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Asian Mega-Deltas



Pathways for Improved Nutrition: A Review of Bangladesh's Agri-Food System Policies

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I. Background

The relationship between agriculture, food systems, and nutrition in Bangladesh is essential for addressing malnutrition and ensuring food security amid a growing population. Although significant advancements have been made in poverty reduction and food availability, malnutrition, particularly among children, continues to be a major issue. This can be attributed to limited access to nutritious food, inadequate education, and healthcare services (Ahmed et al., 2019). Nutrition-sensitive policies are crucial in bridging the gap between agriculture and improved nutrition outcomes. The Government of Bangladesh has introduced several agri-food system policies, such as the Bangladesh Country Investment Plans (CIP) and various sectoral policies, including the National Food Policy 2006 and National Livestock Development Policy 2007, to address food security and nutrition (Ministry of Food, 2006; Ministry of Fisheries and Livestock, 2007).

This policy brief examines the extent to which these policies align with the National Nutrition Policy 2015, focusing on their potential to contribute to nutrition-sensitive interventions. By reviewing sectoral policies across agriculture, fisheries, and livestock, this analysis seeks to highlight the strengths and gaps within the current policy framework and to identify opportunities for enhancing the coherence and integration of nutrition-sensitive goals.

II. Methodology

This analysis adopts a structured approach to assess the alignment between Bangladesh's agri-food system strategies and the National Nutrition Policy 2015 objectives. We classified the policies into two distinct categories: "Integrated" and "Dedicated," based on their primary focus and scope in addressing nutrition directly or as part of broader developmental goals.

To assess the alignment of Bangladesh's agri-food system policies with the National Nutrition Policy 2015, we adapted the **policy coherence analysis method** from Gillespie et al. (2013). While Gillespie's approach typically focuses on identifying the disconnections between agricultural policies and nutrition outcomes, we modified the method to better reflect the nuances of the Bangladeshi policy landscape. Our approach emphasized both the specific and general ways in which nutrition was addressed across multiple sectors, as well as the degree of integration between policies.

The modified method began with the selection of key agri-food system policies, focusing on those central to the country's agricultural, fisheries, and livestock sectors. The selection was driven by the relevance of these policies to food security and their potential impact on nutrition outcomes. These included policies such as the Bangladesh Country Investment Plans (CIP 2 and CIP 3), the National Agricultural Policy 2018, the National Fisheries and Livestock Policy 1998, and the National Food Policy Plan of Action 2008. Each policy was evaluated based on its potential to contribute to nutrition-sensitive interventions.

Policies were then categorized into two main groups based on their focus on nutrition. The first group, referred to as specific actions, comprised policies that included explicit nutrition

interventions such as programs for fortified foods, micronutrient supplementation, or targeted food security measures. The second group, categorized as general mentions, included policies that addressed nutrition as part of broader goals like food security, agricultural productivity, or health promotion, without detailing specific nutritional strategies. This categorization helped clarify which policies were designed with a direct focus on improving nutrition and which contributed more indirectly to the national nutrition agenda.

To evaluate the coherence of these policies with the National Nutrition Policy 2015, a set of criteria was used. This included assessing direct references to nutrition, evaluating the policies' focus on food security, and examining the extent of multi-sectoral coordination for nutrition-sensitive outcomes. Additionally, the policies were reviewed for their alignment with the goals of the National Nutrition Policy 2015, particularly in terms of reducing malnutrition and improving food security. The analysis also focused on how well policies supported cross-sectoral collaboration to address nutritional issues across different areas, including agriculture, health, and education.

A policy coherence matrix was developed to facilitate the comparison between the policies and the objectives of the National Nutrition Policy. This matrix mapped out the areas where policies aligned with the NNP's goals, highlighting strengths, gaps, and overlaps. Through this matrix, the analysis was able to systematically assess the degree of coherence across the various policy documents, helping to identify areas where improvements could be made to enhance the overall effectiveness of the policies in supporting nutrition-sensitive outcomes.

