



INVESTING IN THE FUTURE OF BANGLADESH

COST EFFECTIVE INTERVENTIONS TO IMPROVE ADOLESCENT NUTRITION

A CALL TO ACTION

Bangladesh's ambitions for middle-income status require the energy and creativity of the next generation. Investments in the nutrition of adolescents will enable this potential by realizing the demographic dividend.

Now is the time to make this happen! Prioritization of adolescent nutrition in national budget allocations and the Eighth 5-Year plan provide this opportunity!



The Current Situation



Adolescents make up one-fifth of the total population in Bangladesh and represent the country's future.



15-19 years

One-fourth of older adolescent girls (15-19 years) fail to achieve optimal growth.

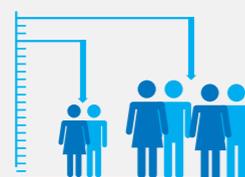


10-14 years

Almost 70 percent of young adolescent girls (10-14 years) are underweight.



23 percent of older adolescent girls are overweight or obese.

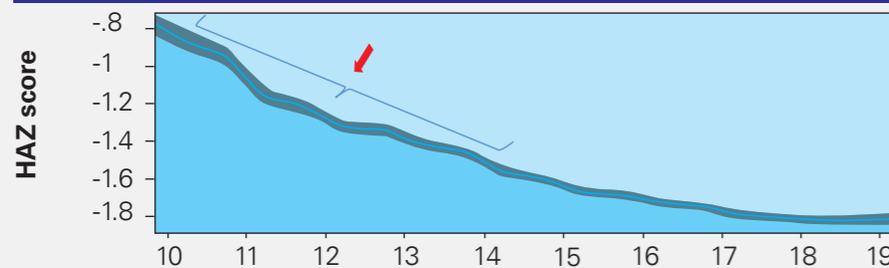


Growth faltering is greater in the early adolescence period, and for all adolescents, dietary diversity is decreasing.



Because one-third of adolescent girls are already mothers or pregnant, their nutrition is critical to the health and survival of the next generation.

Adolescent Growth Dynamics: Height-for-age Z scores (HAZ) by Girls' Age



As this graph shows, there is a steep decline in height for age compared to a healthy norm during the early adolescent period. This begins to level off around age 15 years.

Regional variations in nutritional indicators also exist (Table 1). While an overall decline in rates of adolescent undernutrition has occurred from 2012 to 2014, nutrition indicators in Sylhet, Barisal and Chittagong divisions lag far behind.

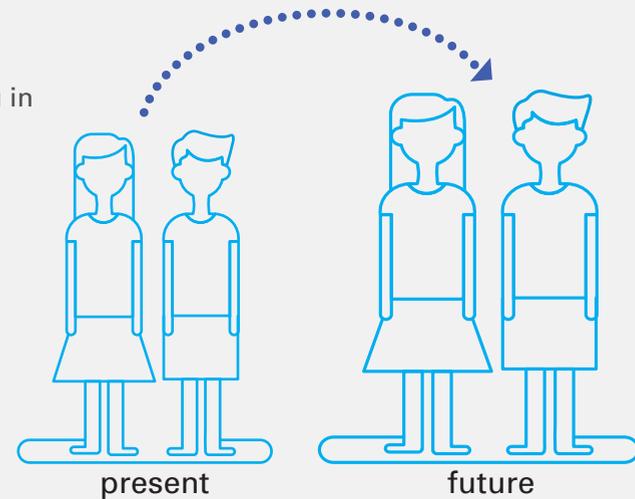
Table 1 Changes in undernutrition and overnutrition by division and rural-urban location

Division	Early adolescence (10-14 years)		Late adolescence (15-19 years)	
	Undernutrition	Overweight	Undernutrition	Overweight
Rajshahi	Decreased	No change	Decreased	Increased
Khulna	No change	No change	Decreased	No change
Barisal	No change	Increased	No change	Decreased
Dhaka	Decreased	No change	Decreased	Increased
Sylhet	No change	No change	No change	No change
Chittagong	No change	Increased	Increased	Increased
Rangpur	No change	No change	Decreased	Increased
Rural	Decreased	Increased	Decreased	Increased
Urban	Decreased	No change	Decreased	Increased

Source: Food Security and Nutrition Surveillance System (FSNSP) data from 2014

An Opportunity Not to Be Missed

Good nutrition is vital to the cognitive and physical development of adolescents. Investing in adolescent nutrition also leads to a productive workforce by preventing non-communicable diseases linked to risk factors like obesity and hypertension. For adolescent girls, these investments will enhance maternal health and birth outcomes, and contribute to breaking the intergenerational cycle of malnutrition.



