

SAFANSI

The South Asia Food and Nutrition Security Initiative

GUIDING POLICY AND INVESTMENT IN HUMAN NUTRITION IN FOUR PROVINCES OF PAKISTAN

Female and childhood malnutrition rates in the Islamic Republic of Pakistan are among the highest in the world. The effects of malnutrition are generally divided into *stunting*, which refers to height deficit by age, *wasting*, which refers to weight deficit by height, and *underweight*, which refers to weight deficit by age. Some 43.7 percent of children under five years of age in Pakistan exhibit the effects of stunting, and the country has the second highest rate of severely wasted children in the world.

The persistently high burden of malnutrition in Pakistan and generally low level of investment in interventions to address the issue were documented in a series of articles in the British medical journal *The Lancet* following severe flooding in 2010 and 2011 that exposed the extent of the problem. The World Bank responded to the series by initiating dialogues with the Government of Pakistan and other partners concerning systematic surveys of nutrition outcomes.

While a country-wide Pakistan National Nutrition Survey was carried out in 2011, the four provincial governments of Balochistan, Khyber Pakhtunkhwa, Punjab, and Sindh undertook their own reviews to guide public policy directed at improved nutrition in the years that followed, and to inform provincial strategies for program development and investment. These included assessments of prevailing rates of stunting, wasting, underweight and overweight people, and micronutrient deficiencies, focusing on particularly debilitating ones such as vitamin A, iron (anemia), and iodine. The assessments would help determine priorities for policies and interventions that target human nutrition-related objectives, including those which are especially applicable and cost-effective in the shorter term.

This focus on the most practical aspects of food and nutrition security reflects the priorities and objectives of the South Asia Food and Nutrition Security Initiative, more often abbreviated as "SAFANSI," which actively supported the research undertaken by the planning and development departments of the four provinces. Whereas notions of food security and malnutrition have often been conceived of rather bluntly in terms of sufficient caloric intake, SAFANSI's treatment of nutrition security focuses on the micro- and macro-nutrient content of the calories consumed as well. The need for this attention to dietary quality has become more urgent throughout much of the South Asia region, in a context of economic growth, increasing agricultural productivity, and declining poverty rates, in which much of the food that has become available and affordable lacks nutritional value. The drivers of consumer preferences and behavior can be complex, and often include the aggressive marketing of highly processed, low quality foods.



Public investment in agricultural interventions that effectively promote food security are more likely to purposefully target women farmers and household gardeners, given their roles within the household and the tasks they carry out in production for home consumption. (Photo: Rama George-Alleyne / World Bank)

And longstanding constraints to the delivery of highly nutritious but generally more perishable foods, such as limited cold storage facilities, persist through much of the region, particularly in the remote, rural areas characteristic of much of Pakistan. SAFANSI represents an adaptation by the World Bank and its partners in South Asia to purposefully accommodate this broader notion of food and nutrition security and more complete understanding of what malnutrition may consist of.

A perspective that entails how *human development* affects *economic development* is a useful starting point. It can be used to clarify how investment in areas such as the biofortification of foods and education about diets may lead to results and outcomes in the wider economy, and to how it relates to development effectiveness. The causal relationships between health and economic growth are often referred to in terms of “pathways.” Pathways through which poor nutrition impinges on economic growth include its direct effects on individual productivity, particularly in physically demanding jobs. A somewhat less direct pathway is through the effects malnutrition has on cognitive development and a child’s learning potential - effects which wield a well-established negative impact on earnings later in life. A third pathway is manifest mainly through the costs incurred by generally poorer health and greater vulnerability to infection of individuals who have experienced episodes of malnutrition.

All of these entail long term consequences of poor nutrition outcomes that not only include pre-natal and early post-natal development, but which are most severe and lasting when experienced in the first thousand days of life. Targeting this window of time therefore presents itself as an urgent priority in the provision of health services, though recent evidence points to the pre-pregnancy nutritional status of women having even greater significance. And they immediately point to the remarkable cost effectiveness of investments in vitamin and mineral (micronutrient) supplements, iron and iodine fortification of foods, and school-based nutrition and health programs.

Governments approach human nutrition through their respective line ministries and the agencies that fall under those ministries’ jurisdiction – a division of labor and responsibility defined by academic discipline and professional field that is generally paralleled in the organization of international development agencies.

Food production and supply makes agriculture an intuitively straightforward sector of the economy to start at, though issues concerning food availability, accessibility, and quality make agriculture’s role in food security (not just supply) more complicated than it first appears. Access to sufficient and sufficiently nutritious food is clearly affected by commodity prices and how affordable food is to households in different income categories. Yet access also varies depending on how food is distributed within households, and even in households that are classified overall as food secure, certain members suffer from malnutrition.

In Punjab for instance, SAFANSI-supported research found stunting to be evident among at least one quarter of young children living in food secure households – a proportion that increases to 32 and 42 percent among children living in food insecure households without hunger and food insecure households with hunger respectively.

The upshot of this type of finding is that public investment in agricultural interventions that effectively promote food security are more likely to purposefully target women farmers and household gardeners, given their roles within the household and the tasks they carry out in production for home consumption. These roles make them central agents in promoting the diversification of the foods that are available to their families, including small livestock husbandry. The diversity of the foods available to households through their own production or through the market proves far more significant than the quantity of food produced.

Women, and younger women of reproductive age in particular, are also natural and urgent priorities for health services that aim to improve nutrition

outcomes. The outreach of these health services tends to rely heavily on how well-informed the women are about matters such as diet quality, immunization, and sanitary behaviors like hand washing before handling food. It also depends on their awareness of what to do, and what kind of health practitioner to consult, in case of serious conditions like diarrheal infections among children. Increasing female school enrollment is a priority in each of the four provinces.