Criteria for Alignment and Coherence Assessment:

- Policies were evaluated based on the following criteria to determine their alignment with the National Nutrition Policy 2015:
 - **Direct References to Nutrition:** The extent to which a policy explicitly addresses nutrition-sensitive interventions, such as promoting dietary diversity, combating malnutrition, or improving access to nutritious food.
 - **Food Security and Agricultural Focus:** The policy's emphasis on ensuring food availability, accessibility, and quality, which indirectly supports nutritional outcomes.
 - **Multi-sectoral Integration:** The level of coordination across various sectors—such as agriculture, health, education, and social protection—to achieve nutrition goals.
 - **Alignment with National Nutrition Policy (NNP) 2015:** The degree of consistency between the objectives and strategies of the NNP and the reviewed policies. This includes assessing whether the policy addresses nutrition in a way that is complementary to the NNP's goals of reducing malnutrition and improving food security.

A key modification in this approach was placing greater emphasis on the integration of nutrition across sectors, rather than limiting the focus to policies with explicit nutrition objectives. By considering the broader impact of agricultural, fisheries, and livestock policies

on food security and nutrition, the analysis was able to capture a more comprehensive view of the policy landscape. This broader approach revealed how policies that did not explicitly mention nutrition could still play a significant role in supporting nutrition-sensitive interventions through improvements in food availability and quality, agricultural productivity, and the promotion of sustainable food systems.

Table 1: Nutrition-sensitive Policies

Integrated Policies	Dedicated Policies
Bangladesh Country Investment Plan 2	National Fisheries and Livestock Policy 1998
Bangladesh Country Investment Plan 3	National Livestock Development Policy 2007
National Food Policy 2006	National Livestock Extension Policy 2013
National Food Policy Plan of Action 2008	National Poultry Development Policy 2008
National Agricultural Policy 2018	National Shrimp Policy 2014
National Agriculture Policy Plan of Action 2004	
National Agriculture Extension Policy and Plan of Action 1995- 2010	
National Food and Nutrition Security Policy (draft) 2019	

We selected the modified policy coherence analysis method based on Gillespie et al. (2013) because it provides a robust framework for evaluating the alignment of sectoral policies with national nutrition goals, allowing for a comprehensive examination of both direct and indirect contributions to nutrition. Given the complexity of Bangladesh’s agri-food system, where policies across sectors like agriculture, fisheries, and livestock can impact nutrition outcomes in multifaceted ways, this method enables us to assess not only specific actions focused on nutrition but also broader, systemic influences such as food security and multi-sectoral collaboration. By adapting the method to focus on both specific and general references to nutrition within policies, we ensured a more holistic understanding of how well these policies align with the objectives of the National Nutrition Policy 2015. This approach allows for a detailed analysis of policy coherence, identifying both strengths and gaps, while offering practical insights for enhancing the integration of nutrition-sensitive interventions across sectors.