Priority Interventions for Adolescent Nutrition

The Bangladesh National Strategy for Adolescent Health 2017-2030 and the Second National Plan of Action for Nutrition (NPAN2) highlight a number of evidence-based interventions for improving adolescent nutrition such as: mainstreaming nutrition education; promoting dietary diversity; micronutrient supplementation; deworming; preventing child marriage; community-based nutrition awareness; physical activity; food supplementation and nutrition counseling.

To prioritize these interventions, a cost-benefit analysis was conducted by the University of Dhaka and BRAC University with the support of UNICEF and The World Bank. Six priority interventions for adolescent nutrition programming were identified (Table 2): Deworming; weekly Iron and Folic Acid (IFA) Supplementation; Multiple Micronutrient Supplementation (MMS); Prevention of Child Marriage; School Meals or Fortified Snacks, and School-based Nutrition Education.

SIX PRIORITY INTERVENTIONS FOR ADOLESCENT NUTRITION PROGRAMMING

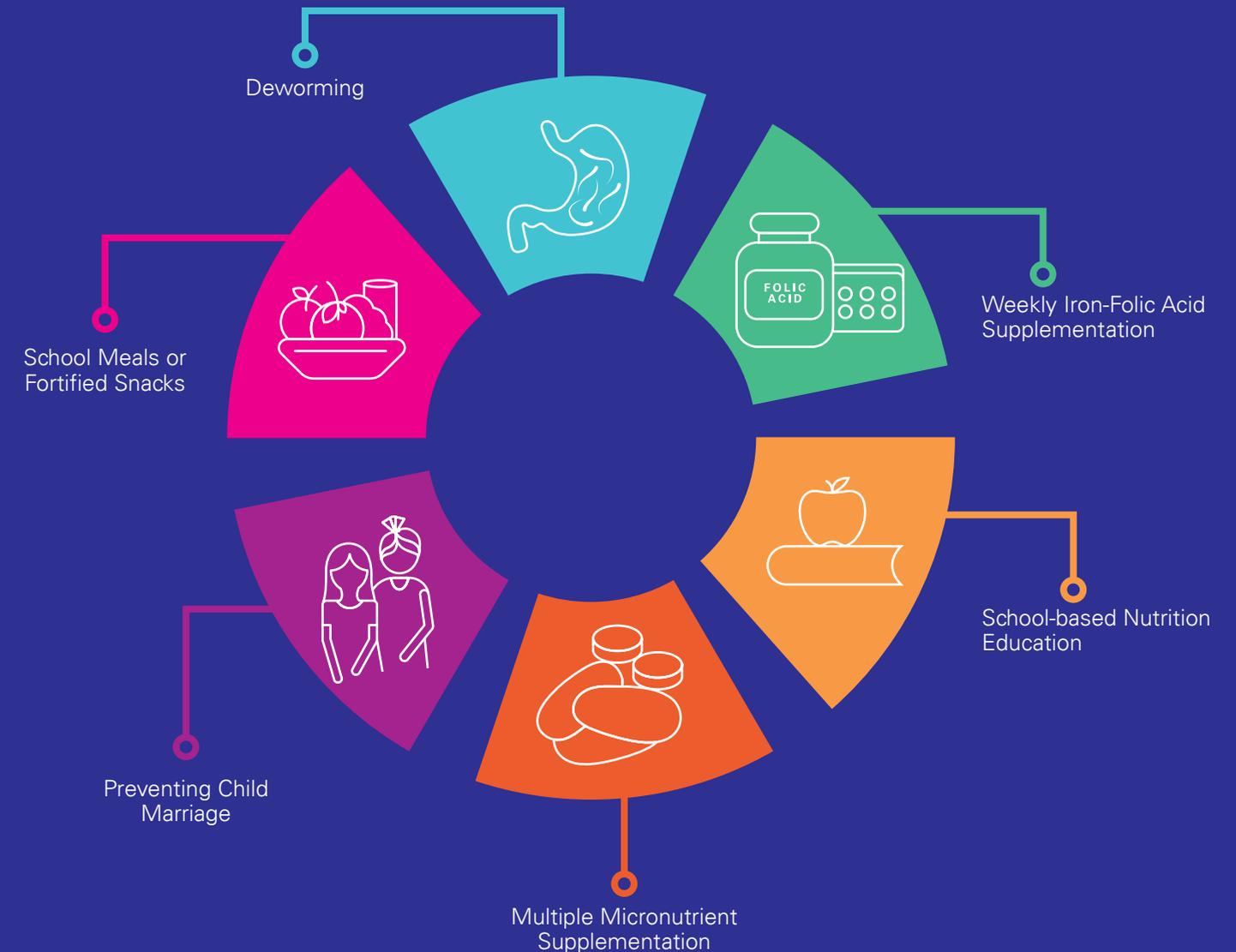


Table 2 Delivery platform, implementation costs, cost-benefit ratio and annual cost of nationwide scaling of six evidence-based interventions for improving adolescent nutrition

Intervention	Platform for implementation	Cost per adolescent per year (USD)	Cost-benefit ratio (95% confidence interval)	Annual cost of nationwide implementation (Million USD)
Deworming	Schools & community-based adolescent clubs	<1 for schools & out-of-school	72 in schools (65-80) & 46 out-of-school (42-51)	11
Iron & folic acid (IFA) supplementation*	Schools & community-based adolescent clubs	<1.5 in schools & <2 out-of-school	32 in schools (29-35) & 15 out-of-school (14-17)	22
Multiple micronutrient supplementation (MMS)*	Schools & community-based adolescent clubs	4 in schools & out-of-school	39 in schools (35-43) & 21 out-of-school (20-24)	64
Prevention of child marriage through skills & livelihood interventions	Schools & community	42	10 in schools (6-19)	599
School meals	Schools	50	10 in schools (9-11)	511
School-based nutrition education	Schools	4	39 in schools (3-161)	40

*Only one of these two interventions should be implemented. If funding permits, MMS containing 15 micronutrients is preferred over IFA if the prevalence of micronutrient deficiencies is high.

RECOMMENDATIONS TO MAKE IT HAPPEN

