

# Policy Entry Points for Healthy Diets in India

## Insights from Three Consultations

### About this policy note

This policy note synthesizes insights from stakeholder consultations, which were convened to identify potential policy actions for improving diets for all in India. Specifically, this note highlights major diet-related challenges, their drivers—spanning behavioral, economic, social, environmental, institutional, and agricultural dimensions—and proposes evidence-based policy actions that were assessed for feasibility and relevance by stakeholders in India.



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## Introduction

### *Healthy diets as an entry point for nutrition*

Globally, the co-existence of multiple forms of malnutrition is rising. In 2018, out of 141 countries with consistent data, 124 had high levels of at least two forms of malnutrition (stunting, anemia among women of reproductive age, and overweight among women), while 41 countries had high levels of all three (Development Initiatives, 2018). These overlapping burdens share common drivers, necessitating integrated solutions. Poor diets are a major contributor to global mortality and health risks (Afshin et al., 2019), and their relative contribution to the global burden of disease is increasing. In India, unhealthy diets account for 56% of the disease burden (ICMR-NIN, 2024).

Ensuring healthy diets for all can address both undernutrition and diet-related overweight, obesity, and non-communicable diseases (Hawkes, Demaio, and Branca, 2017). Healthy diets are diverse, nutrient-dense, and balanced—including fruits, vegetables, legumes, nuts, whole grains, and appropriate amounts of animal-source foods—and limit foods high in sugar, salt, and fat (Menon and Olney, 2024).

### *Trends in food production and consumption*

Food production in India has not only increased but has become significantly more diverse and nutritious (Kapoor et al., 2024). Between 2013–14 and 2023–24, there was fast growth in the production of several foods that are key to healthy diets: the production of milk surged from 137.7 to 239.3 million tons, eggs from 78.5 to 142.8 billion, fish nearly doubled from 9.6 to 18.4 million tons, and meat increased from 6.7 to 10.25 million tons (Press Information Bureau, 2024). Likewise, pulse production increased from 19.3 to 24.2 million tons, while India maintained its position as the world's second-largest producer of fruits and vegetables. Meanwhile, the production of staple grains like rice and wheat increased modestly, reflecting a gradual but significant shift toward more nutrient-rich food production.

Changes in India's food production have enabled meaningful improvements in household consumption. Recent National Sample Survey data reveal encouraging trends. The share of rural households consuming any fresh fruits in the past seven days increased from 64% in 2011–12 to 90% in 2022–23, while the share in urban areas increased from 77% to 94%. Milk and milk product consumption also rose, from 80% to 92% in rural areas and from 91% to 96% in urban areas. At the same time, monthly per capita cereal consumption declined from 10.8 kg to 8.7 kg in rural households and from 8.8 kg to 7.2 kg in urban households over the same period (Kapoor et al., 2024). Despite these gains, dietary imbalances in India persist. Consumption of cereals exceeds National Institute of Nutrition (NIN) recommendations, while diet diversity and the consumption of vegetables and other micronutrient-rich foods remain low. In 2021, only 28% of individuals aged 15 years or older reported consuming all five recommended food groups: starchy staples, vegetables, fruits, pulses, nuts or seeds, and animal-source foods (Global Diet Quality Project, 2022). At the same time, consumption of foods high in sugar, salt, and fat and food eaten outside of the home, which are often higher in these ingredients than meals prepared using raw food at home, is growing rapidly (Kishore & Gupta, 2025).

### *Data-driven dialogues on policy entry points to improving diets*

Ensuring that healthy diets are accessible to all is key for improving nutrition and well-being (Menon and Olney, 2024). Recognizing this imperative, the M. S. Swaminathan Research Foundation (MSSRF) and the International Food Policy Research Institute (IFPRI) hosted three stakeholder consultations in 2024 to identify key challenges in achieving healthy diets in India, the drivers of dietary patterns, and promising policy entry points for improving diet quality. The third consultation was co-hosted with NITI Aayog, the Government of India's premier policy think tank. In all consultations, participants were presented data and evidence on healthy diets in India, and dialogues focused on achieving agreement on major challenges, primary drivers, and on identifying potential policy entry points to support healthy diets.

