



Royal Tropical Institute

# Policy Brief

## Food security

4  
June  
2013

Food security is high on the international agenda and dominates the development discourse. Through a series of Policy Briefs, each looking at a different topic within food security, the Royal Tropical Institute (KIT) aims to contribute to enhanced policy and practice on this issue.

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### *Better nutrition programming by focusing on maternal malnutrition*

**G**ood maternal nutrition is an important factor influencing newborn and child health and survival. While many nutritional programmes in the health sector incorporate interventions for (pregnant) women and girls, improved maternal nutritional status is often not the main focus.

In current programming, the long-term, positive impact of improved maternal nutrition on health and productivity in the population is not always taken into consideration. Gender and empowerment issues as underlying causes of maternal malnutrition are also insufficiently addressed. Using existing information and evidence, we demonstrate that maternal malnutrition can best be alleviated using a multi-sectoral approach (health, agriculture, finance) and a gender lens. This policy brief argues for making women central to programming in order to ensure sustainable change and improved health outcomes for women as well as their children.

#### SCALE AND CAUSES OF MATERNAL MALNUTRITION

The nutritional status of women and children reflects overall societal well-being (Bread for the World, 2012). Maternal undernutrition affects an estimated 200 million women of reproductive age worldwide. About 10-35% of all sub-Saharan and Asian women are extremely thin (UNSCN, 2012). The average micronutrient intake of pregnant women in resource-poor parts of Africa, Asia and Latin America is well below the average requirements (Torheim et al., 2010). The daily energy intake of most pregnant and lactating women is inadequate in the least-developed countries, as well as in some middle-income countries

(Mora and Nestel, 2000, and Chen et al., 2009).

Underlying causes of maternal undernutrition include poverty, food insecurity, poor hygiene and unsafe water, as well as a lack of education, including knowledge about nutrition. Gender affects women's status and intra-household bargaining, divisions of labour and gender norms, values and identities (UNICEF & LSTM, 2011). Many women are food insecure as a result of constraints in accessing key productive resources, wage discrimination and working without payment on family farms (FAO, 2011). Even in food-secure

households, women can experience scarcity due to inequitable food distribution and poor control over resources (Mudege and Verhart, 2013). Female household members often eat less and later, especially in times of food shortage (Bread for the World, 2012). Countries with high gender inequality have higher rates of maternal malnutrition (Save the Children, 2012).

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## DIFFERENT APPROACHES TO BE EVALUATED

There are many nutrition intervention programmes with varying approaches being carried out throughout the world by governments, bilateral, multilateral and non-governmental organizations, and academic groups. Although some appear to be successful, they are often poorly documented or not evaluated rigorously. Most of such community interventions are child-oriented but could be extended to women (Mason et al., 2012) or redirected towards women (Mora and Nestel, 2000).

## LONG-TERM IMPACTS OF MATERNAL MALNUTRITION

Poor nutritional status during pregnancy is an underlying cause of maternal and neonatal morbidity and mortality. Ill mothers often cannot care for other children in the family (UNICEF, 2009). Low maternal pre-pregnancy body mass index (BMI) is a known determinant of low birth weight (LBW) (Ronnenberg et al., 2003). This contributes to the intergenerational cycle of growth failure (IHE, 2008): infant girls who are born with low birth

weight (either from small adult women or teenage girls), experience stunting and eventually become small adult women who are more likely to have LBW babies (see figure 1). There is a strong correlation between undernutrition in adult women and in children across 56 countries in Africa, Asia and Latin America (Nubé, 2005).

Maternal undernutrition may result in impaired cognitive development and decreased

lifetime earnings (Hoddinott et al., 2008). It also has a negative impact on economic growth (Alderman et al., 2003). Individuals lose up to 10% of lifetime earnings and countries at least 2-3% of GDP due to undernutrition (World Bank, 2010). Investments in nutrition are among the most cost-effective strategies for global development.

An emerging nutrition issue is maternal overnutrition resulting from increased intake of fatty foods as well as processed, calorie-dense and micro-nutrient-poor foods and beverages (Vorster, 2011).

The prevalence of obese women, especially in cities in low and middle-income countries, is increasing rapidly and is associated with maternal and neonatal mortality and early childhood malnutrition.