The following 10 actions to improve adolescent nutrition were recommended by key government and civil society stakeholders at a national roundtable held on April 8, 2019:



Current Government investments in adolescent nutrition should be scaled-up and additional recommended interventions included into the national revenue budget and Eighth 5-year plan.



Contributions towards implementation can come from funding already available under costed NPAN2 for different Ministries.



At least one adolescent nutrition indicator should be included in the Eighth 5-year plan to measure progress.



Make secondary schools a delivery platform for adolescent nutrition interventions, for example through nutrition fairs, nutrition promotion through school clubs, school health checks, and initiatives to increase physical activity.



Deworming should be packaged within school-based hygiene and sanitation programs alongside menstrual hygiene management for girls.



Nutritious school meals provided in primary schools can be extended to secondary schools especially in divisions or districts where performance on nutritional indicators is lagging.



Actions to delay the first pregnancy of married adolescents are an urgent priority.



The government should target the delivery of a full set of interventions in the areas of the country where performance on nutrition indicators is lagging and plan for country wide scale up.



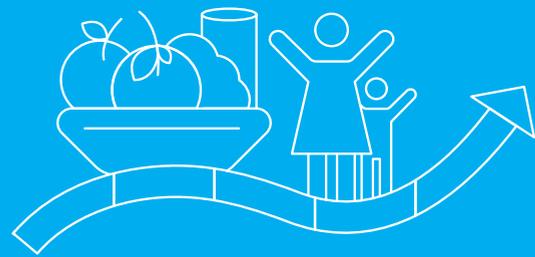
Development Partners, Civil Society and Private Sector must work alongside government in supporting the execution of these interventions.



A phased implementation of prioritized interventions is possible as more funding is made available:

- Phase 1.** Deworming, IFA or MMS, nutrition education
- Phase 2.** Deworming, IFA or MMS, nutrition education, preventing child marriage
- Phase 3.** Deworming, IFA or MMS, nutrition education, preventing child marriage, school meals

FROM CONSENSUS TO ACTION



Investments in adolescent nutrition should be prioritized to support Bangladesh's further economic and social development. The Government of Bangladesh and other stakeholders are committed to making these investments and ensuring that allocations for priority nutrition interventions are included in the national revenue budget and the Eighth 5-Year Plan.

Partners



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