

Influencing Policy and Practice in Bangladesh

Introduction

The Leveraging Agriculture for Nutrition in South Asia (LANSA) research programme consortium aims to improve child and maternal nutrition in Bangladesh through innovative research, capacity strengthening,

and influence relevant policies and practice. LANSA's primary objective is to understand how agriculture and agri-food systems can be better designed to advance nutrition, and identify policies, interventions and strategies that can improve the nutritional status, particularly of women and children, in Bangladesh. The process adopted by LANSA involves understanding the facilitators and barriers to linking agriculture and nutrition and the nutritional impacts of agri-food value chains. In this regard, LANSA partners BRAC and IFPRI have undertaken a number of research and stakeholder engagement activities. In addition to core research work, LANSA activities in Bangladesh included reviewing the evidence base, andrelevant policies or programmes, stakeholder mapping and engagement, policy dialogue, capacity strengthening, research uptake and dissemination.



Figure 1. LANSA activities in Bangladesh

These activities can be grouped into four categories: landscaping, research, stakeholder engagement and policy advocacy, as shown in figure 1.

Review and Landscape work

An evidence review¹, led by IFPRI in 2015, assessed the evidence gaps around the pathways from agriculture to nutrition, and examined available evidence on the nutrition-relevant impacts of agriculture in Bangladesh. The review revealed knowledge gaps in all of the identified pathways, but especially in the areas of agriculture as a source of livelihood – particularly around how farming households use their agricultural income, and the ways in which the status of women in agriculture affects households' expenditures on food, health, and education, internal allocation of resources, child care practices, and women's own health.

Nutrition in Bangladesh, for a long time, sat firmly within the health sector. Lack of coordinated focus on nutrition and failure of proper implementation of policies led to limited success in improving the nutritional status of the country. However in recent times, the Country Investment Plan (CIP1, 2011-2015) to support the implementation of the National Food Policy and its Plan of Action, has envisaged a road map towards investment in agriculture, food security and nutrition. The National Plan of Action for Nutrition (NPAN2) 2017 talks about mainstreaming nutrition into the development agenda including programmes of agriculture. It is now evident that agriculture—nutrition linkages are being acknowledged in the national policy spheres.

¹ Yosef S., Jones A.D., Chakraborty B. and Gillespie S. (2015) Agriculture and Nutrition in Bangladesh: Mapping Evidence to Pathways. *Food and Nutrition Bulletin* 36(4):387-404. http://journals.sagepub.com/doi/pdf/10.1177/0379572115609195



The recently introduced **National Nutrition Policy 2015 (NNP-2015)** of Bangladesh aims to provide better nutritious food to people, particularly mothers, adolescent girls, children and the deprived population, and to improve the quality of living. The policy calls for the setting up of a 'National Nutrition Coordination Council' and for the recognition of dietary diversity and nutrition-sensitive agriculture in controlling malnutrition.

In December 2017, the government of Bangladesh launched the second **National Plan of Action for Nutrition (NPAN2)** which was the result of a joint initiative of 17 Ministries and the Prime Minister's office. The NPAN2 envisages attaining healthy and productive lives through having adequate nutrition during 2016-2025, under the National Nutrition Policy 2015. NPAN2 will work on mainstreaming nutrition into development agenda, especially in the programmes of health and family planning, agriculture, food, education and social protection sectors.

A National Food Policy was devised in 2006 under which a Plan of Action (2008-2015) was adopted. The Health, Population and Nutrition Sector Development Programme included an operational plan for mainstreaming and scaling up nutrition services nationally through the National Nutrition Services (NNS). The government aims to ensure universal access to nutrition services, strengthen human resource capacity and nutrition information systems, and increase coordination with other relevant sectors such as agriculture, economic development and education. Forums like the Nutrition Working Group (NWG) and Scaling Up Nutrition (SUN) bring together UN agencies, bilateral/multilateral donor agencies, civil society partners, national leaders, donors, businesses and researchers to support nutrition initiatives.

In 2011 Government of Bangladesh adopted the first **Country Investment Plan** to support the implementation of the National Food Policy and its Plan of Action. The **CIP1 (2011-2015)** — undertook monitoring and evaluation of **existing** investments in food security, recommended measures to strengthen investments in relevant areas, and provided a road map towards increasing future investments in support of agriculture, food security and nutrition.

