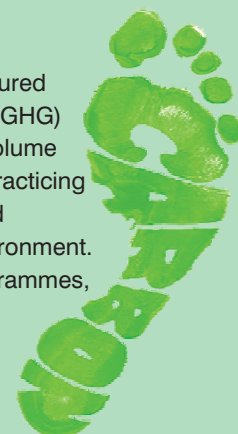


### Report Card on Carbon Footprints due to Breastmilk Substitutes (BMS)

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 India. 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.

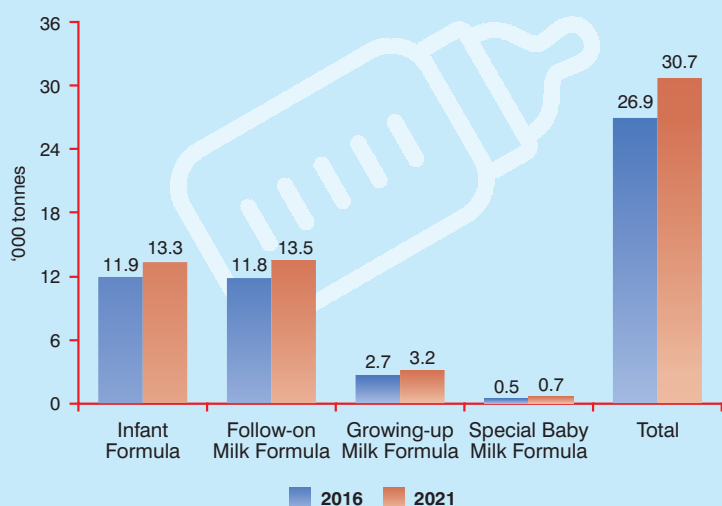


### Estimating GHG emissions due to BMS

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.

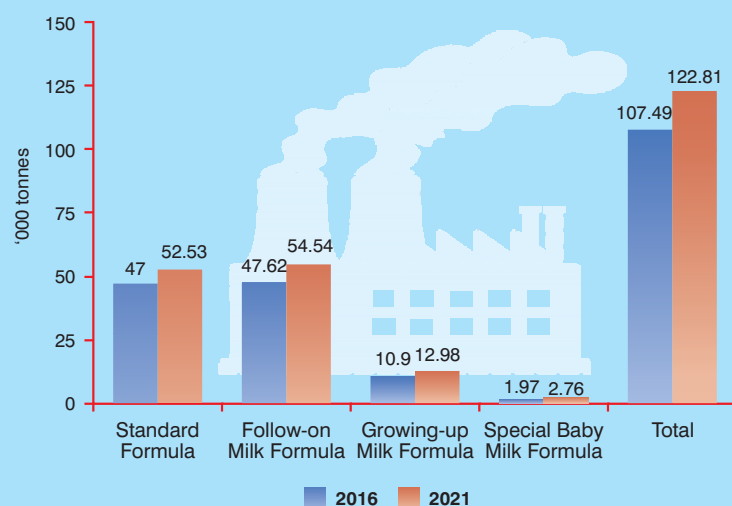
Estimated GHG emissions per kg of BMS ranged from 3.95 kg CO<sub>2</sub> eq. for standard infant formula and special baby milk formula and 4.04 kg CO<sub>2</sub> eq. for follow-up formula and growing up milks.<sup>1</sup>

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



- In 2016, total sale of BMS in India was 26,900 tonnes, out of which 2,700 tonnes was growing up milks, 11,800 tonnes was follow-up formula, 11,900 tonnes was standard infant formula and 500 tonnes was special baby milk formula.
- Total projected sale of BMS in India in 2021 is 30,700 tonnes out of which 3,200 tonnes is growing up milk, 13,500 tonnes is follow-up formula, 13,300 tonnes is standard infant formula and 700 tonnes is special baby milk formula.
- Projections show that there will be about 14% increase in the sale of BMS between 2016 and 2021.

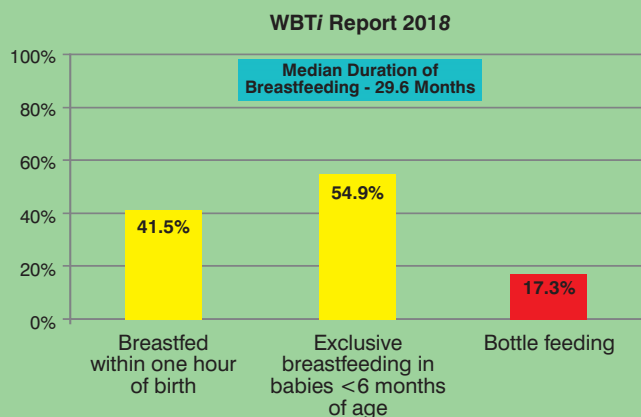
#### GHG Emissions due to BMS in 2016 and projected emissions in 2021 ('000 Tonnes CO<sub>2</sub> eq.)<sup>1,2</sup>



- Total GHG emissions due to BMS in 2016 was 107,490 tonnes of CO<sub>2</sub> eq. out of which 10,900 tonnes was due to growing up milks, 47,000 tonnes was due to standard formula, 47,620 tonnes was due to follow up formula, and 1,970 tonnes was due to special baby milk formula.
- Projected total GHG emissions in 2021 due to BMS is 122,810 tonnes of CO<sub>2</sub> eq., maximum contribution to it will come from the follow-up formula.

