

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 Indonesia. 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.

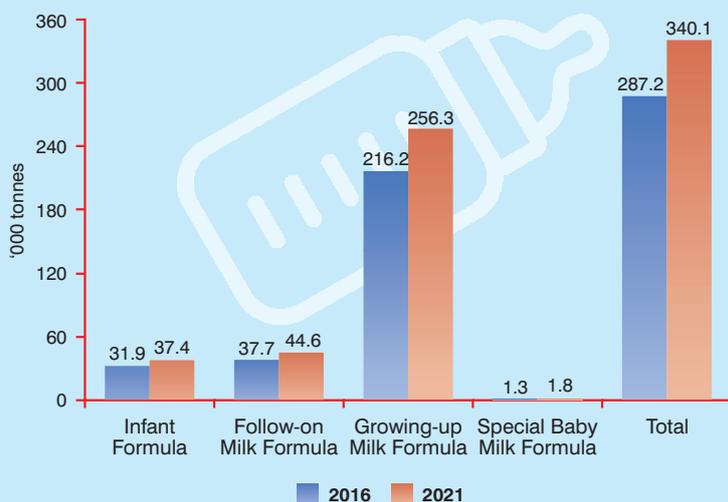


Estimating GHG emissions due to BMS

This report card has used the method developed by IBFAN Asia to estimate the GHG emission [kg CO₂ eq. emissions, that is, the GHG amount that would have the same global warming potential as a kilogram of carbon dioxide gas (CO₂)] 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.

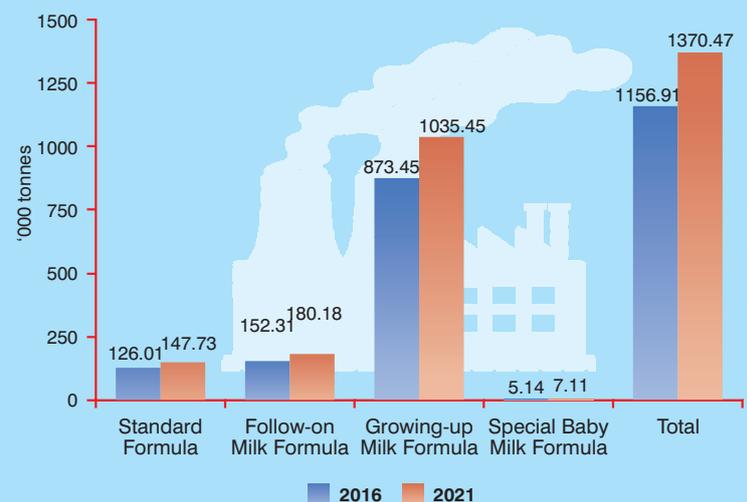
Estimated GHG emissions per kg of BMS ranged from 3.95 kg CO₂ eq. for standard infant formula and special baby milk formula and 4.04 kg CO₂ eq. for follow-up formula and growing up milks.¹

Sales of BMS in 2016 and projected sales in 2021 ('000 Tonnes)²



- In 2016, total sale of BMS in Indonesia was 287,100 tonnes, out of which 216,200 tonnes was growing up milks, 37,700 tonnes was follow-up formula, 31,900 tonnes was standard infant formula and 1300 tonnes was special baby milk formula.
- Total projected sale of BMS in Indonesia in 2021 is 340,100 tonnes out of which 256,300 tonnes is growing up milk, 44,600 tonnes is follow-up formula, 37,400 tonnes is standard infant formula and 1800 tonnes is special baby milk formula.
- Projections show that sale of all categories of BMS will increase substantially by 2021.

GHG Emissions due to BMS in 2016 and projected emissions in 2021 ('000 Tonnes CO₂ eq.)^{1,2}



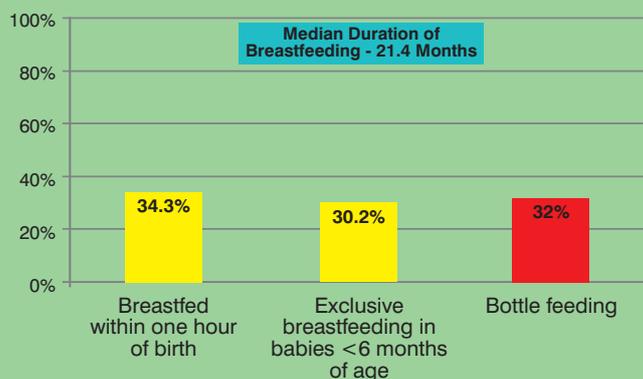
- Total GHG emissions due to BMS in 2016 was 1,156,910 tonnes of CO₂ eq. out of which 873,450 tonnes was due to growing up milks, 126,010 tonnes was due to standard formula, 152,310 tonnes was due to follow up formula, and 5140 tonnes was due to special baby milk formula.
- Projected total GHG emissions in 2021 due to BMS is 1,370,470 tonnes, maximum contribution to it will come from the growing up milks.

