

Why Invest in Nutrition?

- Of the 1.1 million children under 5 years of age in Tajikistan, more than 300,000 (26%) are stunted. These undernourished children have an increased risk of mortality, illness and infections, delayed development, cognitive deficits, poorer school performance, and fewer years in school.
- The mortality rate for children under 5 is 43 per 1,000 live births—nearly 45% of these child deaths are attributable to various forms of undernutrition.
- Malnutrition undermines human capital and economic productivity and can limit progress in achieving at least 6 of the 8 Millennium Development Goals and targets set by the World Health Assembly.
- Investing in nutrition in Tajikistan can significantly reduce child mortality, improve children's school performance, and result in greater economic productivity for the nation.

Summary of Nutritional Status and Priorities

In recent years, Tajikistan has seen stunting levels decrease while levels of “overnutrition”—particularly among women—have increased, affecting 30% of women of reproductive age and 59% of women 41–49 years of age. Wasting, however, affects 23% of children under 6 months of age. In addition, a 2009 micronutrient status survey showed that iodine deficiency has resurged as a significant public health concern, affecting 59% of women and 53% of children under 5. Approaches to address malnutrition in Tajikistan should focus on strengthening micronutrient provision—specifically enforcement of universal salt iodization—and focus on postnatal determinants of stunting and wasting such as poor infant and young child feeding practices (to improve exclusive breastfeeding rates, timely initiation of complementary food, and feeding frequency) and high rates of diarrhea.

Iodine deficiency. As of 2009, roughly 59% of women of reproductive age and 53% of children under 5 had iodine deficiency, staying roughly the same since 2003 (57%), according to a micronutrient status survey. This suggests that more than half of women of reproductive age and children under 5 have insufficient urinary iodine concentration (less than 100 ug/L). Two sub-regions (Direct Rule Districts and Khatlon) in which there was data on urinary iodine concentration reported a median of 72 ug/L, which is considered mild iodine deficiency (MOH and UNICEF 2010). The high levels of iodine deficiency are at least partly due to suboptimal levels of salt iodization and

consumption. Although the 2012 DHS indicates that 83% of children live in households with iodized salt, only 39% of tested households had salt that was fortified with iodine at recommended levels.

Stunting. Stunting, which has decreased in the past decade, still affects a quarter of children under 5. The prevalence of low birth weight, which is higher than other countries in Central Asia but not as extreme as seen in countries in South Asia, indicates that postnatal factors play a larger role in contributing to stunting/wasting, primarily suboptimal infant feeding practices (e.g., short period of exclusive breastfeeding, low timely initiation of complementary feeding, and inadequate feeding frequency) and disease incidence, particularly diarrhea.

Anemia. Anemia affected roughly a quarter (24%) of women of reproductive age in 2009 according to a micronutrient status survey, down from 42% in 2003. Anemia still affects 1 in 2 children under 2 and roughly 29% of children under 5, placing child anemia in the “moderate” level of public health significance (according to WHO classifications). About 30% of children under 5 with anemia are also iron-deficient according to the survey.

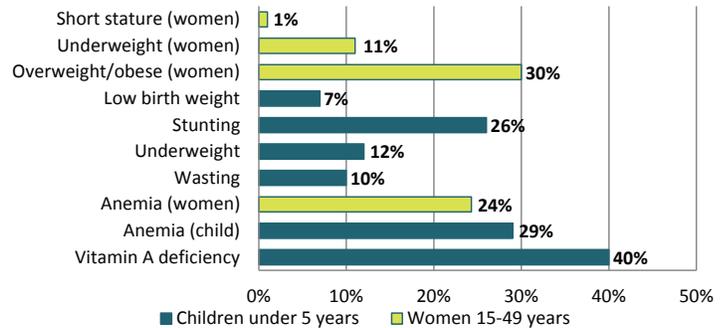
Overweight/obesity among women. The 2012 DHS indicates that overweight and obesity affects 30% of women of reproductive age, with increased levels among women in urban areas (38%) and women 41–49 years of age (59%), and the frequency of high BMI has been increasing in recent years. The increasing

prevalence of overweight/obesity among women occurs against a backdrop of food insecurity, with Tajikistan being the most food insecure of the Central Asian countries according to the Global Hunger Index (Samah Rabie et al. 2012).

Wasting among young infants. Wasting still affects roughly 10% of children under 5, however children under 6 months of age and children 6–8 months have a prevalence of wasting that is twice the national average for children under 5 (23% and 18%, respectively). Children born to women with less education have a higher risk of wasting, although urban versus rural residence does not appear to correlate with wasting prevalence. Most recent data from the 2012 DHS indicate an increase in wasting since the last national survey in 2007.