III. Key Findings

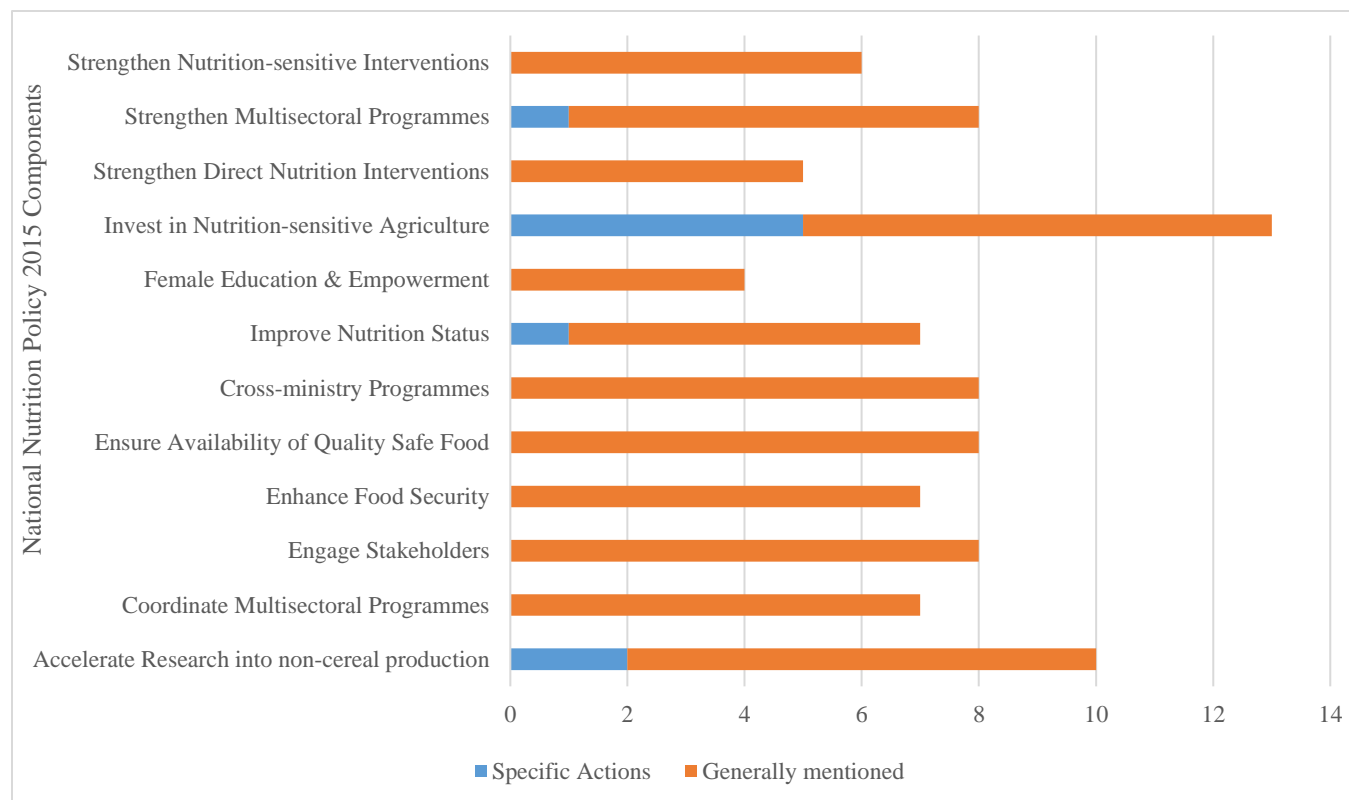


Figure 1: Policy Alignment Analysis

- Alignment with Nutrition Goals:** Analysis indicates a strong alignment of both integrated and dedicated policies with the National Nutrition Policy 2015, particularly in areas of food security and nutritional status improvement. However, direct nutrition interventions are less commonly addressed, pointing to a gap in targeted nutrition programs.

Example: The *National Food Policy 2006* emphasizes improving food security and nutritional outcomes, aligning strongly with the National Nutrition Policy 2015's objectives to reduce malnutrition and ensure food security for vulnerable populations. However, while the policy addresses broad goals related to food availability, it lacks direct, targeted nutrition interventions like micronutrient supplementation programs or fortified food initiatives, which are essential for addressing specific nutritional deficiencies.

- Varied Support Across Policy Components:** While certain components like food security receive widespread support, others, including female education and stakeholder engagement, are less emphasized in the policy landscape.

Example: The *National Livestock Development Policy 2007* focuses heavily on improving livestock productivity and enhancing food security through livestock-

derived products like milk and meat, which indirectly support nutrition. However, this policy does not address components such as female education or stakeholder engagement, which are emphasized in the National Nutrition Policy 2015 as critical for long-term nutritional improvements, particularly for empowering women as key agents of nutrition-related changes.

