

Market Development & Expansion of Native Chicken following Value Chain Approach

Promoting Agricultural Commercialisation and Enterprises (PACE) Project



Good Practices and Lessons Learnt in Native Chicken





Market Development & Expansion of Native Chicken following Value Chain Approach

Promoting Agricultural Commercialisation and Enterprises (PACE) Project



December 2020



Prepared by GMark Consulting Ltd.



GMark Consulting Limited prepared the Good Practices and Lessons Learnt Report on 'Market Development & Expansion of Native Chicken following Value Chain Approach' for Gram Unnayan Karma (GUK) under the project Promoting Agricultural Commercialisation and Enterprises (PACE), jointly funded by Palli Karma-Sahayak Foundation (PKSF) and the International Fund for Agricultural Development (IFAD).

PREFACE

The Lessons Learnt Report has been produced based on the evaluation findings of the project Market Development & Expansion of Native Chicken following Value Chain Approach. The document focuses on key lessons learnt from the two years' implementation experiences and highlights some of the major innovations and best practices those have significantly contributed in promoting the Native Chicken businesses in Bogura. Additionally, it recommends interventions for future programming if donors plan to invest on in a second phase.

The report has been enriched with information, notes and insights from the project management team of Dr. Khandaker Alamgir Hossain, Executive Director of GUK and Dr. Md. Mahbub Alam, Senior Director, Md. Ferdous Hasan Pradhan, Project Manager, Value Chain Development Project, Md. Nurul Azim, Monitoring & Result Management Officer, S M Mehedi Mahabub, Business Development Facilitator and all others project staff shared their knowledge and implementation experience on Native Chicken in Bogura, whose strength of mind provided a lasting encouragement on producing this document. GMark is particularly thankful to Dr. Akond Md Rafiqul Islam, Senior General Manager & Project Coordinator, PACE Project and Dr. S M Niaz Mahmud, Value Chain Specialist, PACE Project of PKSF, whose technical guidance has led to successful completion of the report.

I hope this Lessons Learnt Report will guide implementing partners and project patrons for future programming and make the sector more inclusive for enterprise development and private sector engagement.

> Md. Saifuddin Khaled CEO GMark Consulting Ltd. www.gmark-bd.com

EXECUTIVE SUMMARY

In October 2018, GUK started implementing a project titled "Market Development and Extension of Native Chicken", supported by IFAD and PKSF. The project was run under the broader programme of PACE. GUK implemented the project in Bogura Sadar and Shajahanpur upazilla of Bogura district.

The goal of the project is to improve livelihood opportunities through extension of native poultry rearing. This will result in more income, more profit, and creation of wage based employment and food security. Through various interventions, GUK is able to:

- 1. Increase availability of poultry inputs, machineries and services among the native chicken rearing entrepreneurs by strengthening the supply chain of service providers.
- 2. Increase productivity of meat and eggs by increasing improved farm management practice.
- 3. Establish linkage between local entrepreneurs and formal and informal buyers for market development and expansion.
- 4. Improve farmers' business by creating trade-friendly environment and access to finance.

The facilitator, GUK, successfully demonstrated the value of applying a Market Systems Development approach, as the project's investment in core value chains, support services and the enabling environment generated significant return for the project beneficiaries. With most of the targets being met or achieved, the project activities catalysed a shift towards inclusive business growth of the Native Poultry sector in Bogura and demonstrated future prospects. The project has significantly increased producers' income by improving their production technique and by creating new markets for guaranteed sales. About 50 percent (2,000) producers have increased their income by 50 percent.

Improved production technique and use of better quality inputs increased the production of meat and egg by 50 percent at least. Availability and use of vaccine and medicine have increased and helped to reduce birds' diseases by about 50 percent. Vaccination has played a crucial role in mortality reduction that has now came down to less than 20 percent.

Thanks to the project intervention and activities on forward market linkage and market development. This has created business opportunities for the native chicken producers by tapping into both formal and informal markets. Prices of meat and eggs increased by 10 percent. Establishment of four (04) collection points for aggregation and collective sales enabled improved linkage with forward market buyers.

As sales of native chicken meat and egg products increased remarkably, investment in native chicken production and trading by the producers and associated service providers has also got bigger. The additional investment has expanded their business volume by 50 percent.

To support business development and business expansion of the native chicken rearing entrepreneurs and service providers, the project has deployed improved financial assistance to them. Micro-Finance Institutions (MFIs) have popularised the financial credit and banking services among the native chicken rearers and service providers and created easy-to-take and easy-to-pay credit facilities for them. About 27 percent (1,076) producers were brought under the direct financial assistance by the project. An estimated 44,965,000 Tk. (four crores and forty nine lacs and sixty five thousand taka) loan was disbursed among the participants since the project intervened. GUK alone disbursed 25,908,000Tk. (two crores and fifty-nine lacs and eight thousand taka) among 441 participants through its microcredit operation supported by PKSF.

Best Practices emerged from the project's interventions:

- Establishment of Hatcheries for breeding Parent Stock.
- Establishment of mini-hatcheries to support availability of quality pullets and eggs at village level.
- Use of improved hatching technologies.
- Promote vaccination services through Local Service Providers (LSPs).
- Establish Insect Farm for supplying natural protein sources.
- Establish Collection Points cum Village Business Schools.
- Establish Processing Plant at local level for native chicken (meat) processing.
- Introduce ready feed for native chicken.
- Introduce digital weigh machine at marketplaces.
- Promote packaged processed chicken and eggs for marketing in super stores.

The major **lessons learnt** from the project implementation are:

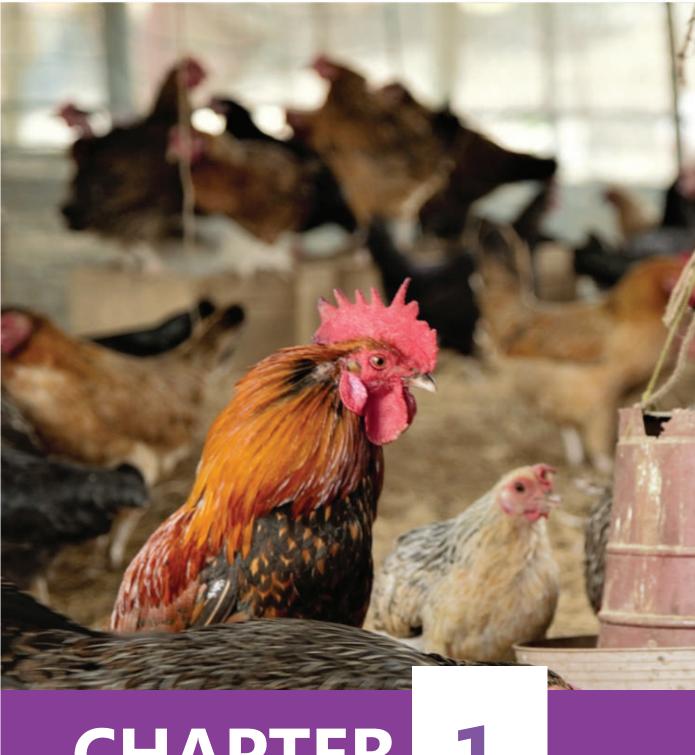
- Private sector engagement can result in greater agility and better price
- Training has significantly improved production and farm management skills
- Value addition (processing) has created new market opportunities
- Collection Points have many benefits, but need to take enterprise formation
- Use of SBCC tools can help increase the consumption and thereby sales of native chicken

- Vaccination addressed mortality, but sustainability of supply depends on strong linkage with dealers
- Strategic shift by the entrepreneurs favours more investment and return
- Financing can enable sectoral growth; must explore other financial inclusion models
- Commercial farming of native chicken has proved to be an alternative profitable means for smallholders
- Increased capacity of hatcheries led to breed improvement
- Local associations' active participation can enable sectoral growth
- Measuring health impacts may drive policy making
- Product development (RTE, RTC) could cater the need of the urban consumers
- Apply Inclusive Business models to attract new investment
- Promote 'organic' concept to end consumers
- Increase involvement of Department of Livestock Services (DLS)
- Other women-inclusion strategies to increase women's empowerment

For future programme design, the project is better consider taking a holistic approach instead of segmented interventions and build the interventions using a logic model (results chain). This would help the project to think systemically and help the solutions to address the core problems. The emerging areas of investment (in form of grants) could be in the areas of enterprise development (production, aggregation, processing, sales and distribution), new product development, organic and safe certification - HACCP (Hazard Analysis Critical Control Point) certification for example, etc.