IYCF Practices

A high bottle feeding rate of 32%, coupled with a low early initiation of breastfeeding and exclusive breastfeeding < 6 months along need immediate attention. It shows that BMS are introduced early and they replace breastfeeding during the infancy and in the second year of life.

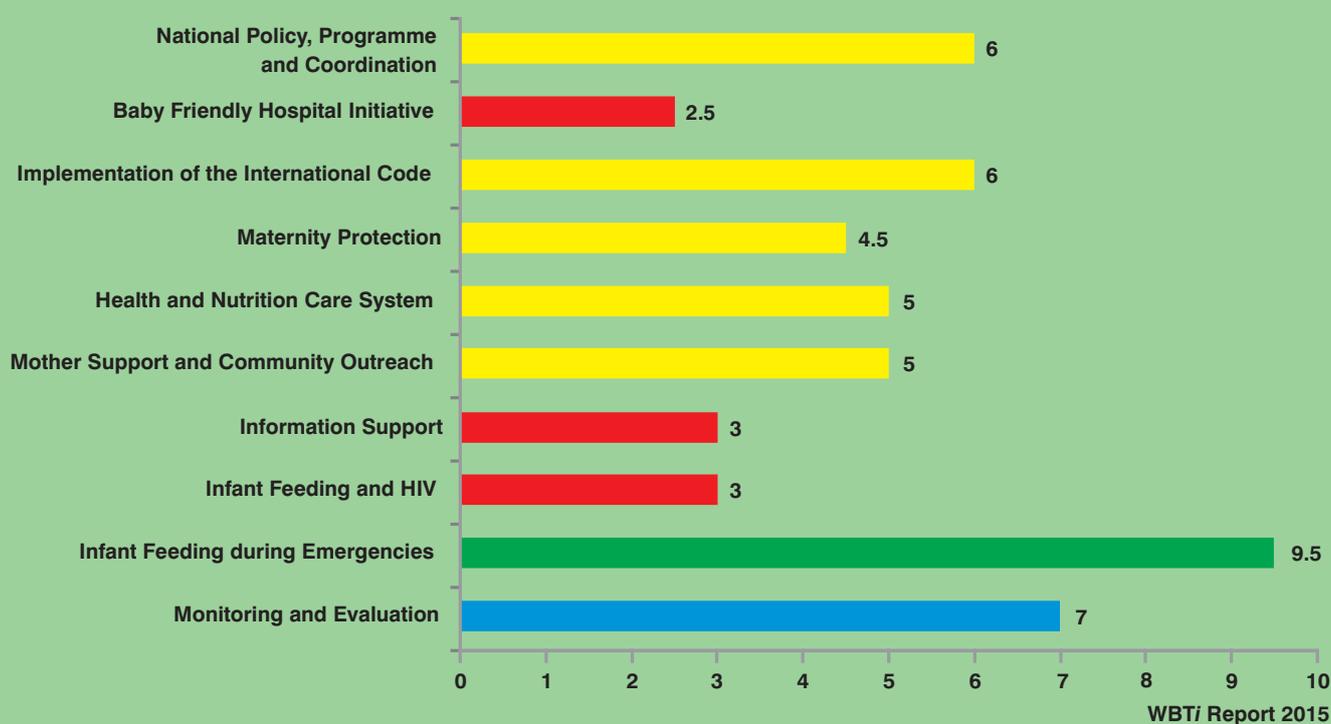


WBTi Report 2015



Policies and Programmes on IYCF³

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, appropriate IEC policy, enhanced maternity protection, effective policies and programmes on HIV and infant feeding, better maternity protection and access to IYCF counselling in the community.
- More importantly there is a need for effective implementation of the International Code of Marketing of Breastmilk Substitutes⁴ by:
 - Strengthening the national legislation by incorporating all the provisions of the Code in it.
 - Establishing International Code 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 Indonesia
 3. WBTi report of Indonesia. 2015. <http://www.worldbreastfeedingtrends.org/GenerateReports/countrysubmit.php?country=ID>
 4. WHO, UNICEF, IBFAN. Marketing of breast-milk substitutes: national implementation of the international code: status report 2016

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