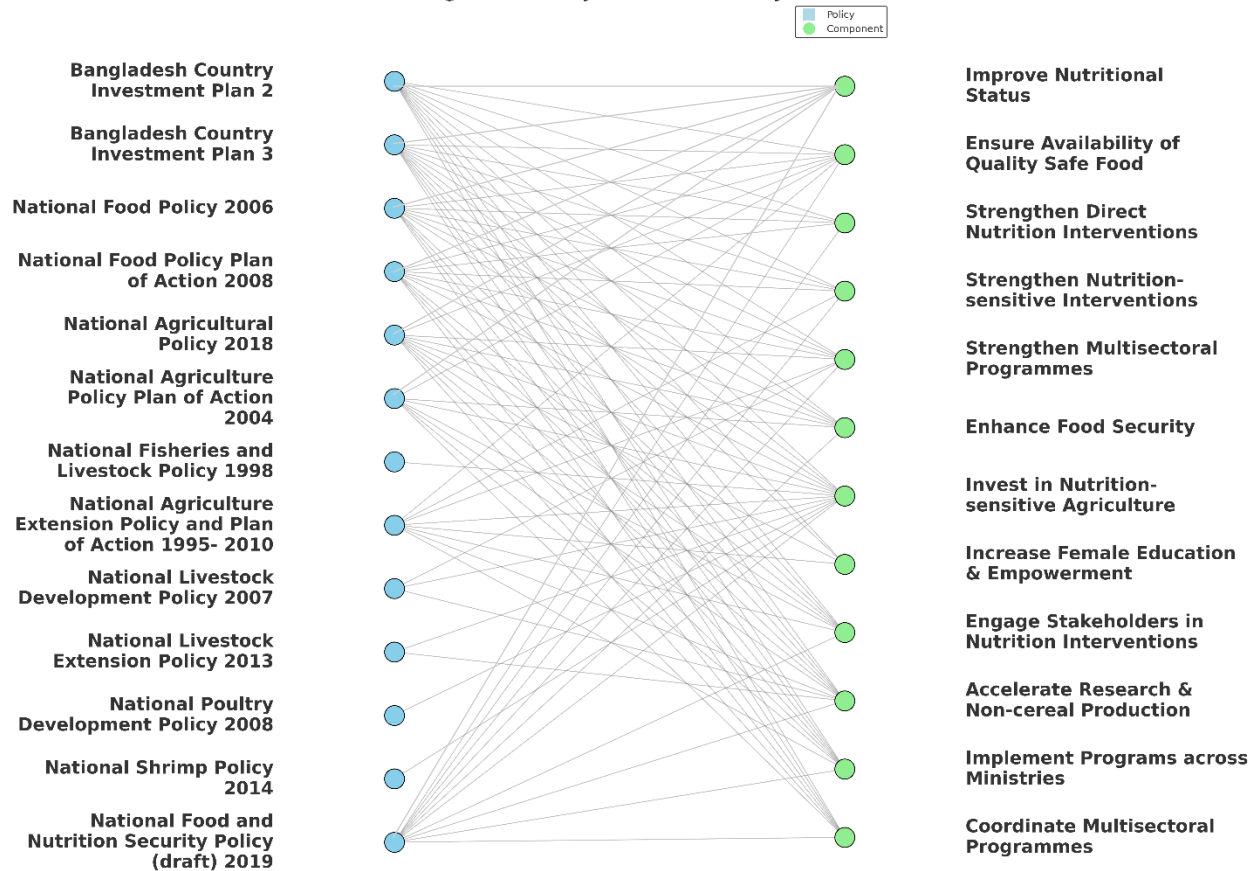
- **Integrated vs. Dedicated Policy Focus:** Integrated policies generally support a wider range of nutrition-related components due to their broader developmental goals, whereas dedicated policies focus more narrowly on specific nutritional outcomes.