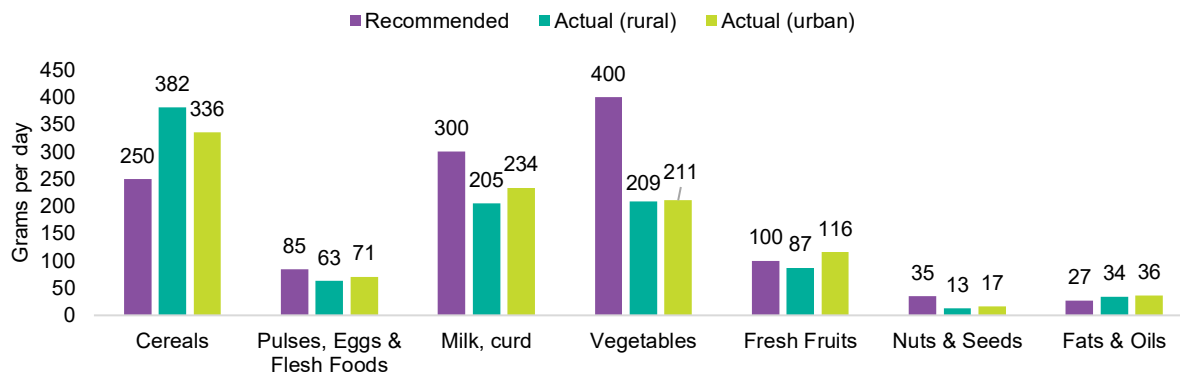
This note synthesizes insights from these consultations on key dietary challenges, their known drivers, and evidence-based, actionable solutions to improve diet quality for all Indians.

## Diet-related challenges in India

Based on the available dietary intake and household consumption data available, key diet-related challenges in India include the following:

- ▶ *High share of calories consumed from cereals and starchy foods:* Although cereals are recommended to contribute no more than 45% of total daily energy intake for the general adult population (ICMR-NIN, 2024), they currently contribute up to 50–70% (Hemalatha et al., 2023).
- ▶ *Low consumption of animal-source foods:* Meat, fish, dairy, and eggs are sources of high-quality protein and bioavailable micronutrients. Even small quantities of animal-source foods can contribute substantially to diet quality and health (IFPRI, 2024). Encouragingly, evidence from the National Sample Survey's Consumption Expenditure Survey (NSS-CES) shows that the share of households that report consuming eggs, fish, or meat in the past seven days increased from 64% in 2011–12 to 80% in 2022–23, and the average consumption levels have also increased. Households in rural India consume only 29 grams of pulses and pulse products and 34 grams of eggs, fish, and meat per person per day. In urban areas, the figures are 31 grams for pulses & pulse products and 39 grams for eggs, fish, and meat. Together, this adds up to a combined intake of pulses and eggs, fish, and meat at 63 grams in rural and 71 grams in urban areas—still below the ICMR-NIN recommendation of 85 grams per day (Figure 1).
- ▶ *Low consumption of vegetables, significant increase in fruit intake:* Fruit consumption has increased between 2011–12 and 2022–23—from 1.9 to 2.7 kg/person/month in rural areas and from 2.7 to 3.5 kg/person/month in urban areas. Average urban consumption now exceeds the ICMR-NIN recommendation of 100 grams/day (or 3 kg/month) for an average adult consuming 2,000 kcal per day while rural consumption remains slightly below it. In contrast, the average monthly per capita consumption of vegetables (excluding potatoes and onions) has declined from 4.3 kg to 4.0 kg over the same period—less than half of the recommended 300 grams/person/day or 9 kg/month (ICMR-NIN 2024; Kapoor et al., 2024).
- ▶ *Rising consumption of calorie-dense, ultra-processed foods and paid cooked meals:* Households are allocating the largest share of their food budget to foods high in salt, sugar, and fat and purchased cooked meals (21% in rural areas and 28% in urban areas), potentially displacing the consumption of healthy, nutrient-dense foods (MoSPI, 2024).

► **Suboptimal diets consumed among special groups:** Individual nutrient requirements vary based on physiological characteristics such as age, physical activity level, and specific life stages like pregnancy or lactation (Menon and Olney, 2024). Overall, diets of pregnant women in India do not meet the recommended nutrient requirements in India (Bellows et al., 2020). Similarly, infant and young feeding practices have remained suboptimal over the last decade, with little improvement in the quality of young children’s diets. According to National Family Health Survey data, only about 50% of children 6-8-months of age received solid or semi-solid foods, less than a quarter of 6-23-month-old children consumed five out of the eight recommended food groups, and only about 11% received an age-appropriate acceptable diet (Ray et al., 2023).



