Research Article

A Policy Dialogue for Nutrition of Women and Adolescent Girls: Sustainable Development Goals Matters Arising

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Malnutrition among adolescent girls and women in Rwanda requires a multisectoral approach across all systems and sectors throughout their lifecycles. This policy dialogue document emphasizes the importance of progress on nutrition for overall sustainable development in the country. The study provides a call to action to tackle these "wicked problems" and highlights the implications for the UN sustainable development goals. Positioned as a practitioner/ academic paper, the implications go well beyond three SDGs (i.e., SDG2, SDG3, SDG5 and SDG17).

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Introduction

Malnutrition is defined as deficiencies or excesses in nutrient intake, imbalance of essential nutrients or impaired nutrient utilization. Undernutrition (referred to as malnutrition in this dialogue) is an ill health caused by deficiencies of calories, protein, vitamins, and minerals interacting with infections and other poor health and social conditions, saps the strength and wellbeing of millions of women and adolescent girls around the world. Although malnutrition's effects on this group have been recognized for decades, there has been little measurable progress in addressing the specific nutritional problems of women and adolescent girls. Ignorance about the symptoms of malnutrition, such as the lethargy and depression caused by iron deficiency, may be dismissed as "normal," further exacerbating the problem. Adequate nutrition, a fundamental cornerstone of any individual's health, is especially critical for women because inadequate nutrition affects not only women's own health but also the health of their children. Children of malnourished mothers are more likely to face cognitive impairments, stunting/short stature, lower

resistance to infections, and a higher risk of disease and death throughout their lives. Malnutrition poses a variety of threats to women. It weakens women's ability to survive childbirth, makes them more susceptible to infections, and leaves them with fewer reserves to recover from illness.

Malnutrition undermines women's productivity, capacity to generate income, and ability to care for their families. Addressing women's malnutrition has a range of positive effects because healthy women can fulfil their multiple roles — generating income, ensuring their families' nutrition, and having healthy children — more effectively and thereby help advance countries' socioeconomic development. Women are often responsible for producing and preparing food for the household, so their knowledge — or lack thereof — about nutrition can affect the health and nutritional status of the entire family. Therefore, promoting greater gender equality, including increasing women's control over resources and their ability to make decisions, is crucial.

Improving women's nutrition can also help nations achieve the Sustainable Development Goals (SDGs). Improving nutrition sits at the core of global development and is central to achieving SDGs. The need for better nutrition was recognized in SDG 2, which aims to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture. Hence, ending hunger, food insecurity and malnutrition for all will require continued and focused multisectoral efforts in Rwanda. However, improving nutrition is crucial for sustainable development beyond SDG2 as it touches other SDGs such as SDG3 on health and wellbeing, SDG5 on gender equality and especially in relation to women, and SDG17 on the partnership for the goals. Needless to add, SDG on quality education transcends the boundaries of the classroom. Nutrition can drive transformational change and help end poverty while improving the health and wellbeing of especially vulnerable groups — be it access to clean water and sanitation, education, and/or gender equality. To address the malnutrition crises among adolescent girls and women in Rwanda, a multisectoral approach across all systems and sectors throughout their lifecycles is necessary. This policy dialogue document emphasizes the importance of progress on nutrition for overall sustainable development.

How Nutrition Affects Women

Women are more likely to suffer from nutritional deficiencies than men for reasons including women's reproductive biology, low social status, poverty, and lack of education. Sociocultural traditions and disparities in household work patterns can also increase women's chances of being malnourished. In

Rwanda, Anemia is a major concern among women, leading to increased maternal mortality and poor birth outcomes as well as reductions in work productivity.

About 13 percent of women aged 15–49 have some degree of anemia. Similarly, many women in Rwanda are underweight 6percent of women aged 15–49 are thin (a body mass index [BMI] below 18.5), while 26 percent are overweight or obese (BMI \geq 25.0). Fetal growth restriction is associated with maternal short stature or stunting and underweight and causes about 12 percent of neonatal deaths and increases the incidence of obstructed labour, leading to maternal deaths.

Adolescents who become pregnant are at greater risk of various complications since they may not yet have finished growing. Pregnant adolescents who are underweight or stunted are especially likely to experience obstructed labour and other obstetric complications. There is evidence that the bodies of the still-growing adolescent mother and her baby may compete for nutrients, raising the infant's risk of low birth weight (defined as a birth weight of less than 2,500 grams) and early death. Pregnancy is associated with increased iron demand and, therefore, increases the risk of iron deficiency anemia. In Rwanda, Anemia prevalence is higher among pregnant women (25 percent) than among breastfeeding women (12 percent) and women who are neither pregnant nor breastfeeding (13 percent). Iron deficiency and anemia cause fatigue, reduce work capacity, and make people more susceptible to infection. Anemia places women at higher risk of death during delivery and the period following childbirth.

