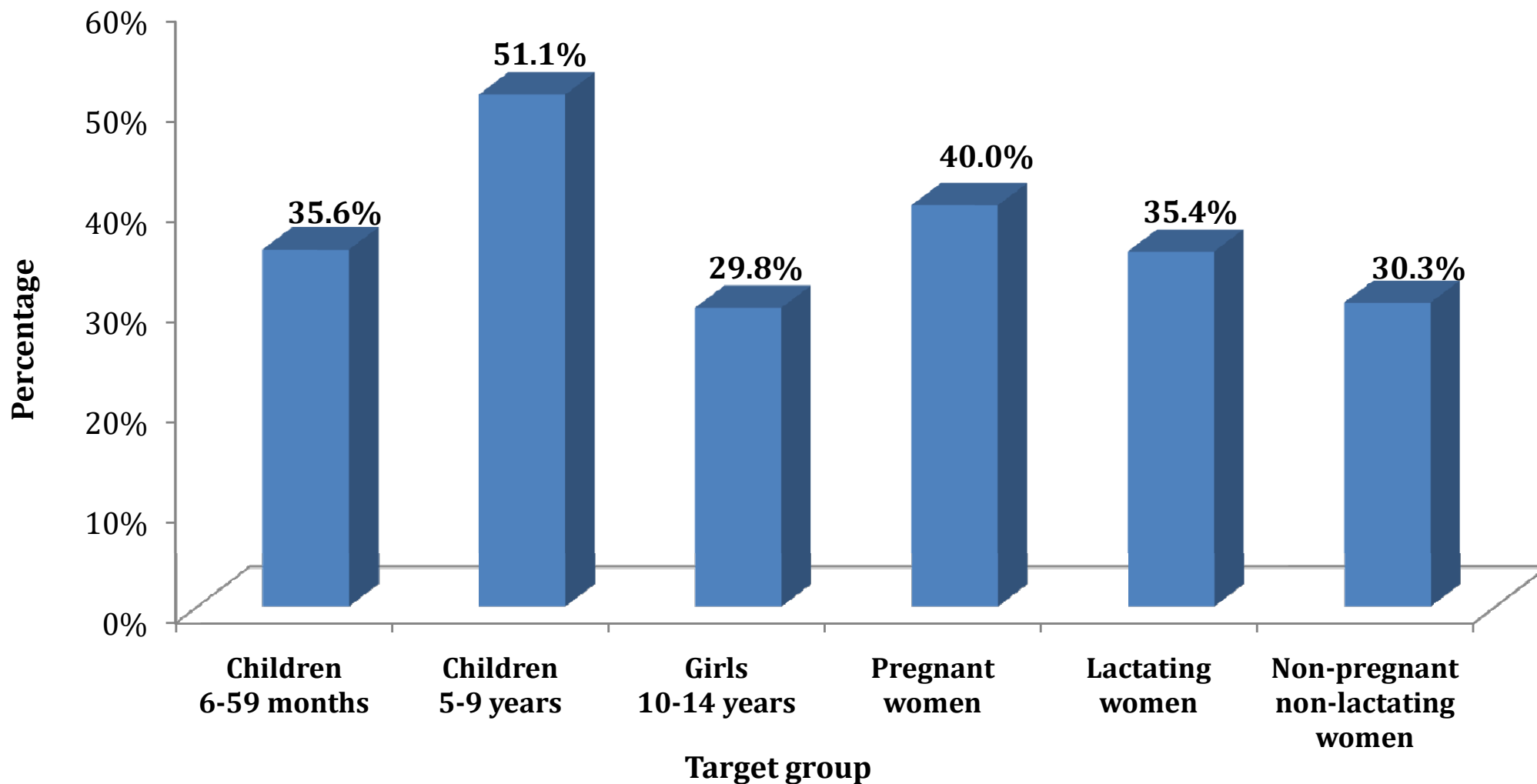


Neural tube defects





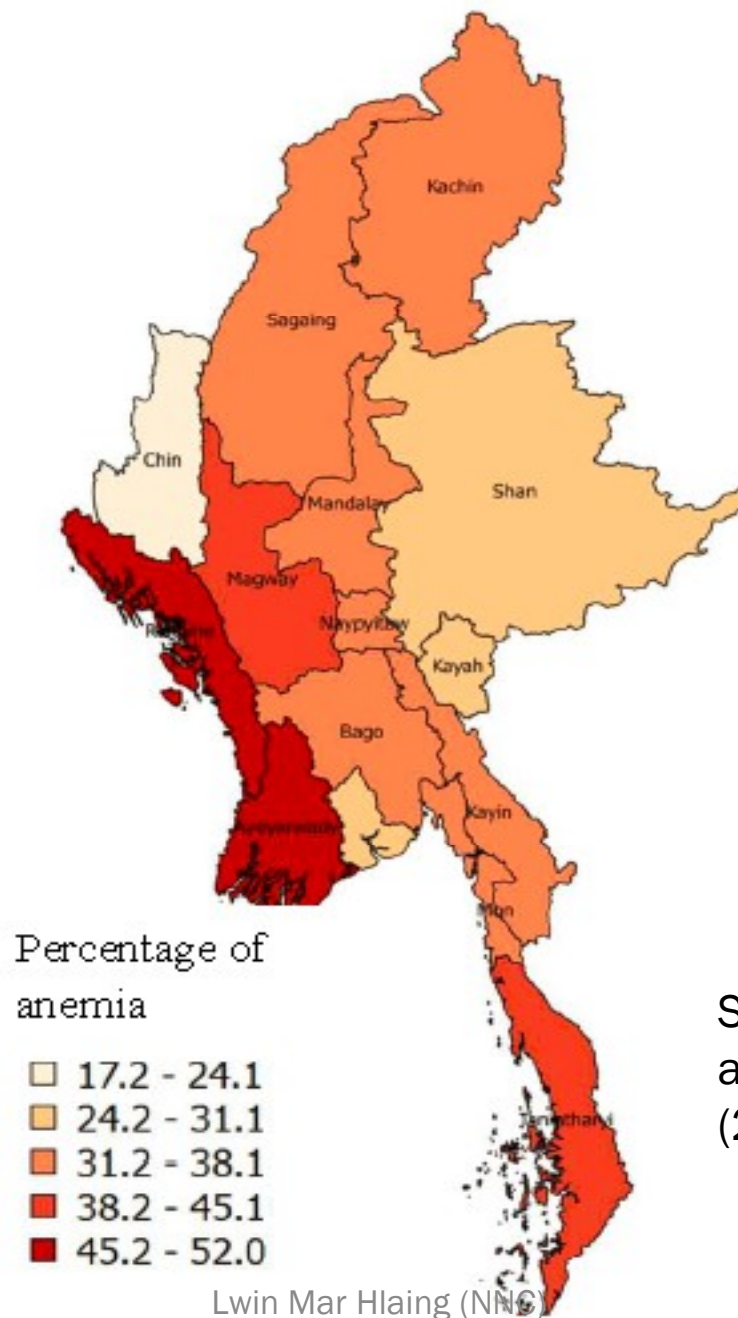
Anemia among different population



Source: Myanmar Micronutrient and Food Consumption Survey (Nov 2017-May 2018), N =8,959 (children 6-59 months)