Example: The *Bangladesh Country Investment Plan (CIP) 3* takes an integrated approach by addressing a wide range of developmental goals, such as food security, agricultural productivity, and environmental sustainability. This broad focus supports multiple nutrition-related outcomes, such as improving dietary diversity and enhancing agricultural innovation for better nutrition. In contrast, a dedicated policy like the *National Poultry Development Policy 2008* focuses narrowly on poultry production and specific nutritional improvements related to protein intake, aligning more directly with targeted nutrition interventions.

- **Opportunity for Enhanced Policy Coherence:** The analysis suggests an opportunity for increasing the coherence between policies to maximize their collective impact on national nutrition objectives.

Example: The *National Shrimp Policy 2014* has the potential to contribute to nutrition-sensitive outcomes through the development of the shrimp aquaculture industry and improved protein availability. However, this policy could benefit from greater coherence with the National Nutrition Policy 2015 by explicitly integrating nutrition-sensitive interventions, such as promoting the consumption of nutrient-rich fish and shrimp products, and aligning more closely with the multi-sectoral strategies outlined in the NNP 2015. This would maximize the collective impact on nutritional improvement by bridging the gap between sectoral goals and direct nutrition-focused outcomes.

Figure 2: Policy Coherence Analysis



The analysis of Bangladesh's nutrition-sensitive policy coherence reveals a concerted effort toward integrated nutritional improvement, with a strong focus on food security, direct and indirect nutrition interventions, and multisectoral engagement. Figure 2 provides a visual representation of the policy coherence analysis, illustrating the relationships between various Bangladeshi policies related to the agri-food system and key nutrition-related components. The figure demonstrates the extent to which these policies are aligned with the critical goals outlined in the National Nutrition Policy 2015, such as improving nutritional status, ensuring the availability of safe food, and strengthening direct and nutrition-sensitive interventions. The dense network of connections between policies and nutrition components highlights the integrated nature of the policy landscape, where multiple policies contribute to overlapping nutrition outcomes.

Notably, policies like the *Bangladesh Country Investment Plans (CIP 2 and CIP 3)* and the *National Agricultural Policy 2018* appear to connect with a wide range of nutrition-related goals, suggesting a broad, multi-sectoral approach that supports nutrition-sensitive agriculture, food security, and female empowerment. In contrast, more specialized policies such as the *National Poultry Development Policy 2008* or the *National Livestock Extension Policy 2013* display fewer connections, indicating a more focused contribution to specific outcomes such as enhancing food security or improving nutritional status.

The figure also underscores certain gaps, particularly in policies' alignment with components like "Strengthen Direct Nutrition Interventions" and "Increase Female Education & Empowerment," where fewer links are observed. This suggests opportunities for improving policy coherence in these areas to better support comprehensive nutrition outcomes. Overall, the figure illustrates both the strengths and gaps in policy alignment, emphasizing the importance of coordinated, multi-sectoral programs that address the diverse factors influencing nutrition in Bangladesh.

Key findings include:

- **Comprehensive Approach:** Policies broadly address nutritional challenges through integrated approaches, emphasizing both food quality and multisectoral collaborations.

Example: The *National Agricultural Policy 2018* takes a comprehensive approach by integrating both food security and agricultural innovation, aiming to improve food availability and quality. This policy also promotes sustainable agricultural practices and engages with multiple sectors, including education and health, aligning well with the multi-sectoral collaboration emphasized in the NNP 2015 for improving nutritional outcomes through a broader focus on food quality and safety.

- **Balanced Focus:** There is a notable balance between direct nutrition interventions and broader, nutrition-sensitive measures such as agricultural innovation and education, underscoring a holistic strategy against malnutrition.

Example: The *National Food Policy Plan of Action 2008* balances both direct nutrition interventions and broader, nutrition-sensitive measures by focusing on improving food security while also encouraging agricultural innovation. For instance, the policy promotes the development of high-nutrient crops and food fortification, which aligns with the National Nutrition Policy's focus on enhancing dietary diversity and addressing micronutrient deficiencies through innovative agricultural solutions.