**Figure 1.** Recommended versus actual consumption quantities of food groups in rural and urban India. Recommended quantities have been taken from Figure 1.3 in the Dietary Guidelines for Indians and are based on a 2,000 kcal/day diet (ICMR-NIN, 2024). Actual quantities are based on authors’ calculations using unit-level data from the NSS-HCES 2023–24 (MoSPI, 2025). Cereals include millets. Vegetables exclude potatoes. Flesh foods include chicken, fish, and meat.

## Drivers of dietary choices

Dietary choices are influenced by various factors, including food availability, affordability, as well as individual preferences, cultural norms, and the local food environment (Blake et al., 2025).

Understanding these drivers provides a foundation for identifying policy entry points and establishing a programmatic and a research agenda for promoting healthy diets (Blake et al., 2025). Drawing upon the Global Food Policy Report 2024 and the growing literature on drivers of food choice, experts at the consultations focused on six broad sets of drivers influencing diet quality in India: availability, affordability, consumer behavior and preferences, unhealthy food environments, socio-cultural drivers, and institutional drivers.

### Availability

Agricultural policies in India have historically prioritized staple grains, particularly rice and wheat, often at the expense of more diverse, nutritious crops and allied sectors, such as livestock and fisheries. For example, the provision of guaranteed minimum support prices (MSPs) for rice, wheat, and sugarcane has encouraged their overproduction (Chatterjee et al., 2024), making these staples highly available and affordable. Yet, despite receiving significant policy support, cereals have recorded the slowest growth among the five major agricultural segments, expanding at a modest 1.6% per year for non-horticultural crops between 2013–14 and 2023–24 (Chand & Singh, 2024). In contrast, sectors not covered by MSPs and with minimal government intervention such as horticulture (3.9% annual growth), livestock (5.8%), and fisheries (9.1%)—have grown faster. Despite higher growth rates in these sectors,

participation in these high-growth sectors remains limited. Only 6.5% of agricultural households cultivate fruits or vegetables, and just 53% engage in animal husbandry (Chand & Singh, 2024).

Going forward, agricultural policies and programs should enable and incentivize greater farmer participation in horticulture and livestock activities to support both income diversification and improved nutrition. Agricultural growth since 2004–05 has been driven more by rising real prices for farm produce than by productivity improvements (Chand & Singh, 2024). This price-driven growth has proven costly for consumers through higher food prices and places strain on fiscal resources. To make nutritious foods more affordable and accessible, agricultural policy at both state and central levels should shift from distortionary input and output subsidies toward innovations and investments that increase on-farm productivity and value chain efficiency.

This productivity-focused approach need not entirely abandon price support mechanisms. While expanding MSP coverage to all nutrient-dense crops may not be fiscally sustainable, targeted "green box" bonuses on MSP for pulses and millets could recognize their positive externalities such as soil quality improvement and water conservation. Such differentiated incentives can promote sustainable, nutrition-rich crops without reintroducing the distortions of the cereal system.

### ***Affordability***

Indian households spend nearly half of their total monthly budget on food—47% in rural areas and 40% in urban areas (MoSPI, 2024)—yet healthy diets remain beyond the reach of most families (Raghunathan, Headey, & Herforth, 2021). This affordability gap is partly a result of price distortions: micronutrient-rich foods are costly, while cereals and foods high in fat, sugar, and salt are cheap (Bai et al., 2021; Headey & Alderman, 2019). Widespread poverty combined with the relatively high costs of nutrient-dense foods make healthy diets unaffordable for many households.

### ***Consumer behavior and preferences***

Preferences are shaped by multiple factors, including taste, convenience, habits, culture, and nutritional knowledge (Blake et al., 2021; Monterrosa et al., 2020). Creating demand for sustainable healthy diets requires shifting personal and collective food choice behaviors (Kim et al., 2024). These behavior changes must account for deeply ingrained cultural practices and individual preferences while building awareness of the benefits of dietary diversity.