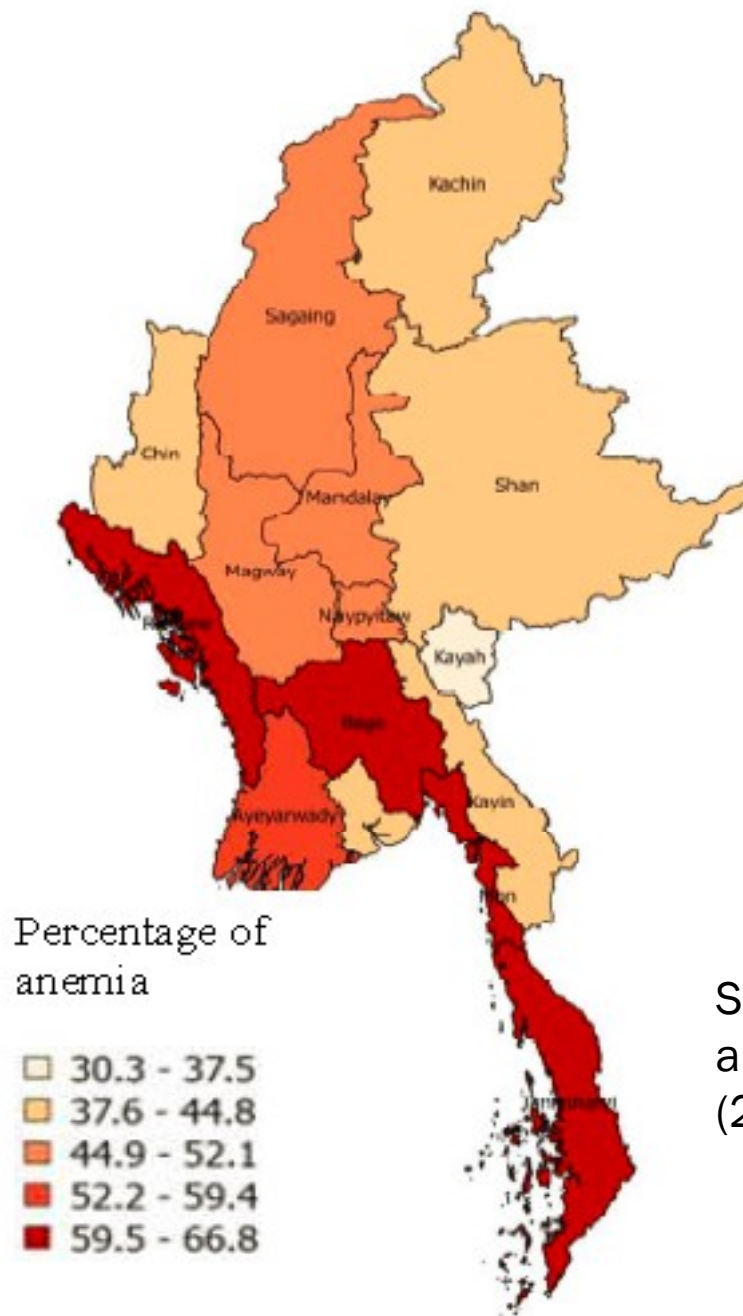


Anemia among 6-59 month children by state/region





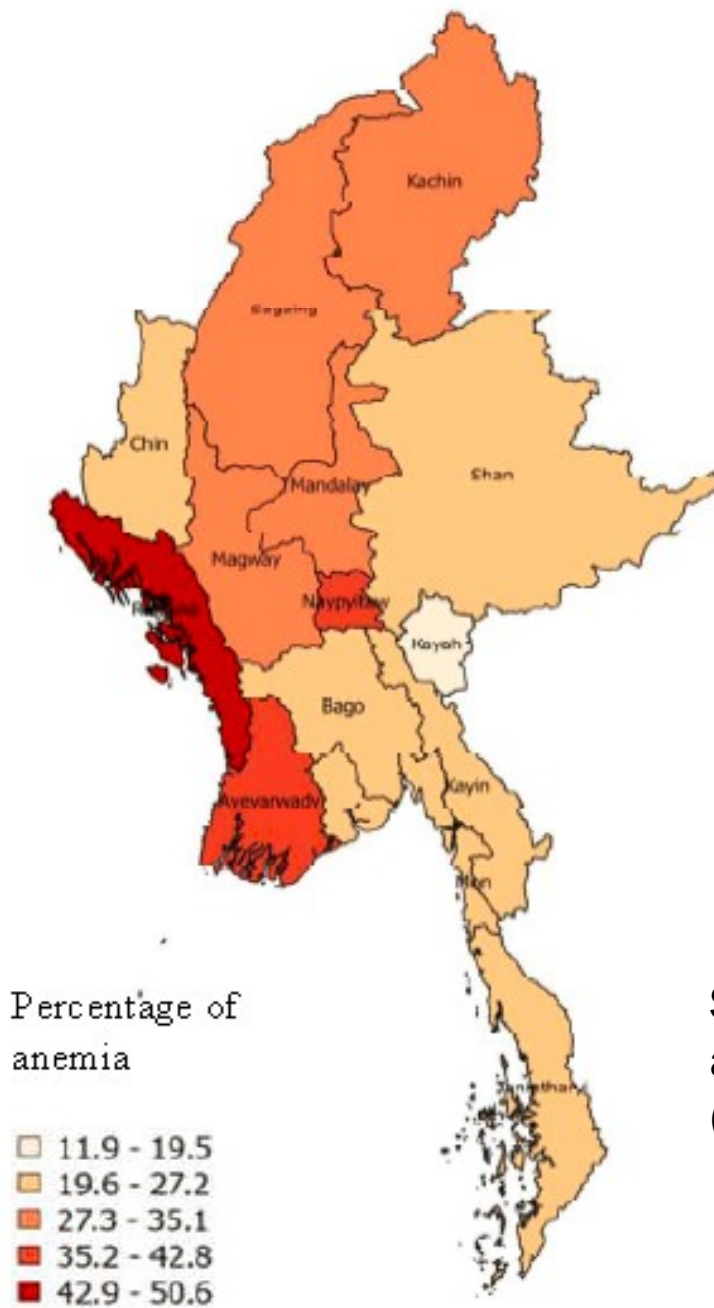
Anemia among 5-9 year children by state/region



Source: Myanmar Micronutrient and Food Consumption Survey (2017-2018)



