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Iran, Malnutrition

Iran: Lowering Malnutrition Rates through Home-Grown School Meals

Context

Iran is a theocratic republic in the Middle East, bordering the Gulf of Oman, the Persian Gulf, and the Caspian Sea, between Iraq and Pakistan (CIA). Its climate is mostly arid or semiarid, with a subtropical zone along the Caspian coast (CIA). With a population of 88,386,937, 77.3% live in urban areas, while 22.7% remain rural—making rural children especially vulnerable to hunger and undernutrition (CIA). While Iran faces one of the highest malnutrition burdens in the Middle East, combining international aid from UNICEF with locally led programs like a school-based feeding initiative can not only reduce stunting and wasting but also empower communities to break cycles of poverty and underdevelopment.

A 2022 study of 8,551 primary school children revealed alarming levels of undernutrition: stunting prevalence reached 36.9% (a 14.7 percentage point increase compared to 2017 global averages) and wasting prevalence reached 53.3% (a 45.8 point increase, or 7 times higher than the global average) (Mohammadi 95; Azizi-Soleiman). Nearly 49.2% of households face food insecurity, including 19.2% experiencing hunger (Daneshi-Maskooni).

Children in rural areas face 1.34× greater odds of malnutrition, girls 1.17× greater odds than boys, the Sistani ethnic group 1.82× greater odds than Fars, and low-income households 2.0× greater odds than wealthier families (Mohammadi 95). Malnutrition in Iran thus reflects deep inequalities linked to geography, gender, and socioeconomic status. Child malnutrition in Iran not only affects health outcomes but also reduces future food security by limiting educational attainment, lowering workforce productivity, and perpetuating poverty cycles.

The central challenge this paper addresses is Iran's extremely high rates of child stunting and wasting, driven by poverty, rural isolation, and gender inequities, which directly threaten national food security by reducing workforce capacity and perpetuating poverty cycles (UNICEF 2024).

Findings

Iran is not the only country facing issues with malnutrition. "Pakistan has been reported to have one of the highest levels of prevalence of child malnutrition compared to other developing countries. According to the National Nutrition Survey, 33% of all children were underweight, nearly 44% were stunted, 15% are wasted, 50% were anemic, and 33% were anemic" (Asim). In Pakistan UNICEF is working on malnutrition, they are working with the government at all levels to help create sustainable development goals [SDGs] specifically with health and WASHI [water, sanitation, and hygiene], they plan to tackle the problem early on, focusing on children (UNICEF).

UNICEF has been working in Iran by improving maternal and child nutrition through comprehensive strategies (UNICEF). This includes collecting and analyzing data on the nutritional status of mothers and children aged 0-18 years and embedding food and nutrition surveillance for children under five into primary healthcare systems (UNICEF). Efforts focus on enhancing nutrition programs through

multisectoral, nutrition-specific, and nutrition-sensitive interventions, such as developing new social policy schemes, advocating for improved food sector policies, and supporting the strategic distribution of nutrient supplementation and fortification to vulnerable groups (UNICEF).

Additionally, UNICEF aims to establish national dietary guidelines for school-age children and address barriers to healthy feeding practices for children under two by designing strategies for social and behavioral change (UNICEF). To combat micronutrient deficiencies, targeted dietary supplements will be distributed to at-risk populations. Finally, UNICEF is committed to empowering nutrition experts and community health workers by providing technical training and advocacy to improve IYCF, infant and young child feeding practices (UNICEF). “UNICEF gets results: Every year, millions of children with severe acute malnutrition recover after receiving treatment with UNICEF's support” (UNICEF).

Solution

Program Design

The prevalence of malnutrition can lower with a food program. UNICEF would help fund and develop a food program in lower income households of Iran. The program would start off with some volunteers experienced in running an organization like this and they would teach lower and even upper class Iranians how to handle the organization. Later on, they would take most of the control with some supervision and needed clearance from the heads of the program.

This could be done at schools once every two weeks. The food would be approved by the FAO, Food and Agriculture Organization of the United Nations, in order to make sure the food is safe to eat, both lowering the prevalence of disease and a low abundance of food (“FAO-WHO”). This can also be done with vitamins (“Basic Needs”). This has been done before in lower class cities in America and it helps many families, programs like the OASIS program in New Jersey help further the development of lower class cities in the state (“Basic Needs”).