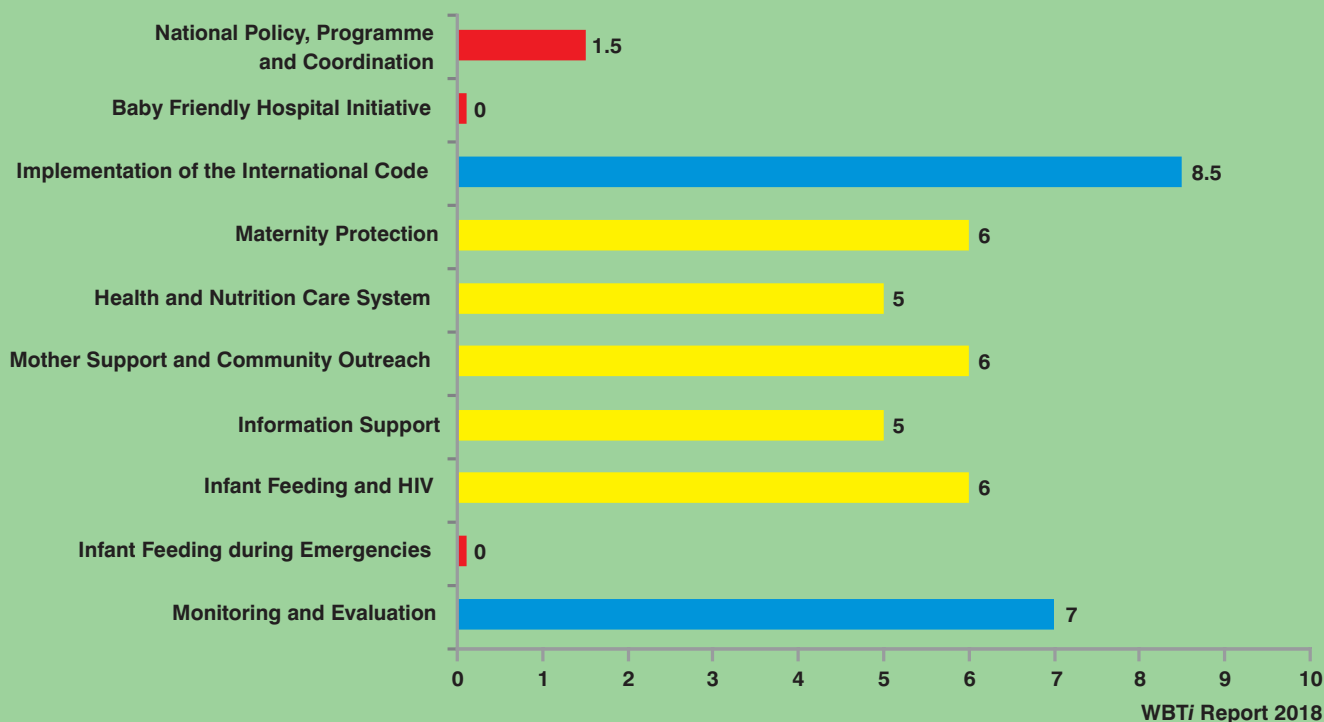
## IYCF Practices

A high bottle feeding rate of 17.3%, a low early initiation of breastfeeding and exclusive breastfeeding rate (< 6 months) of 54.9% 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 2018 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, enhanced maternity protection, effective policy and programmes on IYCF during emergencies and effective policies and programmes on HIV and infant feeding.
- More importantly there is a need for effective implementation of the International Code of Marketing of Breastmilk Substitutes (national legislation the IMS Act)<sup>4</sup> by establishing monitoring mechanisms which are independent and transparent and free from commercial influence.

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 India  
 3. WBTi report of India 2018. <http://worldbreastfeedingtrends.org/GenerateReports/countrysubmit.php?country=IN>  
 4. [http://www.searo.who.int/thailand/news/control-marketing-of-infant-and-young-child-food-act\(2017\).pdf](http://www.searo.who.int/thailand/news/control-marketing-of-infant-and-young-child-food-act(2017).pdf)

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