- **Diverse Coverage and Engagement:** While coverage of nutritional components varies across policies, there is a consistent push for stakeholder engagement and the empowerment of women, highlighting the role of education and gender in nutrition.

Example: The *National Agriculture Extension Policy and Plan of Action (1995-2010)* emphasizes community engagement and capacity building, particularly through extension services that aim to educate farmers about nutrition-sensitive agriculture. While this policy supports the empowerment of women and engages a broad range of stakeholders, there is room for improvement in explicitly addressing the gender-specific components of nutrition, as highlighted in the National Nutrition Policy 2015, which emphasizes the critical role of women in improving household nutrition.

- **Opportunities for Enhancement:** The variation in component coverage across policies suggests room for increasing coherence, particularly by filling gaps in less addressed areas to strengthen the overall policy framework.

Example: The *National Livestock Extension Policy 2013* focuses on livestock productivity and food security but lacks specific provisions for addressing nutrition directly through its programming. To enhance the policy's alignment with the NNP 2015, it could integrate nutrition education for livestock farmers and promote the production of nutrient-rich animal-source foods. This would help fill the gap in nutrition-sensitive interventions and strengthen the overall coherence between the agriculture sector and national nutrition goals.

IV. Recommendations

1. **Strengthen Direct Nutrition Interventions:**

Bangladesh should develop and implement targeted nutrition programs designed to address acute nutritional deficiencies, such as micronutrient supplementation and fortified foods, particularly for vulnerable populations like children and pregnant women. For instance, Nepal's National Vitamin A Supplementation Program significantly reduced child mortality and vitamin A deficiency through targeted interventions (World Health Organization, 2013). Implementing similar interventions in Bangladesh can provide a more direct and effective response to malnutrition.

2. **Enhance Support for Underemphasized Components:**

To achieve long-term nutritional improvements, it is essential to increase efforts and resources toward components that currently receive less policy support, such as female education and stakeholder engagement. Ethiopia's School Feeding Program has shown how integrating nutrition with educational support for girls can boost school enrollment and improve nutrition (World Food Programme, 2019). Bangladesh could benefit from incorporating similar initiatives that combine education and nutrition to empower communities and promote sustained nutritional improvements.

3. **Harmonize Integrated and Dedicated Policy Efforts:**

There is a need to foster greater collaboration between integrated and dedicated policy initiatives to leverage their respective strengths. Brazil's *Fome Zero* (Zero Hunger) program serves as a model of harmonizing both integrated agricultural and food security policies with specific nutrition interventions, resulting in significant reductions in hunger and malnutrition (Food and Agriculture Organization, 2014). Bangladesh can adopt a similar comprehensive approach, ensuring policies aimed at food security and agriculture work synergistically with dedicated nutrition programs.

4. **Maximize Policy Coherence for Nutritional Improvement:**

Bangladesh should conduct regular cross-sectoral reviews of existing policies to ensure alignment with the National Nutrition Policy 2015. This process can help identify gaps and enhance synergies across different sectors. Countries like Zambia and Kenya, through the SUN Movement, have demonstrated the effectiveness of cross-sectoral policy reviews in aligning national policies with nutrition goals (Scaling Up Nutrition Movement, 2016). Additionally, establishing mechanisms for continuous monitoring and evaluation will allow for data-driven adjustments to strengthen the policy framework.

5. **Encourage Multisectoral Engagement and Participation:**

To foster a shared responsibility for nutritional improvement, Bangladesh must promote active participation among all stakeholders, including government agencies, non-governmental organizations, the private sector, and communities. Ghana's multisectoral approach to nutrition, which integrated agriculture and nutrition, successfully enhanced food security and promoted stakeholder collaboration (United Nations Development Programme, 2017). Public-private partnerships can also play a key role in innovating and scaling nutrition-sensitive interventions across the agri-food system.