Building on lessons and experiences of CIP1, the CIP2 (2016/17 - 2020/21, to be adopted soon) will focus on sustainable and nutrition-sensitive food systems, and serve as a country-led planning, fund mobilisation and alignment tool for sectoral and cross-sectoral food security and nutrition related investments and programmes in Bangladesh. The ongoing formulating process ensures that it is consistent with the provisions of the Seventh Five Year Plan (7FYP), Vision 2021, National Social Security Strategy (NSSS), Second National Nutrition Policy, and other commitments, including its endeavour towards the achievement of the Sustainable Development Goals (SDGs).

The **National Agriculture Policy** (NAP 2013) aimed to improve food and nutrition security for all and the quality of life for rural people through increased productivity and agricultural diversification. The **NAP 2018** (to be adopted) in continuation of the previous one, also envisages attaining sustainable food and nutrition security through safe agricultural practices that effectively utilises sustainable natural resources.

The **National Agricultural Extension Policy** emphasises continuous development of agriculture and its sustainability to maintain food security for the growing population and socio-economic emancipation of its people through high value agriculture and value addition through agro-industrialisation. The key to successful implementation of the policy lies in forging a broad–based understanding amongst extension providers, farmers and other stakeholders.

Research undertaken by LANSA in Bangladesh has put an emphasis on farm diversification and including fisheries and livestock to improve nutrition security. While the existing policies have often indirectly contributed to nutritional enhancement through crop diversification, a more holistic approach was needed to bring farm diversity to the forefront.



During the inception phase, a mapping of relevant stakeholders was conducted to identify communication channels in Bangladesh. Stakeholders were then categorised with regard to their involvement, influence and interest in linking agriculture and nutrition. Fifteen highly influential stakeholders were selected and interviewed in order to capture their perceptions and views on the broader agri-food system and nutrition, to provide a baseline for further follow up ².

The findings of the stakeholder interviews further highlighted the issue of inadequate coordination between sectors and that different sectors have different goals for nutrition. Nutrition is perceived from a health perspective whereas agricultural outcomes are focused on staple crop or rice based production. It was also raised by stakeholders that evidence is required on improving nutrition through a value chains approach. Most value chains are currently business orientated, not focused on improving nutrition.

LANSA Research in Bangladesh

Linkages between agriculture and improved nutrition

A study based on DHS data³ looks at the contribution of different drivers and sectoral actions to Bangladesh's success in reducing child undernutrition. The study finds that economic growth and expansions in education (especially for girls) are the two biggest drivers of nutritional change, followed by roughly equal contributions from sanitation, health care, and family planning. The study suggests that continued improvements in child growth can come from: further investment in education (for boys and girls); major progress in access to improved health services (which is still very limited); continued broadbased economic growth; dietary diversification, which, in particular, remains very low in Bangladesh, and should be a primary intermediate objective for improving maternal and child nutrition outcomes; and expanded and enhanced nutrition programmes to improve infant and young child care and feeding practices, which still remain well below the optimum.

A recently completed study⁴ analysed evidences from VDSA panel household survey data (2010-11 to 2014-15) to look into the relationships and linkages between crop diversity, dietary diversity and nutritional outcome in rural Bangladesh. Econometric analysis of the data collected from 500 households of 12 villages located in 11 districts of Bangladesh, revealed that crop diversity level has direct influence on dietary diversity and, thereby, on the nutritional status of the individual. Per capita income also plays a vital role in determining the nutritional status of the household member. Crop diversity, per capita income of the household, and education level of the household head had significant positive contribution to the dietary diversity score of the household. The study provides empirical evidence about the linkages.