Vitamin A deficiency. Vitamin A deficiency is estimated to affect approximately 40% of children under 5 (as of 2007) (UNSCN 2010), a level of deficiency considered of “severe” public health significance by WHO.

Malnutrition Indicators Among Children and Women in Tajikistan



Sources: DHS 2012; UNSCN 2010 (for vitamin A deficiency); MOH and UNICEF 2010 (for anemia)

Key Drivers of Maternal and Child Malnutrition in Tajikistan

Immediate and Underlying

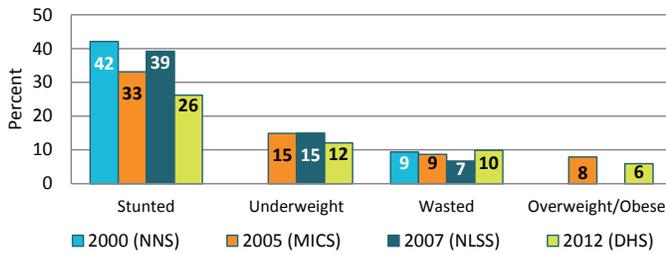
- Suboptimal infant and young child feeding practices, particularly shorter than optimal duration of exclusive breastfeeding, delayed introduction of solid/semi-solid/soft foods, and low frequency of feeding
- Low dietary diversity and intake of micronutrients, particularly iodine, and also vitamin A and iron
- Inadequate access to quality health services providing preventative care
- Inadequate access to safe water and inadequate hygiene practices
- High infectious disease burden among women and children, particularly diarrhea, and malaria in high-transmission areas of the country
- Dietary practices favoring consumption of energy-dense food (such as fried food) and micronutrient-poor staples (such as wheat)
- Food insecurity, particularly due to insufficient food access caused by high levels of poverty, landlessness, limited land for cultivation, and focus on commercial crops such as cotton

Basic

- Weaknesses in the health sector for providing preventative primary care, community outreach, and quality health care services
- Cultural practices that prevent control of income/assets by women, prohibit land rights/ownership, and restrict freedom of movement and decision-making control
- Heavy workloads in the home and gender discrimination in the workforce that prohibit women from obtaining higher paying jobs outside the home
- Intra-household food distribution practices that favor men over women and children

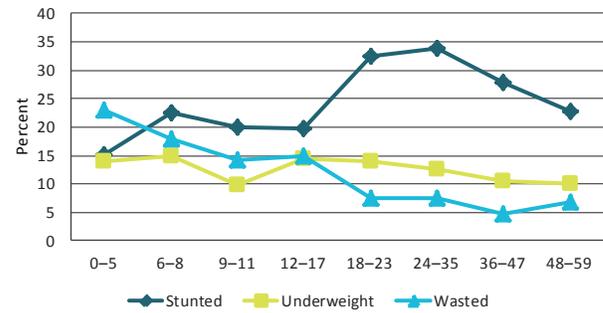
Child Nutrition

Trends in Nutritional Status of Children Under 5, 2000–2012

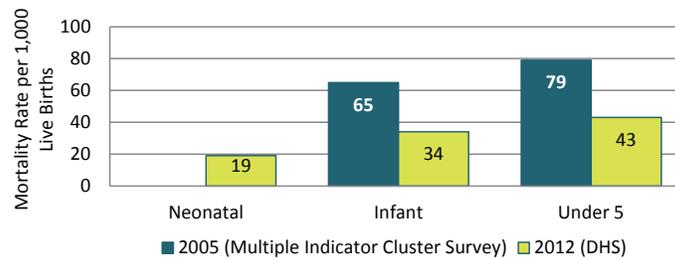


Note: Data represent four different national survey sources and thus comparability across surveys may be limited.

Nutritional Status of Children by Age (2012 DHS)