CHAPTER

1 INTRODUCTION

Programme Background

Promoting Agricultural Commercialisation and Enterprises (PACE) is the third project under the Country Strategic Opportunities Programme (COSOP) of the International Fund for Agricultural Development (IFAD) for Bangladesh. The project is built on the learning and experience of Value Chain Development made by its earlier efforts and clubbed together with financial services for the Micro Enterprises (MEs). The third project focused on scaling up the successful Value Chain Development projects from its earlier phases. It has implemented throughout the country and added non-farm sectors to develop business and create employment for the poor. PACE project had four cornerstones or interrelated aspects- i) finance, ii) non-financial service, iii) service market and iv) technology - which made the project's model unique to make a significant impact on the lives of the poor people.

Small-scale poultry production systems - in the form of small, semi- or fully scavenging, household flocks, or slightly larger intensive units - have developed in a large number of developing countries around the world as a source of livelihood support for the rural poor. In recent years, there has been growing recognition among the development community of the role of small-scale commercial poultry production in accelerating the pace of poverty reduction and reaching out to the poorest of the poor. There is also growing evidence to demonstrate the role of small-scale poultry production in enhancing the food and nutrition security of the poorest households and in the promotion of gender equality.

The market and production context of poultry production has been changing rapidly over the last two decades. Rapid economic growth and urbanisation in developing countries has resulted in fast expansion of industrial, large-scale, vertically integrated, poultry production, especially in Bangladesh. Opportunities have also expanded for small-scale poultry enterprises due to improved market access and infrastructure, and a preference structure that may still favour free-range birds and eggs. As a result, there has been increased market orientation even among small-scale poultry enterprises.

The Bangladesh poultry industry is an emerging industry, industrialising rapidly with recent growth rates of 20 per cent per annum. The vast majority of Bangladesh's broilers are produced in small holdings, often are family run

and integrated into the family household and business. Chicken is the preferred meat in Bangladesh. Current consumption levels of 2.5kg per capita were estimated to grow to greater than 7kg per capita by next three years.

Project Objectives

In October 2018, GUK started implementing a project titled "Market Development and Extension of Native Chicken", supported by IFAD and PKSF. The project was run under the broader programme of PACE. GUK implemented the project in Bogura Sadar and Shajahanpur upazilla of Bogura district.

The goal of the project is to improve livelihood opportunities through extension of native poultry rearing. This will result in more income, more profit, and creation of wage based employment and food security. The project took a Market Systems or Value Chain Development Approach.

Project Specific Objectives:

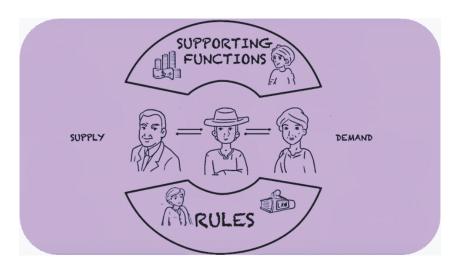
- 1. Increase availability of poultry inputs, machineries and services among the native chicken rearing entrepreneurs by strengthening the supply chain of service providers.
- 2. Increased productivity of meat and eggs by increasing improved farm management practice.
- 3. Establish linkage between local entrepreneurs and formal and informal buyers for market development and expansion.
- 4. Improve farmers' business by creating trade-friendly environment and access to finance.

Anticipated Performance

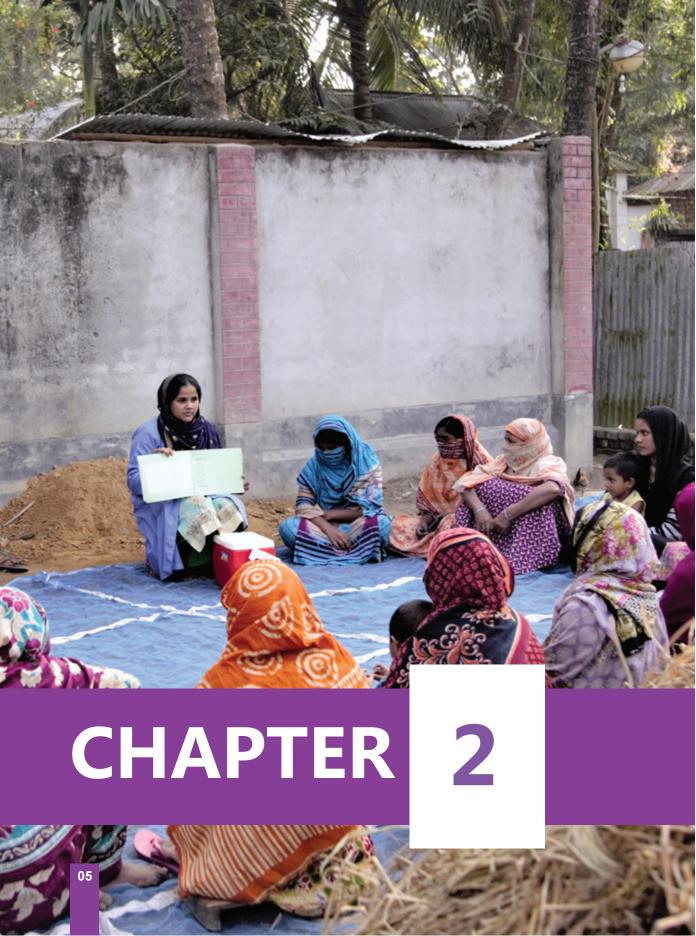
The project aimed to increase income of 4,000 native chicken rearing entrepreneurs by i) introducing improved cultivation practices, ii) increasing use and availability of better quality inputs and services and iii) creating effective linkages with forward market actors. Comprehension to improved cultivation practices and new technologies will increase farm's production of meat and eggs by 50%, which will result a 50% increase in income of the farmers. Because of connecting the native chicken producers with formal and semi-formal market, producers will get at least 10% better price.

Implementation Approach

The facilitator, GUK, successfully demonstrated the value of applying a Market Systems Development approach, as the project's investment in core value chains, support services and the enabling environment generated significant return for the project beneficiaries. With most of the targets being met or achieved, the project activities catalysed a shift towards inclusive business growth of the Native Chicken sector in Bogura and demonstrated future prospects.



Recent trends show that value chain concepts and approaches can be used to increase understanding of how firms and producers of high value products in developing countries are integrating into regional and global markets. The Market Change Facilitation has considered linkage activities with input, forward and service market actors to bring systemic and sustainable changes in the market system of Native Chicken. The biggest challenge for the project was that though GUK and PKSF followed a Market Systems Development approach, it did not built on a systemic learning and did not address some underlying barriers faced by the different set of market actors in the Native Chicken value chain. It is well understood that the project has applied an early stage of Value Chain Development method, where the key focus was on building the capacity of entrepreneurs so that they could improve their efficiency in the areas of production, processing and marketing of native chicken products (meat and eggs).