An Analysis of the Food Security Nutrition Surveillance Project $(FSNSP)^5$ was done to understand the extent of maternal and childhood undernutrition in Bangladesh from a regional and seasonal inequality perspective. The study also examined the association of nutritional status with dietary diversity score and household food insecurity levels. The findings revealed that children below 5 years of age are one and half times likely to be stunted in the waterlogged areas (haor) of the North Eastern region and mothers are also more likely to be underweight both in haor and saline affected coastal areas. The study also concludes that an appropriate policy guideline must consider fragility in agro-ecology and health workers

² Van den Bold M., Kohli N., Gillespie S., Zuberi S., Rajeesh S. and Chakraborty B. (2015) Is There an Enabling Environment for Nutrition-Sensitive Agriculture in South Asia? Stakeholder Perspectives from India, Bangladesh, and Pakistan. *Food and Nutrition Bulletin* 36(2) no. 231-247 http://journals.sagepub.com/doi/abs/10.1177/0379572115587494

³ Headey D., Hoddinott J., Ali D., Tesfaye R. and Dereje M. (2015) The Other Asian Enigma: Explaining the Rapid Reduction of Undernutrition in Bangladesh *World Development* 66, pp. 749–761, 2015 http://www.sciencedirect.com/science/article/pii/S0305750X14002873

⁴ Deb U. and Bayes A. (2018) Crop Diversity, Dietary Diversity and Nutritional Outcome in Rural Bangladesh: Evidence from Panel Households. LANSA Working Paper series Volume 2018 No 31 July http://lansasouthasia.org/sites/default/files/LANSA%20Working%20Paper%2031%20-BRAC%20Crop%20Diversity-Final.pdf

⁵ Mohsena M., Chakraborty B., Hossain M., Rahman A.N.M. and Bayes A. (2017) Fragile Environment, Seasonality, and Maternal and Childhood Undernutrition in Bangladesh. *Journal of Biosocial Science*. 50(5):579-603 https://doi.org/10.1017/S002193201700044X



need to recognise the complex interplay of seasonality in order to find a combination of interventions to address this problem.

A qualitative study was undertaken by Chakraborty *et al*, 2018 (forthcoming), in different areas of *haor* region of Bangladesh to identify the capabilities of the parents of children under two years, leading to their children's growth outcomes. A capability approach framework to child growth was used in this study to analyse the data. The key findings indicated that mothers' capabilities to stay healthy and nourished, to stay away from violence, and to practice autonomy in allocating time for child care are contributory in shaping their children's growth outcomes. Similarly, fathers' capability to be engaged in earning activities is essential to secure the basic needs of the mothers and their children such as food, clothes, health care. However, this is mostly affected because of limited options of doing agriculture during monsoon, agricultural loss and falls in market price of the harvested paddy. The findings can be instrumental in improving the existing efforts for *haor* communities and designing specific interventions in enhancing the capabilities of *haor* communities to achieve better child growth outcomes.

Policies and strategies beyond the farmgate

A country review on agri-food value chain Interventions (BRAC & IDS)⁶ was conducted on existing value chain-based interventions that focus on enhancing the availability, affordability, acceptability and/or consumption of nutritious foods in households beyond the farm-gate. The review covered: 1) interventions focused on foods that are naturally nutrient-dense, 2) interventions focused on enhancing the nutritional value of foods (e.g. fortified and bio-fortified foods) and 3) food distribution programmes. Three intervention cases were identified for Bangladesh: 1) food fortification initiatives; 2) school nutrition programmes (SNP); and 3) promoting milk to the poor.

The three cases examined particular initiatives that are specifically targeted for consumption of nutrient dense food by the poor, with particular focus on children and adolescent girls. Questions included whether the food is distributed and available in areas where the poor are situated, whether the product is available through markets used by the poor, and whether there is any indication that the food is consumed by the poor in the necessary amounts and on a sustained basis. Women and adolescent girls are among the highest priorities for these nutrition interventions, and the analysis of case studies gives careful consideration to how particular initiatives reach or fail to achieve these groups.

The case study on World Food Programme (WFP)-BRAC joint school nutrition programme (SNP)⁷ was conducted in two districts where most of the target children are from the poor households, and micronutrient deficiencies are widespread. The findings highlighted there is relatively unstructured value chain in SNP from food supplier to consumer. Local rural women were involved in implementing the interventions that might contribute to the nutrition of children, as well as enhancing the source of income of these poor women. The findings also highlighted the gap at the producers' level in terms of knowledge on appropriate production technology, and lack of market linkages.