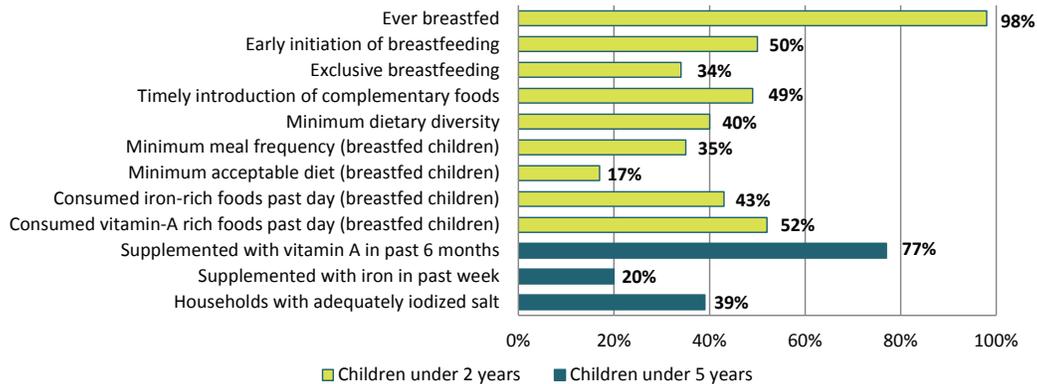


Child Mortality, 2005–2012*

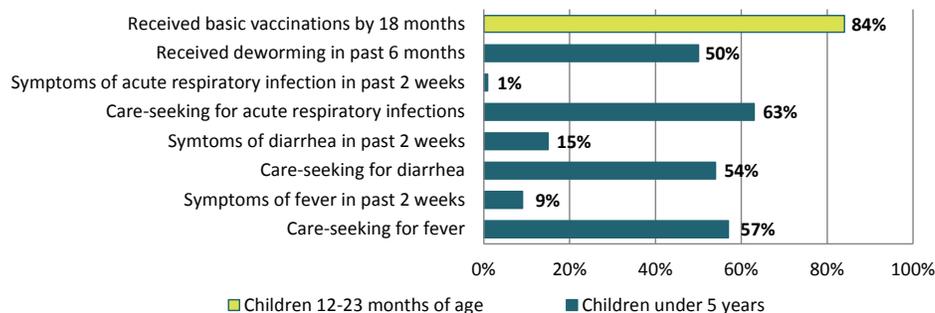


* Data are for the time period within the previous 5 years of the survey.

Dietary Practices of Children (2012 DHS)



Child Health Indicators, 2005–2012



Note: Basic vaccinations include BCG, measles, and three doses each of DPT and polio vaccine.

Maternal Nutrition

Maternal Health Indicators	
Maternal mortality ratio (per 100,000 live births)	65
Total fertility rate (children per women)	3.8
Median age at first marriage (of women 25–49 years)	20.2
Median age at first birth (of women 25–49 years)	21.8
% of women 15–19 years who have begun childbearing by 19	27.1
Median number of months since preceding birth (of women 15–49 years)	30.8
% of married women (15–49) currently using any method of family planning	27.9
% of married women with an unmet need for family planning	22.9
% of women 15–49 years with a live birth in the past 5 years receiving antenatal care from a “medically-trained” or “skilled” provider (doctor, nurse, midwife, or feldsher)	78.8
% of women 15–49 years with a birth in the past 5 years who delivered in a health facility	76.5
% of women 15–49 years with a birth in the past 5 years who delivered with a “medically-trained” or “skilled” provider (doctor, nurse, midwife, or feldsher)	87.4
% anemic, non-pregnant women (Hb < 12 g/dL)	24.2
% Underweight (BMI < 18.5 kg/m ²)	10.6
% Short stature (height < 145 cm)	1.3
% Overweight or obese (BMI ≥ 25 kg/m ²)	29.7
% of women with a birth in the last 5 years given vitamin A supplementation after birth of last child (of women 15–49 years)	26.8
% of women with a birth in the last 5 years given any iron supplementation during last pregnancy (of women 15–49 years)	32.7
% of women with birth in the last 5 years who took at least 90 days of iron supplementation during pregnancy of last child	0.9
% of women with birth in the last 5 years who took deworming medication in last pregnancy	No data
% living in houses with adequately iodized salt	38.8

Sources: 2012 DHS; UNICEF 2012 (for maternal mortality ratio); Micronutrient Status Survey 2009 (for anemia)

Food Security; Diet Diversity; and Water, Sanitation, and Hygiene

Food Security Indicators	
Global Hunger Index (2013)	16.3 (serious level of hunger)
% of households with poor or limited food consumption (food insecure) (2012)	15
Proportion undernourished in total population (%) (2010–2012)	32
Food supply (kcal/capita/day) (2009)	2,106
Depth of food deficit (kcal/capita/day) (2011–2013)	311
Diet Diversity Indicators	
% of dietary energy supply from cereals, roots, and tubers (2009–2010)	63
Average supply of protein from an animal source (grams/capita/day) (2008–2010)	12
Water, Sanitation, and Hygiene Indicators	
% of population with access to improved drinking water sources	76
% of population with access to sanitation facilities	94
% of households using appropriate treatment method for drinking water	85