Newborns And Children: The Cycle Of Poor Growth

Low Birth Weight (LBW)

The quality of care and feeding offered to children ... is critically dependent on women's education, social status, and workload. Un Sub-Committee On Nutrition

A variety of nutritional deficits, including iron deficiency and insufficient caloric intake, can increase a woman's chances of having an LBW infant and is the strongest determinant of a child's survival. Infants with LBW account for many infant deaths in the first week of life and are at higher risk of death throughout infancy. Those who survive tend to remain shorter (stunted) and lighter (underweight) than their peers, which damages their ability to work during adulthood. LBW infants often suffer from cognitive impairment, developmental problems, and a greater susceptibility to illness.

A recent UNICEF Rwanda analysis reveals the fact that the largest contributing factor to stunting in Rwanda was intergenerational transfer factors comprised of maternal nutrition, low birth weight, and years of maternal education. In Rwanda, 10 percent of babies born to mothers under age 20 are LBW compared to babies born to mothers aged 20–34 or 35–49, who are LBW 7 percent of each. Similarly, Children born to mothers in the lowest wealth quintile are more likely to have a low birth weight (9 percent) than children born to mothers in the highest wealth quintile (4 percent).

How Women's Nutrition Affects National Economies

Malnutrition in women leads to economic losses for families, communities, and countries as it not only reduces women's ability to work but also creates ripple effects that stretch through generations. Rwanda, with high stunting levels, must deal with its immediate costs, including reduced income from malnourished citizens and long-term ill health costs that may be related to low birth weight, including high rates of cardiac disease and diabetes in adults. It is difficult to determine exactly what proportion of those losses are due to maternal malnutrition, but recent research indicates that 60 percent of deaths of children under age five are associated with malnutrition — and children's malnutrition is strongly correlated with mothers' poor nutritional status. In Rwanda, one study shows that an estimated 503.6 billion Rwandan francs (RWF) — \$US 820 million — were lost in 2012 because of child undernutrition, which is equivalent to 11.5 percent of GDP. By improving the nutrition of adolescent girls and women, nations can reduce healthcare costs, increase intellectual capacity, and improve adult productivity.

Policy Options

Improving women's diets, access to nutrition services, and nutrition and care practices — before and during pregnancy and while breastfeeding — is critical to preventing malnutrition in all its forms. This is particularly true for the most vulnerable mothers and babies. The SDG challenges nations to create effective interventions to improve women's and adolescent girls' nutrition. Taking such action not only improves the health of girls and women today but also has far-reaching intergenerational effects that can help Rwanda develop and meet its aspiration of becoming a middle-income country.

Public health systems need to prevent and treat micronutrient deficiencies, encourage households to meet the dietary needs of women and adolescent girls throughout their lives and ensure their access to high-quality health services, clean water, and adequate sanitation. Policymakers should also address women's low social status and ensure that girls have access to education — which should include

information on nutrition. Such policy measures can improve and increase women's nutritional status, an important determinant of stunting in Rwanda.

Call For Action – Ten key actions to improve nutrition of adolescent girls and women

As a call to action, we outline five broad themes (each with its sub-components) — notably, theme 1) Nutrition governance for adolescent girls and women; theme 2) Food systems and nutritious diets; theme 3) Nutrition services and social protection programmes; theme 4) Nutrition and care practices, and theme 5 Social and economic empowerment.

Nutrition governance for adolescent girls and women

- 1. Build bolder leadership to mobilize institutions, leverage resources and galvanize actions for adolescent girls' and women's nutrition more effectively.
- 2. Harness data and evidence to inform policy and programme decisions and strengthen accountability for adolescent girls' and women's nutrition.

Food systems and nutritious diets

- 3. Improve access to affordable, nutritious foods including fruits, vegetables, eggs, fish, meat, and fortified foods for all adolescent girls and women.
- 4. Implement policies and mandatory legal measures to protect adolescent girls and women from nutrient-poor and unhealthy ultra-processed foods and beverages.

Nutrition services and social protection programmes

- 5. Improve access to essential nutrition services for adolescent girls and women before and during pregnancy and while breastfeeding, including in humanitarian crises.
- 6. Expand access to social transfer programmes for adolescent girls and women, including in fragile settings and humanitarian crises.

Nutrition and care practices

- 7. Investing in the development of robust and innovative SBC interventions can empower women and adolescents to help them convert knowledge into desirable behaviours and practices. Use multiple communication channels (print, broadcast, social and digital media) to reach adolescent girls, women, and the general public, with advice on nutrition and care practices.
- 8. Strengthen the coverage and quality of counselling to help adolescent girls, women, and their family members make decisions and take action to improve nutrition.

Social and economic empowerment

- 9. Implement gender-transformative policies and legal measures that strengthen the social and economic empowerment of adolescent girls and women.
- 10. Accelerate the elimination of discriminatory gender and social norms to enable adolescent girls and women to realize their rights to food and nutrition.

Conclusion

Adequate nutrition is important during the life course with more emphasis on women not only because it helps them be productive members of society but also because of the direct effect adolescent and maternal nutrition has on the nutrition, health, and development of the next generation. Ultimately, this study provides a call to action to tackle these "wicked problems" and highlights the implications for the United Nations' sustainable development goals.

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