2 ACHIEVING IMPACTS

The project's intended goal was to increase the income opportunities of the native chicken producers by stimulating the sectoral growth of Native Chicken sector in Bogura. As so, the project intervened in multiple areas such as developing the input market, capacity building of the producers and service providers, market promotion, creating access to credit and the like to improve the production and business performance of the enterprises involved in the production, processing and marketing of Native Chicken products (meat and eggs).

Project Interventions

The primary pillars of the project are the following four interventions.

Intervention

01

• Availability of inputs, machineries and services through improved service provisions

Intervention

02

• Promote improved production and rearing practices of native chicken

Intervention

03

• Establish linkage with formal and informal buyers

Intervention

04

• Ensure business-friendly environment

Activities for Impact

Intervention

01

• Availability of inputs, machineries and services through improved service provisions

The first intervention focused on creating availability of inputs and their related services by developing the capacity of service providers and creating access to inputs and services. The input market actors in the Native Chicken Value Chain are primarily the hatcheries, feed sellers, and vaccine

and medicine sellers. Native chicken were kept in mud-built houses, which are not healthy and scientific. Hatching incubator was rare in the locality, which makes the producers to use indigenous techniques (i.e. bamboo-made baskets). These indigenous forms of hatching could not provide necessary humidity that affects the production rate (50-60%).

Availability of appropriate feed, medicine and vaccine were also insufficient. Producers were not conscious about the quality of feed rather they followed the traditional feed menu for their chicks like rice husk and supposed to have lower productivity of their chicken (less weight). Producers were also ignorant about the quality of their breed due to lack of knowledge about application of vaccine and medicine.

Input retailers claimed that no different/ alternative feed menu for native chicken exist in the market that they can sell than that of the poultry feed.

To improve the market performance of downstream market actors (input market and their services), the project undertook the following activities under Intervention 1.

- 1. Establish 06 model hatcheries for Parent Stock breeding.
- 2. Establish 06 mini-hatcheries to increase availability of quality native breeds.
- 3. Establish model farms for production of insects (as insects are the protein source of chicken).
- 4. Establish ready feed factory to increase supply and availability of ready feed for native chicken.
- 5. Develop 24 Sub-Dealers to make DOC (Day Old Chick) and pullet available among the native chicken producers.
- 6. Develop Sub-Dealers of ready feed to increase availability and usage among the native chicken producers.
- 7. Provide capacity building training to Service Providers on vaccination and medication.
- 8. Provide capacity building training to Input Service Providers of feed, medicine and hatchling.
- 9. Provide business logistic support to 100 Service Providers.
- 10. Organise vaccination and de-worming campaign.
- 11. Organise periodic meeting and linkage workshops between input service providers and the producers of native chicken.

• Promote improved production and rearing practices of native chicken

In the project locations, about 4,000 producers are involved in production and rearing of native chicken. However, none of these producers had improved production and farm management knowledge on native chicken. As a result, they were not reaping the benefit from the meat and egg production. Besides, lack of availability of quality inputs and farming related services accompanied by limited access to forward markets led to an unhappy circumstance of these entrepreneurs involved in native chicken rearing. The farming culture of native and local chicken therefore were not enough profitable for them.

The project facilitator, GUK came into the scenario two years ago to address the constraints of producing native chicken. GUK took some very productive and practical steps to improve the production and farm management practices of native chicken rearing entrepreneurs. They implemented the following list of activities over the project's 2-years' timeline.

- 1. Provide training to 4,000 producers on improved farming techniques and modern management practices.
- 2. Establish 200 model farms (production hubs) for exhibition.
- 3. Distribute improved variety eggs (for breeding) from Parent Stocks and Bangladesh Livestock Research Institute (BLRI) to 1,000 native chicken producers.
- 4. Organise actor coordination meeting with backward and forward market actors.
- 5. Organise market linkage meetings to establish and improve business relationship and market development efforts.

Establish linkage with formal and informal buyers

The primary objective of homestead production of native chicken (production of egg and meat) is to consume by the family and relatives, however, some eggs are kept aside for breeding purpose as well. The remaining amount of egg and meat or bird after consumption is sold to retailer, trader, directly to consumers and in the local market. The farmers bring their produce (egg and bird) to the local market for selling and sometimes the paikers collect directly from farm gates (from houses).

Buying behavior of meat consumers vary depending on consumer's income, hygienic factor, availability etc. Generally, lower income consumers buy broiler meat because of the amount of meat, when they buy 1.5 to 2 kg native chicken at cost of 350 to 450 Tk., at the same amount they can get almost 3 kg of broiler meat. Consumers wish to buy native chicken egg most of the time but they do not get because of insufficient supply. Besides, commercial duck eggs and chicken eggs are adequately available in the market, round the year, comparatively at a lower price.

Traders can make more profit from poultry business rather than native chicken, so they had less interest in native chicken trading business. Besides, most of the traders do the business of native chicken as part time basis whereas poultry traders do the business full time basis. The traders prefer to buy in large volumes whereas the native chicken producers' production is not as high as the poultry. Currently the traders have to collect the native chicken from the farmers who bring small quantity in the market so the cost price is also higher for the traders. Absence of a well-organised or structured market place for native chicken has also been attributed to a major challenge in the output market.

The project realised that to boost the intake of native chicken products, they needed to create new markets, marketing techniques and strong market linkages with formal buyers. In so doing, the project agreed on the following activities.

- 1. Organise linkage-building workshops with small and large traders, restaurant owners, superstores and online entrepreneurs.
- 2. Establish 04 Collection Points cum Village Business School to organise collective marketing of native chicken products.
- 3. Establish 01 egg and meat processing centre at local level.
- 4. Develop e-commerce based online business platform.
- 5. Facilitate MOU (Memorandum of Understanding) with large superstores and online shops.

• Ensure business-friendly environment

The household producers of native chicken did not have access to formal finance sources. As a result, most of the producers were reluctant towards commercial production of native chicken that may require more investment to buy shed, feed and inputs.

Government officials agreed that government run projects do not exist related with native chicken patronisation. They also lacked the field force necessary to provide extension services to rural native chicken producers. At present, there are efforts from the government livestock extension that provides vaccination services but these services are mostly focused to livestock (cattle) and commercial poultry rearing. Training service provision from the Department of Livestock Services (DLS) towards the local service providers had not been matched. There were lack of coordination between District Livestock Office and Bangladesh Livestock Research Institute (BLRI) that together could have researched on improved techniques of native chicken rearing and promote alternative breeding technologies.

No proper market governance was functional that could effectively control and promote production and marketing of native chicken. Absence of an enabling environment caused sufferings to the native chicken producers and deprived them from a better livelihood.GUK facilitated the following activities to strengthen the govt. services support and improved access to financial means.

- 1. Organise advocacy and coordination workshops between major rules and regulatory players such as the Haat-Bazar Committee and the Local Chicken Producers' Association.
- 2. Organise linkage building workshops and advisory seminars with Financial Institutions (FIs), Non-Banking Financial Institutions (NBFIs) and Micro-Finance Institutions (MFIs) to increase access to formal financing.



Summary of Key Results and Impacts

The project has significantly increased producers' income by improving their production and farming technique and by creating new markets for sales that is fail-safe. About 50 percent (2,000) producers have increased their income by 50 percent.

Improved production technique and use of better quality inputs increased the production of meat and egg by 50 percent at least. Availability and use of vaccine and medicine have increased and helped to reduce birds' diseases by about 50 percent. Vaccination has played a crucial role in mortality reduction that has now came down to less than 20 percent.