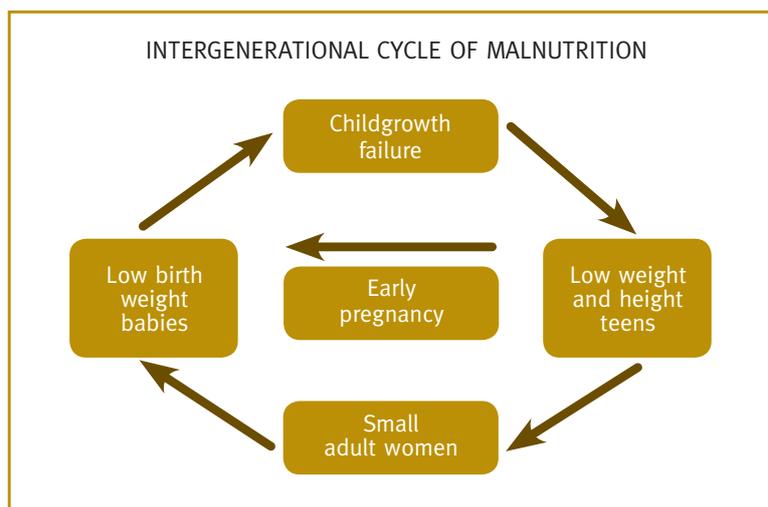


Figure 1: Intergenerational cycle of malnutrition (source: ACC/SCN (1992)).

## MATERNAL MALNUTRITION PROGRAMMING

Both LBW and poor nutrition can be linked to major maternal issues, including inadequate dietary intake and poor nutrition practices, teenage pregnancy and maternal morbidity. The Scaling Up Nutrition (SUN) movement, distinguishes two types of interventions.

Nutrition-specific interventions consist of nutrition-focused interventions with specific goals to directly improve nutrition<sup>1</sup>. Such programmes often target pregnant women and involve

the provision of dietary supplementation with micro-nutrients and/or (enriched) food. Nutrition-sensitive interventions are implemented by non-health sectors. They may involve integrating nutrition in agriculture or improving access to safe drinking water. Most nutrition-specific and nutrition-sensitive programmes include a behavioural change and communication (BCC) component to increase knowledge.

However, knowledge alone is

not always enough to change behaviour. Therefore, health information programmes need to be understood within the cultural context, need to use adult learning approaches and need broader targeting to include influential persons (Sen & Hook, 2012).

<sup>1</sup> These include: micronutrient interventions such as maternal iron folic acid (IFA), micronutrient (MMN), calcium and post-partum vitamin A supplementation, food fortification including maternal iodine through iodization of salt and fortification of staple food with iron; malaria-control, de-worming in pregnancy and maternal supplementary feeding.

## EVIDENCE FOR THE NEED OF A GENDER LENS

There is growing evidence and recognition of the added value of addressing gender in a more comprehensive manner in nutrition programmes. According to HKI (2010) and Sen & Hook (2012), gender-sensitive programmes can lead to:

1) increased use of health services by women (using

outreach and home visits);  
 2) community participation (participatory learning through women's groups);  
 3) social protection and financial inclusion (microcredit and cash transfers). In Bangladesh, Nepal and the Philippines, a focus on gender awareness and women's empowerment in

multidimensional programming – involving nutrition, agriculture and food production, maternal self-care, infant and young child feeding – resulted in increased production and consumption of nutrient-rich food, increased purchasing of additional food, and the reduction of anemia in mothers and children.

## THE WAY FORWARD

A priority focus on short-term gains in child survival has negatively impacted progress on maternal nutrition (UNSCN, 2012). This review agrees that more efforts are needed to invest in maternal nutrition in a sustainable and holistic manner and recommends the following actions.

- Nutrition policy-making, both nationally and internationally, should take into account the central role of maternal nutrition in child health and household nutrition, especially in resource-poor settings.

- Nutrition programmes should consider placing maternal nutrition at the heart of their activities. This can be done by:
  - using a multi-sectoral approach that addresses underlying causes and involves prevention strategies and a combination of nutrition-specific and nutrition-sensitive interventions.
  - conducting specific BCC activities at the community level to address the gap between knowledge and practice relating to maternal nutrition.

- The nutrition policy models that inform nutrition policy-making and nutrition programmes should use a gender lens to address the underlying causes of maternal undernutrition.
- Practical experiences of programmes that put maternal nutrition at the heart of their activities should be thoroughly evaluated to refine existing nutrition policy models ensuring that the field know what works and what doesn't.

## THE IMPORTANCE OF POLICY

Policies and programmes often miss the opportunity to focus on maternal nutrition as a desirable result in itself, and not just a means of achieving better nutrition for children, neglecting the value and impact of improved women's nutrition (including maternal nutrition) to improve women's health and productivity, leading to better nutritional status, health and productivity of children and families.

Sen & Hook (2012) show that most national nutrition policies in South Asia fail to address the underlying gender-driven causes of maternal undernutrition. Interventions missing in country policies include: community outreach prevention programmes with behavioural change aimed at eating better, resting more, birth spacing, strengthening women's role in decision-making and overcoming gender inequity (Bread for the World, 2012).

Recent examples of good comprehensive country policies are Nepal that is developing a multi-sector nutrition plan with coordination across five ministries, including strategies to empower women and improve leadership skills, reduce the workload of women and improve adolescent girls' education, life skills and nutrition (DoHS, 2012) and Zimbabwe where strategies to ensure optimal nutrition for all women of reproductive age include advocacy across all sectors and the development of gender-sensitive nutrition policies, guidelines and programmes (FNC, 2013).