The case study to map the dairy value chain in Bangladesh⁸, suggested that a large portion of people residing outside milk-producing rural areas (such as Pirgacha of Rangpur) and urban slum areas did not consume milk. The rest consumed at below recommended rates. It was found necessary to raise awareness and convey information about importance of milk consumption by the government and private

⁶ Islam M.S., Abid-Ul-Kabir M., Chakraborty B. and Hossain M. (2017) Review of Agri-Food Chain Interventions Aimed at Enhancing Consumption of Nutritious Food by the Poor: Bangladesh. *LANSA Working Paper Series* Volume 2017 No 12 January. http://ims.ids.ac.uk/sites/ims.ids.ac.uk/files/documents/Review of agri food Bangladesh final.pdf

⁷ Kabir M.A. and Islam M.S. (2018) School Nutrition Programme, Bangladesh: WFP-BRAC Initiative *LANSA Working Paper Series* Volume 2018 No 32 September.

⁸ Kabir M.A., Islam M.S. and Reza M.H. (2018) A Study on Milk Value Chains for Poor People in Bangladesh. *IDS Bulletin* 49 (1):129-146 http://opendocs.ids.ac.uk/opendocs/handle/123456789/13521



sectors. Proper market linkage was recommended so that the producers at the rural level get fair prices for their milk. Initiatives to purchase milk directly from the smallholders must be introduced. Information dissemination and behavioural communication change might be the way to change the food habits of people. To meet current market demand, the government has initiated various measures but the study found that response only to the immediate situation may not work without adequate consideration of related problem areas.

Another case study was conducted in Jhikargacha upazila of Jessore district using a qualitative approach to assess Orange Fleshed Sweet Potato (OFSP) as a fortified food initiative in Bangladesh⁹. This case study was based on the "USAID Horticulture Project CIP/AVRDC, Bangladesh" titled "Improving Incomes, Nutrition and Health in Bangladesh through Potato, Sweet potato and Vegetables". The project activities addressed the implementation of a school nutrition programme along with value chain development on OFSP. The school feeding initiative was aimed at overcoming vitamin A deficiency among nutritionally vulnerable children in the area. The project also targeted local poor women to empower them by producing vegetables in their own homestead and linking them to markets both in rural and urban areas. The objective of the study was to assess the sustainability of the bio-fortified crop and to identify the marketing strategies needed to ensure sustainability of production and consumption and assess scope for improvement in the value chain.

Nutrition sensitive farming approaches

A formative study¹⁰, within the existing programmatic framework of BRAC, aimed to understand barriers and facilitators to farming systems for better nutrition from the perceptions and needs of local farming communities. The key findings of the study indicated that the meaning and significance of nutrition sensitive farming approaches are not yet well understood by the farming communities. The findings highlighted the importance of conveying nutrition sensitive agricultural messages that will sensitise the communities to realise the potential of agriculture in achieving better nutrition. It was also highlighted that women farmers need to be targeted as the key beneficiaries of the interventions along with the decision makers of the households, with precise and understandable messages focusing on nutrition sensitive farming production, consumption and market opportunities.

How LANSA is making an impact?

Through the programme of research and regular engagement with government and non-governmental stakeholders, LANSA aims to use the generated evidence to inform policy and programme decisions to enhance nutrition through agriculture; for example, encouraging policy makers to consider factors such as seasonal perspectives and education (especially of females) in the hunger and nutrition debates. The research aims to contribute to policy changes that will improve the nutrition sensitivity of agriculture and enhance nutrition outcomes in Bangladesh. As the country still lacks enough evidence on agri-nutrition linkages, the research findings will address the gaps to help policymakers take the next step forward. The study findings would also help all relevant stakeholders in strongly advocating for and influencing policies and programme interventions for improving nutrition through agriculture. An early analysis of the stakeholders' perception concluded that although there are different ways in which South Asian agriculture can improve its impact on nutrition, sensitising key influencers to the importance of nutrition for the health of a country's population appears as a critical issue.