Community Model

The food program would rely heavily on funding; however, it would make a large impact on those who struggle with malnutrition. Low income households face the dangers of malnutrition more than 2 times higher income families would (Mohammadi 95). It's because of this injustice that those lower income families should be the first problem area to focus on.

The program would work like the Oasis program of New Jersey, where they set up soup kitchens to feed those in need, and create distribution centers at schools every few weeks to provide families with healthy food, diapers, and vitamins since “Most children who suffer from malnutrition and stunting are deficient in many micronutrients, such as the B vitamins, vitamin D, iron, iodine and zinc” (Kraemer).

The plan is to start off with a non-profit; UNICEF will help build the foundation of the food program. UNICEF would help to make use of Iran's farmland, which makes up $\frac{1}{3}$ of the country, and would also get funding from the World Bank. Getting this money would be feasible, as the loan would be paid back. By creating this Iranian Oasis we are feeding the people, leaving them with more money, which would have them using their money to buy more resources, contribute to businesses; inevitably creating this cycle in which the country's economy is boosted and would easily allow for the loan to be paid back.

Farmers benefit from stable local food demand, parents gain healthier children, schools see higher attendance, and the government reduces long-term healthcare costs. UNICEF and FAO provide technical expertise, while World Bank loans supply start-up funds. Religious leaders and local councils ensure cultural acceptance, and female health workers help address gender-based barriers (FAO 2023).

School-Based Fortification Program

In addition to these broader efforts, a school-based fortified meal and micronutrient powder program could directly target the most vulnerable populations. This plan would prioritize rural primary schools in provinces with the highest burden—such as Sistan, Baluchistan, Kerman, and Kurdistan—while giving special attention to girls and low-income families.

For instance, Ethiopia faced rural-urban disparities in malnutrition, but reduced them through nutrition-sensitive agriculture that targeted poor farming families. If Iran adopted a similar community-focused agricultural approach, rural children would benefit more consistently from food access.

Each child would receive one fortified hot meal per school day and one micronutrient powder dose per week, with monthly parent sessions led by female community health workers to encourage long-term adoption. Ingredients like rice, legumes, yogurt, vegetables, and herbs would be sourced from local farmer cooperatives, while premix micronutrients would be FAO/WHO-approved to ensure safety and quality. Meals would either be cooked on-site or delivered from central kitchens, always prepared in line with halal standards.

To respect cultural norms, female cooks and health workers would serve in schools where gender restrictions apply, with coordination from local councils and mosques. Risks such as inflation and sanctions would be addressed by prioritizing local sourcing, promoting import substitution, and partnering with regional FAO networks. Importantly, meals would only be provided at schools to encourage consistent attendance and reduce dropout rates.

Together, the community food distributions and fortified school meals directly respond to the major drivers of malnutrition identified earlier: poverty (by reducing household food costs), geography (by reaching rural schools), gender (by prioritizing girls' nutrition), and weak healthcare systems (by involving trained health workers). This integrated approach ensures that root causes are addressed, not just symptoms (WHO 2022).

Sustainability and Local Ownership

Down the line, the Iranian “Oasis” would be run by the people of Iran themselves. Giving them power and autonomy, giving them the ability to make decisions they believe will impact communities more. This plan is sustainable, by having the actual people who are affected by malnutrition be part of the eradication of this terrible disease, we are making sure that the problem at hand is being taken care of, because we know that the people taking care of it want it gone more than us.

The program is culturally relevant because it aligns with Iran's strong community-based traditions and religious emphasis on feeding the poor. Using halal foods, female cooks, and mosque-endorsed distribution ensures acceptance across diverse regions(Esfandiari 2021).

In terms of practicality and attainability the food program would be very feasible. By working with UNICEF the program would be working under the supervision of an agency with experience. It would be of great importance and a priority of many Iranians who need healthy food.

Conclusion

Success would be measured through school attendance records, child health screenings, and annual nutrition surveys. The goal is to reduce stunting and wasting rates by at least 15% within three years, while also lowering child mortality rates and improving educational attainment.

To conclude, malnutrition acts as a box keeping Iran locked in this position in which the country is unable to truly grow and develop. Some prevalent causes are wealth, gender, and educational attainment (Mohammadi 95). With the solutions presented in this paper, malnutrition rates, and child mortality rates will lower in Iran.

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