Thanks to the project intervention and activities on forward market linkage and market development. This has created business opportunities for the native chicken producers by tapping into both formal and informal markets. Prices of meat and eggs increased by 10 percent. Formal business agreements have been made with companies like the chaldal.com and organic online BD who now directly purchase full-grown birds and eggs and pay more to the producers. These e-commerce platforms pay 15-18 Tk. more per dozen of eggs and at least 60 Tk. more for per kg native chicken meat. The increased demand for meat and eggs of native chicken among the urban consumers has now led to year-round production and sales of native chicken products. Establishment of four (04) collection points for aggregation and collective sales enabled improved linkage with forward market buyers.

As sales of native chicken meat and egg products increased remarkably, investment in native chicken production and trading by the producers and associated service providers has also got bigger. The additional investment has expanded their business volume by 50 percent.

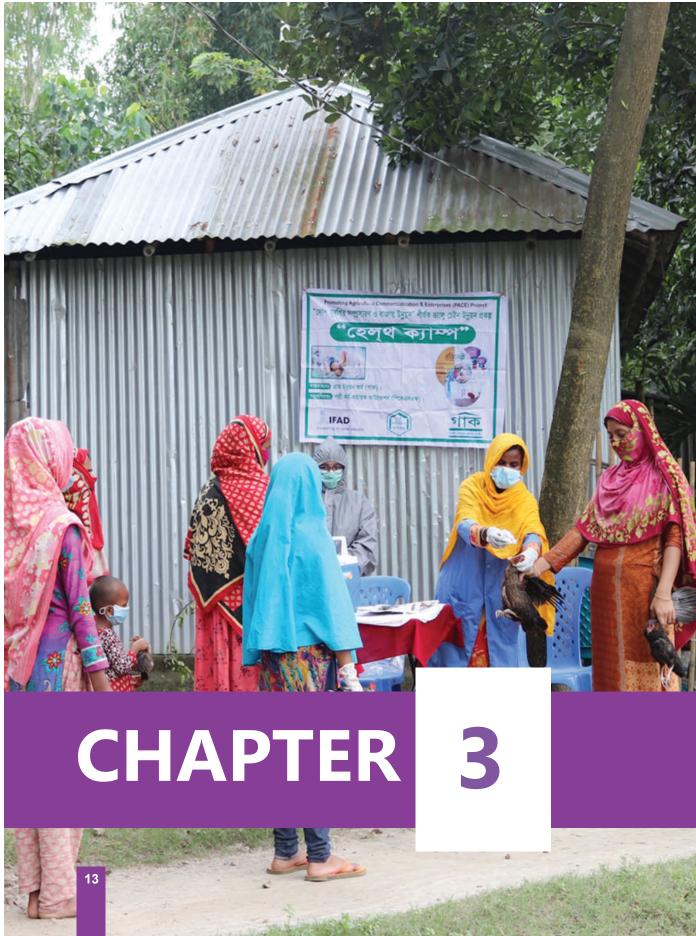
The number of hatcheries that sell Parent Stocks has increased because of the project's effort to develop quality input suppliers and service providers. At present, there are six (06) hatcheries operating in the locality - as a direct result of project intervention. These hatcheries have increased their technical capacity on production of Parent Stocks. About 24 dealer points were established throughout the project period, who at present continuously provide day old chicks and pullets to some 4,000 native chicken producers and thus help improve the breed and productivity (meat and egg).

Farmers' knowledge on modern farming techniques has also improved. The project created 200 exhibition farms to demonstrate the benefits of improved farming practices on native chicken rearing. The producers of these exhibition

farms have already demonstrated high yield in terms of productivity and price by applying modern farm management techniques. As a result, income of these producers has increased by 50 percent. An average native chicken producer now earns a minimum 5,000 Tk. a month.

To support business development and business expansion of the native chicken rearing entrepreneurs and service providers, the project has deployed improved financial assistance to them. Micro-Finance Institutions (MFIs) have popularised the financial credit and banking services among the native chicken rearers and service providers and created easy-to-take and easy-to-pay credit facilities for them. About 27 percent (1,076) producers were brought under the direct financial assistance by the project. An estimated 44,965,000 Tk. (four crores and forty-nine lacs and sixty five thousand taka) loan was disbursed among the participants since the project intervened. GUK alone disbursed 25,908,000 Tk. (two crores and fifty nine lacs and eight thousand taka) among 441 participants through its microcredit operation supported by PKSF. Other than GUK, BRAC NGO, ASA, Uddipan, TMSS, EKti Bari Ekti Khamar project and SKS are nameable MFIs who provided loan assistance to the native chicken producers in Bogura district.





3 BEST PRACTICES

The main innovation that introduces production of native chicken on a commercial scale has the potential to be replicated and scaled up as it has proven to be successful in providing an alternative source of income to the extreme poor in Bogura area. Given the economic analysis, this report concludes that production and marketing of native chicken meat and egg is a more economically and/or environmentally sustainable alternative livelihood source. This innovation is relevant in meeting SDGgoal1(No Poverty) and it broadly aligns with the purpose of improving the socio-economic status of the smallholder local producers nationwide.

Innovations and the Best Practices

1. Parent Stock to help sustainable sourcing

Normal Neck and Naked Neck native birds are commonly found across the country though the distribution of Naked Neck bird is comparatively very thin. The Aseel is also a rare variety found only in certain areas. To increase the availability of the original breed of native chicken, the project realised that it needs to focus on sustainable sourcing of improved native breeds along with its major focus in most cases, on improved practice. By setting up six (06) Parent Stock (PS) farms, the project materialised the dream for expansion of improved native breeds in Bogura. At present these PS farms rear and market improved and fertile eggs, day old chicks and pullet of the normal neck birds, naked neck birds and hilly birds to the project's 4,000 native chicken producers. As a result, the production and reproductive performance of these varieties have increased significantly. For example, production of meat and eggs has increased by at least 80 percent for native varieties in 2019-2020, compared to their production in 2018-2019.

2. Mini hatcheries to make improved breed locally available

In addition to the establishment of Parent Stock farms, GUK established another six (06) mini hatcheries to ensure availability of high quality native breeds (DOC and pullets) among the local producers. Monthly production and supply capacity of each mini-hatchery is about 2,000 units. To enhance the distribution of DOC and pullets, the project has supported development of 24 sub- dealer points at union level. This 'hub and spoke' distribution model has

ensured sustainable supply of improved quality pullets to some 4,000 native chicken producers and thus is helping the expansion of native chicken production and consumption.

3. Collection Points to help product aggregation and collective marketing

The project has already took effort to establish four (04) collection points (Village Business School) to promote production and marketing of native chicken products in different clusters, instead of scattered production and sales. At present, four collection points collectively facilitate sales of about 5000-7000 eggs and 1500-2000 grown chickens to various formal and informal buyers. Buyers do not need to go door-to-door, instead they can find their aggregated products from a single service point, thus reduced their time and cost of acquisition.

4. Introduction of ready feed for native chicken

Previously, producers of native chicken usually feed their birds following the traditional scavenging method. Moreover, no specialised feed for native birds could be found in Bogura, The improper and poor feeding caused malnourishment and as a result, producers could not get the desired sized birds - prices dropped.

To make the distribution service of ready feed stronger, the project supported establishment of 40 sub-dealers who sell ready feed at union and village level. Producers have already perceived the benefit of using ready feed for native chicken. Therefore, the adoption to ready feeding is higher - almost 80 percent (3,200) producers have adopted to the application of ready feeding their birds. GUK also financially supported to setup a mini ready feed factory in the locality and introduced small packet (5kg pack) of ready feed for comfortable distribution and sales.

5. Community based vaccination and de-worming camps by LSPs provided brought services at producer's doorstep

GUK branded potential Local Service Providers (LSPs) as health service providers for vaccination, medication and de-worming services and trained them on disease identification, diagnosis and treatment. Presently, 40 LSPs (vaccinators) work as front line service providers to address health related issues. In the project period, GUK supported them to arrange health camps, vaccination and de-worming campaigns and the like to provide services to the producers. This has significantly helped reduce bird's mortality rate.