6. **Prioritize Education and Gender-Sensitive Approaches:**

Integrating nutrition education into school curricula and adult learning programs can help build awareness and knowledge on healthy diets and nutrition. India's Integrated Child Development Services (ICDS) program has demonstrated the importance of empowering women to improve family and community nutrition outcomes (United Nations Children's Fund, 2018). Bangladesh can take a similar approach by designing gender-sensitive nutrition strategies that position women as key agents of change in improving household nutritional status.

V. Conclusion

In conclusion, the review of Bangladesh's agri-food policies reveals a critical opportunity for enhancing the country's nutrition-sensitive agenda. While many of the existing policies, such as the Bangladesh Country Investment Plans and the National Agricultural Policy, align well with the broader goals of food security and nutritional improvement, there remain significant gaps in targeted, direct nutrition interventions. The analysis underscores the need for a more coherent policy framework that not only addresses food security but also integrates explicit nutrition-sensitive measures across all relevant sectors.

The findings highlight the varied support across policy components, particularly in areas such as female education and stakeholder engagement, which are currently underemphasized despite their vital role in achieving long-term nutritional improvements. Moreover, the distinction between integrated and dedicated policies shows that while integrated policies often support a broader range of nutrition-related outcomes, dedicated policies can be more effective at addressing specific nutritional challenges. Strengthening the coherence between these types of policies is essential for maximizing their collective impact.

Additionally, the analysis points to an opportunity for fostering greater multisectoral collaboration, ensuring that all stakeholders—including government agencies, the private sector, non-governmental organizations, and local communities—are actively engaged in advancing nutrition-sensitive initiatives. This collaboration, along with public-private partnerships, will be crucial in scaling up innovative nutrition interventions and ensuring their sustainability.

To move forward, Bangladesh must prioritize direct nutrition interventions, address underrepresented areas like female education and empowerment, and harmonize integrated and dedicated policy efforts to create a more robust and effective policy landscape. Regular cross-sectoral reviews, continuous monitoring, and data-driven refinements will be key to ensuring that these policies remain relevant and impactful. By taking these steps, Bangladesh can create a more coordinated and nutrition-sensitive agri-food system that contributes to the reduction of malnutrition and promotes a healthier, more resilient population, ultimately driving sustainable development and food security.

References

- Ahmed, T., Mahfuz, M., Ireen, S., Ahmed, A. M., Rahman, S., Islam, M. M., & Alam, M. A. (2019). Nutrition of children and women in Bangladesh: trends and directions for the future. *Journal of Health, Population and Nutrition*, 37(1), 1-7.
- Ministry of Food. (2006). National Food Policy. Government of Bangladesh.
- Ministry of Fisheries and Livestock. (2007). National Livestock Development Policy. Government of Bangladesh.
- Gillespie, S., Harris, J., & Kadiyala, S. (2013). The agriculture-nutrition disconnect in India: What do we know? *IFPRI Discussion Paper*, 01187.
- Food and Agriculture Organization. (2014). The state of food insecurity in the world 2014: Strengthening the enabling environment for food security and nutrition. Rome: FAO. Retrieved from <https://www.fao.org>
- Scaling Up Nutrition (SUN) Movement. (2016). Zambia and Kenya: Aligning policies with nutrition goals through the SUN Movement. Retrieved from <https://scalingupnutrition.org>
- United Nations Children's Fund (UNICEF). (2018). Integrated Child Development Services (ICDS) in India: Empowering women to improve family nutrition. Retrieved from <https://www.unicef.org>
- United Nations Development Programme (UNDP). (2017). Ghana's multisectoral approach to nutrition: Integrating agriculture and nutrition for food security. Retrieved from <https://www.undp.org>
- World Food Programme (WFP). (2019). School feeding in Ethiopia: Boosting education, nutrition, and local economies. Retrieved from <https://www.wfp.org>
- World Health Organization (WHO). (2013). Nepal: Success in reducing child mortality through vitamin A supplementation. Retrieved from <https://www.who.int>

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