To engage stakeholders with the research, LANSA has arranged national level stakeholder consultations and knowledge sharing seminars with government, NGOs, and other eminent stakeholders involved in the

⁹ Kabir M A and Islam M S (2018) Orange Fleshed Sweet Potato as a Bio-Fortification Initiative in Bangladesh *LANSA Working Paper Series* (forthcoming)

Chakraborty B., Akter F., Mukta U.S. and Hossain M. (2017) Farming Systems for Improved Nutrition: a Formative Study. LANSA Working Paper Series Volume 2017 No 21 November https://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/13389/LANSA Working paper 21 BRAC.pdf?sequence=1



policy making process. These have drawn on the stakeholders identified through LANSA activities and the existing networks of LANSA partners, BRAC and the International Food Policy Research Institute (IFPRI), who provide support to the Policy Research Unit within the Ministry of Agriculture.

At a recent stakeholder event for disseminating LANSA research findings (December 2017), the Secretary of the Ministry of Food stated that findings from the LANSA studies would be valuable inputs for the food policy of the country.

For the years 2015, 2016 and 2017, the monitoring reports for the National Food Policy and Country Investment Plan has made direct reference to LANSA research on determinants of child undernutrition and on the importance of agriculture in addressing undernutrition¹¹. The report is developed by the Ministry of Food's <u>Food Planning and Monitoring Unit</u> (FPMU) with support from FAO and several other relevant Ministries. The next country investment plan to be adopted soon (2018) focuses on nutrition sensitive food systems and evidences and results generated from LANSA's work are likely to be important inputs to inform policy.

When LANSA began its programme, a few of the relevant country policies did mention the importance of agriculture for nutrition but there was huge knowledge gap on the linkages along the many pathways identified by LANSA's mapping process. The impacts of the evidences are reflected in the updated country policies like the CIP2, NAP2018 where agriculture-nutrition linkages were emphasised in developing multisectoral interventions. Emphasis is given on seeing nutrition through the agriculture lens and vice versa. Multisectoral coordination has become an important issue. LANSA in Bangladesh has been engaging with key policymakers, policy influencers, practitioners, experts, academicians of the agri-nutri sphere, by way of holding stakeholder events, participating and presenting LANSA work in various agri-nutri forums including the Nutrition Working Group. This helped in bringing the focus of discussion on how agriculture influences nutrition. It can be said that the combined efforts of LANSA and several other programmes and projects similar to LANSA, by IFPRI, FAO, USAID have played a key role in sensitising the policymakers into focusing more on the agri-nutri linkages.

Policy Implications

Through the LANSA work several policy implications have been highlighted:

- o The findings addressed the knowledge gap across different domains of agriculture and nutrition in context of Bangladesh. Using the evidence, further research can be undertaken to identify cost effective approaches in delivering nutrition sensitive agriculture in Bangladesh.
- O Agriculture and other development programmes should take into account the most vulnerable members of a household, particularly children, in targeting, design, and delivery.
- Nutrition-related outcomes, such as dietary diversity and women's empowerment need to be measured more explicitly when evaluating the impact of agricultural production systems and development initiatives.
- The findings on seasonality signal the need for more research and initiatives on this topic. The findings may help the health workers to recognise the complex interplay of seasonality. From a policy perspective, considering seasonal thinking and fragility in agroecology should still be of prime importance.
- Action research can be undertaken to understand how the findings and recommendations can be translated into the existing programmatic frameworks
- O Value chain interventions that aim to enhance access to, and consumption of, foods that are naturally rich in micronutrients, should be augmented. Market price stabilisation, institution of a proper marketing system, standardisation of processing and packaging systems, production and distribution of foods with increased nutritional value - either via biofortification or industrial

¹¹ LANSA Story of influence in Bangladesh 2017



- fortification, are key areas for further action. Improvement of the food chain through innovations or systems improvements, often involving both private and public sectors is also crucial. This can be done by improving infrastructure, removing other distribution barriers or directly subsidising food distribution programmes by the government, donors, or other stakeholders.
- The formative study (Chakraborty *et al*, 2017) may provide a base for farming communities' in terms of their practice, knowledge and awareness as well as needs on nutrition sensitive farming. The findings are based on the perceptions, views, feedback and suggestions from the communities in relation to their needs and understanding on nutrition and farming and the linkages between them. Therefore, the findings may provide a realistic guideline for designing and testing small scale interventions to initiate larger scale nutrition-sensitive agriculture programs. Extracts from the findings can also be used to inform and improve existing interventions.