Proper techniques of breastfeeding and the timing and sequence with which semi-solid foods are introduced into children's diets carry significant advantages to the long-term health and well-being of nursing women as well as their children, and this is something that is critical for women to be aware of. All of the four provinces analyzed in the Pakistan health policy reviews pointed to these as major areas in which policy can be brought effectively to bear on the poor state of maternal and childhood nutrition in the country. And the education of girls, long before they are of reproductive age, yields benefits that cut across all the "sector" lenses through which public policy views human nutrition issues. Educated women are far more likely to avail themselves of health services and to understand the essentials of hygiene, as well as to command higher incomes and have access to more employment opportunities. They also tend to play more prominent roles in household decision making about how income is spent to satisfy the needs of household members. These findings are corroborated by SAFANSI-supported research elsewhere throughout the South Asia region, as well as by similar studies in other regions.

Water supply and sanitation is another sector that relates directly to nutrition because even with adequate food intake, diarrheal and other infections deprive the body of its ability to absorb and utilize nutrients. The safe handling of water is a major issue. Even in a setting such as Sindh, in which 85.7 percent of households use water that is safe at its source, pathogens have numerous opportunities to enter the water supply during collection, storage, and transport.

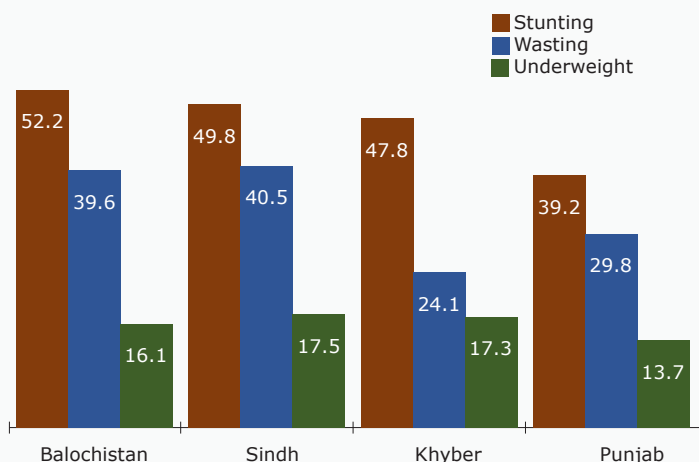


It is critical for women and mothers to be well-informed about matters such as diet quality, immunization, and sanitary behaviors like hand washing before handling food to improve nutrition outcomes. (Photo: World Bank)

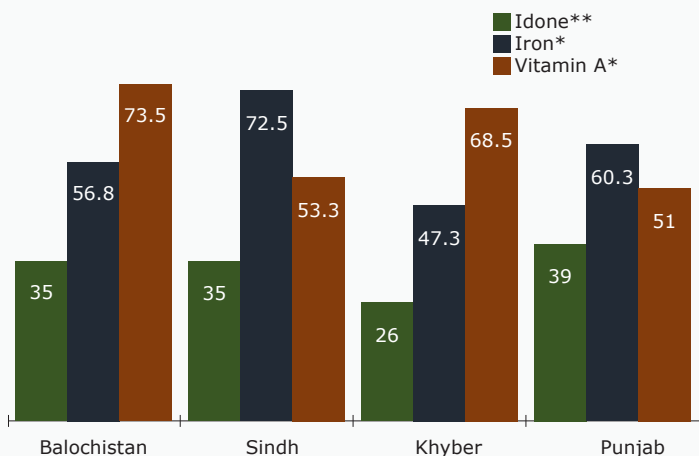
The four nutrition policy guidance notes prepared for Balochistan, Khyber Pakhtunkhwa, Punjab, and Sindh stress the practical significance of inter-sectoral coordination between agriculture, education, water supply and sanitation, and social safety nets. The effective work of each sector and the ministries and agencies responsible for them are aptly represented as necessary but not sufficient conditions to improved nutrition outcomes. Progress in each respective field is moreover recognized as contributing to overall economic development by ensuring a healthier, more productive workforce, reduced exposure to poverty and food insecurity, lower rates of illness, and higher incomes with fewer costs.

The recommendations presented in the policy guidance notes are organized into interventions, coordination between sector agencies, and issues that apply to nutrition but transcend any one sector – principally gender and private sector investment. The private sector is seen as playing a particularly important role in supplying essential commodities like soap, nutritional supplements, and fortified foods as well as in marketing messages that aim at promoting their use by consumers. It is also seen as a major actor in the provision of medical facilities.

Percentage of children under 5 affected



Percentage of children affected



** School age children

* Children under five

The resulting clarification of priorities has been instrumental in guiding program development and increasing investment. This in turn has led to a gradual expansion in the coverage of integrated packages of health-related interventions. It has also seen a marked improvement in the understanding of what greater cohesion consists of when rolling out interventions in multiple sectors, and between those in agriculture, social safety nets, education, and water supply and sanitation in particular.

SAFANSI has played a catalytic role in defining and advancing the food and nutrition agenda in the World Bank's work program in South Asia, as well as in governments in the region, where policy makers' commitment to nutrition-sensitive food and agriculture systems has become more pronounced. The Initiative's first phase was carried out between 2010 and 2015, and the development of its second phase, launched in December of 2014, was informed by the experience and lessons derived from its first five years. Phase II is financially supported by the United Kingdom's Department for International Development (DfID) and European Commission, while the World Bank continues to serve as its trustee, responsible for its administration, program development, and oversight.

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This results series highlights development results, operational innovations and lessons emerging from the South Asia Food and Nutrition Security Initiative (SAFANSI) of the World Bank South Asia region.

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