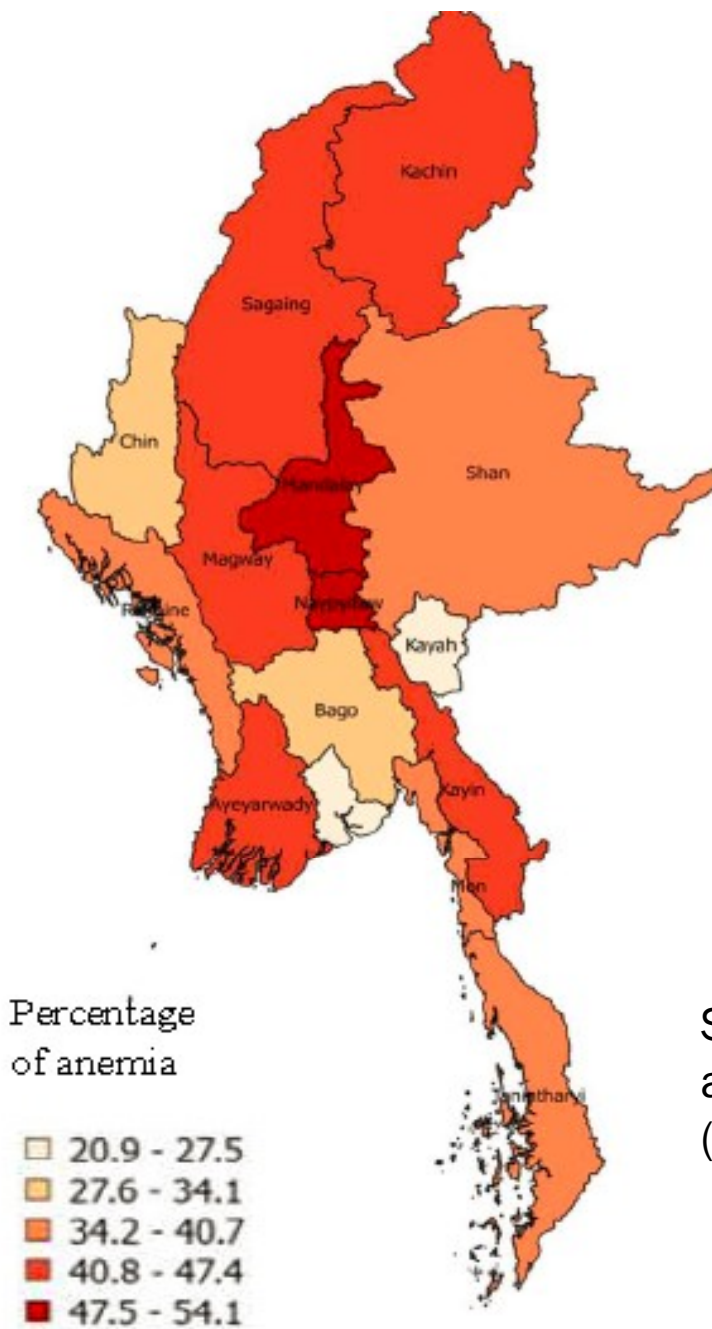
Anemia among adolescent girls by state/region



Source: Myanmar Micronutrient and Food Consumption Survey (2017-2018)



Anemia among pregnant women by state/region



Source: Myanmar Micronutrient and Food Consumption Survey (2017-2018)