### ***Unhealthy food environments***

The consumption of foods high in salt, sugar, and fat is increasing rapidly across all geographic areas and income levels (Rathi et al., 2022; Kishore & Gupta, 2025). This trend is exacerbated by increasingly unhealthy food environments, characterized by aggressive marketing, easy access to calorie-dense foods, including through online delivery apps, and limited availability of fresh options (Kumar et al., 2022; Rathi et al., 2022; Gupta et al., 2023; Menon & Olney, 2024). Urbanization and convenience culture can further erode traditional healthy diets, creating environments that promote unhealthy food choices (Satija et al., 2021; Kumar et al., 2022).

### ***Socio-cultural drivers***

Socio-cultural factors profoundly shape dietary choices through multiple pathways. Barriers to healthier diets related to these factors include deeply entrenched eating habits (Higgs et al., 2021) and a lack of

awareness regarding the benefits of dietary diversity and adequate nutrition (Nair et al., 2023). Social norms and perceptions also play a significant role: foods high in salt, sugar, and fat often carry social prestige, contributing to their broad acceptance and increased consumption (Popkin & Reardon, 2022). Cultural norms, such as vegetarian preferences in certain communities of India, also significantly influence food selections (Rosenfeld, 2022). Local opinion leaders may inadvertently promote feeding practices that are not evidence-based, potentially hindering efforts to improve dietary habits (Saldanha et al., 2022). Gendered time constraints add another layer of complexity—women, who are primarily responsible for preparing and serving meals, often face time pressures that can impact breastfeeding and complementary feeding practices. This time scarcity can lead to greater reliance on ready-to-eat or easily prepared, calorie-dense foods, shaping household dietary patterns in less nutritious ways (Smith & Haddad, 2022). Additionally, stress, time pressure, and habitual behaviors can lead to automatic, often less health-conscious decision making in food selection, especially when unhealthy foods are easily accessible (Marteau et al., 2021).

### ***Institutional drivers***

Government policies, programs, and regulations play an important role in shaping dietary choices in India. Key institutional levers include the Public Distribution System (PDS) and the Minimum Support Price (MSP) and public procurement system, which together determine both what farmers produce and what foods reach consumers at subsidized prices. While the PDS has been crucial for improving food security, its focus on cereals has likely limited dietary diversity (Narayanan & Gerber, 2023). Similarly, the MSP and public procurement system's historical emphasis on rice and wheat has reinforced a production–consumption cycle centered on cereals, discouraging diversification into pulses, millets, fruits, vegetables, and animal-source foods. Reorienting procurement and incentive structures to support these nutrition-sensitive foods could enhance both farmer incomes and diet quality. The Government of India has sought to enhance nutrient density in safety net programs by introducing fortified rice and wheat flour into the PDS and other schemes, though real-world evidence of impact remains limited. Some states have experimented with diversifying the PDS basket or offering cash transfers alongside or instead of subsidized grains, but these efforts are sporadic, with limited evidence of nutritional benefits. To complement these, supply-side efforts incentivize farmers to diversify agriculture through better price realization, supported by integrated agricultural markets (e.g., National Agricultural Market or e-NAM), strengthened farmer producer organizations (FPOs) for greater bargaining power, and innovative schemes like the *Bhavantar Bharpai/Bhugtan Yojana* (deficiency price payments scheme) in Haryana and Madhya Pradesh for pulses, oilseeds, and horticulture crops. These initiatives, however, are nascent, with limited evidence of impact, and require greater resources, institutional support, experimentation, and scaling of successful pilots (NITI Aayog, 2024).

Beyond PDS and agricultural policies, broader institutional factors shape the food environment and influence dietary choices across India. The food industry's substantial influence on food policy often leads to weak regulations on ultra-processed foods and inadequate package labeling, contributing to unhealthy food environments (Thow et al., 2022). Insufficient enforcement of food safety standards, especially in the informal food sector, raises concerns about food quality and safety (Sudershan et al., 2022). Furthermore, uneven implementation of school feeding programs and ICDS across states, driven by variations in funding and logistics, leads to disparities in nutrition outcomes (Chakrabarti et al., 2021). These disparities reflect differences in fiscal capacity, administrative efficiency, and political priorities across states. Addressing some of the structural constraints in lagging states is critical to realizing the nutrition potential of India's extensive food and social protection systems.

# Opportunities for evidence-informed policy actions

During the consultations, several potential evidence-informed policy actions across the food systems were identified for improving Indian diets. These actions were evaluated based on their proven effectiveness in improving availability, affordability, accessibility, and demand of healthy diets, as well as their feasibility, considering scalability, financial requirements, and political viability.

