

## Report Card on Carbon Footprints due to Breastmilk Substitutes (BMS)

Breastfeeding is a sustainable and natural source of food and nutrition. On the other hand, industrially manufactured Breastmilk Substitutes are made from dairy and other agricultural products, which generate greenhouse gases (GHG) including methane and nitrous oxide during production, transport and use. Their use also generates a sizable volume of waste, which needs disposal. **GreenFeeding** is a call to make feeding decisions that have dual benefits i.e. practicing breastfeeding which is a natural and sustainable source of food and nutrition for infants and young children (and contributes to achieving global nutrition targets), as well as avoiding BMS and helping conserve the natural environment.

However, the use of milk formula is increasingly driven by sub-optimal implementation of policies and programmes, particularly regulation of marketing of commercial baby foods to enhance optimal breastfeeding practices.

This report-card provides estimates of GHG emissions arising from BMS sale in Vietnam. This is set alongside assessment of the implementation of policies and programmes on infant and young child feeding in the country and some suggested actions to improve the situation.

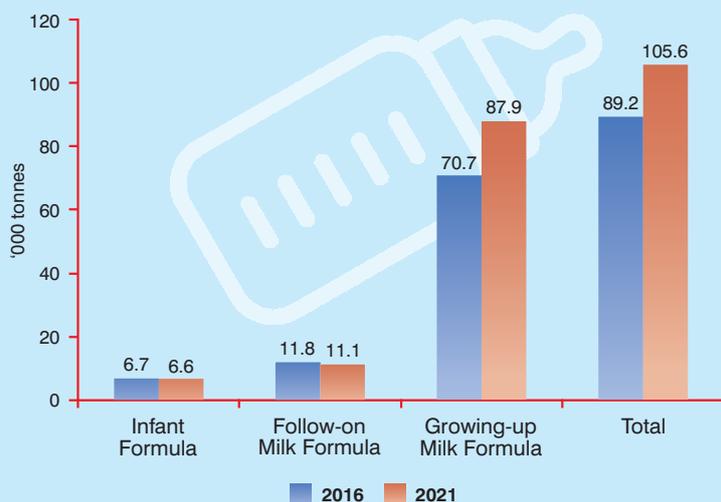


## Estimating GHG emissions due to BMS

This report card has used the method developed by IBFAN Asia to estimate the GHG emission [kg CO<sub>2</sub> eq. emissions, that is, the GHG amount that would have the same global warming potential as a kilogram of carbon dioxide gas (CO<sub>2</sub>)] per kg of BMS sold. It took into account the GHG emissions due to constituents of BMS like milk powder, vegetable oils and sugars, as found from a literature review. Proportions of ingredients in various BMS products were calculated using Codex Alimentarius guidance on macronutrient composition. Published industry data from Euromonitor International for milk formula sales provided data on volumes of milk formula sold in the country.

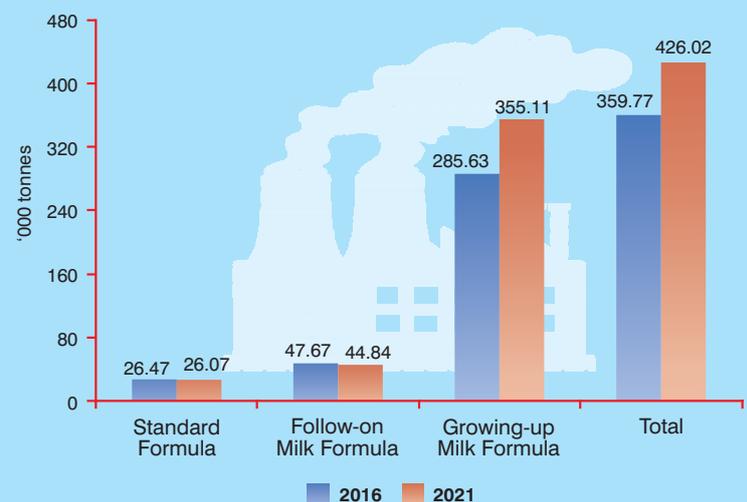
Estimated GHG emissions per kg of BMS ranged from 3.95 kg CO<sub>2</sub> eq. for standard infant formula and special baby milk formula and 4.04 kg CO<sub>2</sub> eq. for follow-up formula and growing up milks.<sup>1</sup>

**Sales of BMS in 2016 and projected sales in 2021 ('000 Tonnes)<sup>2</sup>**



- In 2016, total sale of BMS in Vietnam was 89,200 tonnes, out of which 70,700 tonnes was growing up milks, 11,800 tonnes was follow-up formula and 6,700 tonnes was standard infant formula.
- Total projected sale of BMS in Vietnam in 2021 is 105,600 tonnes out of which 87,900 tonnes is growing up milk, 11,100 tonnes is follow-up formula and 6,600 tonnes is standard infant formula.
- Projections show sale of standard infant formula and follow-up formula will go down while there will be about 25% increase in the sale of growing up milk by 2021.