Strategies to reduce micronutrient deficiencies

☐ Micronutrient supplementation



☐ Food fortification

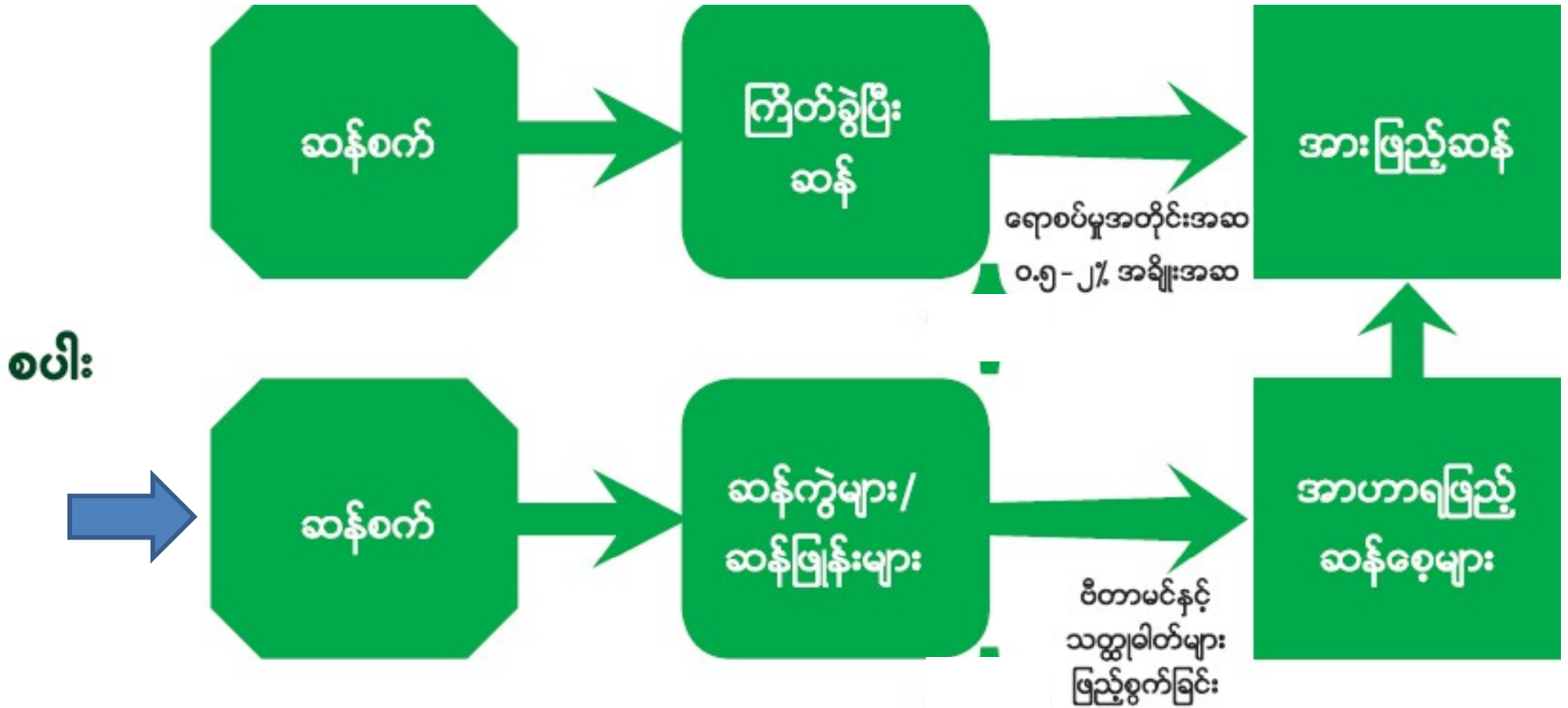


☐ Dietary diversification





Production of Fortified rice





General composition of Fortified rice

☐ Nutrients:

1. Iron
2. Zinc
3. Vitamin A
4. Thiamine (Vitamin B₁)
5. Niacin (Vitamin B₂)
6. Pyridoxine (Vitamin B₆)
7. Folic Acid (Vitamin B₉)
8. Vitamin B₁₂

☐ Amount:

- ✓ Estimated average requirement of adult male (19-50 years)



Partners for rice fortification



စိုက်ပျိုးရေးဦးစီးဌာန



MRF
Myanmar Rice Federation



Livelihoods and Food Security Fund





Rice fortification in Myanmar

Goal: To reduce micronutrient deficiencies in the population while creating income-generation opportunities for supply-chain and distribution actors through the introduction of fortified rice in Myanmar

Output 1:

Advocacy &
policy

Output 2:

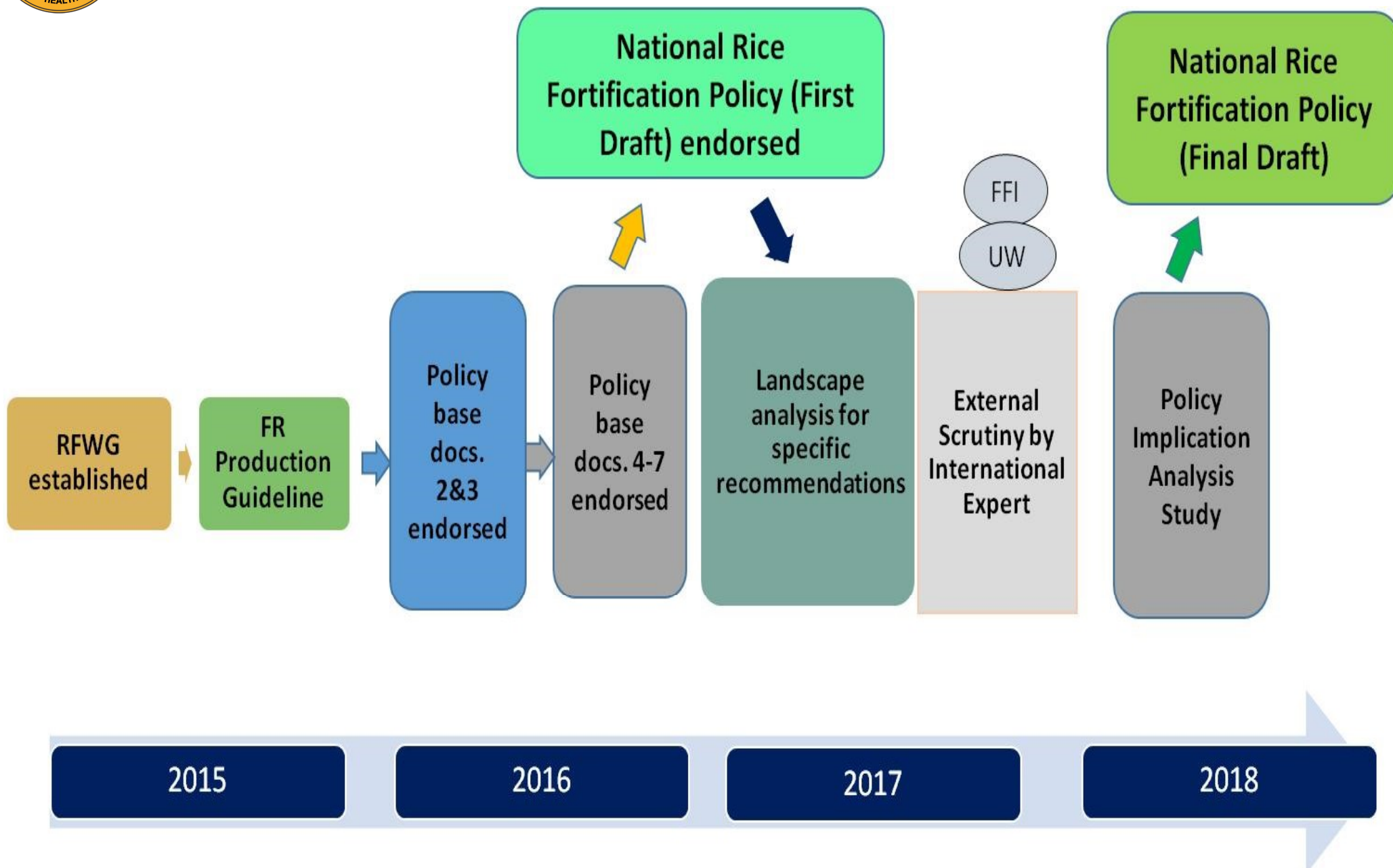
Supply chain &
distribution

Output 3:

Sustainable
demand



Output1: Supportive policy environment





Launching of Technical Guidance on Rice Fortification (2 March 2019, Yangon)