Evidence of impact and feasibility varied significantly across policy actions—some were well-supported, while others required further validation. Likewise, some policy actions necessitate major systemic reforms and large budget outlays, whereas others can be implemented with minimal investments and modest adjustments (Table 1). Ultimately, the participants tried to identify evidence-based policies that could meaningfully enhance diet quality without requiring substantial new investments or complex trade-offs.

**Table 1:** Potential evidence-informed policy actions across the food system to improve Indian diets

Cost and feasibility of proposed actions	Strong evidence of impact	Needs more research/analysis
<b>Low cost, high feasibility actions</b>	Front-of-package labeling and nutrient profiling	Integrating nutrition and healthy lifestyle education into school curricula and public awareness campaigns
<b>Medium cost, medium feasibility actions</b>	Including animal-source foods (e.g., eggs) in PM POSHAN, ICDS, and other safety net programs in all states	Combining food or cash transfers in PDS with nutrition BCC; Regulating marketing and advertisements of ultra-processed and HFSS foods
<b>High cost, low feasibility actions with big impact</b>	Expanding cash transfer programs complemented by strong nutrition BCC	Diversifying food baskets under the Public Distribution System (PDS) to include nutrient-rich foods

## Low-cost, high-feasibility actions

*Instituting front-of-package labeling and nutrient profiling:* Effective front-of-package labeling that provides consumers with easy-to-understand nutrition information can promote healthy food choices and incentivize reformulation by manufacturers (Fretes et al., 2024). This form of nutrition labeling is strongly recommended by international health agencies. Color-coded labeling of sugar-sweetened beverages combined with media campaigns to raise awareness in Sri Lanka has led to a reduction in the sugar content of beverages and a drop in the sales of carbonated drinks (WHO, 2023). However, efforts to implement accessible front-of-package labeling often encounter strong resistance from the food industry, which wields considerable influence over consumer choices and policymaking (Bansal, 2021; Resnick & Nogales, 2024). Effective implementation requires robust regulatory enforcement and protection from industry interference. In April 2025, India's Supreme Court directed the Food Safety and Standards Authority to finalize and implement simple Front-of-Pack Nutrition Labels on all packaged foods within three months. It remains to be seen when and how this directive will be implemented. Enhanced transparency through public accountability tools like corporate influence scorecards can help counter the industry's undue influence on regulation (Resnick & Nogales, 2024).

*Improving nutritional awareness:* Approximately 90% of food enterprises in India are small, informal, and outside the regulatory and tax net (Gupta et al., 2023). The high degree of informality may limit the

impact of taxes and regulations on food quality and divert demand to informal food enterprises. Therefore, taxes and other regulations should be combined with efforts to shift consumer preferences and habits towards more nutritious foods. Educational or awareness campaigns can play a vital role by raising awareness and shifting social norms towards healthier eating (Mozaffarian et al., 2018). A systematic review of 145 studies on behavior change interventions to reduce unhealthy food consumption found that intervention packages incorporating multiple information, education, and communication components reported impacts more frequently than single-component informational interventions (Kachwaha et al., 2024). The Government of India and the state governments are implementing several large-scale social and behavior change initiatives to enhance nutrition knowledge and awareness, such as the National Nutrition Mission and women's group programs in India. Assessments and evaluations are needed to inform the design and implementation of nutrition knowledge and awareness programs in India.

*Education on healthy diets and lifestyle should be a part of the school curriculum:* The World Health Organization (WHO) recommends three key strategies: (1) incorporating nutrition education into the school curriculum to educate children and teaching professionals; (2) transforming the school food environment by restricting the placement and availability of ultra-processed foods, limiting their marketing or promotion, regulating food variety or portion sizes, reformulating school menus, and implementing canteen policies; and (3) forming partnerships with students and communities to promote healthy food purchases and ensure equitable food distribution among household members (WHO, 2020). Embedding a learning agenda and mechanism to support implementation and impact of such programs could enhance the impact, cost effectiveness and sustainability of school-based nutrition awareness programs.