Sources: FAO 2013; von Grebmer et al. 2013 (for Global Hunger Index); USAID and WFP 2012 (for food insecure); FAO et al. 2012 (for undernourished); FAOSTAT (<http://faostat3.fao.org/faostat-gateway/go/to/browse/FB/FB/E>) (for food supply); 2012 DHS (for water, sanitation, and hygiene indicators)

Gender

Gender inequality exacerbates food insecurity and malnutrition in Tajikistan through women's limited decision-making power and lack of access to and control over resources, employment, and income. Relative to other countries in this region, adolescent pregnancy is not as significant a problem, still, nearly 27% of women have given birth to a child by 19 years of age and 15% of women 20–49 years of age are married by the age of 18. In Tajikistan, only 32% of women of reproductive age reported being employed, and 19% are not paid for their employment. Among women who work and earn income, 33% report being able to decide on their own on how to dispose of that income, and 74% report earning less than their husbands. In terms of asset ownership, 47% do not own houses and 71% do not own land. Domestic violence is also widely prevalent with 24% of women of reproductive age reporting having ever experienced various forms of domestic violence in their lifetime.

The 2012 DHS found that 43% of women 15–49 years reported participating in decisions about their own health, major household decisions, and visiting relatives, but among women 15–19 years, only 18%

reported participating in these same decisions. In terms of decision-making, women's participation increases with age such that 60% of women 45–49 years participate in all three decisions compared to around 30% for women 20–29 years. This is significant because a majority of women complete childbearing between 20–29 years of age, which is when they have less decision-making power and much less access to resources and income to support their young children's nutritional needs. Strategies to reduce fertility, increase women's education, provide women with employment opportunities that give them pay that is equal to men's, and efforts at a societal level to promote gender equality and women's empowerment will be important to further reduce food insecurity and malnutrition in this context.

Government Policies and Program Environment: Needs and Challenges

Policies. According to an assessment of the nutrition situation in Tajikistan conducted by UNICEF and the World Bank in 2012, there is increasing awareness and commitment to addressing nutrition in the country (Samah Rabie et al. 2012). A National Nutrition Plan was in progress as of 2008; in addition, the National Health Strategy 2010–2020 has nutrition activities and the Food Security Program 2009–2015 highlights nutrition needs. The Food Security Program highlights the need to increase food production and make policy adjustments to enhance accessibility to food through pricing and income strategies, and also identifies broader nutrition issues (such as maternal nutrition, infant and young child feeding, micronutrient deficiencies, and sanitation and hygiene) as important for food and nutrition security (ibid).

Programs. Operationalizing nutrition interventions through the health sector may be hampered by challenges faced by a system that is still evolving after the end of Soviet rule and subsequent civil war in the 1990s when many services and facilities collapsed due to lack of basic infrastructure. The health system is highly centralized with a stronger focus on specialized, curative, and inpatient care at the hospital level, and less emphasis on preventative care, particularly interventions that require community involvement and mobilization, such as nutrition (Samah Rabie et al. 2012; Khodjamurodov and Rechel 2010).

Nutrition-Specific Policies

Food Security Program (2009)

Law on Protection of Breastfeeding for Children (2006)

The Act on Food Quality and Safety (2002)

Law on Salt Iodization (2002)

Law on Flour Enrichment

Complementary Feeding Policy (under development)

International Code of Marketing of Breast Milk Substitutes (adopted by Parliament)

Needs and challenges. Health services in rural areas in particular have been deemed to be of low quality and inaccessible as compared to other low-income countries, plagued by problems such as lack of qualified medical personnel, lack of basic medical equipment and medications, poor infrastructure of primary health care services, and poor infection control standards (Samah Rabie et al. 2012). Health reform efforts are focused on improving primary health care services, including greater interaction with the communities they serve (ibid). This will be important for many of the nutrition interventions needed in Tajikistan, namely improving breastfeeding and complementary feeding practices.

Development Partner Support

- The Asian Development Bank provides nutrition-related funding to increase the use of effective health services and nutrition practices in the country
- The World Bank, through the Community and Basic Health Project, provides funding to improve the delivery of maternal and child health services and improve nutritional outcomes for pregnant and breastfeeding women, infants, and children under 5
- UNICEF provides funding to advocate for increased promotion of infant and young child feeding, including support for National Breastfeeding Week, semi-annual vitamin A days, micronutrient supplements to targeted children 6–24 months and pregnant women (including iron and folic acid), strengthening therapeutic feeding centers to prevent and treat severely malnourished children, and introducing a “wedding package” in Isfara district to improve the nutritional status of first-time mothers, which includes iodized salt, soap, and education materials on maternal nutrition and child feeding
- UNDP, FAO, and WFP all fund food security activities within Tajikistan and helped to create and continue to support the Food and Nutrition Security Monitoring and Surveillance System
- WFP and FAO supported the creation of a comprehensive National Food and Nutrition Security Strategy
- WFP implements a school meals project, supports a therapeutic and supplementary feeding program to treat acutely malnourished children, and with the support of the Government of Russia, provides basic food rations to target families during the lean seasons