Output 2: Establishment of supply chain

Business Partners Engaged for Rice Fortification

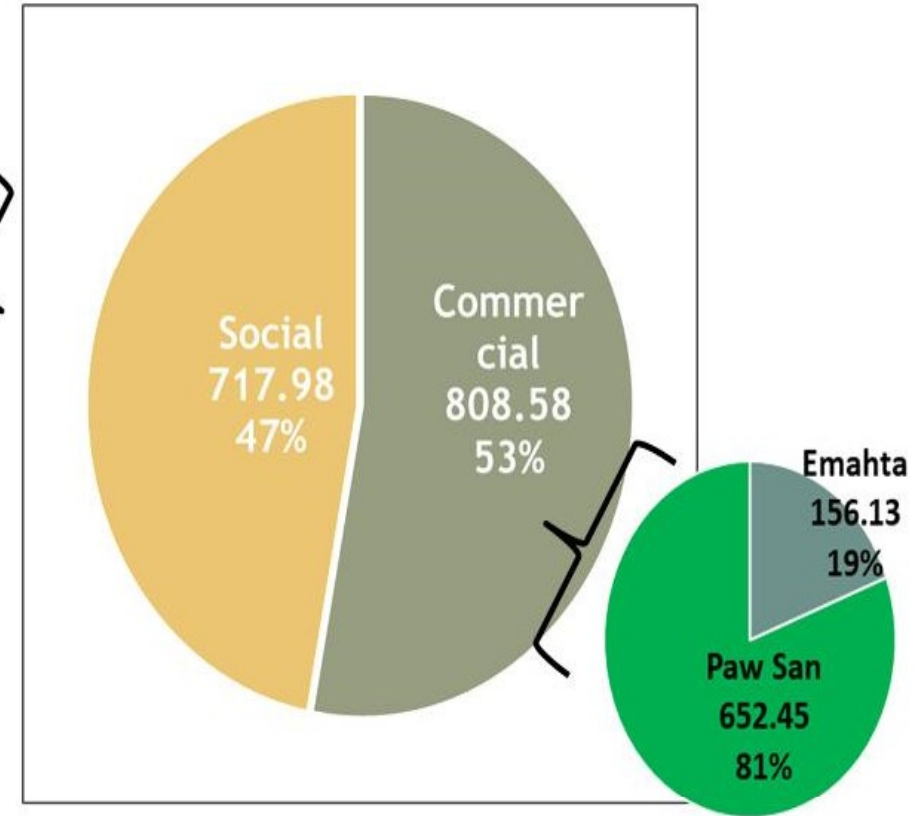
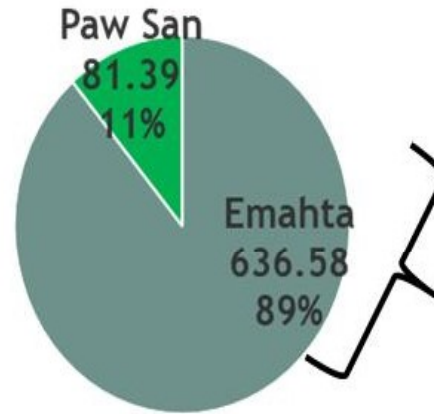
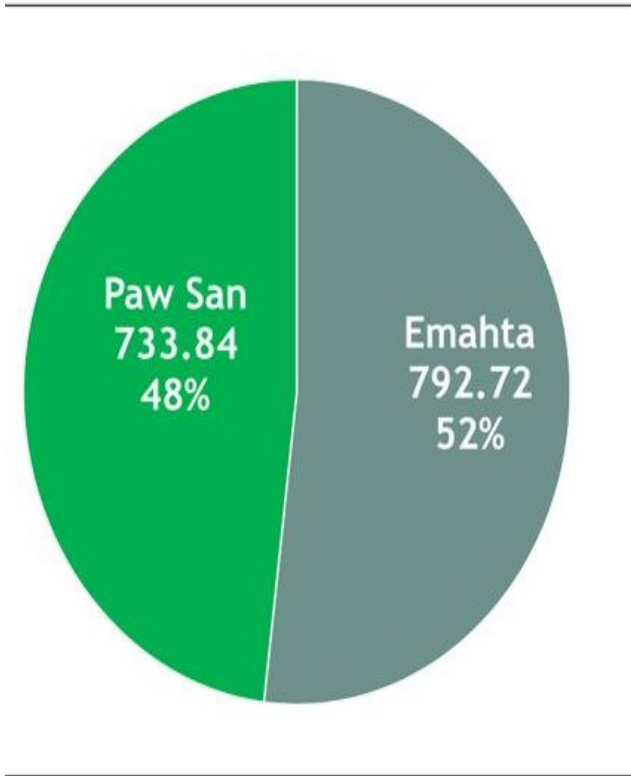
- ❑ *TWO* Fortified Kernel Producers –
 - Gold Power in Yangon
 - MAPCO Golden Lace in Kyaiklatt

- ❑ *TWO* Blending unit producers (Fabricators) –
 - Soe Naing Win
 - Power Vigor

- ❑ *FOURTEEN* Fortified Rice Producers–
 - Gold Power, Swan Htet Myet, Excel, 122 in Yangon
 - Aung Pyae, MAPCO-Golden Lace, U Cho, Time Wing, Aung Theidi in Ayeyarwaddy
 - Red Star in Bago (Eastern)
 - Theingi in Sagaing
 - Crescent Land, Tun Tun Zaw in Rakhine
 - Tan Tayar in Bago (Western); Nattalin



Output 2: Distribution (As of Dec 2018)



Total = 1,526.57 MTs

Out of 51.4 million total population in Myanmar:

- ❖ One time consumer for fortified rice ~ 350,000 population
- ❖ Usual consumer of fortified rice ~ 12,000 population



Output 3: Demand generation

- Commercial channels (Mass media, Social media, Printed media)
- Public channels (Hospitals, Regional government, Day care centers)
- Community-based promotional events
- Market activation campaigns
- Brand visibility
- Social channels (Affordable meal on wheel, Business Kind Myanmar)



Output 3: Demand generation



Distribution of Fortified rice to pregnant women in
“Mittar San Yay” clinic by MMCWA