### **Medium-cost, medium-feasibility actions**

*Explore opportunities for introducing high nutritional value foods into ICDS and PM-POSHAN:* The composition of take-home rations varies by state, typically consisting of a mix of cereals, pulses, and nuts—with sugar and oil added in some cases (WFP, 2019). Five states provide milk, and 13 states provide eggs as a part of take-home rations under ICDS. Identifying options for improving the quality of take-home rations by excluding or reducing sugar to negligible quantities is desirable. Under the Mid-Day Meals Scheme (PM-POSHAN), only 13 states include eggs. It is imperative to understand why some states distribute more nutritious foods and others do not under the same national mandate and program guidelines. Co-creating a learning agenda with these varied sets of states could glean insights on the enabling conditions, challenges, and solutions, and facilitate cross-state learning.

Strengthen nutrition behavior change communication (BCC) in existing national programs like ICDS, health, Pradhan Mantri Matru Vandana Yojana (PMMVY), and PDS: A randomized controlled trial in Bangladesh demonstrated that combining cash transfers with high-quality nutrition BCC can improve diet quality and reduce child stunting (Ahmed et al., 2024). This evidence suggests that integrating BCC with existing cash transfer programs in India could be evaluated and, if effective, scaled up in India to improve nutritional outcomes. Several national programs offer strategic opportunities to combine nutrition education with financial support. Under the National Nutrition Mission, BCC efforts have intensified, focusing on improving nutrition during the first 1,000 days. Between 2016 and 2021, health and nutrition education interventions under ICDS significantly expanded their coverage (Avula et al., 2024). The PMMVY program provides cash transfers to pregnant women upon meeting conditions such as pregnancy registration, antenatal care, birth registration, and child immunization. These touchpoints create ideal opportunities to deliver targeted BCC that promotes healthy diets among pregnant and lactating women. Similarly, the PDS in states and union territories like Karnataka, Chandigarh, and Puducherry provides cash transfers in addition to, or in place of, staples like rice, wheat, or millets. Exploring ways to combine cash (and food) transfers with BCC in India's largest food safety net program could yield nutritional gains beyond the benefits of the transfer alone. A critical gap in current BCC interventions is that they primarily promote healthy diets without adequately addressing the risks of unhealthy and ultra-processed foods. Given shifting dietary patterns and the rise in unhealthy food consumption, integrating information on the dangers of ultra-processed foods into BCC messaging is both feasible and necessary. This enhancement could contribute to improving diets and addressing the dual burden of malnutrition and diet-related non-communicable diseases.

*Restricting advertisements of ultra-processed foods:* There is an urgent need to curtail the rapidly rising consumption of ultra-processed foods through a combination of comprehensive and mutually reinforcing policy actions (Popkin et al., 2021). Regulating advertisements and promotion of such foods, especially among children, is one such effort. For example, the Chilean Government initially restricted marketing targeted to children and later expanded the policy to include all foods with warning labels. Several other countries have banned the marketing of ultra-processed foods in schools (Popkin et al., 2021).

### ***High-cost, lower-feasibility actions with potentially large impact***

*Expanding cash transfer programs complemented by strong nutrition BCC:* India has some of the world's largest food-based safety net programs, such as the PDS, the Integrated Child Development Services (ICDS), and the Mid-Day Meal Scheme (PM-POSHAN). These programs provide millions of individuals subsidized staples, reconstitutable foods, and cooked meals, respectively. There are opportunities for these food-based programs to improve diets among those they reach, such as adding nutrition BCC and introducing high nutritional value foods where possible (Scott et al., 2023).

### **Strengthening Equity and Data-Driven Implementation**

While the proposed policy actions vary in cost and feasibility, their success ultimately depends on whether they reach the populations most affected by poor diets and malnutrition. Strengthening the enabling systems that underpin implementation, particularly those related to equity, data, and monitoring, is therefore essential. Investments in data-driven targeting, inclusion, and accountability can ensure that the benefits of these interventions extend to marginalized groups and lagging regions, making India's nutrition policies more effective, equitable, and sustainable.

*Opportunities to Strengthen Equity Considerations Through Data-Driven Targeting:* India's Aspirational Districts Programme, launched in 2018, demonstrated how data-driven approaches can accelerate development in the poorest and least developed districts through convergence, collaboration, and performance-based incentives. This targeting sharpened further with the launch of the Aspirational Blocks Programme in 2023. Technology advancements and the JAM (Jan Dhan-Aadhaar-Mobile) infrastructure now enable tracking of program coverage and development indicators at progressively higher frequency and granular resolution. Data collection, collation, and analysis capacity should be strengthened to ensure better targeting of nutrition programs—making them more inclusive not only of less developed areas, but also of disadvantaged populations living within them, including women, Dalits, tribal communities, older adults, and young children.