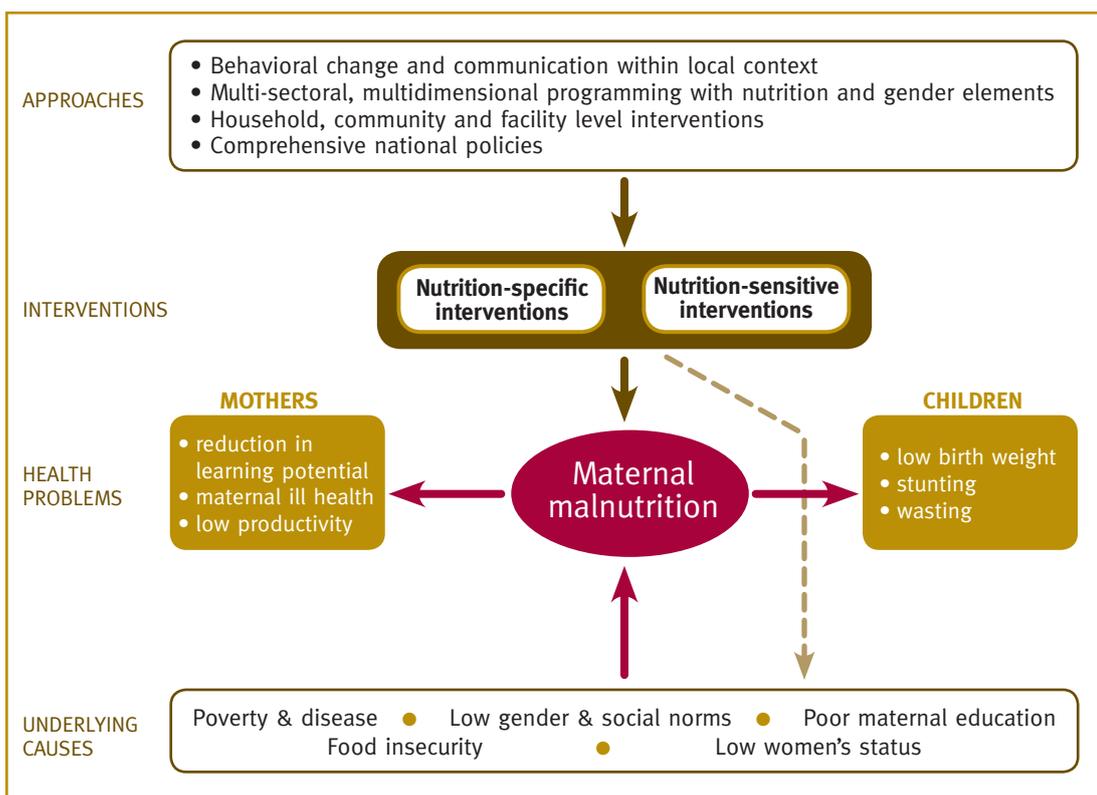


Figure 2: Maternal malnutrition: Causes, health problems, interventions and approaches.

## BEST PRACTICES FOR GENDER-SENSITIVE MATERNAL NUTRITION

- **The Positive Deviance approach:** facilitates peer-to-peer learning based on examples of good practice in the community (Schooley & Morales, 2007). Save the Children's 'Saving Newborn Lives Initiative' in Pakistan and its 'Child Survival 19 Project' in Afghanistan were shown to be effective in changing the nutrition behaviours of women and households.
- **Targeting senior women:** this approach was pioneered by the Grandmother project in Senegal

(Aubel, 2004 and 2012). Women in India were found to adopt new practices more quickly when taught by grandmothers or mothers-in-law.

- **Community cooking groups:** where women are advised and taught to prepare food that is nutrient-dense, locally available and affordable (USAID, 2011), are found throughout Asia and Africa. Community cooking clubs for pregnant women in Sierra Leone were identified as an important approach for improving maternal nutrition (Herscherderfer, 2011).
- **Community groups:** using a rights-based livelihood approach,

the Shouhardo project in Bangladesh (CARE) supports the formation of groups for women and adolescent girls. Results show that this element of women's empowerment had the strongest influence on reducing child stunting.

- **Multidimensional (agriculture) programming with nutrition and gender components:** the Homestead Food Production programme (Helen Keller International 2010) increased women's control of household resources and decision resulting in a potential impact on food choices and preparation, intra-household food allocation

and healthseeking behaviour by women. Similarly, Linking Agriculture, Natural resources and Nutrition (LANN) training in Cambodia is expected to improve food and nutrient intake through improved utilization and household food security (Welthungerhilfe, 2013).

- **Social protection policies:** with food security objectives are implemented in a number of countries. Cash transfers influence gender relations and empower women in household spending decision-making and most likely result in nutrition gains (Arnold, 2011).

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