Output 3: Demand generation



Community Talk show and awareness Campaign



Output 3: Demand generation



WFP distribution of fortified rice in their project areas



Output 3: Demand generation



UEHRD distribution of fortified rice in Rakhine



Output 3: Demand generation



သင့်မိသားစု ကျန်းမာသန်ထွား ဉာဏ်ဖြင့်မားရန်

အာဟာရပြည့် အားဖြည့်ဆန်

ကုန်အမှတ်တံဆိပ်
အားဖြည့်ဆန်

Category brand

အရည်အသွေးအသိအမှတ်ပြုတံဆိပ်

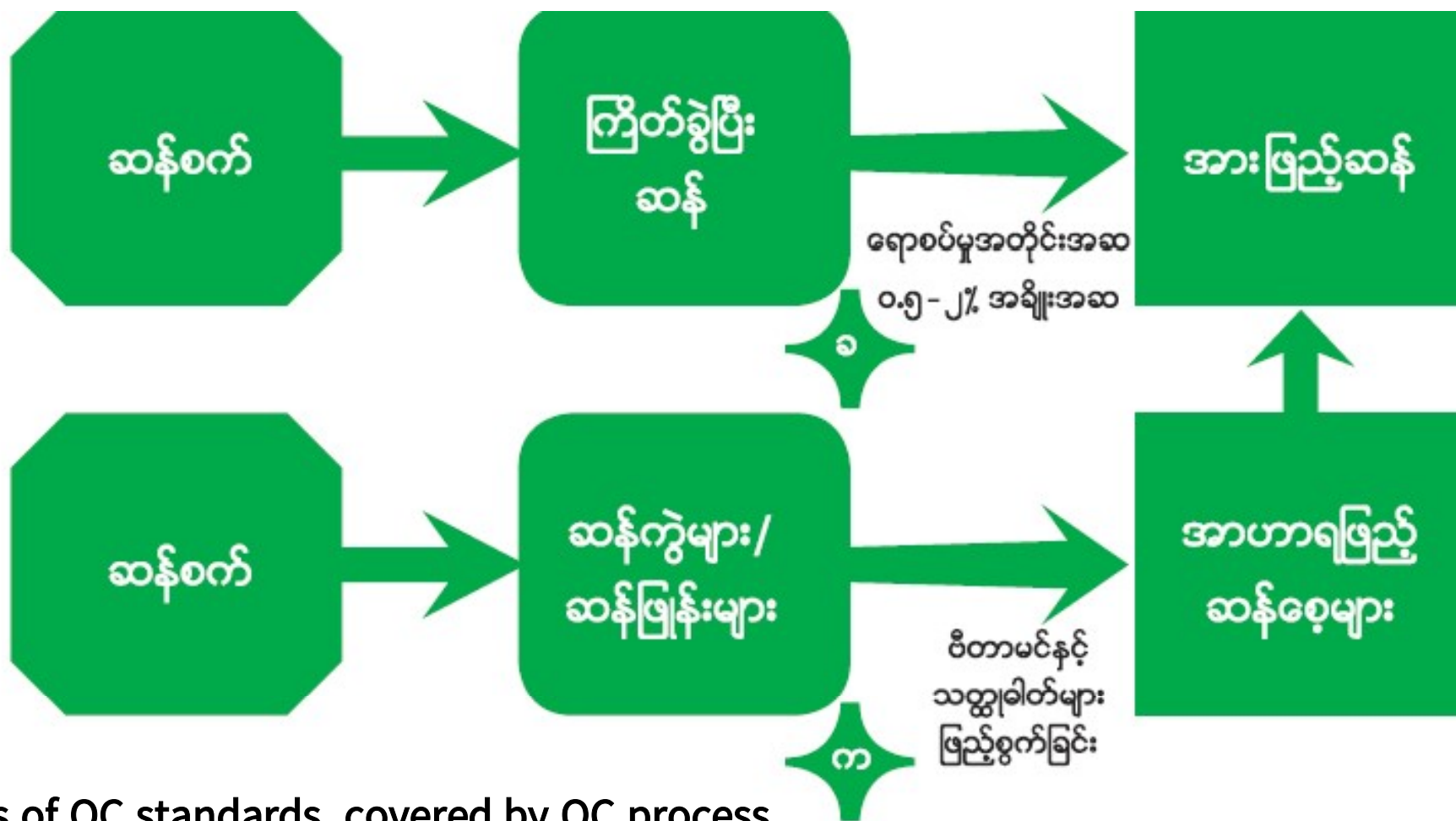


Quality seal



Quality Control

စပါး



Key sets of QC standards covered by QC process

- (က) Micronutrient standard
- (ခ) Blending ratio standard



Future Plan

- Replace ordinary rice with fortified rice in sports institutes/ training centers/hospitals under MoHS
- Awareness raising on benefits of fortified rice for community as well as rice producers
- Encourage rice millers for mass production of fortified rice to reduce the production cost
- Support import permit & tax exemption for instruments related to the fortified rice production
- Ensure the nutrient content quality of fortified rice
- Maximize the reach to vulnerable population
 - ✓ Negotiate small millers
 - ✓ Consider selling of fortified kernel



THANK YOU