To operationalize this approach for healthy diets, the integration of diet quality and food environment metrics into existing monitoring frameworks should be explored. Programs can then be designed to address specific barriers faced by marginalized groups—such as women's time constraints through child-care support, improving local food environments through subsidies for women-led or small-scale enterprises producing nutritious and convenient foods, and ensuring that cash transfer programs reach the most vulnerable households. This data-driven, equity-focused approach would transform broad recommendations into targeted, actionable interventions that address the root causes of diet inequality across caste, tribal status, regional, and gender dimensions.

*Identifying and targeting hotspots:* To improve diet quality in India's most underdeveloped regions, the Government of India can leverage the Aspirational Districts Programme (launched in 2018) and the Aspirational Blocks Programme (launched in 2023). These initiatives target underdeveloped areas through enhanced convergence, collaboration, and healthy competition for additional resources. The government can monitor diet quality in the aspirational blocks and districts and allocate resources to address identified constraints and gaps.

## Conclusions

Improving diet quality in India is both urgent and achievable, and the cost of inaction is high. The policy entry points identified through stakeholder consultations offer practical ways forward—from implementing front-of-package labeling and restricting ultra-processed food advertisements, to strengthening nutrition behavior change communication in existing safety net programs and making these programs more nutrition-sensitive.

India's increasingly diverse food production is creating the supply-side foundation for healthier diets. Policy action should now focus on three key areas: making nutritious foods more accessible and affordable through agricultural policies and social protection programs that enable and incentivize crop and diet diversification; fostering healthier food environments by regulating ultra-processed foods with improved labeling, restrictions on advertising and promotion near schools, and limits on sugar, fat, and salt content; and building sustained demand for diverse, nutritious diets through targeted behavior change communication. Implementation should apply a consistent equity lens: prioritizing lagging geographies and marginalized groups, addressing gendered time constraints through childcare and other supports, and enabling women-led and small enterprises that produce nutritious, convenient foods.

Success requires prioritizing cost-effective interventions with demonstrated impact, fostering collaboration across government departments and levels, and leveraging India's growing data infrastructure to ensure interventions reach the most vulnerable populations.

## Research and Learning Agenda

While several policy entry points have strong evidence of effectiveness, others require further validation and adaptation to the Indian context. A robust research and learning agenda is essential for refining interventions and ensuring their real-world impact.

### Priority areas for evidence generation:

1. **Combining food transfers with nutrition BCC:** While evidence from Bangladesh shows promise, India will need well-designed, independently conducted evaluations—with appropriate comparison groups, transparent reporting, and adequate sample sizes—to assess whether integrating such interventions into the PDS, PMMVY, or other cash transfer programs can improve diet quality and nutrition outcomes at scale in a cost-effective manner. These rigorous studies require greater investment and methodological discipline than is typically applied in many pilot efforts.
2. **Diversifying safety net food baskets:** Research is needed on the enabling conditions, challenges, solutions, and benefits of including eggs, milk, and other nutrient-dense foods in ICDS and PM-POSHAN across all states. Cross-state learning from states that already provide these foods can inform national scale-up strategies.
3. **Restricting advertisements of ultra-processed foods:** Evidence on the impact of advertising restrictions in the Indian context—given the high informality of food retail—would help design effective, enforceable regulations.
4. **School-based nutrition education:** Implementation research and impact evaluations of integrating nutrition education into school curricula are needed to identify effective pedagogical approaches and assess their influence on dietary behaviors and knowledge among children and adolescents.
5. **Targeting mechanisms for equity:** Research should explore how to integrate diet quality and food environment metrics into existing monitoring frameworks like those used for Aspirational Districts and Blocks, and evaluate interventions that address specific barriers faced by marginalized groups (women's time constraints, support for women-led food enterprises, etc.).
6. **Fortification effectiveness:** Real-world evidence on the impact of fortified foods distributed through the PDS and other schemes, and through the open market, is limited and should be systematically evaluated.

Continuous research and adaptation, focused on field testing of different approaches at scale and assessing their cost-effectiveness and real-world impact, will ensure long-term success. High-frequency data collection, enabled by digital systems, should be leveraged to enable rapid iteration and course correction. Collaboration between government, research institutions, and implementing partners will be critical for generating actionable evidence that can inform policy refinement and national scale-up decisions.

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