Explaining Best Practices using Innovation Matrix

To understand the impact magnitude of the above-described best practices and innovation, this document analysed them using a four-part change theology taken from IFAD's Evaluation Synthesis document on "Technical Innovations for Rural Poverty Reduction". The typology helped classify and explain to what extent and how the different good practices identified over the life of the project contributed to the actual transformation to the lives of targeted beneficiaries.

We will look at the definition of the four-part change theology. These are:

- **1) Productivity enhancement -** practices those improve returns to land, labour, and capital by making incremental changes to the business.
- **2) Transformative change -** practices those bring about a major change in the production structure and the way it operates, by introducing a new technology.
- **3) Asset strengthening -** innovations that change capital or fixed assets and thereby affect the productivity of a manufacturing or trading enterprise.
- **4) Beneficiary health enhancing -** practices that improve beneficiaries' health and workplace safety.

Productivity	Transformative	Asset	Health
Enhancement	Change	Strengthening	Enhancing
Businesses have grown a desire for loan products. Producers shifted their focus on product quality (in terms of origin, purity and weight). Input companies and LSPs sell quality inputs and services.	Producers adopted to new technologies and innovation to improve product quality. Use of Processing Plant have increased for value addition. Enterprises use modern technologies i.e. Hazal.	Enterprises use e-commerce platform for buying and selling birds and eggs.	Production of native chicken increased health consciousness. Growing number of customers demand for organic and safe birds meat and eggs.

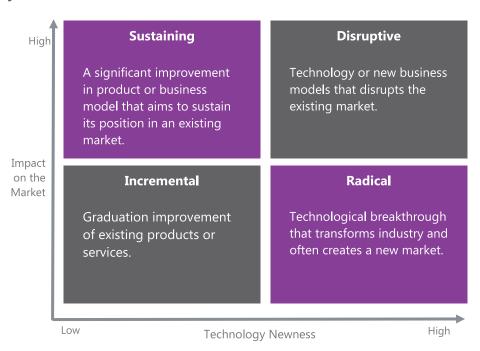
It is evident that the project has immensely focused on '**Transformative Change**' by encouraging adoption of new technologies such as modern hatching techniques. The project similarly focused on improving the production capacity and output of the native chicken producers by injecting loan products,

linking with input companies that sell quality inputs and the like- activities that led to 'Productivity Enhancement'.

This also explains project's attribution strategy to a specific systemic change. For example, while the native chicken producers have transformed their farms with modern technologies and farm management systems, the change in behaviour has led to 1) the need for skilled technology service providers and 2) the need for availability of technologies in the local markets. Therefore, the project expected a **'crowding-in'** situation, which was composed by the presence and emergence of some 24 sub-delears and 100 LSP netwpork. This is a clear example on how the **transformative change** has resulted in a systemic change in the native chicken market system.

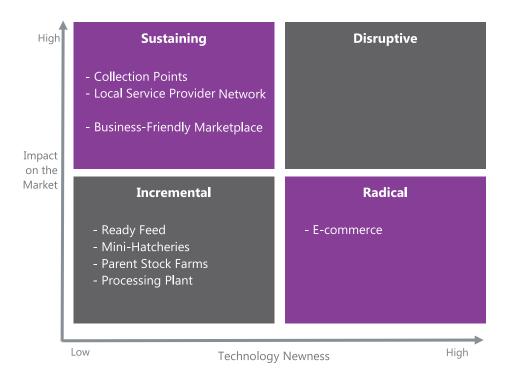
The Innovation Matrix

Innovation can be categorised in many ways, and some of those categorisations are more or less overlapping. This report followed a **2-by-2 Innovation Matrix** that will further elaborate the dynamism of the best practices or the innovations that the native chicken sector has experienced in its project lifetime.



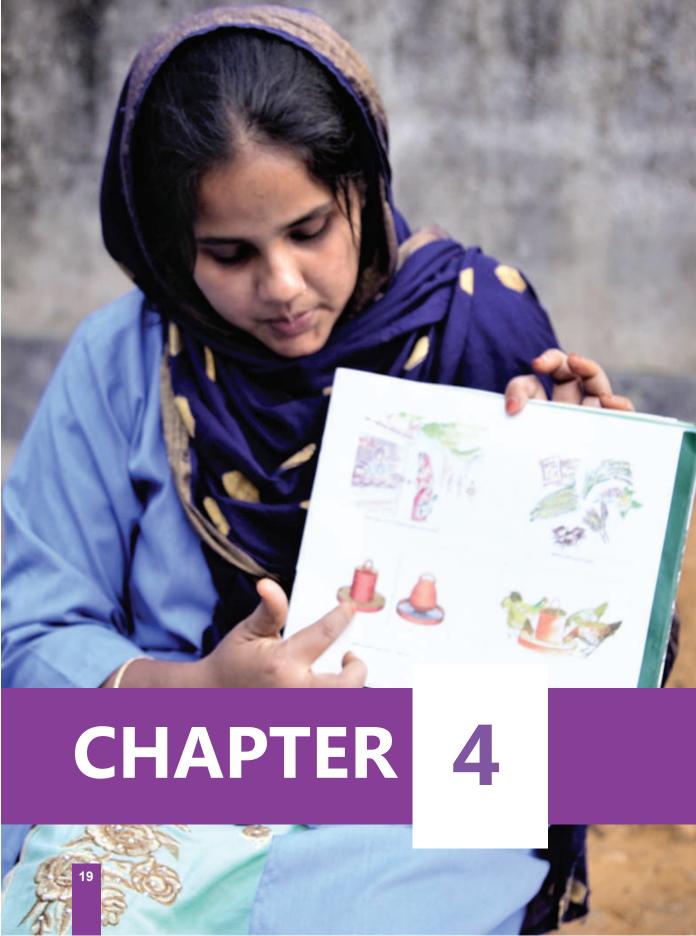
Interestingly the 2-by-2 matrix found that most of the innovations that have emerged from the project interventions are either **Sustaining Innovations** or **Incremental Innovations**. The product performance of sustaining innovation is made better in every possible way (i.e. use of better quality input etc.). Value

addition were made by introducing local processing plant. Collection points were established to ease aggregation and to increase collective marketing and bargaing power of the producers, help the producers to secure higher margins than the previous one. To strengthen distribution of better quality inputs and services, the project established a network of 100 Local Service Provider (LSPs).



On the other hand, the project has produced a good number of *Incremental Innovations* that have made slight variations in the production or processing technique. Introduction of ready feed in the native chicken market, establishing Parent Stock Farms and setting up mini-hatcheries are all example of incremental innovations. Although the incremental innovations did not help the entrepreneurs create or enter into a new market, but it added positive values to their products (eggs and meat) by creating an appeal to a larger, mainstream buyer community.

The project saw **Radical Innovations** such as the use of e-commerce that have created a new market opportunities for the native chicken entrepreneurs.



4 LESSONS LEARNT

What Was Learnt

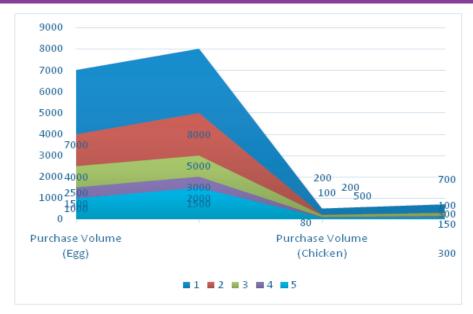
1. Private sector engagement can result in greater agility and better price

The private sectors (especially institutional and formal buyers) would normally participate in the native chicken value chain if it were ensured a regular supply of quality products, as in the case of Bogura. We have seen that as soon as the project has increased producers' capacity on improved cultivation practices including selection and availability of quality inputs and services, producers gained a competitive advantage to link their businesses with commercial and formal buyers. This has built successful business partnerships with large processing companies such as Chaldal.com, Organic Online BD, Healthy Khan, Prava Super Shop, and Bogura Home Mart. These private sectors have repositioned their investment on the native chicken producers of Bogura and as a result, the sector has seen a phenomenal growth during 2019-20.