Recommended Nutrition Priorities

Key nutrition priorities for Tajikistan include a focus on iodine deficiency, stunting, wasting among young infants through a focus on promoting exclusive breastfeeding and improving young child feeding practices, overweight and obesity, and vitamin A deficiency. USAID has invested funds for health programming in Tajikistan, but virtually no funds have been earmarked for nutrition. Yet there are specific nutrition problems that could be effectively addressed through greater direct allocation for nutrition. Among existing USAID-funded activities and programs, this includes integrating nutrition into existing efforts in maternal and child health and family planning/reproductive health projects and continuing to expand access to family planning services to promote a healthy family size and improve maternal and child nutrition outcomes. Additional opportunities include:

- Supporting nutrition advocacy to:
 - Augment accountability and governance for nutrition
 - Increase awareness of malnutrition, particularly optimal infant and young child feeding practices and the importance of early nutrition for prevention of stunting as well as overweight
 - Increase awareness of micronutrient deficiencies, particularly iodine deficiency and iron-deficient anemia
 - Increase demand for community-nutrition services and increase community mobilization
- Integrating a “1,000 days” approach (to prevent malnutrition among children under 2) in existing and future health service delivery projects and activities, particularly as Tajikistan has joined the Scaling Up Nutrition movement
- Expanding services to manage acute malnutrition

In terms of opportunities to support the Government of Tajikistan, opportunities include:

- Engaging with the government to garner high-level political commitment to reducing malnutrition
- Engaging with the government to complete, adopt, and implement the national nutrition policy
- Supporting improved iodization of salt, including policy adoption and implementation, monitoring and quality control of iodized salt production, and enforcement of policy implementation among producers

- Supporting the government in transitioning its health services to a more community-oriented approach, and supporting health system strengthening and capacity-strengthening of community-level providers in nutrition

USAID can also work in close coordination with other donors to:

- Support Government of Tajikistan initiatives to promote improved community-level nutrition service delivery
- Align with the Scaling Up Nutrition movement efforts
- Align resource allocation to limit duplication of activities and leverage donor investments to strategically invest in nutrition, focusing on areas that need added resources such as management of acute malnutrition, prevention of chronic malnutrition, micronutrient deficiencies, and quality nutrition service delivery

Recommended Indicators to Monitor Nutritional Impact

It is recommended that USAID consider incorporating the following key nutrition indicators into the programs and projects it funds in order to specifically monitor the impact of USAID programs on maternal and child nutrition status.

1. Prevalence of underweight children under 5 years of age (< -2 SD)
2. Prevalence of stunted children under 5 years of age (< -2 SD)
3. Prevalence of stunted children under 2 years of age (< -2 SD)
4. Prevalence of wasted children under 5 years of age (< -2 SD)
5. Prevalence of underweight women (BMI < 18.5)
6. Women’s dietary diversity: mean number of food groups consumed by women of reproductive age
7. Prevalence of exclusive breastfeeding of children under 6 months of age
8. Prevalence of children 6–23 months receiving a minimum acceptable diet

While nutrition-sensitive interventions can have an impact on the indicators listed, it is critical to implement nutrition-specific activities that address the direct causes of malnutrition in order to see reductions in these key indicators.

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Recommended Citation:

Chaparro, C.; Oot, L.; and Sethuraman, K. 2014. *Tajikistan Nutrition Profile*. Washington, DC: FHI 360/FANTA.

This nutrition profile is made possible by the generous support of the American people through the support of the Office of Health, Infectious Diseases, and Nutrition, Bureau for Global Health, U.S. Agency for International Development (USAID) and USAID Bureau for Asia under terms of Cooperative Agreement No. AID-OAA-A-12-00005, through the Food and Nutrition Technical Assistance III Project (FANTA), managed by FHI 360.

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The intended purpose of this profile is to provide a broad overview of the status of nutrition in Tajikistan in order to inform potential US-supported efforts. To view more information about USAID's Global Health and Feed the Future (FTF) initiatives and their extensive nutrition contributions in Tajikistan, please visit: www.usaid.gov/what-we-do/global-health/nutrition.