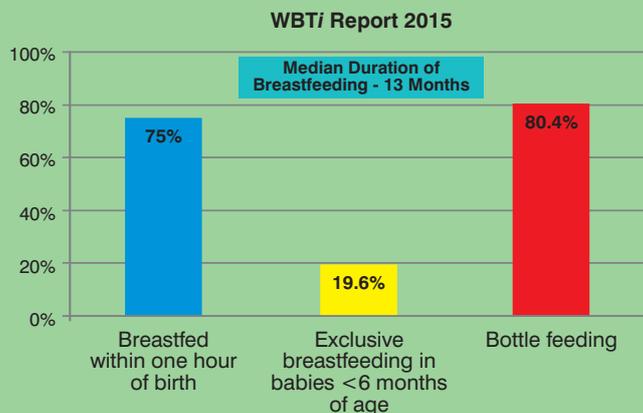
**GHG Emissions due to BMS in 2016 and projected emissions in 2021 ('000 Tonnes CO<sub>2</sub> eq.)<sup>1,2</sup>**



- Total GHG emissions due to BMS in 2016 was 359,770 tonnes of CO<sub>2</sub> eq. out of which 285,630 tonnes was due to growing up milks and 47,670 tonnes was due to follow up formula.
- Projected total GHG emissions in 2021 due to BMS is 426,020 tonnes of CO<sub>2</sub>, with the maximum contribution to come from the growing up milks.

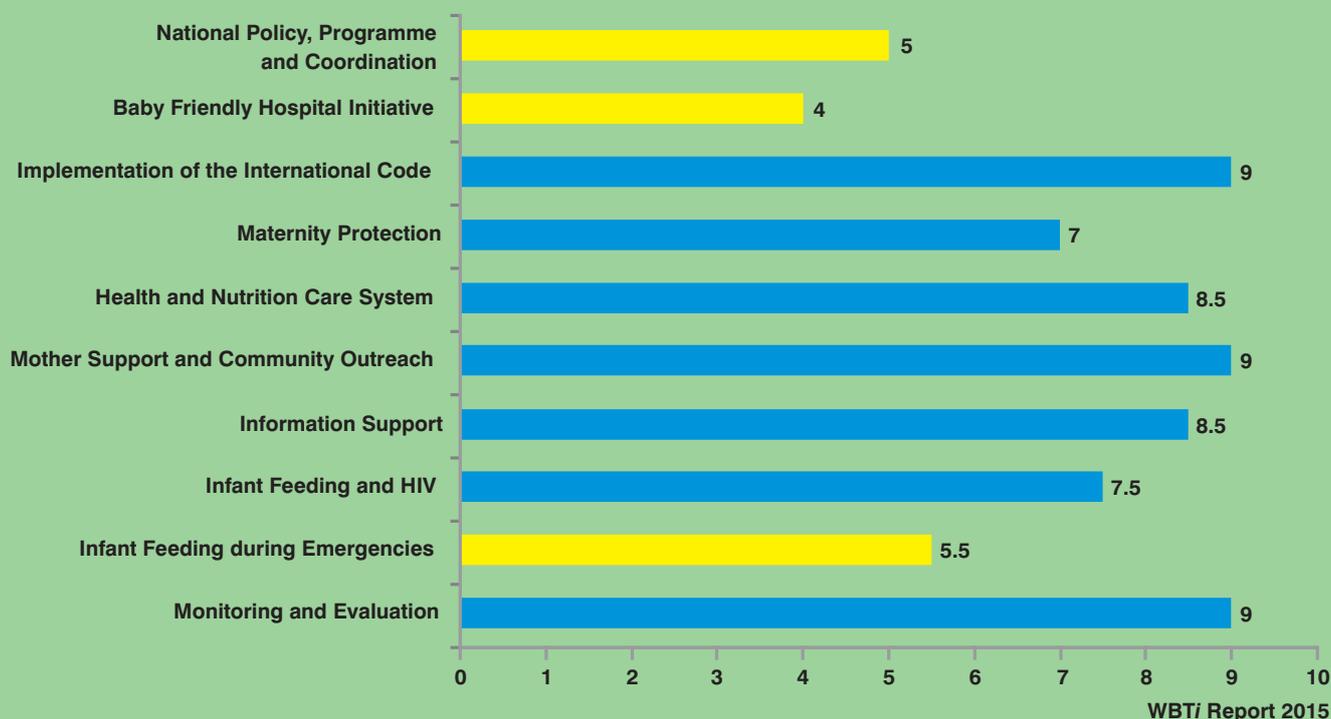
## IYCF Practices

A high bottle feeding rate of 80.4%, a low rate of exclusive breastfeeding < 6 months and coupled with a median duration of breastfeeding of 13 months need immediate attention. It shows that BMS are introduced early and they replace breastfeeding during the infancy and in the second year of life.



## Policies and Programmes on IYCF<sup>3</sup>

To enhance breastfeeding rates and to restrict use of BMS, strengthening of policies and programmes on IYCF is required. WBTi assessment 2015 has revealed many gaps in policies and programmes on IYCF.



- There is a need to have a robust national IYCF policy, effective programme to improve breastfeeding practices in hospitals, safe infant feeding practices during emergencies, better maternity protection provisions and effective implementation of programmes on HIV and infant feeding.
- More importantly there is a need for effective implementation of the International Code of Marketing of Breastmilk Substitutes<sup>4</sup> by strengthening the Code legislation to bridge the gaps being exploited by the manufacturers to promote their baby food and milk formula products; and establishing International Code monitoring mechanisms which are independent and transparent, free from commercial influence and empowered to impose legal sanctions.

1. Dadhich JP, Smith J, Iellamo A, Suleiman A. Report on carbon footprints due to milk formula: a study from selected countries of the Asia-Pacific Region. Delhi: BPNI/IBFAN Asia; 2016.  
 2. Euromonitor International (2016). Passport-Baby Food in Vietnam  
 3. WBTi report of Vietnam 2015. <http://www.worldbreastfeedingtrends.org/GenerateReports/countrysubmit.php?country=VN>  
 4. WHO, UNICEF, IBFAN. Marketing of breast-milk substitutes: national implementation of the international code: status report 2016

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