Due to engagement of these private companies, directly with the producers and the producers' groups, production has increased by at least 50 percent to maintain the steady supply. This is mainly because these large private companies purchase nearly 40 percent of the aggregated volume of meat and eggs. The companies also pay better price as they can directly procure from the producers. Producers receive at least 10-12 percent higher price than what they could get previously from the general traders.

SL	Name of the Company	Purchase Volume (Egg)		Purchase Volume (Chicken)		
		Min	Max	Min	Max	
1	Chaldal.com	7000	8000	500	700	
2	Organic BD	4000	5000	200	300	
3	Healthy Khan	2500	3000	200	300	
4	Bogura Home Mart	1500	2000	100	150	
5	Ettadi.com	1000	1500	80	100	
* Purchase in a weekly basis.						



To increase private sectors' participation in the value chain, however, there is a need for regular dialogue and negotiation between upstream and downstream actors. General traders (wholesalers and retailers) are unfair to producers and contractualisation (contract farming) is not common. Engagement of commercial firms and large aggregators could make the dealings more ethical and responsive to collaborating with native chicken rearing entrepreneurs.

2. Training has significantly improved production and farm management skills

The agronomy training programmes to improve the production and farming practices of native chicken entrepreneurs went well. The training has significantly improved producers' performance on farm management. Of the 4,000 producers trained, at least 50 percent (2,000) adopted a majority of the best practices, meeting the original adoption target of 50 percent. Due to this high level of best practice adoption, average production of native chicken (meat and eggs) increased 50 percent within a year of the training, compared to the neighbouring control groups. The technical training programme took a tier-ed approach to develop producers' knowledge and production practices systematically. Producers were trained primarily trained on disease management to reduce mortality rate of the birds. In the second tier, they learnt about the usage and benefits of various inputs and services (i.e. feeding techniques, house management, broody hen management, day-to-day nursing etc.) that has improved their farm's environment. Finally, these producers were taught on appropriate breed selection techniques to avoid misconception of breeding and improve the productivity of original native chicken.

The training has added knowledge about better management of the flocks that has reduced the cost of production by improving the productivity. How that has happened - the answer lies with the timeline of producing a 750-800 grams chicken. Previously, before the project had intervened, an average chicken weighing 750-800 grams took at least six (06) months to reach the desired weight (to become sell-able). Once the project intervened with appropriate knowledge about best farming management, the production phase to reach 'sell-able weight' reduced by half of the time. At present, it only takes three (03) months to grow a chicken ready to sell. This means that producers can re-invest in the second lot of production earlier and recoup the investment twice bigger than before.

The reason behind the success of the training programmes is that the project took a realistic timeline to provide the training to the native chicken entrepreneurs. Instead of providing a single training programme for the producers, the project spread over the training into several sections, so that the producers know exactly what behaviours to apply related to that particular stage of the birds. This is one big reason for producers to understand the key insights from the training and demonstrate results within a short period.

3. Value addition (processing) has created new market opportunities

In recent years, retail value of processed products has significantly increased, while farm value of the products remained nearly constant. The country has some small-scale processing plants for processing poultry meat. However, the

amount of meat processed in these plants can no way meet the demand of the country (only 16% of the demand is met according to BBS data). Also the recent breakout of bird flu or other viral diseases, transmissible from birds to human, it is suggested that poultry birds should not be sold live rather they should be sold after processing.

The native chicken producers from Bogura did not know such value-addition techniques for which they could not pass through their local and regional markets that are highly dominated by the intermediaries.

The project introduced value-addition by establishing a Meat & Egg Processing Plant in the neighborhood. This has created an opportunity to access to a previously untapped market by offering processed meat and eggs. Customers of processed products are super store, online shops and large restaurants who demand for processed chicken items.

In other forms, there is a clear demand for Ready-to-Eat (RTE) and Ready-to-Cook (RTC) chicken, especially among the urban and city dwellers. The current weekly capacity of the newly established processing unit is 3500- 4000 units of chicken including delivery capacity to all over Bangladesh. The processed chicken is sold round the year at a better price (at least 15 percent more than the usual market price). However, the project needs to identify the markets for processed chicken and meat precisely, so that the expansion of the plant (in terms of technological innovation, capacity and newness) can take place.

4. Collection Points have many benefits, but need to take enterprise formation

Cooperative or collective production and marketing may contribute significantly to the outcome by providing smallholders with a tool to procure inputs more economically, farm more productively and market the goods more expensively. The project has already took effort to establish four (04) collection points (Village Business School) to promote production and marketing of native chicken products in different clusters, instead of scattered production and sales. At present, four collection points collectively facilitate sales of about 5000-7000 eggs and 1500-2000 grown chickens to various formal and informal buyers. Buyers do not need to go door-to-door, instead they can find their aggregated products from a single service point, thus reduced their time and cost of acquisition.

It has been already proven that the clustered approach or the cooperative model could significantly increase farmers' market power both with the upstream and downstream actors and make them able to self-sustain beyond the project period in managing their businesses. However, the already established collection points need to take formal business form (e.g. registered for business). These need to include formal organisational

structure, business management guidelines, formal business and marketing plans, income statements and the like so that they could grow further as an independent business enterprise, not as a project mandate.

5. Use of SBCC tools can help increase the consumption and thereby sales of native chicken

The project put little emphasis on promotion and marketing of native chicken products (meat and egg). To create demand outside of Bogura region, GUK made an effort to introduce e-commerce marketing. To help sell native chicken products using e-commerce based platform, online pages were prepared. This has led to establish business relationships between the producers and formal and informal buyers. However, there is not enough evidence that can give a clear verdict that the e-commerce has helped increase the demand for native chicken in the neighbourhood.

However, the project has overlooked the fact of conducting appropriate marketing and promotion that could cater a bigger market segment including the high-end consumers (premium market segment) who continuously search for native chicken in the city bazars and super stores. There needs to be a strong

SBCC (Social and Behavior Change Communication) component to encourage consumption. Strong, focused SBCC is necessary to overcome both taboos against egg consumption by young children and an understandable motivation for poor households to save, rather than eat eggs. After all, consuming an egg represents a chicken that cannot be raised and sold and is thus an economic loss. Useful approaches in this area can include the following:

- Positive deviance i.e., providing examples of children who have eaten eggs and turned out healthy;
- Aspirational messaging using economic motivations i.e., emphasizing the economic benefits of a healthy, well-nouri shed child;
- Approaches that connect a chicken to a child in the caregiver's mind i.e., officially providing the chicken to the child, not the parents, or describing it as "the child's chicken";
- SBCC that does not discourage egg or chicken sales but still stresses the importance of using income to buy for children.

6. Vaccination and de-worming addressed mortality, but sustainability of supply depends on strong linkage with dealers

GUK took serious efforts to reduce birds' mortality rate by introducing a comprehensive vaccination, de-worming and health campaigns in the project location. Season and age specific mortality is very common if the birds are not vaccinated properly and timely. Especially, the mortality rate is as high as almost 100 percent in winter season when birds becomes more vulnerable to diseases.

GUK identified potential Local Service Providers (LSPs) who could provide health related services (vaccination and medication) and trained them on disease identification, diagnosis and treatment. Presently, 40 LSPs(vaccinators) work asfront line service providers to address health related issues. In the project period, GUK supported them to arrange health camps, vaccination and de-worming campaigns and the like to provide services to the producers. However, the effort was partially subsidised by GUK and it lacked appropriate market linkages with the suppliers of vaccine and medicine for poultry. Establishment of dealerships linked with vaccine producers can help improve the situation and the supply chain.

7. Strategic shift by the entrepreneurs favours more investment and return

The entrepreneurs of native chicken made a major shift in their business strategies as they experienced the benefits of a Value-Added Production System. The shift to a value-adding mindset increased the production and processing quality that would support business return in a longer term. The producers captured that buyers are more interested to purchase native chickens those meet the industry standard (in terms of specifications and quality) and thus they have built a new production model that is responsive to buyers' need. This long-term view is helping the native chicken production businesses to adopt to some best management practices in regards to use of quality inputs, improve care and apply processing units. This is a clear shift towards a more professional approach to business management and is essential to continue business in a commercially viable way. It paradigm shift has made the entrepreneurs competitive that has led to improved products and service delivery. In addition to this, the increased business opportunities with forward market actors greatly increased their business performance, and opens up other windows for new business opportunities (packaging, readyto-eat, ready-to-cook products etc.).

8. Financing can enable sectoral growth; must explore other financial inclusion models

The native chicken producers in Bogura had less access to formal financial means, which prevented the production and processing business to grow. Moreover, the local intermediaries controlled the credit financing to these smallholder farmers where the farmers were obliged to sell their produces at a lower price to them compared to the market rate. The credit funding from these wholesalers was high in interest rate against a very low amount of credit disbursement. Commercialisation of the farms and improvement in the farm management system were much required in order to capture the formal market or the markets with better price. The entrepreneurs were not able to upgrade and expand their production without having a reliable source of finance.

To support business development and business expansion of the native chicken rearing entrepreneurs and service providers, the project has deployed improved financial assistance to them. Micro-Finance Institutions (MFIs) have popularised the financial credit and banking services among the native chicken rearers and service providers and created easy-to-take and easy-to-pay credit facilities for them. About 27 percent (1,076) producers were brought under the direct financial assistance by the project. An estimated 44,965,000 Tk. (four crores and forty-nine lacs and sixty five thousand taka) loan was disbursed among the participants since the project intervened. GUK alone disbursed 25,908,000 Tk. (two crores and fifty-nine lacs and eight thousand taka) among 441 participants through its microcredit operation supported by PKSF. Other than GUK, BRAC NGO, ASA, Uddipan, TMSS, EKti Bari Ekti Khamar project and SKS are nameable MFIs who provided loan assistance to the native chicken producers in Bogura district.

However, despite the efforts of creating access to formal financing, the project needs to determine other financing options such as impact investment, crowd funding, equity funding, low interest-bearing credit facility, and digital financing etc. to support the growth of the native chicken producers and small-scale processors (for expansion of processing units in terms of capacity and geographical presence).

9. Commercial farming of native chicken has proved to be an alternative profitable means for smallholders

The 4,000 producers have increased their income by 50 percent as a minimum, by adapting to improved production and farm management techniques and technologies and by transforming to a semi-commercial production system. One of the key lessons learnt through this project is that

native chicken rearing could play an important role in improving the livelihoods for smallholder producers who have meagre pieces of land. The attention of smallholder farmers especially women is being diverted towards the rearing of native chicken in their backyards, which offered them an incremental benefit. The production cycle has been reduced to three months from a previously pro-longed six months period, thus native chicken rearing has gained popularity among the smallholder farmers mainly because of their underlying need for early cash return. Thus, production of native chicken has proved as high yielding that is responsive to economies of scale, fast growing and less demanding of space - all making them economically attractive for the poor.

10. Increased capacity of hatcheries led to breed improvement

The project increased knowledge and skills of input production of the local hatcheries on native chicken breeding and hatching. The project has supported establishing two (02) mini-hatcheries to ensure availability of quality DOC and pullet, while four (04) other mini-hatcheries will launch their operations soon. These hatcheries have become a sustainable supply solution for about 4,000 native chicken producers in the project area who have a monthly supply capacity of 2,000 pullets. The skills and knowledge upgradation of these hatcheries have led to expansion and promotion of original native chicken breeds in Bogura. The expansion has created incremental income opportunities for producers, especially women producers who belong to the most marginalised communities.

11. Local associations' active participation can enable sectoral growth

The project has strengthened functioning of two local associations - the Local Chicken Business Committee and the Haat Bazar Committee- who now facilitate regulatory actions and performance in the sector and are significantly contributing to the industrial growth of local native chicken producers. In doing so, theses associations helped to establish market rules and policies that could create a favourable business environment for the local producers. One of the most important change in the native market system that these committees have made is the introduction of digital weighing machine. Previously, producers and the buyers made business transactions based on estimated weight of fully-grown chicken (measured by eyes) that caused major risk of financial loss for both parties. Now that the committees made the use of digital weight machine as an obligation, this ensured fair pricing for the producers. More to this, there were market actors brought mixed-breed

chicken (termed as 'Sonali') in the market and sell them in disguise of the original native chicken, thus manipulating the products, their quality and prices. Now that the Haat Bazar Committee regularly monitors business doings and transactions in the marketplace, the act of fabricated products (i.e. Sonali in disguise of native chicken) has been restricted to very minimum.

12. Measuring health impacts may drive policy making

The project has not considered in its design and implementation to evaluate whether there are any health and environmental impacts of native chicken. No impact analysis on health and nutrition have been incorporated in any stages of the project. The authors have found that there are a number of promising

directions for future work on this topic. There is a need for more rigorous research that quantifies the effects of small-scale native chicken production on income, food security, access, and consumption of poultry products by households, women, and young children across varying rural and urban contexts. It would also be helpful to address the methodological problems associated with measuring the impact of small-scale poultry interventions on nutrition outcomes when they are part of a larger package of interventions.

13. Product development (RTE, RTC) could cater the need of the urban consumers

The project could have narrowed down some of its focus on developing specialty brand items to serve the consumers living at the top of the buying pyramid. They could have trained a segment of the native chicken business entrepreneurs to develop a niche product (processed or semi processed, ready-to-eat (RTE) or ready-to-cook (RTC) items, frozen foods etc.) that has selling propositions in the high-end market. Product development could cater a new market segment of upper-middle and upper income consumer group. This could help penetrate the superstores in city areas such as Agora, Meena Bazar, Swapno and the like.

14. Apply Inclusive Business models to attract new investment

Inclusive Businesses refer to the use of business models that could address social and environmental issues effectively and help mainstreaming the under-served producers' group. We have found that such business models can help the native chicken producers to leverage on market linkages, technical expertise and financing that they would not normally have access to. In general, gaps across the agriculture value chain - lack of access to affordable financial products, limited knowledge of high quality inputs, low usage of technology and market data, and poor market links etc. are present. Social businesses in the agriculture sector have already proven successful in closing these gaps, believing that the cost of their services or products will be recuperated by the benefits and income gains that smallholders will achieve.

For example, Parmeeda (www.parmeeda.com) is a Social Business venture, geared to address capacity constraints of smallholder farmers by nurturing hundreds of micro-enterprises into a network of franchisees. Each franchisee has access to a centralised supply chain of major agricultural inputs, training and ongoing support in business management and customer service, and access to finance through extension of supplier credit by the franchisor. Through the improved social business model, Parmeeda has established formal business relationships with more than 3,000 producers (50

percent are women). The demonstrated results of Parmeeda has brought an innovative solution to address a social problem through market-oriented model and at the same time set a pathway for the marginalised farmers towards a sustainable livelihood. Social business models as similar as Parmeeda show immense potential for improving financial services, best practices, and long-term success for smallholder farmers and can generate better economic, social, and environmental results for these farmers and their families and communities

15. Promote 'organic' concept to end consumers

Organic and safe products are becoming increasingly popular as consumers are becoming more aware of the health effects of consuming unsafe food and food products. Even in the processed and frozen food industry, there is a growing trend of producing organic and natural alternatives safe for human health. The domestic agricultural market has realised the great market demand for natural

and organic products, due to which production of organic and safe food has rapidly increased in last three years. On this basis, organic agriculture has become a great choice as means of organic product producing.

Producers of native chicken in Bogura have already began the organic movement by following indigenous and natural methods for native chicken rearing. The project therefore could stress on the fact that how the production system of native chicken have transformed and is greatly benefitting to the human health and environmental sustainability. This could further help to market and advertise 'organic' and 'safe' concepts to the consumers; those prefer organic chicken (meat and egg) to the conventional one.

16. Increase involvement of key govt. agricultural departments

The project's collaboration could increase the extent of research on scientific investigation of native chicken between the Poultry Production Research Division of Bangladesh Livestock Research Institute (BLRI), Bangladesh Standards and Testing Institution (BSTI) and agricultural universities to identify the nutrition outcome and benefits of native chicken on human health and environment, and conservation. In addition, these government-backed institutes could get involved for production and distribution of quality pullets of to preserve the major indigenous species of native chicken and help expansion and marketing.

Involvement of the key govt. department and the extension services of could help scaling up the production of native chicken, increase health benefit awareness of indigenous birds, provide technical assistance at village level and increase market linkage with commercial processors and buyers.

17. Include other women-inclusion strategies to increase women's empowerment

Women's involvement in chicken rearing is widespread, but their control over revenues from the sale of poultry products is very limited. Supporting chicken production by women is not an automatic route to their empowerment without complementary activities that directly support women's ongoing ownership and decision making around the use of their production and any resulting income. Such activities will likely need to involve both women and men, and go deeper than chickens and eggs alone to tackle underlying gender norms that constrain women's decision-making power in the country settings. The project could have considered increase women's' economic and social participation in project activities conducive in increasing their decision-making power and confidence (for example, as members of treasury, purchasing committee or marketing network).





5 RECOMMENDATIONS FOR FUTURE PROGRAMME DESIGN

Lessons Learnt for Donors

While looking through the glasses of Market Systems Development approach, the donor and facilitator should take a **holistic view** of the native chicken sector. To achieve maximum impact, all areas of value chain must be addressed. The facilitators need to look at the full range of functional roles needed to produce a high performing inclusive native chicken market and not just focus on existing market actors alone. The current project focused too much on direct service provisions and overlooked other associated actors such as the input sellers and/or the forward market actors who could be brought in to fill gaps more exclusively.

There should be **in-depth analysis of the market system** to identify the root causes of problems and the intervention logic model should be built on this. The basic conceptual understanding of the sector may not have shed as much light on the problem at hand, which resulted in creation of an intervention logic that became less relevant to actual problem solving. The in-depth assessment would also help the project to spot new opportunities leading to innovative and inclusive business models (such as the Parmeeda's business model) that could benefit the value chain actors. The project should take a more conscious approach to understand the changing perceptions and market behaviours so that it could make a 'business case' and attempt to make it successful.

In collaborating for systemic change, the project may consider working with highly motivated lead firms and industrial processors (Golden Harvest, Harvest Rich, Kazi Farms and the like) who have national or international presence. Larger firms with national and global coverage can employ their own resources quickly, once an idea has proven its business potential. They also can force to replicate an innovation on a large scale and have a positive disruptive effect on the evolution of the market, with an accelerated scaling. Improving the skills of the native chicken producers or making availability of quality input materials was not enough, it was also necessary to focus more on forward market linkages, especially bringing large and established meat and meat products processors. Additionally, the project should increase its focus on liaison with the govt. livestock departments and the regulatory authorities such as BSTI to promote indigenous breeds.

Formation of the Committees and Collective Enterprises and their role to achieve project goal or the sectoral goal was not clear. Successful **enterprises must elect business leaders** for them to perform optimum; must have knowledgeable and committed workforce. The Collection points at present does not show any evidence of commercial growth or success, they must choose how they want to perform, what could be their incentives and business outcome in the end. Without considering the commercial viability of the collection points cum Village Business Schools, these aggregation models will not become functional and beneficial for the native chicken producers and other mainstream market actors i.e. input sellers, buyers and the like.

It is essential to **mainstream gender performance** and to sensitise the community on the importance of women's participation. There were narrow focus and incomplete actions to establish women economic leadership in the sector. The project considered women inclusion only as part of its beneficiary count and direct service delivery instead of creating a pathway for self-development. The project also did not focus much on creating women leadership at different tier of the value chain.

The donors must ensure that **the entry strategy is the exit strategy.** A project should clearly articulate the exit strategy to manage expectations from the very beginning, which means **engaging private sector partners** is crucial and that has to be done differently than the typical standard donor-contract when working with NGOs. Agreements need to be entered into that are flexible, commercially viable and that can be easily changed and adapted toward successful interventions and away from under-performing activities and partners.



Investment Priorities

The next phase of investment priorities by the donor may happen in the areas of enterprise development (production, aggregation, processing, sales and distribution), new product development, organic and safe certification - HACCP (Hazard Analysis Critical Control Point) certification for example, etc.

With this change in life style and food habits, frozen food products or ready to cook are getting popular among service holders, well-off section of society and the young generation. As per estimation of sector people, the market of ready-to-cook snacks or frozen foods stood at 265 crore Tk. in 2018, which is expected to grow to 380 crore Tk., with an annual growth by 20%. As of now there about 15 local companies and three to five foreign companies producing ready-to-cook foods and snacks in the country. The project if extended, should invest on **product development that are ready-to-cook or ready-to-eat** and **developing small-scale processing businesses** to cater the increasing needs for alternative processed foods by the urban consumers. The biggest challenge that the industry faces is infrastructure. Cold chain management is the heart of processed food business and this requires technical expertise, industry-related expertise and huge investment.

Investment can be made on **developing innovative business and financing models** (crowd funding, equity investment, impact investment etc.) to increase establishment of infrastructure that support processing and countrywide transportation, adoption of new farming techniques and business models. Inputs and capital items can be made affordable only by applying creative financing and digital financing models to help small-scale entrepreneurs realise their longer-term savings and profit potential from commercial farming of native chicken products.

The project can also facilitate **injection of foreign investment** to develop the country's local market of native chicken. Bangladesh govt. has already created favourable environment for foreign investors in poultry sector. Companies like CP, New Hope and Godrej are already working and became a major stakeholder in national poultry value chain. It is a scope for other foreign investors to invest on native and local chicken production in Bangladesh.

One of the areas where Bangladeshi native chicken producers can gain competitive advantage is through producing a safe product of superior quality, underpinned by a demonstration of first class traceability and food safety assurance. The safe production of chicken meat and eggs **requires the HACCP system.** This underlines the need to develop and provide sound guidance on the principles of production, farming and processing of native chicken - from the backend up to consumers.



Promoting Agricultural Commercialisation and Enterprises (PACE) is a joint initiative of PKSF and IFAD, which promotes improve livelihoods (higher income from self-employment, business profit and wage employment, and food security) of the moderate and extreme poor (men and women) in a sustainable manner. The project adopted the strategy of combining financial and non-financial services to expedite the process of poverty reduction. This will eventually increase sales due to the expansion of business, enhancement in productivity due to adoption of technologies and management practice, increase income by micro-entrepreneurs and other value chain actors, increase the skill levels of workers, sustainable services, and create wage employment and a conducive sector specific policy environment.

PACE is being implemented all over Bangladesh through the countrywide network of Partner Organisations (POs) of PKSF.





